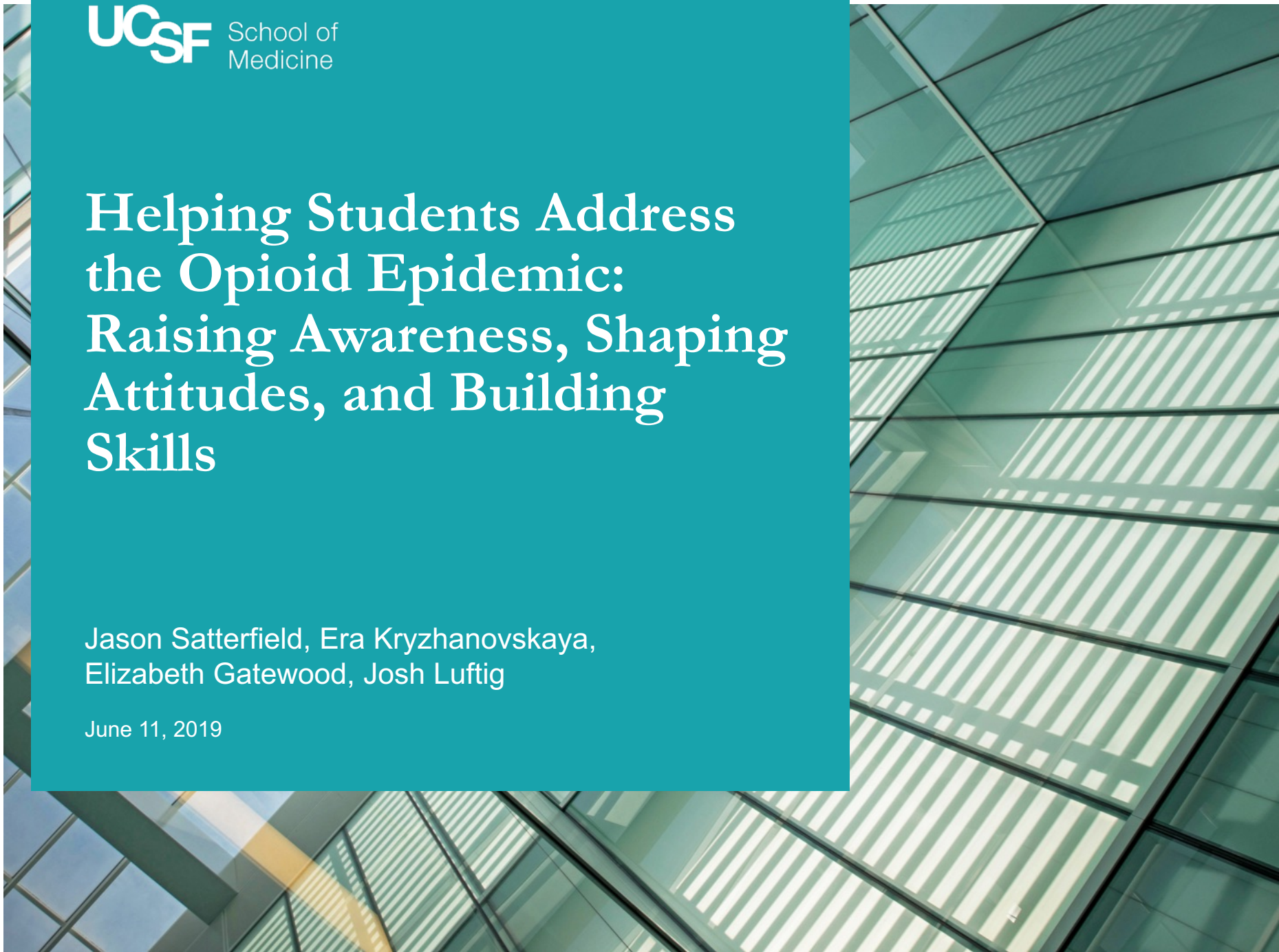
UCSF School of Medicine

Helping Students Address the Opioid Epidemic: Raising Awareness, Shaping Attitudes, and Building Skills

