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

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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.

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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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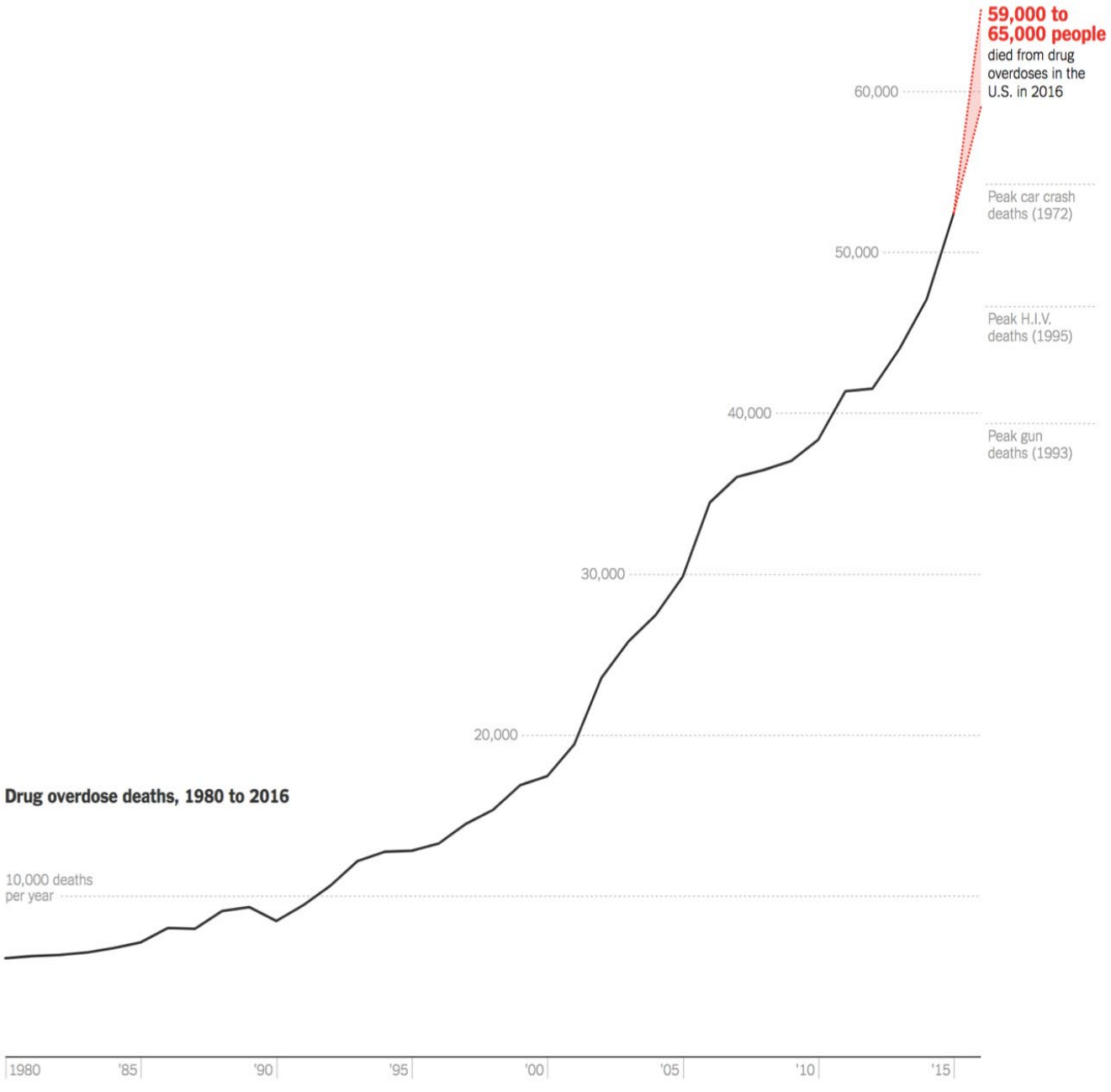
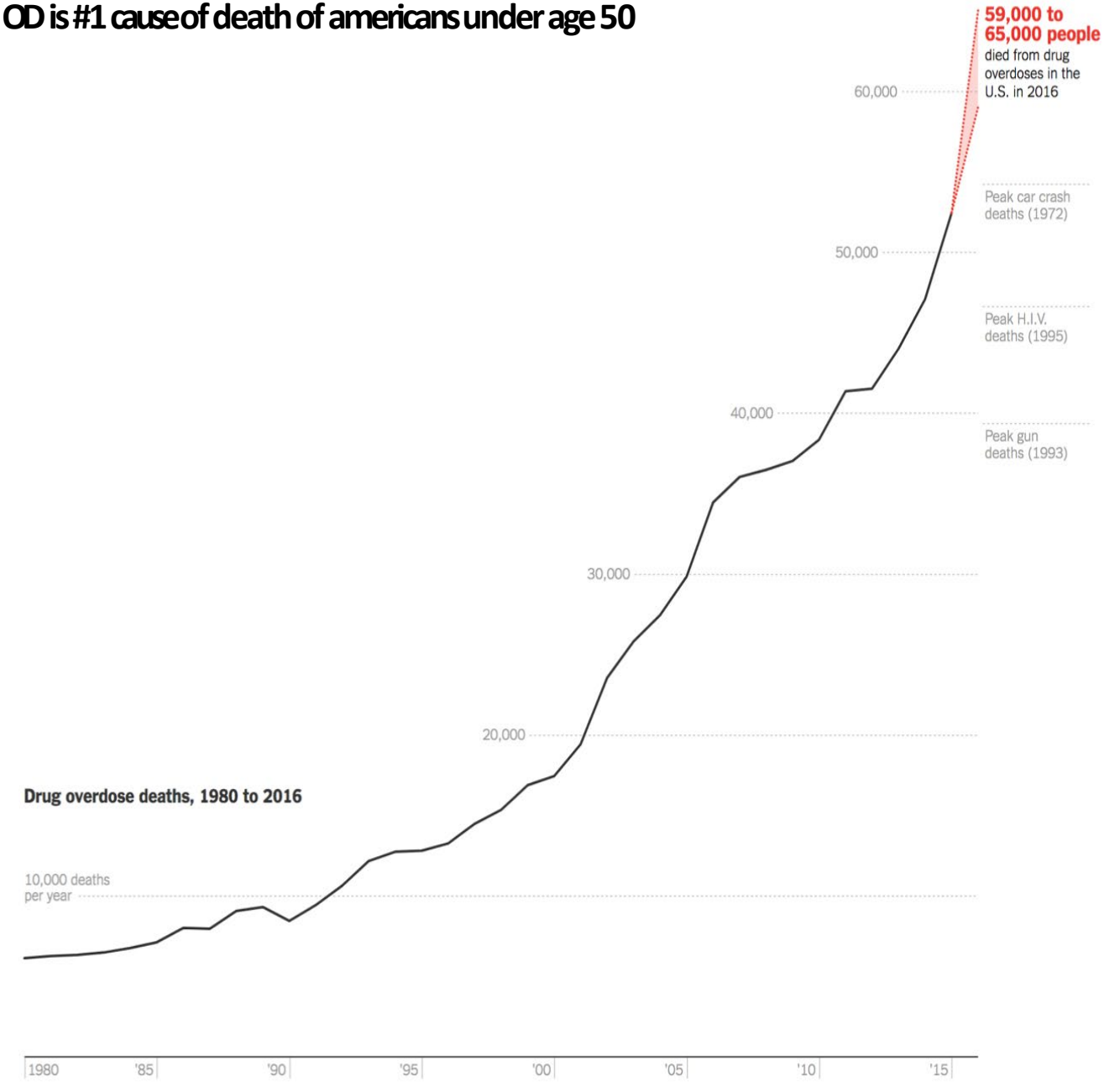

