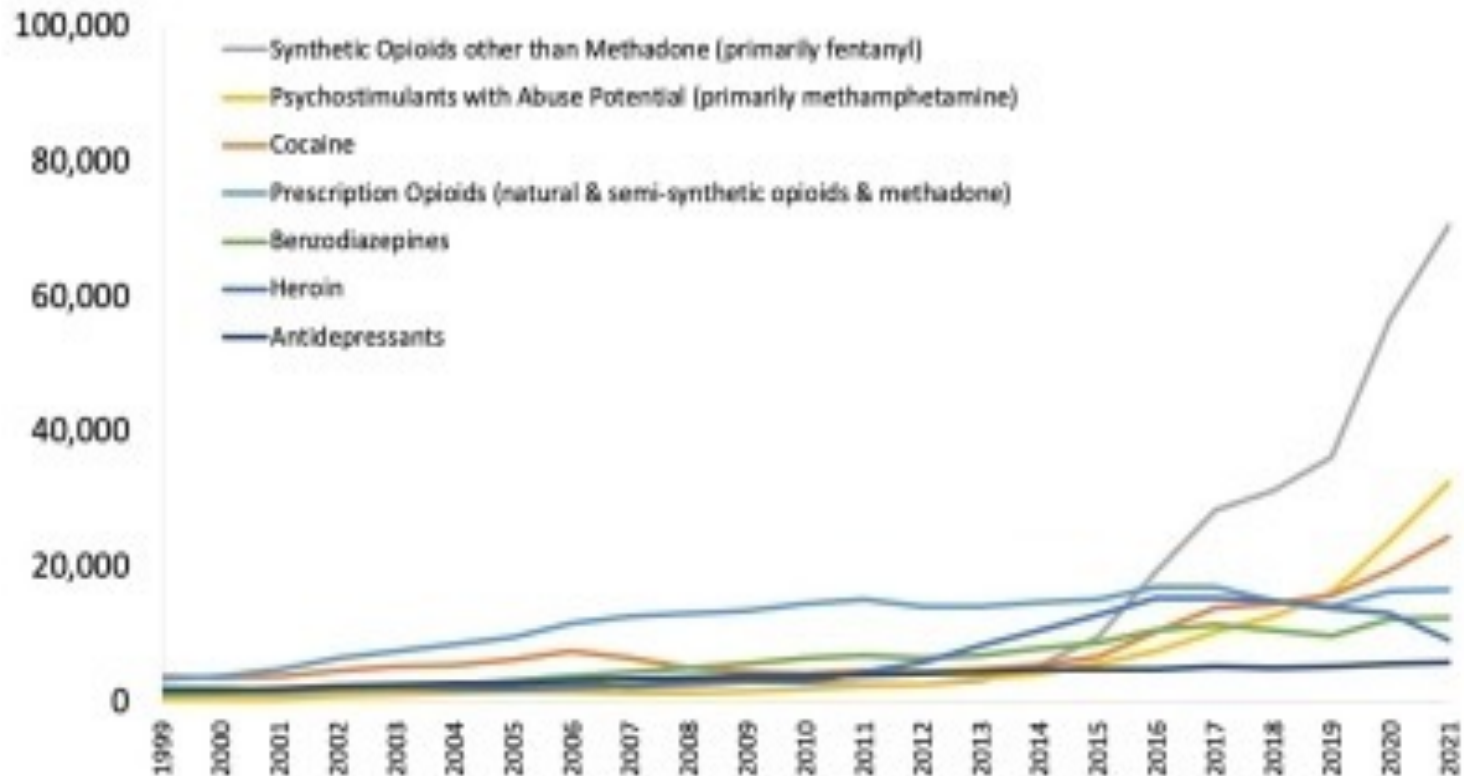


# Implementation of ED OUD Treatment program

Kathryn Hawk, MD, MHS  
Associate Professor  
Department of Emergency Medicine



## Figure 2. National Drug-Involved Overdose Deaths\*, Number Among All Ages, 1999-2021



\*Includes deaths with underlying causes of unintentional drug poisoning [X40–X44], suicide drug poisoning [X60–X64], homicide drug poisoning [X85], or drug poisoning of undetermined intent [Y10–Y14], as coded in the International Classification of Diseases, 10th Revision. Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2021 on CDC WONDER Online Database, released 1/2023.

