Emergency Department Initiated Buprenorphine: Expanding the Scope of Emergency Medicine Care During an Addiction Epidemic

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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.

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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

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Drug overdose deaths, 1980 to 2016

Peaks:
- Peak car crash deaths (1972)
- Peak HIV deaths (1995)
- Peak gun deaths (1993)

59,000 to 65,000 people died from drug overdoses in the U.S. in 2016.
OD is #1 cause of death of americans under age 50
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1999-2016: more than 600,000 overdose deaths
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1999-2016: more than 600,000 overdose deaths
life expectancy for americans is falling, two three years in a row
ED Management of Pain and Misuse During an Epidemic

1. Prevent opioid naïve patients from becoming misusers by your prescription
   - Calculate benefit: harm whenever opioid RX considered
   - If opioid RX, small number of low dose, lower-risk pills

2. For existing opioid users:
   2a. Revealing, willing
       “I’m an addict, I need help”
       aggressive move to treatment
       ED-initiated buprenorphine
       arranged specialty follow-up
   2b. Revealed, Unwilling
       “I overdosed”
       Harm reduction, low thresh bupe,
       supportive stance, open door
   2c. partially revealed
       “I have chronic pain and need meds”
       avoid opioids in ED or by prescription
       opioid alternatives for pain
       express concern that opioids are causing harm
   2d. unrevealed
       “I have acute pain and need meds”
       risk stratify with red & yellow flags
       PMDP-move positives to willingness
MAT: Medication Assisted Treatment is the best treatment for opioid addiction
**MAT:** medication assisted treatment is best treatment for opioid addiction

**MOUD:** Medications for Opioid Use Disorder

**OAT:** opioid agonist treatment

**OST:** opioid substitution treatment is the treatment for opioid addiction
MAT: medication assisted treatment is best treatment for opioid addiction

OAT: opioid agonist treatment

OST: opioid substitution treatment is the treatment for opioid addiction

Abstinence does not work
Abstinence does not work for opioid addiction

Detox does not work
Rehab does not work
12-step does not work
NA does not work
Counseling does not work
Abstinence does not work for opioid addiction

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Rehab does not work
12-step does not work
NA does not work
Counseling does not work

27% relapse on day of discharge from rehab
65% relapse at one month
90% relapse at one year
Abstinence does not work for opioid addiction

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12-step does not work
NA does not work
Counseling does not work

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65% relapse at one month
90% relapse at one year

Very Dangerous
abstinence.

does not work.

for opioid addiction.
abstinence. does not work. for opioid addiction.

MAT
Naltrexone
Methadone
Buprenorphine
MAT: Medication Assisted Treatment

Naltrexone

monthly depot opioid antagonist
MAT: medication assisted treatment

Naltrexone

monthly depot opioid antagonist
abstinence therapy
MAT: medication assisted treatment

Naltrexone

monthly depot opioid antagonist
abstinence therapy
withdrawal
MAT: medication assisted treatment

**Naltrexone**
monthly depot opioid antagonist
abstinence therapy

Withdrawal

cravings
MAT: Medication Assisted Treatment

methadone
MAT: medication assisted treatment

methadone

long-acting full opioid agonist
MAT: medication assisted treatment

methadone

long-acting full opioid agonist

effective but abuse-prone and dangerous
MAT: medication assisted treatment

methadone

- long-acting full opioid agonist
- Increased risk of OD with dose adjustments in first month
- daily engagement sometimes a plus but usually a minus
MAT: Medication Assisted Treatment

buprenorphine
MAT: medication assisted treatment

buprenorphine

partial opioid agonist
ceiling effect: much safer, less euphoriant
MAT: medication assisted treatment

buprenorphine

partial opioid agonist

ceiling effect: much safer, less euphoriant

higher receptor affinity than almost any other opioid

will precipitate withdrawal if not in withdrawal
MAT: medication assisted treatment

buprenorphine
partial opioid agonist
ceiling effect: much safer, less euphoriant

higher receptor affinity than almost any other opioid
will precipitate withdrawal if not in withdrawal

less abuse-prone and blocks more abuse-prone opioids
buprenorphine

✧ Partial opioid agonist
  – Maintains tolerance and blocks relapse to gull agonist
  – Ceiling effect, much safer, less euphoriant