59,000 to 65,000 people
died from drug overdoses in the U.S. in 2016
60,000
Peak car crash deaths (1972)
50,000
Peak H.I.V. deaths (1995)
40,000
Peak gun deaths (1993)
30,000
20,000
Drug overdose deaths, 1980 to 2016
10,000 deaths per year
1980
'85
'90
'95
'00
'05
'10
'15

OD is #1 cause of death of americans under age 50



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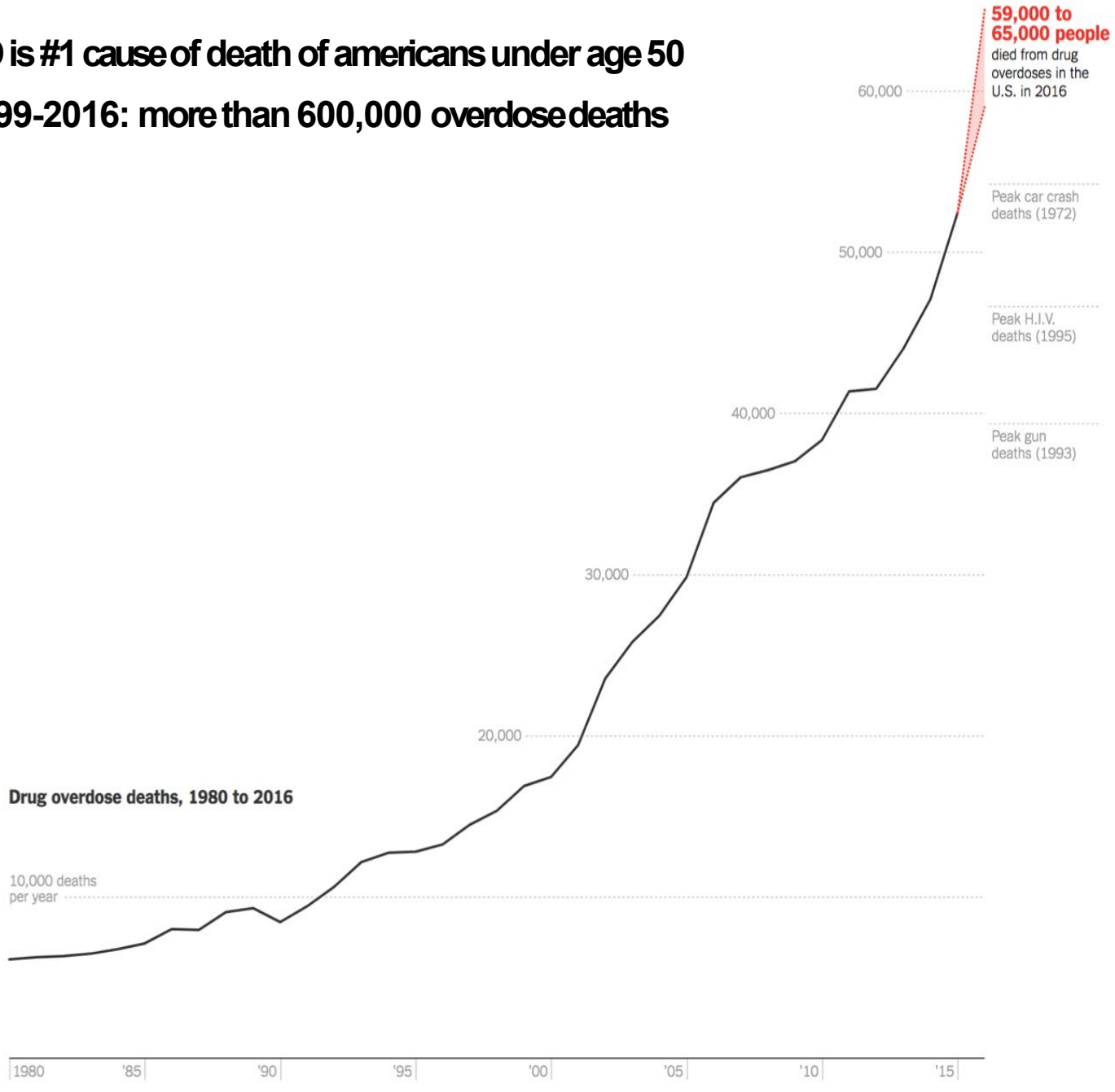
1999-2016: more than 600,000 overdose deaths