Jason Satterfield, Era Kryzhanovskaya,
Elizabeth Gatewood, Josh Luftig

June 11, 2019



Introductions

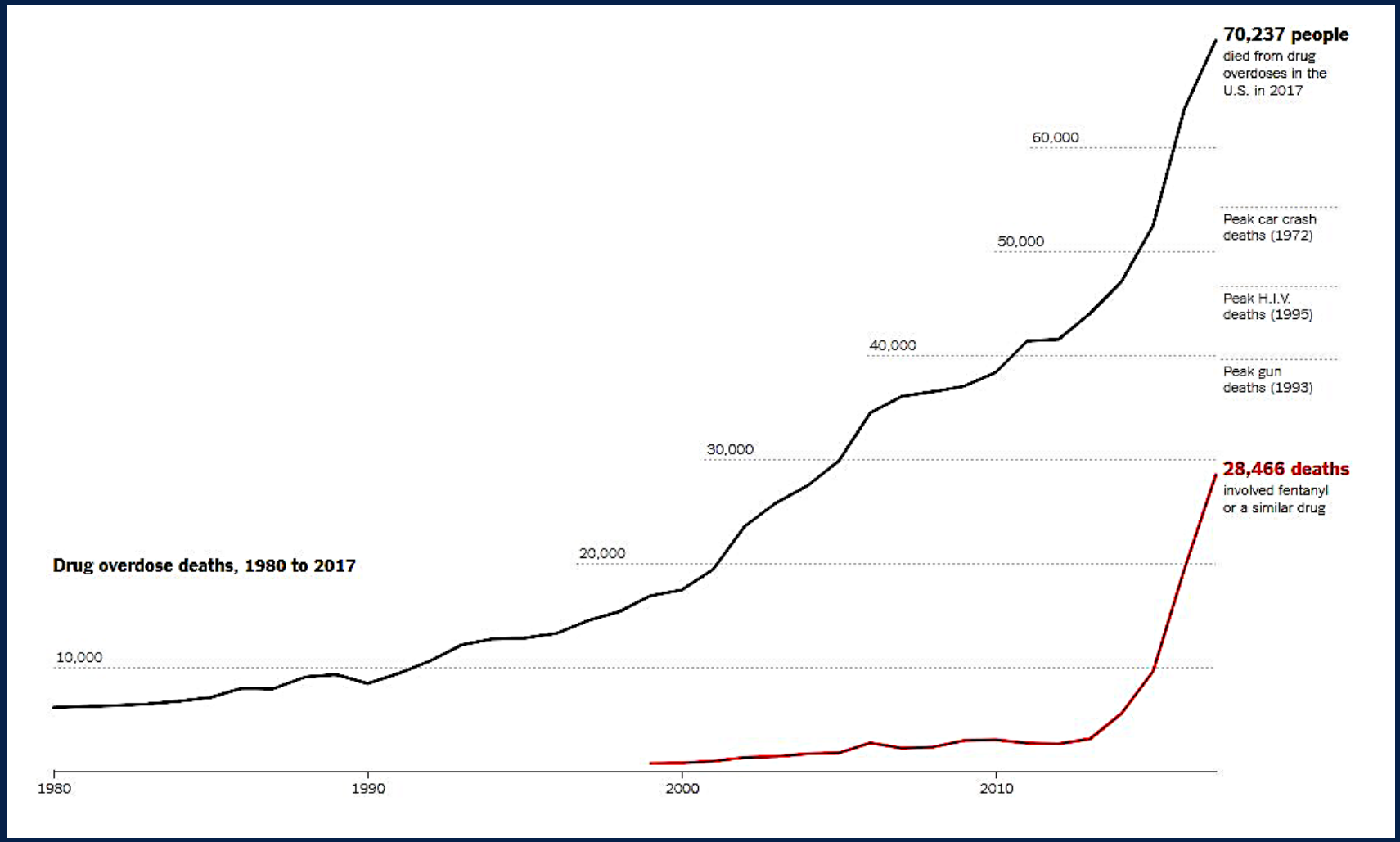



- Era Kryzhanovskaya
- Elizabeth Gatewood
- Jason Satterfield
- Josh Luftig
- No conflicts or disclosures to report

Agenda

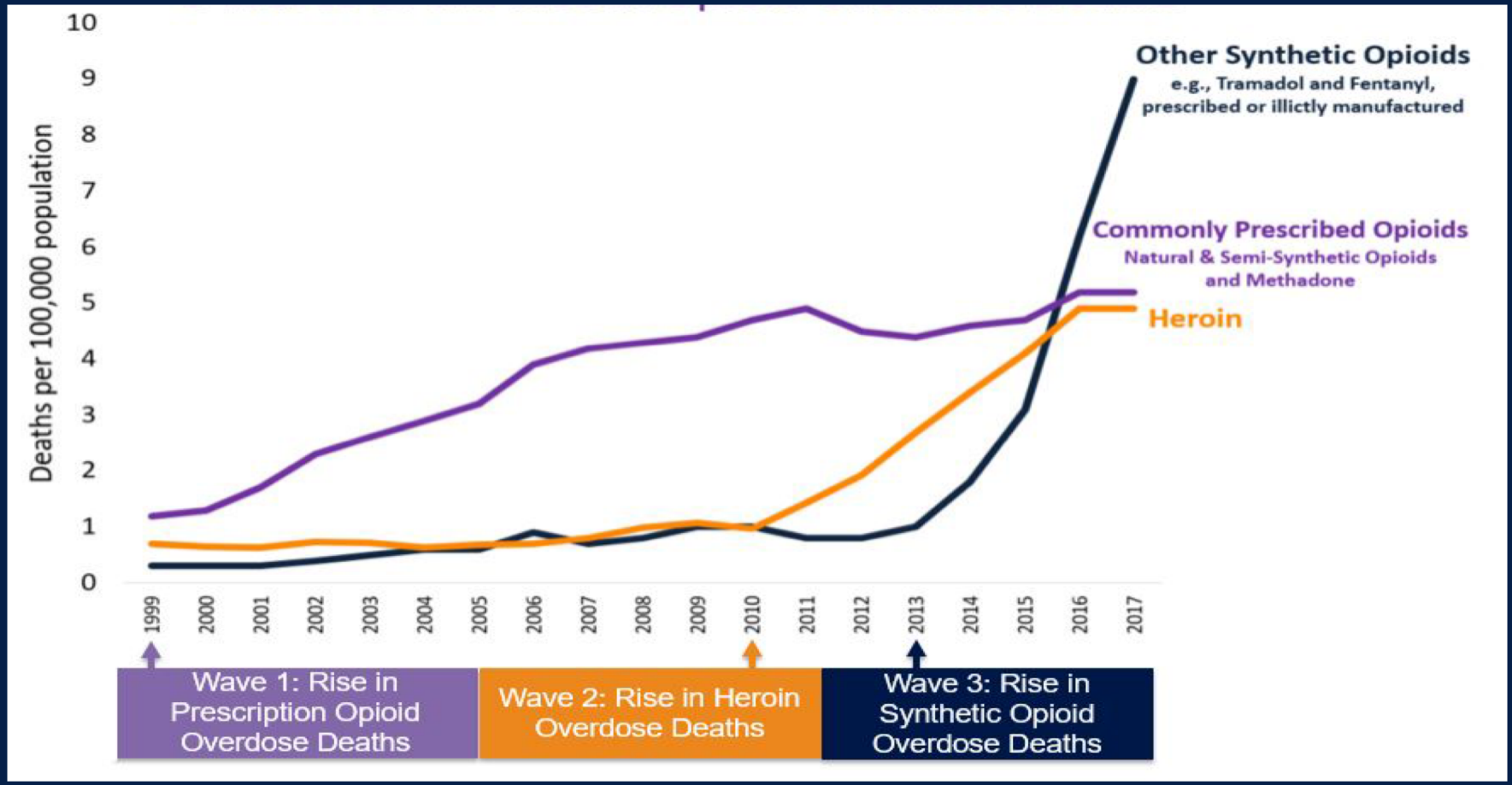
- Introductions
- Didactics
  - Epidemiology
  - Opioid use disorder (OUD)
  - Treatment
- Cases (3)
- OUD Resources for Coaches and Students
- Reflections and next steps

