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SHM Rapid Clinical Updates: Hospitalist Management of Opioid Use Disorder

Moderated by Joseph Sweigart, MD
Marlene Martín, MD | Susan Calcaterra, MD, MPH

January 27, 2022, 4 PM EST

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Brief Pre-test

CME Information:

- **Claim via link – end of presentation**

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Dr. Joseph Sweigart, MD, SFHM

Associate Professor

Lexington VA Health Care System

Midway, KY

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Marlene Martín, MD

Associate Professor

Addiction Care Team Director

University of California, San Francisco

San Francisco General Hospital

Marlene Martín is an Associate Professor of Clinical Medicine at UCSF and a hospitalist at San Francisco General Hospital (SFGH). Drawn to medicine to address health inequities and social injustices, her interests lie in systems improvement with a focus on addiction, community engagement, and care transitions. Marlene is board certified in internal medicine and addiction medicine and founded and directs the Addiction Care Team, an interprofessional consult service that provides harm reduction, evidence-based treatment, and linkage to care for emergency department and hospitalized patients with unhealthy substance use. Marlene chairs the Society of Hospital Medicine's Substance Use Disorder Special Interest Group.

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Disclosures

Marlene Martín has no relevant financial or advisory relationships with corporate organizations related to this activity.

Susan Calcaterra, MD, MPH

Associate Professor

Director, Addiction Medicine Consult Service

University of Colorado Hospital

Susan Calcaterra is an Associate Professor of Medicine at University of Colorado. She is board certified in internal medicine and addiction medicine. She practiced hospital medicine at a safety-net hospital in Denver, Colorado for seven years after which time she completed an addiction medicine fellowship at University of Colorado. She now directs the Addiction Medicine Consultation Service at the University of Colorado Hospital. She has grant funding from the National Institute of Drug Abuse to conduct research related to opioid use disorders and has authored over 30 peer reviewed manuscripts. She is affiliated with the Division of Hospital Medicine and the Division of General Internal Medicine at the University of Colorado.

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Outline

- ❑ Diagnose opioid use disorder (OUD)
- ❑ Initiate evidence-based medications for OUD
- ❑ Link hospitalized patients with OUD to treatment on discharge

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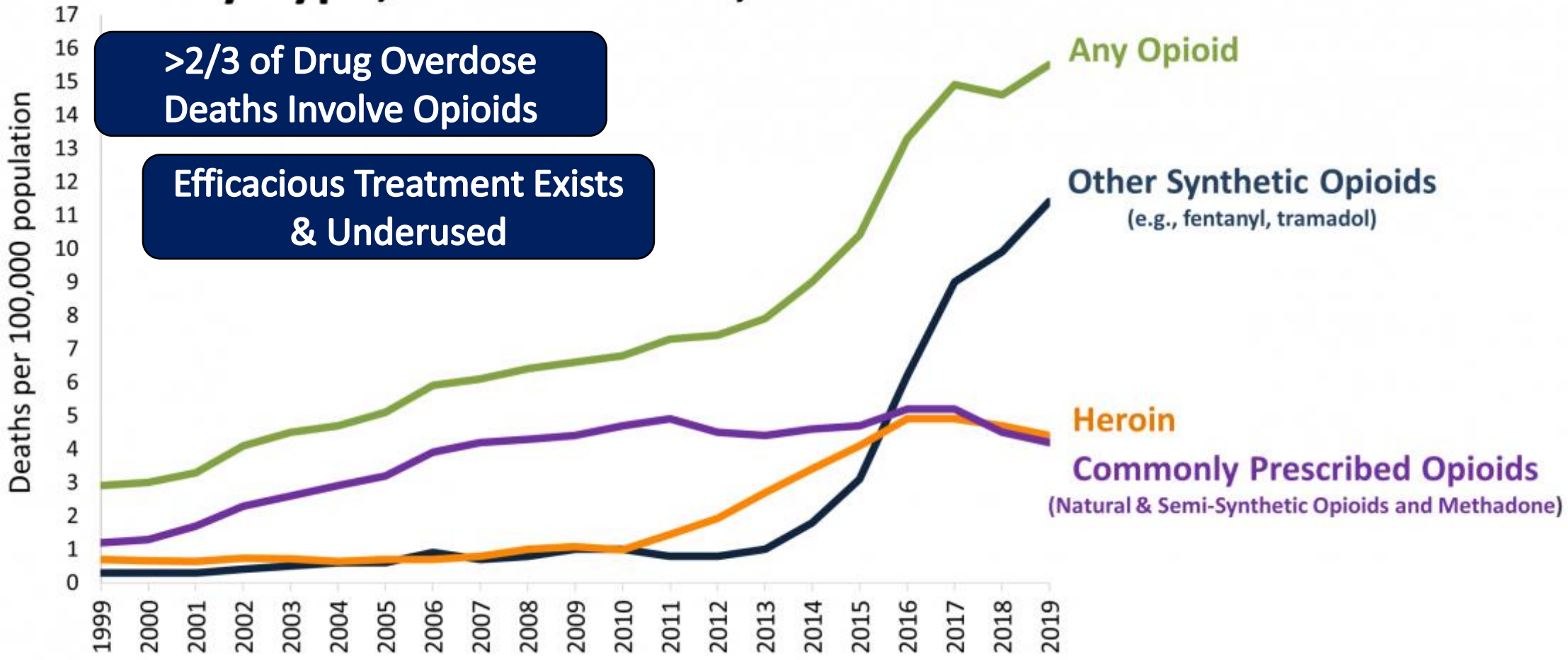
Roadmap

- ❑ **Landscape of Addiction**
- ❑ Diagnosing OUD
- ❑ Treating OUD
- ❑ Care Transitions & Harm Reduction

Overdose Death Rates Involving Opioids, by Type, United States, 1999-2019



CDC. National Vital Statistics System 2020.

