PCSS Medications for Opioid Use Disorders

Providers Clinical Support System

Clinical and Public Health Approaches to Overdose Prevention and Substance Use Care

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10/9/24

Housekeeping

- This event is brought to you by the Providers Clinical Support System – Medications for Opioid Use Disorders (PCSS-MOUD). Content and discussions during this event are prohibited from promoting or selling products or services that serve professional or financial interests of any kind.

- The overarching goal of PCSS-MOUD is to increase healthcare professionals' knowledge, skills, and confidence in providing evidence-based practices in the prevention, treatment, recovery, and harm reduction of OUD.

Disclosure to Learners

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Presenter(s), planner(s), reviewer(s), and all others involved in the planning or content development of this activity were required to disclose all financial relationships within the past 24 months

All disclosures have been reviewed, and there are no relevant financial relationships with ineligible companies to disclose.

All speakers have been advised that any recommendations involving clinical medicine must be based on evidence that is accepted within the profession of medicine as adequate justification for their indications and contraindications in patient care. All scientific research referred to, reported, or used in the presentation must conform to the generally accepted standards of experimental design, data collection, and analysis.

Learning Objectives

Boston Medical Center
Source: Boston Medical Center Website
https://www..bmc.org

At the conclusion of this activity participants should be able to:

1. Recognize overdose is the leading cause of accidental death.
2. Reduce overdose death via naloxone distribution and medications for opioid use disorder.
3. Innovate new approaches to address overdose and substance use care.

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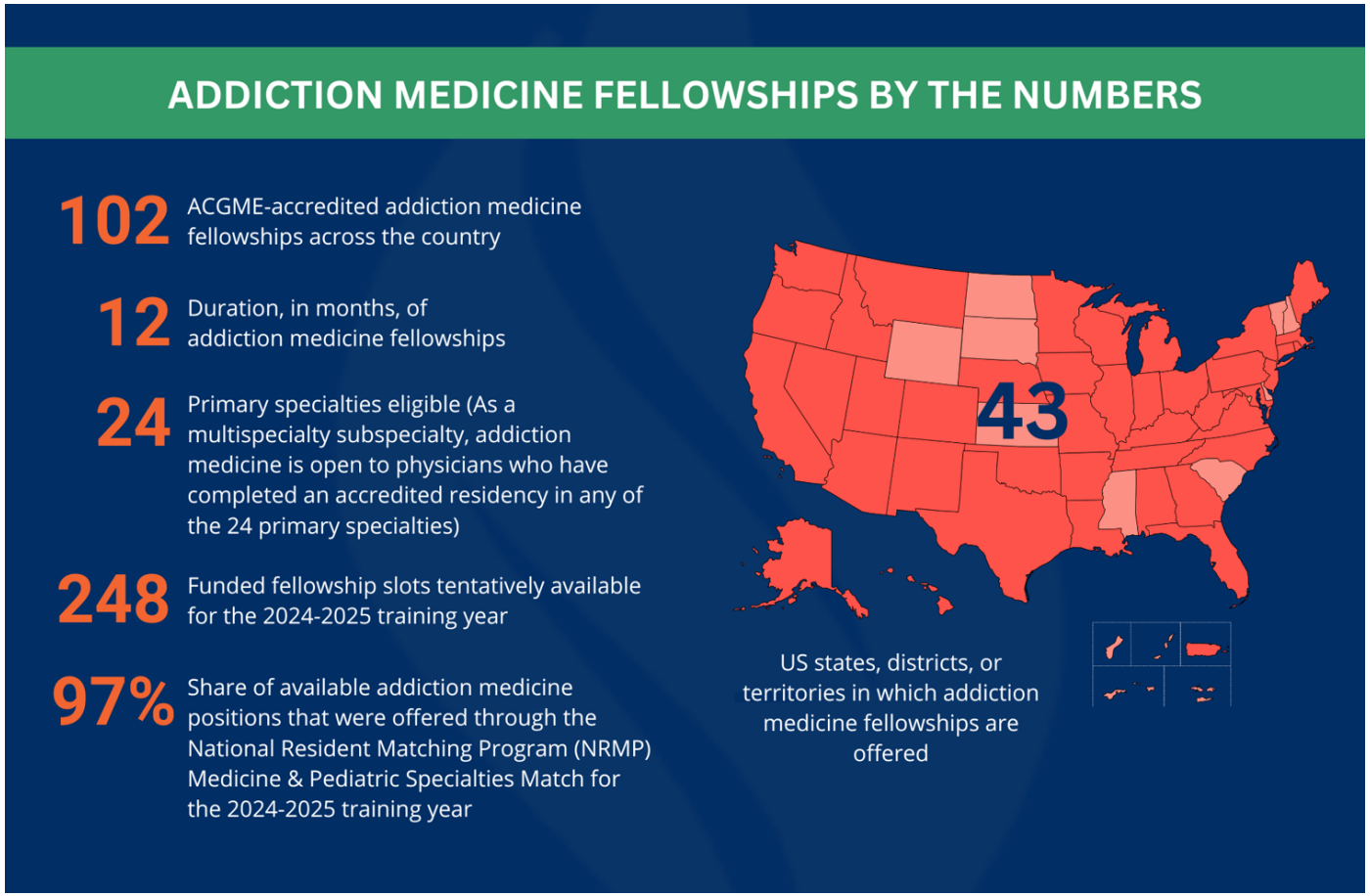
American College of Academic Addiction Medicine

Mission:

To promote academic excellence and inspire leadership in addiction medicine



To learn more, go to: acaam.org

Addiction Psychiatry Fellowships

- According to the National Institute on Drug Abuse (NIDA), 37.9% of adults with substance use disorders (SUDs) also have mental illnesses. **This is more than double the rate for the general population and highlights the need for more substance-use care providers.**

- Addiction Psychiatry fellowships are available to provide specialized training and board certification through the American Board of Psychiatry and Neurology. Other complementary specialties in psychiatry include adolescents, geriatrics, consultation-liaison, and forensics with addictions.

- To learn more, go to: www.aaap.org.

The ACGME website lists 54 addiction psychiatry fellowship opportunities. To see available fellowships go to: https://apps.acgme.org/ads/Public/Programs/Search

Land Acknowledgement

Massachusetts is the original homeland of the Wampanoag, Nipmuc, and Massachusetts tribal nations. They are the keepers of their tribal histories, as well as the shared history of this country and Massachusetts, despite the oppression of colonization and genocide since the time of European contact. I honor and respect the thousands of diverse Indigenous peoples connected to these lands.

Several distinct Native Peoples inhabited what is now Massachusetts and points south.

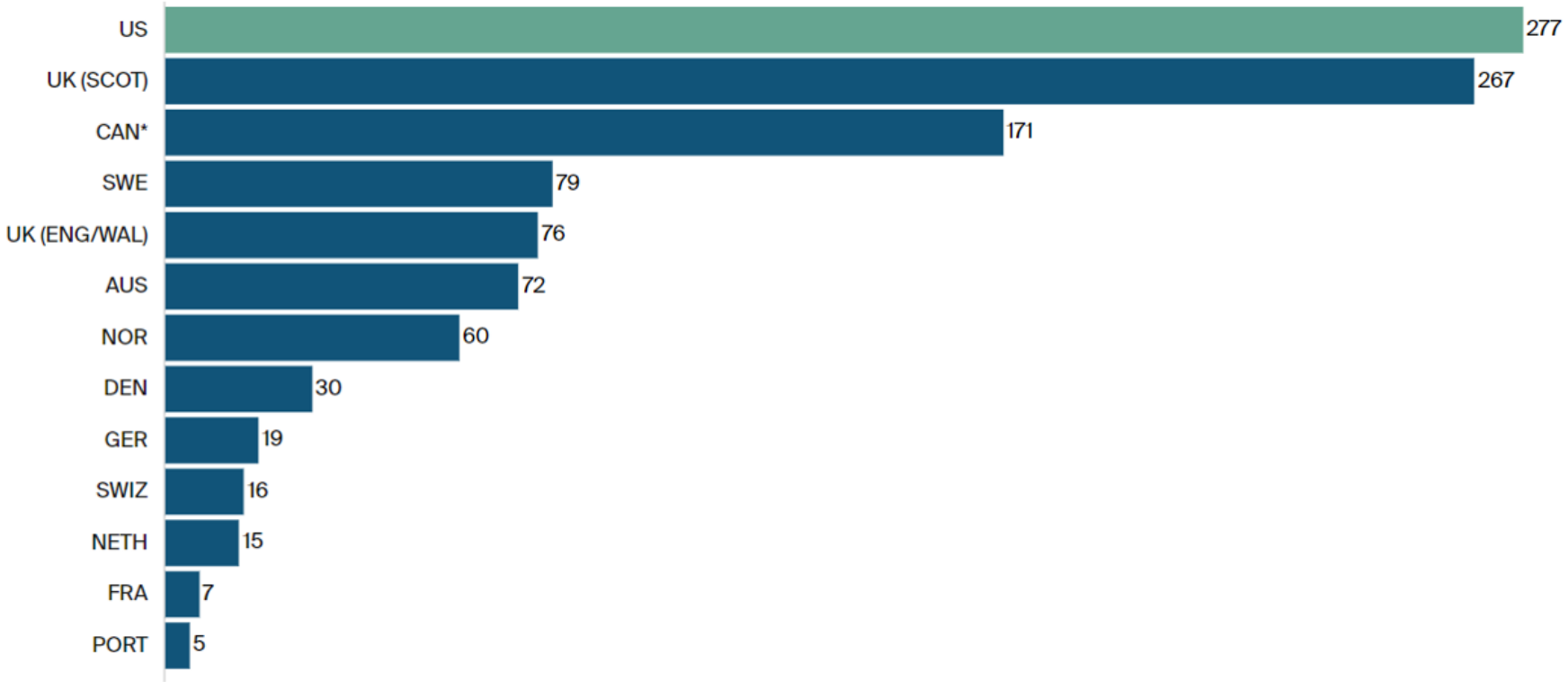
Tribal territories of Southern New England. Around 1600.

Author: Nikater, adapted to English by Hydrargyrum.

Retrieved from: https://commons.wikimedia.org/wiki/File:Tribal_Territories_Southern_New_England.png#/media/File:Tribal_Territories_Southern_New_England.png

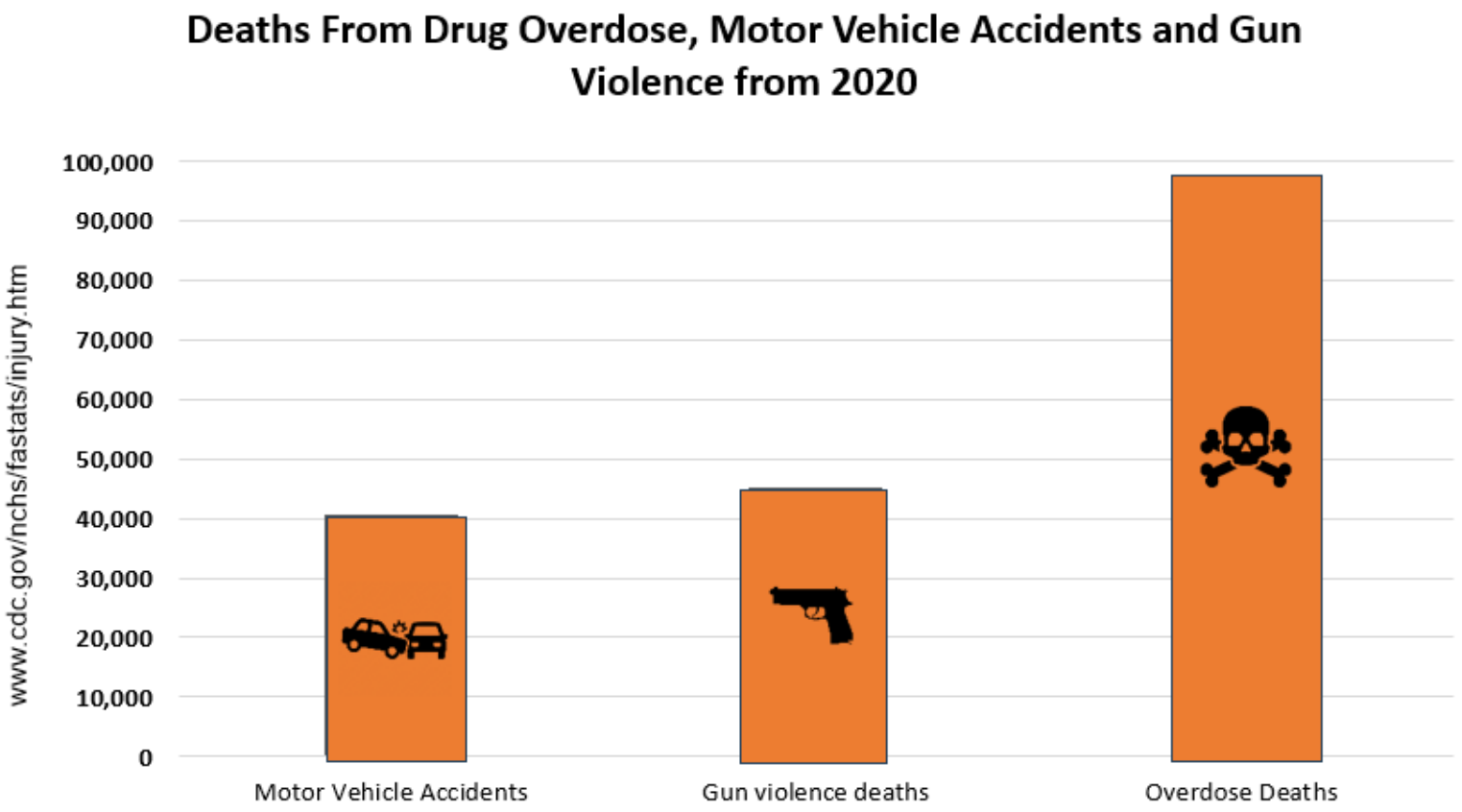
Learning Objective #1: Recognize overdose is the leading cause of accidental death

Drug-related death rate per 1 million population (unadjusted), 2020 or latest year available



Source: https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm

Overdose is the leading cause of accidental injury death . .. by far!