Epidemiology of opioid epidemic



Source: New York Times, 2018

Three Waves of Opioid Overdose Deaths



Source: CDC, 2017

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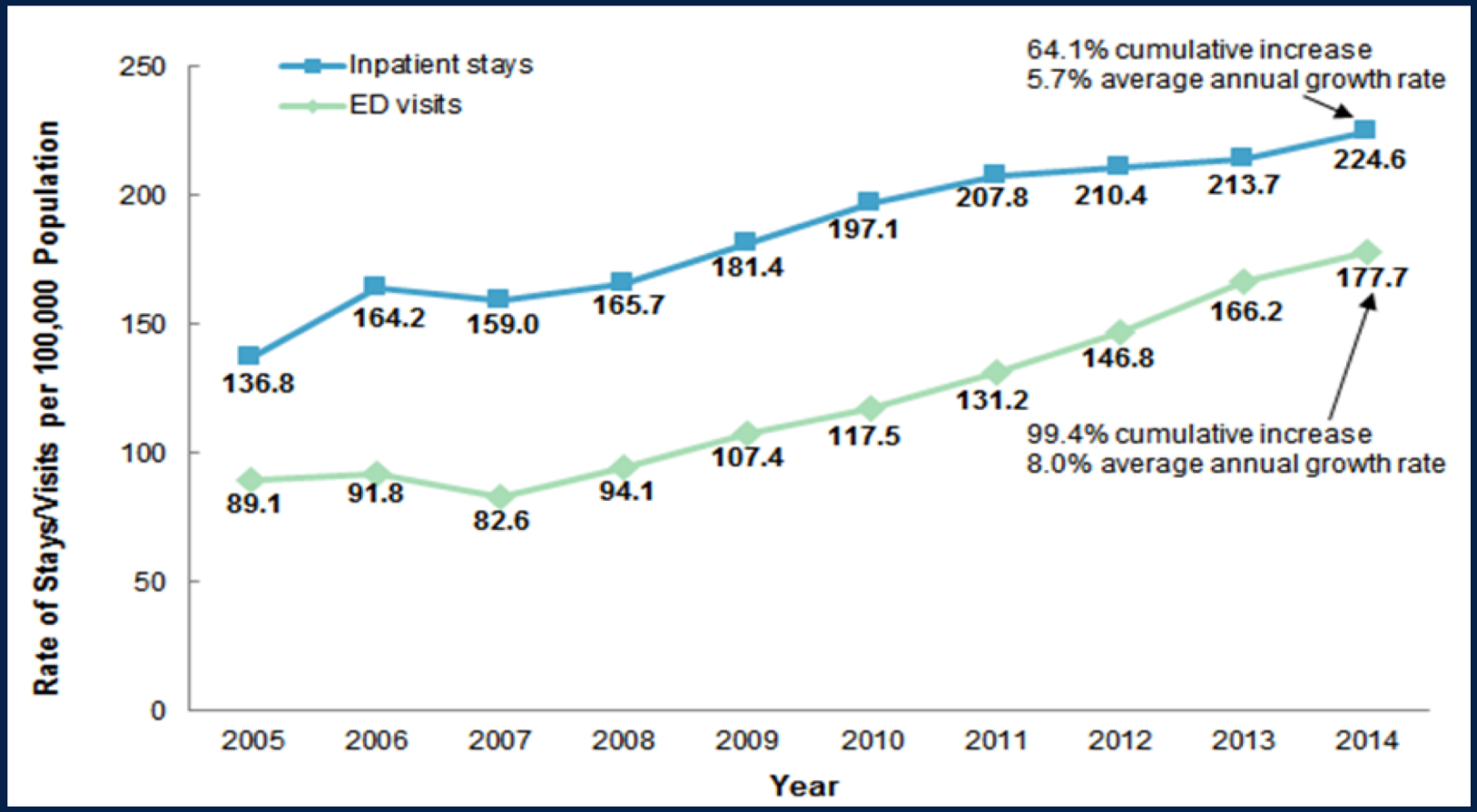
OUD-related ED visits and hospitalizations increasing



Source: AHRQ, 2017

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Opioid Use Disorder (OUD)

- How to diagnose
  - DSM-5
  - 4R's, 4C's
  - Use + consequences of use

- What you may see in clinic or hospital
  - Withdrawal
  - Uncontrolled pain (10% of patient with chronic pain have OUD)
  - Skin and Soft Tissue Infections, Endocarditis, Osteomyelitis
  - Trauma
  - Overdose

The 4R's
-Role failure
-Relationship trouble
-Risk of bodily harm
-Repeated attempts to cut back

The 4C's
-Control (loss of it)
-Craving
-Compulsion to use
-Consequences of use

Why treat OUD?

- Chronic disease requiring chronic medication
- Eliminate withdrawal and preserve tolerance (in the hospital)
- Reduce cravings
- Proper dosing-> no euphoria, no sedation
- Detox doesn't last
- Decreased mortality
- Medications
  - Reduce injection and illicit drug use, infectious complications, criminal behavior, and promote return to work

Chutuape 2001, Sordo 2017

Medications for OUD

Opioids: full agonist
heroin, oxycodone, fentanyl, etc

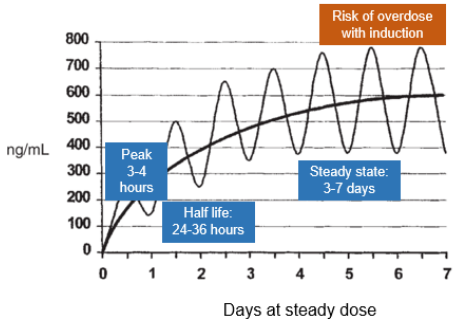
Methadone: full agonist
Activates receptor, prevents binding

