Care of the Hospitalized Patient with Opioid Use Disorder

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Disclosures

No financial relationships to disclose

Objectives

- Introduce strategies for patient centered communication
- Review strategies for effective pain management in hospitalized patients with opioid use disorder
- Review evidence in the literature for initiating treatment for opioid use disorder in hospitalized patients
- Understand methods for methadone and buprenorphine initiation in the hospital

Terminology

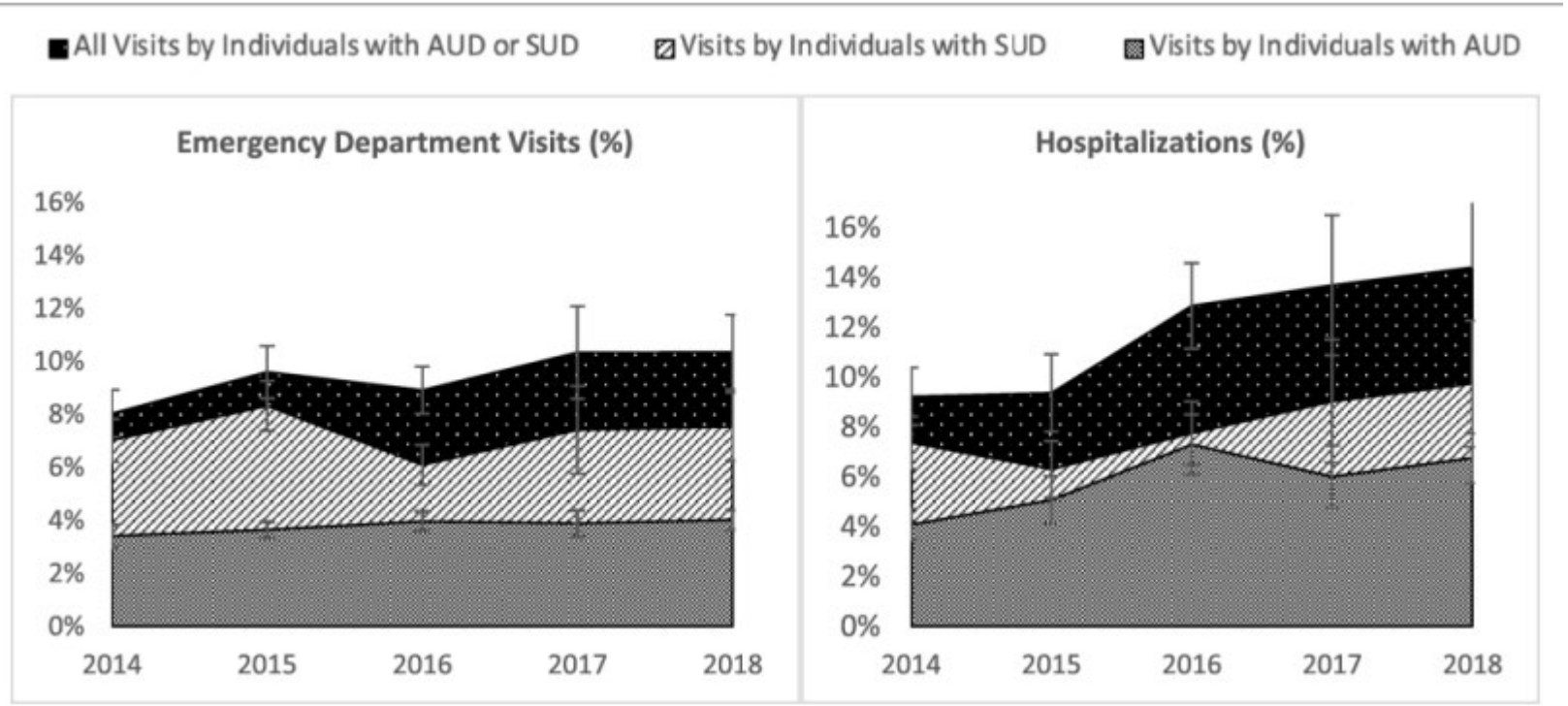
OUD = Opioid Use Disorder

MOUD = Medications for opioid use disorder, meaning methadone, buprenorphine and naltrexone

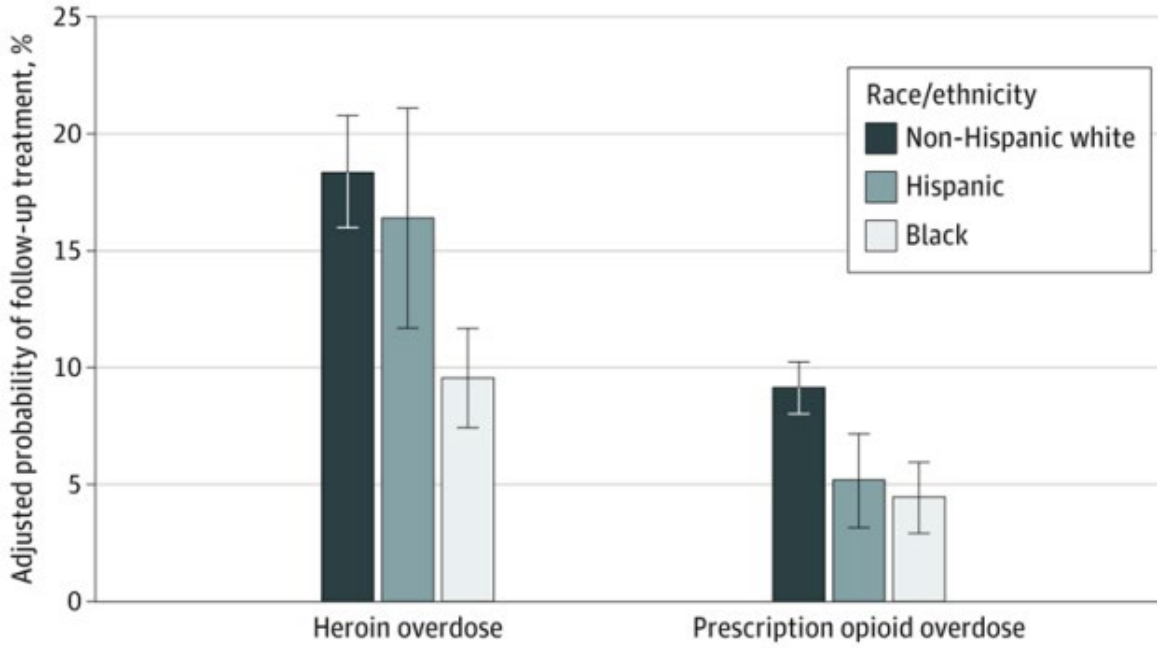
MAT = medication assisted treatment for substance use disorders, meaning methadone, buprenorphine and naltrexone

