RUSH UNIVERSITY MEDICAL CENTER

Opioid Stewardship and Managing the Opioid Crisis: A Health-Care Perspective

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Dr. Holden has disclosed that there is no actual or potential conflict of interest in regards to this presentation

The planners, editors, faculty and reviewers of this activity have no relevant financial relationships to disclose. This presentation was created without any commercial support.

Opioid Use Disorder Diagnosis and Treatment

Learning Objectives

At the conclusion of this course participants will be able to

- Describe local opioid prescribing, hospitalization and overdose trends in Chicago.
- Explain the neurobiological changes that occur in the brain of someone with opioid use disorder.
- Describe the current opioid prescribing guidelines for acute and chronic pain, as well as recommendations for non-pharmacological management of chronic pain.
- Explain the DSM 5 diagnostic criteria for opioid use disorder and the available treatment options for opioid use disorder.
- Define harm reduction and explain its role in working with patients who use drugs.
- Describe health-system level interventions that can be taken to promote best practices as they relate to opioid prescribing and opioid use disorder treatment.
- Describe new formulations for treatment of OUD overdose, and abuse-deterrent formulations and their effect on potential for misuse.
- Discuss challenging clinical cases with group of health professionals and identify potential approaches to clinical management.

To obtain credit you must:

- **Be present for the entire session**
- **Complete an evaluation form**
- **Return the evaluation form to staff**
- Certificate will be sent to you by e-mail upon request.

In support of improving patient care, [Insert name of Joint Accredited Provider] is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

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In Addiction, Powerful Changes Occur in the Brain

REWARD SYSTEM	STRESS SYSTEM	DECISION-MAKING SYSTEM
• Drive-pleasure pathways hijacked (food, water, sex, exercise, etc.) • Diminished pleasure/ reward in non-drug behaviors • Experience strong cravings, urges to use drugs	• After too much reward anti-reward system turns on • Irritability, depression, distress • Perceive only relief through substance use	• Impulsive/struggle to resist urges (brakes damaged) • Difficulty making plans and following through (steering damaged)

(Difficult to change habituated behaviors under the best of circumstances)

How Do You Diagnose An Opioid Use Disorder?

The C's of Addiction

Loss of **C**ontrol

Continued use in spite of **C**onsequences

Craving/ **C**ompulsion

How Do You Diagnose An Opioid Use Disorder?

- **DSM-V Criteria**
  - **More/longer than intended**
  - **Unable to cut back/control**
  - **Time dedicated to obtaining, using, recovering from**
  - **Physical or psychological consequences**
  - **Activities given up**
  - **Failure to fulfill major obligations**
  - **Social or interpersonal problems caused or made worse by**
  - **Use in hazardous situations**
  - **Craving/strong desire/urge**
  - **Tolerance** (unless taken solely under appropriate medical supervision)
  - **Withdrawal** (unless taken solely under appropriate medical supervision)

Severity

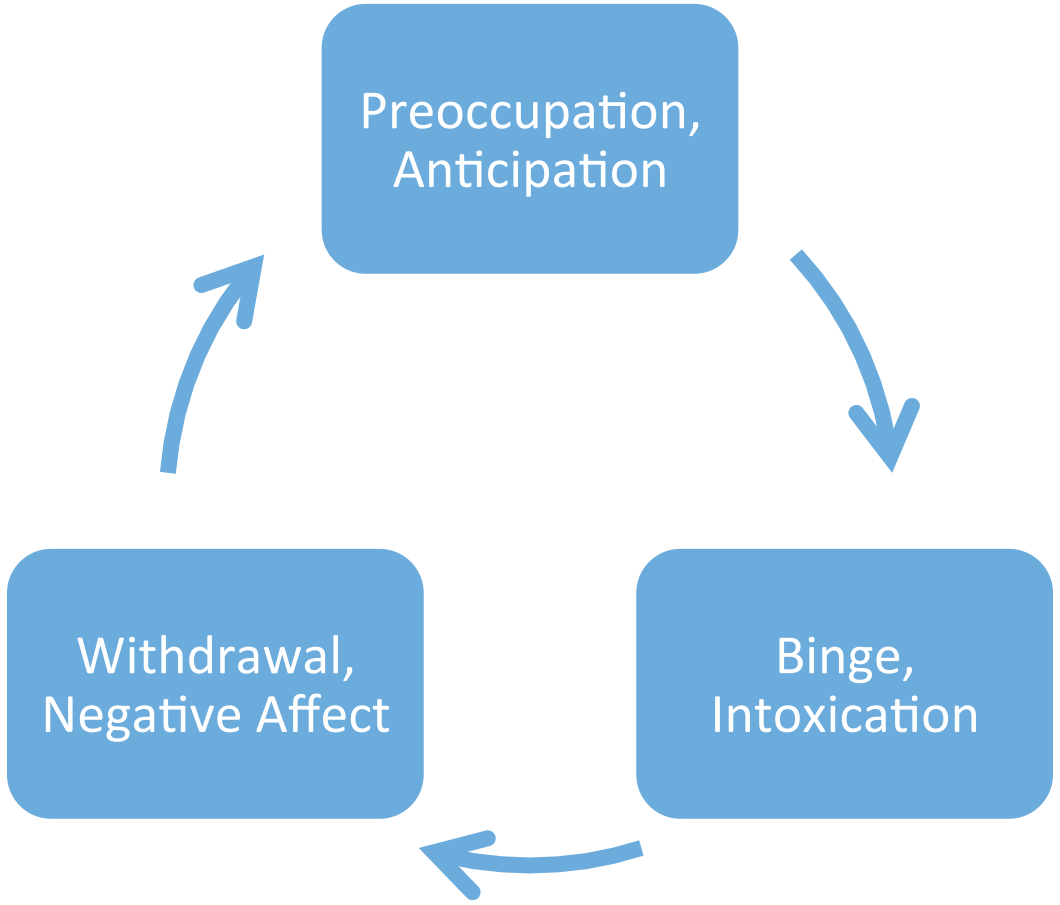
- Mild: 2-3 symptoms
- Moderate: 4-5 symptoms
- Severe: 6+ symptoms