Buprenorphine: partial agonist
High affinity, ceiling effect

Naltrexone, naloxone:
Full antagonist, high affinity

Medications for OUD

	Methadone	Buprenorphine
Treatment retention	Higher than buprenorphine likely due to treatment structure	Retention improves at doses >16mg
Office visits	Daily visits to treatment program	Daily-monthly; can also provide as DOT in some settings
Who can prescribe in acute care?	**Any inpatient provider during hospitalization. Any provider in ED: up to 72 hours dosing**	**Any inpatient provider during hospitalization. Any provider in ED: up to 72 hours dosing**
Who can prescribe at discharge?	**Opiate Treatment Program (methadone clinic)**	Any provider with DATA2000 X waiver
Sedation	Yes at high doses in non-tolerant patients or slow metabolizers	Ceiling effect for respiratory depression
Withdrawal when starting	Takes time to reach comfortable dose	**Need to be in withdrawal, precipitated withdrawal possible**



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Agenda

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- Didactics
  - Epidemiology
  - Opioid use disorder (OUD)
  - Treatment
- **Cases**
- Resources
- Reflections

Case 1 Setup: What's wrong with this case?

[taken from Steiger et al, SGIM 2019]

- The ER resident calls you with the following report: "I've got a shooter with a fever for you to admit. Besides polysubstance abuse and Hep C, no known PMH, no meds.
- Vitals are 39.5 118/68 115 18 99%
- On exam, she's yawning and has tracks up her L arm.
- She's demanding methadone and threatening to leave, but I already gave her 4 doses of narcotics, so I don't feel comfortable with that."

What's wrong with this case?

- The ER resident calls you with the following report: "I've got a shooter with a fever for you to admit. Besides polysubstance abuse and Hep C, no known PMH, no meds.
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Words matter

- LANGUAGE → BELIEFS → ACTION
- “Drug abusers” → “weak-willed” or “bad people” → poor medical care
- “PSA” → “demanding” → no treatment of OUD, AMA, missed opportunity for reducing harm from ongoing use

Case 1: Words Matter

Person-First Language

- Case: You are working with a 2nd year resident in General Medicine Clinic. Your resident comes to precept with you about the patient they just saw.
- " J.P is a 56 year old IV drug user here for follow up after a recent hospitalization for another abscess. She left the hospital AMA after 1 day, because she was frustrated by the interruptions to her sleep when they would get vitals and blood draws. Her utox from the hospitalization came back dirty, consistent with cocaine. This is her drug of choice, which she's been shooting daily for years. The good news is there was no meth or heroine. They also screened her for HIV which was negative. Her PMHx is significant for Hep C and her viral load was 1.2 million. She also has had elevated BP, though it is not clear if she has HTN or if this is just because she's always high when she comes in for care. Ms. P was discharged on amlodipine 5 mg, but her blood pressure today is 164/90, so she's obviously not taking it. Though she says she picked it up. She also was discharged with antibiotics, which she says she finished yesterday. Her abscess is resolved, but she says she thinks she is getting a new one and is in a lot of pain. She was last seen here 2 years ago and it looks like they talked with her about how she needs to stop using so that we can treat her Hep C. "

Case 1: Words Matter

- *What concerns do you have about the language used by the resident?*
- *How will you address your concerns to the resident? What will you do if the resident becomes defensive?*
- *How can you promote person-first language and patient-centered care?*

- Instructions:
- Break into pairs for role play
- Role play with coach and resident during the precepting encounter [8 min]
  - Coach should intervene and demonstrate use of teachable moment with special attention to language, stigma and patient-centered care

Group Share: Case 1

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Person-First Language Take-Homes

- Student language often reflects the implicit curriculum and broader societal messages.
- A “teachable moment” is an opportunity for growth and relationship building rather than a cause for reprimand.
- There is increasing awareness across medicine that “labels” matter and often rob patients of their humanity.
- Coaches can model person-first language across all diseases and conditions and promote culture change
- Practice language around stigmatized areas like SUD and BH
- Refer learners to online resources, published guidelines, and recent studies reviewing power of person-first language

Case 2: Screening, Intervention, and Education

Mr. B is 45-year-old man with a history of injection heroin use who is admitted with fever and erythema in his right upper extremity and diagnosed with cellulitis.

Two hours after admission, the bedside nurse pages the team to say that the patient reports feeling achy and nauseous. His pulse is 102, he is sweating, and moving frequently in bed.

You are the medical student who admitted Mr. Blue and spent time with him in the ED and now the hospital room. He tells you that his last use was this morning. He has tried to quit cold turkey before but “that just doesn’t work,” he says. He is currently experiencing homelessness, and lost his job last month when he didn’t show up to work for the third time in one week.

Case 2: Screening, Intervention, and Education

Mr. B is 45M h/o heroin use admitted for RUE cellulitis, now tachycardic, diaphoretic, and fidgeting in bed.

Put yourself in the shoes of the medical student to consider the following questions:

- What is on your ddx? How would you narrow in on the dx?
- What diagnostic or therapeutic steps would you suggest?
- What would you do if your discussion with the team about your concerns for this patient wasn't helpful? When/how would you involve your coach or coaching cohort?

Group Share

Case 2: OUD diagnosis?

