

Developing an ED-Initiated Buprenorphine Program

Kathryn Hawk, MD, MHS

Gail D'Onofrio, MD

Department of Emergency Medicine

Yale University School of Medicine



STR-TA
Consortium
State Targeted Response
Technical Assistance

Working with communities to address the opioid crisis.

- ✧ SAMHSA's State Targeted Response Technical Assistance (STR-TA) Consortium assists STR grantees and other organizations, by providing the resources and technical assistance needed to address the opioid crisis.
- ✧ Technical assistance is available to support the evidence-based prevention, treatment, and recovery of opioid use disorders.

Funding for this initiative was made possible (in part) by grant no. 1H79TI080816-01 from SAMHSA. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.



Working with communities to address the opioid crisis.

- ✧ The STR-TA Consortium provides local expertise to communities and organizations to help address the opioid public health crisis.
- ✧ The STR-TA Consortium accepts requests for education and training resources.
- ✧ Each state/territory has a designated team, led by a regional Technology Transfer Specialist (TTS) who is an expert in implementing evidence-based practices.

Funding for this initiative was made possible (in part) by grant no. 1H79TI080816-01 from SAMHSA. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.



Contact the STR-TA Consortium

✧ To ask questions or submit a technical assistance request:

- Visit www.getSTR-TA.org
- Email str-ta@aaap.org
- Call 401-270-5900

Funding for this initiative was made possible (in part) by grant no. 1H79TI080816-01 from SAMHSA. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.

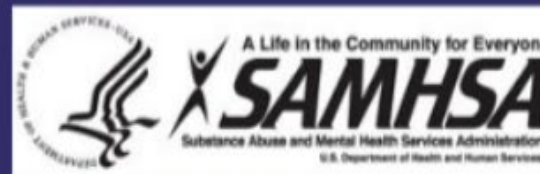


Disclosure Statement

Current grant funding:



Provided funding for filming & production of videos displayed on our interactive web portal



The 24/7/365-day Option To Fight the Opioid Crisis



Why focus on the ED?

Because that's where the patients are

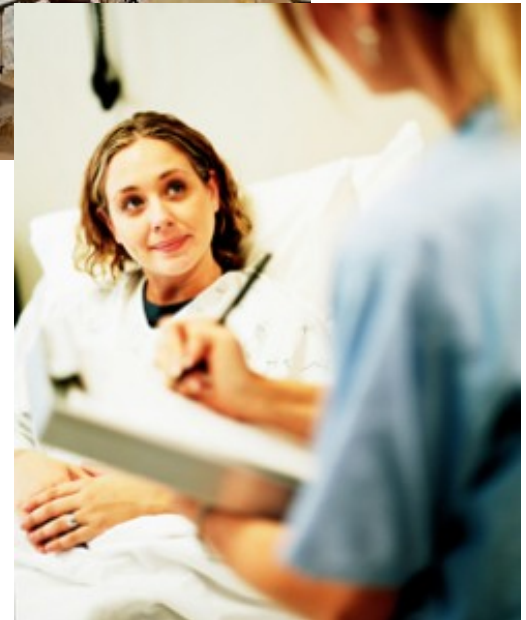


Overdose



Seeking Treatment

Screening



EDs and Emergency Physicians can...

- Identify patients with OUD
- Provide treatment
 - Initiate buprenorphine
 - Overdose education and naloxone distribution
- Directly link patient to continued opioid agonist therapy & preventive services



A Randomized Trial of ED-Initiated Interventions for Opioid Dependence

Research

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.

Original Investigation

Emergency Department–Initiated Buprenorphine/Naloxone Treatment for Opioid Dependence A Randomized Clinical Trial

Gail D'Onofrio, MD, MS; Patrick G. O'Connor, MD, MPH; Michael V. Pantalon, PhD; Marek C. Chawarski, PhD; Susan H. Busch, PhD; Patricia H. Owens, MS; Steven L. Bernstein, MD; David A. Fiellin, MD

IMPORTANCE Opioid-dependent patients often use the emergency department (ED) for medical care.

OBJECTIVE To test the efficacy of 3 interventions for opioid dependence: (1) screening and referral to treatment (referral); (2) screening, brief intervention, and facilitated referral to community-based treatment services (brief intervention); and (3) screening, brief intervention, ED-initiated treatment with buprenorphine/naloxone, and referral to primary care for 10-week follow-up (buprenorphine).

DESIGN, SETTING, AND PARTICIPANTS A randomized clinical trial involving 329 opioid-dependent patients who were treated at an urban teaching hospital ED from April 7, 2009, through June 25, 2013.

INTERVENTIONS After screening, 104 patients were randomized to the referral group, 111 to