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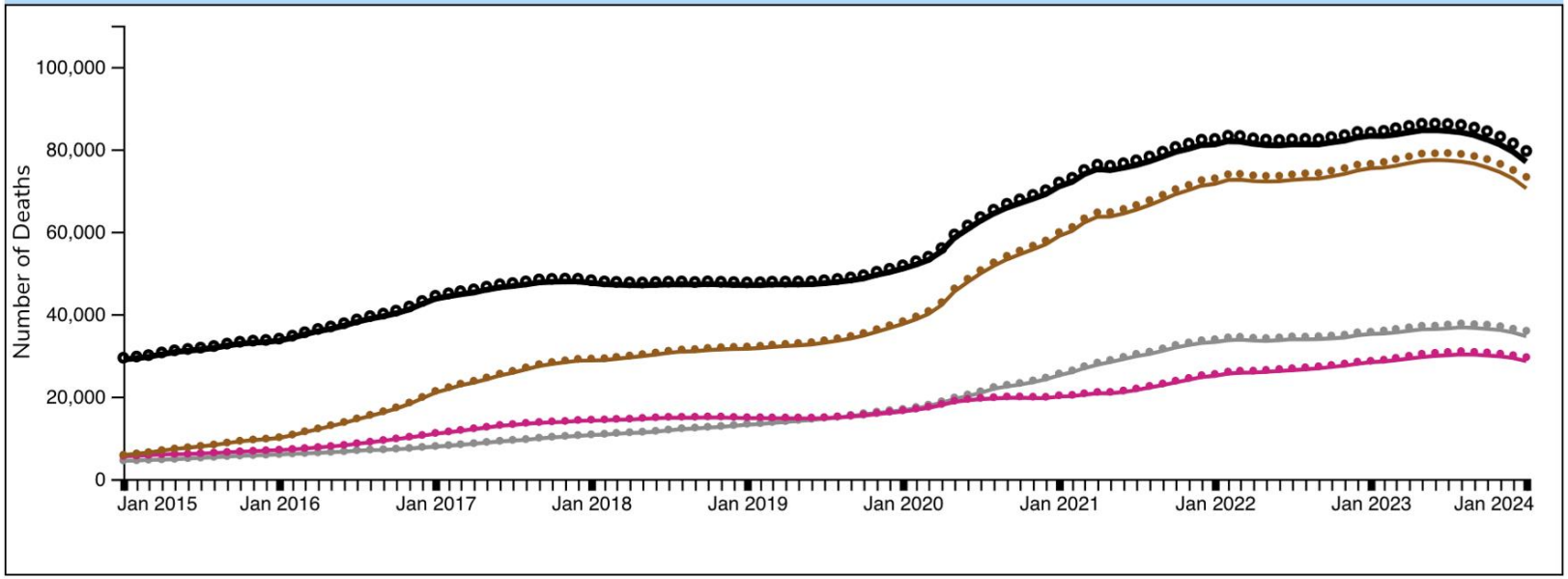
Overlapping Waves of Opioid Overdose Deaths

Figure 2. 12 Month-ending Provisional Number of Drug Overdose Deaths by Drug or Drug Class: United States



Legend for Drug or Drug Class

- Cocaine (T40.5)
- Opioids (T40.0-T40.4,T40.6)
- Psychostimulants with abuse potential (T43.6)
- Synthetic opioids, excl. methadone (T40.4)

---- Reported Value

O Predicted Value

Source: https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm

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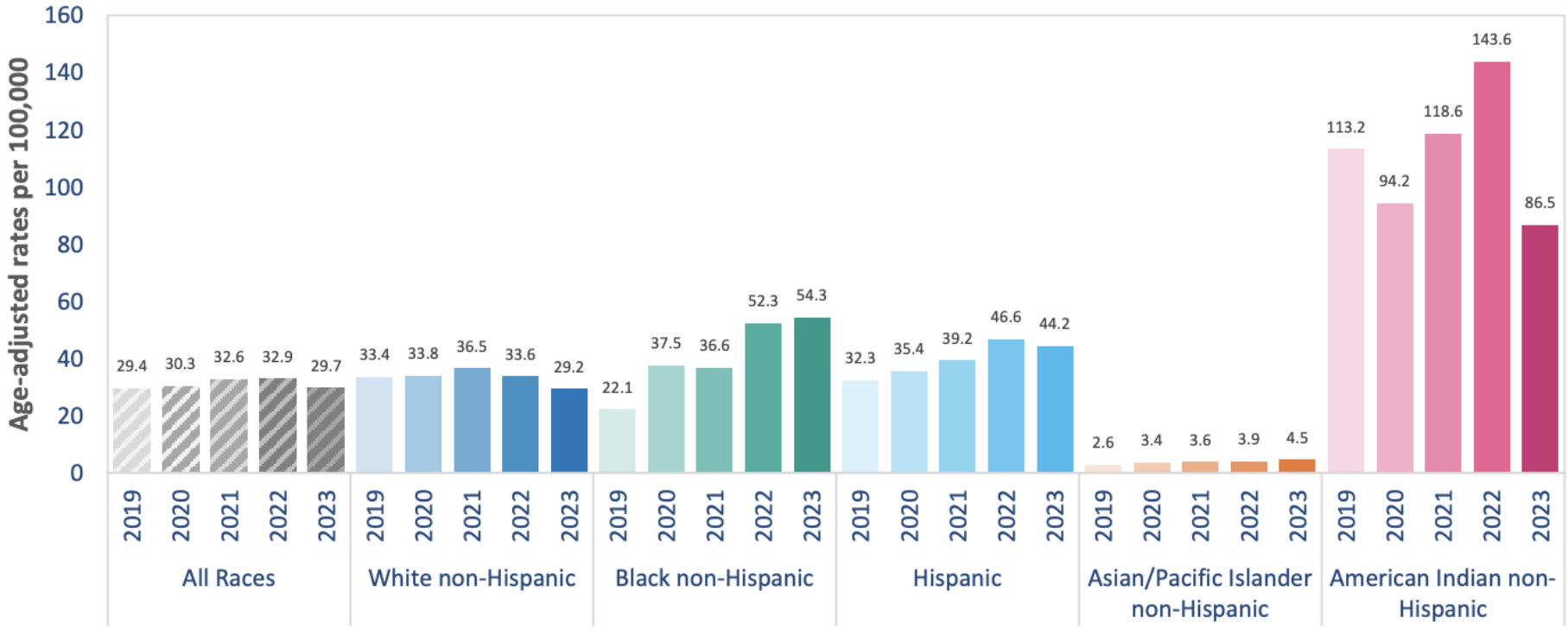
Confirmed Opioid-Related Overdose Rates, All Intents, by Race and Hispanic Ethnicity



An increasing, but unknown, number of people who do not have opioid use disorder are overdosing due to fentanyl contamination of cocaine, methamphetamine, and counterfeit prescription pills

- People without opioid tolerance unwittingly exposed to fentanyl via non-opioids
  - ***Innovate to focus on engaging people who use stimulants and counterfeit non-opioid prescription pills***

An increasing, but unknown, number of people who do not have opioid use disorder are overdosing due to fentanyl contamination of cocaine, methamphetamine, and counterfeit prescription pills

J Urban Health
https://doi.org/10.1007/s11524-024-00852-0

ORIGINAL ARTICLE

Overdose from Unintentional Fentanyl Use when Intending to Use a Non-opioid Substance: An Analysis of Medically Attended Opioid Overdose Events

Alexander R. Bazazi · Patrick Low · Bryson O. Gomez · Hannah Snyder · Jeffrey K. Hom · Christine S. Soran · Barry Zevin · Michael Mason · Joseph Graterol · Phillip O. Coffin

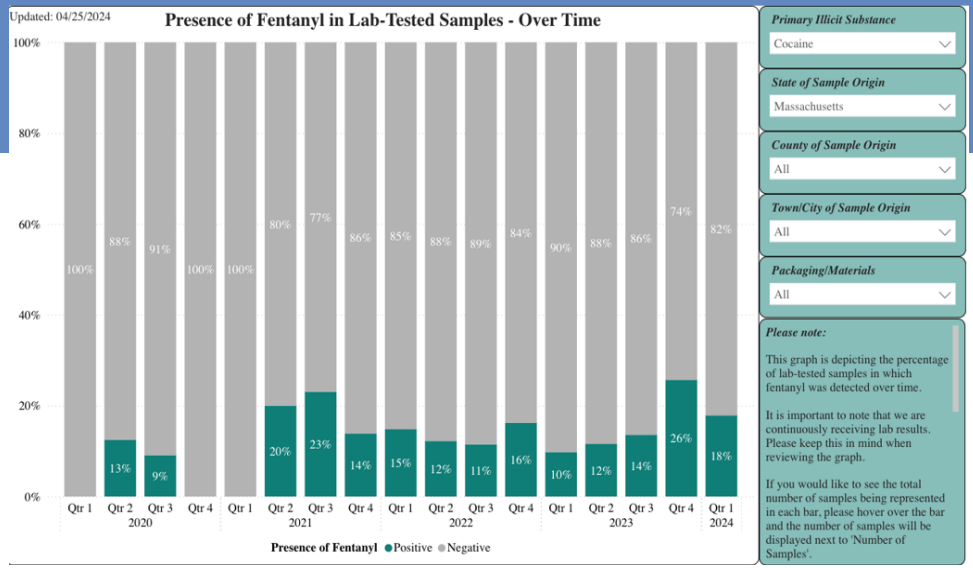
- People without opioid tolerance unwittingly exposed to fentanyl via non-opioids
  - *Innovate to focus on engaging people who use stimulants and counterfeit non-opioid prescription pills*

Among 448 opioid overdose survivors in SF 6/2022-9/2022

- 57% intended to use opioids
- 43% intended to use methamphetamine or cocaine
  - 58% of Black and 52% of Latinx survivors
  - 29% of White Survivors

An increasing, but unknown, number of people who do not have opioid use disorder are overdosing due to fentanyl contamination of cocaine, methamphetamine, and counterfeit prescription pills

STREET CHECK COMMUNITY DRUG CHECKING

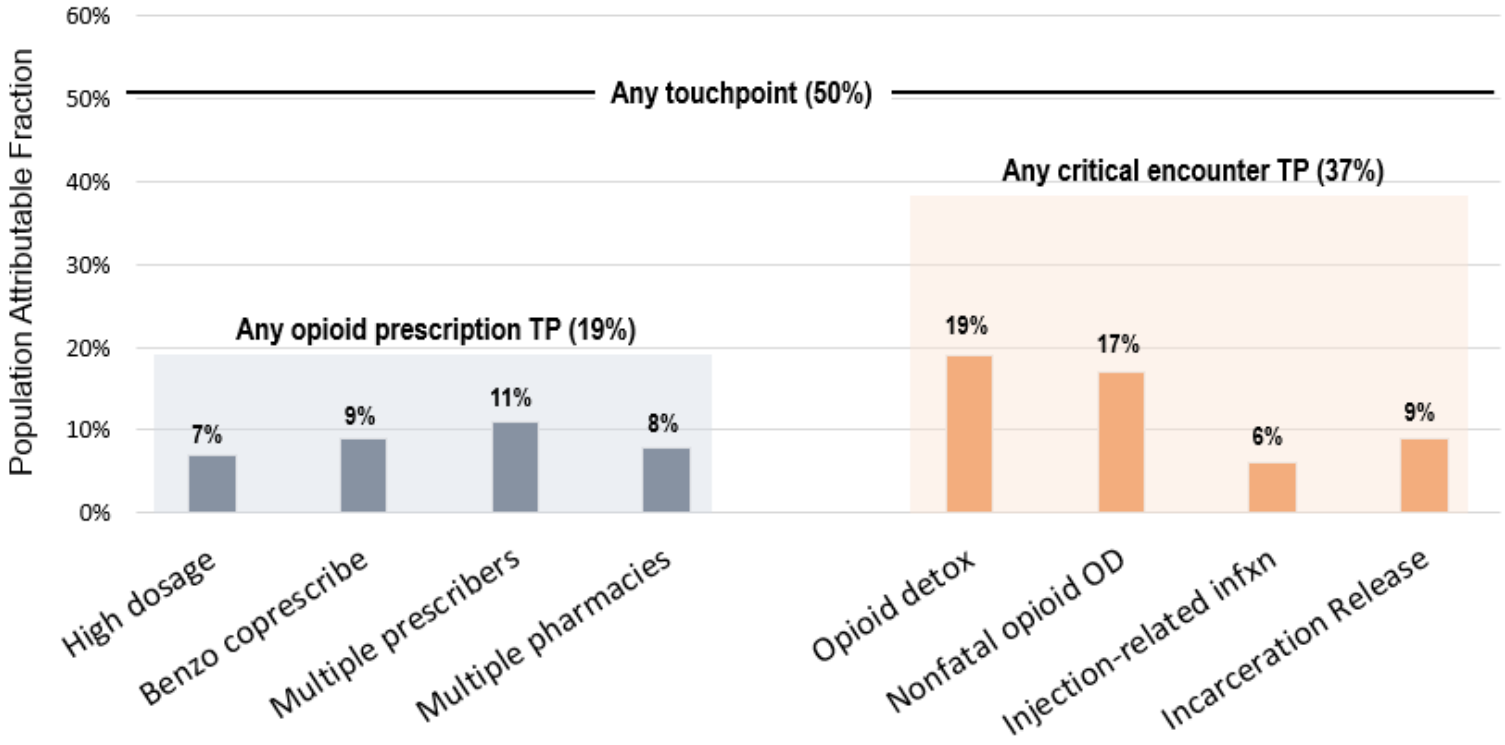


- People without opioid tolerance unwittingly exposed to fentanyl via non-opioids
  - ➢ *Innovate to focus on engaging people who use stimulants and counterfeit non-opioid prescription pills*

Learning Objective #2: Reduce overdose death via naloxone and medications for opioid use disorder