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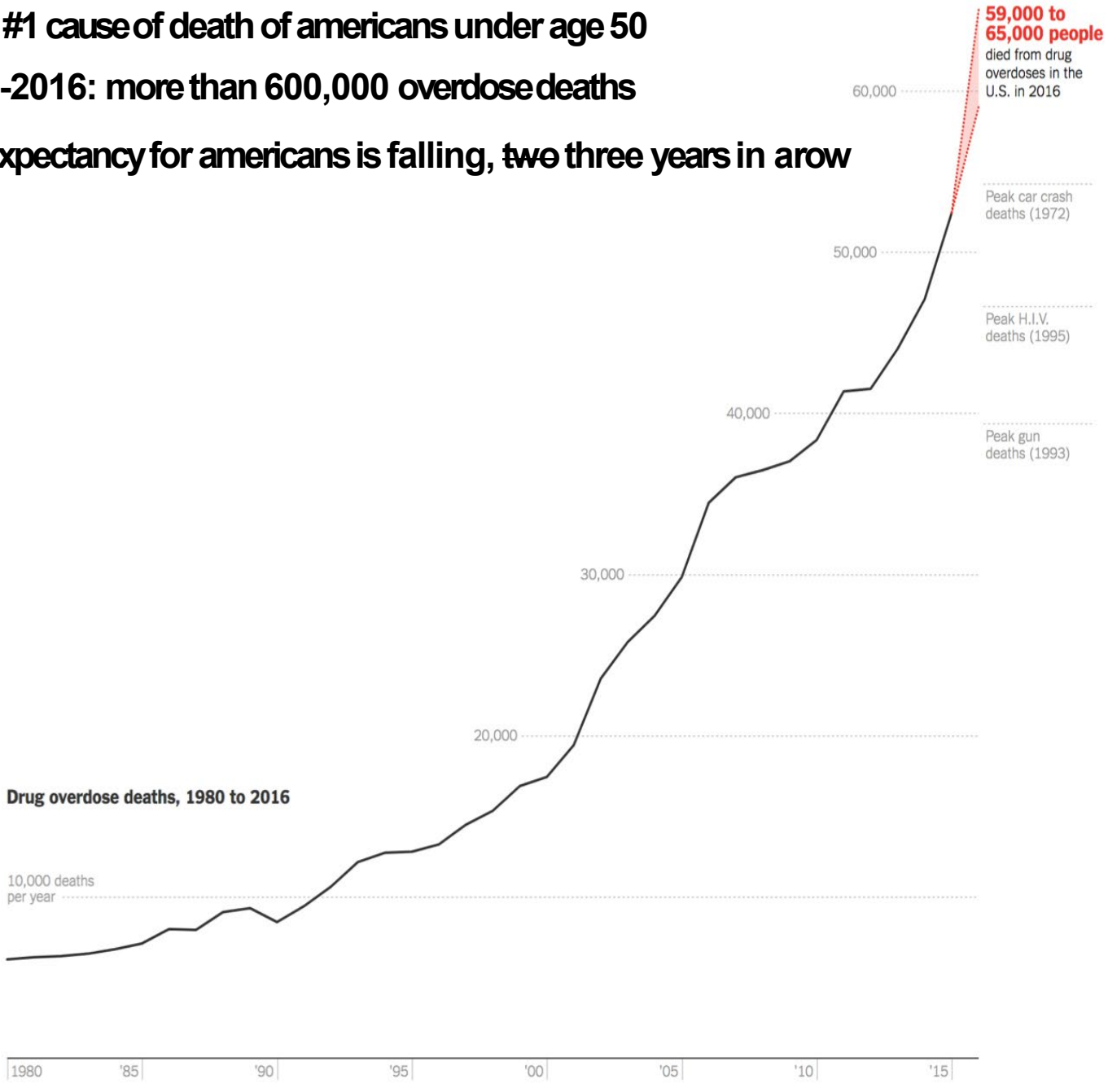
life expectancy for americans is falling, ~~two~~ three years in arow



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

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MOUD-Medications for Opioid Use Disorder

OAT: opioid agonist treatment

OST: opioid substitution treatment is the treatment for opioid addiction

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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

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

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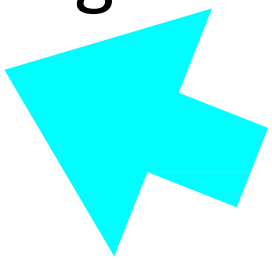

Very Dangerous

abstinence.

does not work.

for opioid addiction.

abstinence.

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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

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buprenorphine

partial opioid agonist
ceiling effect: much safer, less euphoriant

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will precipitate withdrawal if not in withdrawal

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less abuse-prone and blocks more abuse-prone opioids

MAT: medication assisted treatment

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

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

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slow acting & long-acting

reduces abuse potential

+ceiling effect = long dosing intervals

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everyone can use buprenorphine to treat withdrawal but an X-waiver is required to administer for addiction