+ JAMA Report Video and Author Video Interview at jama.com

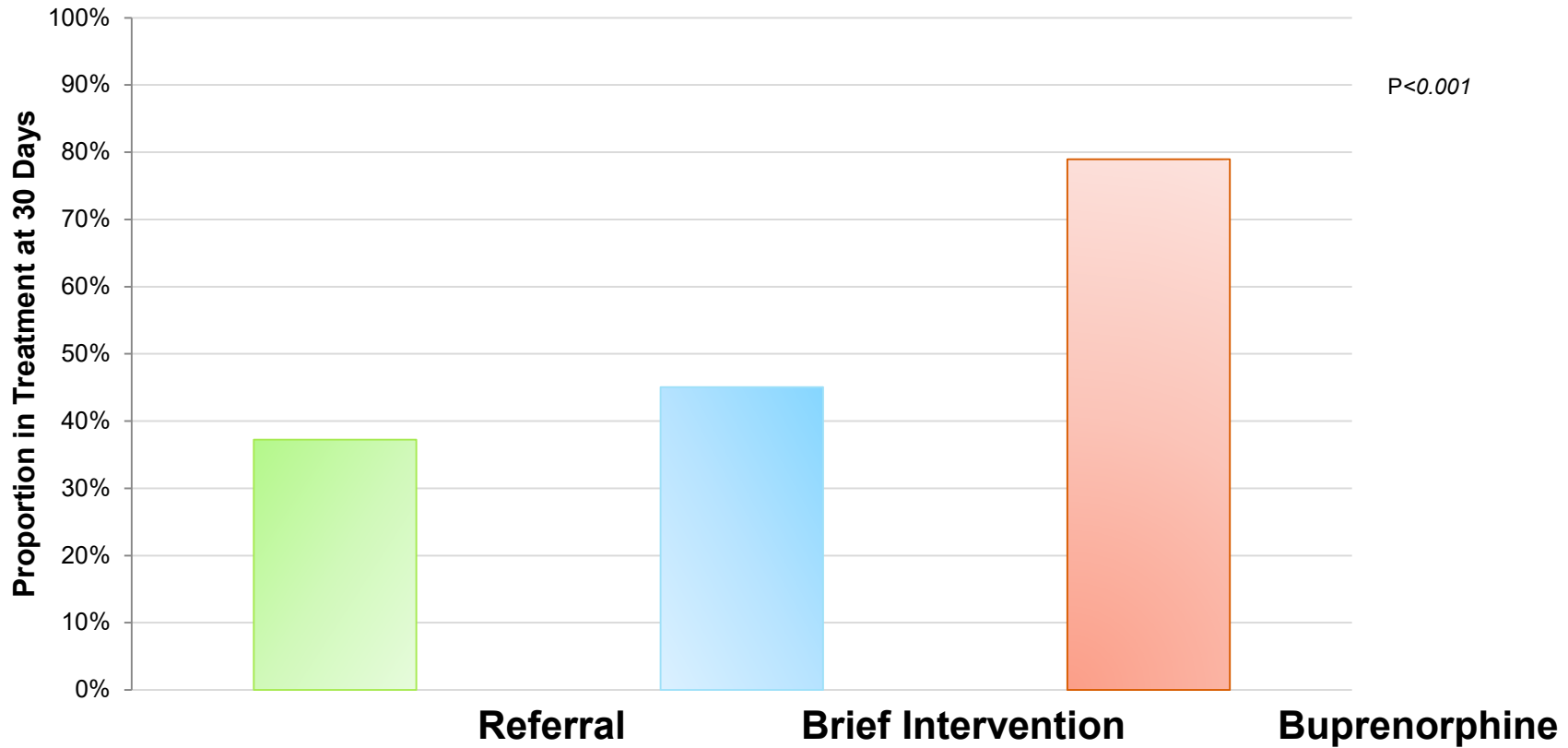
+ CME Quiz at jamanetworkcme.com
CME Questions p



NIDA 5R01DA025991

JAMA. 2015;313(16):1636-1644.

ED-Bup: 2x More Likely to be Engaged in Addiction Treatment at 30 Days



Translating Research into Practice



Resources

<https://www.drugabuse.gov/ed-buprenorphine>

<https://medicine.yale.edu/edbup/>

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 opioid overdose from July 2016 –



September 2017¹. Addiction is a chronic, relapsing disease, and a strongly stigmatized one. **It is NOT a moral failing.** People who present to the ED for other chronic disease like diabetes and asthma are stabilized with medications and handed off for outpatient care. Individuals with opioid use disorder (OUD) do best with a similar treatment plan.

What is the Evidence?

A 2015 study (JAMA) found that twice as many patients were in OUD treatment at 30 days (~80%) with ED-initiated buprenorphine & a brief negotiation interview (BNI) compared with referral only or a BNI + facilitated referral and used less illicit opioids in the last 7 days.²

What Do I Need to Know About Buprenorphine?

It is NOT simply replacing one drug for another.

Buprenorphine treatment decreases withdrawal and craving

Facts for Medication

KEY DOCUMENTS

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

RESEARCH UPDATES

ONLY THREE IN TEN PEOPLE WHO SURVIVE AN OVERDOSE RECEIVE MEDICATION TREATMENT

The researchers identified 17,568 cases where an adult in Massachusetts survived an overdose between 2012 and 2014 . There was a 59% reduction in mortality for individuals taking methadone compared to those not taking medication, and a 38% reduction in mortality for those treated with buprenorphine. There was no change in mortality associated with naltrexone. Despite these gains relative to morbidity, in the 12 months following the OD, only 34% of individuals received any medication for OUD: 11% received methadone maintenance treatment (median of 5 months); 17 received buprenorphine (median of 4 months); 6% received naltrexone (median of 1 month).

Treatment with opioid agonist therapy (methadone and buprenorphine) is associated with a reduction in all-cause and opioid-related mortality. Only a minority of overdose survivors received treatment.

Laroche et al., Medication for Opioid Use Disorder Alter Nonfatal Opioid Overdose and Association With Mortality. Annals Of Internal Med, 2018.



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

[Read More](#)



Assessments & Tools

[Read More](#)