Half of overdose decedents had at least one touchpoint in the previous 12 months

Population attributable fractions for pre-OD touchpoints, Massachusetts, 2014, n=1,315 opioid deaths



Larochelle MR, Bernstein R, Bernson D, Land T, Stopka TJ, Rose AJ, Bharel M, Liebschutz JM, Walley AY. Touchpoints - Opportunities to predict and prevent opioid overdose: A cohort study. Drug Alcohol Depend. 2019 Nov 1;204:107537

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Case for overdose education and naloxone distribution (OEND)

PRESCRIBE TO PREVENT

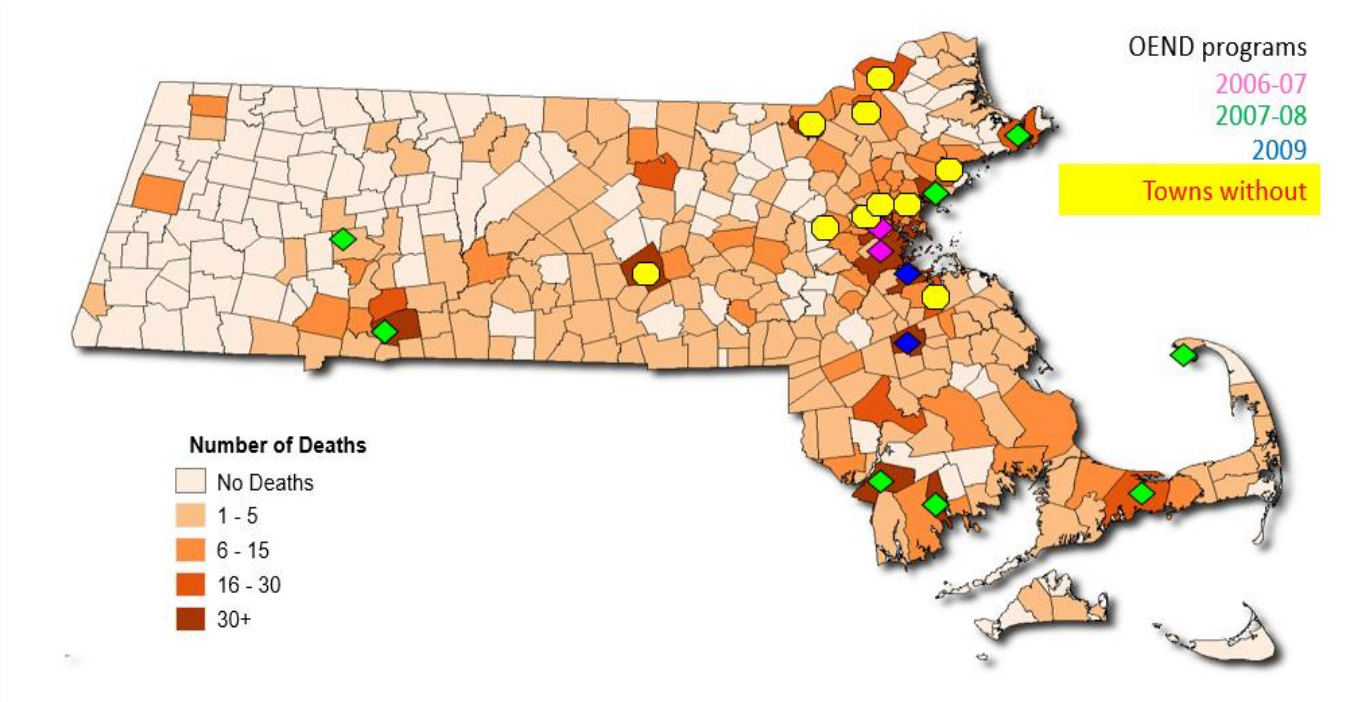
[Patient education videos and materials at prescribetoprevent.org.]

Most people who use opioids do not use alone

- Known risk factors:
- Mixing substances, abstinence, using alone, unknown source
- Opportunity window:
- Opioid overdoses take minutes to hours and is reversible with naloxone
- For fentanyl, the window is seconds to minutes
- Bystanders are trainable to recognize and respond to overdoses
- Fear of public safety

OEND implementation by town

Opioid Overdose Related Deaths: Massachusetts 2004 - 2006



Walley AY et al. BMJ. 2013 Jan 30;346:f174.

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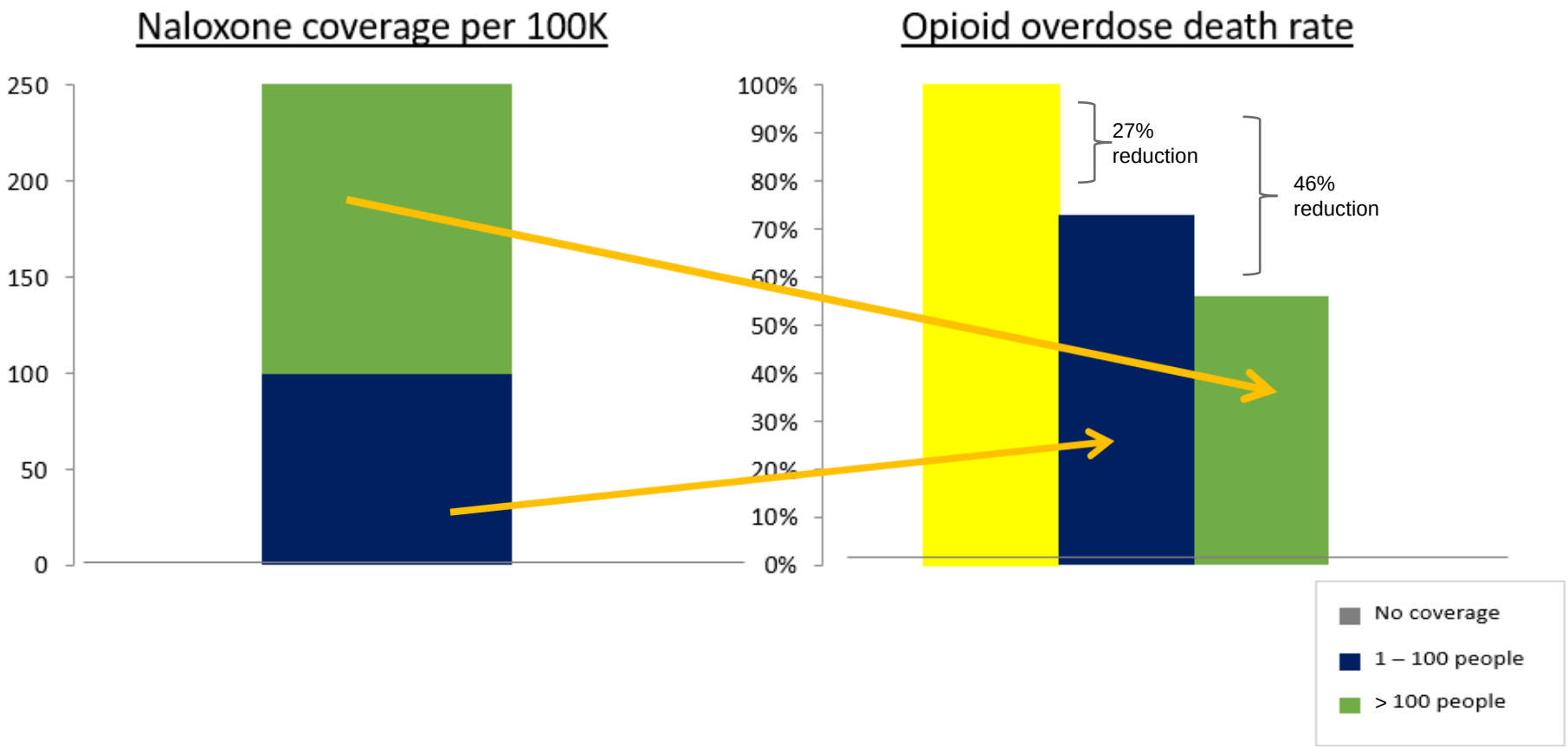
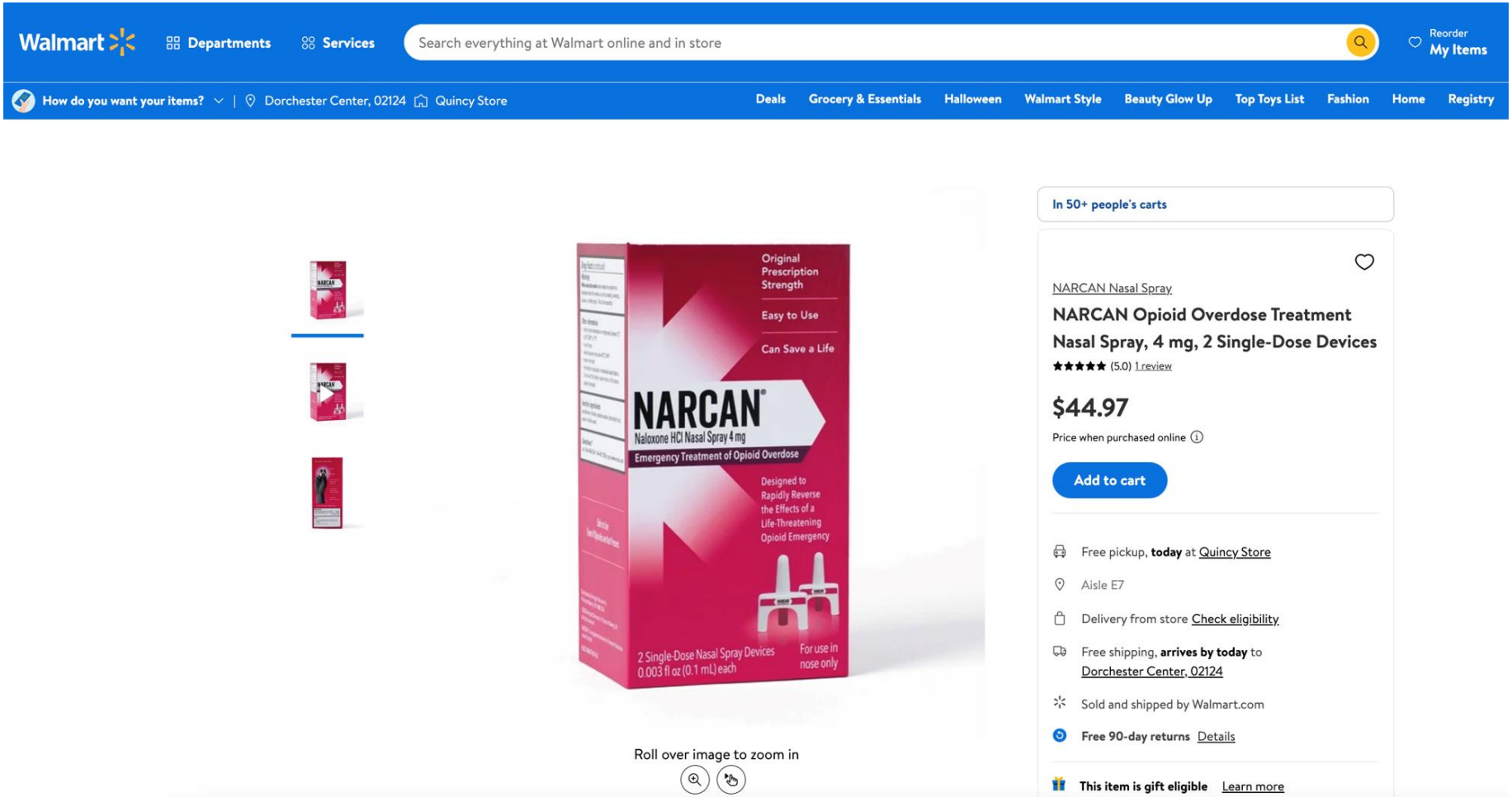
Fatal opioid OD rates by OEND implementation



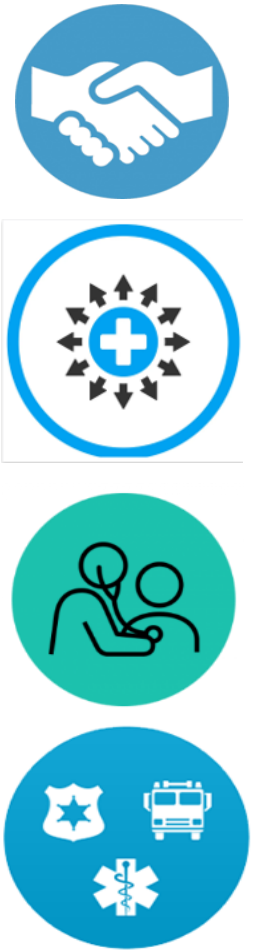
Walley AY et al. BMJ. 2013 Jan 30;346:f174.