- Let's check!
  - DSM-5
  - 4R's, 4C's
  - **Use + consequences of use**

The 4R's
-**Role failure**
-Relationship trouble
-Risk of bodily harm
-**Repeated attempts to cut back**

The 4C's
-**Control (loss of it)**
-Craving
-**Compulsion to use**
-**Consequences of use**

Case 2: OUD treatment

Opioid Use Disorder, Withdrawal and Linkage to Treatment

Methadone Guide for OUD Treatment and Withdrawal

Day 1
- ❑ Utox, qTC, PDMP, COWS, confirm OUD diagnosis
- ❑ Give 10-30mg of methadone
- ❑ 4 hours later -> check COWS, if still withdrawing or having cravings, give 5-10mg more. Do not exceed 40 mg on Day 1

Day 2
- ❑ Give Day 1 total dose if patient not sedated
- ❑ 4 hours later -> check COWS, if withdrawing or having cravings, give 5-10mg more, repeat again in 4 hours and give 5-10mg. Do not exceed 50 mg on Day 2

3
- ❑ Same as Day 2. Do not exceed 60 mg on Day 3

Day 4
- ❑ Give Day 3 max dose. Continue for 5 days before increasing (if needed) by 5-10mg every 5 days

Adjunctive Support

Sweating, restlessness, hot flashes, watery eyes → **Clonidine**
Loose stools → **Loperamide**
Nausea → **Zofran**
Insomnia → **Trazodone** or **Melatonin**
Insomnia or anxiety → **Diphenhydramine**
Pain → **Tylenol** and/or **Ibuprofen**

Buprenorphine Guide for OUD Treatment and Withdrawal

Day 1
- ❑ Utox, pregnancy test, PDMP, COWS, confirm OUD, consider QTc & LFTs
- ❑ Ensure patient in mild withdrawal (COWS>8) or has been off opioids for 5 days before administering buprenorphine (bup)
- ❑ If patient received opioids:
  - ❑ Short acting -> wait 12 h
  - ❑ Long acting -> wait 24-48 h
  - ❑ Methadone in the last 5 days -> ask for help
- ❑ If COWS ≥ 8 OR no opioids x 5 days → administer 4mg
- ❑ 1 hour later → recheck COWS. If ≥ 8 give 4mg more
- ❑ 6 hours later (or sooner if withdrawing) → recheck COWS. If ≥ 8 give 4 mg more. Do not exceed 16 mg on Day 1

Day 2
- ❑ Give Day 1 total dose. Refer to reverse side for pain guidelines
- ❑ If continued withdrawal or cravings, increase by 2-4mg daily. Most achieve craving and withdrawal control on 16mg-32mg/day

Rapid Start Buprenorphine for *Uncomplicated Treatment

Day 1
- ❑ Evaluate for OUD history and withdrawal symptoms
- ❑ Administer 8mg bup
- ❑ 1 hour later → check if withdrawal improved
  - ❑ If yes, but still withdrawing, give 8 mg more
  - ❑ If not, consider other diagnoses

Day 2
- ❑ Give 16 mg or total dose received on day 1
- ❑ Continue titrating dose to cravings, usually 16mg-32mg/day

*__Uncomplicated__ = no methadone x 5 days, no acute pain or surgery, not altered, no severe illness

Bup and Methadone Quick Facts

- Any inpatient provider can order bup or methadone to treat opioid withdrawal, OUD, or continue outpatient treatment
- Any provider with an X waiver can prescribe bup on discharge, but ideal to link to close PCP follow up
- **We're not allowed to prescribe methadone for OUD on d/c**. Connect patient to methadone clinic!

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Case 2: Why treat in the hospital?

- OUD is root cause of ED visits, admissions, and readmissions
- Pivotal touch point to harness patients' motivation
- Provides a chance to link to care
- Reduces withdrawal symptoms
- Preserve tolerance
- Decrease AMA rate: 30% of patients with SUD leave AMA
- It's the right thing to do

Englander 2017, Lianping 2015

Case 2: Take Home Points

- Screen for OUD w/ DSM, 4R'c/4C's, or use+harms
- Offer treatment when patients present with any of the evidence-based treatment options (buprenorphine, methadone, or XR-naltrexone)
- Encourage teams to discuss OUD on inpatient side; treating is one form of harm reduction…

Englander 2017, Lianping 2015

Case 3: Harm Reduction

Preventing Death from Opioid Overdose

Ms Y is a 43-year-old woman with a h/o heroin use % acute R ankle pain x 1 day onset s/p “stepping off a curb wrong”. Vital signs are unremarkable aside from HR 98. On physical exam you notice a right lower leg fluctuance, swelling, and redness consistent with a developing abscess. She is also tapping her leg nervously, sniffling, and occasionally yawning. When you inquire about the abscess, she discloses that she injects heroin in that area, last time was yesterday. You ask how she is feeling overall, and she discloses that while waiting to be seen in the ED, she has begun to feel “sick” from withdrawal. You calculate a COWS score of 16. Ms Y has tried buprenorphine---she calls it “subs” for suboxone on the street and is amenable to starting treatment today for her withdrawal and to cut down on her heroin use. You consult a “quick start” buprenorphine dosing algorithm, initiate treatment with buprenorphine, and arrange next day follow up at a substance use clinic for continued treatment. Xray of the ankle is unremarkable, dressing and an ace wrap are in place, and crutches have been dispensed. Abscess incision and drainage is complete, and the patient feels better, asking to leave.

CASE 3: HARM REDUCTION

Discuss for ~10min

- *If she had not disclosed her heroin use, how would you start the conversation about substance use?*
- *Why is acute care management of OUD critical?*
- *What interventions could be provided to reduce her risk of infection and/or overdose? How would you put these into action?*
- *What other benefits may arise from the use of harm reduction interventions?*
- *How can you teach harm reduction to your coaching cohort?*

Group Share: Case 3

Case 3: Clinical/Learning Pearls

- *If she had not disclosed her heroin use, how would you start the conversation about substance use?*
- *Why is acute care management of OUD critical?*
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HIV & Hep C Screening & Linkage