Treatment: Buprenorphine Algorithm & BNI

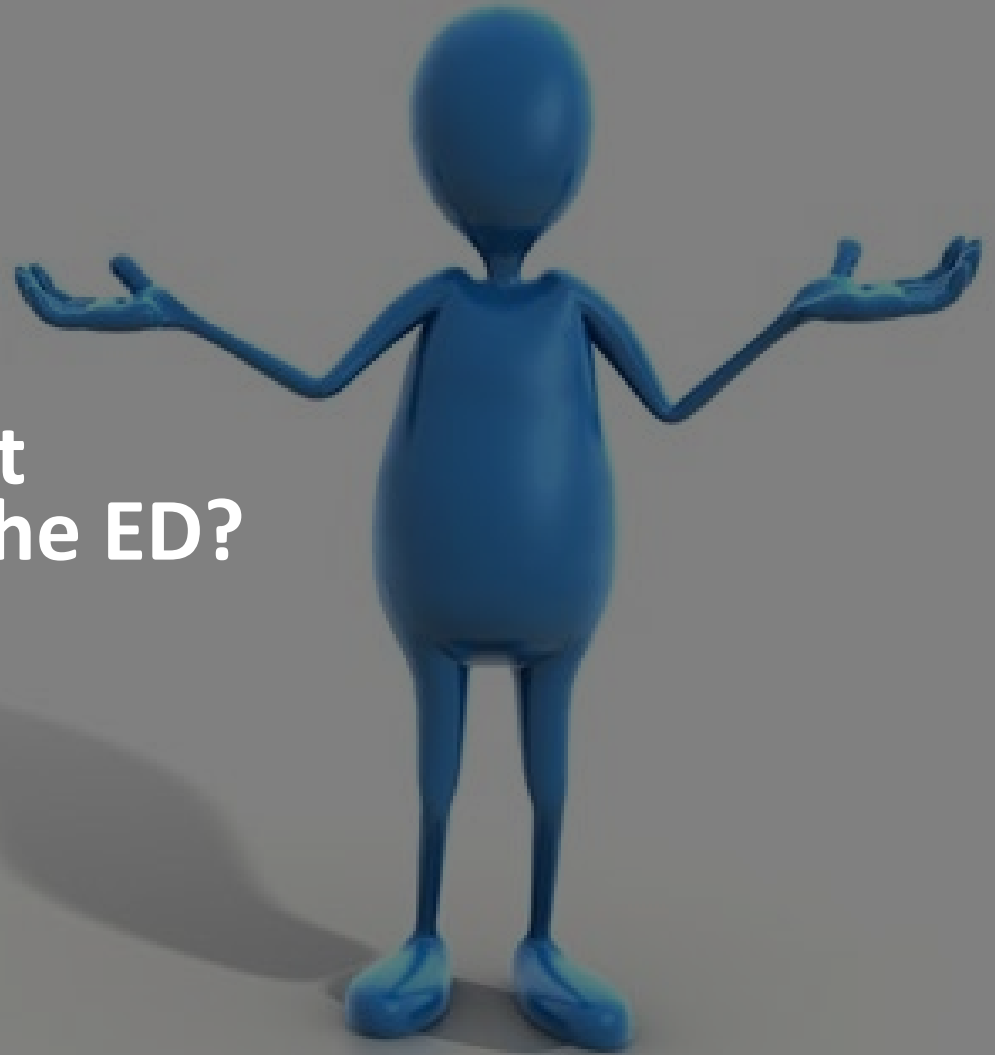
[Read More](#)

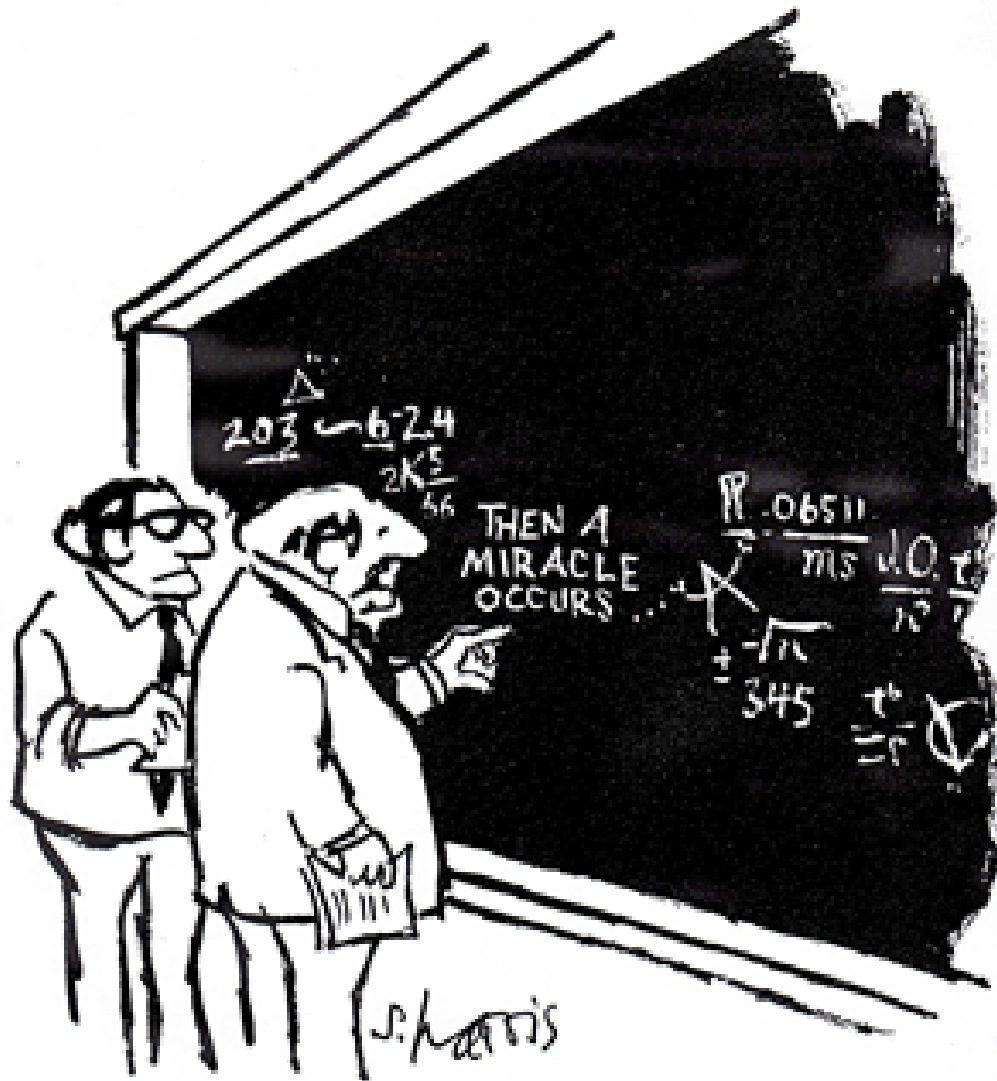


Discharge and Treatment Referral

[Read More](#)