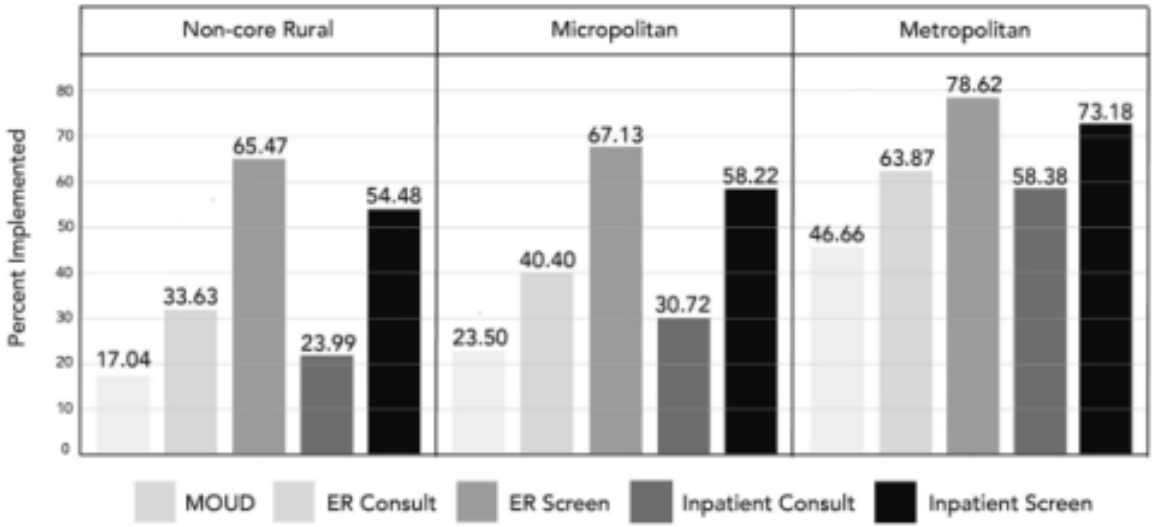
SUD = Substance Use Disorders

Hospitalization Outcomes for Patients with SUD



Hospitalization Outcomes for Patients with SUD





What About Methamphetamine?

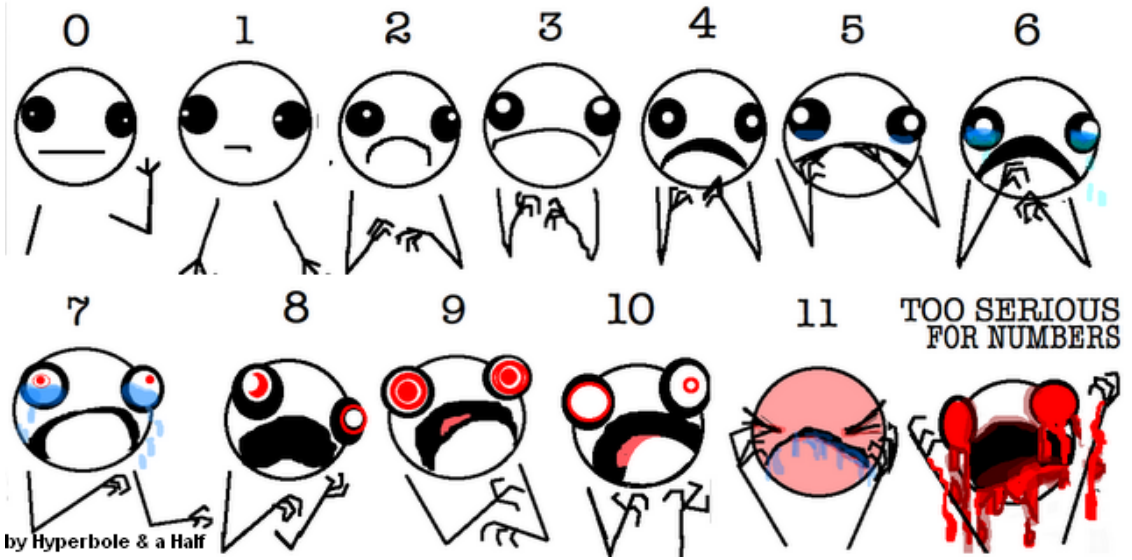
- Unfortunately we don’t have effective pharmacological treatments for methamphetamine the way we do for opioid use disorder
- Mainstay of treating Methamphetamine Use Disorder remains behavioral treatment
- Approaching patients with compassion, engaging in motivational interviewing, encouraging connection to treatment when the patient is ready
- Limited low quality evidence supporting some pharmacotherapy such as:
  - Wellbutrin
  - Mirtazapine

Dave

Dave is a 38 year old man with Hepatitis C, an unspecified mood disorder and “polysubstance abuse” on his problem list. Dave is unhoused and uses injected fentanyl and methamphetamine regularly several times per day and presents to the ED with multiple subcutaneous abscesses, as well as ankle tenosynovitis and septic arthritis of the left knee, along with a new murmur. He is admitted for IV antibiotics and surgical consultation. After getting 4mg of morphine in the ED, he arrives on the medical floor demanding more pain medication. Nursing is short staffed and he arrives on the floor at shift change, so it takes some time for his bedside nurse to bring 10mg of oxycodone. When he finds out this the only order for pain medication, he becomes agitated and threatens to leave AMA unless the physician comes to speak with him. The bedside nurse pages the physician with “the IVDU in 512 wants to see you, very agitated re: oxycodone, drug seeking? thanks”

What Are We Dealing With???

