



Providers  
Clinical Support  
System

# Module 1: Overview

# Target Audience

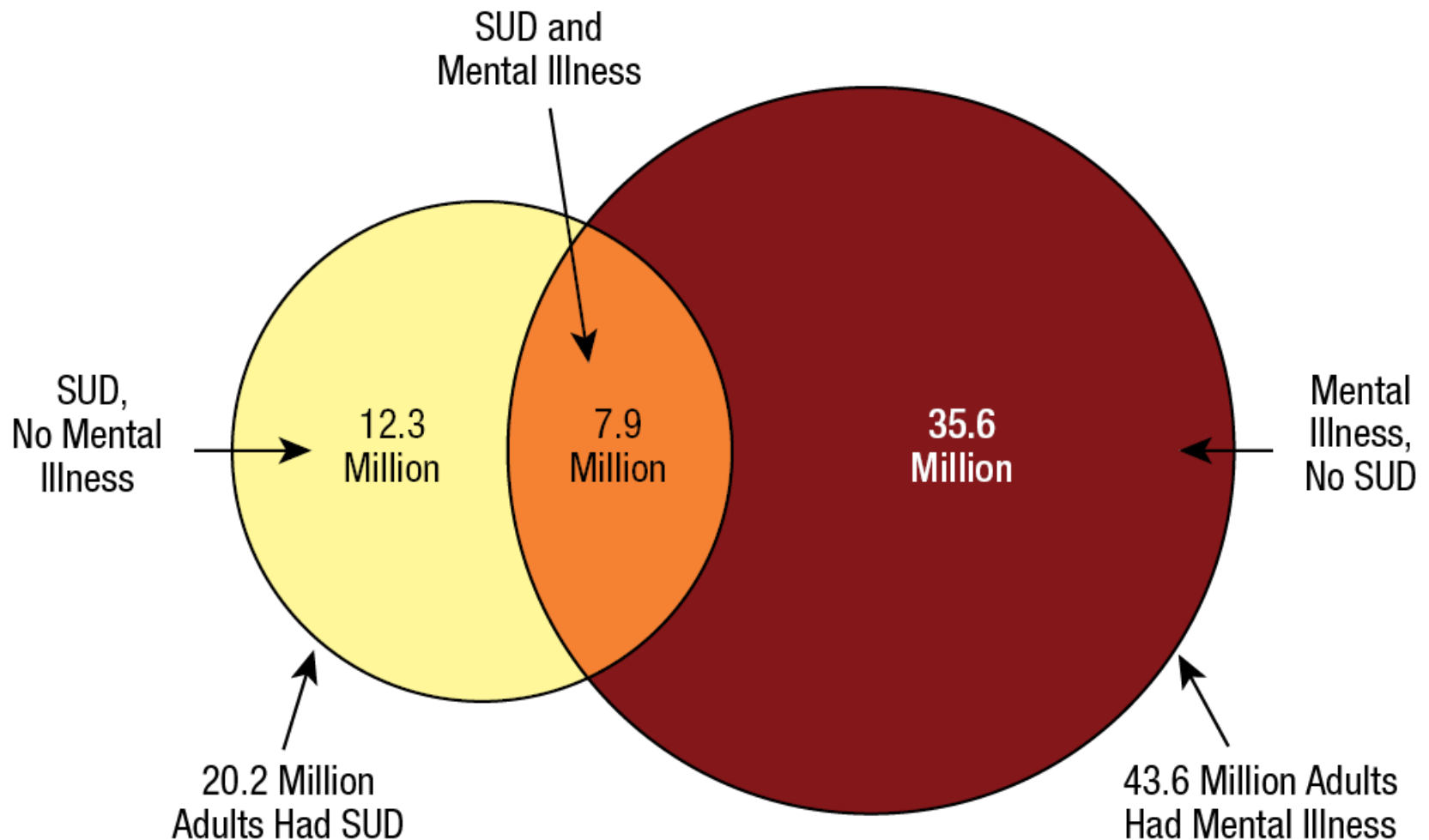
The overarching goal of PCSS is to train a diverse range of healthcare professionals in the safe and effective prescribing of opioid medications for the treatment of pain, as well as the treatment of substance use disorders, particularly opioid use disorders, with medication-assisted treatments.