Broaden naloxone distribution

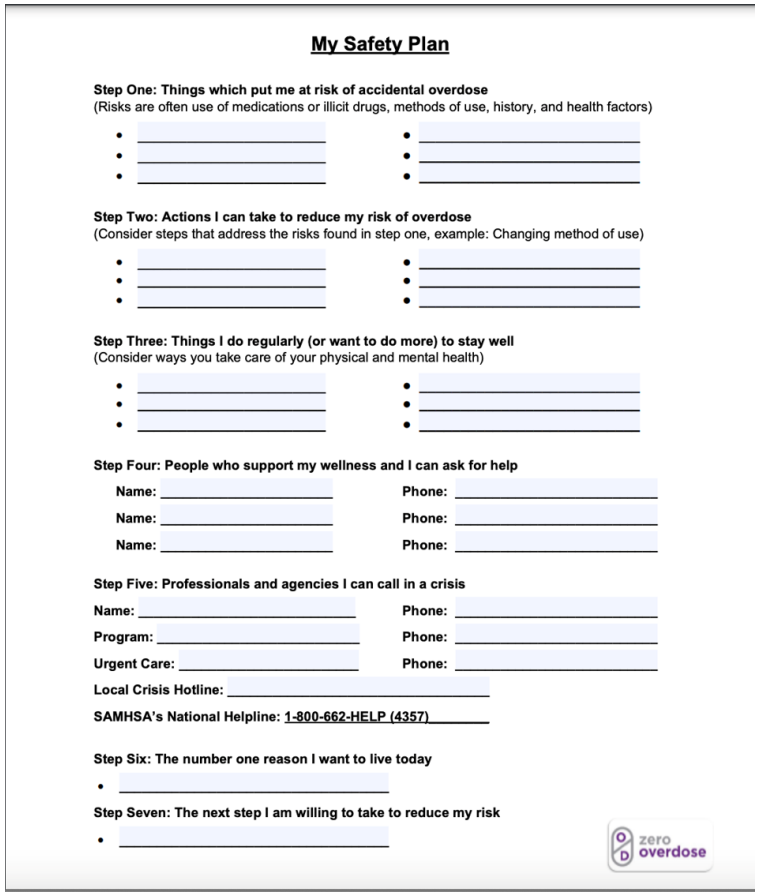


Broaden naloxone distribution

- Partner with Harm Reduction Providers to get naloxone to those at highest risk for overdose
  - Community Program Standing Order
- Facilitate Pharmacy distribution
  - Over-the-Counter Placement and Cost offset
  - Statewide Standing Order
  - Insurance Coverage
- Engage addiction treatment providers, federally qualified health centers, emergency departments
- First responders – administration and leave behind



Make a risk reduction plan



My Safety Plan

Step One: Things which put me at risk of accidental overdose
(Risks are often use of medications or illicit drugs, methods of use, history, and health factors)

Step Two: Actions I can take to reduce my risk of overdose
(Consider steps that address the risks found in step one, example: Changing method of use)

Step Three: Things I do regularly (or want to do more) to stay well
(Consider ways you take care of your physical and mental health)

Step Four: People who support my wellness and I can ask for help

Name: _____ Phone: _____
Name: _____ Phone: _____
Name: _____ Phone: _____

Step Five: Professionals and agencies I can call in a crisis

Name: _____ Phone: _____
Program: _____ Phone: _____
Urgent Care: _____ Phone: _____
Local Crisis Hotline: _____
SAMHSA's National Helpline: 1-800-662-HELP (4357)

Step Six: The number one reason I want to live today

Step Seven: The next step I am willing to take to reduce my risk

zero overdose

Ask your patients:

- **How do you protect yourself against overdose?**
  - Plan A? Plan B? Plan C?
- **How do you keep your medications safe at home?**

Ask their loved ones:

- **What is your plan if you witness an overdose in the future?**
- **Have you received training to prevent, recognize, or respond to an overdose?**

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Especially important for people using fentanyl…

Use with a witness

- Partners, overdose prevention sites, virtual spotting
- **Take turns** to prevent simultaneous overdose
- **Have naloxone ready** and an immediate way to call for help

Start low and go slow

- Use a small amount and give slowly to gauge potency

DSM-5 defines a substance use disorder as the presence of at least 2 of 11 criteria

- Impaired control:
  1. Taking more or for longer than intended
  2. Not being able to cut down or stop (repeated failed attempts)
  3. Spending a lot of time obtaining, using, or recovering from use
  4. Craving for substance
- Social impairment:
  1. Role failure (interference with home, work, or school obligations)
  2. Kept using despite relationship problems caused or exacerbated by use
  3. important activities given up or reduced because of substance use
- Risky use:
  1. Recurrent use in hazardous situations
  2. Kept using despite physical or psychological problems
- Pharmacologic dependence:
  1. Tolerance to effects of the substance*
  2. Withdrawal symptoms when not using or using less*

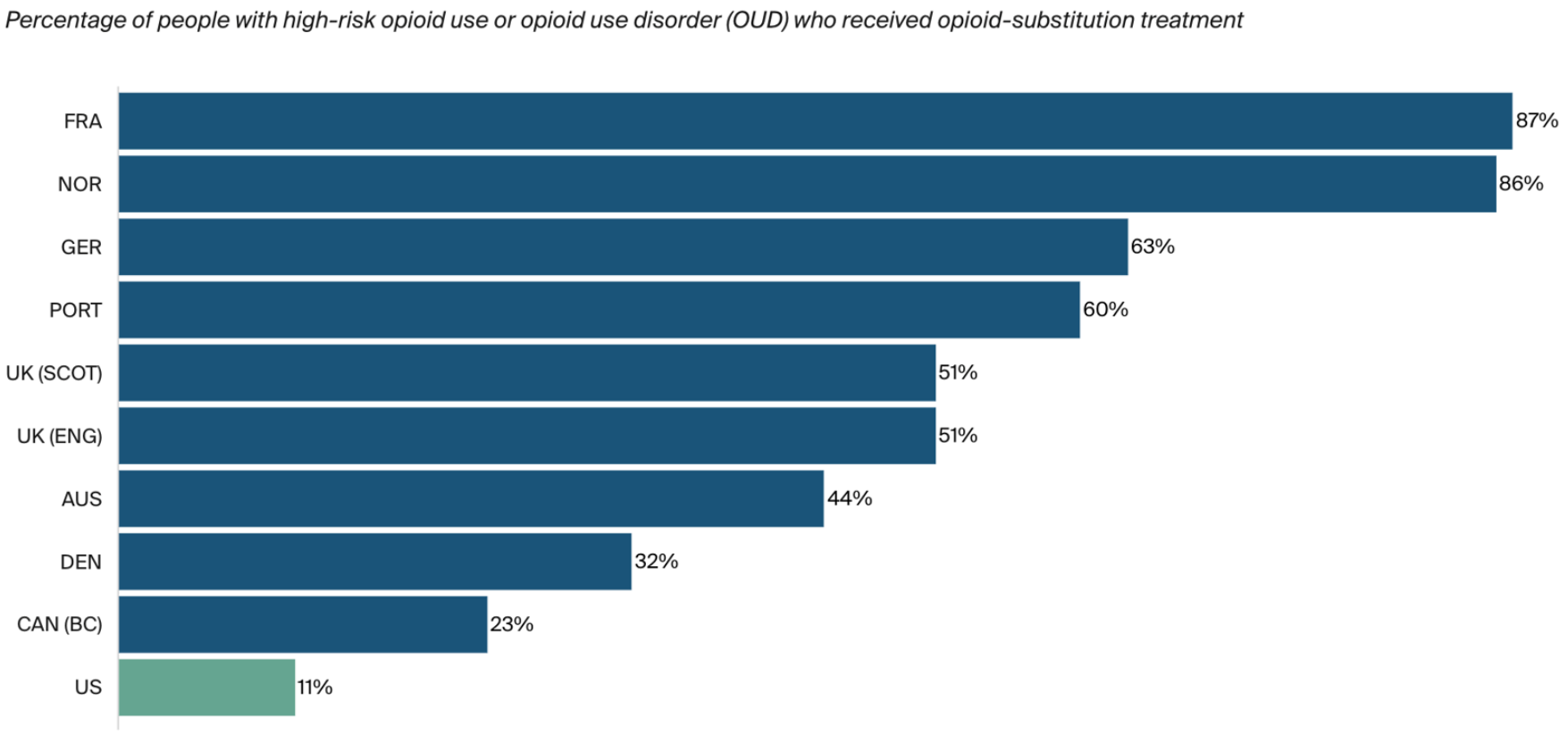
Mild = 2-3 criteria
Moderate = 4-5 criteria
Severe = 6 or more criteria

EPIC Smartphrase - DSM5AYW

- Persons prescribed medications such as opioids may exhibit these two criteria, but would not necessarily be considered to have a substance use disorder

American Psychiatric Association. (2013). Diagnostic and Statistical Manual of Mental Disorders (5th ed.). Arlington, VA: American Psychiatric Publishing.

Percentage of people with high-risk opioid use or opioid use disorder that receive medication for opioid use disorder



Baumgartner et al, 2022
https://www.commonwealthfund.org/blog/2022/too-many-lives-lost-comparing-overdose-mortality-rates-policy-solutions

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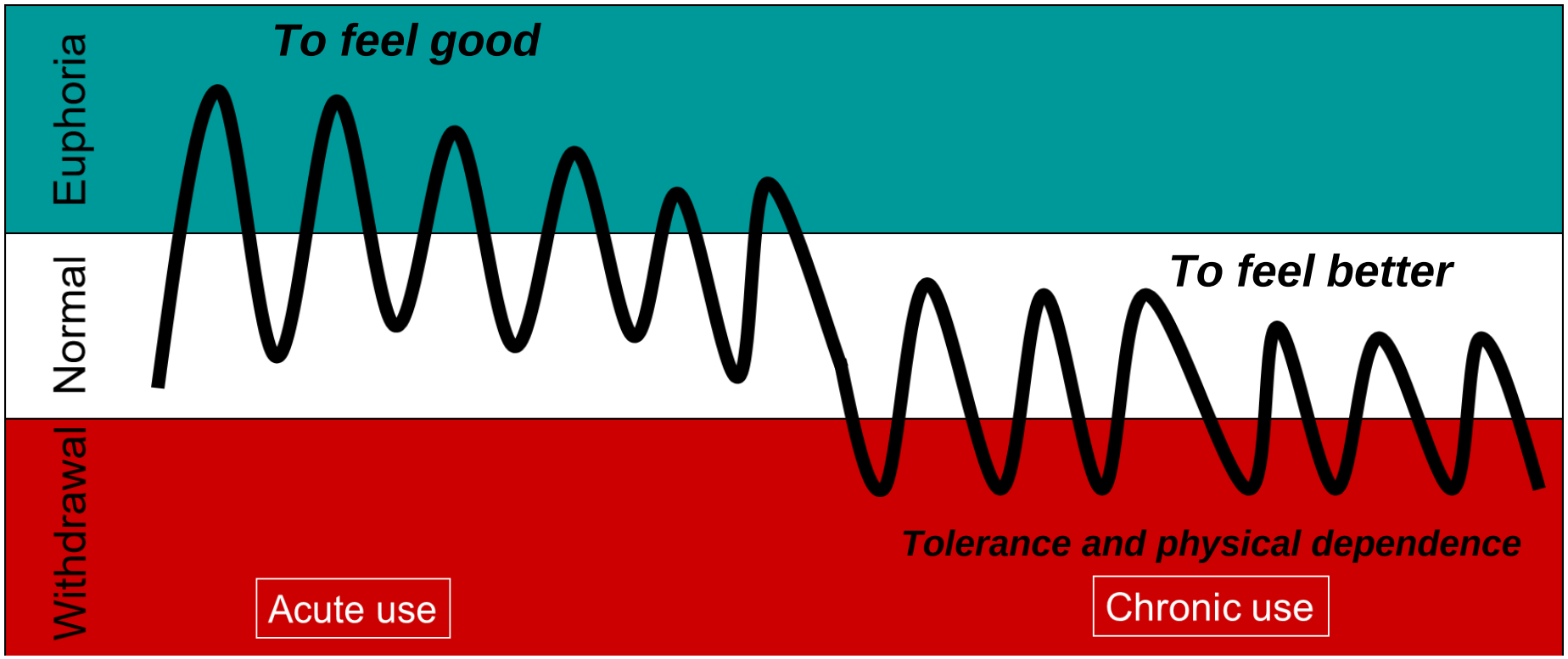
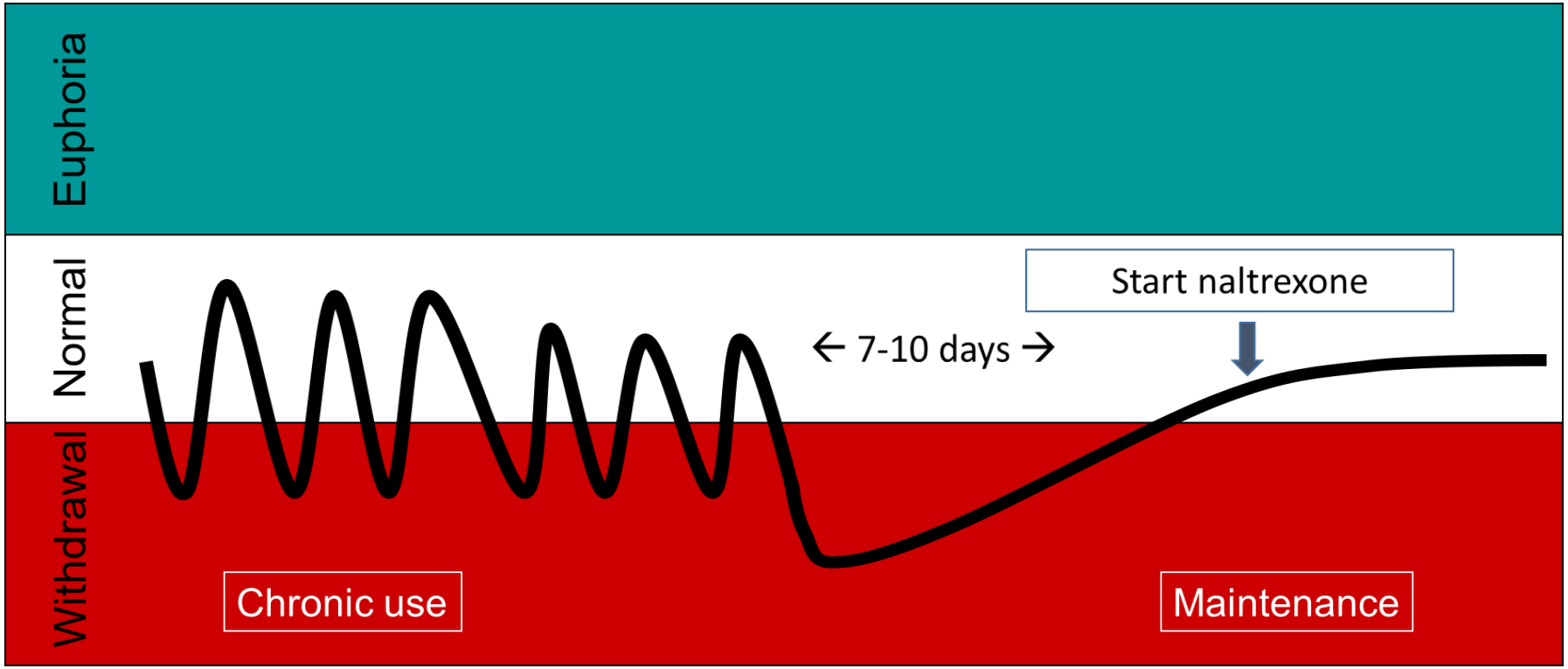
Goals of medication for opioid use disorder