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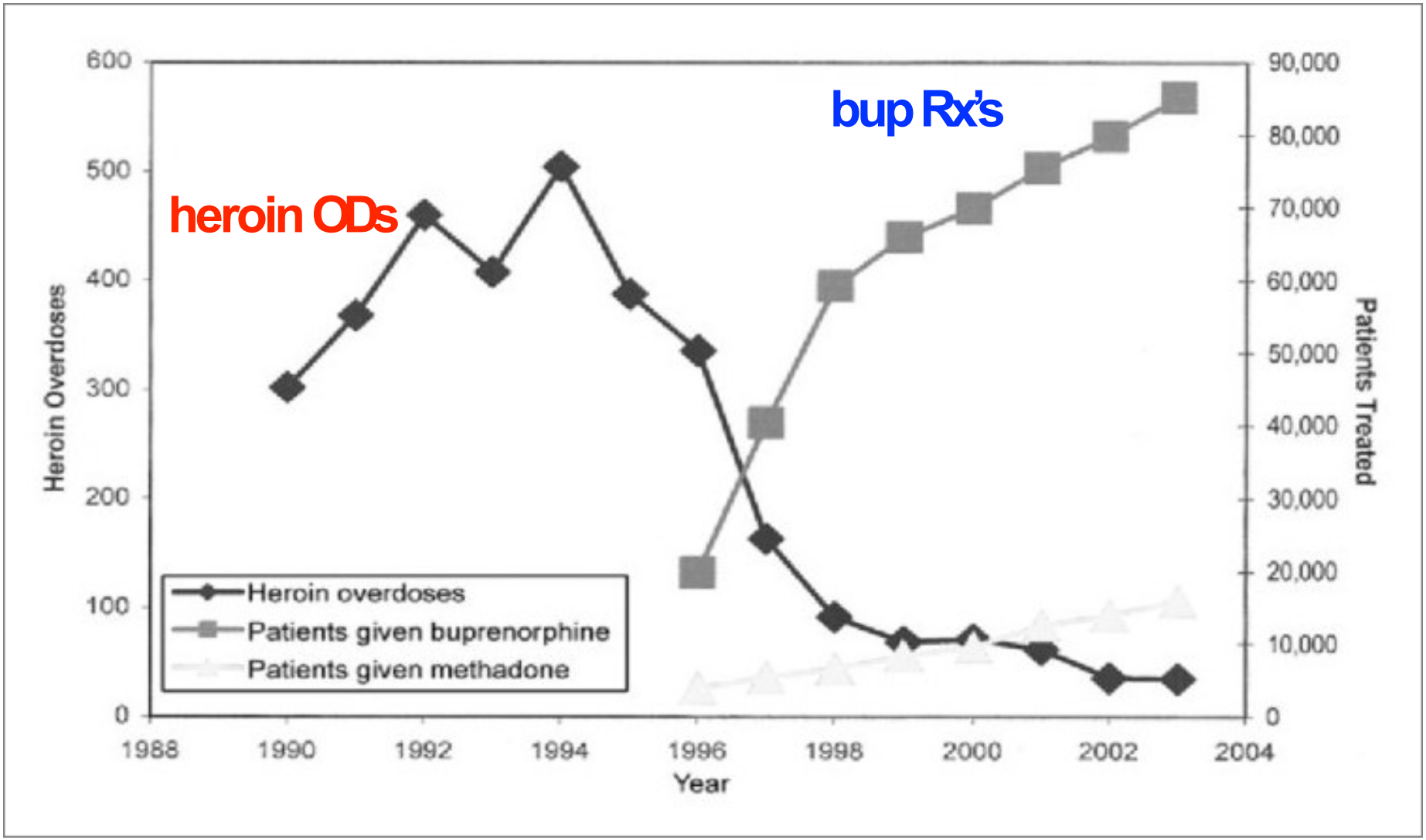
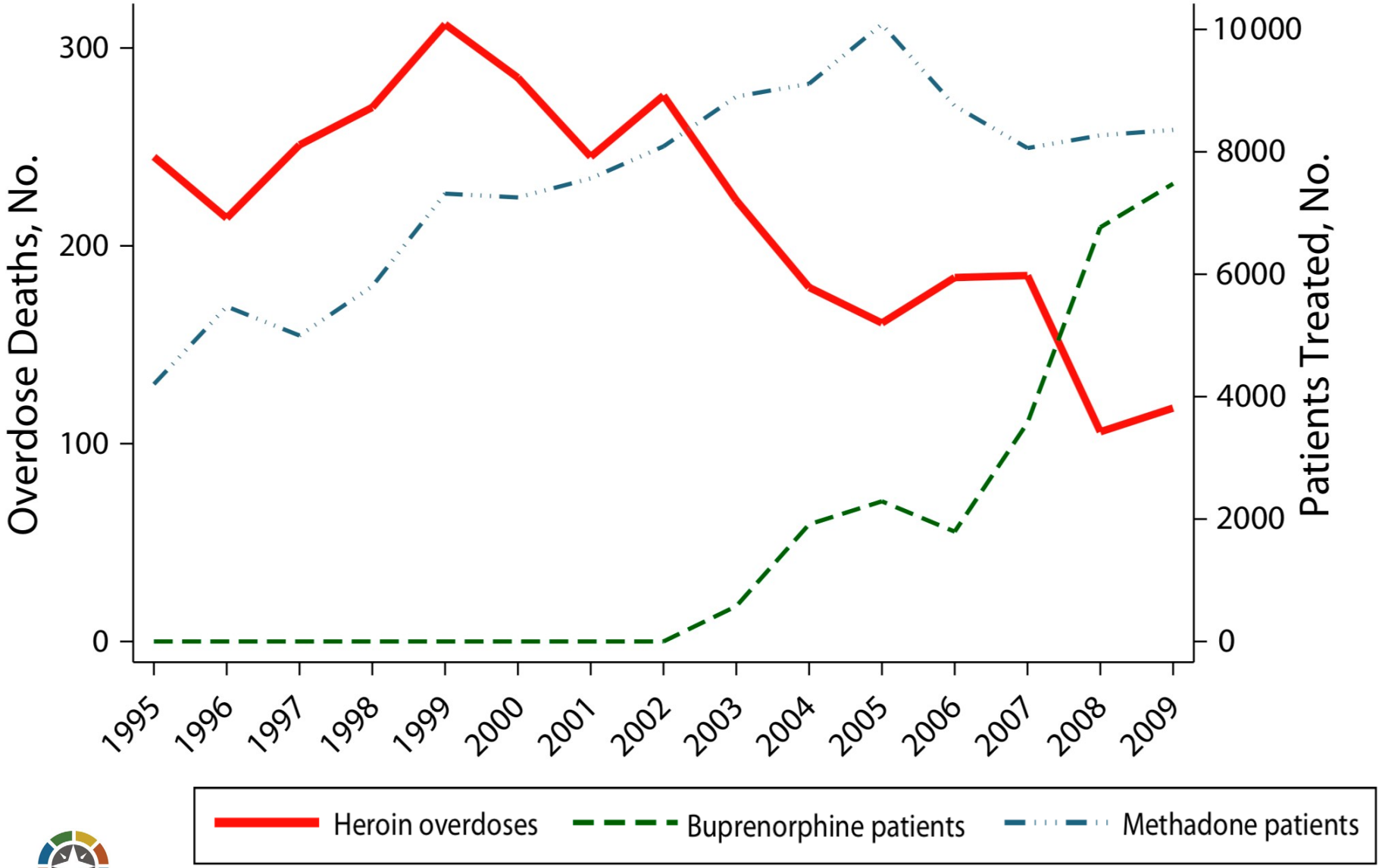
ACEP XWaiver course for emergency docs

In 1996, France responded to its heroin overdose epidemic by training/licensing GP's to prescribe buprenorphine