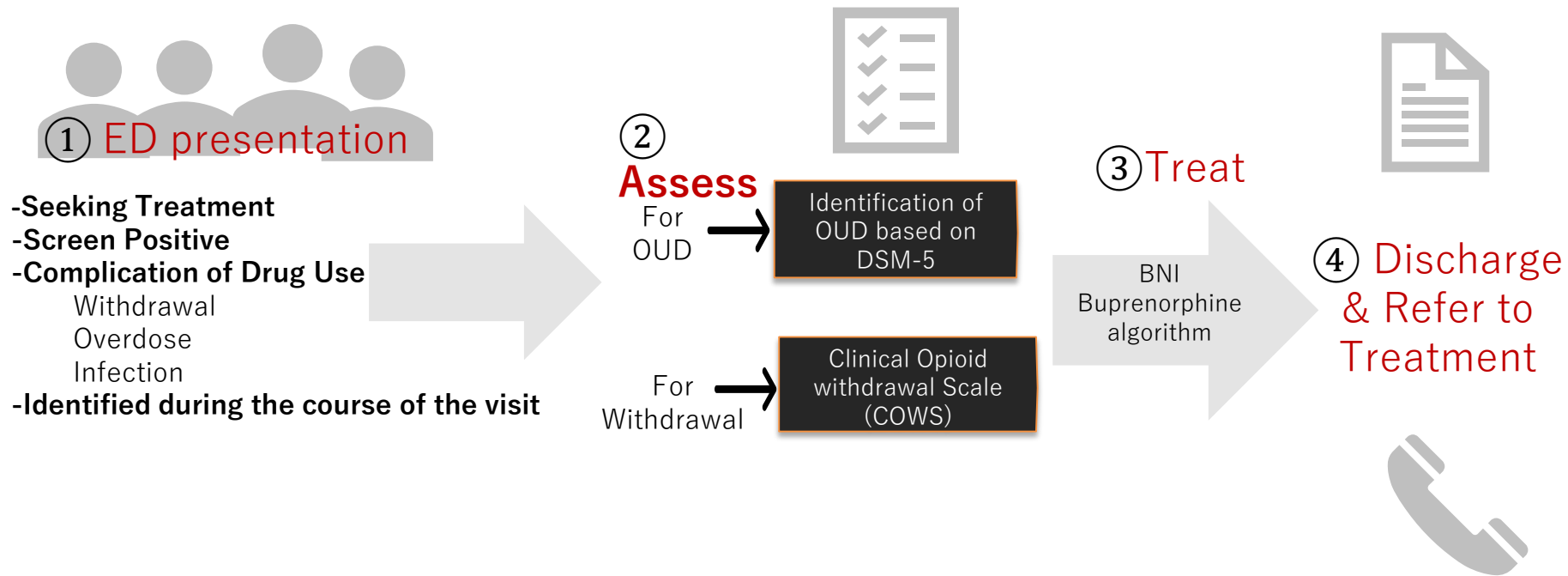
**How do I start
buprenorphine in the ED?**





"I THINK YOU SHOULD BE MORE EXPLICIT HERE IN STEP TWO."

Buprenorphine Integration Pathway



DSM-5 criteria for diagnosis of Opioid Use Disorder

At least 2 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



- ① Formally assess for opioid use disorder
- ② Formally assess the severity of opioid withdrawal (COWS)
- ③ Assess patient willingness for BUP
- ④ Provide ED-initiated buprenorphine (ED or home induction)
- ⑤ Overdose education and naloxone distribution (OEND)
- ⑥ Provide formal referral for ongoing opioid agonist treatment



COWS

Resting Pulse Rate

80 or below (0)	81-100 (1)	101-120 (2)	>120 (4)
--------------------	---------------	----------------	-------------

Restlessness

Sits still (0)	Difficulty sitting still (1)	Frequently shifting limbs (3)	Unable to sit still (5)
-------------------	---------------------------------	----------------------------------	----------------------------

Anxiety or irritability

None (0)	Increasing (1)	Irritable/ anxious (2)	Cannot participate (4)
-------------	-------------------	------------------------------	---------------------------

Yawning

None (0)	1-2 times (1)	3 or 4 times (2)	Several per/min (4)
----------	------------------	---------------------	------------------------

Pupil Size

Normal (0)	Possibly larger (1)	Moderately dilated (2)	Only rim of Iris visible (5)
---------------	------------------------	---------------------------	---------------------------------

Runny Nose or Tearing

Not present (0)	Stuffiness/ moist eyes (1)	Nose running/ tearing (2)	Constant running/ tears streaming (4)
--------------------	----------------------------------	---------------------------------	---

Tremor

No tremor (0)	Felt-not observed (1)	Slight tremor observable (2)	Gross tremor/ Twitching
------------------	--------------------------	---------------------------------	----------------------------

Sweating

No report (0)	Subjective report (1)	Flushed/ observable (2)
------------------	--------------------------	-------------------------------

Gooseflesh Skin

Skin is smooth (0)	Piloerection (3)	Prominent piloerection (5)
-----------------------	---------------------	-------------------------------

Bone or Joint pain

None (0)	Mild (1)	Severe (2)	Unable to sit still due to pain (4)
-------------	-------------	---------------	--

GI upset

None (0)	Stomach cramps (1)	Nausea or loose stool (2)	Vomiting or diarrhea (5)	Multiple episodes (5)
-------------	-----------------------	------------------------------	-----------------------------	--------------------------

Score:

5-12= Mild

13-24= Moderate

25-36= Moderately Severe



Anyone Can Treat Opioid Withdrawal with Buprenorphine



72-hour rule

Title 21, Code of Federal Regulations, Part 1306.07(b)

Allows to administer (but not prescribe) narcotic drugs for the purpose of relieving acute withdrawal symptoms while arranging for the patient's referral for treatment

- Not more than 1-day's medication may be administered or given to a patient at one time
- Patient must return to ED each day for no more than 72 hours
- This 72-hour period cannot be renewed or extended.