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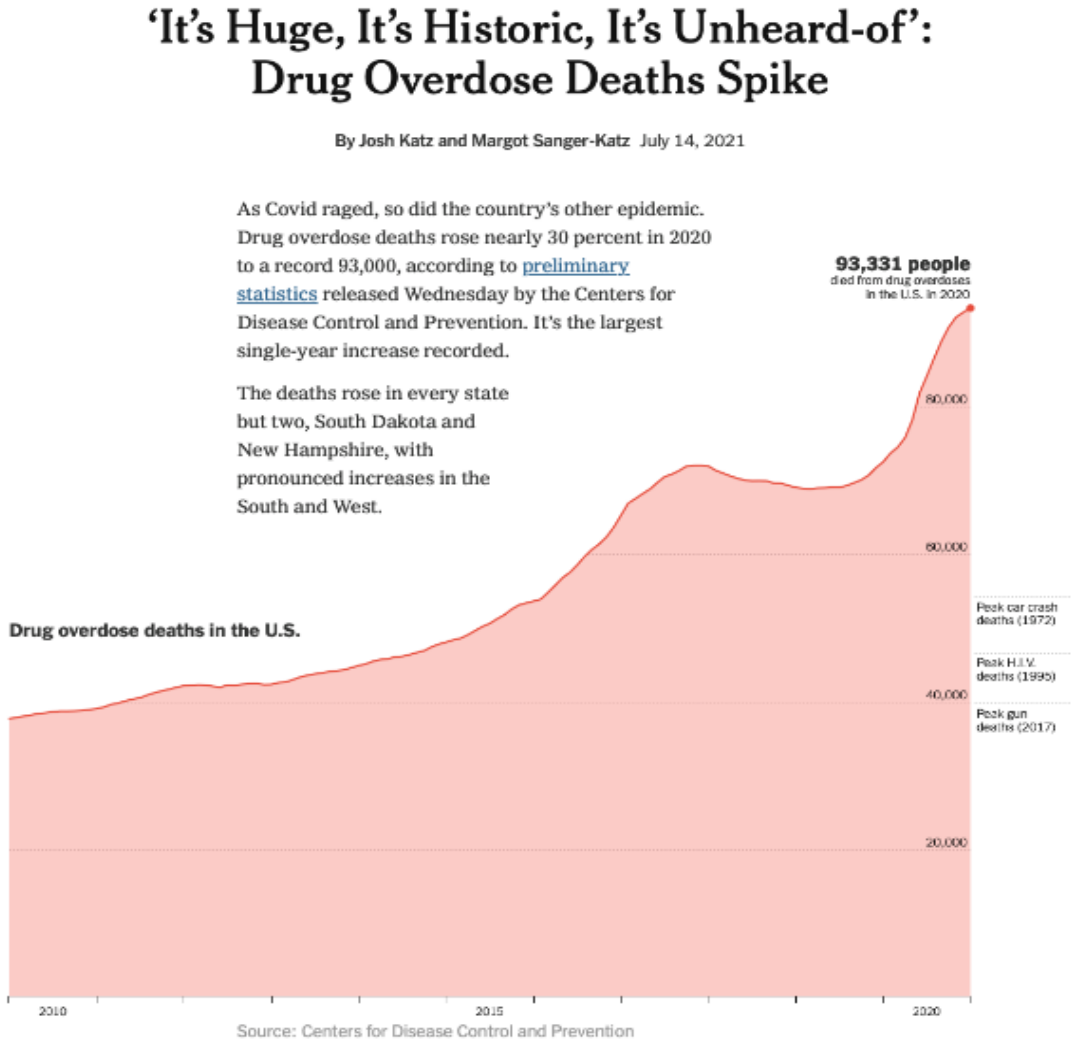
COVID and OUD

- Magnifying the drivers of use
  - Psychosocial & economic impacts
- Riskier use
  - Group programs halted / only accessible via technology
  - Limited hours of Syringe Access Services
  - Using alone
  - Suppliers disrupted
  - Shelters closed / unappealing



‘It’s Huge, It’s Historic, It’s Unheard-of’: Drug Overdose Deaths Spike

By Josh Katz and Margot Sanger-Katz July 14, 2021

As Covid raged, so did the country’s other epidemic. Drug overdose deaths rose nearly 30 percent in 2020 to a record 93,000, according to preliminary statistics released Wednesday by the Centers for Disease Control and Prevention. It’s the largest single-year increase recorded.

The deaths rose in every state but two, South Dakota and New Hampshire, with pronounced increases in the South and West.

Source: Centers for Disease Control and Prevention

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Fentanyl

- >100,000 drug-related deaths between in the 1-year period ending March 2021
  - 30% increase in drug related deaths from the previous year
  - Highest number of deaths ever recorded in a 1-year period

Salwan Georges/The Washington Post/

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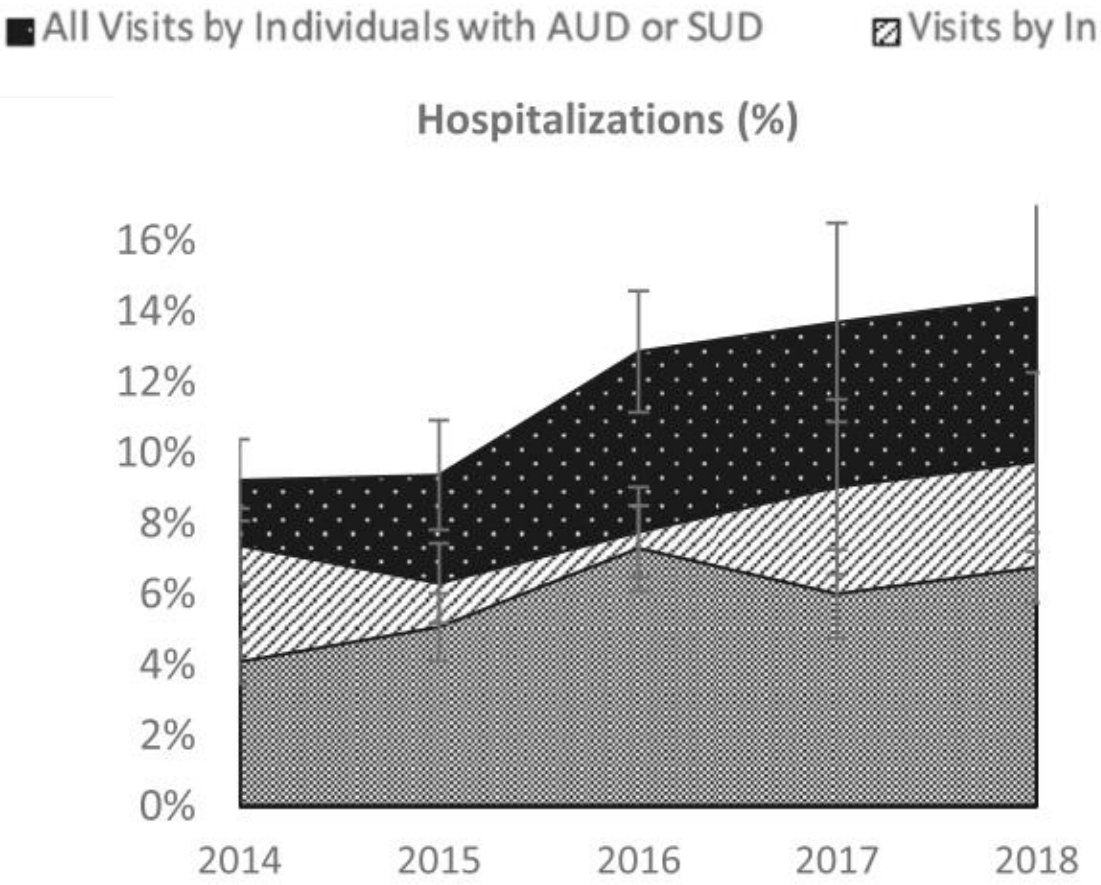
SUD are prevalent among hospitalizations