✧ Higher receptor affinity than almost any other opioid
  – Will precipitate withdrawal if not in withdrawal
  – Some patients require daily dosing/observed dosing to ensure adherence

✧ Less abuse prone and blocks more abuse prone opiates
  – It can be prescribed in general outpatient settings so it is more flexible than methadone
  – Ceiling effect, much safer, less euphoriant
  – Bup is uniquely suited to treat opioid addiction: less dangerous, less abuse prone vs. methadone, more likely to abolish craving, protects users from OD by more dangerous opioids
MAT: medication assisted treatment

buprenorphine
buprenorphine

buprenorphine + naloxone = Suboxone
 naloxone additive is inert unless injected
 naloxone component only prevents IV abuse
MAT: medication assisted treatment

buprenorphine

buprenorphine + naloxone = Suboxone

Naloxone additive is inert unless injected
Naloxone component only prevents IV abuse

Slow acting & long-acting

Reduces abuse potential + ceiling effect = long dosing intervals
MAT: medication assisted treatment

**buprenorphine**

buprenorphine + naloxone = Suboxone
naloxone additive is inert unless injected
naloxone component only prevents IV abuse

**slow acting & long-acting**

- reduces abuse potential
- ceiling effect = long dosing intervals

everyone can use buprenorphine to treat withdrawal but an X-waiver is required to administer for addiction
MAT: medication assisted treatment

**buprenorphine**

buprenorphine + naloxone = Suboxone

Naloxone addictive is inert unless injected

Naloxone component only prevents IV abuse

**slow acting & long-acting**

Reduces abuse potential + ceiling effect = long dosing intervals

Everyone can use buprenorphine to treat withdrawal

But an X-waiver is required to administer for addiction

ACEP X-Waiver course for emergency docs
In 1996, France responded to its heroin overdose epidemic by training/licensing GP's to prescribe buprenorphine.
Heroin overdose deaths and opioid agonist treatment Baltimore, MD, 1995–2009

- Heroin overdoses
- Buprenorphine patients
- Methadone patients

Schwartz 2013
1-year retention in treatment was 75% and 0% in the buprenorphine and placebo groups.
“adding any psychosocial support to standard maintenance treatments does not add additional benefits.”
everyone needs a therapist, but an opioid addict needs an opioid agonist
opioid addiction

desperate need to avoid withdrawal
constant debilitating cravings
perpetual cycling of highs/lows
normal functioning impossible

