Addiction for the Busy Hospitalist

Two Busy Hospital Clinicians: Chris Goodman, Ben Thompson

Get your waiver!

Learning Objectives

1. Review epidemiology of addiction in the hospital
2. Describe our experience building an addiction consult team
3. Review inpatient management of opioid use disorder
4. Apply knowledge of addiction to individual practice

Our Story

Treatment is now standard of care

SGIM Society of General Internal Medicine

AAMC

Accreditation Council for Graduate Medical Education

shm Society of Hospital Medicine

ACP American College of Physicians® Leading Internal Medicine, Improving Lives

"Hospitalists: Treat Opioid Use Disorder with buprenorphine or methadone!"
(And 17 other recommendations)*

"Hey everyone: more buprenorphine and methadone please!"

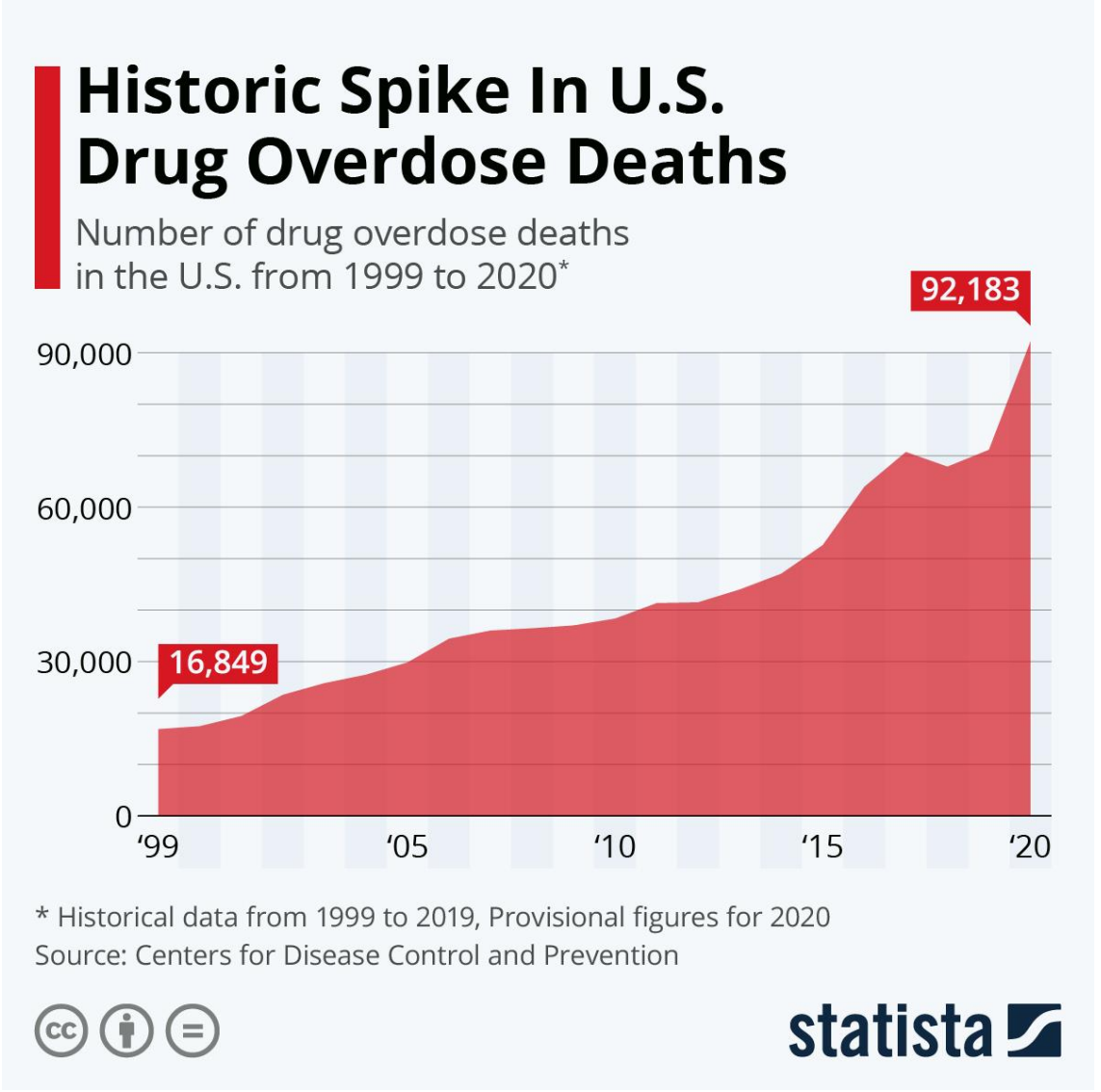
Calcaterra SL, Martin M, Bottner R, Englander H, Weinstein Z, Weimer MB, Lambert E, Herzig SJ. Management of opioid use disorder and associated conditions among hospitalized adults: A Consensus Statement from the Society of Hospital Medicine. J Hosp Med. 2022 Sep;17(9):744-756. doi: 10.1002/jhm.12893. Epub 2022 Jul 26. PMID: 35880813; PMCID: PMC9474708.
Format:

Epidemiology of Addiction

In South Carolina:

1400

- 2690 Stroke
- 870 Colon cancer
- ~~748~~ Opioids
- 289 Influenza
- 212 HIV



Epidemiology of Addiction: What about hospitals?

- Alcohol
- Stimulants
  - Cocaine
  - Meth
- BZD
- **Opioids (~20%)**
- Marijuana

The typical experience

- “Addict / drug user”
- Shame
- Confrontation
- Pain
- Withdrawal
- Stigma

“Touchpoints”

Hospitalizations are a potential **turning point**

Larochelle MR, et al. Touchpoints – Opportunities to predict and prevent opioid overdose: A cohort study. Drug and Alcohol Dependence. 2019;204:107537.

I-ACT: Ethos

“When you come upon a wall, throw your hat over it, and then go get your hat.”

The Prisma Midlands / USC Inpatient Addiction Consult Team (I-ACT)

- Anna Grace Ridlehuber, Licensed Social Worker
- Christopher Goodman, Internal Medicine Physician
- Benjamin Thompson, Palliative Care Physician
- Morgan Rhodes, PharmD
- Bobby Brazell, Peer Recovery Coach

I-ACT: Results

Days after discharge	Engaged in care
30 days (n=18)	89%
60 days (n=15)	87%
180 days (n=10)	60%

Goodman CW, Rhodes MA, Thompson BW, Brazell B, Litwin AH. Advancing Best Practices for Hospitalized Patients with a Volunteer Addiction Consult Team. Am J Med. 2022 Feb;135(2):143-145. doi: 10.1016/j.amjmed.2021.07.047. Epub 2021 Sep 9. PMID: 34508707.

I-ACT: Stories

1 year later, yoga with daughter

"I am so glad you are doing this."

"Thanks for your help."