SUD-related ED visits and hospitalizations account for **$13.2 billion** in healthcare spending/year

Suen LW. J Gen Intern Med. 2021.

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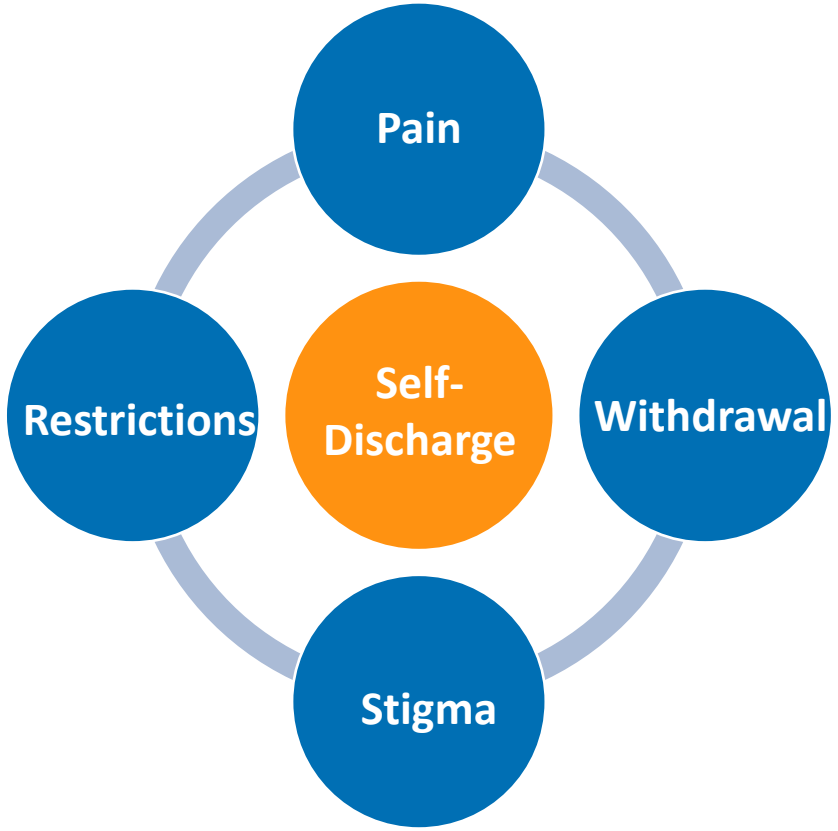
OUD among hospitalized patients

- More likely to be admitted from the ED
- Longer and costlier stay
- Higher readmission rate
- Unconnected to care
- High self-discharge rates



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Statistical Brief #249. March 2019. Agency for Healthcare Research and Quality; Brown RL. Prev Med 1998. Englander H. J Hosp Med. 2017. Spooner, K. Mayo Clin. Walley AY. J Addict Med. 2012.

Why treat OUD in the hospital?

2/3 Patients are Motivated to Reduce Use

Pivotal Touch Point

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Roadmap

- Landscape of Addiction
- **Diagnosing OUD**
- Treating OUD
- Care Transitions & Harm Reduction

But 1st: Words Matter

- Language propagates stigma which can be harmful, distressing, and marginalizing
- Use of person-first language is recommended in medical documentation and spoken language
- Open Notes (www.opennotes.org)
  - Avoid jargon, acronyms, and abbreviations
  - Offer a balanced perspective

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Words Matter: Person-first language

Don't Use	Use
Addict / h user, junkie, alcoho / drunk	Person who uses drugs, substances, opioids, alcohol
Drug habi	Disease
Relapse	Return to use
Clean	Maintain recovery
Dirty drug scre / positive for	Urine showed opioids, methamphetamine
Clean drug / teste / e for	Urine was non-reactive, did not have substances
Drug s	Treating withdrawal as a medical condition

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Wakeman SE. Am J Public Health, 2014; Words Matter, National Institute on Drug Abuse https://www.drugabuse.gov/; Accessed 10/28/21

35 Y man admitted with right upper extremity erythema, pain, and swelling

- ❑Started on empiric treatment for cellulitis overnight
- ❑When receiving am sign out you are paged that he is complaining of nausea, diarrhea, abdominal pain, & headache.
- ❑On evaluation, he is yawning and his pupils are dilated. He reports last using heroin right before admission.

Does he have OUD?