Relief of withdrawal symptoms	• Low dose methadone (30-40mg), buprenorphine
Opioid blockade	• High dose methadone (>60mg), buprenorphine, naltrexone
Reduce opioid craving	• High dose methadone (>60mg), buprenorphine, naltrexone
Restoration of reward pathway	• Long term (>6 months) • methadone, buprenorphine, naltrexone

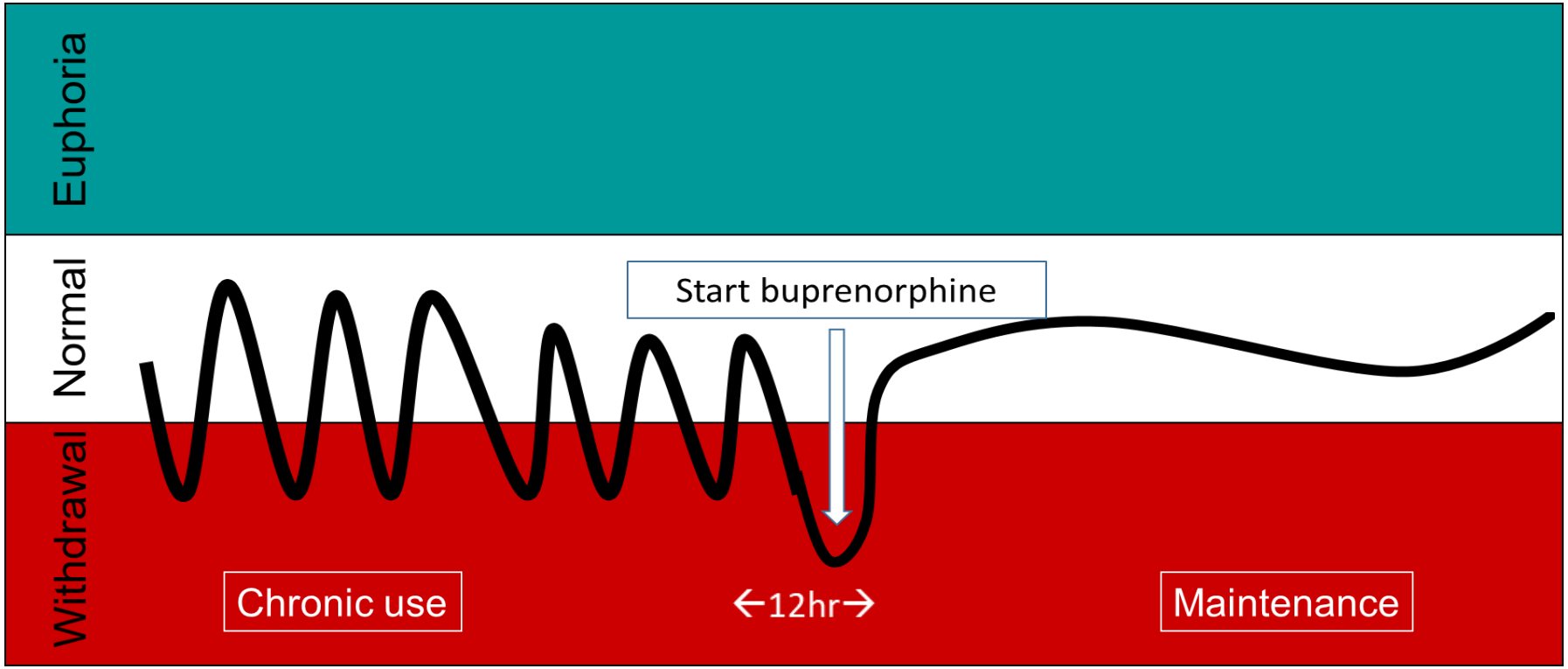
Why do people use opioids?



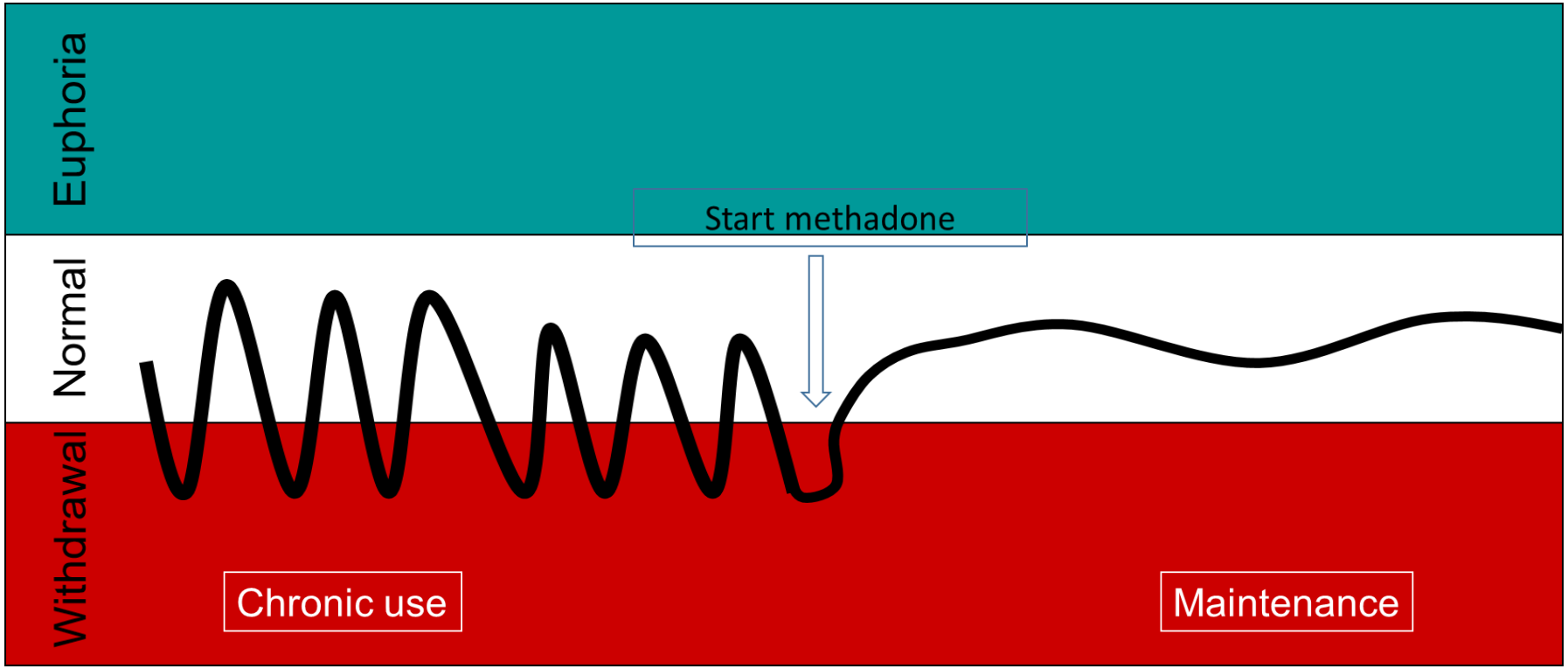
Naltrexone Initiation for Severe Opioid Use Disorder



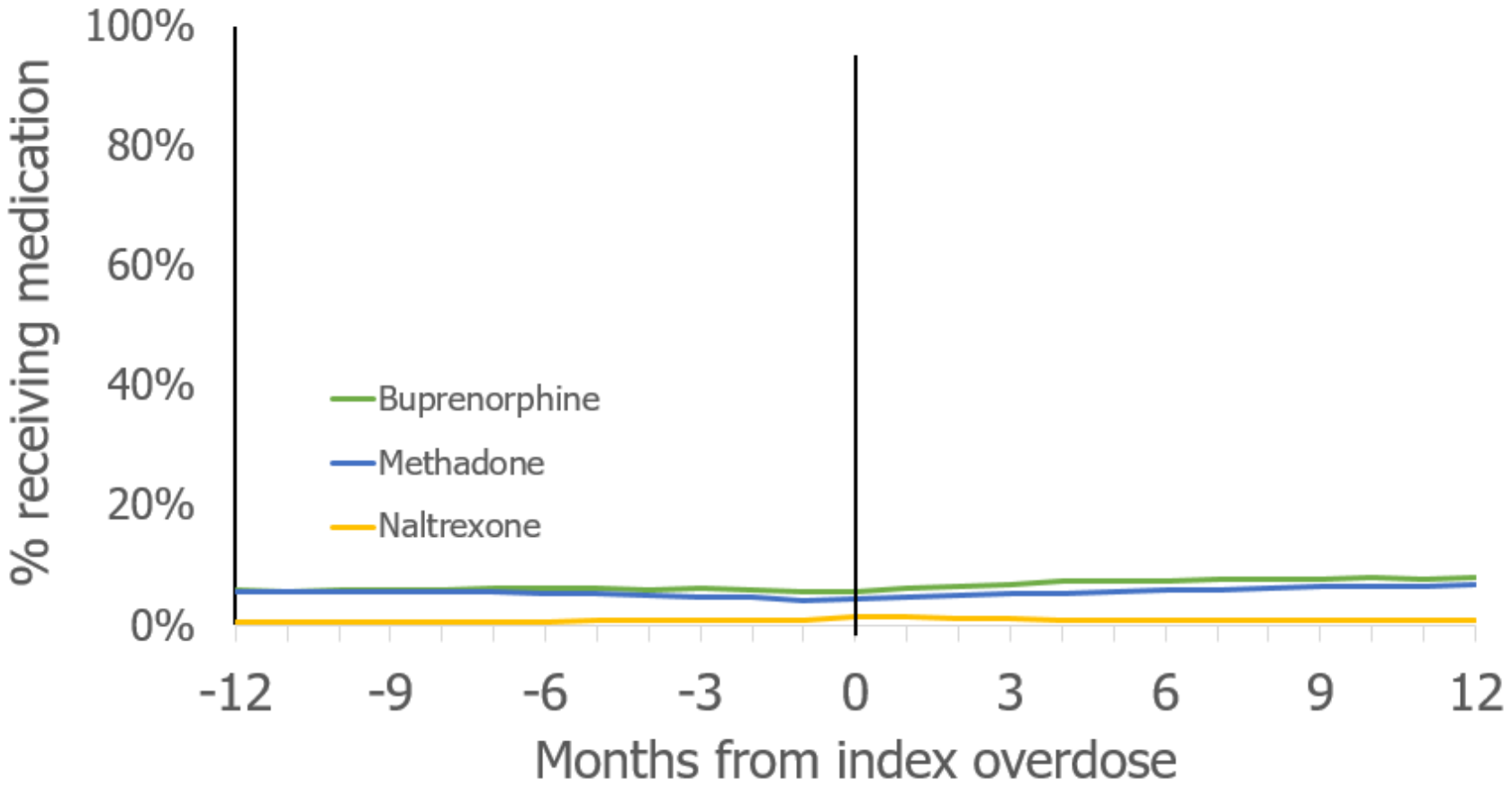
Buprenorphine Initiation for Severe Opioid Use Disorder



Methadone Initiation for Severe Opioid Use Disorder



After overdose, few survivors receive medications for OUD
Cohort of 17,755 overdose survivors in MA, 2012-2014



Larochelle MR, Bernson D, Land T, Stopka TJ, Wang N, Xuan Z, Bagley SM, Liebschutz JM, Walley AY. Medication for Opioid Use Disorder After Nonfatal Opioid Overdose and Association With Mortality: A Cohort Study. Annals of Internal Medicine. 2018 2018 Aug 7;169(3):137-145.

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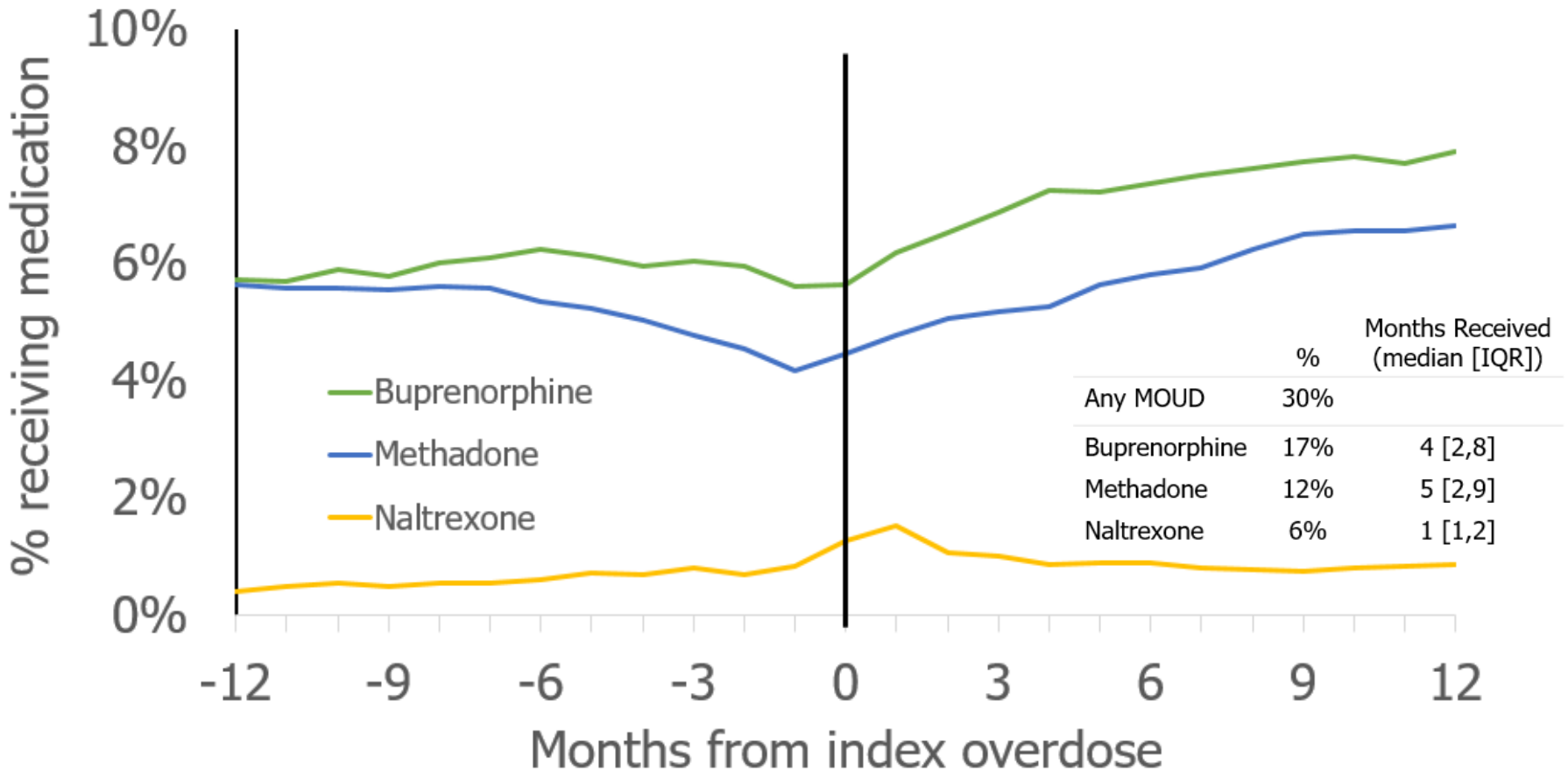

	%	Months Received (median [IQR])
Any MOUD	30%	
Buprenorphine	17%	4 [2,8]
Methadone	12%	5 [2,9]
Naltrexone	6%	1 [1,2]

Larochelle MR et al. Medication for Opioid Use Disorder After Nonfatal Opioid Overdose and Association With Mortality: A Cohort Study. Annals Intern Med. 2018 Aug 7;169(3):137-145.