- Opioid-induced hyperalgesia
- Opioid tolerance
- Opioid withdrawal
- Fear of pain/withdrawal/judgment
- Anger/anxiety/shame
- Feelings of stigmatization
- Loss of control



All of these make the acute pain worse!

Common Biases

- Being manipulated
- Drug seeking
- Pain is not real
- Treatment is hopeless/futile
- Patients get high from ordered pain meds or MAT dosed in the hospital
- Methadone and buprenorphine treatment is “just substituting one addiction for another”

Respect Gets Respect

Sit down

Slow down

Eye position

"Not a whiff of judgement"

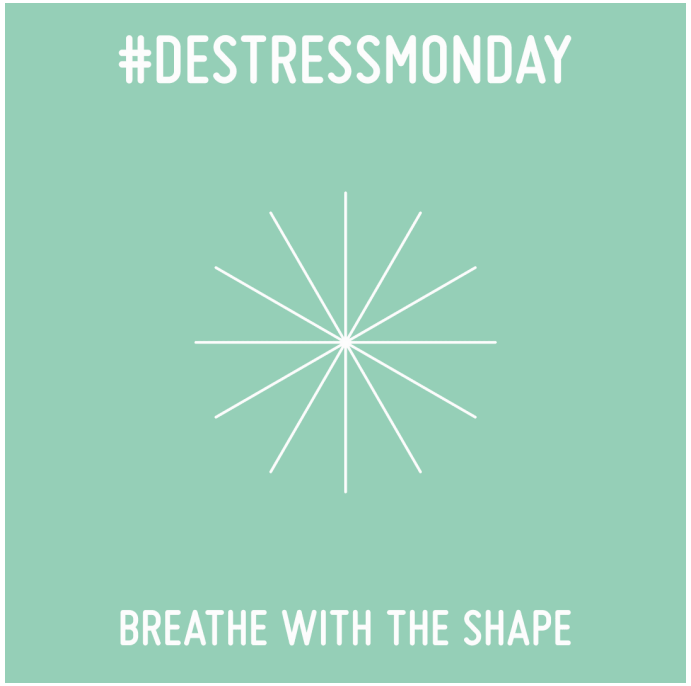
Notice opportunities for affirmation / validation

Don't let anxiety or defensiveness keep you from showing your genuine self

Dave

Dave is now writhing in pain, he is diaphoretic, tachycardic, slightly febrile with very large pupils. He looks extremely uncomfortable and begs the medical team to do something to relieve his pain. He asks for “the one that starts with D”

- Pause
- Take a breath
- Acknowledge your feelings
- Remember your motivational interviewing and empathetic listening skills: validations, affirmations and open-ended questions will get you a long way

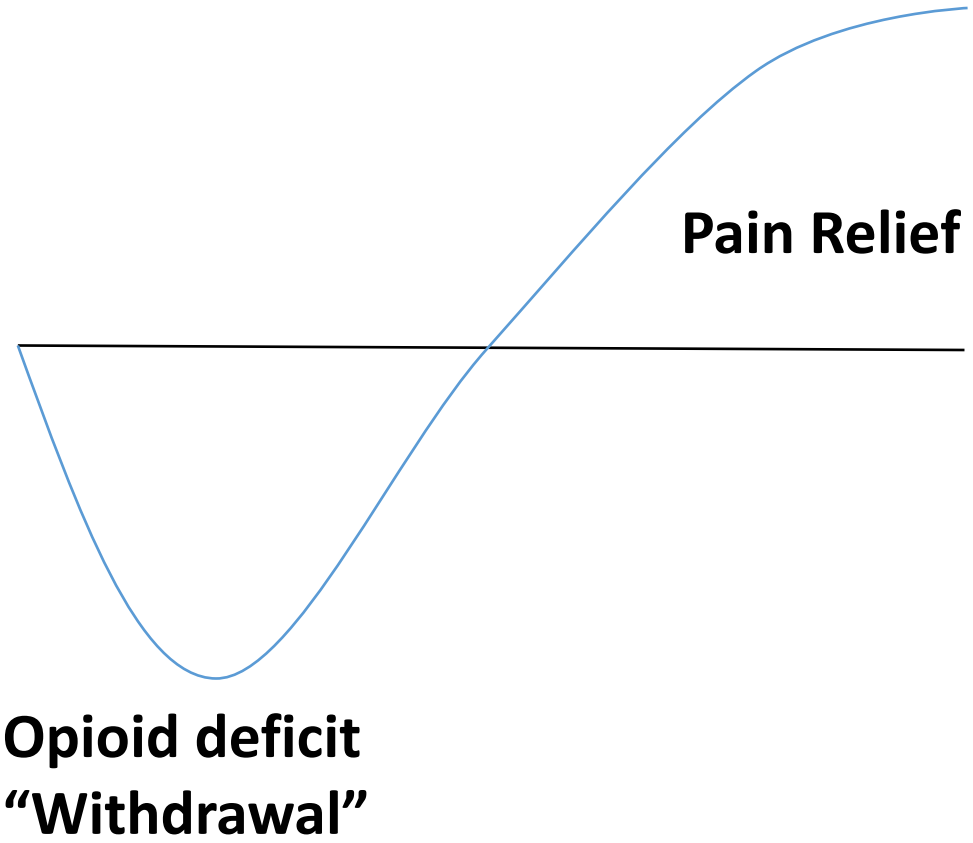


“But we WANT to help… or at least not make the addiction worse!”

GIVING THIS PATIENT OPIOIDS IN THE HOSPITAL IS <u>NOT</u> GOING TO MAKE THE ADDICTION WORSE.