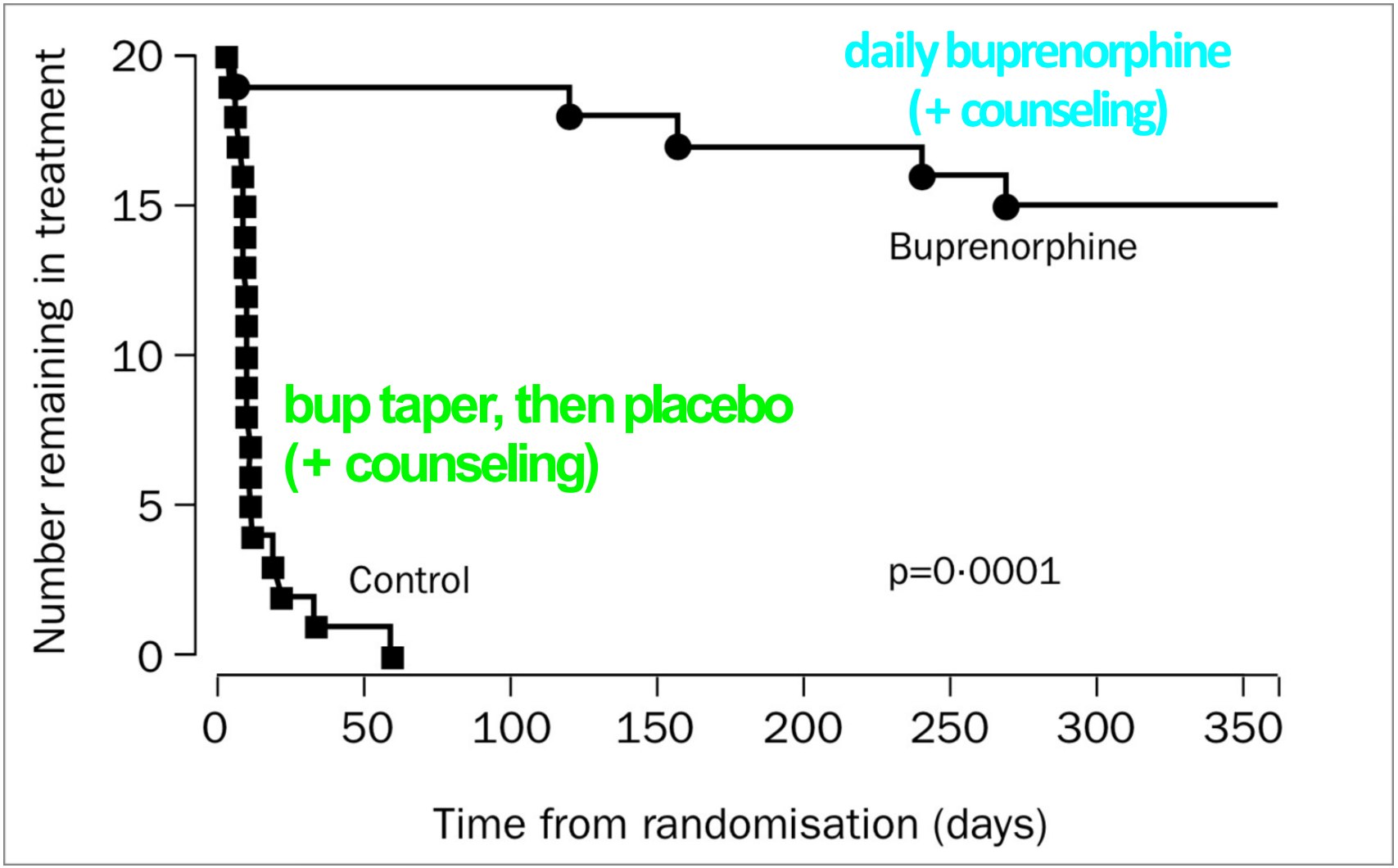


Auriacomb 2004

Heroin overdose deaths and opioid agonist treatment Baltimore, MD, 1995–2009



Schwartz 2013



1-year retention in treatment was 75% and 0% in the buprenorphine and placebo groups

Kakko 2003

"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

prescribed
opioid agonist

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

acquisition harms: poverty, crime, frantic behavior

injection harms: local infections, HIV/Hep C, endocarditis

street drug harms: accidental overdose/death

opioid dependence

scheduled opioid consumption

freedom from addiction harms

normal life possible

Detox Facilities

Medical Detox Facilities (may have rehab also)

Metropolitan Hospital
1900 2nd Ave.
212-423-6822 (clinic); x7312 (PER); x7117 (beds)
Population: M/F >18
Hours: 24 hours thru ER
Services: Inpatient 14-bed detox; avg 14 day stay. May place in Metro Clinic Rehab after detox.
Payment: all insurance and self-pay
Transport: 96th St. subway stop
ID: preferred, but not required

North General
Madison Ave. (121st and 122nd)
212-423-1330 (Mark Gauntlet)/4318/4404
Population: M/F >18. No woman past 1st trimester.
Hours: MWThF 8am-10pm; Tu 8am-4pm; Sat 10am-6pm. Other times thru ER.
Services: Inpatient detox 4-5 days.
Payment: all insurance and self-pay
Transport: facility *may* send a van
ID: if no MCD-Birth Certificate, Driver License, Rent/Utility bill, pay stub, or meal card if in shelter

Harlem Hospital
22-44 W. 137th St. (Lenox and 5th). ER at 136th & 5th.
212-939-1083/8102/3328 (ER). 939-3033 DTP/rehab
Population: M/F >18
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
Transport: 2 or 3 train to 135th
ID: preferred, but not required

St. Vincent's Midtown
415 W. 54th between 9th and 10th
212-459-8103
Population: M/F >18
Hours: M-F 8:30-5:30, call first
Services: Inpatient detox about 4 days length
Payment: all insurance and self-pay (before 2pm)
Transport: C, E, 1, 9 trains
~~ID: if no ID need Support Letter from shelter~~

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-F 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

Coney Island Hospital
2601 Ocean Parkway; Brooklyn, NY 11235
718-616-5500
Population: M/F >18
Hours: admitting 8am-2pm
Services: Inpatient detox at hospital and outpatient rehab at outside clinic. No smoking.
Payment: all insurance and self-pay
Transport: D train to Brighton Beach; F to Ave. X
ID: required

Medical Arts/Cornerstone
57 W. 57th Street at 6th Ave.
212-755-0200
Population: M/F >18
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
ID: required, if homeless need shelter or pic ID

"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."

Volkow 2018

Discharging a person addicted to opioids who is in withdrawal 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)

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2 buprenorphine initiation 4-8 mg SL in the ED

x-waiver not required

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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

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- the prescription is a potential problem for EM
  - requires x-waiver

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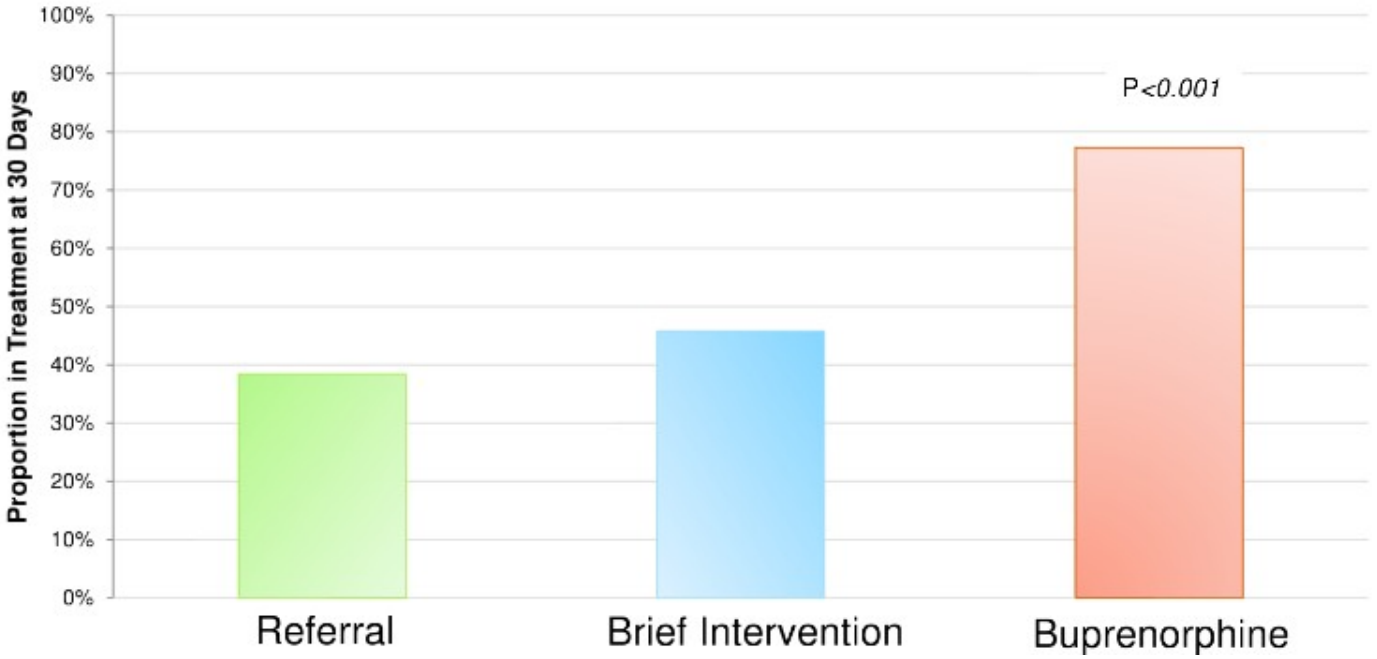
16 mg SL on days #2, #3