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DSM-5 Criteria

	DSM–5 In the past year, have you:	
1	Had times when you ended up drinking more, or longer, than you intended?	The presence of at least 2 of these symptoms indicates an **Alcohol Use Disorder (AUD).** The severity of the AUD is defined as: **Mild:** The presence of 2 to 3 symptoms **Moderate:** The presence of 4 to 5 symptoms **Severe:** The presence of 6 or more symptoms
2	More than once wanted to cut down or stop drinking, or tried to, but couldn't?	
3	Spent a lot of time drinking? Or being sick or getting over other aftereffects?	
4	Wanted a drink so badly you couldn't think of anything else? ****This is new to DSM–5****	
5	Found that drinking—or being sick from drinking—often interfered with taking care of your home or family? Or caused job troubles? Or school problems?	
6	Continued to drink even though it was causing trouble with your family or friends?	
7	Given up or cut back on activities that were important or interesting to you, or gave you pleasure, in order to drink?	
8	More than once gotten into situations while or after drinking that increased your chances of getting hurt (such as driving, swimming, using machinery, walking in a dangerous area, or having unsafe sex)?	
9	Continued to drink even though it was making you feel depressed or anxious or adding to another health problem? Or after having had a memory blackout?	
10	Had to drink much more than you once did to get the effect you want? Or found that your usual number of drinks had much less effect than before?	
11	Found that when the effects of alcohol were wearing off, you had withdrawal symptoms, such as trouble sleeping, shakiness, restlessness, nausea, sweating, a racing heart, or a seizure? Or sensed things that were not there?	

5 C's and 3R's

Control: Exceeded own limits ★

Can't **C**ut down

Compulsion: Time using, getting, recovering

Craving

Role failure

Relationship trouble

Gave up other meaningful activities

Risk of bodily harm ★

Consequences: Physical/psychological

Tolerance

Withdrawal

Impaired Control

Social Impairment

Risky Use

Pharmacological Criteria

2-3: Mild
4-5: Moderate
6 or more: Severe

35 Y man with cellulitis. He uses heroin 3-4 times daily and is unable to cut back. He lost his job due to missing work and has distanced himself from his parents due to his use. Does he have OUD?

a) Yes
b) No
c) Need more information

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35 Y man with cellulitis. He uses heroin 3-4 times daily and is unable to cut back. He lost his job due to missing work and has distanced himself from his parents due to his use. Does he have OUD?

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- **C**ontrol**:** Exceeded own limits
- Can't **C**ut down
- **C**ompulsion: Time using, getting, recovering
- **C**raving
- **R**ole failure
- **R**elationship trouble
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- Withdrawal

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Roadmap

- ❑ Landscape of Addiction
- ❑ Diagnosing OUD
- ❑ **Treating OUD**
- ❑ Care Transitions & Harm Reduction

35 Y man with cellulitis and OUD. He's interested in OUD treatment. What would you offer?

a) Buprenorphine
b) Methadone
c) Clonidine, diphenhydramine, loperamide, acetaminophen
d) Extended-release Naltrexone
e) Psychosocial Treatment (residential, mutual help group)
f) Need more information

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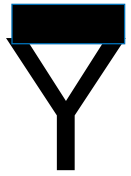
Medications for OUD

Mu receptor →

Opioids: full mu agonist include heroin, oxycodone, fentanyl

Methadone: full mu agonist

Buprenorphine: partial mu agonist
High affinity, ceiling effect



Extended-release naltrexone:
Full antagonist, high affinity

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Medications for OUD

	Methadone	Buprenorphine
Treatment retention	Higher than buprenorphine	Increased retention at doses >16mg
Office visits	Daily visits to Opioid Treatment Program (OTP – methadone clinic)	Daily-monthly; can also provide as directly observed therapy in OTPs
Prescribe in acute care?	**Any inpatient clinician during hospitalization**	**Any inpatient clinician during hospitalization**
Prescribe at discharge?	**OTP**	**Any clinician with DATA2000 X waiver**
Sedation	Yes at high doses, non-tolerant patients or slow metabolizers	Ceiling effect for respiratory depression = very safe
Withdrawal when starting	Days-weeks to reach comfortable dose	**Withdrawal or low-dose/microdose**

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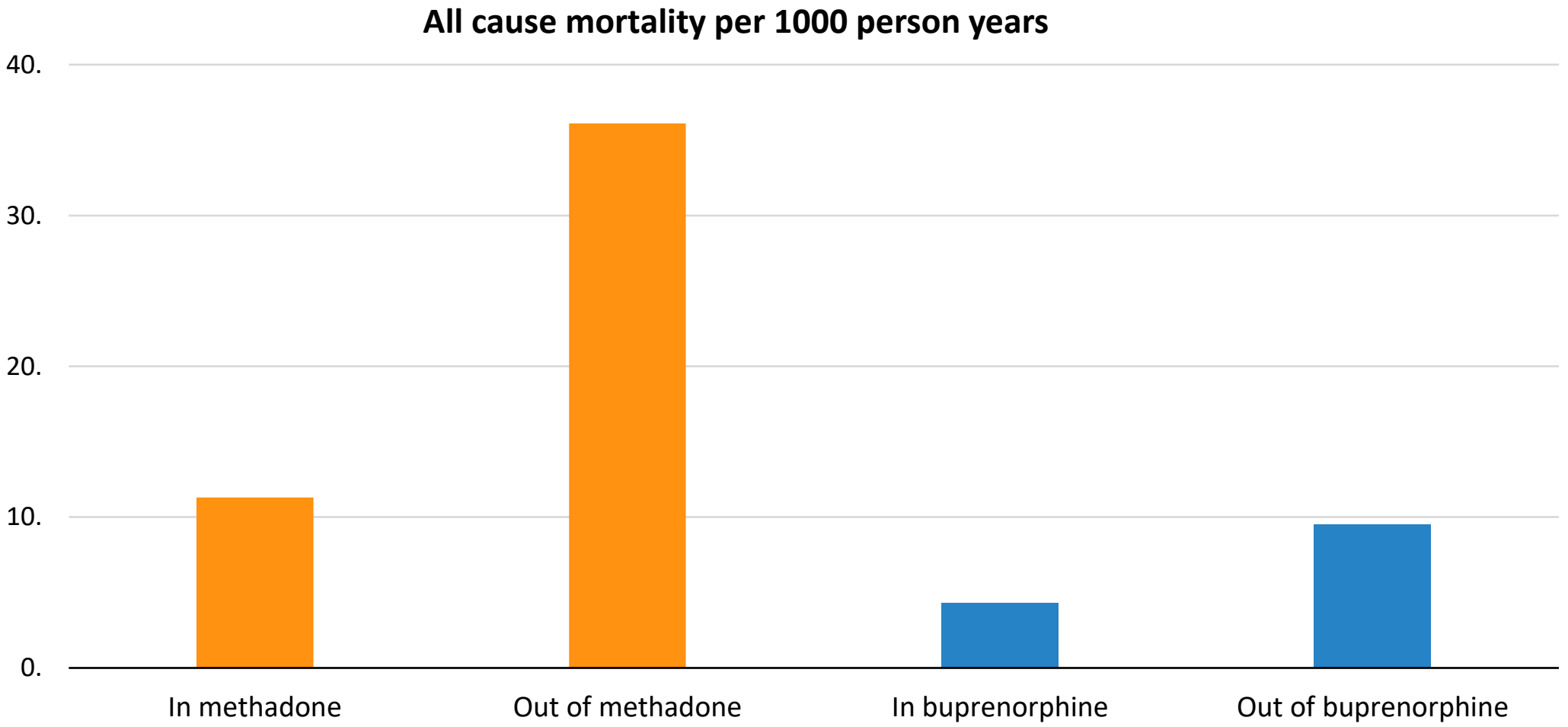
Decreased Mortality