Opioid-sparing Multimodal Analgesia

Buprenorphine

Ketamine

Naloxone Rx

Regional Anesthesia

MAT/MOUD Linkage

HIV & Hep C Screening & Linkage

Opioid-sparing Multimodal Analgesia

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MAT/MOUD Linkage

Opioid Resource Kit

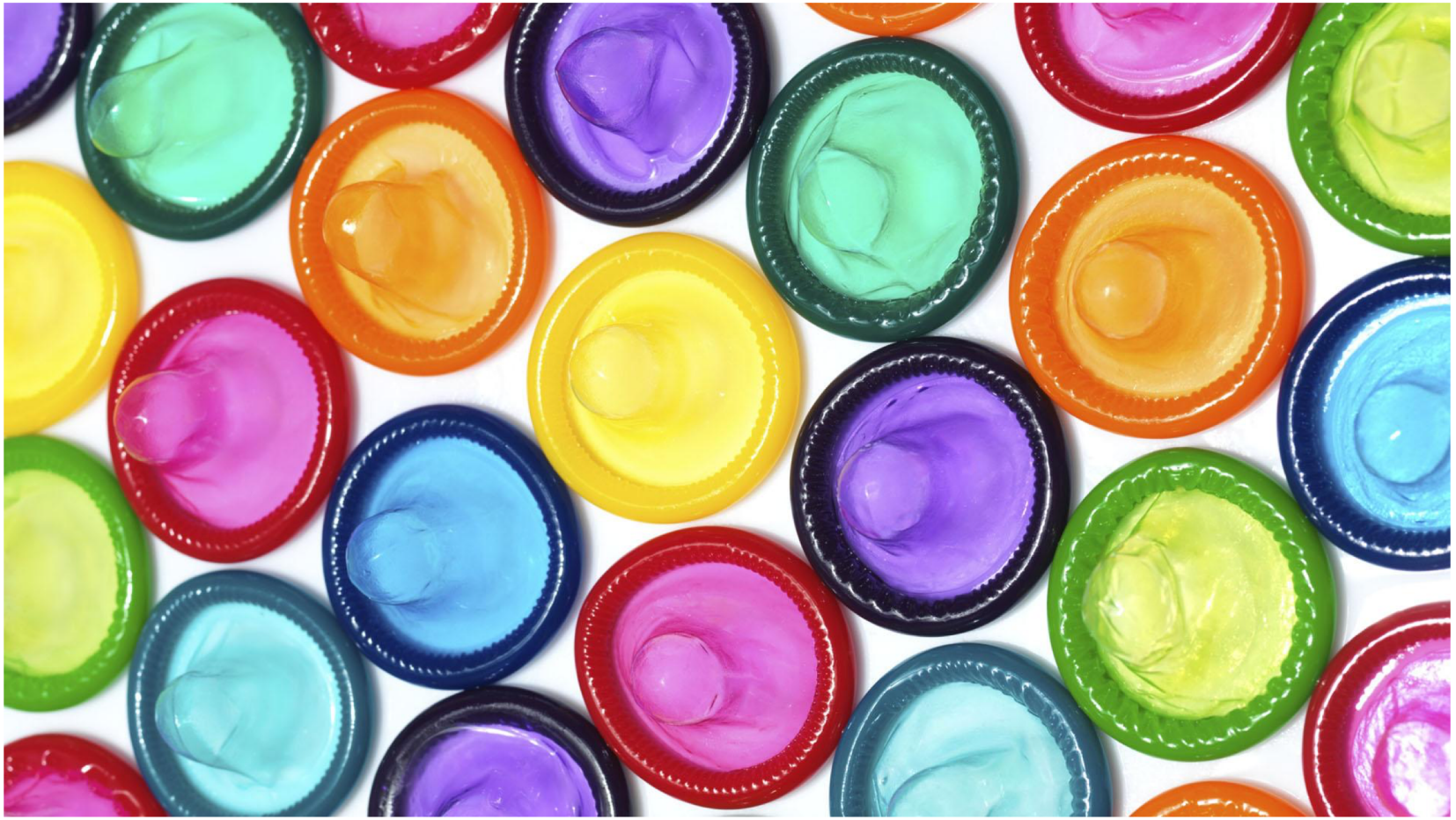
Safer Use Injection Kits


PREVENT
Biohazard Infectious Waste
SHARPS CONTAINER


URGENT
OAKLAND
TUESDAY
MCKESSON
Alcohol Prep Pad


REF 329412
BD Insulin Syringes
U-100 Insulin
Doses up to 100 units
Two Unit Scale
0.40mm (27G) x 16.0mm (5/8")
Not made with natural rubber latex
This syringe contains no dead space.
Non-Pyrogenic
Contents: 10 syringes
1mL
STERILE R
Sterilized using irradiation
Do not re-use
(01)00382903294121


FYL
FYL



We believe in offering **low threshold** services—meaning you don't have to fill out a lot of paperwork, and need to give minimal information to get services

We believe in **harm reduction**—meaning we try and keep you safe even when you're engaging in risky behaviors, we know we all do things that carry risk, we know people use drugs for reasons and we are here whether you want to keep using, reduce or stop drug use

We believe in **non judgmental** care—we are here to treat you without judgment, with dignity and respect no matter what choices you've made in your life or what situation you are in

Programs & Services

HEPPAC

HIV Education Prevention Project of Alameda County
5323 Foothill Blvd
Oakland, CA 94601
510-434-0307
Fax—510-261-8365

www.casasegura.org

Casa Segura Drop-In Center
Syringe Exchange Services
HIV/HCV Services
Outreach
Naloxone Distribution
Highland Hospital
Emergency Department

Casa Segura Drop-In

Services—showers, laundry, hot food, snacks, hygiene supplies, drop in counseling services, referrals

Hours & Location
5323 Foothill Blvd, Oakland CA
Tuesdays—9am-1pm
Fridays—10-2pm
Wednesday & Thursdays—by appt

Syringe Exchange Services

Services—syringe exchange, HIV testing, HCV testing and treatment, herbal and acupuncture care, wound and abscess care, primary care physician, narcan access, hygiene and basic needs supplies, hot food

Hours & Location
Tuesdays—6-8pm (E. 12th & 23rd Ave)
Thursdays— 6-8pm (100th & Permain St)
Fridays— 12-2pm (2313 San Pablo Ave)
**no hot food, or medical services on Friday*

HIV & HCV Services

At all syringe exchange sites and by appointment at Casa Segura Drop-In you can get confidential HIV and HCV testing
Once tested you get your results within 20 minutes and are able to be linked to treatment if needed
HCV Treatment is now available at syringe exchange service sites

Outreach

HEPPAC does outreach across homeless encampments in Oakland.
You can access services (HIV and HCV testing, Narcan, syringe exchange and harm reduction supplies) when you see the RV in your community

Naloxone Distribution

Naloxone or Narcan is an opioid antagonist that can reverse potentially fatal overdoses. You can get training on overdose recognition and response and get your own narcan kit at syringe exchange services, Casa Segura and during outreach.