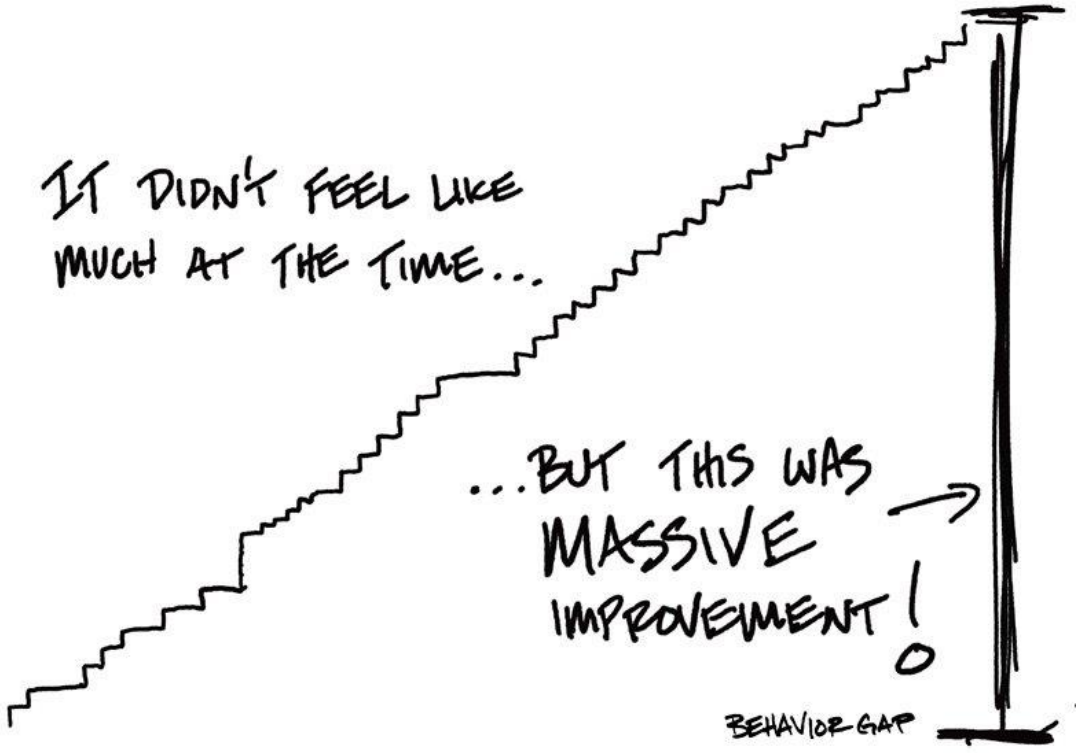
The emergency housing vote

Friday afternoon consult

LRADAC
Improving Lives. Improving Communities.

I-ACT: Lessons

- Start small
- Find your partners
- Leverage EMR / Stakeholders
- Change is slow



Principles of Addiction in Hospital

PROMOTE HEALING

TREAT WITHDRAWAL

GET AN ACCURATE DIAGNOSIS

TEST AND TREAT/REFER

Words **matter**

PROMOTE HEALING

TREAT WITHDRAWAL

GET AN ACCURATE DIAGNOSIS

TEST AND TREAT/REFER

Don'ts

Addict / drug user

Substance abuse

Clean or dirty

Drug seeking / Manipulative

Polysubstance abuse

Abstinence / Relapse

Stop Stigma!

shm
Society of Hospital Medicine

Do's

Person-first language

Proper diagnostic terms

Recovery-focused

Be specific, objective

Chronic disease

Principles of counselling

PROMOTE HEALING

TREAT WITHDRAWAL

GET AN ACCURATE DIAGNOSIS

TEST AND TREAT/REFER

"counselled patient about drug use"

- Trauma-informed
- Motivational interviewing
- Social capital

Get an accurate diagnosis


PROMOTE HEALING


TREAT WITHDRAWAL


GET AN ACCURATE DIAGNOSIS


TEST AND TREAT/REFER

TABLE 1 Summarized DSM-5 diagnostic categories and criteria for opioid use disorder

Category	Criteria
Impaired control	• Opioids used in larger amounts or for longer than intended • Unsuccessful efforts or desire to cut back or control opioid use • Excessive amount of time spent obtaining, using, or recovering from opioids • Craving to use opioids
Social impairment	• Failure to fulfill major role obligations at work, school, or home as a result of recurrent opioid use • Persistent or recurrent social or interpersonal problems that are exacerbated by opioids or continued use of opioids despite these problems • Reduced or given up important social, occupational, or recreational activities because of opioid use
Risky use	• Opioid use in physically hazardous situations • Continued opioid use despite knowledge of persistent physical or psychological problem that is likely caused by opioid use
Pharmacological properties	• Tolerance as demonstrated by increased amounts of opioids needed to achieve desired effect; diminished effect with continued use of the same amount • Withdrawal as demonstrated by symptoms of opioid withdrawal syndrome; opioids taken to relieve or avoid withdrawal

Treating opioid withdrawal

PROMOTE HEALING

TREAT WITHDRAWAL

GET AN ACCURATE DIAGNOSIS

TEST AND TREAT/REFER

- Brief history
  - Comorbid conditions
  - Recent use (including treatment)
- Be aware of sepsis
- Choose treatment approach
  - Bup or methadone +/- adjunctives
  - Prior treatment exposure

“But I can’t use these medicines right?”

