# The Pharmacist's Role In Increasing Access To Treatment for Opioid Use Disorder

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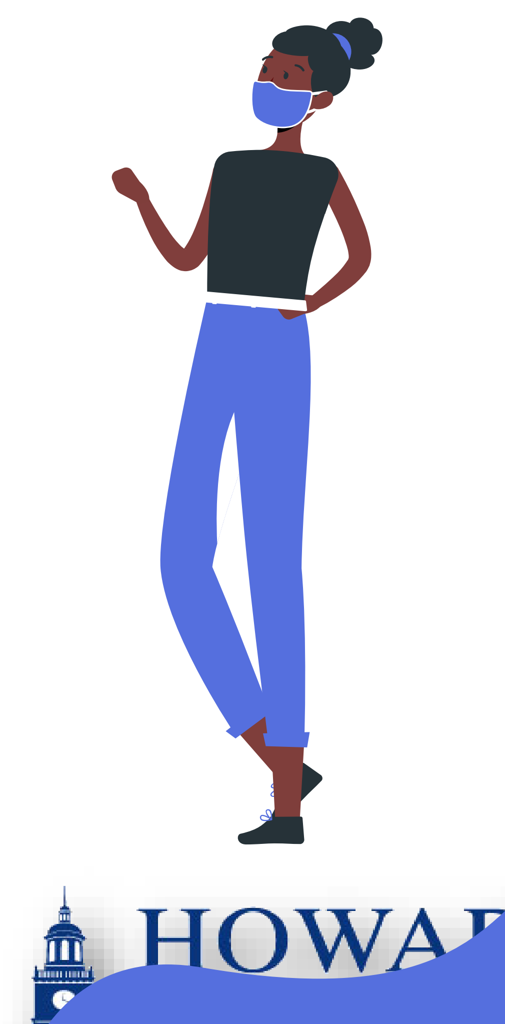
# Disclosures

"I have no relevant financial relationships or conflicts of interest to disclose"

- CJ Franklin



HOWA

# Learning Objectives

**01** Outline treatment approaches for opioid use disorder

**02** Explain the differences between pharmacologic treatment options for the management of opioid use disorder

**03** Summarize the findings of available data regarding the pharmacist-driven interventions for the management of opioid use disorder.

# Background: What Are Opioids?

- Opioids diminish the perception of and reaction to pain
- Produce feelings of euphoria
- Respiratory Depression, miosis, sedation
- Natural, or synthetic
- The misuse of opioids can result in opioid overdose and death
- Opioids have been citied to be the main cause of drug overdose deaths in the United States.

# Background: Examples Of Opioids

| Type | Name |
| --- | --- |
| Natural Opiates | Morphine, codeine, thebaine |
| Semi-synthetic Opioids | Heroin, hydromorphone, hydrocodone, oxycodone, buprenorphine |
| Fully synthetic Opioids | Fentanyl, methadone, merperidine, tramadol |

# Background: Lethal Doses

# Background: What is Opioid Use Disorder (OUD)?

"A problematic pattern of opioid use leading to clinically significant impairment or distress"

Li R, Leffers P, Doering PL. Substance-Use Disorders: Overview of Depressants, Stimulants, and Hallucinogens. In: DiPiro JT, Yee GC, Posey L, Haines ST, Nolin TD, Ellingrod V. eds. Pharmacotherapy: A Pathophysiologic Approach, 11e New York, NY: McGraw-Hill; . http://accesspharmacy.mhmedical.com/content.aspx?bookid=2577§ionid=231921773. Accessed April 20, 2020