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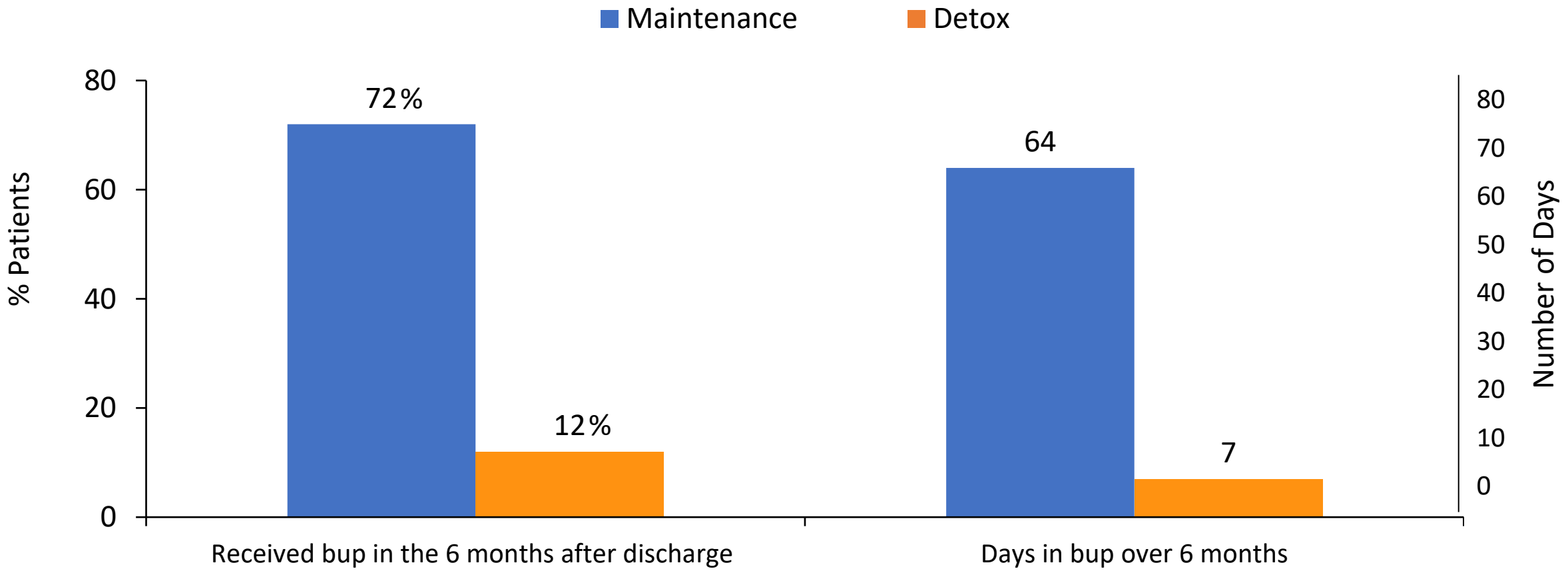
Sordo. BMJ. 2017

Hospital Initiation of Buprenorphine



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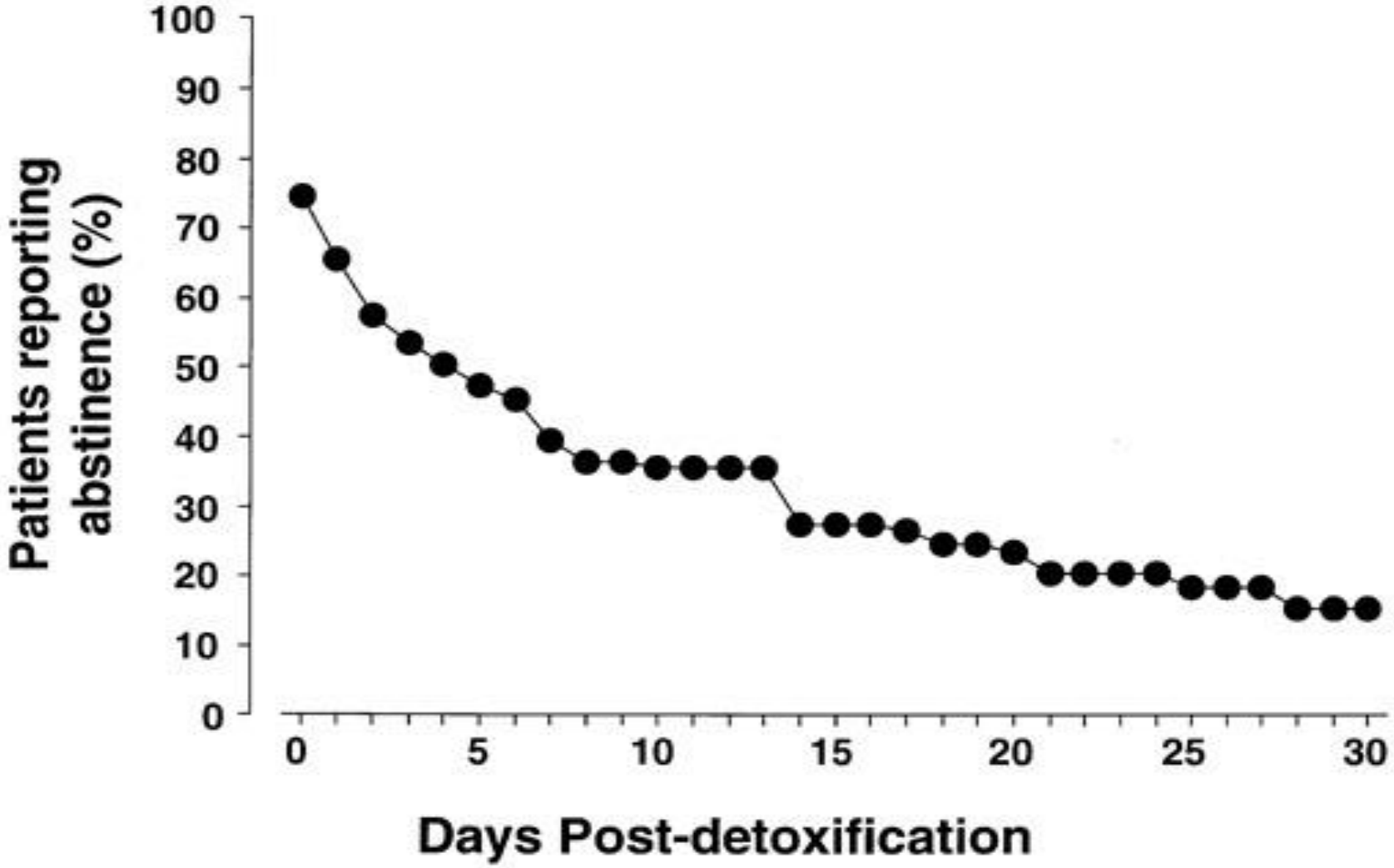
Liebschutz. JAMA Internal Medicine. 2014.