Treating opioid withdrawal

PROMOTE HEALING | TREAT WITHDRAWAL | GET AN ACCURATE DIAGNOSIS | TEST AND TREAT/REFER

In the hospital if…

- Primary diagnosis not OUD
- Pain
- Outpatient medication

***Administer* buprenorphine/methadone**

When do you need a buprenorphine waiver?

- OUD primary diagnosis, >3 days
- At discharge ***

Test and Treat/Refer

PROMOTE HEALING

TREAT WITHDRAWAL

GET AN ACCURATE DIAGNOSIS

TEST AND TREAT/REFER

HIV, HBV, HCV testing

Consider other STDs, TB

PrEP

Naloxone

Needles

Medication

Get your waiver!

Case-Based Discussions

What does a typical consult look like?

30 year old with history of OUD presents for altered mental status and injection-site erythema, found to have endocarditis.

- Psychosocial Assessment
- Medical Assessment
- Peer Support
- Collaboration with Floor CM
- Link to Outpatient Treatment

Case 1 – Methadone Induction

30 year old with history of OUD presents for altered mental status and injection-site erythema, found to have endocarditis.

COWS Clinical Opiate Withdrawal Scale

Wesson & Ling, J Psychoactive Drugs. 2003 Apr-Jun;35(2):253-9.