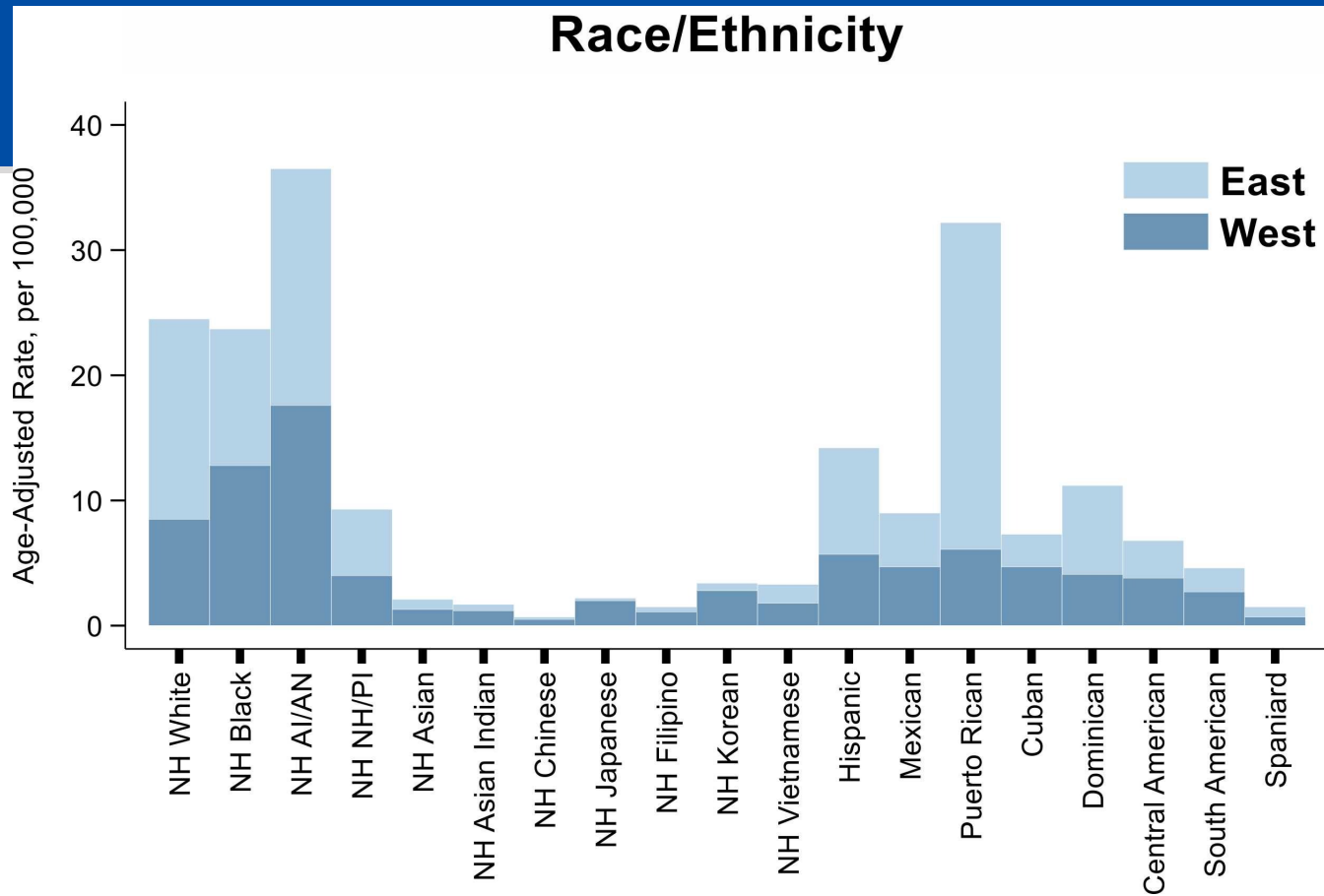


Fig. 1. Age-Adjusted Synthetic Opioid Overdose Mortality Rates by Racial/Ethnic Group, East and West of the Mississippi River, 2018–2021.