Loss of **C**ontrol

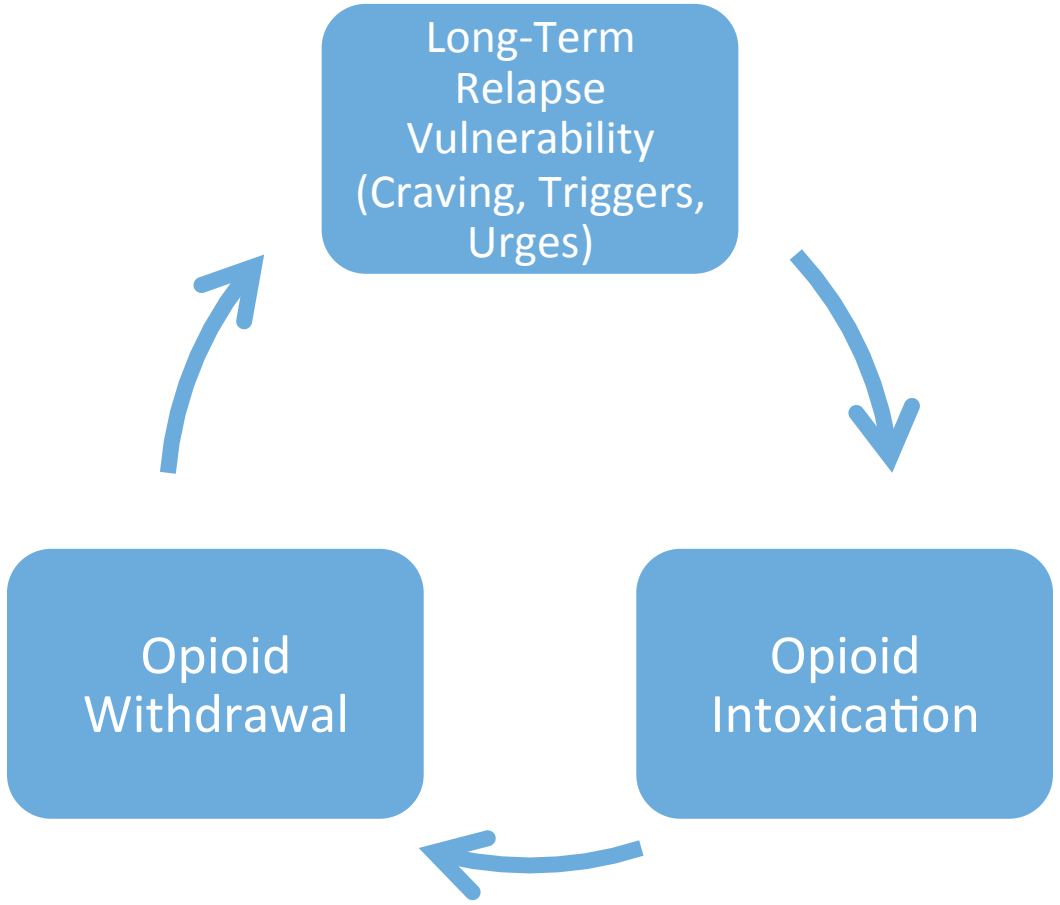
Continued use in spite of **C**onsequences