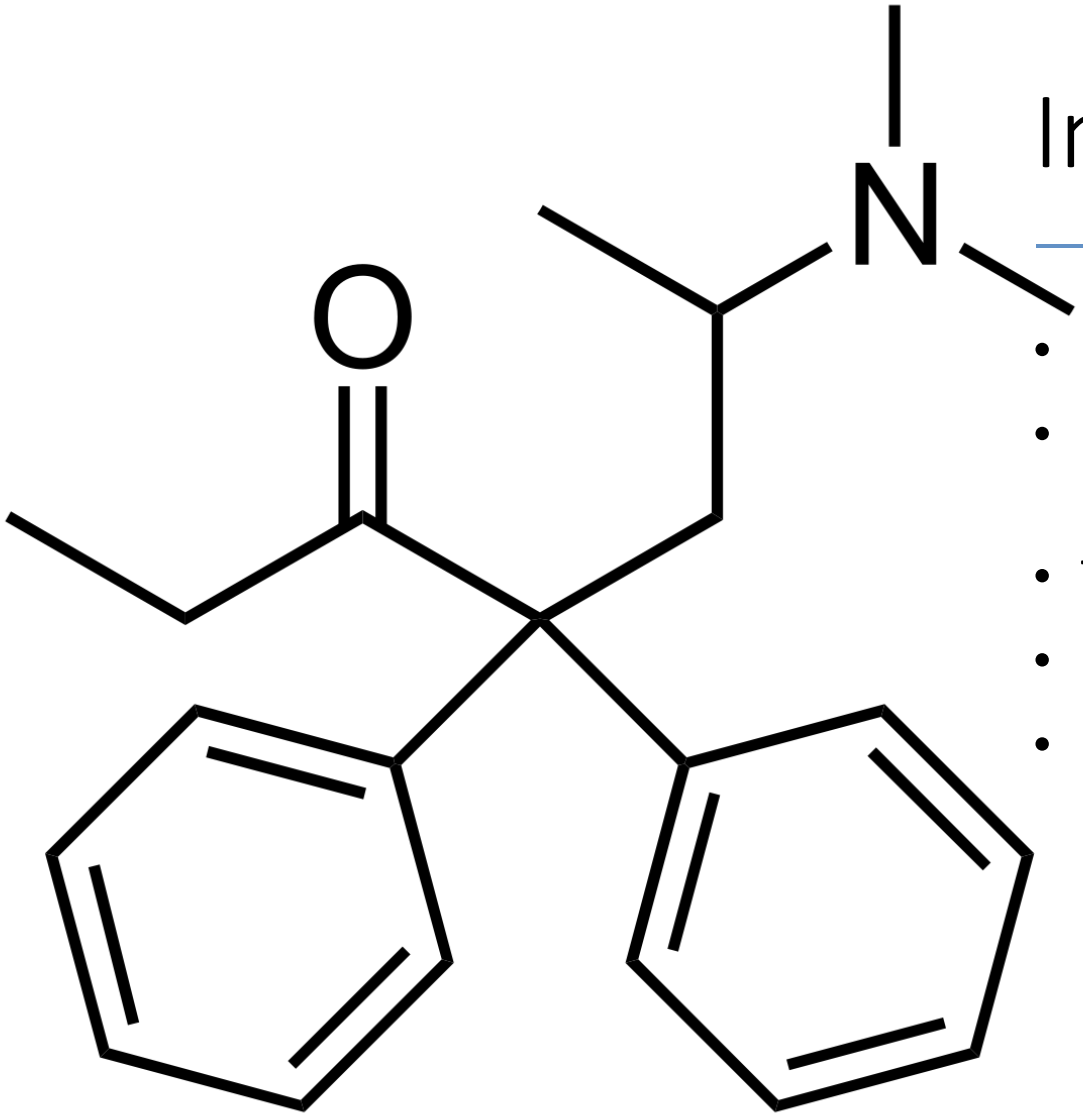
Resting Pulse Rate: _____beats/minute *Measured after patient is sitting or lying for one minute* 0 Pulse rate 80 or below 1 Pulse rate 81-100 2 Pulse rate 101-120 4 Pulse rate greater than 120	GI Upset: *over last 1/2 hour* 0 No GI symptoms 1 Stomach cramps 2 Nausea or loose stool 3 Vomiting or diarrhea 5 Multiple episodes of diarrhea or vomiting
Sweating: *over past 1/2 hour not accounted for by room temperature or patient activity.* 0 No report of chills or flushing 1 Subjective report of chills or flushing 2 Flushed or observable moistness on face 3 Beads of sweat *on* brow or face 4 Sweat streaming off face	Tremor *observation of outstretched hands* 0 No tremor 1 Tremor can be felt, but not observed 2 Slight tremor observable 4 Gross tremor or muscle twitching
Restlessness *Observation during assessment* 0 Able to sit still 1 Reports difficulty sifting still, but is able to do so 3 Frequent shifting or extraneous movements of legs/arms 5 Unable to sit still for more than a few seconds	Yawning *Observation during assessment* 0 No yawning 1 Yawning once or twice during assessment 2 Yawning three or more times during assessment 4 Yawning several times/minute
Pupil size 0 Pupils pinned or normal size for room light 1 Pupils possibly larger than normal for room light 2 Pupils moderately dilated 5 Pupils so dilated that only the rim of the iris is visible	Anxiety or irritability 0 None 1 Patient reports increasing irritability or anxiousness 2 Patient obviously irritable anxious 4 Patient so irritable or anxious that participation in the assessment is difficult
Bone or Joint aches *If patient was having pain previously, only the additional component attributed to opiates withdrawal is scored* 0 Not present 1 Mild diffuse discomfort 2 Patient reports severe diffuse aching of joints/ muscles 4 Patient is rubbing joints or muscles and is unable to sit still because of discomfort	Gooseflesh skin 0 Skin is smooth 3 Piloerrection of skin can be felt or hairs standing up on arms 5 Prominent piloerrection
Runny nose or tearing *Not accounted for by cold symptoms or allergies* 0 Not present 1 Nasal stuffiness or unusually moist eyes 2 Nose running or tearing 4 Nose constantly running or tears streaming down cheeks	Total Score _____ The total score is the sum of all 11 items Initials of person completing Assessment:_____

Score: 5-12 mild; 13-24 moderate; 25-36 moderately severe; more than 36 = severe withdrawal

Methadone induction, ctd

- Patient uses 500mg heroin daily for the last 6 years
- Last use was yesterday
- Has been in methadone clinic and had 2 yrs abstinence
- UDS on admission positive for fentanyl, opioids, and benzodiazepines
- Patient with pulse 130, flushed, moderately dilated pupils, diffuse aching, nauseous, and obviously anxious
- Will be inpatient for 6 weeks IV antibiotics

What starting dose of methadone would you pick?