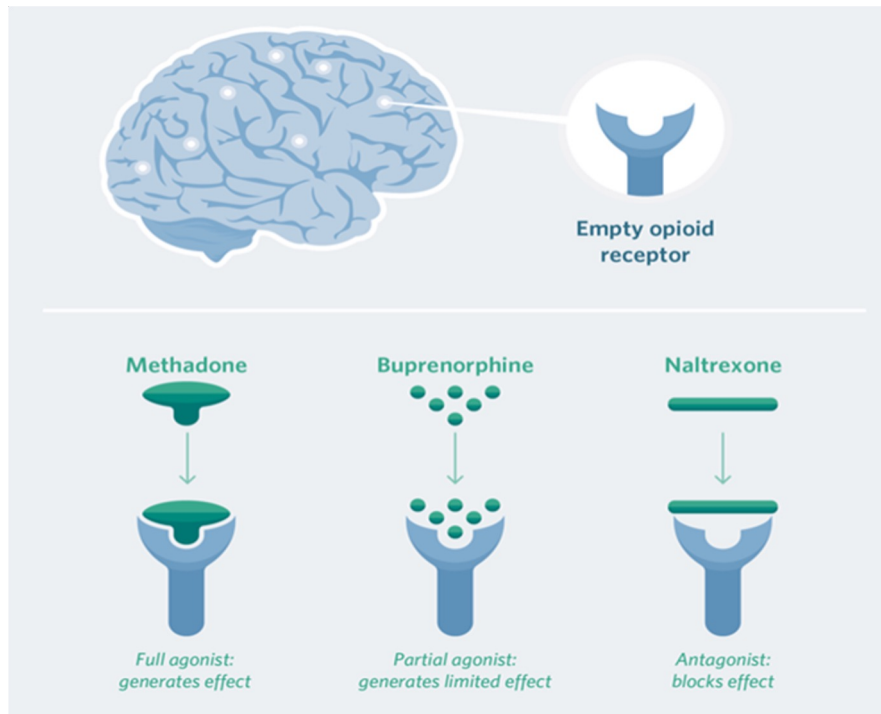
Cano et al, DAD, 2023

# OUD Treatment

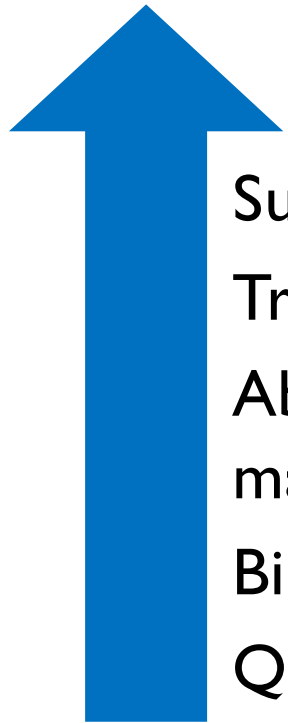
Minimization  
of harms from  
ongoing use



Sustained recovery  
with abstinence  
from all substances



# Medication for OUD



Survival  
Treatment retention  
Ability to gain &  
maintain employment  
Birth outcomes  
Quality of life