# Objectives

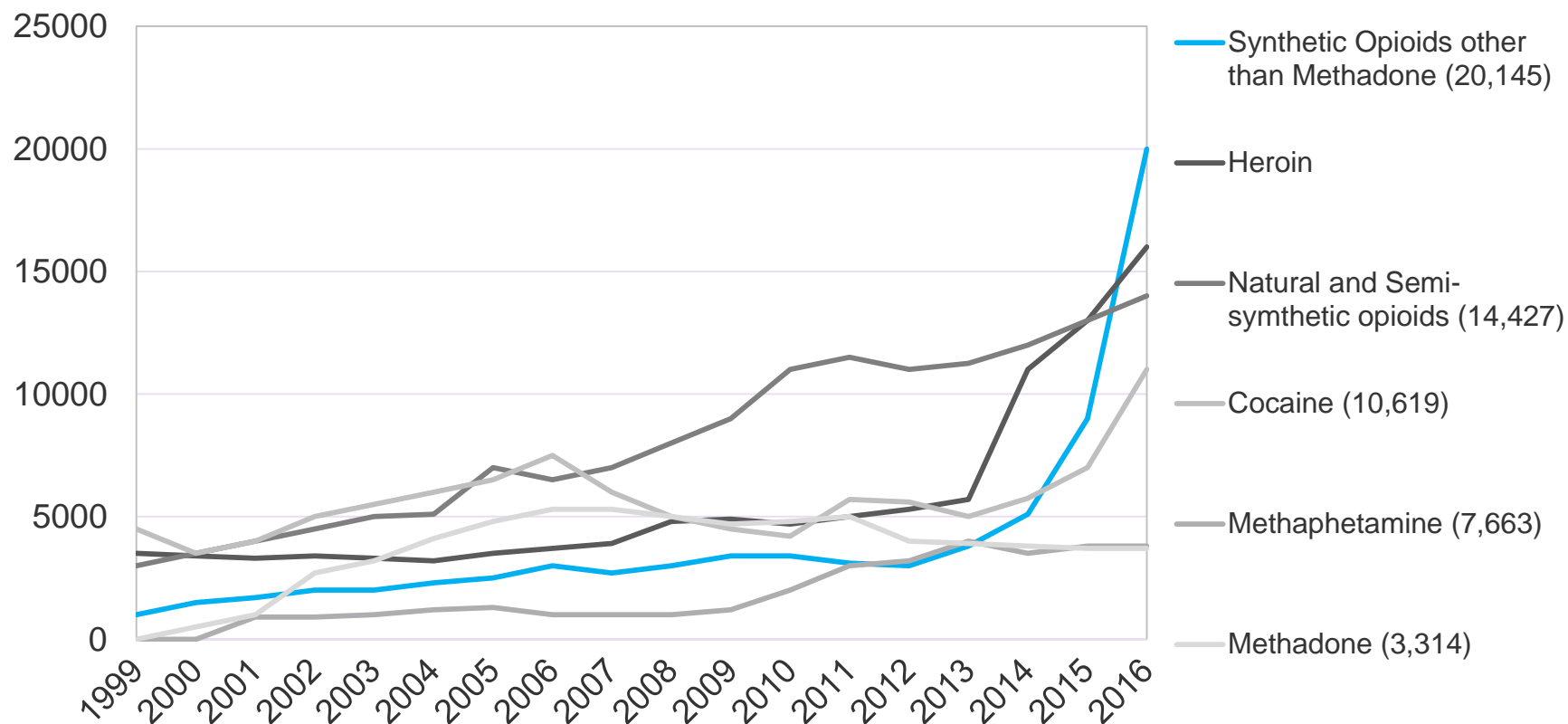
- 1. Describe the epidemiology of substance use disorders (SUDs) and related mortality in the United States**
2. List the DSM-5 criteria for SUD
3. Describe pivotal milestones in the treatment of opioid use disorders
4. Describe the benefits of Medication-Assisted Treatment (MAT)