Induction and Dose Increases

- Can start patients anywhere between 10-30mg
- Only for opioid-tolerant patients (given of this patient population)
- Typically starting at 30mg in hospitalized pts
- Increase dose 10mg q4-5 days
- Ideal dose = no withdrawal symptoms until right before dosing

Journal of Addiction Medicine, 2020

Breakthrough Withdrawal Symptoms

- Don’t use CIWA
- Symptomatic Treatment
- Clonidine and Lofexadine – Alpha 2 adrenergic agonists
  - Typically clonidine 0.1mg q6h PRN withdrawal symptoms

Case 1, Continued – Hospital-Based Methadone at discharge

- Patient stabilized on 90mg methadone daily.
- Addiction Coordinator discussed case with methadone clinic, who agrees to see the patient the next day
- Hospitalist cannot write discharge rx for methadone for addiction. Special rules for prescribers and for pharmacies.

Case 1, Continued – Acute pain in patient on methadone

- Pt with history of OUD on methadone presents after MVC with traumatic amputation of lower extremity.
- How do you manage pain in this patient?

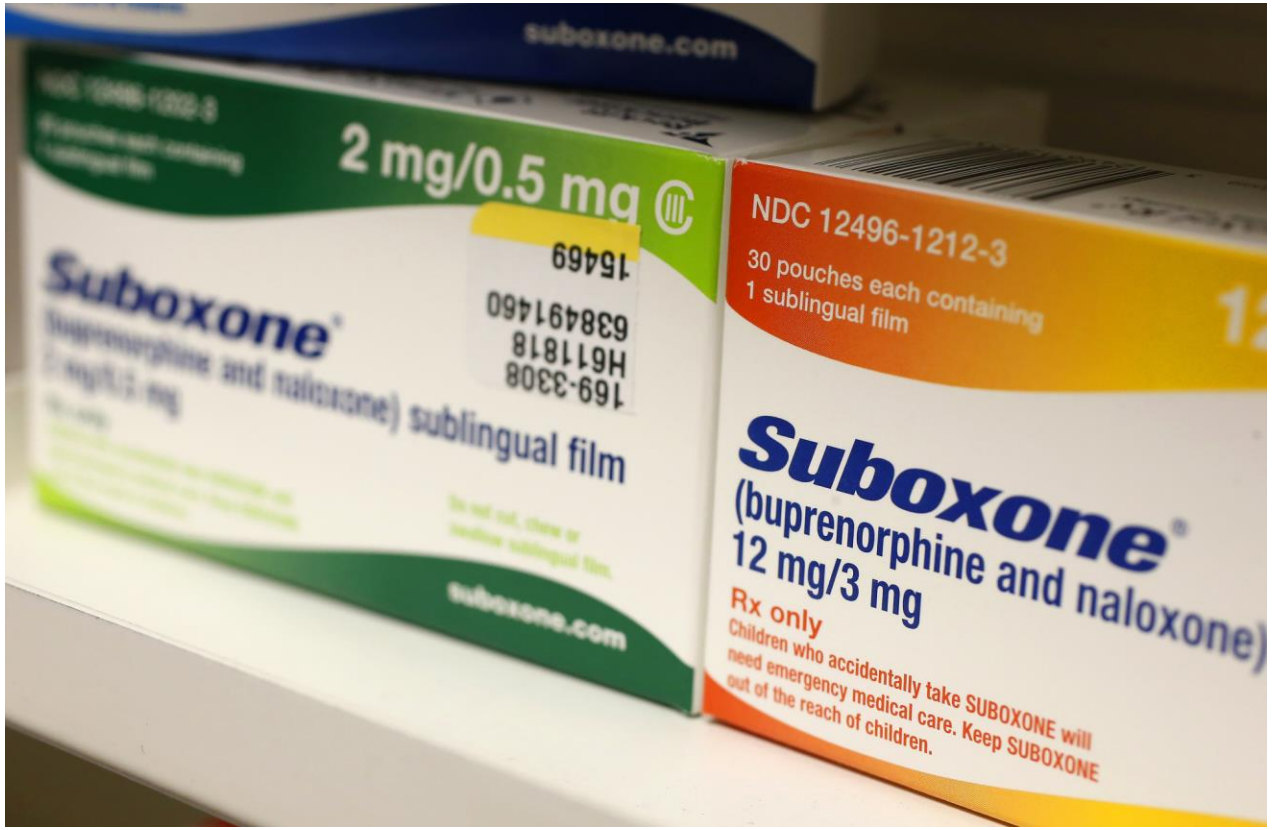
How to manage acute pain?