How do you motivate patients to accept treatment?



What makes people take action?



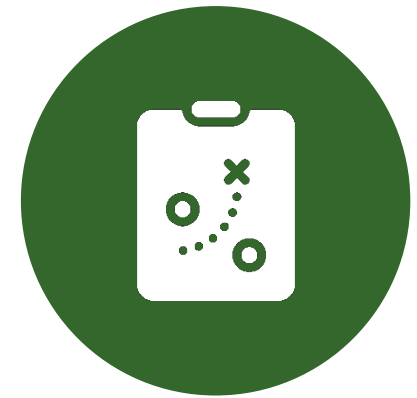
Autonomy
(freedom)



Engaging
Talk



Hearing
Themselves



Making a
Plan



People only really listen to
1 person...



THEMSELVES!



Brief Negotiation Interview BNI

Raise The Subject

- Establish rapport
- Raise the subject of drug use
- Assess comfort



Provide Feedback

- Review patient's alcohol and/or drug use and patterns
- Make connection between AOD use and negative consequences; (e.g. impaired judgment leading to injury/unprotected sex/sharing needles)
- Make a connection between AOD use and ED visit



BNI (continued)

Enhance Motivation

Assess readiness to change: One a scale 1 to 10 how ready are you to stop using, cut back or enroll in program???

(Why didn't you pick a lower number?)



Negotiate

- Negotiate goal
- Give advice
- Summarize and complete referral/prescription form
- Thank patient for their time

D'Onofrio G, Pantaloni MV, Degutis LC, Fiellin DA, O'Connor PG. Development and implementation of an emergency practitioner-performed brief intervention for hazardous and harmful drinkers in the emergency department. Acad Emerg Med 2005;12:249-256.



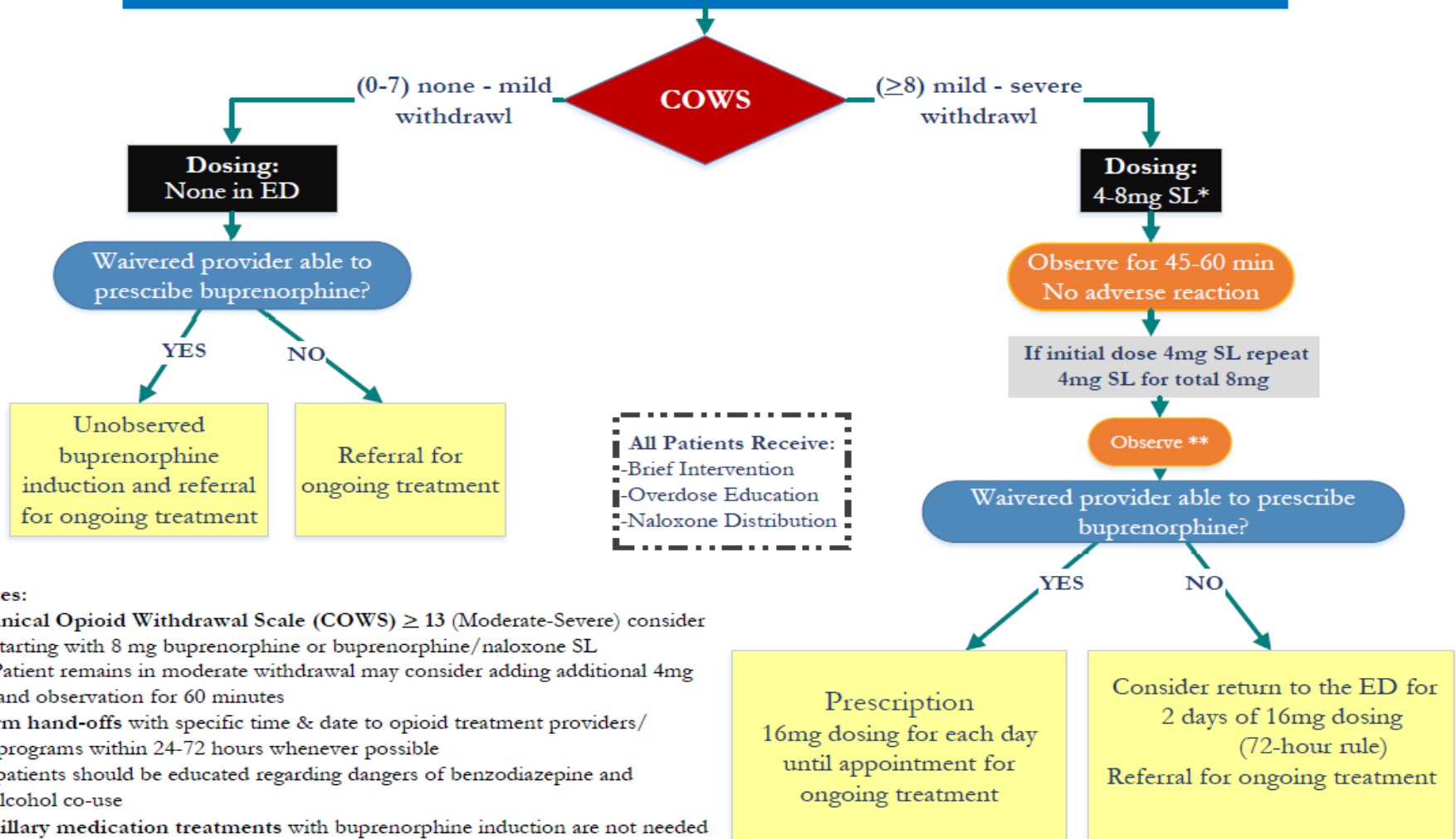
ED-Initiated Buprenorphine

Diagnosis of Moderate to Severe Opioid Use Disorder

Assess for opioid type and last use

Patients taking methadone may have withdrawal reactions to buprenorphine up to 72 hours after last use

Consider consultation before starting buprenorphine in these patients



Notes:

*Clinical Opioid Withdrawal Scale (COWS) ≥ 13 (Moderate-Severe) consider starting with 8 mg buprenorphine or buprenorphine/naloxone SL

** Patient remains in moderate withdrawal may consider adding additional 4mg and observation for 60 minutes

Warm hand-offs with specific time & date to opioid treatment providers/ programs within 24-72 hours whenever possible

All patients should be educated regarding dangers of benzodiazepine and alcohol co-use

Ancillary medication treatments with buprenorphine induction are not needed



A Guide for Patients Beginning Buprenorphine Treatment at Home

Before you begin you want to feel very sick from your withdrawal symptoms

It should be at least . . .