# Epidemiology of SUDs in the US



# Worsening Epidemic

Drugs Involved in U.S. Overdose Deaths, 2000 to 2016

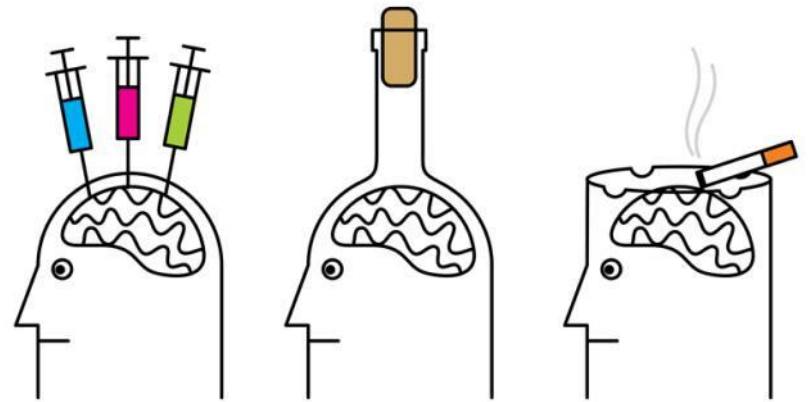


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# National Institute of Drug Abuse (NIDA) Definition of Addiction

Addiction is defined as a *chronic, relapsing brain disease* that is characterized by compulsive drug seeking and use, despite harmful consequences. It is considered a brain disease because drugs change the brain; they change its structure and how it works. These brain changes can be long lasting and can lead to many harmful, often self-destructive, behaviors.



# American Society of Addiction Medicine (ASAM) Definition of Addiction

- Addiction is a primary, chronic disease of brain reward, motivation, memory and related circuitry. Dysfunction in these circuits leads to characteristic biological, psychological, social and spiritual manifestations. This is reflected in an individual pathologically pursuing reward and/or relief by substance use and other behaviors.
- Addiction is characterized by inability to consistently abstain, impairment in behavioral control, craving, diminished recognition of significant problems with one's behaviors and interpersonal relationships, and a dysfunctional emotional response. Like other chronic diseases, addiction often involves cycles of relapse and remission. Without treatment or engagement in recovery activities, addiction is progressive and can result in disability or premature death.



# DSM-5 Criteria for SUDs

## Loss of control

- more than intended
  - amount used
  - time spent
- unable to cut down
- giving up activities
- craving

## Physiology

- tolerance
- withdrawal

## Consequences

- unfulfilled obligations
  - work
  - school
  - home
- interpersonal problems
- dangerous situations
- medical problems

*formerly “dependence”*

*formerly “abuse”*

- A **substance use disorder** is defined by having 2 or more • in the past year resulting in distress or impairment.
- **Tolerance** and **withdrawal** alone don't necessarily imply a disorder.
- Severity is rated by the number of symptoms present: 

{	2-3 = mild
	4-5 = moderate
	6+ = severe

# Spectrum of Substance Use

None or  
low risk

At risk

Mild

Moderate

Severe

Increasing amounts, higher-risk  
substances or situations

Craving, loss of control,  
consequences

← tolerance and withdrawal can appear anywhere →

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# History of Opioids

- Utilized throughout the world for various uses for thousands of years
- 1800's:
  - Morphine and Heroin were marketed commercially as medications for pain, anxiety, respiratory problems
  - Invention of Hypodermic syringe allowed for rapid delivery to the brain