- ALWAYS use multimodal analgesia
  - NSAIDS / acetaminophen
  - Patches
  - Heat / cool
  - Guided imagery / relaxation / meditation

- Can split dose
- Can use PCA
- If concerned and available, curbside addiction team

Case 2- Buprenorphine Induction

30 year old with history of OUD presents for altered mental status and injection-site erythema, found to have endocarditis.



Buprenorphine induction, ctd

Get your waiver!

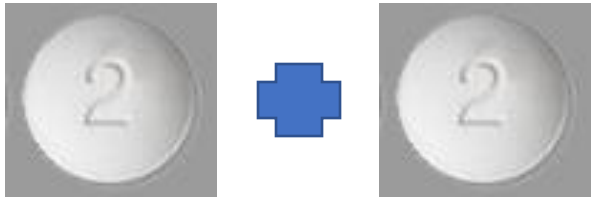
- Patient uses 500mg heroin daily for the last 6 years
- Last use was yesterday
- Has never been in treatment
- UDS on admission positive for fentanyl, opioids, and benzodiazepines
- Patient with moderate withdrawal symptoms
- Will be inpatient for 6 weeks IV antibiotics

What starting dose of buprenorphine would you pick?

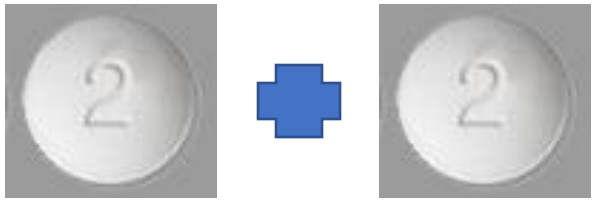
Standard Induction

- Patient presents in moderate withdrawal
- Can give 2-4mg q1-2 hours until relief from withdrawal
- Hourly COWS reassessment
- Max dose 16mg on Day 1

- 8a: Patient is in Moderate Withdrawal (COWS 25)

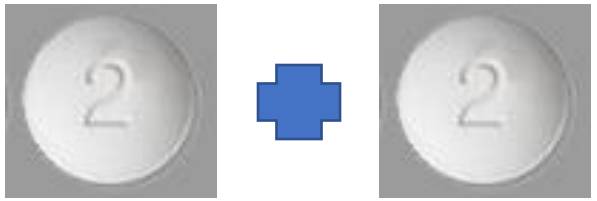


- 10a: Patient is in Moderate Withdrawal (COWS 20)