Overview of pain control

1. Reassure and gain trust early
2. Fill the opioid deficit
3. Treat acute pain aggressively



Filling the Opioid Deficit - Strategies

	Advantages	Drawbacks
Methadone	• No risk of precipitated withdrawal • Provides some pain relief • Can be used to treat OUD on discharge	• Drug interactions • Respiratory depression • QTc prolongation • Complicates discharge planning if patient lives far from a methadone program – cannot be prescribed at discharge for OUD
Buprenorphine	• Safer than methadone • Provides some pain relief • Can be used to treat OUD on discharge, can be prescribed at discharge	• Risk of precipitated withdrawal
Pain relief opioids at high doses for both pain relief and opioid withdrawal	• Simpler medication regimen • No risk of precipitated withdrawal • Familiarity with medications and dosing	• Very frequent dosing and very high doses may be required – this could give you or the pharmacist anxiety • Cannot be prescribed long-term on discharge

Wait, is this even legal???!!???

"…This section is not intended to impose any limitations on a physician or authorized hospital staff to administer or dispense narcotic drugs in a hospital to maintain or detoxify a person as an incidental adjunct to medical or surgical treatment of conditions other than addiction, or to administer or dispense narcotic drugs to persons with intractable pain in which no relief of cure is possible or none has been found after reasonable efforts,"

Title 21 CFR Section 1306.07C

What if the patient is already on Methadone or Buprenorphine?

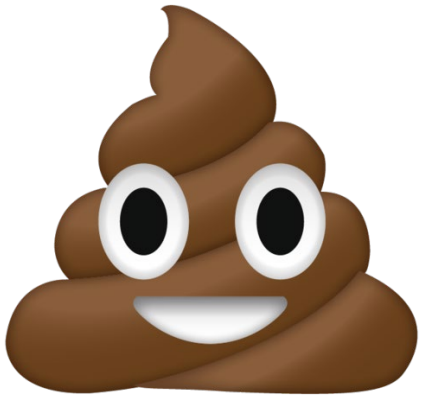
Methadone	Buprenorphine
• Call the patient's methadone program to confirm their dosing and let them know the patient is in the hospital – methadone does not appear on the MPDR • Typical effective doses for treatment of opioid use disorder are 80-150mg • For most patients with OUD, giving 30mg daily in the hospital setting while awaiting confirmation of their daily dosing is likely safe, unless this dose is causing respiratory depression • Consider splitting their total daily dose to provide better pain relief • Okay to adjust the dose in discussion with the patient's methadone program if needed • Continue through the perioperative period	• Can confirm their dose via the MPDR • Typical effective doses for OUD are 8-24mg, some patients may need up to 32mg • Buprenorphine is relatively safe, it is likely safe to give the patient their stated dose without waiting for confirmation • Splitting the dose so that the patient gets a small amount of buprenorphine every 4 hours can help with pain relief – buprenorphine's analgesic effect lasts about 4 hours • Okay to adjust the dose of buprenorphine – if the patient is still using opioids, their outpatient dose is probably not sufficient! • Continue through the perioperative period

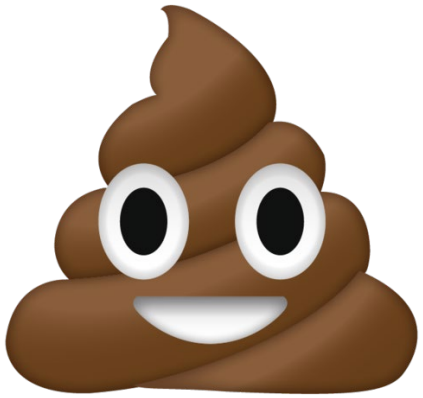
Treating Acute Pain – Strategies & Safety Principles

Set expectations early – pain will likely be 3-4/10 at best

- **Moderate Pain**
  - Schedule opioids, write hold parameters for safety!
    - Hold for RR< 12 or sedation
  - Patients with opioid use disorder will require aggressive doses
  - May need additional PRN dosing for physical therapy sessions or wound care
- **Severe Pain**
  - PCA is your friend!
  - Remind visitors not to push the button for the patient
  - Provides safety as well as patient autonomy
- Schedule adjunctive medications like Tylenol and NSAIDS
- Don’t forget multi-modal control with heat/ice therapy, nerve blockade, etc
  - Talk about multi-modal pain control AFTER the patient’s pain is controlled with opioids, not before

Don’t forget!






microtab
nicotine
2mg
nicotine
nicorette
inhalator
nicotine
nicotine
new dosing regime
nicorette
invisi 25mg
patch
nicotine
7
25mg
step 1
0.5 mg
FILM-COATED
Varenicline
nicorette
freshmint
4mg gum
nicotine