acquisition harms: poverty, crime, frantic behavior

injection harms: local infections, HIV/HepC, endocarditis

street drug harms: accidental overdose/death

opioid dependence

scheduled opioid consumption
freedom from addiction harms
normal life possible

prescribed opioid agonist
## Detox Facilities

<table>
<thead>
<tr>
<th>Facility</th>
<th>Address/Location</th>
<th>Phone Numbers</th>
<th>Services/Payment Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metropolitan Hospital</td>
<td>1900 2nd Ave.</td>
<td>212-423-5822 (clinics); x7312 (PER); x7117 (beds)</td>
<td>Inpatient detox, avg 14 day stay. Payment: all insurance including MCD. Patients must be able to pay as there is no sliding scale at this facility.</td>
</tr>
<tr>
<td>North General</td>
<td>Madison Ave. (121st and 122nd)</td>
<td>212-423-1330 (Mark Gautier)4318/4404</td>
<td>No woman past 1st trimester. Hours: M-F 8am-6pm; Tu 8am-10pm; Sa 8am-6pm. Other times thru ER. Services: Inpatient detox 4-5 days. Payment: all insurance and self-pay.</td>
</tr>
<tr>
<td>Harlem Hospital</td>
<td>22-44 W. 137th St. (Lenox and 5th)</td>
<td>212-939-1083/8132/3328 (ER); 939-3033 DTP/rehab</td>
<td>Hours: screening 8am-3pm. ER other hours. Services: Inpatient detox 3-10 days. No cocaine or crack unless medical prob (pregnant, HIV, etc.). Also have extensive rehab and DTP (any substances). Payment: all insurance and self-pay.</td>
</tr>
<tr>
<td>St. Vincent's Midtown</td>
<td>415 W. 54th between 9th and 10th</td>
<td>212-459-8103</td>
<td>ID: preferred, but not required.</td>
</tr>
<tr>
<td>Coney Island Hospital</td>
<td>2601 Ocean Parkway; Brooklyn, NY</td>
<td>718-616-5500</td>
<td>Hours: admitting 8am-2pm. Services: Inpatient detox at hospital and outpatient rehab at outside clinic. No smoking. Payment: all insurance and self-pay.</td>
</tr>
<tr>
<td>Medical Arts/Cornerstone</td>
<td>57 W. 57th Street at 6th Ave.</td>
<td>212-755-0000</td>
<td>Hours: 8am-8pm. Services: Inpatient detox up to 7 days. Inpatient 7-30 day rehab. Payment: all private insurance. Take Medicaid or self-pay only if alcohol related. Transport: facility can send a van to pick-up patient.</td>
</tr>
</tbody>
</table>

A.C.I. www.acihealthgroup.com
500 W. 57th St. at 10th Ave.; NY, NY 10019
1-800-724-4444; 212-293-3000; 212-378-4545
Population: M/F >18
Hours: 7 days a week, call for hours daily
Services: Inpatient and outpatient detox and rehab.
Payment: all insurance including MCD. Patients must be able to pay as there is no sliding scale at this private facility.
Transport: subway
ID: required

Beth Israel Medical Center
15th Street (1st and 2nd Ave.); Bernstein Pavilion, 1st fl
212-420-4220/4270
Population: M/F >18
Hours: M-S 7am-5pm; S-Su 9am-5pm; after 5pm thru ER.
Services: Inpatient and outpatient detox, 7-10 days. Inpatient (28-day) and outpatient rehab.
Payment: all insurance and self-pay
Transport: may be able to assist 212-420-4270
(Reggie Schwartz)
ID: required
“A great part of the tragedy of this opioid crisis is that, unlike in previous such crises America has seen, we now possess effective treatment strategies that could address it and save many lives, yet tens of thousands of people die each year because they have not received these treatments.”
Discharging a person addicted to opioids who is in withdrawal is more dangerous than any discharge we would ever consider in any other context.
“The history of medicine is, in part, the history of physicians stretching the scope of their practice to answer the pressing needs of their times.”

Rapoport & Rowley, NEJM, 2017
I need help
I'm dope sick
I overdosed
I have fevers
I have cellulitis
I have pneumonia
I was assaulted
I was arrested
I was in jail
I'm selling sex and have an STI
I'm homeless and cold

emergency department is where these patients are
buprenorphine initiation in the ED: the warm handoff
buprenorphine initiation in the ED: the warm handoff

1. Patient with opioid use disorder is in withdrawal (COWS ≥ 8)
buprenorphine initiation in the ED: the warm handoff

1 patient with opioid use disorder is in withdrawal (COWS ≥ 8)

2 buprenorphine initiation 4-8 mg SL in the ED
   x-waiver not required
buprenorphine initiation in the ED: the warm handoff

1. Patient with opioid use disorder is in withdrawal (COWS \( \geq 8 \))

2. Buprenorphine initiation
   4-8 mg SL in the ED
   x-waiver not required

3. Refer to long term addiction care with or without buprenorphine Rx
buprenorphine initiation in the ED: the warm handoff

the future: high dose bup initiation

high dose is likely (but not certainly) safe
buprenorphine initiation in the ED: the warm handoff