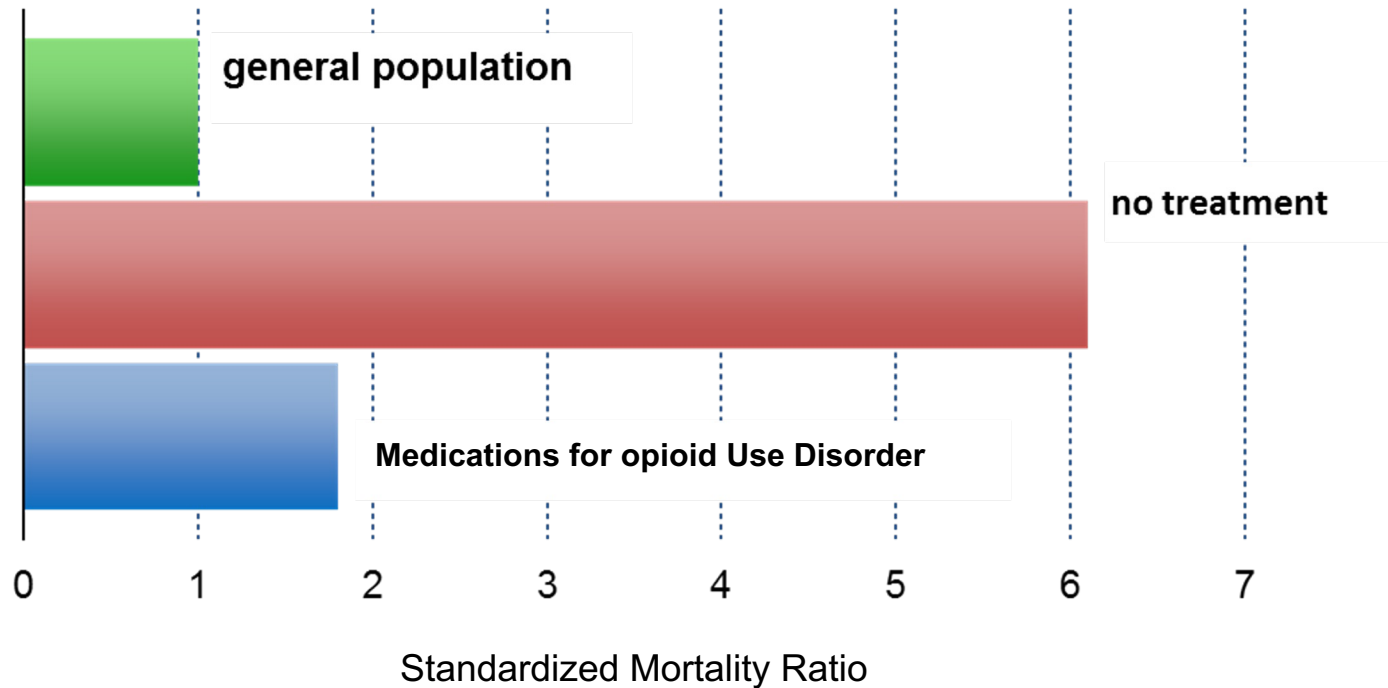


Overdose  
Mortality  
HIV & HCV  
Infections  
Crime

Mattick et al, 2008  
Volkow et al., 2019

# Benefits of Medications for OUD: Decreased Mortality

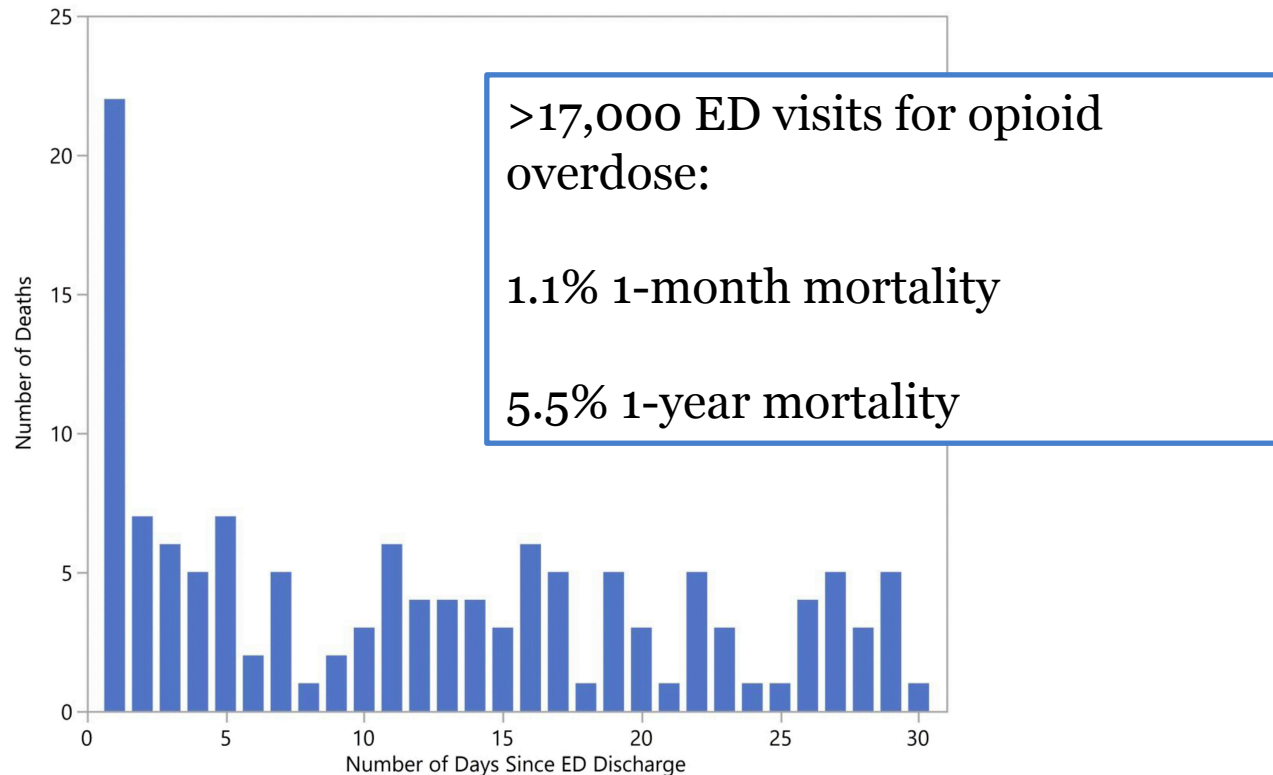
## Death rates:



Dupouy et al., 2017  
Evans et al., 2015  
Sordo et al., 2017

# One-Year Mortality of Patients After Emergency Department Treatment for Nonfatal Opioid Overdose

Scott G. Weiner, MD, MPH\*; Olesya Baker, PhD; Dana Bernson, MPH; Jeremiah D. Schuur, MD, MHS



# Case

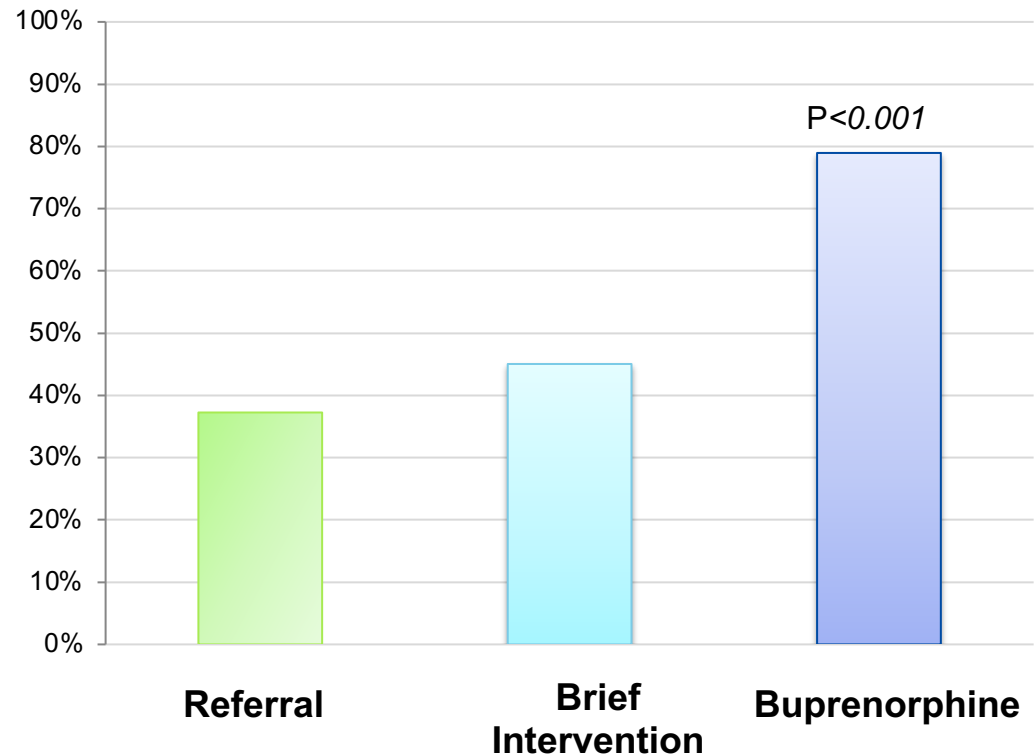
- 25 yo F with OUD and multiple prior treatment attempts presents in cardiac arrest after opioid overdose.
- ED team gets ROSC with compressions x 2, epi x 2, naloxone.
- She is awake, alert, without any apparent neurological deficits and says that she just returned home yesterday after a 30-day detox in California.