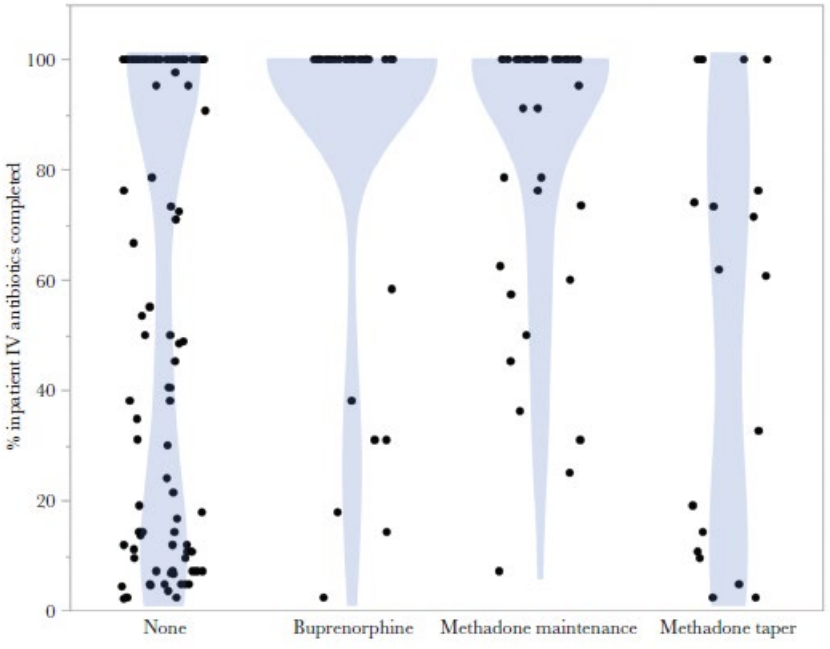
Dave

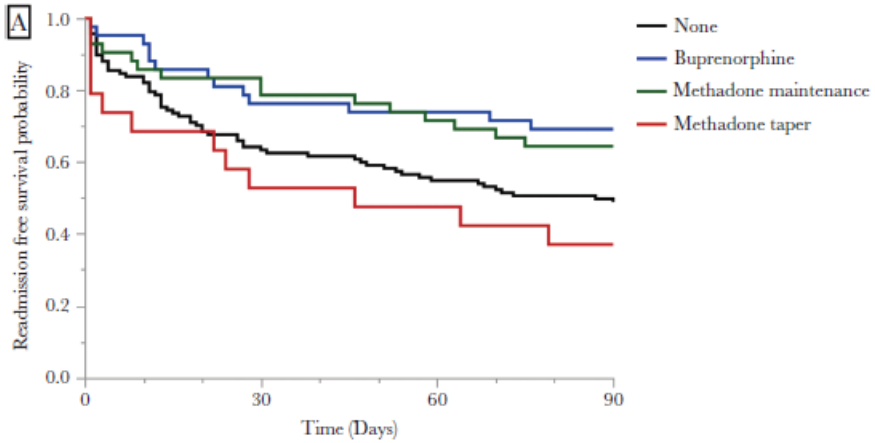
To stabilize Dave's opioid withdrawal, the medical team starts him on 30mg of methadone daily, with PO dilaudid scheduled for pain relief. This provides him with some basic relief for his symptoms and he is much calmer.

His blood cultures are persistently positive and he undergoes TTE and TEE which reveal endocarditis, meaning he will need to remain in the hospital for several weeks of IV antibiotics.

You are talking with Dave and he tells you he is really sick of using opioids on the street. He has tried to quit several times, he has been in and out of rehab and has never really succeeded. The only thing that has helped him stay sober for more than a few days is suboxone. He stays in Ronan and is unable to make the trek to the methadone clinic every day, he is worried about what he will do when he is discharged from the hospital.

Evidence Rationale for Starting MOUD in the Hospital





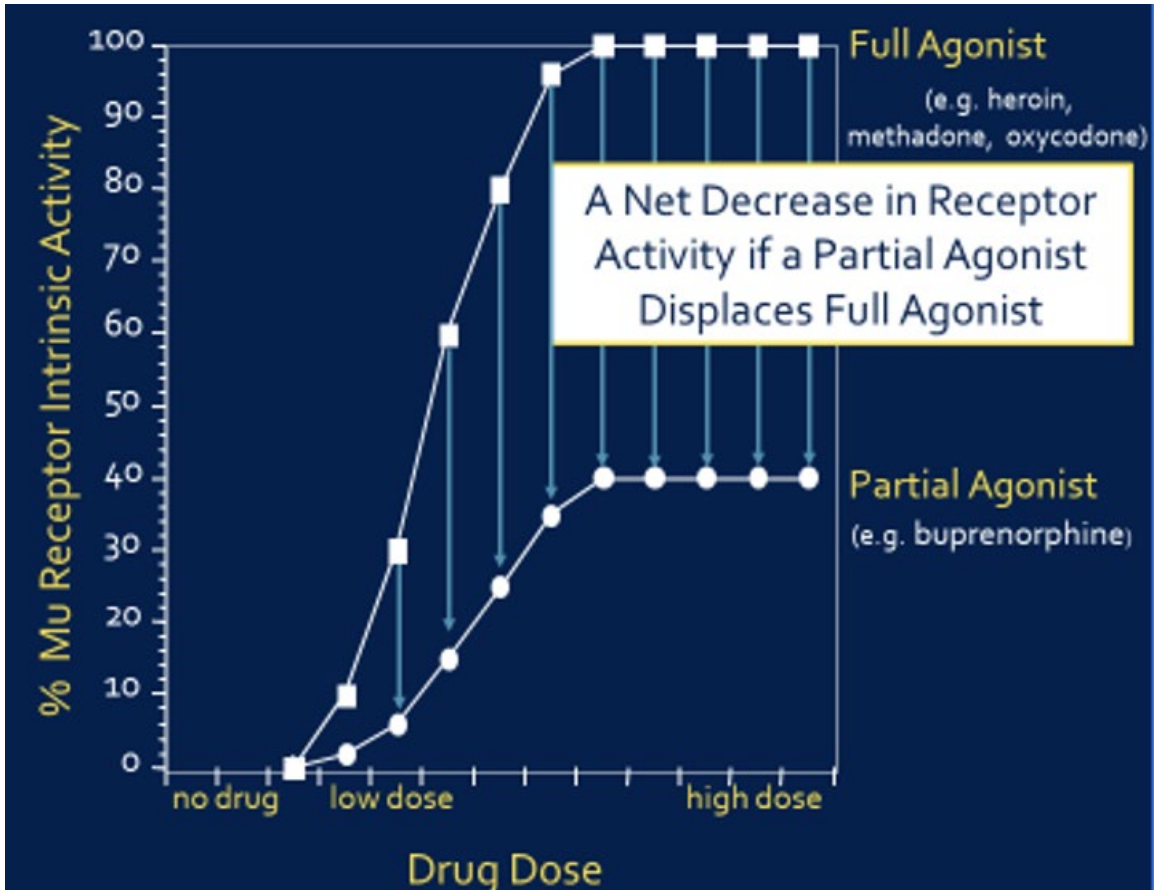
- Greater proportion of patients completing antibiotic therapy (64% vs 46%)
- Greater number of days of gold-standard antibiotic therapy
- Reduced 30-day & 90-day hospital readmission
- More likely to attend outpatient follow up appointments after discharge
- Higher likelihood of attending an outpatient addiction treatment program after hospital discharge
- Reduction in AMA discharge, post discharge higher odds of medication adherence, reduced emergency department visits and reduced opioid overdoses