Engaged in Treatment at 30-Days



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 superfentanyls

high dose bup initiation: prescription less important

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

Opioid Use Disorder patient presents to the ED

Harm Reduction

take home naloxone
HIV, Hep C screening

referral to needle exchange
discuss safe drug use practices

A

B
ED Bup
ED Bup Rx

C
ED Bup

D
ED Bup Rx

ED Bup

patient unwilling/
unable to enter
comprehensive
addiction care

return to ED
for bup

Case
management
Persistence
patience

Comprehensive Addiction Care

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

opioid withdrawal?

No → symptomatic treatment with non-opioids prn
consider home-initiated buprenorphine
harm reduction
outpatient addiction referral

if inadequate withdrawal, buprenorphine will precipitate withdrawal
score on clinical opiate withdrawal scale
COWS should be ≥ 8, the higher the better

Yes ↓

complicating factors?

Yes → discuss with addiction specialist

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

No ↓

buprenorphine 4-8 mg SL

- 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

observe 30-60 min ↓

symptoms improved?

No → if minimally improved, may be inadequate dose of bup. if *worsened* by bup, may be buprenorphine-precipitated withdrawal (BPW)

- 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

- treatment of BPW is controversial
- may respond to higher doses of bup
- classic management is to switch to non-opioid Rx (benzodiazepines, neuroleptics, antiemetics, anti-adrenergics, analgesics, ketamine)

Yes ↓

second dose of buprenorphine
8-24 mg SL

- 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

observe for 1 hour
harm reduction

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

buprenorphine prescription
if x-waivered prescriber available

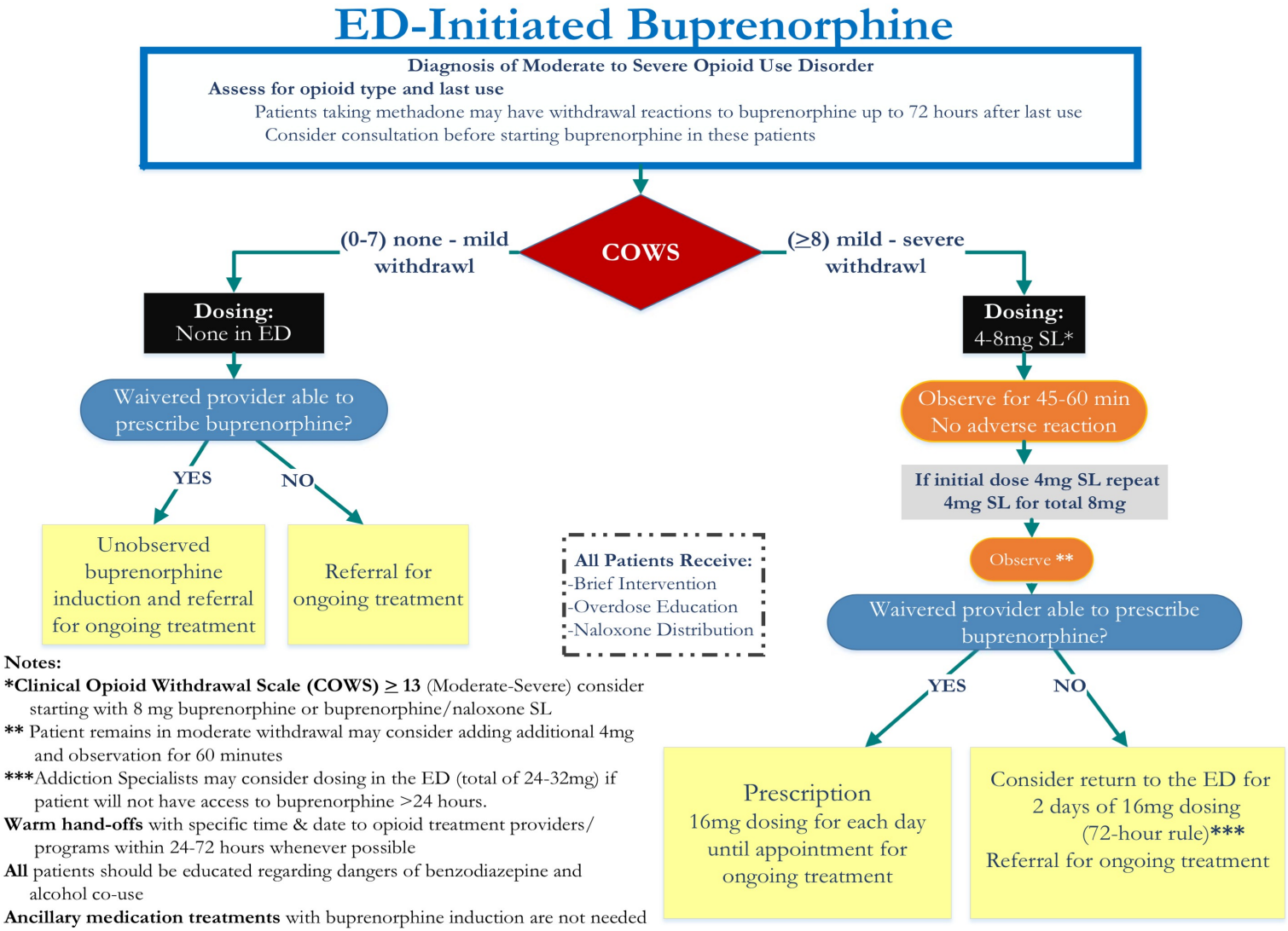
buprenorphine/naloxone 8/2 mg
1 tab/strip BID SL
dispense x 1 week