Highland Hospital ED

Struggling with heroin or pain pills (opioids)? The Highland Emergency Department (ED) staff can start you on buprenorphine (suboxone) which is one of the best treatments for withdrawal and addiction. This can be done on the spot, without any blood/urine tests or paperwork.
If you are planning on having your 1st buprenorphine dose in the ED (which is a great option!) try not to use any opioids for 12-24 hours prior to arrival. This is because buprenorphine works best if you are in withdrawal when starting. We understand withdrawal can feel horrible — but if you let the ED staff know that you are in withdrawal when you arrive you will be treated quickly and effectively!

Hours & Location
Highland Hospital ED
1411 E. 31st St. Oakland, CA

Open 24 hours

Always available:
Emergency buprenorphine treatment and referral to continued treatment.

Monday-Friday 9am-5pm:
Treatment Navigator available
provides additional expertise in substance use treatment and further assistance with connecting to continued buprenorphine treatment

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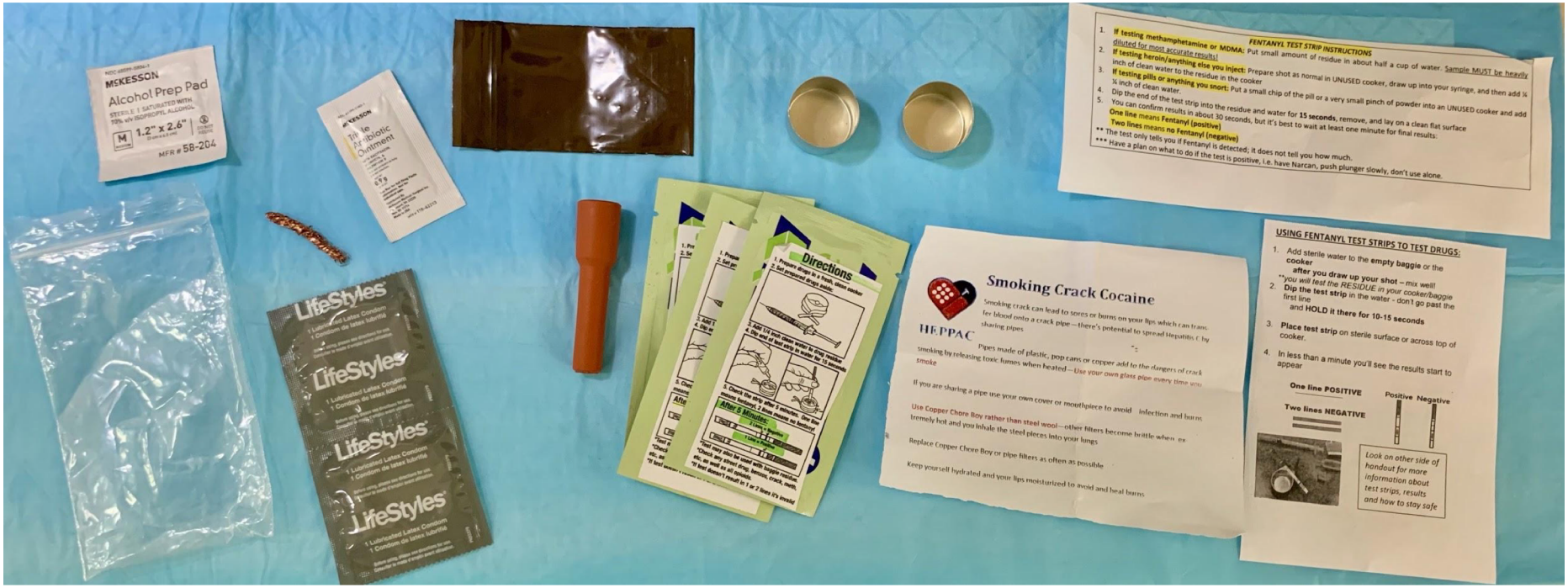
Safer Use Smoke Kits


ALAMEDA
RN


MSKESSON
Alcohol Prep Pad
1.2" x 2.6"
MFR # 58-204
LifeStyles
Directions
Smoking Crack Cocaine
HEPPAC
FENTANYL TEST STRIP INSTRUCTIONS
1. If testing methamphetamine or MDMA: Put small amount of residue in about half a cup of water. Sample MUST be heavily diluted for most accurate results!
2. If testing heroin/anything else you inject: Prepare shot as normal in UNUSED cooker, draw up into your syringe, and then add ¼ inch of clean water to the residue in the cooker
3. If testing pills or anything you snort: Put a small chip of the pill or a very small pinch of powder into an UNUSED cooker and add ¼ inch of clean water.
4. Dip the end of the test strip into the residue and water for 15 seconds, remove, and lay on a clean flat surface
5. You can confirm results in about 30 seconds, but it's best to wait at least one minute for final results:
One line means Fentanyl (positive)
Two lines means no Fentanyl (negative)
** The test only tells you if Fentanyl is detected; it does not tell you how much.
*** Have a plan on what to do if the test is positive, i.e. have Narcan, push plunger slowly, don't use alone.
USING FENTANYL TEST STRIPS TO TEST DRUGS:
1. Add sterile water to the empty baggie or the cooker
after you draw up your shot – mix well!
**your will test the RESIDUE in your cooker/baggie
2. Dip the test strip in the water - don't go past the first line
and HOLD it there for 10-15 seconds
3. Place test strip on sterile surface or across top of cooker.
4. In less than a minute you'll see the results start to appear
One line POSITIVE
Two lines NEGATIVE
Positive Negative
Look on other side of handout for more information about test strips, results and how to stay safe