# Biopsychosocial Model of OUD

# Background: Opioid Overdose

Excessive opioid receptor agonism

- Unintentional ingestion
- Intentional abuse
- Therapeutic Use

**Effects**

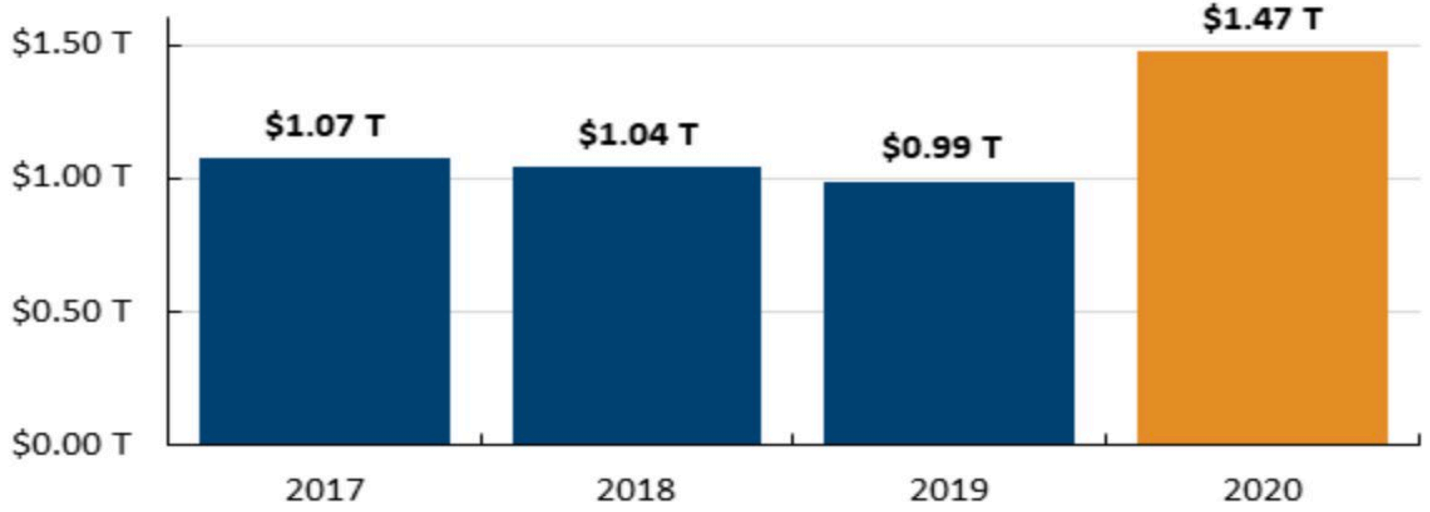
- Reduced sensitivity to changes in O2 and CO2
- Reduced tidal volume and respiratory frequency
- Respiratory depression and death due to hypoventilation

**What are some signs of an opioid overdose?**

- unconsciousness
- very small pupils
- slow or shallow breathing
- vomiting
- an inability to speak
- faint heartbeat
- limp arms and legs
- pale skin
- purple lips and fingernails

NIDA. Naloxone DrugFacts. National Institute on Drug Abuse website. https://www.drugabuse.gov/publications/drugfacts/naloxone. June 1, 2021 Accessed July 27, 2021.

# The Economic Toll of The Opioid Crisis



Source: Joint Economic Committee Democrats: The Economic Toll of the Opioid Crisis Reached Nearly $1.5 Trillion in 2020

# Drug-Involved Overdose Deaths

60,000
50,000
40,000
30,000
20,000
10,000
0

Synthetic Opioids other than Methadone (primarily fentanyl)
Psychostimulants with Abuse Potential (primarily methamphetamine)
Cocaine
Prescription Opioids (natural & semi-synthetic opioids & methadone)
Heroin
Benzodiazepines
Antidepressants

1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

Source: CDC WONDER

Number of Deaths: 450, 400, 350, 300, 250, 200, 150, 100, 50, 0

Number of Individual Drugs: 450, 400, 350, 300, 250, 200, 150, 100, 50, 0

| | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|---|
| Number of Deaths | 281 | 213 | 281 | 411 | 426 | 363 |
| Heroin | 151 | 97 | 102 | 106 | 67 | 30 |
| Fentanyl | 172 | 178 | 257 | 382 | 402 | 338 |
| Fentanyl Analogs | 107 | 78 | 69 | 119 | 95 | 151 |
| Prescription Opioids | 89 | 40 | 43 | 63 | 58 | 46 |
| Other | 20 | 12 | 7 | 19 | 24 | 20 |