Craving/ **C**ompulsion

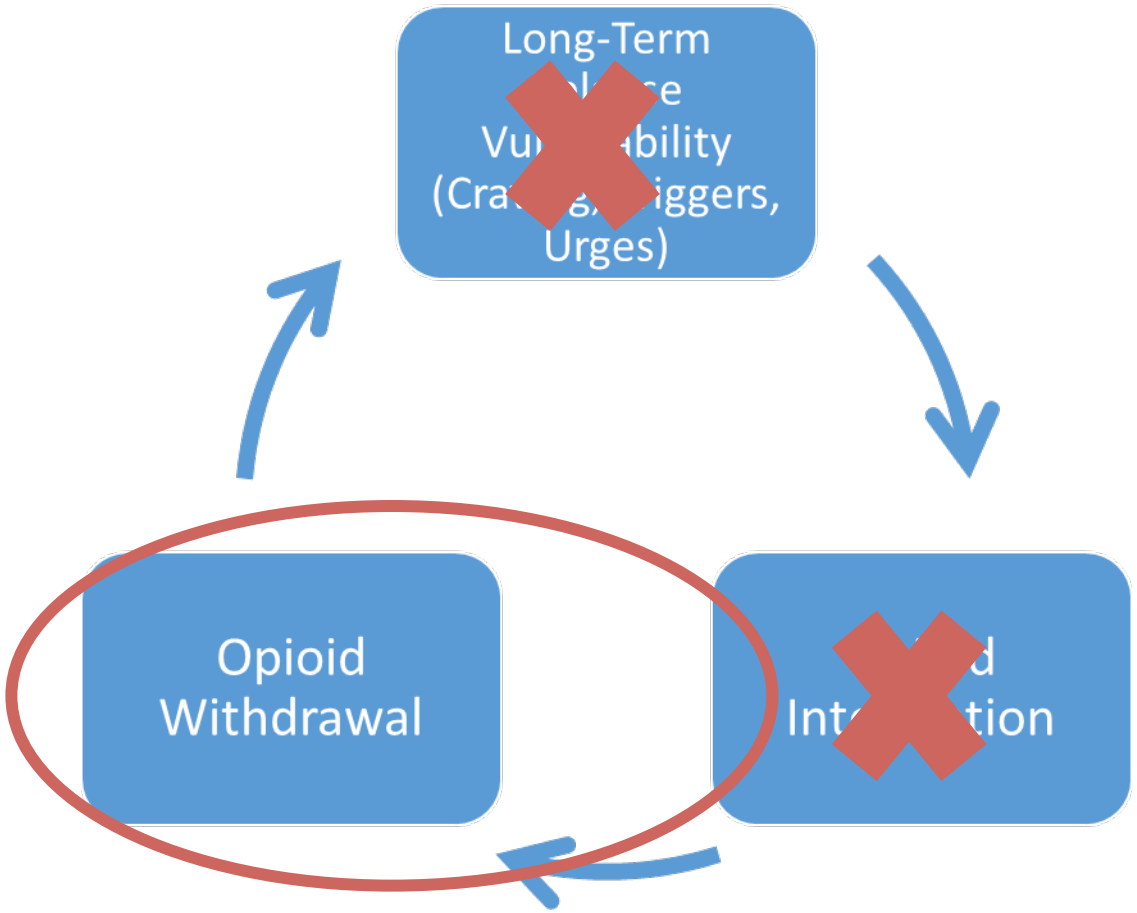
Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, American Psychiatric Association, 2013