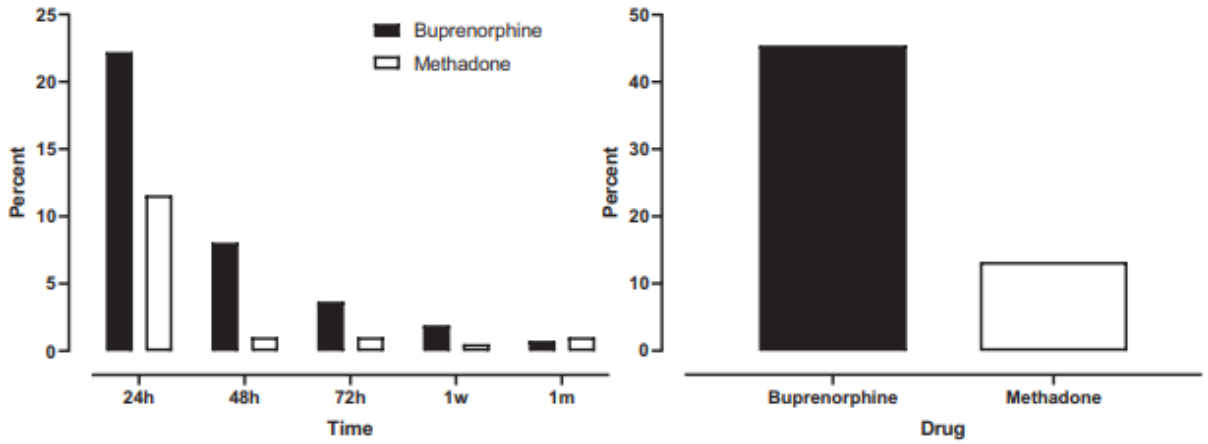
Evidence Rationale for Starting MOUD in the Hospital

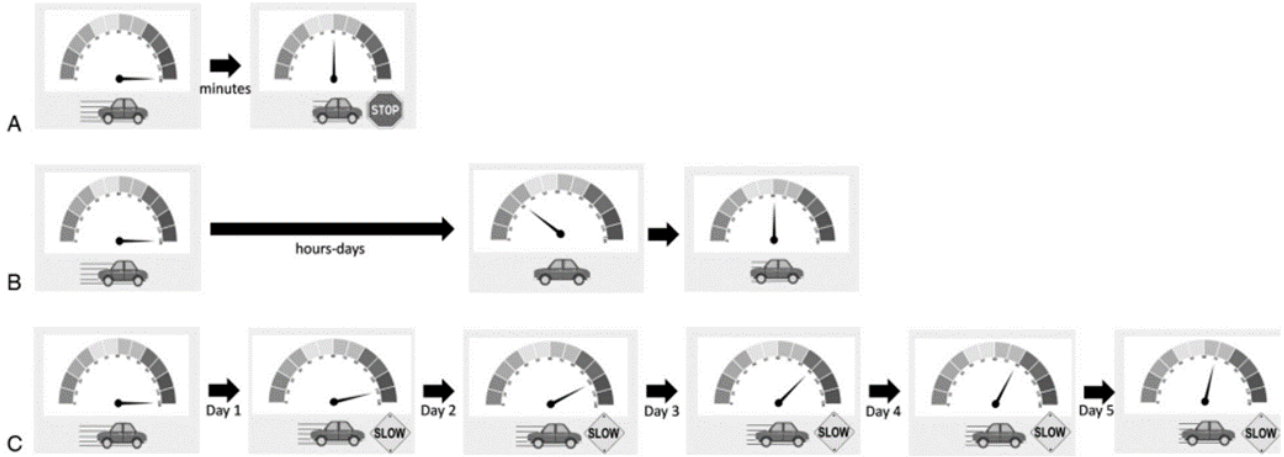
Table 2. Overdose Outcomes for the Total Cohort and Stratified by Receipt of OUD Treatment Within 7 Days of Discharge

	Patients, No. (%)		
		Received OUD treatment within 7 d of discharge[a]	
Outcome	Total (N = 22 235)	No (n = 21 051)	Yes (n = 1184)
Fatal or nonfatal overdose			
≤6 mo	452 (2.0)	430 (2.0)	22 (1.9)
≤12 mo	758 (3.4)	712 (3.4)	46 (3.9)
Fatal overdose			
≤6 mo	46 (0.2)	44 (0.2)	2 (0.2)
≤12 mo	76 (0.3)	72 (0.3)	4 (0.3)
Nonfatal overdose			
≤6 mo	411 (1.8)	390 (1.8)	21 (1.8)
≤12 mo	691 (3.1)	648 (3.1)	43 (3.6)