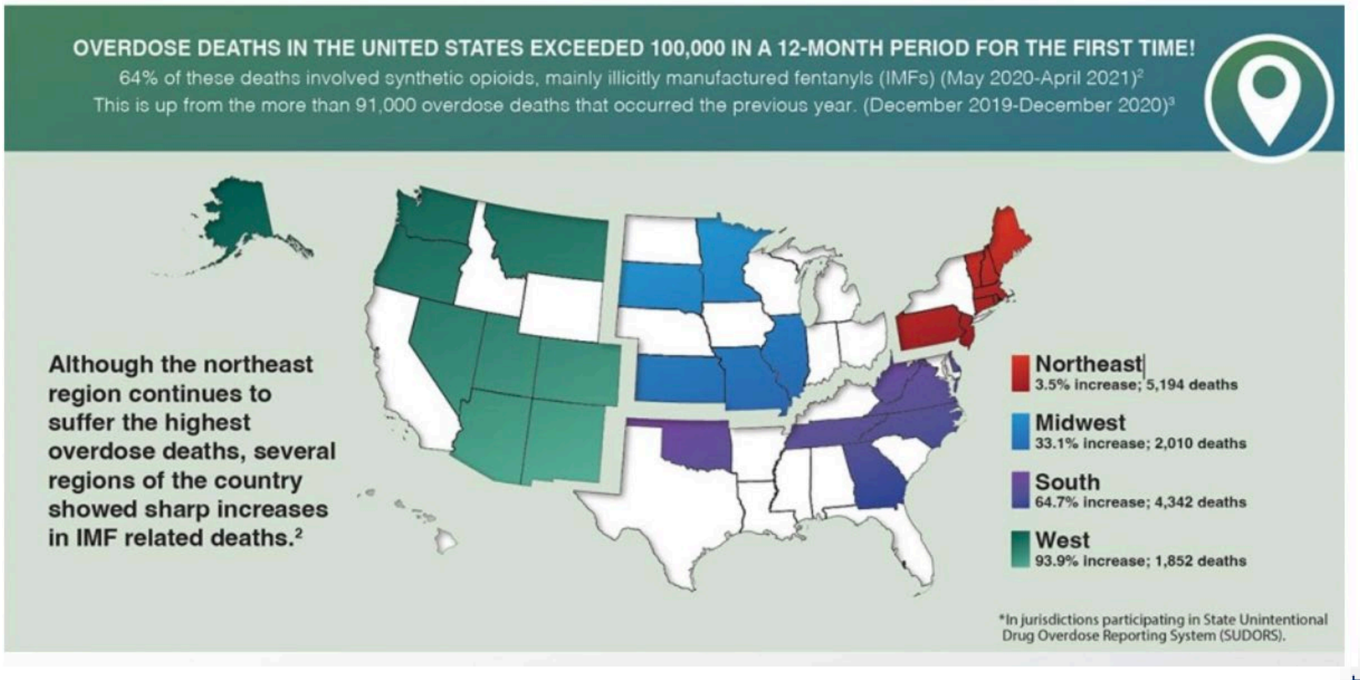
Source: DC Office of the Chief Medical Examiner

# Drug-Involved Overdose Deaths

WHAT IS **FENTANYL?**

Fentanyl is a synthetic opioid that is approximately **50X MORE POTENT THAN MORPHINE[1]**

Many people are exposed to fentanyl without knowledge while others use it intentionally because of its potency.

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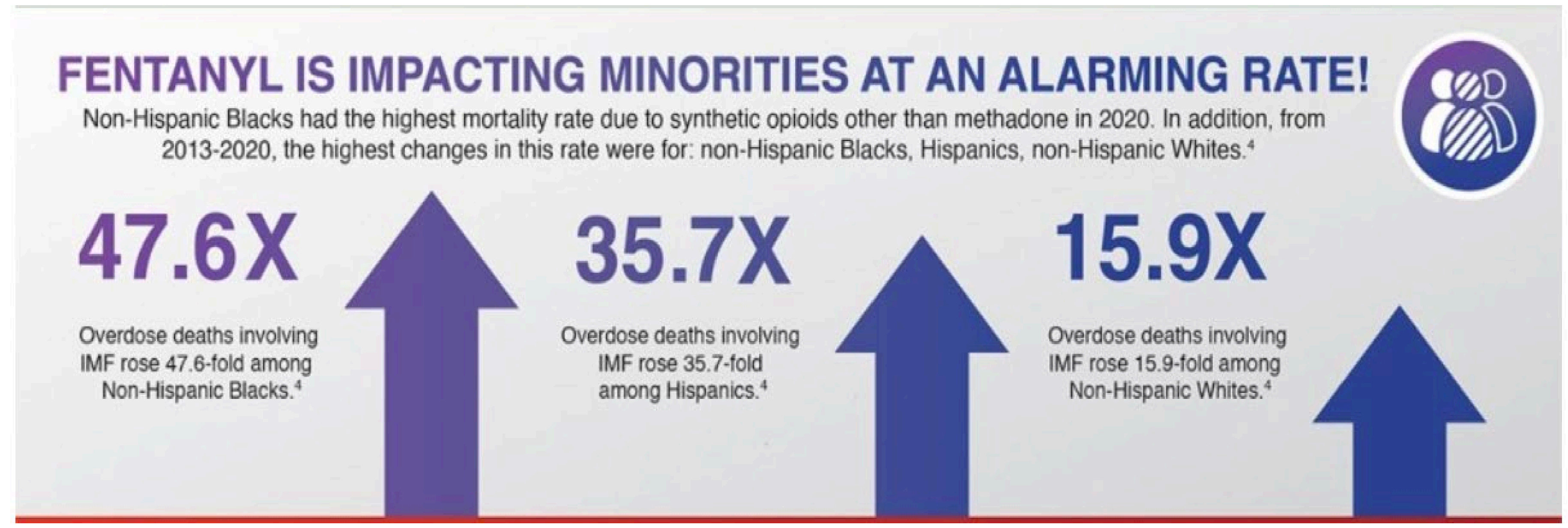
# Who Is Affected By OUD?