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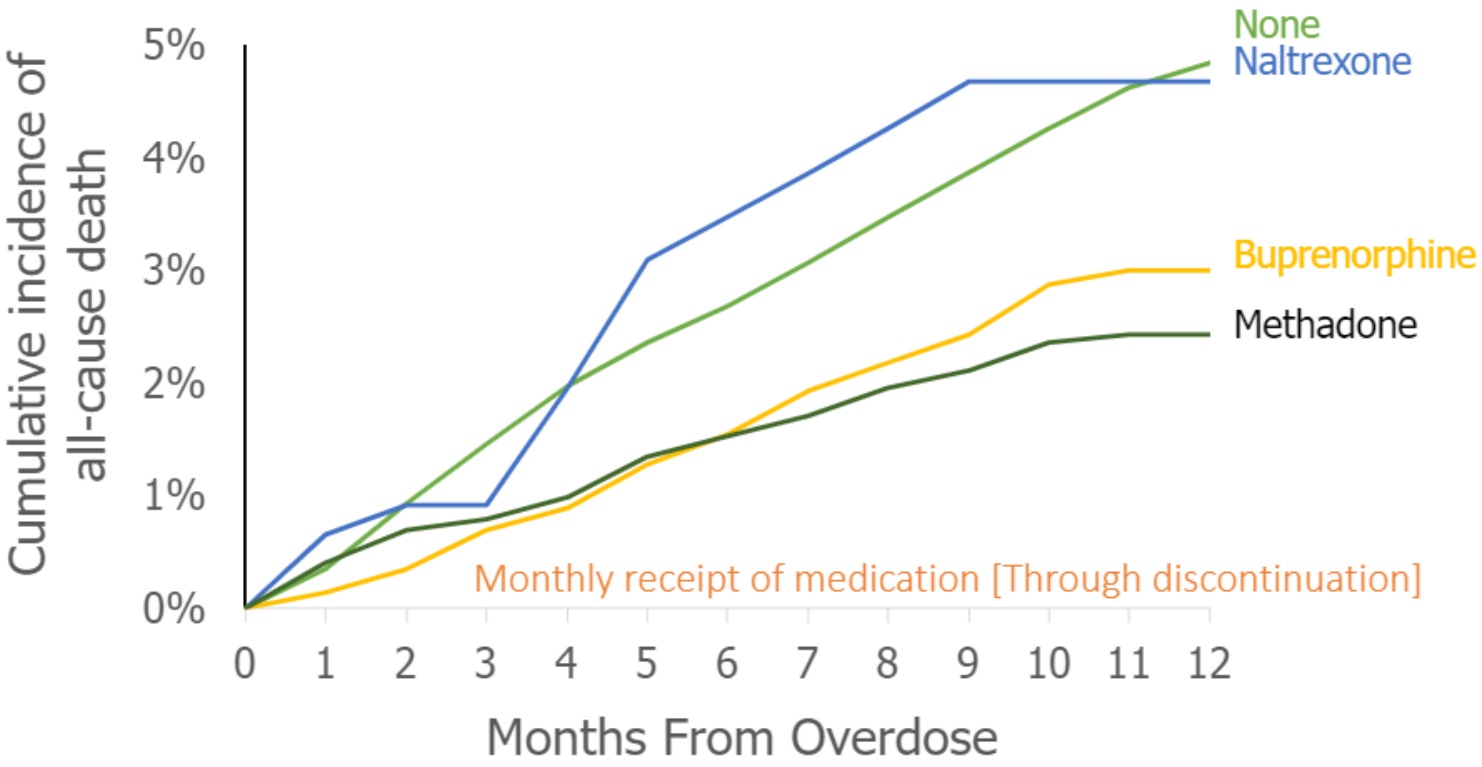

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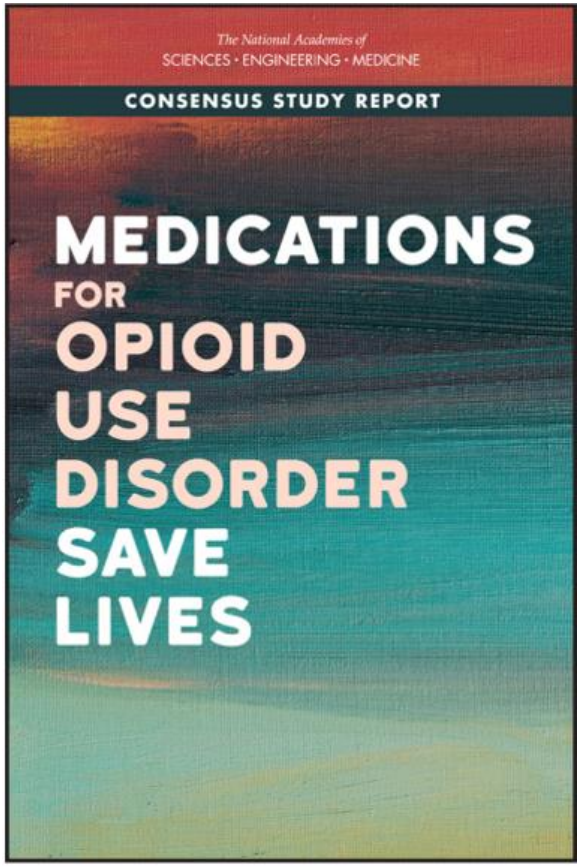
National Academy of Sciences, Engineering, and Medicine 2019



OVERVIEW OF CONCLUSIONS

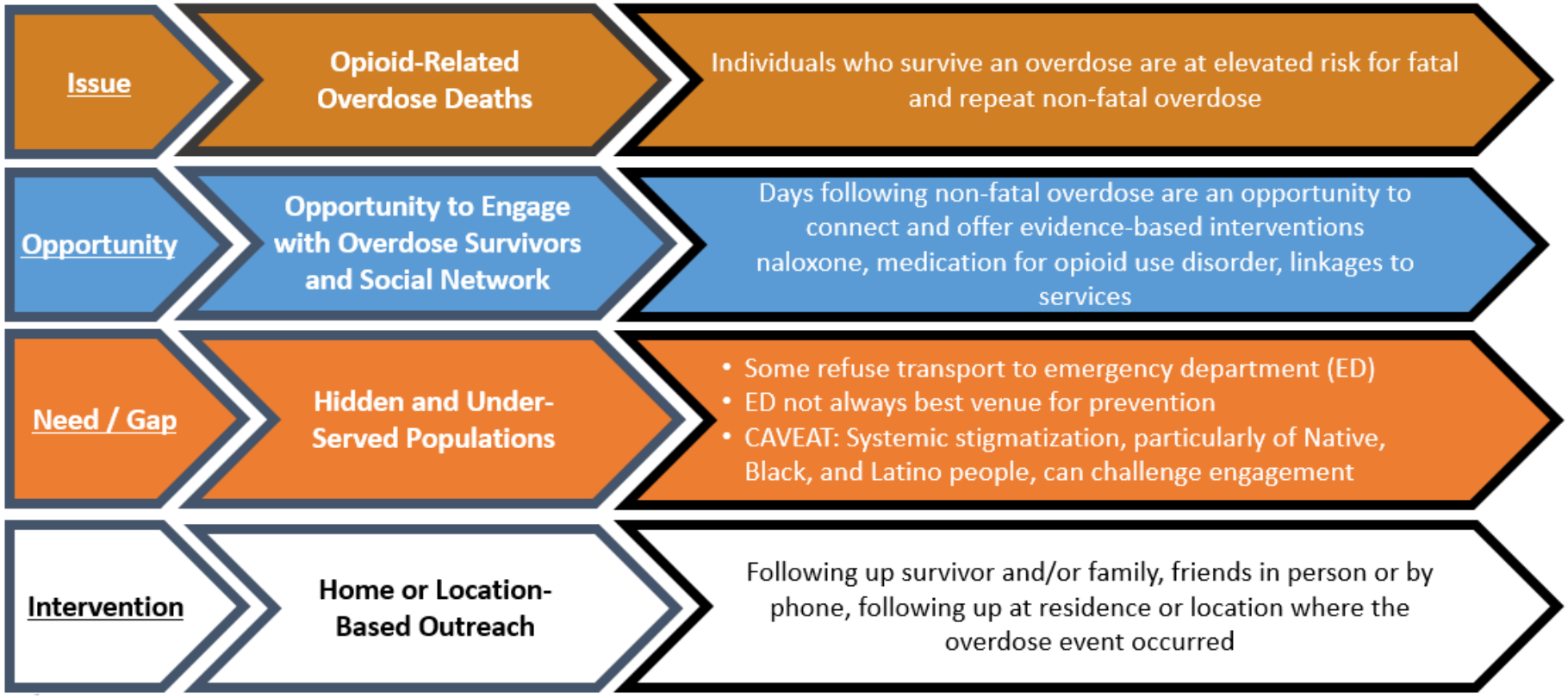
To read the full text of the committee's conclusions, visit nationalacademies.org/OUDtreatment.

1. Opioid use disorder is a treatable chronic brain disease.
2. FDA-approved medications to treat opioid use disorder are effective and save lives.
3. Long-term retention on medications to treat opioid use disorder is associated with improved outcomes.
4. A lack of availability of behavioral interventions is not a sufficient justification to withhold medications to treat opioid use disorder.
5. Most people who could benefit from medication-based treatment for opioid use disorder do not receive it, and access is inequitable across subgroups of the population.
6. Medication-based treatment is effective across all treatment settings studied to date. Withholding or failing to have available all classes of FDA-approved medication for the treatment of opioid use disorder in any care or criminal justice setting is denying appropriate medical treatment.
7. Confronting the major barriers to the use of medications to treat opioid use disorder is critical to addressing the opioid crisis.

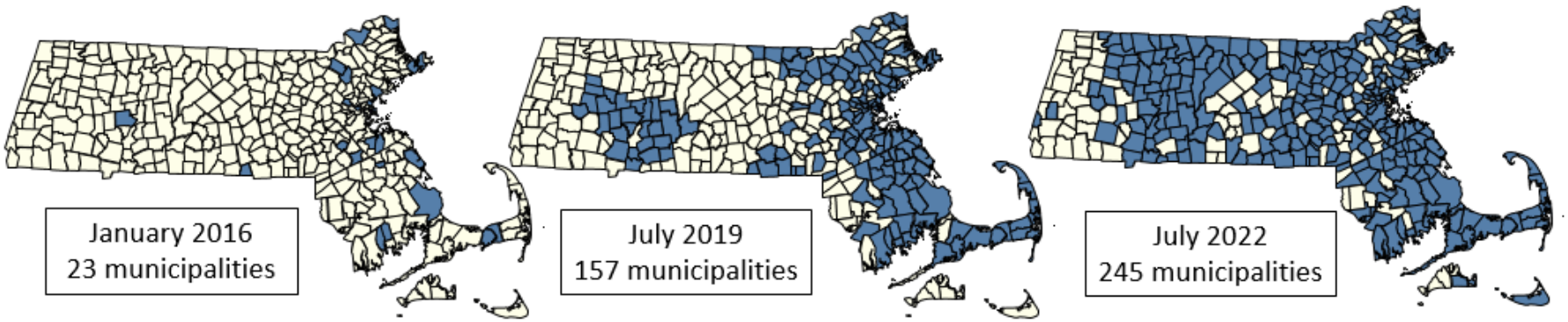
Learning Objective #3: Innovate new approaches to address overdose and substance use care

1. Post-Overdose Outreach
2. Overdose Monitoring Technologies
3. Community Drug Checking

Rationale for Post-Overdose Outreach



Survey: Post-overdose outreach programs are spreading



Massachusetts Department of Public Health, Post-Overdose Outreach Programs Data (2016-2022)

Multi-site Interrupted Time Series: Implementation associated with 6% lower annual opioid overdose death rates