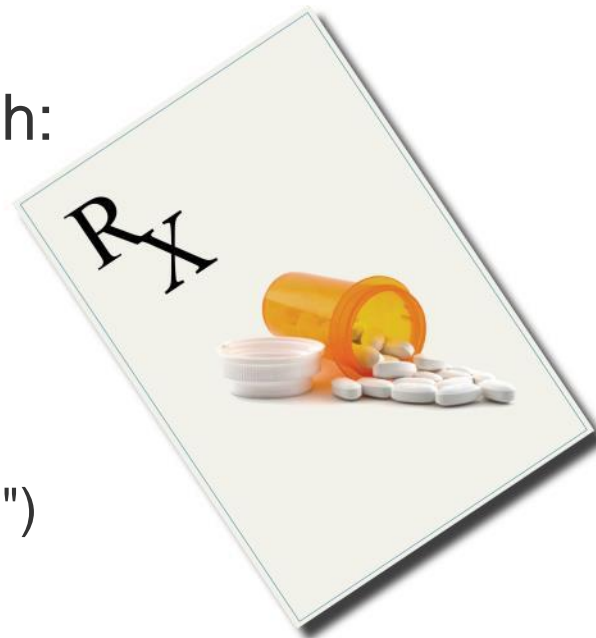
# Pivotal Milestones in Treatment

Year	Milestone
1970	Methadone is approved by the FDA for <u>detoxification</u>
1973	Methadone is approved by the FDA for <u>maintenance</u>
1974	Opioid Treatment Programs (OTP's) able to dispense Methadone for maintenance treatment
1984	Oral Naltrexone is approved by the FDA
2000	Drug Addiction Treatment Act of 2000 (DATA 2000) allowed qualified physicians to offer Office Based Opioid Treatment (OBOT)
2002	Buprenorphine is approved by the FDA
2010	Extended-release injectable naltrexone is approved by the FDA
2016	Comprehensive Addiction and Recovery Act (CARA) - Allows Nurse Practitioners and Physician Assistants to become eligible to prescribe buprenorphine for treatment of opioid use disorder

# Drug Addiction Treatment Act (DATA 2000)

Permitted physicians who met certain qualifications to treat opioid addiction with:

- Schedule III, IV, and V narcotic medications that had been specifically approved by the FDA for that indication
- In treatment settings other than the traditional Opioid Treatment Program ("methadone clinic") settings



# DATA 2000 – Practitioners Requirements

- ✓ ■ Licensed provider with DEA Registration
- ✓ ■ Subspecialty training in addictions or completion of an 8-hour course
- ✓ ■ Registration with SAMHSA and DEA
- ✓ ■ Must affirm the capacity to refer patients for appropriate counseling and ancillary services
- ✓ ■ Must adhere to patient panel size limits
  - 30 during the first year
  - 100 during the second year
  - 275 during the third year

# Opioid Treatment Programs (OTPs)



- Starting in 2013:
  - OTPs (methadone maintenance programs) were able to dispense buprenorphine in same manner as office-based practitioners.
  - Previously, OTPs had to dispense buprenorphine as they did for methadone (with restricted take-home doses).
- Advantages:
  - Can provide structure to patients who need closer observation than an office-based practitioner can provide.
  - May offer additional services counseling, medical/mental health, case-management services.

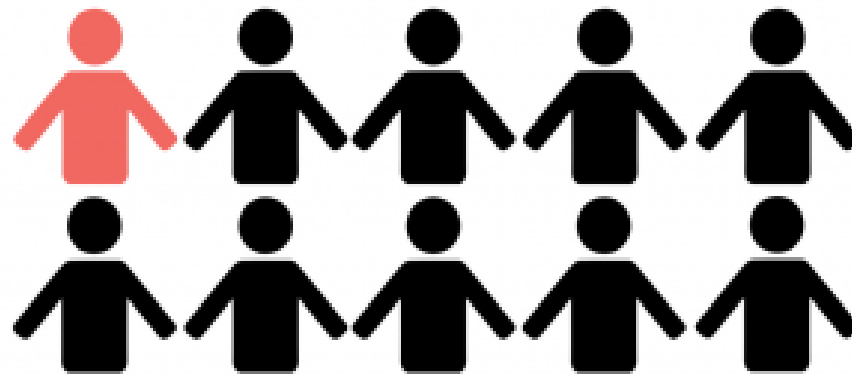


# Comprehensive Addiction and Recovery Act (CARA)

- Signed into law on July 22, 2016
- Expands prescribing privileges to nurse practitioners (NPs) and physician assistants (PAs) for five years (until October 1, 2021)
- NPs and PAs must complete 24 hours of training to be eligible for a waiver to prescribe and must be supervised by or work in collaboration with a qualifying physician if required by state law