- the future: high dose bup initiation
- high dose is likely (but not certainly) safe
- high dose prolongs safety and safe window to make next link
The future: high dose bup initiation

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- High dose makes prescription less important
buprenorphine initiation in the ED: the warm handoff

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- the prescription is a potential problem for EM
  - requires x-waiver
buprenorphine initiation in the ED: the warm handoff

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✧ the prescription is a potential problem for EM
✧ requires X-waiver
✧ concerns around suboxone abuse
buprenorphine initiation in the ED: the warm handoff

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- concerns around suboxone abuse
- if no Rx and delay to f/u, return to the ED - 72hr rule
buprenorphine initiation in the ED: the warm hand off

The future: high dose bup initiation
High dose is likely (but not certainly) safe
High dose prolongs safety and safe window to make next link
High dose makes prescription less important
The prescription is a potential problem for EM
Requires x-waiver
If no Rx and delay to f/u, return to the ED - 72h rule
16 mg SL on days #2, #3
Engaged in Treatment at 30-Days

Proportion in Treatment at 30 Days

Referral
Brief Intervention
Buprenorphine

P<0.001
Buprenorphine treatment for opioid misuse should be available in emergency departments.
we don’t want to be a suboxone clinic / suboxone abuse

EDs that have started bup programs have not seen significant bup abuse. Bup is not nearly as abuse prone as full agonists. Patient visits may decrease - these patients are coming to the ED anyway. Non-prescribed bup exposure potentiates successful treatment. OD is basically safe (though not entirely). Even diversion may not be a bad thing, in an era of superfentanyl. High dose bup initiation: prescription less important.
Opioid Use Disorder patient presents to the ED

- take home naloxone
- HIV, Hep C screening
- Harm Reduction
- referral to needle exchange
discuss safe drug use practices

A: EDBup
B: EDBup
C: EDBup
D: EDBup Rx

Case management
Persistence

patient unwilling/unable to enter comprehensive addiction care

return to ED for bup

Comprehensive Addiction Care

LOW THRESHOLD BUPRENORPHINE

I need help I'm dope sick I overdosed I have fevers I have cellulitis
I have pneumonia I'm selling sex and have an STI I'm homeless and cold
OUD ED Scenarios

Active withdrawal (did not receive naloxone)
Opioid intoxicated
Sober (not intoxicated, not in withdrawal, but will be)
“Detoxed” (withdrawal symptoms over)
Naloxone-precipitated withdrawal

Patient declines bup
Emergency Department Initiation of Buprenorphine for Opioid Use Disorder

1. Symptomatic treatment with non-opioids prn consider home-initiated buprenorphine
   harm reduction outpatient addiction referral

2. Opioid withdrawal?
   - No
   - Yes

3. Complicating factors?
   - No
   - Yes

4. Buprenorphine 4-8 mg SL
   - Observe 30-60 min

5. Symptoms improved?
   - No
   - Yes

6. Second dose of buprenorphine 8-24 mg SL
   - Observe for 1 hour
   - Harm reduction

7. Buprenorphine prescription
   - If x-waived prescriber available
   - Refer to outpatient addiction treatment

8. If inadequate withdrawal, buprenorphine will precipitate withdrawal
   - Score on clinical opiate withdrawal scale
   - COWS should be ≥ 8, the higher the better

9. Severe medical disease or very intoxicated/ altered (e.g. acutely ill, liver failure)
   - Using methadone or extended-release opioid
   - Naloxone-precipitated withdrawal
   - Taking high dose prescription opioids daily

10. - The higher the daily dose of opioids the patient usually uses, and the more severe the withdrawal, the higher the initial dose of bup
    - If borderline/inconsistent withdrawal symptoms, dose 2-4 mg every 1-2h
    - If vomiting, may use 0.3 mg IV/IM every 30-60 min

