

Initiating Opioid Treatment in the Emergency Department (ED)

Frequently Asked Questions (FAQs)

An Information Paper

Medication-assisted treatment (MAT) with buprenorphine is one strategy emergency physicians (EPs) can use to address the opioid epidemic. In general, MAT programs in the ED select appropriate patients with opioid use disorder to receive buprenorphine while in the ED. An assessment and brief intervention with a behavioral health specialist might occur, and then those patients would follow up soon afterwards in an outpatient treatment setting to continue buprenorphine and initiate behavioral therapy.

What is MAT?

Medication-assisted treatment (MAT) is the combination of behavioral therapy with medications designed to manage withdrawal and minimize cravings. Such medications might include chlordiazepoxide for alcohol abuse, and methadone, naltrexone or buprenorphine for opioid abuse. The combination of behavioral therapy with medication is more effective than either treatment modality alone, but currently only a minority of eligible patients with opioid use disorder receive MAT. MAT with buprenorphine lowers mortality from opioid addiction seven-fold.

What is buprenorphine?

The DEA placed buprenorphine and all products containing buprenorphine into schedule III in 2002. So, it needs to be corrected and stated as a Schedule III. It has analgesic effects and can also be used to manage symptoms of opioid withdrawal. Typical dosing for withdrawal is 2-8mg orally titrated up to 24mg until symptoms of opioid withdrawal are controlled, though some protocols call for significantly higher doses. Typical maintenance dosing is 8-16mg per day. The medication can be delivered orally, sublingually, transdermally, or parenterally. Oral formulations are sometimes combined with naloxone to prevent diversion.

What are side effects of buprenorphine?

Death from buprenorphine overdose due to respiratory depression, while possible, is rare. Due to a high affinity combined with a limited partial activation of the mu opioid receptor, buprenorphine exhibits a “ceiling effect” that limits the risk of respiratory depression when compared to full opioid agonists. Although used as a treatment for opioid withdrawal, initiating buprenorphine among patients who are not yet withdrawing may paradoxically precipitate withdrawal, especially for patients taking long-acting opioids such as methadone. For this reason, many ED MAT pathways recommend initiating treatment only among patients already experiencing symptoms of withdrawal and subsequently titrating the dose during an observation period.

What are restrictions around prescribing buprenorphine?

Providers with a standard DEA license may prescribe buprenorphine and methadone without restrictions, but only specifically for pain. Current federal regulations require that when writing an outpatient prescription of buprenorphine specifically for opioid addiction, providers need a DEA “X-license,” also known as a “DATA waiver.” This restriction applies to outpatient prescriptions and not to direct administration of buprenorphine in the ED or hospital.

What is the exception provided by the “three-day rule”?

Providers without a DEA-X license may directly administer buprenorphine for opiate withdrawal for up to 72 hours in the outpatient setting. EPs or advanced practice providers with a standard DEA license may give a patient in the ED a dose of buprenorphine during their ED visit, and they or their colleagues may give the patient follow-up dosing on the subsequent two days.

Who are appropriate patients for ED-initiated MAT?

Ideal patients are those with moderate to severe opioid use disorder who are experiencing signs of withdrawal and are not occasional recreational users. The Clinical Opiate Withdrawal Scale (COWS) is sometimes used, often with a recommendation to begin treatment at scores of 8 or higher. Pregnancy is not a contraindication. Many programs recommend offering MAT to ED patients being treated for opioid overdoses.

Given a higher risk of precipitated withdrawal, patients on long acting opioids, such as methadone, are often not ideal candidates for initiating buprenorphine.

What would an MAT pathway look like in the ED?

MAT pathways will vary from ED to ED, based on local resources and access to behavioral health experts. Appropriate patients could be identified by the emergency provider, and buprenorphine administered in the ED. The patient might be monitored for up to an hour afterwards for withdrawal symptoms, which would be treated with further buprenorphine. During this time, an assessment and intervention with a behavioral health specialist might occur, and a connection could be established with an outpatient treatment facility. Alternative protocols have been developed that allow for a single 8mg dose of buprenorphine without subsequent observation in low acuity, or fast-track, zones of the emergency department.