Adapted from Koob & LeMoal. *Science.* 1997

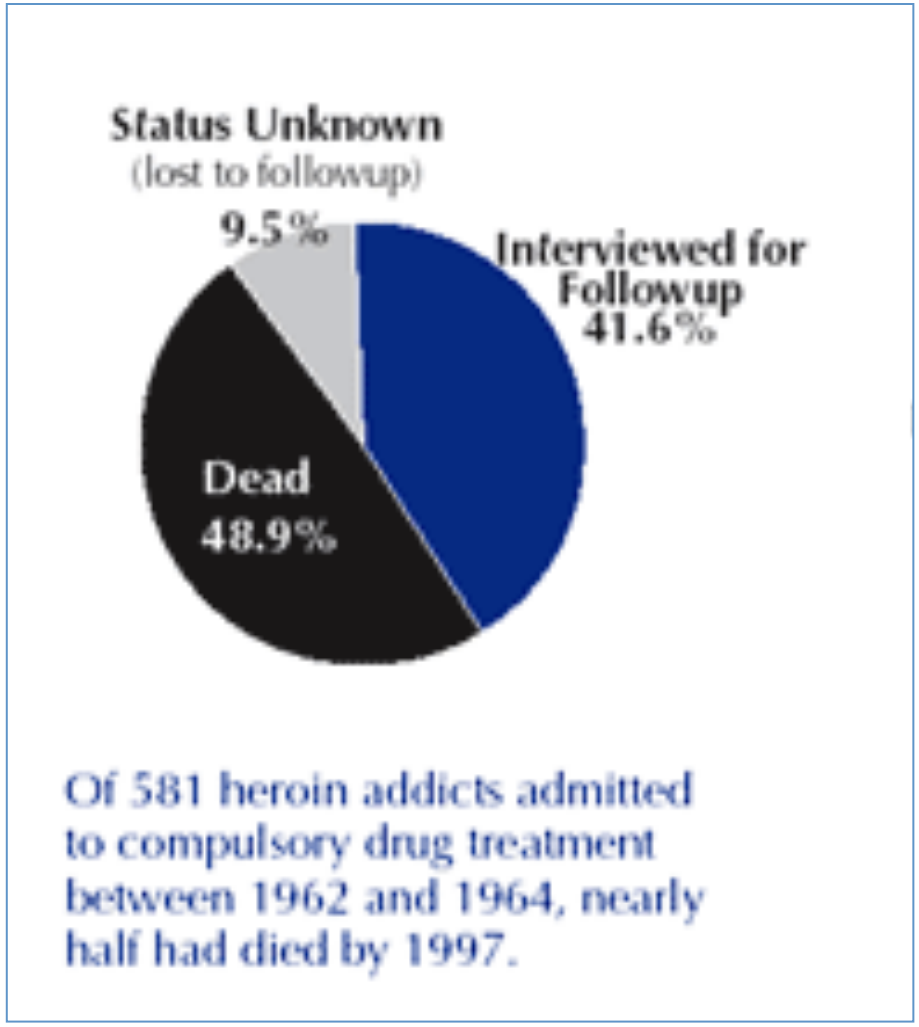

Long-Term Relapse Vulnerability (Craving, Triggers, Urges)
Opioid Intoxication
Opioid Withdrawal

Detox is NOT Sufficient Treatment



- Unlikely to lead to sustained recovery on its own
- Return to use within 1 week, 1 month very high
- Can increase the risk of overdose
- Either avoid or view as PRE-treatment

SEVERE, CHRONIC, RECURRENT DISEASE



- Longitudinal Study of Heroin Addicted Individuals
  - Death rate 50-100 times rate of non-addicted cohort
  - Of survivors, less than half achieved 5+ years of abstinence at any point
  - Subset with 15 years of abstinence: 25% relapsed in next 10 years

Hser et al. *Arch Gen Psychiatry*. 2001

How to Treat a Chronic, Recurrent, Severe Disease?

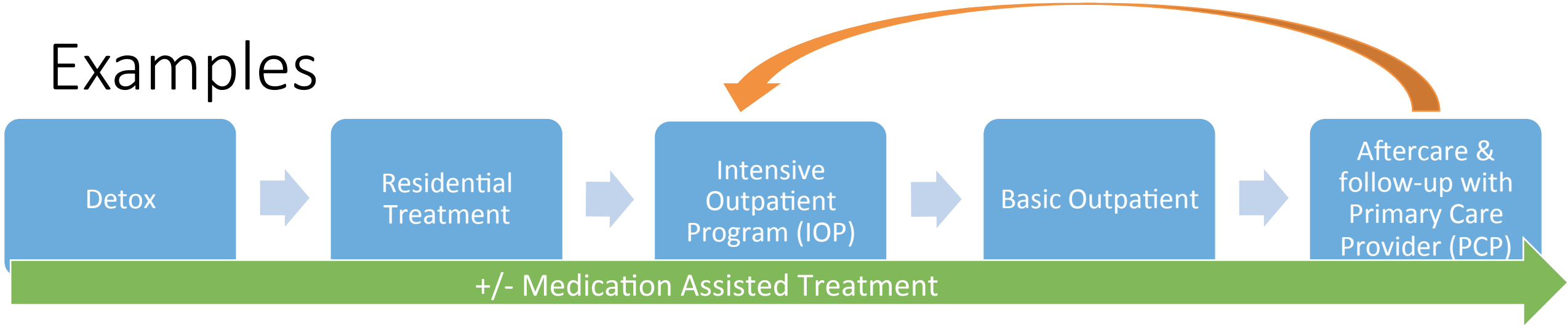
- Prevention
- Early intervention
- Treatment
  - Different types
  - Different settings
  - Different intensities
- Long-term
- Requirements change over time

What Does Treatment Look Like?

- Different “levels” of care
  - Based on severity of disease and psychosocial situation
  - Can vary from one hour per week to intensive inpatient programs
- Medication for opioid use disorder should be available, offered, and encouraged as a general rule

Source: ASAM Website

Examples


Detox
Residential Treatment
Intensive Outpatient Program (IOP)
Basic Outpatient
Aftercare & follow-up with Primary Care Provider (PCP)
+/- Medication Assisted Treatment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Detox