Opioid Overdose Death Rate for U.S. Black Population Is Higher Than for White

Fentanyl use exploded while government slept. Here's what to do now.

# Who Is Affected By OUD?

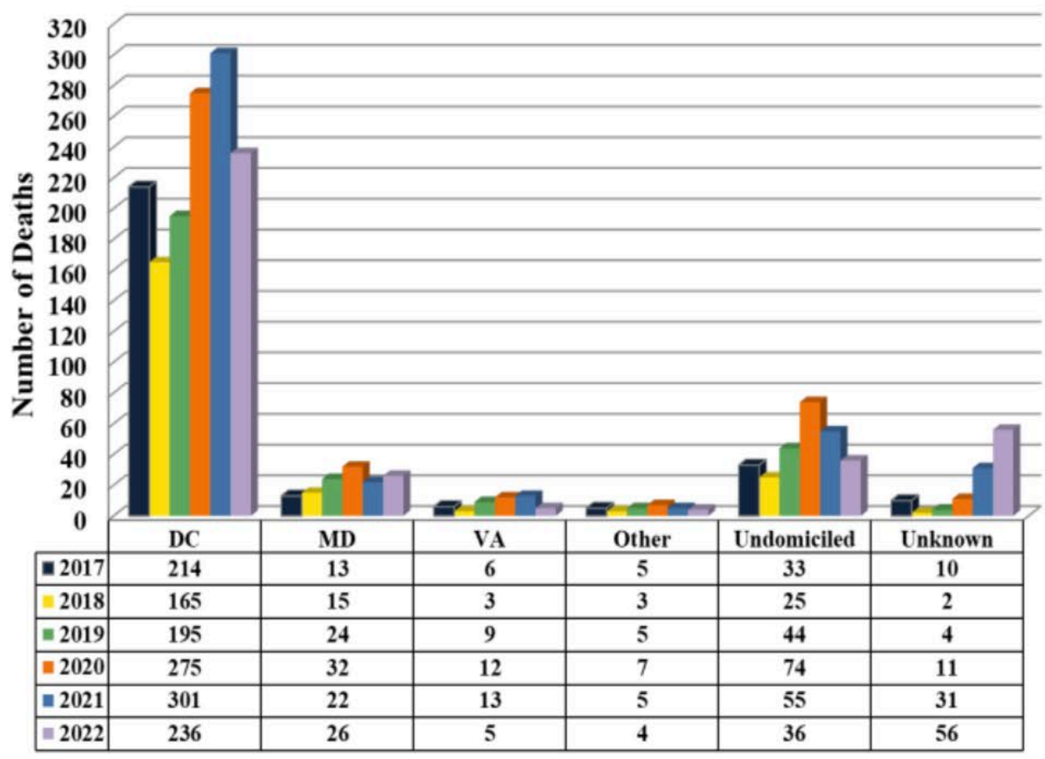
Fig. 6: Number of Drug Overdoses due to Opioid Use by Race/Ethnicity and Year