- 12 hours since you used heroin/fentanyl
- 12 hours since snorted pain pills (Oxycontin)
- 16 hours since you swallowed pain pills
- 48-72 hours since you used methadone

You should feel at least three of these symptoms . . .

- Restlessness
- Heavy yawning
- Enlarged pupils
- Runny nose
- Body aches
- Tremors/twitching
- Chills or sweating
- Anxious or irritable
- Goose pimples
- Stomach cramps, nausea, vomiting or diarrhea

Once you are ready, follow these instructions to start the medication

DAY 1:

8-12mg of buprenorphine

Most people feel better the first day after 8-12mg. (Dosing depends on how early on the first day you started)

Step 1.

Take the first dose

4mg

Wait 45 minutes



- Put the tablet or strip under your tongue
- Keep it there until fully dissolved (about 15 min.)
- Do NOT eat or drink at this time
- Do NOT swallow the medicine

Step 2.

Still feel sick?
Take next dose

4mg

Wait 6 hours



Most people feel better after two doses = 8mg

Step 3.

Still uncomfortable?
Take last dose

4mg

Stop

Stop

- Stop after this dose
- Do not exceed 12mg on Day 1

DAY 2:

16mg of buprenorphine

Take one 16mg dose

Most people feel better with a 16mg dose

16mg

Repeat this dose until your next follow-up appointment

If you develop worsening symptoms while starting buprenorphine before your scheduled outpatient appointment return to the emergency department



Those at Highest Risk for Overdose

- ✧ Prior non-fatal opioid overdose
- ✧ Opioid use disorder leaving controlled settings (e.g. residential treatments, detoxification, incarceration) who have lowered opioid tolerance
- ✧ Prescribed doses of opioid analgesics greater than 90 milligram morphine equivalents (MME) per day
- ✧ Taking (co-prescription or co-use) opioids and benzodiazepines
- ✧ Alcohol and opioids
- ✧ Injecting opioids
- ✧ Exposed to high potency opioids (fentanyl, W-18)
- ✧ Low levels of physical tolerance (new initiates)
- ✧ Sleep disordered breathing (e.g. sleep apnea)



Harm Reduction Strategies

- ✧ **Carry naloxone**
- ✧ **Never use alone**
- ✧ **Don't combine opioids with other substances**
(alcohol, benzodiazepines or other sedatives)



Buprenorphine Referral Form

BUPRENORPHINE REFERRAL FORM FOR OPIOID USE DISORDER

Instructions: Buprenorphine/naloxone (brand name: Suboxone) helps treat opioid use disorder by decreasing cravings and suppressing withdrawal symptoms. When appropriate, patients with opioid use disorder should receive a prescription or first dose of buprenorphine in the hospital, along with a direct referral for buprenorphine maintenance. For referrals, please complete and fax this form to local treatment centers listed below.

Patient's Name: _____ **Date of birth:** ____/____/____
Phone number: (____) _____-____ **Date of ED visit:** ____/____/____
Insurance: Medicaid/Medicare Commercial Self-pay
Presented to ED with opioid overdose: Yes No

Opioid Use History:

Age of first use: _____ Primary type of opioid used: _____
Pattern of opioid use (average daily amount and frequency): _____

Substance Use History (other than opioids): Is the patient CURRENTLY using any of the following?

- | | |
|--|--|
| <input type="checkbox"/> cocaine | <input type="checkbox"/> PCP |
| <input type="checkbox"/> alcohol | <input type="checkbox"/> synthetic marijuana |
| <input type="checkbox"/> benzodiazepines | <input type="checkbox"/> other _____ |

Medical/Psychiatric History: _____

Critical actions required by the Emergency Department prior to buprenorphine induction:

DSM 5 Score for opioid dependence (Score must be ≥ 3): _____

COWS Score (Score must be ≥ 8): _____

Buprenorphine started in ED: - Yes - No **Date first dose given in ED:** ____/____/____

Dose given: _____ Rx dose _____ Sig: _____

Number of days given (Rx): _____

Name of referring ED provider: _____

Contact number: (____) _____-____

Completed form sent by EHR, faxed etc. to (please check one): {List frequent referrals sites}

Note: For all treatment options include information on what insurance types are accepted and appointment times, availability or contact. Include



**How do I set up a
program?**





Local champions

Community Partners

Leadership Buy-In

Anticipate Barriers

Success Stories

Protocols

Know your Resources

Community Partners

- ✧ Is there an OTP, primary care practice, resident clinic, FQHC that will take a “warm handoff”?
 - What services do they offer?
 - Insurance?
 - Waitlist or mandatory waiting period?

- ✧ Anyone willing to run a Bridge or Transition Clinic?



Local Champions

- ✧ Administration, Faculty, Residents, Nursing...
 - 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!