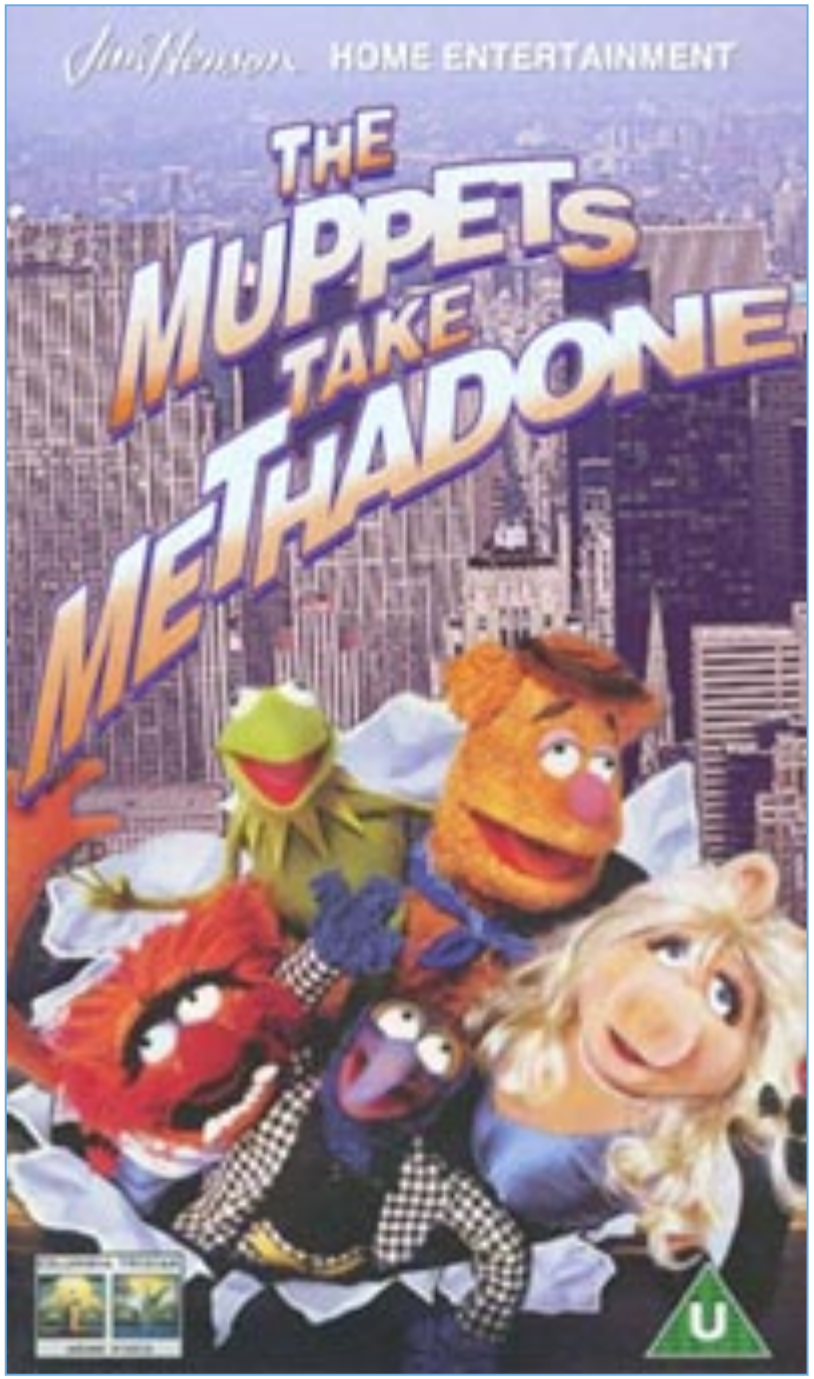

Detox
Residential Treatment

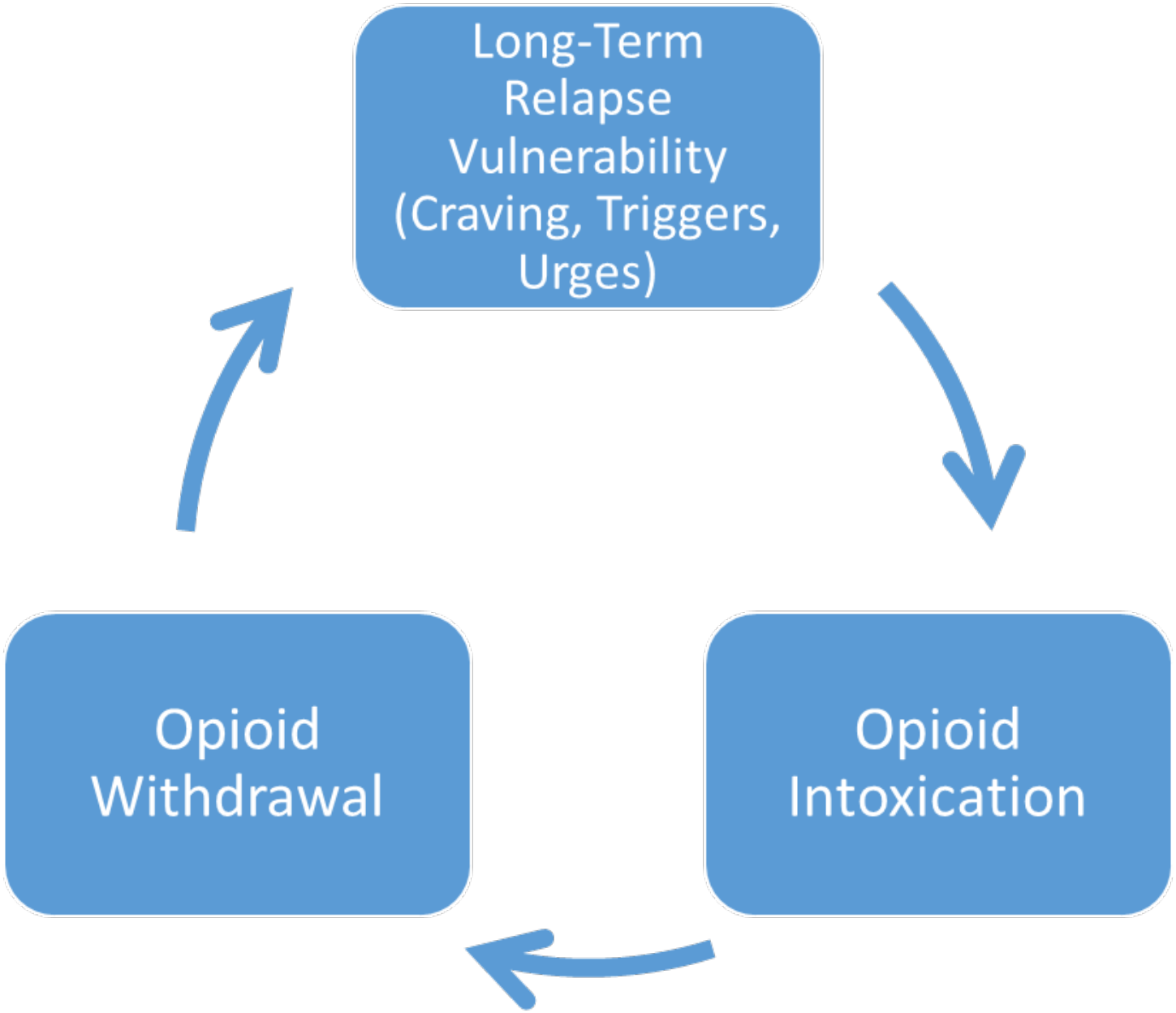
MAT: Medication Assisted Treatment

- Methadone
- Buprenorphine (Suboxone®, Subutex®, Bunavail®, Zubsolve®, and Probuphine® Implant)
- Long-Acting Injectable Naltrexone (Vivitrol®)

Methadone

- Synthetic opioid
- μ-opioid receptor full agonist
- Long half-life
- 1960's: clinical trials for addiction
- Restricted to federally-licensed Methadone Maintenance Treatment Programs (MMTP)
  - Does not apply to analgesic prescribing