11. - If symptoms not improved with 8 mg bup, patient may be in buprenorphine-precipitated withdrawal and effect of higher buprenorphine dose is uncertain
    - Bup can cause nausea - if primary symptom is nausea, treat with ondansetron 8 mg

12. - The bigger the initiation dose of buprenorphine, the longer the patient is protected from withdrawal, cravings, and street opioid overdose
    - High dose (total dose of 16-32 mg in ED) preferred if patient not able to be seen by bup prescriber or fill prescription in next 12-24 hours
    - Do not initiate high dose if patient is heavy user of alcohol or benzodiazepines, medically complex, older age - for risk of respiratory depression

13. Buprenorphine/naloxone 8/2 mg
    - 1 tab/strip BID SL
    - Dispense x 1 week

14. 72 hour rule: patient may return to ED for up to 3 days
    - Administer 16 mg SL on days 2 & 3

Harm Reduction for all opioid misusers
- All patients at high risk for OD should receive take home naloxone
- Consider screening for HIV, Hep C
- If IVDU, refer to local needle exchange
- Discuss safe injection practices
- Open door policy: if unwilling to be treated for addiction now, come back anytime, we’re here 24/7
Yale (D’Onofrio) ED IB Protocol

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

COWS

(0-7) none - mild withdrawal
(≥8) mild - severe withdrawal

Dosing:
None in ED

Waivered provider able to prescribe buprenorphine?

YES
- Unobserved buprenorphine induction and referral for ongoing treatment

NO
- Referral for ongoing treatment

Dosing:
4-8mg SL

Observe for 45-60 min
- No adverse reaction

If initial dose 4mg SL repeat 4mg SL for total 8mg

All Patients Receive:
- Brief Intervention
- Overdose Education
- Naloxone Distribution

Waivered provider able to prescribe buprenorphine?

YES
- Prescription
  - 16mg dosing for each day until appointment for ongoing treatment

NO
- Consider return to the ED for 2 days of 16mg dosing (72-hour rule)

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

***Addiction Specialists may consider dosing in the ED (total of 24-32mg) if patient will not have access to buprenorphine >24 hours.

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
Highland (Herring) ED IB Protocol

MODERATE TO SEVERE OPIOID WITHDRAWAL
- Use clinical judgement to determine moderate to severe withdrawal.
- If uncertain, use the Clinical Opioid Withdrawal Scale (COWS)
- If using COWS, the score should be ≥ 8 or ≥ 6 with at least one objective sign of withdrawal
- Document which opioid used, time of last use

COMPLICATING FACTORS
Identify and manage complicating factors prior to proceeding. The only absolute contraindication is allergy to buprenorphine.
Refer to Buprenorphine Guide before dosing buprenorphine for:
- Clinical suspicion of acute liver failure
- ≥ 20 weeks pregnant
- Intoxicated or altered
- Withdrawal precipitated by naloxone
- Taking methadone or long acting opioid
- Chronic pain patients taking prescribed opioids
- Withdrawal symptoms are inconsistent or borderline (COWS of 6-8), or opioid use within 12 hours, consider beginning with a low dose (0.4 mg SL) and titrating every 1-2 hours

PARENTERAL DOSING
- Use if unable to take sublingual (SL)
- Start with 0.5 mg IV/IM buprenorphine; may repeat as needed; switch to SL when tolerated

PRECIPITATED WITHDRAWAL
- Buprenorphine can cause precipitated withdrawal if too large a dose is given too soon after the last opioid use.
- The longer the time since last opioid use (≥ 24 hours) and the more severe the withdrawal symptoms (COWS ≥ 13) the better the response to initial dosing.
- Only patients with objective improvement in withdrawal after the 1st dose should receive subsequent dosing.
- Worsening after buprenorphine is likely precipitated withdrawal, no further buprenorphine should be administered in the ED; switch to symptomatic treatment