# Emergency Department Initiated Buprenorphine

- Treatment trial of 329 ED patients with mod/severe OUD randomized to:
  - Standard Referral
  - Brief Intervention (BI) with facilitated referral
  - BI with ED-initiated buprenorphine with primary care follow-up

## 30 Day Treatment Engagement



# Implementation

# Overview and Terminology

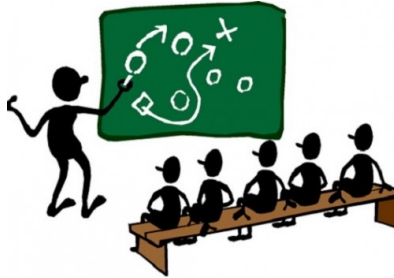
OUD Treatment Program



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The **THING**\*

Implementation Strategies



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the stuff to help people do the thing\*

Implementation Outcomes



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How well you do the thing\*

\*Terminology attributable to Dr. Geoffrey Curran

# Recognized facilitators to implementation of an ED-initiated buprenorphine program\*



\*Whiteside LK et al Annals EM, 2022

# Strategies for Success



- Existing Protocol
- Clear referral plan
- Culture

# NIDA Quick Screen Question

**Quick Screen Question:**

**In the past year, how often have you used the following?**

**Never**

**Once or  
Twice**

**Monthly**

**Weekly**

**Daily or  
Almost  
Daily**

**Alcohol**

- For men, 5 or more drinks a day
- For women, 4 or more drinks a day

**Tobacco Products**

**Prescription Drugs for Non-Medical Reasons**

**Illegal Drugs**

# EMBED: ED BUP Clinical Decision Support

**Buprenorphine (BUP) Initiation**  
Do you have a waiver to prescribe Buprenorphine?  
No  Yes

**Buprenorphine Treatment Options** [ED-initiated Buprenorphine Resources](#)

	Care Pathway #1	Care Pathway #2	Care Pathway #3	Care Pathway #4	Decision Support
	<b>Exit/No BUP</b>	<b>Hold in ED</b>	<b>Start 4 mg BUP (2x)</b>	<b>Start 8 mg BUP</b>	Use these optional tools in any order to help you decide ↓ <a href="#">Diagnose OUD</a> using DSM tool
Does the patient have Opioid Use Disorder?	<b>NO</b> ( $<4$ DSM criteria)	<b>YES</b> ( $\geq 4$ DSM criteria)	<b>YES</b> ( $\geq 4$ DSM criteria)	<b>YES</b> ( $\geq 4$ DSM criteria)	
How severe is patient's withdrawal?	None-to-Mild < 8	None-to-Mild < 8	Mild-to-Moderate 8 - 13	Moderate-to-Severe > 13	<a href="#">Assess Withdrawal</a> using COWS tool
Is patient ready for treatment?	<b>NO</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>	<a href="#">Motivate Readiness</a> using interview tool
	Select #1	Select #2	Select #3	Select #4	

*Don't give buprenorphine if patient is intoxicated or has taken methadone within 72 hours*

- Integrated Clinical Decision Support
- Includes embedded links to OUD calculator
- Dosing Algorithm
- Auto populates discharge instructions
- Prescriptions for BUP and naloxone
- Electronic referral

# MD Calc – ED-Initiated Buprenorphine



Search “QT interval” or “QT” or “EKG”

Log in

SIGN UP

## Emergency Department-Initiated Buprenorphine for Opioid Use Disorder (EMBED)

Assess OUD, opioid withdrawal, and treatment readiness for ED-initiated buprenorphine.

OU D Present	No	Yes
--------------	----	-----

How ready is the patient to start treatment with Buprenorphine today?