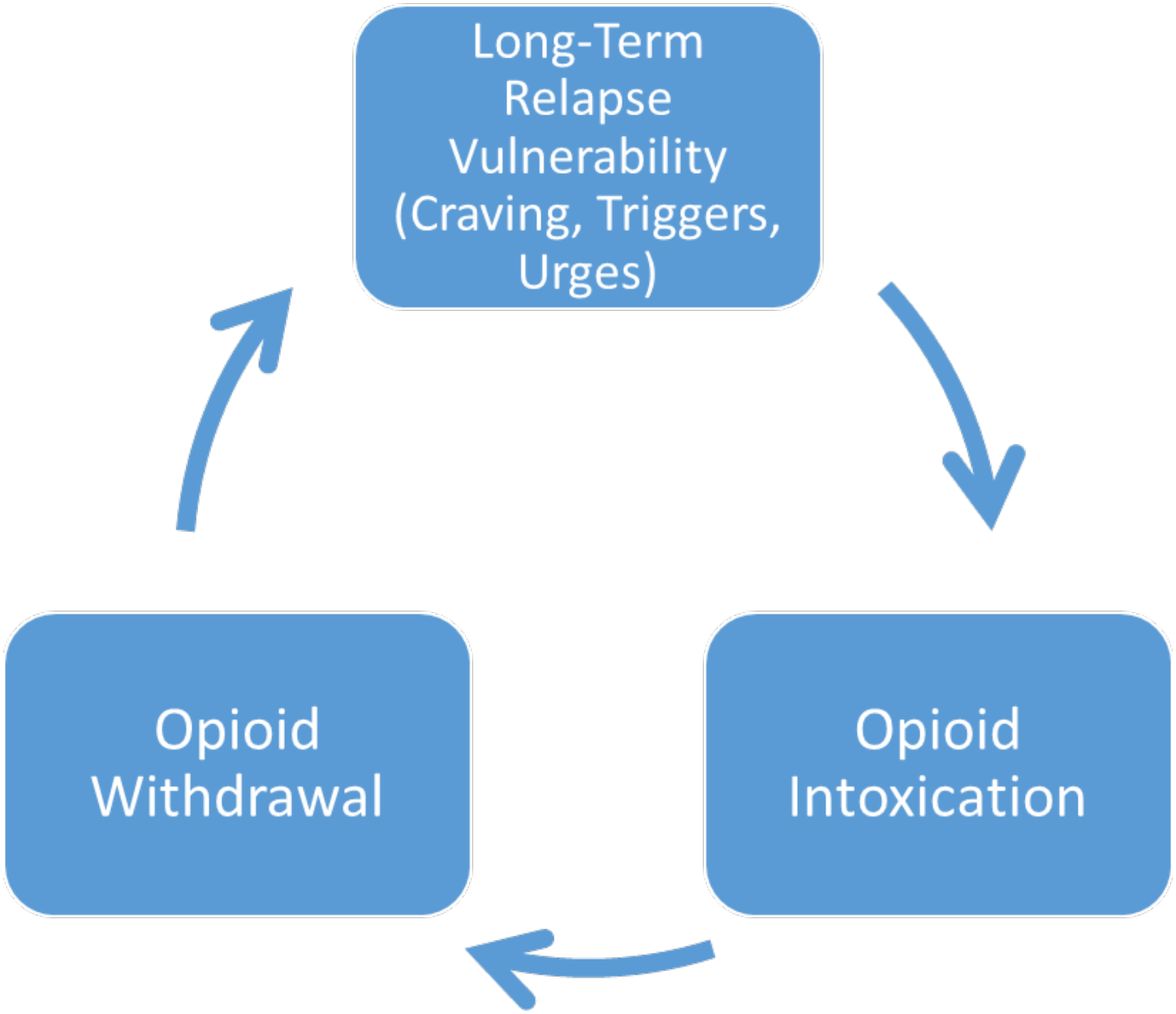




- Withdrawal suppression
- Decreased craving
- Reduced euphoric effects of additional opioids

Buprenorphine

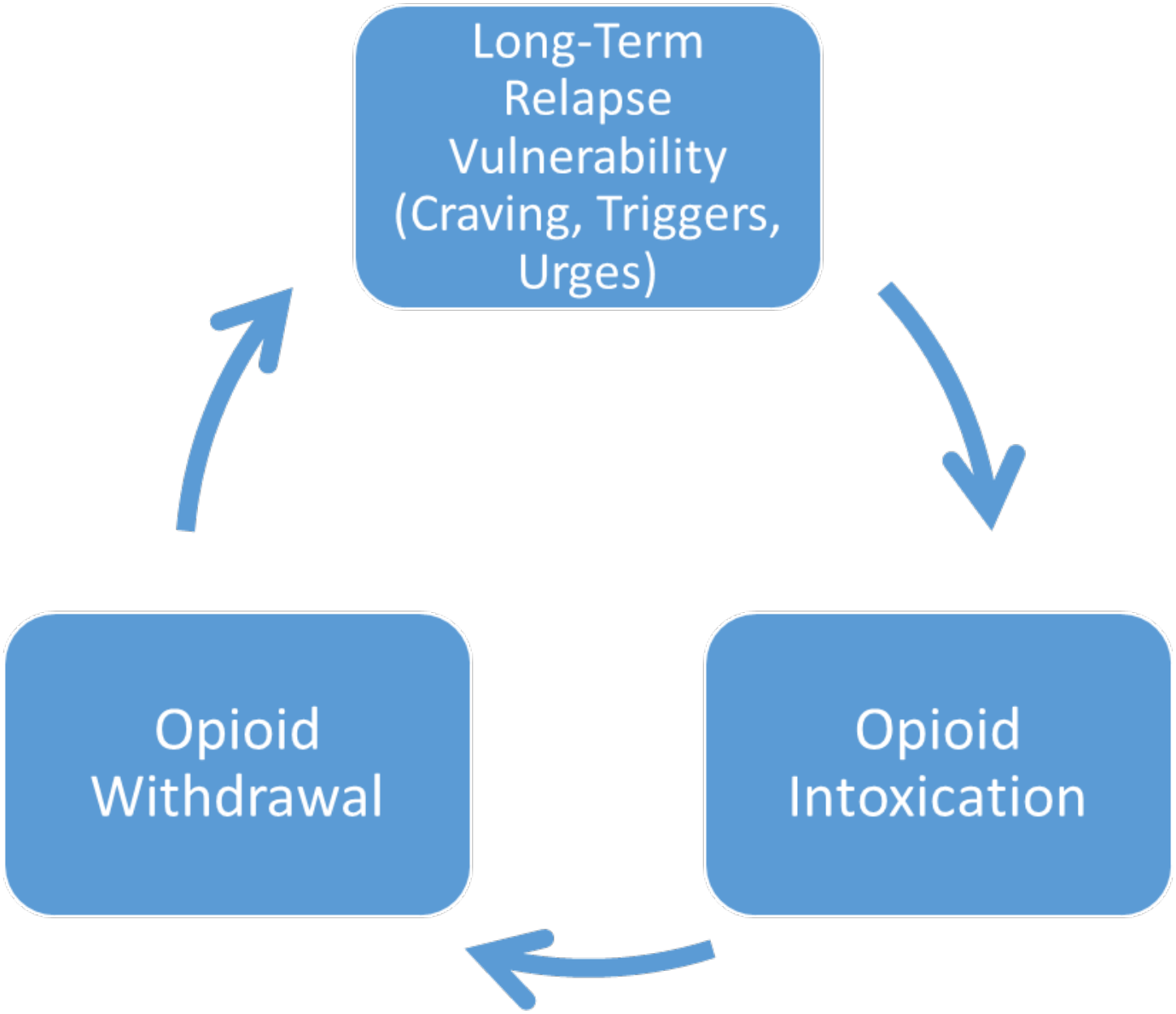
- Partial μ opioid receptor agonist
  - Better safety profile
  - Some full agonist effects
- High binding affinity to opioid receptor
- Long half-life
- 1990's: emerging evidence as treatment for OUD
- 2002: FDA approved for OUD treatment
  - Can be prescribed in outpatient settings with DATA waiver (Primary care, etc)
- Waivered NPs and PAs can now prescribe