Among 93 municipalities in MA: 2013 –2019

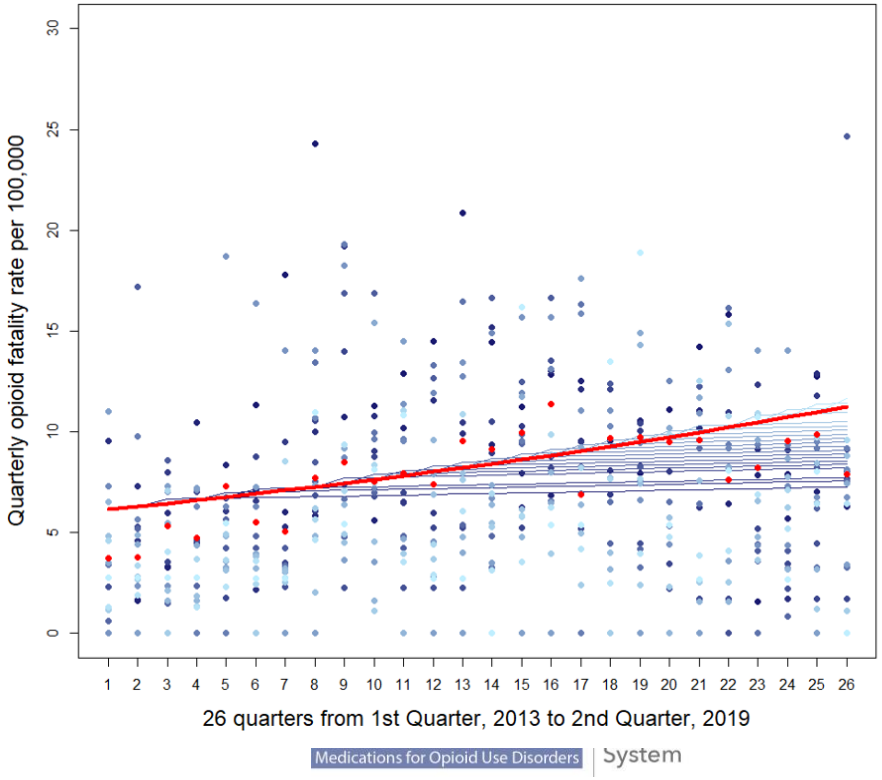
- Compared slopes of quarterly opioid fatality rates of implementing to non-implementing municipalities
- Poisson segmented regression of multiple time series with generalized estimating equations

- Adjusted for municipal-level:
  - Population size and demographics
  - Education and housing vacancy
  - Naloxone distributed, MOUD and residential treatment
  - Drug court/jail diversion, corrections release, drug arrests
  - Drug prevention coalitions
  - Fentanyl-involved death rates

JAMA Psychiatry | Original Investigation

Association of Implementation of Postoverdose Outreach Programs With Subsequent Opioid Overdose Deaths Among Massachusetts Municipalities

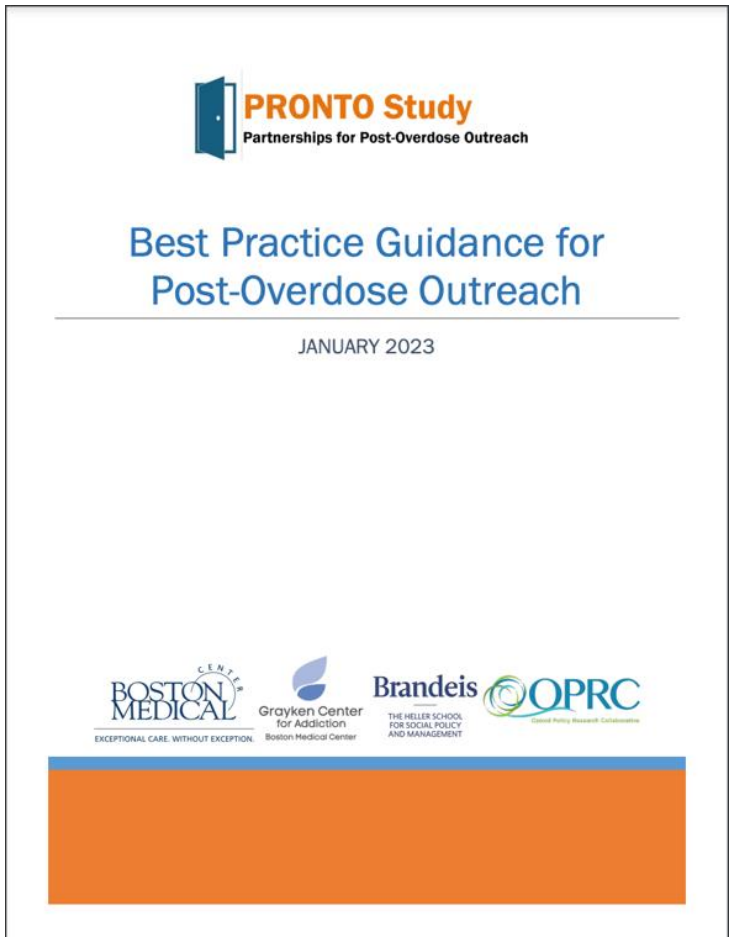
Ziming Xuan, ScD, SM; Shapei Yan, MPH; Scott W. Formica, PhD; Traci C. Green, PhD, MSc; Leo Beletsky, JD, MPH; David Rosenbloom, PhD; Sarah M. Bagley, MD, MSc; Simeon D. Kimmel, MD, MA; Jennifer J. Carroll, PhD, MPH; Audrey M. Lambert, MPH; Alexander Y. Walley, MD, MSc



Role of law enforcement: Police Paradox

- *On the one hand….*
  - In many communities, law enforcement has taken the lead in developing programs
    - Access to 911 call data
    - Access to federal and state funding
    - Void in public health infrastructure or capacity to respond
  - For many, this is the next step after responding to overdoses with naloxone
- *On the other hand…*
  - Much of law enforcement's work is drug criminalization which systemically stigmatizes drug use and people who use drugs
    - Black, Latino, Hispanic, and Native people have been disproportionately arrested, incarcerated, and killed by law enforcement
  - Thus, law enforcement involvement may limit engagement of people with greatest overdose risk

PRONTO Best Practice Guidance for Post-Overdose Outreach



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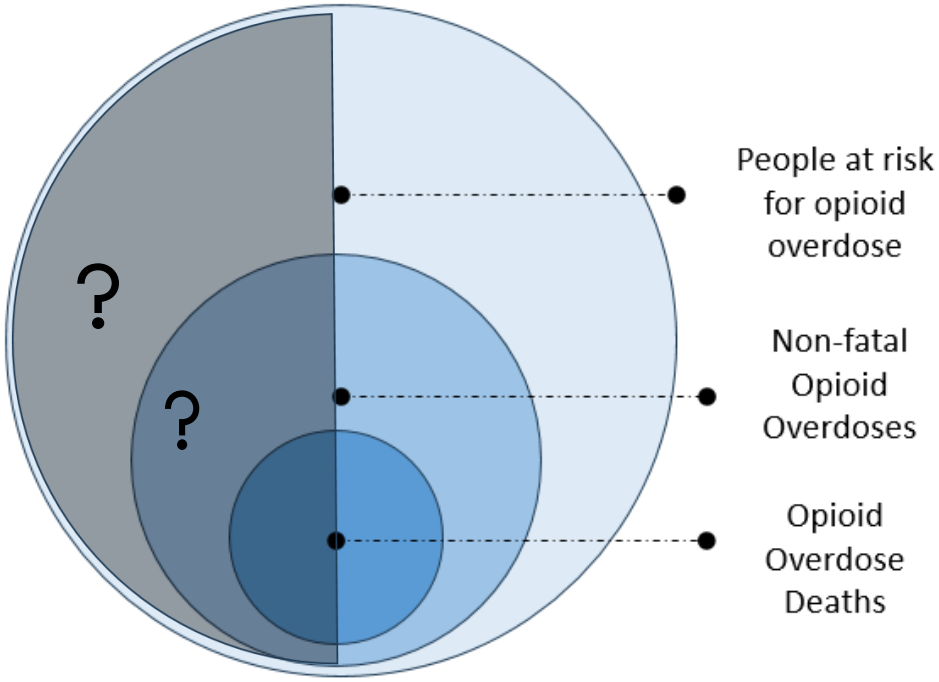
Challenge: What is the rate of unwitnessed drug use? What can we do about it?

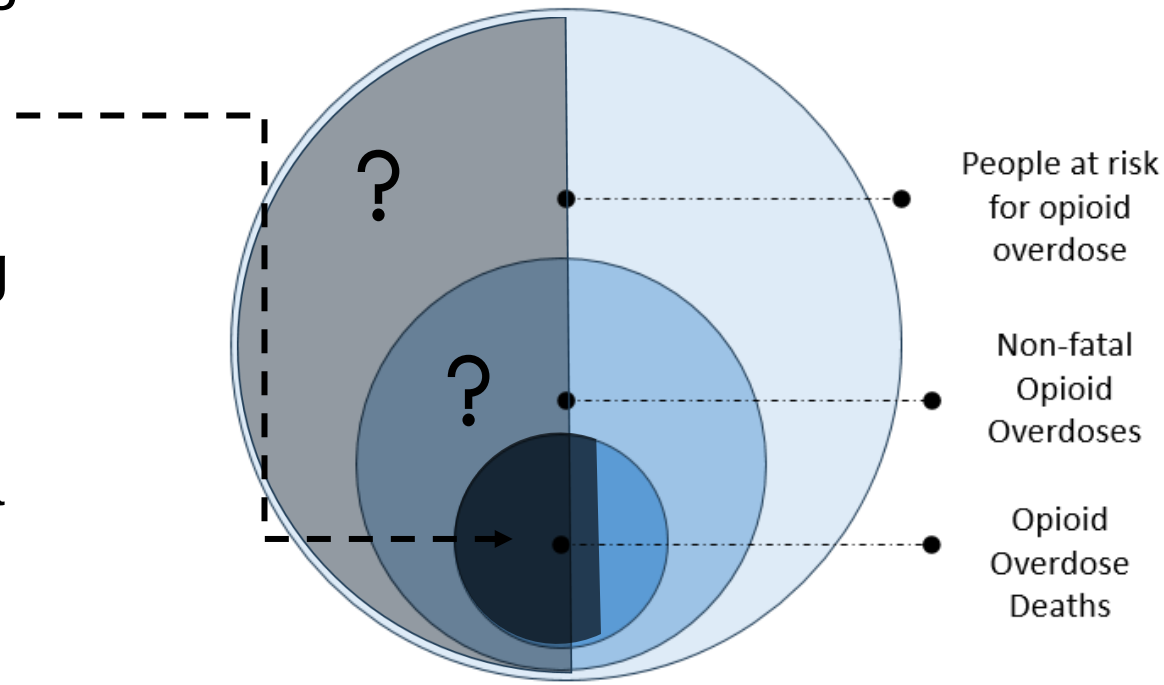
- Unwitnessed drug use is common
- *Why do people use alone?*
  - Feel safer and more comfortable, maintain privacy, avoid stigma, convenience, avoid theft/violence
- Survivor and rescuer fentanyl fatigue
- Post-naloxone adverse events
  - Withdrawal due to high doses
  - Anger due to lack of communication



Neale J et al. Factors associated with withdrawal symptoms and anger among people resuscitated from an opioid overdose by take-home naloxone: Exploratory mixed methods analysis. JSAT. 2020.

Challenge: What is the rate of unwitnessed drug use? What can we do about it?

- Unwitnessed drug use is common
- >90% of deaths occur during unwitnessed drug use
- Naloxone only works if there is a witness



O'Donnell et al. Trends in and Characteristics of Drug Overdose Deaths Involving Illicitly Manufactured Fentanyls - United States, 2019-2020. MMWR Morb Mortal Wkly Rep. 2021.

Opportunity:
Compassionate Overdose Response

1. **Titratable naloxone + communicative rescuers**
   - Higher doses, longer acting antagonists -> unintended consequences, unproven benefit
   - Experienced rescuers spare naloxone
2. **In-person and virtual witnessing**
   - Overdose Prevention Centers
   - Overdose prevention helplines, apps and devices
3. **Support practices of safety – "Back to Basics"**
   - EVERYONE needs an overdose safety and self-care plan and a network they can count on

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PCSS Medications for Opioid Use Disorders
Providers Clinical Support System

Opportunity:
Compassionate Overdose Response

24/7 phone service with trained, peer operators who make a safety plan with people using drugs alone, "spot" them and send help when needed

Rationale: For >90% of overdose deaths, drug use is unwitnessed – *naloxone can not help without someone there*

From October 2022-September 2024

- 5002 drug use events "spotted" -> 16 overdose activations
  - No overdose deaths!
- Call volume increasing monthly
- Operators pick up in < 15 seconds
- Funded by Massachusetts DPH
  - Calls from 32 states and Canada
- For more info, call 800-972-0590 or go to safe-spot.me
- Check out This American Life episode – "The Call"

Scan me!