Detoxification doesn't last



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Chutuape M. The American Journal of Drug and Alcohol Abuse, 2001.

Back to our patient. He wants to start buprenorphine. How would you start it?

a) Low-dose, “microdosing”
b) 2mg buprenorphine
c) 4mg buprenorphine
d) 8mg buprenorphine
e) Need more information

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Back to our patient. He wants to start buprenorphine. How would you start it?

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He wants to start buprenorphine. How would you start it?

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Traditional buprenorphine initiation

- ❑ Can tolerate an opioid free period
- ❑ In opioid withdrawal (min COWS score 8-11
- ❑ Predominant using short acting opioids (heroin, oxycodone, etc.)

Low-dose/microdosing of buprenorphine

- ❑ Avoid opioid free period (e.g., acute pain/post-op pain)
- ❑ Regular fentanyl use
- ❑ Uses long-acting opioid use (e.g., methadone)

*Methadone to buprenorphine → Ask for help

COWS Score for Opioid Withdrawal

Sign or Symptom	Score
Heart Rate	< 80 = 0 81-100 = 1 101-120 = 2 > 120 = 4
Sweating	None = 0 Subjective report = 1 Flushed or moist face = 2 Beads of sweat on face = 3 Sweat streaming of face = 4
Restlessness	Able to sit still = 0 Subjective reports of restlessness = 1 Frequent shifting or extraneous movements = 3 Unable to sit still for longer than a few seconds = 5
Pupil size	Normal or small = 0 Pupils possibly larger than appropriate = 1 Pupils moderately dilated = 2 Pupils so dilated that only rim or iris visible = 5
Bone or joint aches	None = 0 Mild diffuse discomfort = 1 Subjective reports = 2 Patient actively rubbing joints or muscles = 4
Rhinorrhea or lacrimation	None = 0 Congestion or moist eyes = 1 Rhinorrhea or lacrimation = 2 Nose constantly running or tears streaming = 4
Yawning	None = 0 Yawning 1-2 times = 1 Yawning > 3 times = 2 Yawning several times per minute = 4
Anxiety or irritability	None = 0 Subjective report = 1 Patient appears anxious = 2 So irritable that cannot participate in assessment = 4
Gooseflesh	Smooth skin = 0 Piloerection can be felt = 3 Prominent piloerection = 5

Withdrawal Assessment

COWS shortcut: Subjective AND at least 1 objective sign of withdrawal

- Subjective: Nausea, abdominal pain, myalgias, chills
- Objective (≥1): Restlessness, sweating, rhinorrhea, dilated pupils, watery eyes, tachycardia, yawning, goose bumps, vomiting, diarrhea, tremor

https://www.mdcalc.com/cows-score-opiate-withdrawal

Traditional Buprenorphine Initiation

- When COWS ≥8, give 2-8 mg
- Reassess in 1 hour, then q4-6 hours thereafter.
  - Max day 1: 16 mg
  - Max day 2: 24 mg
- Therapeutic dose 16-24mg/day

Increase dose: craving, withdrawal, pain

Decrease dose: insomnia, mania, sedation

Works well with pill-based OUD and heroin use disorder

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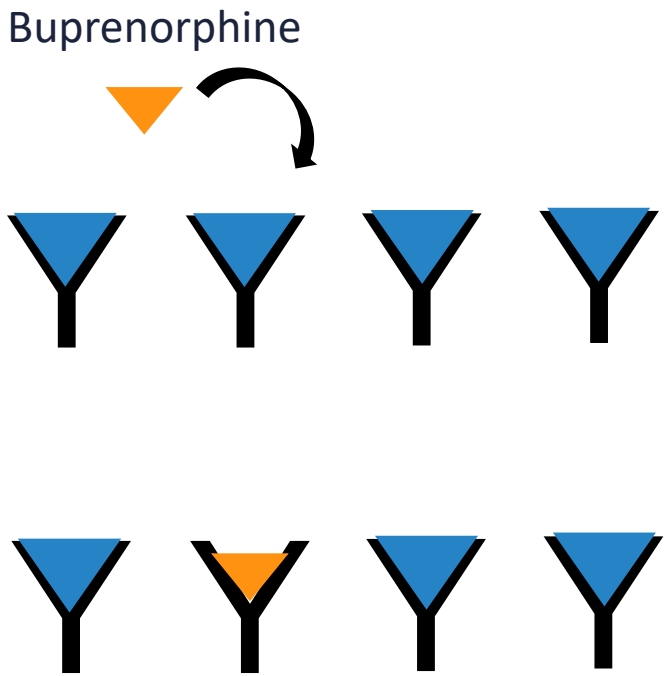
Example of low-dose (microdosing) start with films or tabs