What would follow-up look like after the ED?

Ideally, patients would be seen the day after their ED visit, before experiencing severe withdrawal once the ED buprenorphine dose wore off. However, many pathways exist, and good outcomes are still possible, even without 24-48-hour follow-up and a warm hand-off. Follow-up will be specific to the community's resources. Patients will need to be seen in an environment that offers both behavioral therapy and access to a clinician with a DEA-X license to provide long-term buprenorphine or methadone. Some models involve smartphone apps and telemedicine; others involve more traditional community based treatment clinics. Patients are often maintained on buprenorphine with behavioral therapy for months to years or indefinitely.

MAT Links

Links

Kashef Z. Starting opioid addiction treatment in the ED is cost-effective, says study. *Yale News*. August 16, 2017.

Health media overview of landmark Yale MAT study and its effectiveness in guiding patients to treatment.

Initiating medication-assisted treatment for patients presenting with opioid withdrawal. *ED Management*. August 1, 2017.

Health media overview of the effectiveness of MAT with a focus on the experiences of a program initiated in Washington state.

Emergency department initiation of medication-assisted treatment for opioid addiction: Strategies for success. California Health Care Foundation. Published August 2016.

Report on launching an opioid addiction treatment program with visual guide to setting up an effective MAT program.

Emergency department treatment and follow-up strategies for opioid use disorder. Centers for Medicare & Medicaid Services. December 13, 2017.

PowerPoint presentation outlining CMS-sponsored lectures on ED treatment and follow-up planning for patients presenting with opioid use disorder.

Robeznieks A. For patients struggling with opioids, ED visit can mark new start. *AMA Wire*. November 22, 2017.

Brief AMA article outlining MAT therapy in the ED at Washington University Medical Center in St. Louis.

Frazier WT. Medication-assisted treatments and opioid use response to opioid overdose sentinel events. Master essay, University of Pittsburgh.

Comprehensive overview of MAT response to opioid overdose to determine treatment utilization before and after nonfatal overdose using a longitudinal retrospective cohort of the Pennsylvania Medicaid population 2008-2013.

Martin A, Kunstler NM. Opinion: We have effective treatments for opioids addiction - why don't we use them?" *ACEPNow*. December 12, 2017.

Article on some barriers to the widespread adoption of MAT and a call to overcome these barriers for the sake of our patients.

Addressing the opioid crisis - an ACH collaboration. Washington State Hospital Association, Washington State Medical Association.

Set of strategies outlined by the Accountable Communities of Health for communities, hospitals, and providers to better combat the opioid epidemic, of which MAT is a main component.

Research

D'Onofrio G, O'Connor PG, Pantalon MV, et al. Emergency department-initiated buprenorphine/naloxone treatment for opioid dependence: a randomized clinical trial. *JAMA*. 2015 Apr 28;313(16):1636-44.

"The D'Onofrio Trial," a randomized clinical trial performed at Yale showing the effectiveness of ED initiated MAT.

Does initiating medication assisted treatment in the emergency room result in better outcome? Recovery Research Institute.

An organized breakdown and summary of the D'Onofrio study highlighting the effectiveness of ED initiated MAT.

Protocols

SBIRT and Buprenorphine/Naloxone Administration in the ED for Acute Withdrawal: St Agnes Hospital (PDF).

California ED-Bridge/ Emergency Buprenorphine Treatment Project: Guide for Emergency Buprenorphine Treatment (PDF).

ED Initiation of Buprenorphine in the Emergency Department: Natividad Medical Center (PDF).

Opioid Withdrawal Protocol: Zuckerberg San Francisco General Hospital and Trauma Center (PDF includes pocket card).