Brief Negotiation Interview	Yes	Not Ready for Treatment
-----------------------------	-----	-------------------------

Withdrawal Severity	<8 None to Mild	8-12 Mild to Moderate	>12 Moderate to Severe
---------------------	--------------------	--------------------------	---------------------------

Assessed COWS Score:

### About the Creators



Yale Addiction Implementation Science Team



The EMBED Design Team



# Online Resources



## ACEP E-QUAL Opioid Initiative

- Toolkit
- Webinars
- Articles
- Online Interactive Cases
- Apps

[www.drugabuse.gov/ed-buprenorphine](http://www.drugabuse.gov/ed-buprenorphine)

NIH National Institute on Drug Abuse  
Advancing Addiction Science

enter keywords Search

Connect with NIDA: Facebook, LinkedIn, YouTube, Twitter, Instagram, RSS

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Initiating Buprenorphine Treatment in the Emergency Department

Print Share

NIDAMED: Medical & Health Professionals

Revised September 2018

Introduction

Emergency department (ED) clinicians are in a unique position to interact with people struggling with opioid addiction. ED clinicians will see the same patients in their emergency clinics multiple times, often after administering life saving naloxone to reverse an overdose. NIDA has funded research into the initiation of medications for opioid use disorder addition to opioids right there in the emergency setting coordinated by emergency department specialists at Yale University. The resources reflect best practices identified through research; and offer tools to assist emergency room clinicians.

Why the Emergency Department (ED)?

That is Where the Patients Are! The opioid epidemic is strongly impacting EDs, with 2018 data from the CDC indicating that there has been a 30% increase in visits for...

• Buprenorphine Integration Pathway

• Buprenorphine Treatment Algorithm

• Motivating Patients

• A Guide for Patients Beginning Buprenorphine Treatment at Home

• Questions for Identification of Opioid Use Disorder based

Treatment Information

- [Buprenorphine Integration Pathway](#)
- [Buprenorphine Treatment Algorithm](#)

Motivating Patients

- [Case 1 - Opioid Overdose: ED-Initiated Buprenorphine](#)
- [Case 2 - Seeking Treatment for Opioid Use Disorder](#)
- [Case 3 - Opioid Overdose: Harm Reduction](#)
- [Case 4 - Adolescent Presenting with Opioid Overdose: Assessment, Intervention and Referral](#)
- [Case 5 - Prescription Opioid Withdrawal Symptoms: Assessment, Treatment and Referral](#)

[www.medicine.yale.edu/edbup](http://www.medicine.yale.edu/edbup)

Yale School of Medicine | Emergency Medicine

ED-Initiated Buprenorphine

Overview | Assessment | Treatment | Discharge | Implementation | Evidence | Quick Start | Other Resources

KEY DOCUMENTS

- [Buprenorphine Algorithm](#)
- [Identification of OUD based on DSM-5](#)
- [Clinical Opioid Withdrawal Scale \(COWS\)](#)
- [Buprenorphine Patient Form](#)
- [Home Buprenorphine Initiation](#)

NEED ACCESSIBILITY SUPPORT?

If you need an accommodation to access this content, please contact:

Shara Martin  
203.737.1016  
shara.martin@yale.edu

ED-Initiated Buprenorphine

The Yale Department of Emergency Medicine is pleased to provide this website as a comprehensive resource for any provider seeking information on ED-initiated buprenorphine. Please check back often as we will be continuously updating the materials provided here.

Overview

Assessments & Tools

Treatment, Buprenorphine Algorithm & BNI

Discharge and Treatment Referral

# Who can you collaborate with?

- Is there an OTP, primary care practice, FQHC that will take a “warm handoff”?
  - What services do they offer?
  - Waitlist or mandatory waiting period?
- What do you need to take “warm handoffs” from ED, SEPs, urgent care, clinics, CJ, etc?
- Is anyone willing to run a Bridge or Transition Clinic?
- Telehealth options??

# Local Champions

- Administration, Clinicians, Nursing, Pharmacists...
  - How are you going to get providers waived?
  - How are you going to get waived providers to prescribe?
  - Do you need to consider other models?
- Know your allies
  - In the hospital and out
  - Social work/navigators/Health Promotions Advocates
  - Pharmacy!

# Innovative Strategies for ED BUP Programs

- Peer navigators
- APPs in Triage
- EHR Triage alerts → Social work or Peer Recovery Programs
- On call local champion/expert
- Telehealth?
- Collaborative practice ??



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