- Day 1: 0.5mg q6h = 2mg total (continue full agonist)
- Day 2: 1.0mg q6h = 4mg total (continue full agonist)
- Day 3: 2.0mg q6h = 8mg total and start to decrease/stop full agonists (except if acute pain)
- Day 4: 12-32mg



- Depends on formulations (films, tabs, patches, buccal, or IV buprenorphine) available in your hospital

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As you are ordering buprenorphine, he asks about methadone. What methadone dose would you start?

a) 5mg
b) 20mg
c) 100mg
d) None, we cannot start methadone in the hospital
e) Need more information

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a) 5mg
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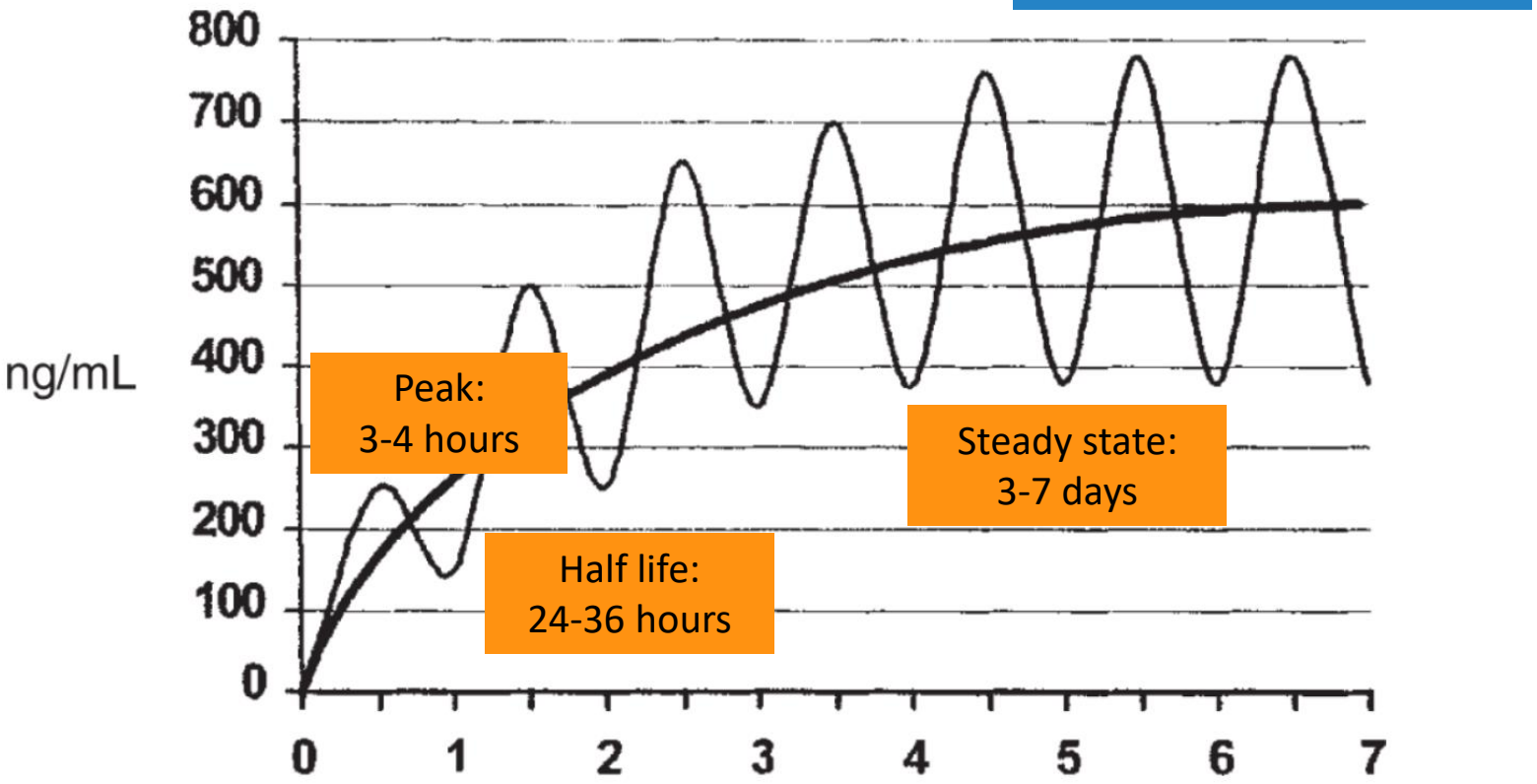
Yes, we can start methadone in the hospital

(c) 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 or cure is possible or none has been found after reasonable efforts.***

https://www.deadiversion.usdoj.gov

Methadone Initiation

Risk of overdose with initiation



Days at steady dose

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Methadone titration

Day 1 Start with 10-30 mg, reassess in 3-4 hrs, add 10mg PRN withdrawal or cravings, max 40 mg Check for sedation at 4 hours. Ok to give additional short acting opioids throughout
Day 2 Total Day 1 + 5-10 mg in 3-4 hrs PRN, max 50 mg
Day 3 Today Day 2+ 5-10 mg in 3-4 hrs PRN, max 60 mg

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Our patient ultimately chooses buprenorphine and is doing well on 16mg daily. However, he has an abscess and goes to the OR for debridement. How would you treat his pain post procedure?

a) Regional block
b) Morphine
c) Tylenol
d) Adjust buprenorphine dosing/frequency
e) Stop buprenorphine
f) All of the above

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Medication for OUD management in the perioperative period

	Pre-procedure	Post-procedure
Methadone	Continue full dose	Continue full dose Consider splitting dose in the hospital
Buprenorphine	Continue full dose	Continue / increase dose Consider splitting

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Kohan L. Reg Anesth Pain Med. 2021.

Managing acute pain in the setting of medications for OUD treatment

	Interventions to consider
Mild pain	• Split buprenorphine/methadone TID
Moderate pain	• Ibuprofen, acetaminophen, topicals • Neuropathic: TCAs, SNRIs, gabapentin
Severe pain	• Regional and local anesthesia • Give opioids → you will need higher doses due to tolerance • Ketamine

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Haber LA. J Hosp Med. 2019.