refer to outpatient
addiction treatment

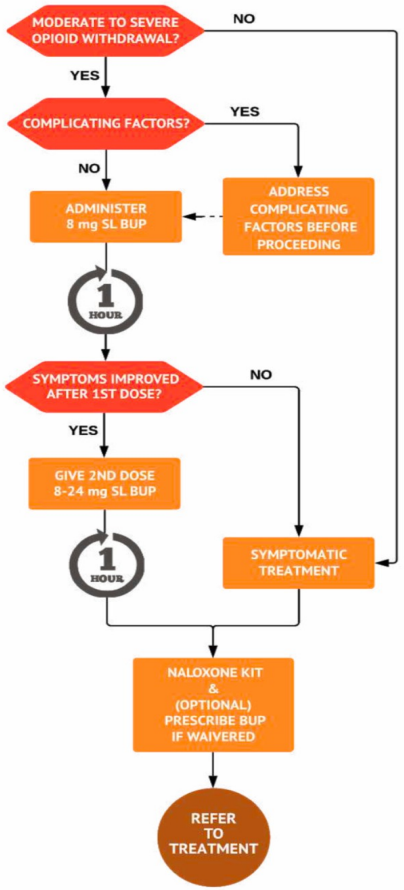
72 hour rule: patient may return to ED for up to 3 days
administer 16 mg SL on days 2 & 3

r. strayer & e. ketcham
emupdates.com/help
based on a. herring et al
ed-bridge.org

Yale (D'Onofrio) ED IB Protocol



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 (2-4 mg SL) and titrating every 1-2 hours

PARENTERAL DOSING

- Use if unable to take sublingual (SL)
- Start with 0.3 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

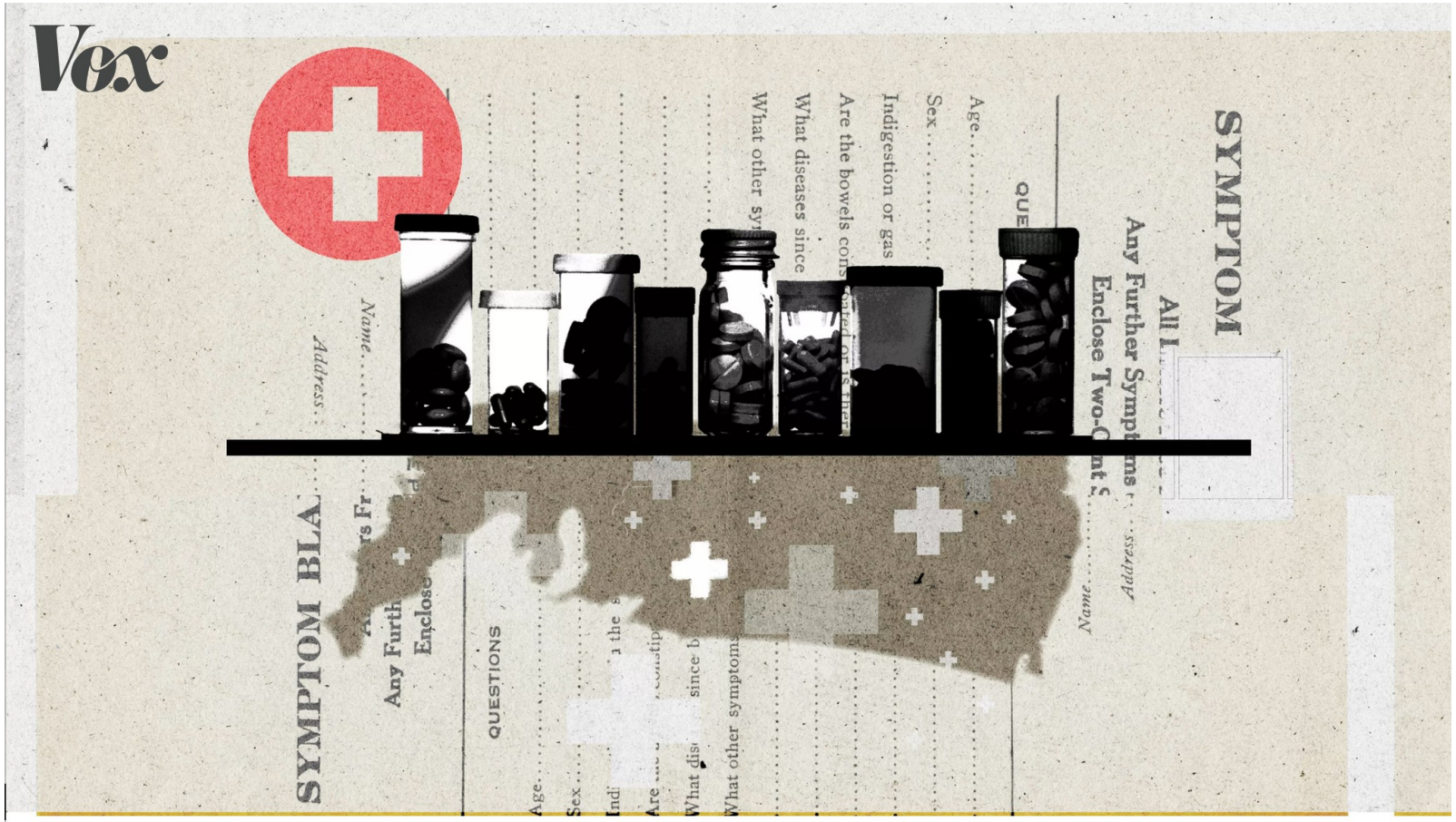
- Goal: follow-up treatment available within 3 days

The New York Times

THE TREATMENT GAP

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.



Christina Animashaun/Vox

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 | @germanrlopez | 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

(Photo: DNY59, Getty Images/iStockphoto)

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
if unsure of withdrawal symptoms or borderline COWS, dose 2 mg q2h

observe in ED for 30-60 minutes
provide sandwich

optional testing during buprenorphine initiation
HCG, urine tox, BAL, LFTs, Hep C, HIV

if waivered doc present, can d/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
the smaller the ED buprenorphine dose, the tighter the follow up has to be, esp if no Rx

in withdrawal
does not desire treatment

consider buprenorphine initiation anyway
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 (see box)

Harm Reduction for all opioid misusers

all patients at high risk for OD should receive take home naloxone: REVIVE program
call 212-POISONS, request a Wellness Advocate be dispatched to the ED

if IVDU, refer to local needle exchange [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 test shot to make sure a new batch isn't too strong?

open door policy: if unwilling to be treated for addiction now,

HealthCare 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
jvazquez@healthcarechoicesny.org