# Treatment Gap for Substance Use Disorders

- Approximately 22 million individuals aged 12 or older needed substance use treatment in 2015
- 10% of those diagnosed with SUDs received any type of specialty treatment
- Although increasing, currently a minority of all providers are trained to provide MAT



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# Treatment Goals

- Range of treatment goals

Minimization  
of harms from  
ongoing use



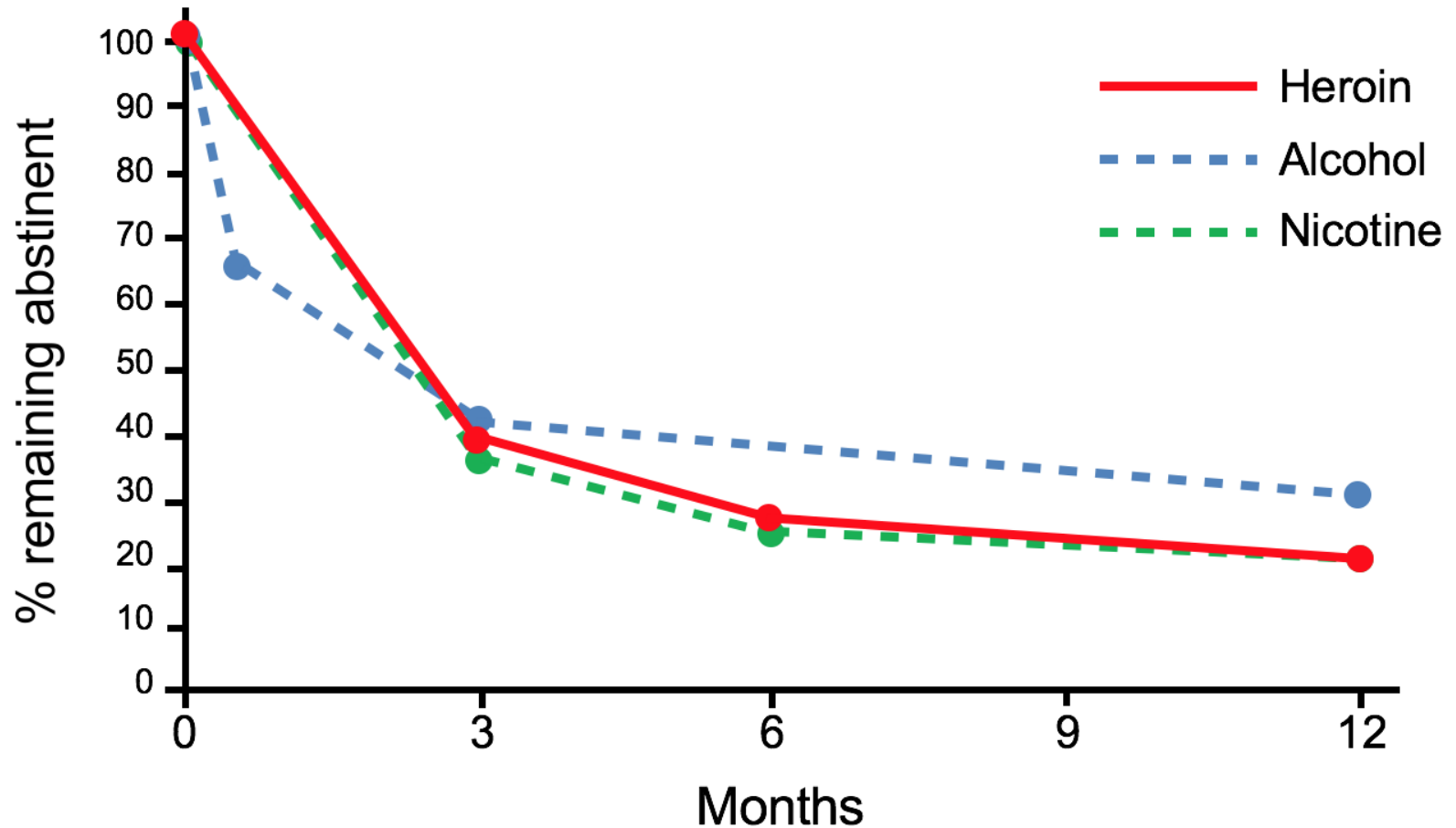
Sustained recovery  
with abstinence  
from all substances