HIV & Hep C Screening & Linkage

Opioid-sparing Multimodal Analgesia

Buprenorphine

Ketamine

Naloxone Rx

Regional Anesthesia

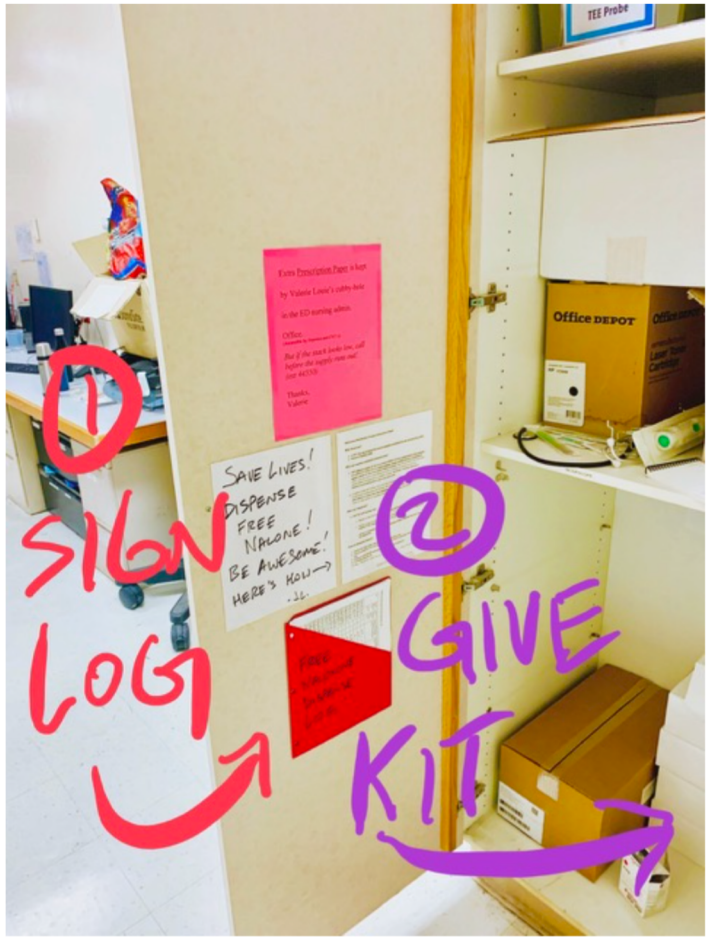
MAT/MOUD Linkage

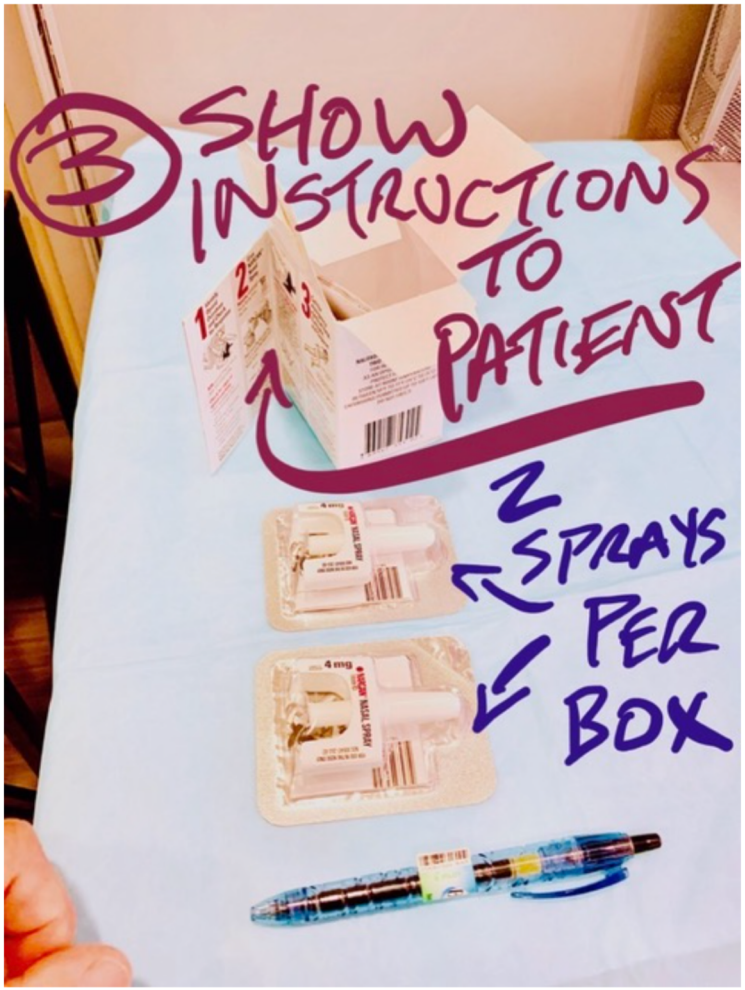
Opioid Resource Kit

Free Naloxone


NARCAN
NASAL SPRAY 4 mg
Two Pack

Super Simple Steps to Dispense (from charting room cabinet)**:**




3 SHOW INSTRUCTIONS TO PATIENT
2 SPRAYS PER BOX
4 mg
NASAL SPRAY

FREE

Low Threshold

Distributed from the ED

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- **OUD Resources for Coaches and Students**
- Reflections and next steps

Resources for Opioids, Pain, and OUD

- Opioids and Safe Prescribing
- Chronic pain management
- Person-first language
- Opioid use disorders – diagnosis and treatment
  - Medication-assisted treatment (MAT)
- Harm reduction and overdose prevention
- Next Steps and Opportunities

Reflection

Take 2 minutes…

- One change you plan on implementing in your practice with learners.
- One take-home point from this session that will help you empower your learners to understand, diagnose, and promote treatment of OUD in their patients.

Thank You!

Questions? Collaboration?

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