SYMPTOMATIC TREATMENT
- Supportive medications such as clonidine, gabapentin, metoclopramide, low-dose ketamine, acetaminophen, NSAIDs

LOWER TOTAL DOSE OPTION (16 mg)
- Possible lower risk of sedation or precipitated withdrawal
- Some patients will go back into withdrawal in less than 12 hours increasing risk of early dropout
- Buprenorphine prescription or next day follow-up should be available

HIGHER TOTAL DOSE OPTION (24-32 mg)
- Increased magnitude and duration of opioid blockade
- More complete treatment of withdrawal in heavy users
- May suppress craving and protect against overdose (opioid blockade) for 2 days or more
- Use with caution in medically complex patients, older patients, and patients using other sedatives such as alcohol or benzodiazepines

RE-EVALUATION TIME INTERVALS
- The time to SL buprenorphine onset is typically 15 minutes and peak clinical effect is typically within 1 hour
- Re-evaluate patient 1 hour after buprenorphine doses
- Observe for 1 hour after the final dose before discharge

DEA 72 HOUR RULE
- Patients may return to the ED for up to 3 days in a row for repeat doses
- At each visit administer 16 mg SL buprenorphine

FOLLOW-UP
- Goal: follow-up treatment available within 3 days
This E.R. Treats Opioid Addiction on Demand. That's Very Rare.

Some hospital emergency departments are giving people medicine for withdrawal, plugging a hole in a system that too often fails to provide immediate treatment.
Despite an opioid crisis, most ERs don’t offer addiction treatment. California is changing that.

This is what it looks like when we stop treating addiction as a moral failure.

By German Lopez | @germanlopez | german.lopez@vox.com | Updated Jan 8, 2019, 11:25am EST
Too many overdoses: ERs fight drugs with drugs amid opioid crisis

Lilly Price, USA TODAY  Published 7:38 p.m. ET Jan. 3, 2019 | Updated 9:31 a.m. ET Jan. 4, 2019

The opioid crisis in the United States continues to take center stage as the National Institute on Drug Abuse says more than 115 people die of an opioid overdose every day. Buzz60

MADISON, Wis. — It happens every day; emergency clinicians administer life-saving care to patients suffering from opioid overdoses.

Now physicians, counselors and agencies in Wisconsin are considering anti-addiction drugs as a first response in emergency rooms. Most emergency clinicians want to expand such medication-assisted treatment (or MAT), according to Wisconsin's chapter of American College of Emergency Physicians.

"It weighs on you driving home after a night shift and someone didn’t make it, knowing society could have intervened and helped," said Bobby Redwood, an emergency and preventive medicine physician.

Medication-assisted treatment is a proven method for successfully treating substance abuse disorders by combining anti-craving medicines such as buprenorphine or methadone with supportive counseling and behavioral therapy.
**Maimonides EDOpioid Misuse Treatment Map**

### In withdrawal
- **Desires treatment for opioid addiction**
  - Exclusions from ED buprenorphine initiation: on methadone, on high dose (usually prescribed) opioids, very intoxicated (with other substances), buprenorphine allergy.
  - Verifying adequate withdrawal is crucial, if inadequate withdrawal, buprenorphine will precipitate withdrawal.
  - Plug COWS into mdcalc or your favorite resource, COWS should be ≥ 8, the higher the better.
  - You do not need to be waivered to treat withdrawal with buprenorphine in the ED.
  - Buprenorphine 4-8 mg sublingual, the higher the COWS, the larger the bup dose.
  - Optional testing during buprenorphine initiation: HCG, urine tox, BAL, LFTs, Hep C, HIV.
  - If waivered doc present, cand/c with prescription.
  - If expected delay in accessing buprenorphine (>24h), consider high dose initiation in consultation with addiction specialist.
  - Advise on dangers of etoh/benzo use while on bup.
  - Refer to HCC.