- Treatment Options

- Medication-Assisted Treatment. FDA approved options include:
  - Buprenorphine: Partial Agonist at the mu-receptor
  - Methadone: Agonist at the mu-receptor
  - Naltrexone/Naloxone: Antagonists at the mu-receptor
- Behaviorally-Oriented Treatment

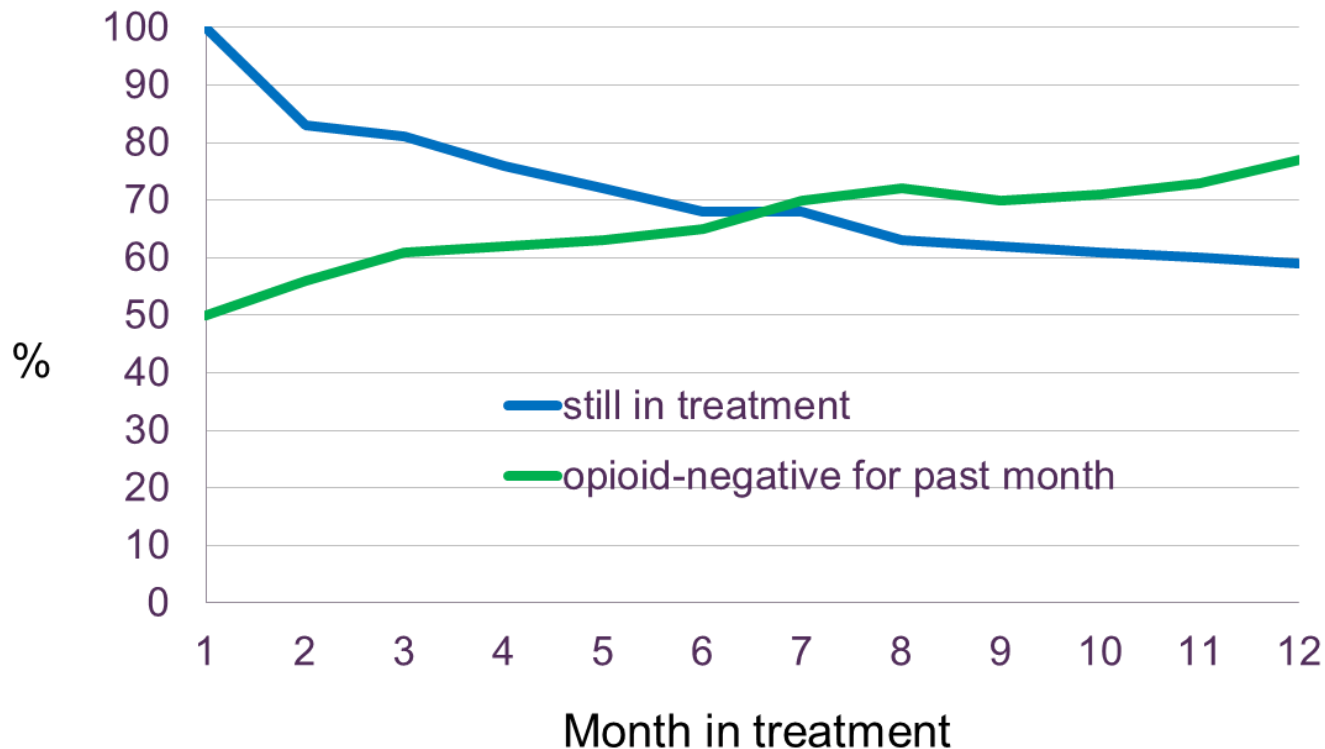
- Ultimate Goal: Maintain long-term recovery with or without medication