Anticipate Challenges

- ✧ Buprenorphine
 - Waiver Requirements
 - Formulary/ED Pyxis
 - Insurance Prior Authorization?
 - Local pharmacy

- ✧ Patient
 - ID
 - Insurance
 - Transportation



Additional Challenges

- ✧ Anticipate resistance, particularly around ANY increased workload across all staff
 - How can you offload some of the work?
 - What motivates different key players?
 - Reducing repeat ED visits or psych holds
 - Staff safety
 - LOS
 - Patient satisfaction

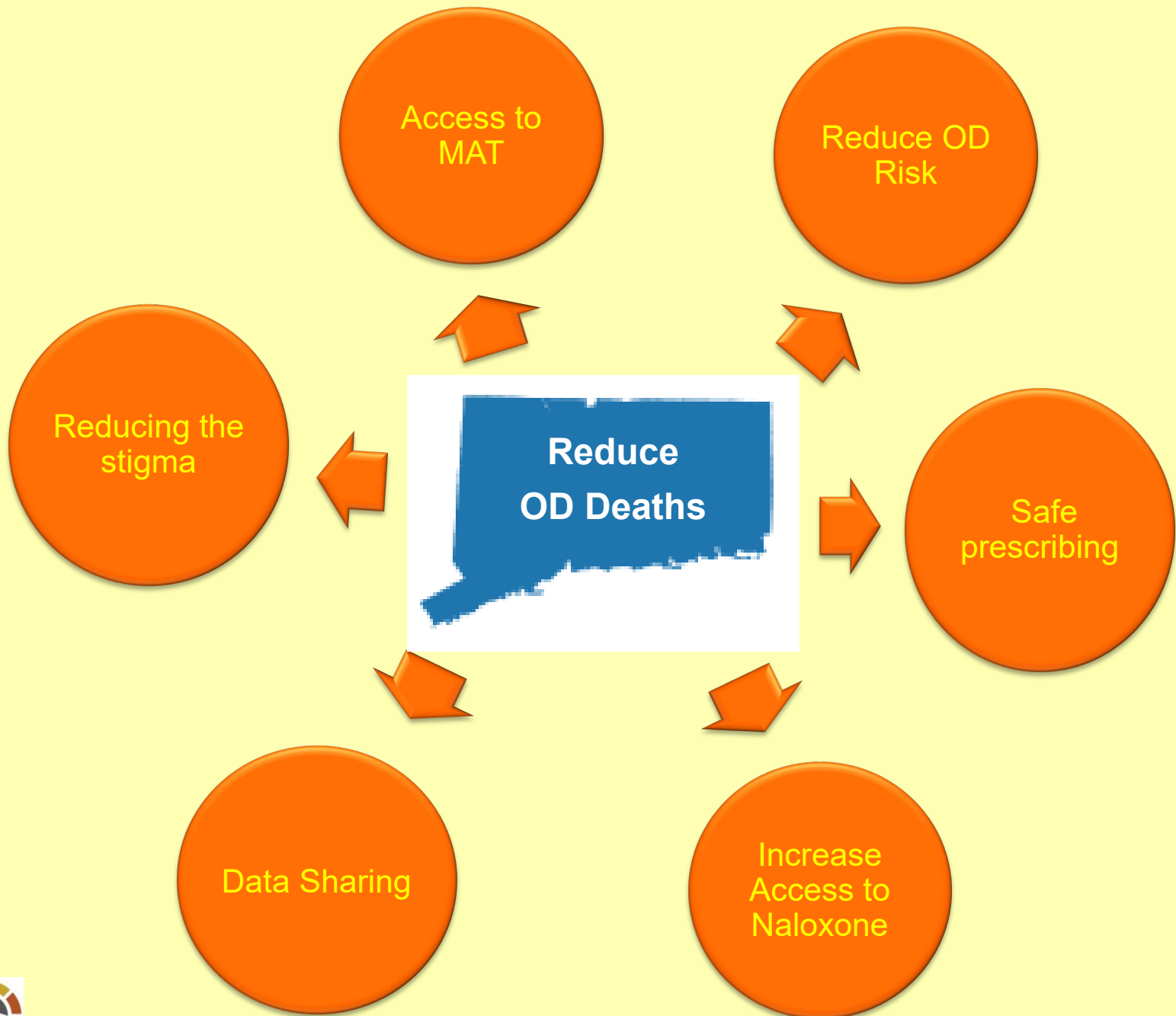


Making Progress

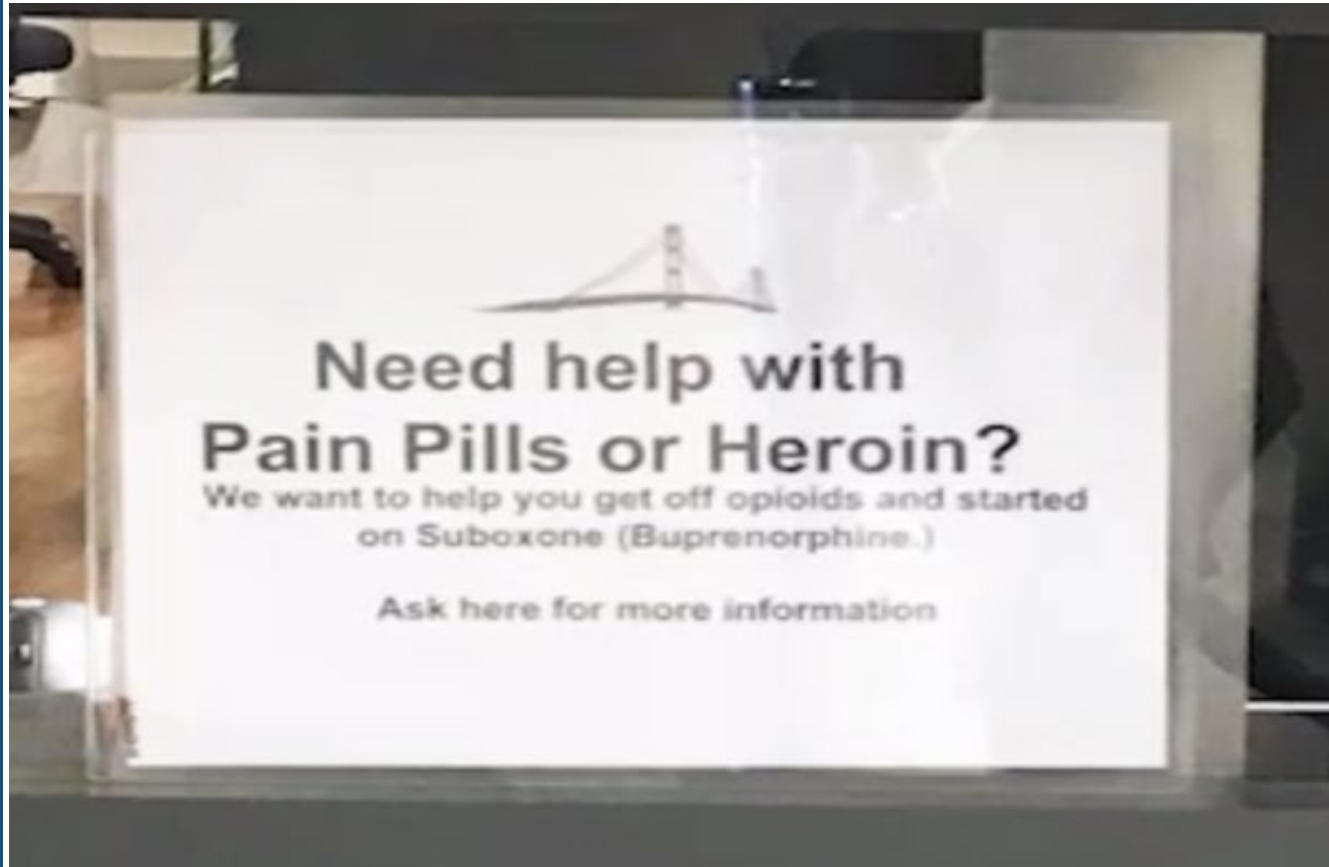
- ✧ Engaging stakeholders helps change culture
- ✧ It will not happen overnight
- ✧ Perfect is the enemy of good
 - Don't wait for a perfect protocol or system!
- ✧ Make is as easy as possible for providers and patients

“This is about improving patient care”





Barriers & Myths



Emergency Departments — A 24/7/365 Option for Combating the Opioid Crisis

Gail D’Onofrio, M.D., Ryan P. McCormack, M.D., and Kathryn Hawk, M.D., M.H.S.

Concerns, Realities, and Solutions Regarding Opioid Use Disorder and Buprenorphine Treatment in the ED.*

Concern	Reality	Solution
Addiction is a moral failing; patients keep coming back to the ED time and time again.	Addiction is a chronic and relapsing disease that can be effectively treated with opioid-agonist therapies. Emergency physicians often see a skewed sample of patients not in treatment.	Provide patient-specific feedback to ED providers on success stories regarding engagement in treatment.
Providing buprenorphine to patients will lead to diversion.	There is less diversion of buprenorphine than of other opioids. Buprenorphine bought off the street is often used to reduce withdrawal symptoms. Every buprenorphine pill taken is one less opportunity for overdose, complication of injection drug use, or death.	Offer limited supplies, preferably 2–7 days’ worth of treatment, until an appointment with a community provider or program can be arranged.
Initiating buprenorphine treatment is complicated, and the ED is already crowded and chaotic.	Buprenorphine is safer and more predictable than many medications used in routine ED practice. Treatment can be accomplished in less time than an urgent care visit.	Integrate protocols electronically into the ED workflow from triage to discharge that engage all providers in order to facilitate a simplified and streamlined process. Identify a cadre of champions available to support new prescribers.