- Withdrawal suppression
- Decreased craving
- Reduced euphoric effects of additional opioids

Naltrexone

- High affinity μ opioid receptor antagonist
- Long half-life
- 1984: FDA approved oral formulation for opioid dependence
  - Adherence major issue
- Depot preparation (Vivitrol®)
  - 2010: FDA approved for opioid dependence (2006 for alcohol dependence)
  - Much less well-studied than methadone and buprenorphine (and very little head-to-head comparisons), but current evidence is promising



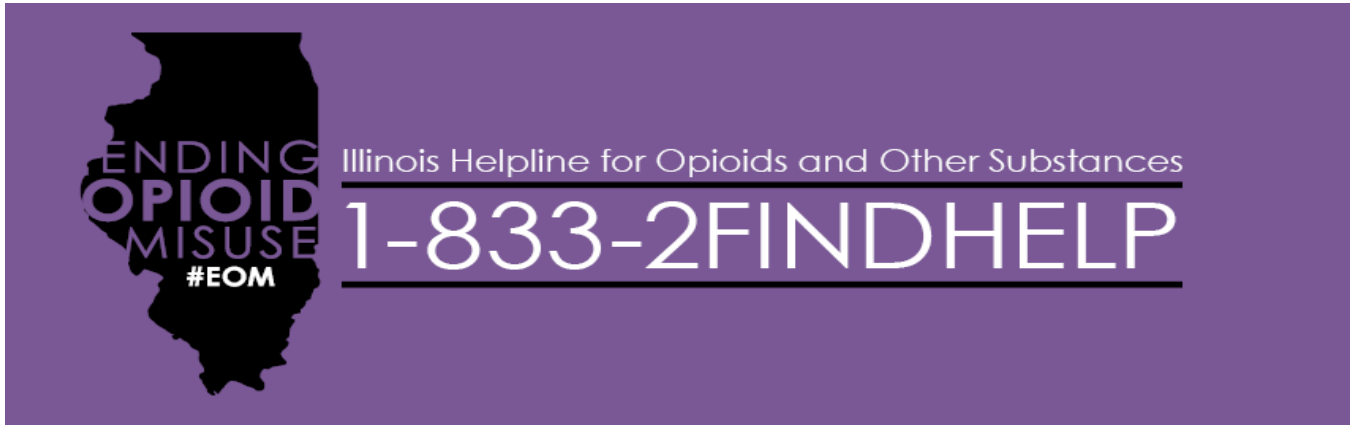
- Does not suppress withdrawal symptoms (and can worsen if started too soon)
- Decreased craving
- Reduced euphoric effects of additional opioids

Benefits of MAT

- Evidence is best established for agonist treatment
- High treatment retention
- Reduction in illicit drug use
- Improvement in physical health
  - Increase in length of life
  - Reduction in overdose deaths
  - Reduction in HIV, Hepatitis B, and Hepatitis C infection
- Improved psychiatric well-being
- Improvement in vocational functioning
- Improvement in legal functioning (e.g. less crime)
- Improved familial functioning

How Long is MAT Needed?

- Duration is critical factor
  - Most patients stay on MAT for less than a year
  - Substantial and sustained changes in social, vocational, etc. functioning can take years
- Risk of relapse after discontinuation very high even after substantial change
- Individualized approach needed
- Society, families, friends, physicians, patients themselves often view MAT in negative, stigmatized way (e.g. as a “crutch”)- important for providers to be counterbalancing force
- Many patients benefit from lifetime treatment



Newly launched state help line

https://overcomeopioids.org/

CDPH website that explains OUD treatment options in lay terms