# Abstinence Without MAT



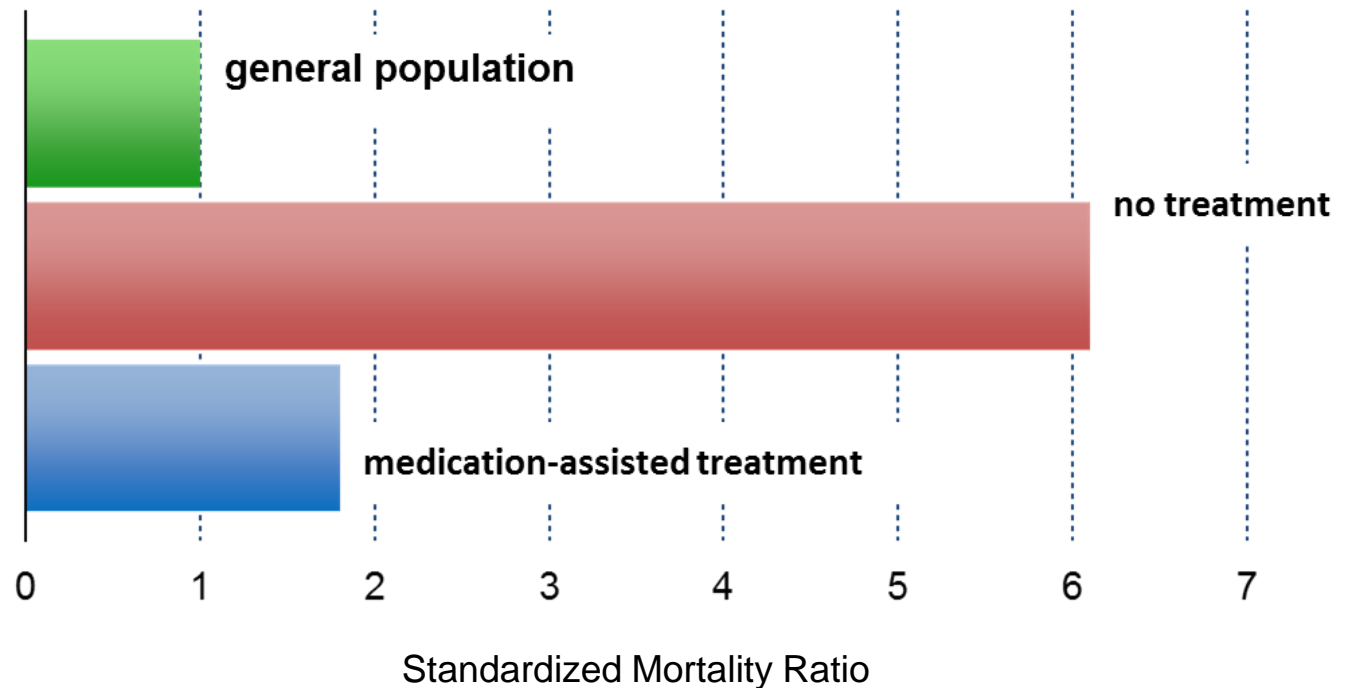
# Treatment Retention and Decreased Illicit Opioid Use on MAT

- Buprenorphine promotes retention, and those who remain in treatment become more likely over time to abstain from other opioids



# Benefits of MAT: Decreased Mortality

## Death rates:



# Summary

- Rates of overdose deaths from opioids are at an all-time high and are continuing to increase
- In the DSM-5, SUD is defined by having two or more symptoms that highlight a loss of control, physiologic effect and harmful consequences
- A number of legislative initiatives have been passed to improve access to treatment for opioid use disorders
- MAT for opioid use disorder has several benefits including:
  - Decrease in the number of fatal overdoses
  - Increase patients' retention in treatment, and improved social functioning



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*Funding for this initiative was made possible (in part) by grant nos. 5U79TI026556-02 and 3U79TI026556-02S1 from SAMHSA. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.*