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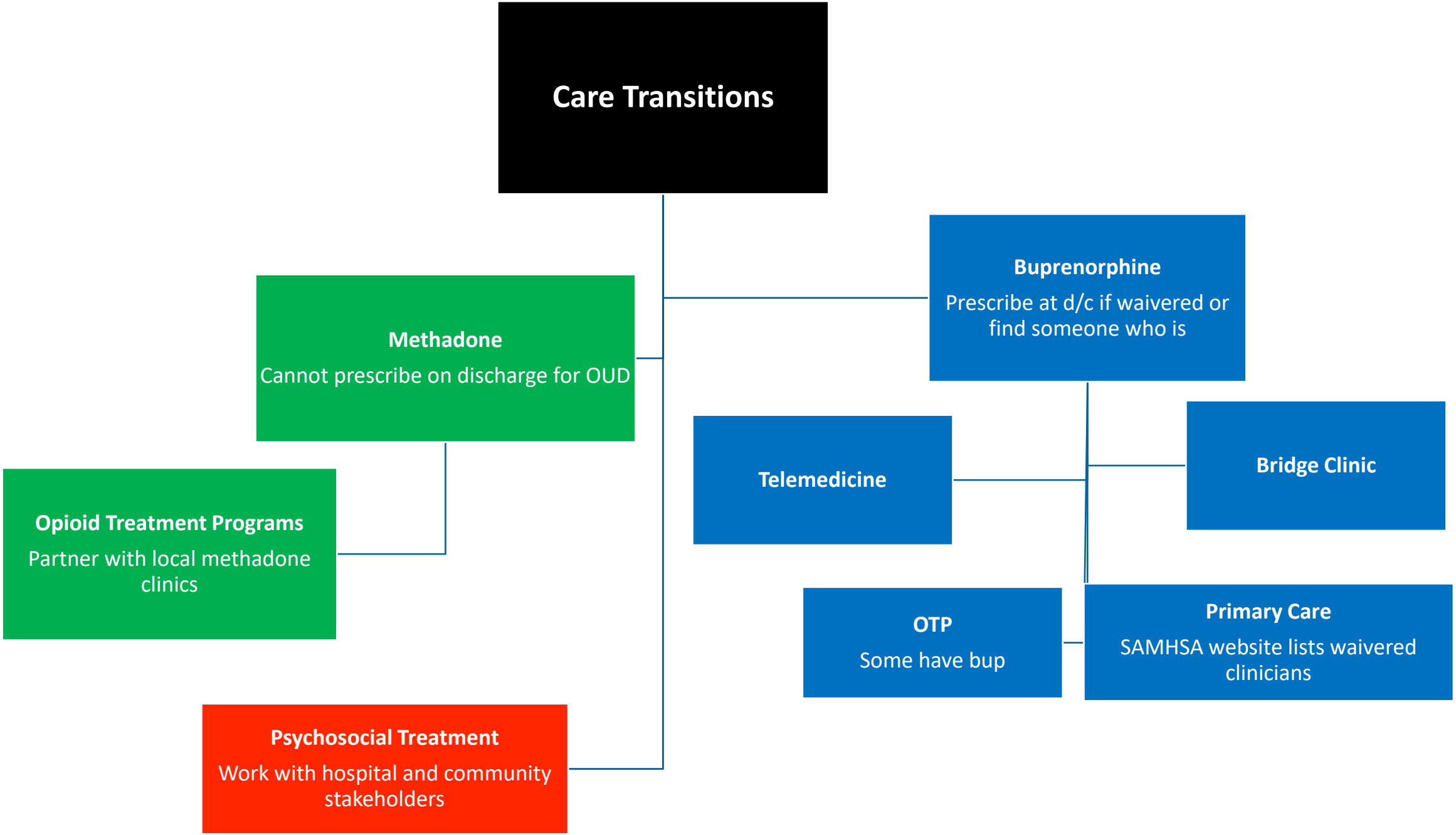
Roadmap

- ❑ Landscape of Addiction
- ❑ Diagnosing OUD
- ❑ Treating OUD
- ❑ **Care Transitions & Harm Reduction**


Care Transitions
Buprenorphine
Prescribe at d/c if waivered or find someone who is
Methadone
Cannot prescribe on discharge for OUD
Telemedicine
Bridge Clinic
Opioid Treatment Programs
Partner with local methadone clinics
OTP
Some have bup
Primary Care
SAMHSA website lists waivered clinicians
Psychosocial Treatment
Work with hospital and community stakeholders

Harm Reduction

Syringe access services	Review injection practices	Overdose prevention sites	Buddy system, never use alone
HCV and HIV education, screening, and treatment	HAV, HBV, & TDaP vaccines	Naloxone	Stimulants warrant overdose prevention

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How you can help today

1. Get your X waiver!
2. Prescribe naloxone for overdose prevention
3. Assess your patients for OUD and their OUD goals
4. Continue and initiate OUD medications during admission and ensure seamless care transition

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SHM supports getting the X-Waiver now!

1. Go to: https://buprenorphine.samhsa.gov/forms/select-practitioner-type.php

2. To complete the notification of intent:
   - Under training you received, click other and mark: "practice guidelines”
   - Date: today
   - City: type "Practice Guidelines"
   - State: Type in your state
   - Select 30 patients

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- SHM recommends that all hospitalists become X-Waivered to prescribe buprenorphine at discharge

- SHM plans to release a consensus statement with recommendations for hospital-based OUD management

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Key Guidance for Opioid Use Disorder Screening, Treatment, Overdose Prevention, and Care Transitions by Hospitalists

Outline

- ❑ Diagnose opioid use disorder (OUD)
- ❑ Initiate evidence-based medications for OUD
- ❑ Link hospitalized patients with OUD to treatment on discharge

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Brief Post-test

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Audience Questions

Submit questions via the webinar of GoToWebinar.

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SHM Clinical Rapid Updates: Hospitalist Management of OUD

Marlene Martín, MD
ACT.UCSF.EDU
marlene.martin@ucsf.edu
@MarleneMartinMD

Susan Calcaterra, MD, MPH
Susan.calcaterra@cuanschutz.edu
@CalcaterraSusan