Fentanyl & Precipitated Withdrawal in Buprenorphine Initiation

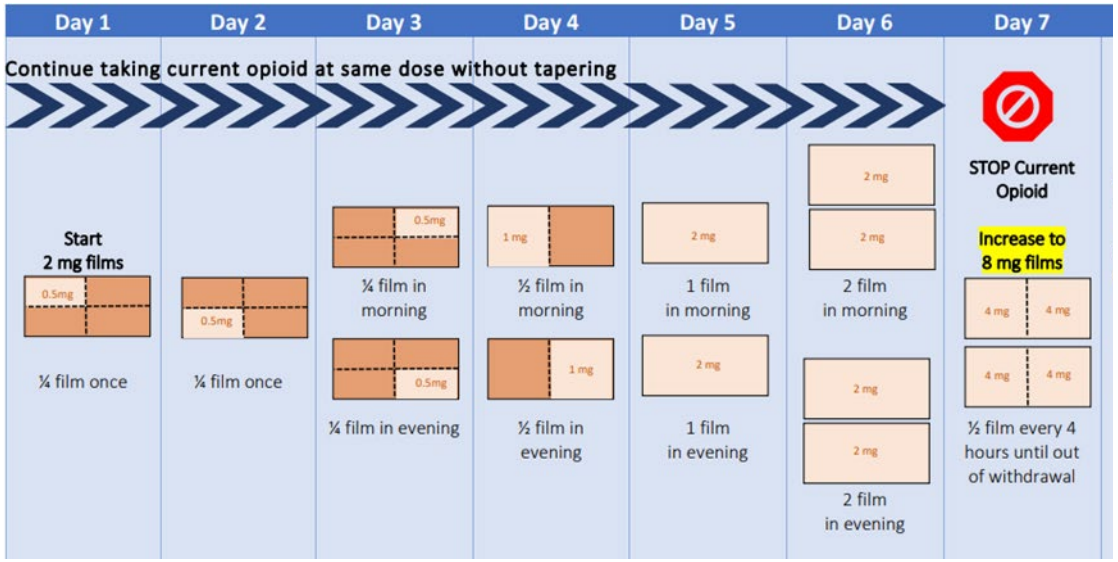


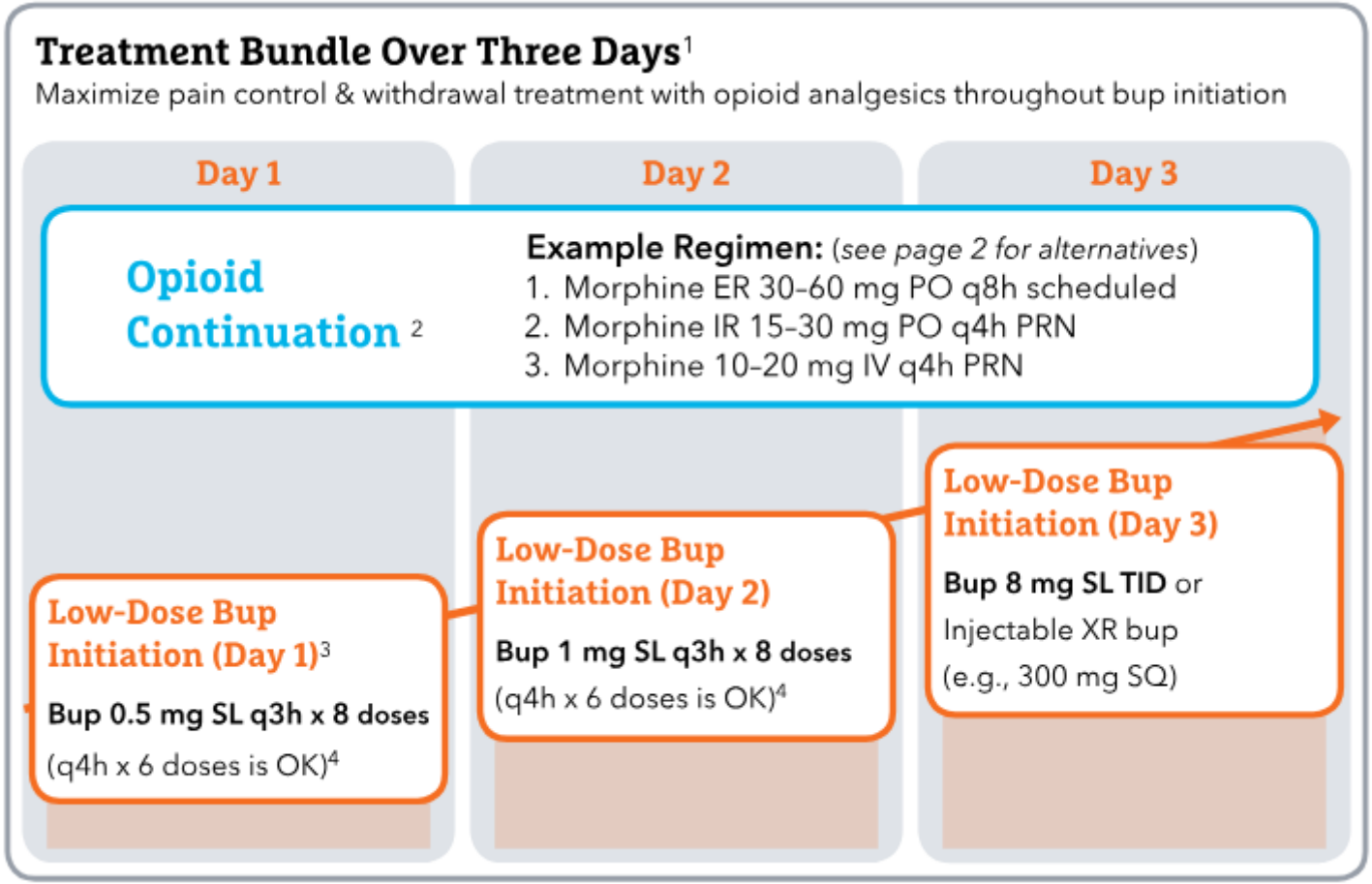




Overview of Buprenorphine Strategies

- Low dose buprenorphine with full agonist overlap





Variant Timeline Dave

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You are talking with Dave and he tells you he is really sick of using opioids on the street. He has tried to quit several times, he has been in and out of rehab and has never really succeeded, even when on 24mg daily of buprenorphine-naloxone. He can camp in his sister's backyard two blocks away from the local methadone clinic when he gets out of the hospital.

Why would **anyone** be on Methadone???