HealthCare Choices Clinic
6209 16th Ave, Brooklyn 11204
(718) 234-0073
healthcarechoicesny.org

not in withdrawal
desires treatment for opioid addiction

if waivered doc present, can prescribe buprenorphine for home initiation

alternatives:
return to ED when withdrawing
hold in ED to await withdrawal

refer to HCC

not in withdrawal
does not desire treatment

engage, encourage to move to treatment

refer to HCC or alternative

if Jose not available, you can make appt yourself using clinic # or engage Marilyn Hodge (718) 234-0073 x26007

if you have any questions/ concerns/not sure how to proceed with a patient: **text strayer** 610.308.0022

buprenorphine Rx

buprenorphine/naloxone 8/2 mg sublingual tabs 1 tab SLbid-can dispense 6 to 14 tabs

if concern for suboxone abuse/diversion, can skip Rx or ↓ Rx (though suboxone safer than street opioids)

alternatively, **patient can return to ED** while awaiting follow up: on days 2 and 3 dose 16 mg SLx- waiver not required to dose in ED on days 2&3 however cannot continue beyond 3 days by law

These x-waivered attendings will Rx Buprenorphine for you: Bogoch, Koch, Lin, Marshall, Mathew, Motov, Pickens, Strayer, Wood

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

Follow

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 titratration 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)

f

emupdates@gmail.com

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

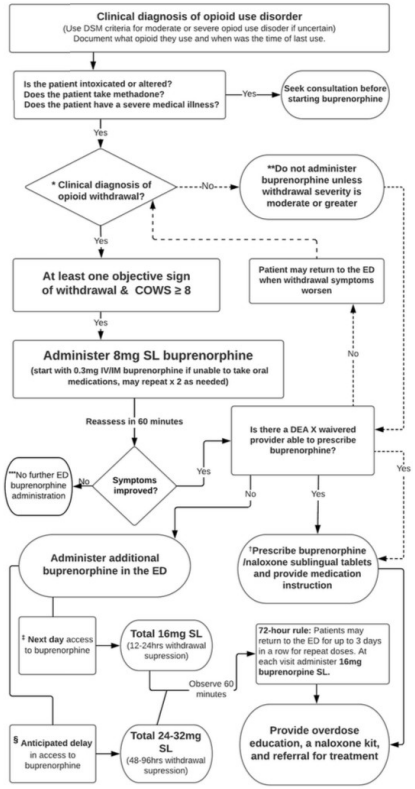
HIGHLAND EMERGENCY
DEPARTMENT OF EMERGENCY MEDICINE
ALAMEDA HEALTH SYSTEM - HIGHLAND HOSPITAL

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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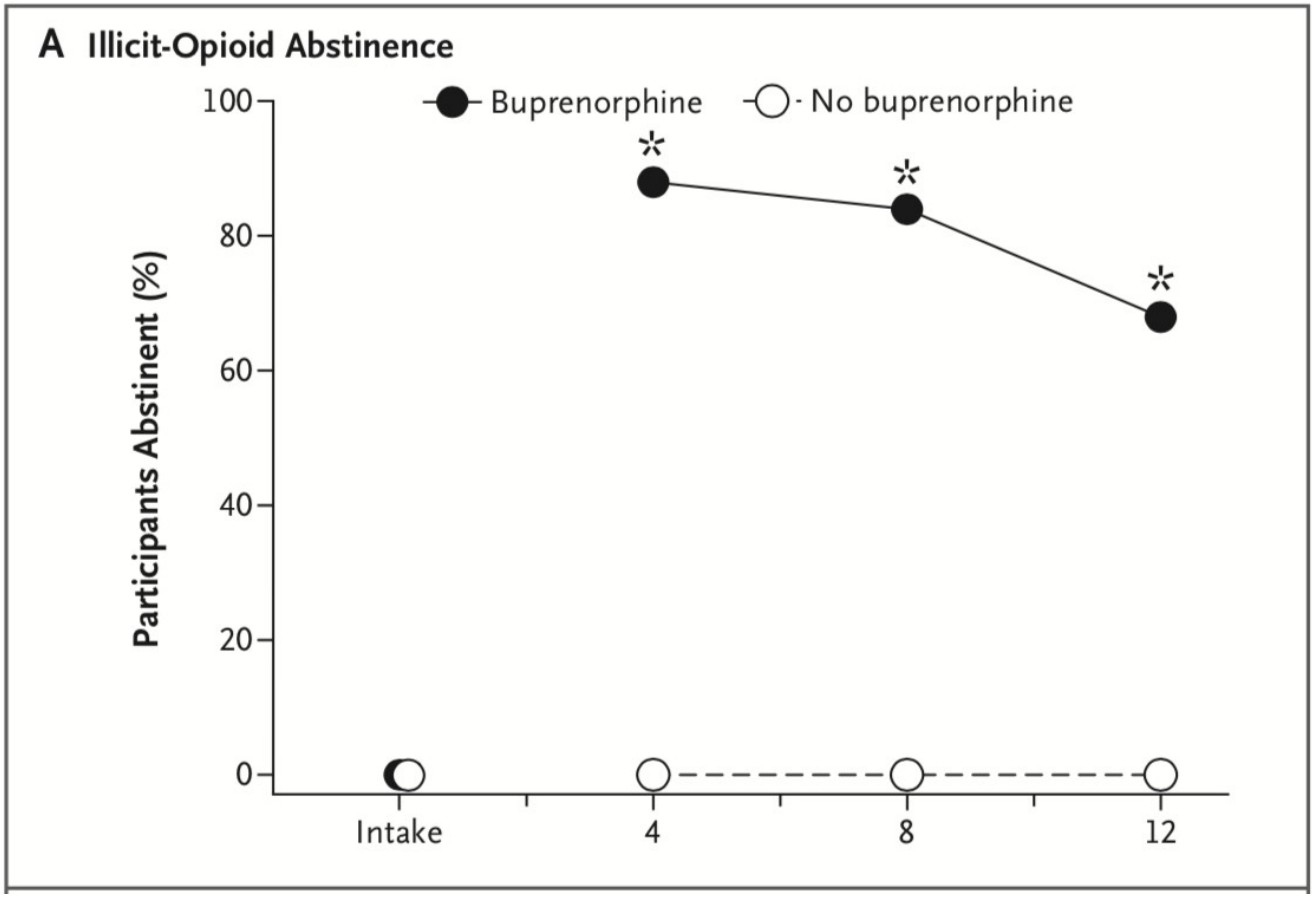
The NEW ENGLAND JOURNAL of MEDICINE

Interim Buprenorphine vs. Waiting List for Opioid Dependence

N ENGL J MED 375;25 NEJM.ORG DECEMBER 22, 2016



Sigmon 2016

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 s abdominal pain, similar to prior episodes of gastroparesis. Denies any daily medications. Reports anaphylactic allergic reactions to acetaminophen, ibuprofen, loperidol, and morphine.