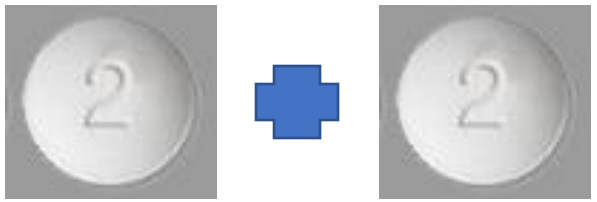


Total First-Day Dose

- 12p: Patient is in Moderate Withdrawal (COWS 15) **16mg**

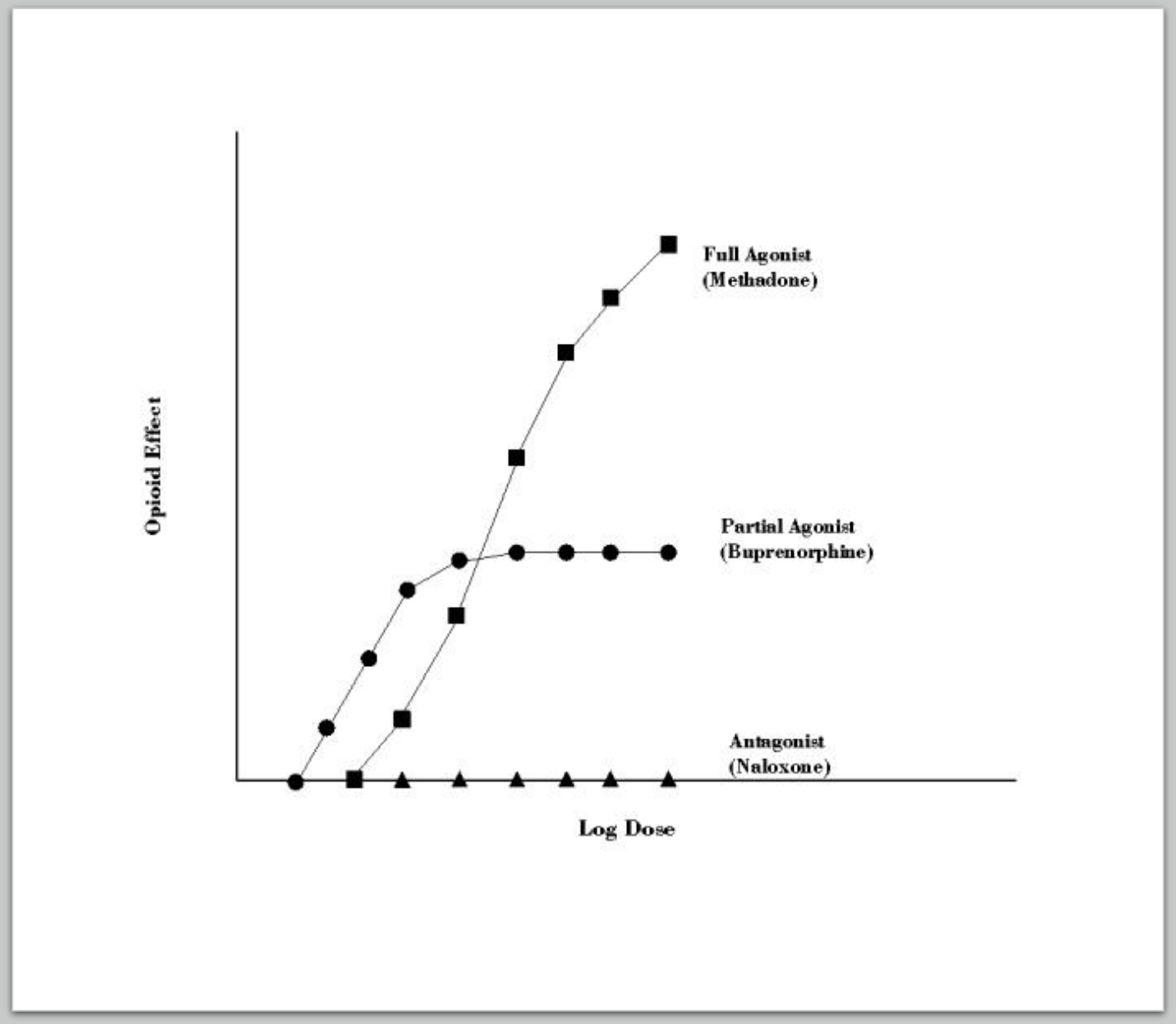


- 2p: Patient is in Mild Withdrawal (COWS 5)
- 6p: Patient is in Moderate Withdrawal (COWS 15)



Partial Agonist and Precipitated Withdrawal

- Buprenorphine is STRONG partial mu receptor agonist
- Affinity 5x hydromorphone



Low Dose Induction

Day	**Buprenorphine/naloxone (buprenorphine component listed)**	*** **Full agonist**
1 ***	Quarter film (0.5mg) twice a day	Full dose
2 ***	Half film (1 mg) twice a day	Full dose
3 ***	Half film (1mg) three times a day)	Full dose
4 ***	1 film (2mg) three times a day	*** 2/3 dose
5 ***	2 films (4mg) three times a day	none
6 ***and onward	We will talk about adjusting your buprenorphine dose further	none

Discharge Prescriptions

- PLEASE write for Naloxone Nasal Spray
- Providers with x-waiver can write buprenorphine-naloxone RX until next clinic appointment
- (Personal preference 1-2 wks max)

In summary

Get your waiver!

- Opioid Use Disorder has become increasingly prevalent over the last decade and is associated with increased risk of death
- Inpatient medical teams can treat OUD using several evidence-based approaches
- In the best-case scenario, treatment of addiction bridges patients to the outpatient world for continuity of care