Initiating buprenorphine will increase length of stay.	Initiating buprenorphine will reduce length of stay and reduce the potential for violent behaviors and injury to staff. Buprenorphine markedly reduces withdrawal symptoms in 20–30 minutes.	Streamline protocols and educate staff to achieve times of 60–90 minutes from presentation to discharge, in keeping with urgent care criteria.
There is a lack of referral sites for patients who have initiated buprenorphine treatment.	Most communities have treatment resources of which the ED staff are unaware.	Partner and develop relationships with community resources and local health departments to permit efficient referral and feedback. Hire an ED staff member such as a health promotion advocate, which is helpful and cost-effective. ³



Emergency Departments — A 24/7/365 Option for Combating the Opioid Crisis

Gail D’Onofrio, M.D., Ryan P. McCormack, M.D., and Kathryn Hawk, M.D., M.H.S.

Patients will return repeatedly for redosing.	Repeated visits for redosing have not been demonstrated at sites that consistently offer buprenorphine.	Develop treatment plans that are similar to those for other chronic diseases, such as sickle cell disease. Treat withdrawal with buprenorphine and referral.
Patients will flock to the ED for treatment.	Patients with OUD are already in the ED. Sites with ED-initiated buprenorphine do not report an uptake of patients seeking treatment.	Initiate treatment protocols at triage to promote rapid assessment, treatment, and referral.
Many patients don’t want treatment anyway.	Some patients, often after an overdose, are not ready for treatment after a brief psychosocial intervention, but discussion may lead to a change in motivation in the future. The ED visit is often a missed opportunity to engage patients who may be contemplating a positive change but need guidance and support.	Introduce harm-reduction strategies such as overdose prevention and naloxone distribution. Establish rapport to facilitate improved outcomes.
Obtaining a waiver to prescribe buprenorphine is too burdensome.	The training required to obtain a waiver can be done all online or as half-day courses coupled with half-day online services. Most training is free and similar to other required learning and counts toward CME requirements for specialty certification, recertification, and licensing in many states.	Identify resources online and at institutions using the SAMHSA and ASAM websites. Offer faculty development days or group learning events.



Opportunity

**Embrace science
based treatments**

**Engage emergency
practitioners**

**Change the trajectory of
the opioid epidemic**



Questions?



kathryn.hawk@yale.edu

gail.donofrio@yale.edu