### Not in withdrawal
- **Does not desire treatment**
  - Alternative: methadone 10 mg IM/PO, can use non-opioid Rx, but much less effective.
  - Clonidine, NSAID, antiemetic, antidiarrheal, haloperidol, ketamine.
  - Refer to HCC or alternative addiction center.

### Harm Reduction for all opioid misusers
- Re: take home naloxone: RELAY.
  - Call 212-POISONS or request a Wellness Advocate be dispatched to the ED if IVDU, refer to local needle exchange [http://iduha.org/nyc-sep-map](http://iduha.org/nyc-sep-map).
  - And encourage safe injection practices.
  - Do you lick your needles?
  - Do you cut your heroin with sterile water?
  - Do you discard your cotton after every use?
  - Do you inject with other people around?
  - Do you do a tester shot to make sure a new batch isn't too strong?

### Open door policy
- If unwilling to be treated for addiction now, come back anytime, we're here 24/7.
- You do not need to be waivered to treat withdrawal with buprenorphine in the ED.
- Buprenorphine 4-8 mg sublingual, the higher the COWS, the larger the bup dose.
- If unsure of withdrawal symptoms or borderline COWS, dose 2 mg q2h.
- Observe in ED for 30-60 minutes, provide sandwich.

### Not in withdrawal
- **Does not desire treatment**
  - Refer to alternative care.
  - If waivered doc present, can prescribe buprenorphine for home initiation.
  - Refer to HCC.

### Health Care Choices (HCC) Clinic Referral
- Text/Call Jose Vazquez 347.423.7444 (not overnight).
- If overnight, can hold patient until morning to speak with Jose or discharge patient with clinic information and email Jose with patient’s info and best phone number.

- **If Jose not available, you can make an appointment using clinic# or engage Marilyn Hodge:**
  - (718) 234-0073 x26007.

- **If expected delay in accessing buprenorphine (≥24h), consider high dose initiation in consultation with an addiction specialist**.

- **If waivered doc present, can d/c with prescription**.

- **Buprenorphine Rx**
  - Buprenorphine/naloxone 82 mg sublingual tablets 1 tab, bup 3 days, condensed to 14 tabs.
  - If concern for suboxone abuse/diversion, ask if Rx (though suboxone safer than street opioids).

- **Alternatively, patient can return to ED while awaiting followup.** On days 2 and 3, give 16 mg Bup.

- **These waivered attending will RexBuprenorphine for you:** Bogoch, Koch, Lin, Marshall, Mathew, Motov, Pickens, Strayer, Wood.

- **Test strayer 610.308.0022**
Future Directions

Long-acting bup

Patch

Implantable wafer (6 months)
CAM2038 (weekly SQ depot)

Bup for acute pain

Long acting, safe, abuse liability vs. alternatives
future directions
bup microdosing

PHS Health Clinic
@PHS_PrimaryCare

Replying to @DocVan_Nostrand @tdbrothers and 11 others

We love micro-dosing at our clinic! We have pre-packaged blister packs for a 7 day bup titration that we give out as a carry for the patient to dose it all at home. Patients can go from methadone, SROM or from illicit use, to a smooth bup start with no withdrawal.

PHS Health Clinic @PHS_PrimaryCare · Nov 4

Day 1 = 0.5mg
2 = 0.5mg BID
3 = 1mg BID
4 = 2mg BID
5 = 3mg BID
6 = 4mg BID
7 = 12mg

I tell patients it's like walking into the ocean: you go a little at a time to adjust to the temp, rather than plunging right in. Once you're in the water you feel great.
lots still to workout

optimal dosing strategy
labs/observation/psychiatry
who/how many providers need
to be x-waivered
how to deal with precipitated withdrawal
bup for post-naloxone OD patients
managing willing patients not in withdrawal (home initiation)
To register for NYC DOHMH sponsored waiver trainings, contact: 

buprenorphine@health.nyc.gov

free online DATA 2000 X Waiver course:

https://learning.pcssnow.org/p/onlinematwaiver

https://pcssnow.org/education-training/mat-training/mattraining-events

https://www.asam.org/education/live-online-cme/buprenorphine-course
Emergency Department Initiation of Buprenorphine With a Loading Dose