Opportunity: Compassionate Overdose Response

Carroll et al. Harm Reduction Journal (2022) 19:9
https://doi.org/10.1186/s12954-022-00590-z

Harm Reduction Journal

RESEARCH Open Access

The Bronze Age of drug checking: barriers and facilitators to implementing advanced drug checking amidst police violence and COVID-19

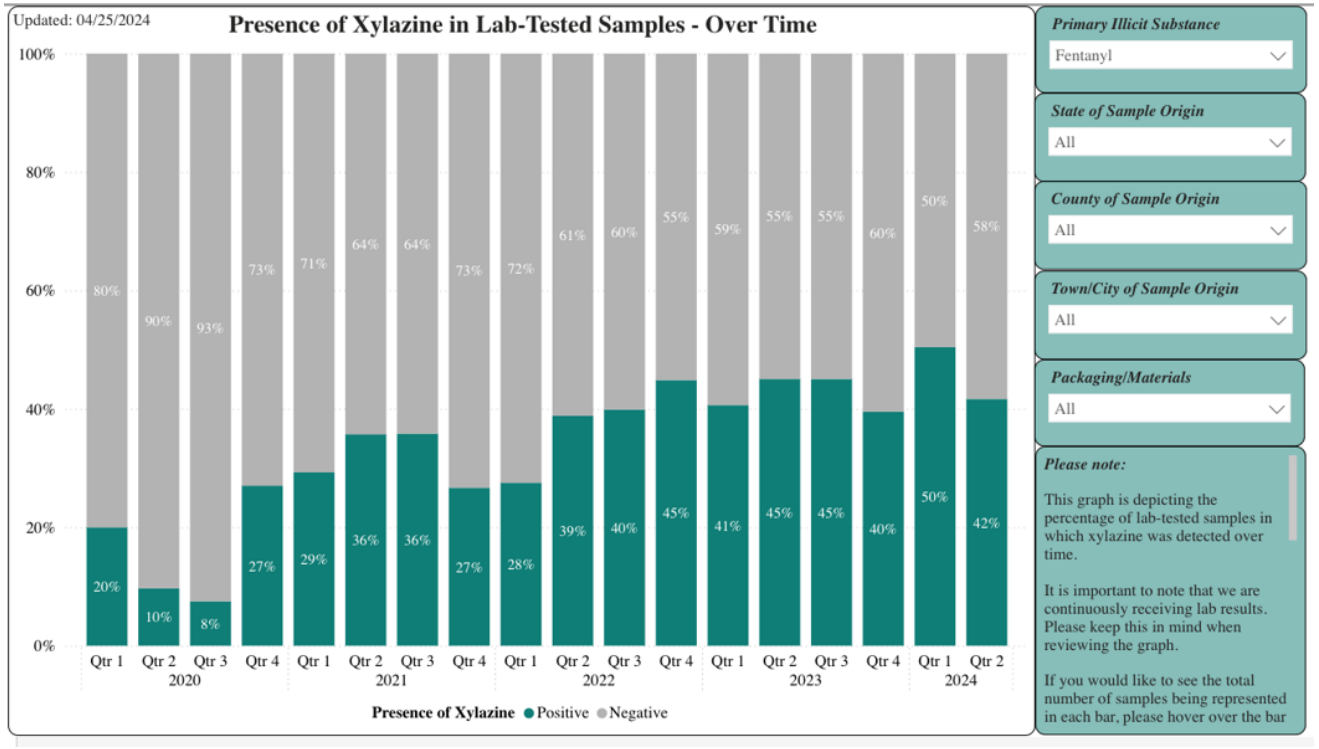
Jennifer J. Carroll[1,2*], Sarah Mackin[3], Clare Schmidt[3], Michelle McKenzie[2,4] and Traci C. Green[2,5]

- Barriers to drug checking:
  - technological complexity of the advanced spectroscopy devices
  - spectroscopy devices are powerful but not always well-suited for street-based drug checking efforts
  - legal ambiguity of drug checking
  - disruptive and oppositional police

"The reality is the technology has not caught up…For [mobile outreach], ideally, we would have something that was cheaper. Like a Toughbook. That's maybe that size or less. And that's super accurate and can tell you percentages. And what the cut is. And it doesn't require a lot of kinda like finagling to get a good read on it…We are in, like, the Bronze Age of drug checking."

Tracking xylazine emerging…

- Adrenergic alpha(2) agonist that is a longer acting sedative and anesthetic
  - Synergizes with fentanyl for overdose
  - Complicates MOUD initiation
  - Wounds at injection sites and elsewhere



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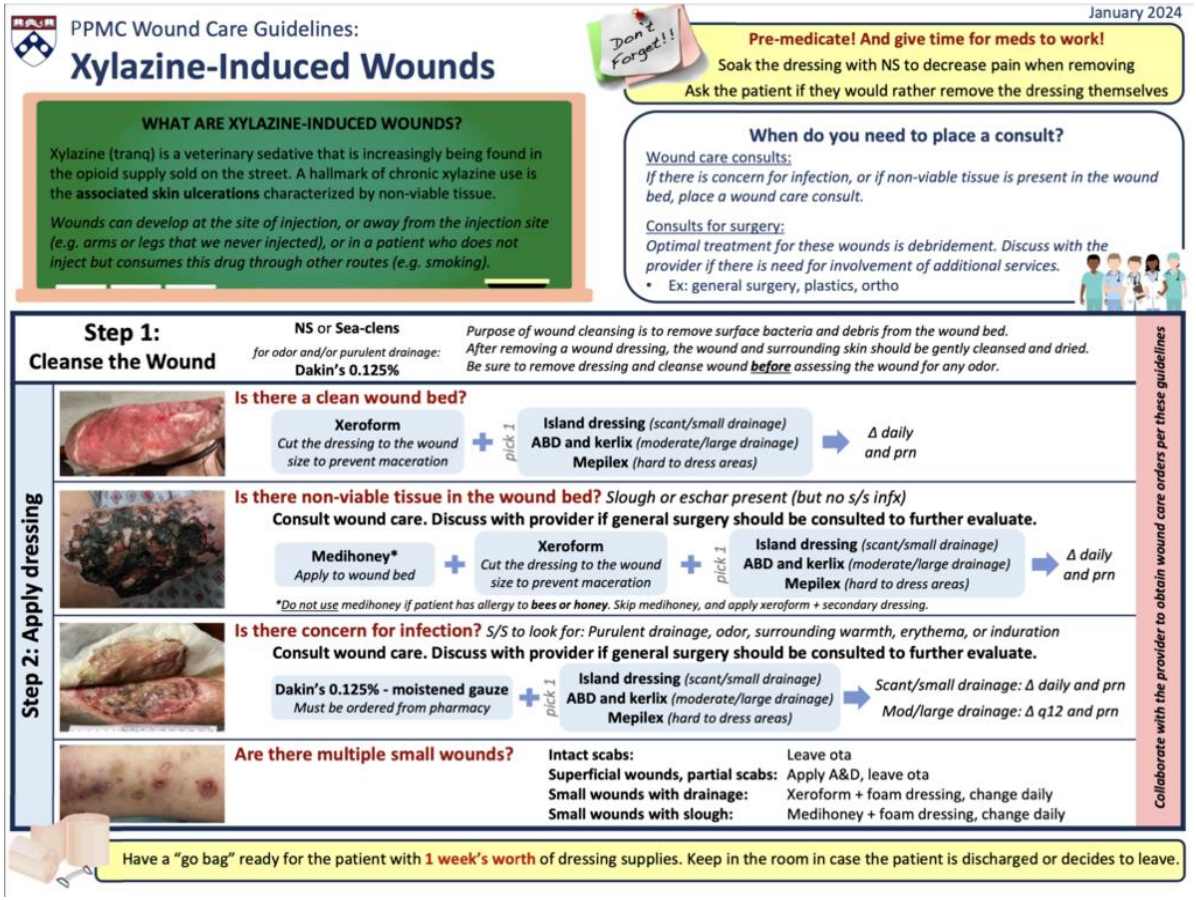
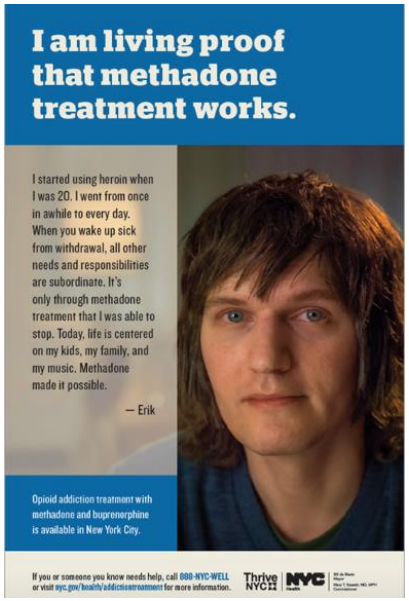


Additional Innovations to Optimize Safety

- Culturally responsive care
- Making medication for opioid use disorder work better
  - Liberalized methadone access
  - Buprenorphine induction innovations
  - Long-acting morphine, injectable opioid agonists
- Decriminalization
- Safer Supply
- Safe spaces for oversedation
- Bathroom safety
- Mobile and Post-overdose outreach
- Managed alcohol programs
- Bad date sheets
- Pre and Post Exposure Prophylaxis



Thank you!

Thank you!

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Source: https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm

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PCSS-MOUD Mentoring Program

- PCSS-MOUD Mentor Program is designed to offer general information to clinicians about evidence-based clinical practices in prescribing medications for opioid use disorder.
- PCSS-MOUD Mentors are a national network of providers with expertise in **addictions, pain, and evidence-based treatment including medications for opioid use disorder (MOUD)**.
- 3-tiered approach allows every mentor/mentee relationship to be unique and catered to the specific needs of the mentee.
- No cost.

For more information visit:

https://pcssNOW.org/mentoring/

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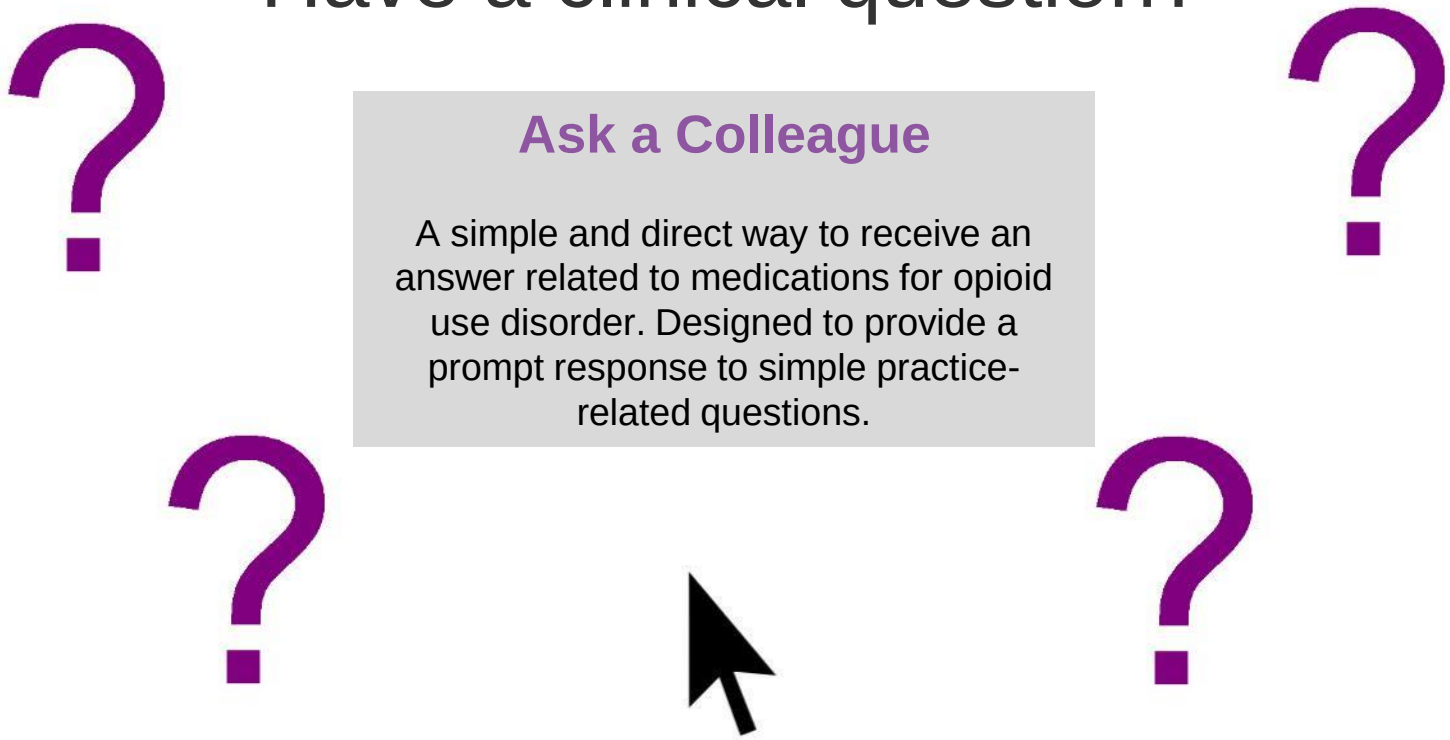
PCSS-MOUD Discussion Forum

Have a clinical question?



Ask a Colleague

A simple and direct way to receive an answer related to medications for opioid use disorder. Designed to provide a prompt response to simple practice-related questions.

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PCSS Medications for Opioid Use Disorders — Providers Clinical Support System

PCSS Medications for Opioid Use Disorders

Providers Clinical Support System

PCSS-MOUD is a collaborative effort led by the American Academy of Addiction Psychiatry (AAAP) in partnership with:

Addiction Policy Forum	American College of Medical Toxicology
Addiction Technology Transfer Center*	American Dental Association
African American Behavioral Health Center of Excellence	American Medical Association*
American Academy of Addiction Psychiatry*	American Orthopedic Association
American Academy of Child and Adolescent Psychiatry	American Osteopathic Academy of Addiction Medicine*
American Academy of Family Physicians	American Pharmacists Association*
American Academy of Neurology	American Psychiatric Association*
American Academy of Pain Medicine	American Psychiatric Nurses Association*
American Academy of Pediatrics*	American Society for Pain Management Nursing
American Association for the Treatment of Opioid Dependence	American Society of Addiction Medicine*
American Association of Nurse Practitioners	Association for Multidisciplinary Education and Research in Substance Use and Addiction*
American Chronic Pain Association	Coalition of Physician Education
American College of Emergency Physicians*	College of Psychiatric and Neurologic Pharmacists
	Black Faces Black Voices

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Columbia University, Department of Psychiatry*	Partnership for Drug-Free Kids
Council on Social Work Education*	Physician Assistant Education Association
Faces and Voices of Recovery	Project Lazarus
Medscape	Public Health Foundation (TRAIN Learning Network)
NAADAC Association for Addiction Professionals*	Sickle Cell Adult Provider Network
National Alliance for HIV Education and Workforce Development	Society for Academic Emergency Medicine*
National Association of Community Health Centers	Society of General Internal Medicine
National Association of Drug Court Professionals	Society of Teachers of Family Medicine
National Association of Social Workers*	The National Judicial College
National Council for Mental Wellbeing*	Veterans Health Administration
National Council of State Boards of Nursing	Voices Project
National Institute of Drug Abuse Clinical Trials Network	World Psychiatric Association
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