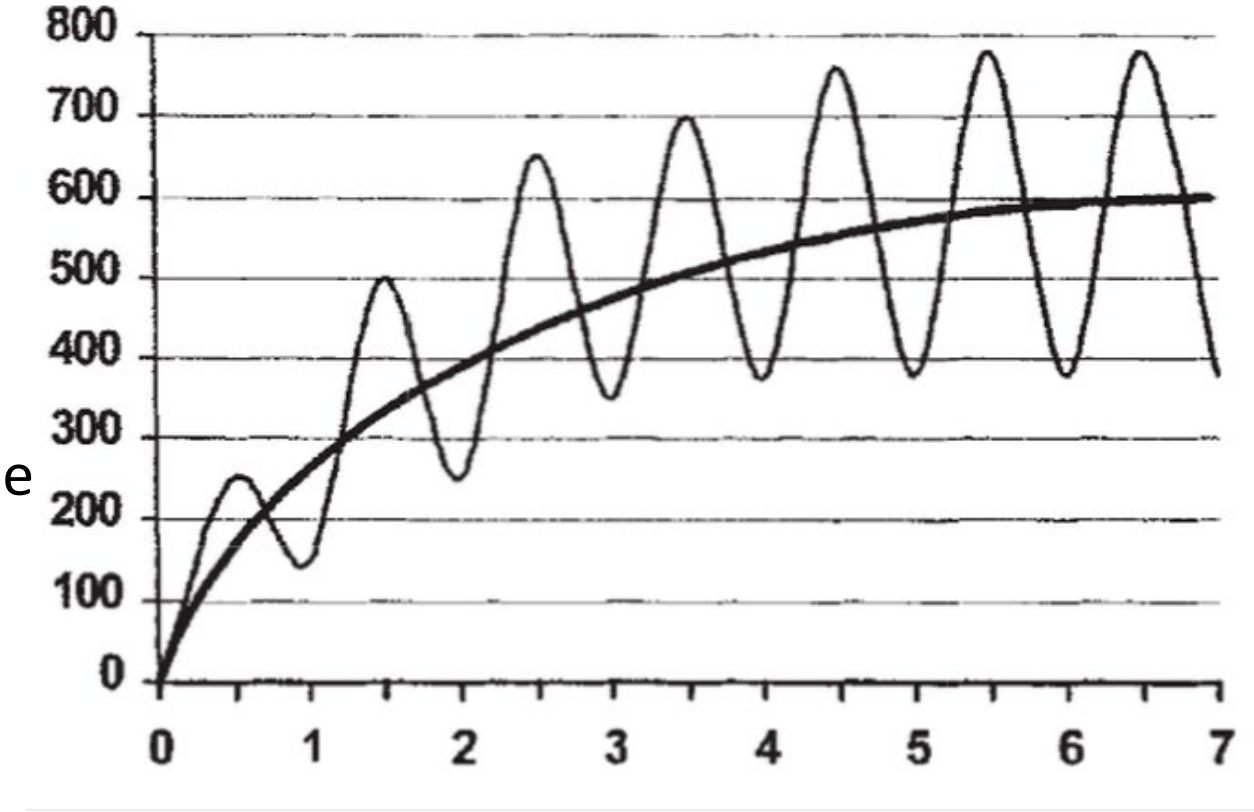
1. **More effective** at keeping people from using illicit opioids compared to buprenorphine/suboxone
2. Some patients **need full mu-agonist therapy** to remain sober and remain in treatment
    - Methadone effective dose 80-150mg, some patients may need more
    - Buprenorphine/suboxone 24mg = 50-60mg methadone
3. **Daily observed dosing** works better for some patients
    - Patients who need additional supervision
    - Homeless
    - Living with still-using family member or partner
    - More severe opioid use disorder
4. Still provides **mu receptor blockade** when dosed appropriately

Methadone for Opioid Use Disorder

Peak: ~2-4 hours
Long & variable duration: $t^{1/2}$ 18-36H
Accumulates over 3-5 days

30 mg initial dose *should* be safe
- Start 5-10 mg TID or QID

Hold parameters:
- For sedation
- For RR < 12

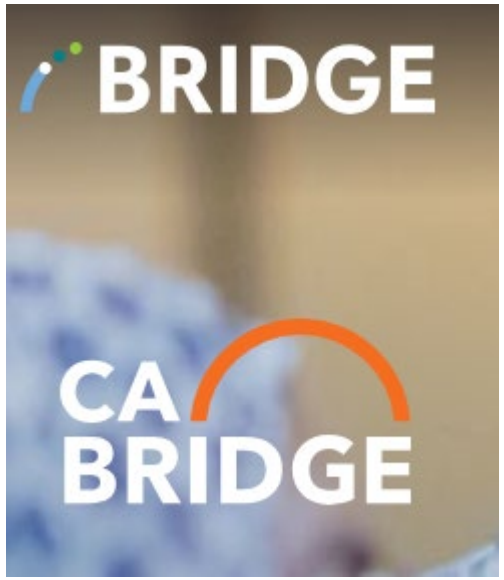


- Adjust dosing every 3-5 days
- Treat withdrawal with short-acting opioids if unable to increase dose

Discharge Planning

Methadone	Contact the methadone program at least 3-5 days prior to discharge to ensure the patient has a SEAMLESS transition – this may require keeping them to avoid a weekend or holiday discharge to avoid a gap in their methadone treatment It is ILLEGAL to prescribe methadone for OUD outside the hospital, don't do this!
Buprenorphine	Options for buprenorphine treatment in Missoula include: Ideal Options, Community Medical Services, Partnership Health Center, Western Montana Mental Health Prescribe ENOUGH buprenorphine to get them to their follow up appointment!
Acute pain opioids	Close contact with the patient's PCP who will be handling the taper – set expectations with the patient that the opioids will be tapered over a pre-defined period of time
Everyone	Prescribe Narcan! Screen for Hepatitis C, syphilis & HIV Discuss smoking cessation Consider: • Update flu and other appropriate immunizations • Discuss reproductive plans and contraception with patients at risk for unplanned pregnancy

Resources!



- California Bridge www.bridgetotreatment.org – clinical protocols for inpatient, outpatient and emergency department addiction treatment
- Curbsiders Addiction Medicine Podcast
- UCSF Substance Use Disorder Warm Line
  - M-F 9:00am-8:00pm ET
  - Nurses, clinical pharmacists and addiction med physicians
  - **(855) 300-3595**

Questions

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