* Andrew A Herring, MD, Eben Clattenburg MD, Mac Chamberlin MD, Mari Nomura MD, Martha Montgomery MD, Cody Schultz MD

**Background:** The opioid crisis has led to calls for emergency departments (EDs) to provide access to medication assisted treatment (MAT) for opioid use disorder (OUD) with buprenorphine (BUP). Most ED providers do not have DEA authority to prescribe BUP for OUD and those that do may be reluctant to prescribe due to concerns for diversion. Because same day access to outpatient treatment is often not available, there is a need to implement strategies to suppress opioid withdrawal for at least 72 hours after ED discharge. The effect of a standard 8mg SL BUP dose may wane after as little as 4 hours. The ceiling effect and long half-life of BUP offer an elegant solution. Previous clinical studies have found a 32mg sublingual (SL) BUP dose is well-tolerated and provides 72 hour suppression of opioid withdrawal symptoms. ED BUP loading for OUD has not previously been described. Herein we describe our initial cohort of patients initiated onto BUP with a loading dose of 32mg SL.

**Methods:** We performed a retrospective review of all patients who were administered buprenorphine for the treatment of opioid withdrawal in a single urban emergency department between July 1st and December 15th, 2017. Patients treated for the indication of pain were excluded. ED visit characteristics including total buprenorphine dose, patient sex and age, length of stay, chief complaint, vital signs, incidence of adverse events, and administration of rescue medications were described.

**Results:** A total of 101 ED patients were treated for opioid withdrawal during the study period with an average of 4.8 buprenorphine treatments per week. There were 12 ED patients who were administered at least 32mg SL buprenorphine. All patients were discharged in good condition. No patient showed clinical signs of opioid toxicity, nor was naloxone administered for any patient. Most of these patients (56%) were seen in a “fast track” area. There were no adverse events including; hypoxia, excessive sedation, hypotension, or hypersensitivity. Most patients were male (77%) and young (average age 31.5 years). The median length of stay was 221 minutes. All patients were enrolled in a linkage program to ensure access to follow up treatment after discharge.

**Conclusion:** a BUP loading dose of 32mg SL is well tolerated. Prolonged suppression of withdrawal symptoms after ED discharge may promote successful linkage to long term treatment of opioid use disorder with buprenorphine. Non-waivered emergency providers can provide several days of relief from withdrawal symptoms without need for a prescription of buprenorphine.

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Interim Buprenorphine vs. Waiting List for Opioid Dependence

A Illicit-Opioid Abstinence

- Buprenorphine
- No buprenorphine

Participants Abstinent (%)

Intake 4 8 12

* *
Case 1 43F presents with request for heroin detox. She has been injecting heroin intravenously for many years; her best friend just died of an overdose and now she wants to “come clean.” Her last heroin use was 3 hours ago; she has no medical or psychiatric complaints.
Case 2 27M presents to your resuscitation zone after being found unresponsive and cyanotic with a heroin needle in his arm. He was bagged by EMS during transport but is now breathing on his own at a rate of 9/minute, saturating well on room air. Minimally responsive to pain.
Case 3  27M presents to your resuscitation zone after being unresponsive and cyanotic with a heroin needle in his arm. He received 2 mg intravenous naloxone by EMS and is now agitated and requests to be discharged.
Case 4
54F with chronic low back pain, takes 80 mg oxycontin per day, presents with severe low back pain, says her home meds aren’t working.
Case 5 38M with a history of gastroparesis presents with severe abdominal pain, similar to prior episodes of gastroparesis. Denies any daily medications. Reports anaphylactic allergic reactions to acetaminophen, ibuprofen, loperidol, and morphine.