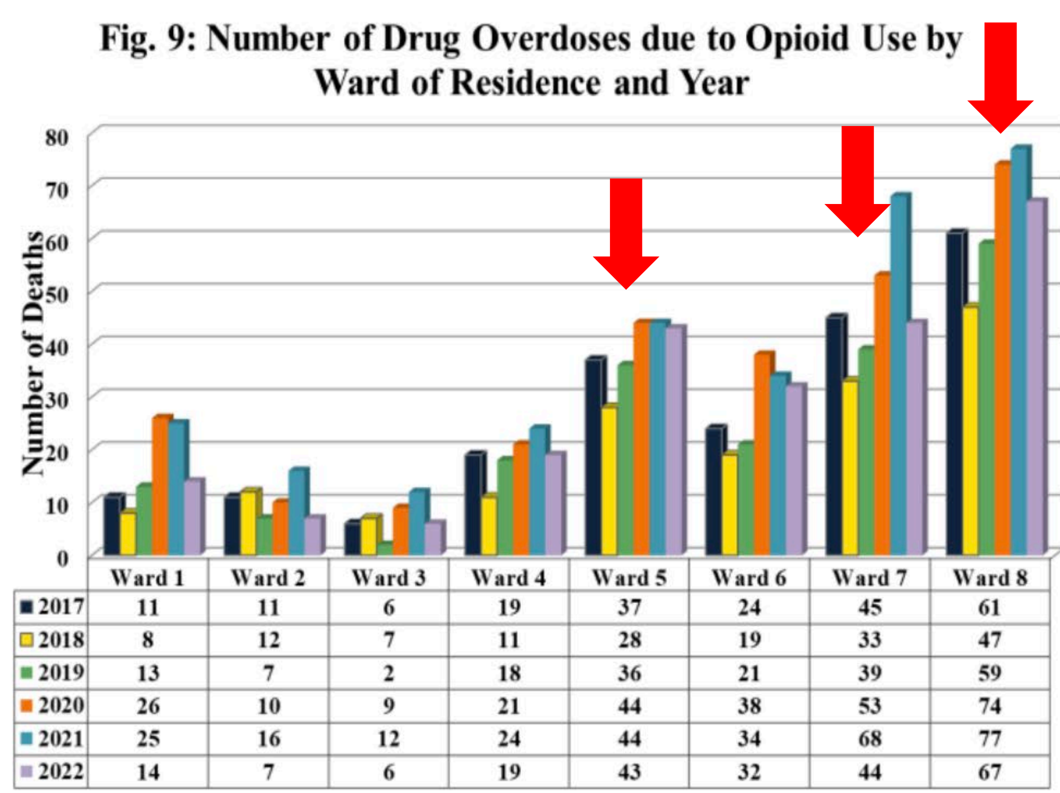
| | Black | White | Hispanic | Other |
|---|---|---|---|---|
| 2017 | 235 | 39 | 5 | 2 |
| 2018 | 179 | 30 | 3 | 1 |
| 2019 | 235 | 33 | 9 | 4 |
| 2020 | 351 | 38 | 19 | 3 |
| 2021 | 367 | 46 | 10 | 1 |
| 2022 | 308 | 35 | 15 | 3 |

Source: DC Office of the Chief Medical Examiner

# Who Is Affected By OUD?




| | DC | MD | VA | Other | Undomiciled | Unknown |
|---|---|---|---|---|---|---|
| 2017 | 214 | 13 | 6 | 5 | 33 | 10 |
| 2018 | 165 | 15 | 3 | 3 | 25 | 2 |
| 2019 | 195 | 24 | 9 | 5 | 44 | 4 |
| 2020 | 275 | 32 | 12 | 7 | 74 | 11 |
| 2021 | 301 | 22 | 13 | 5 | 55 | 31 |
| 2022 | 236 | 26 | 5 | 4 | 36 | 56 |

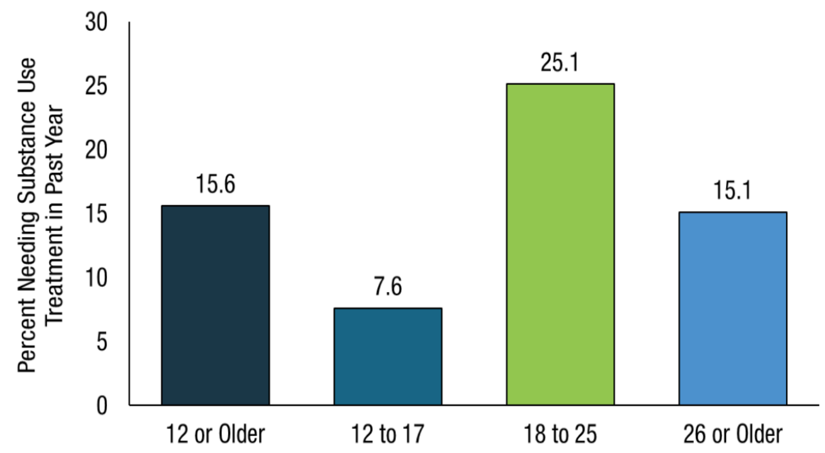



| | Ward 1 | Ward 2 | Ward 3 | Ward 4 | Ward 5 | Ward 6 | Ward 7 | Ward 8 |
|---|---|---|---|---|---|---|---|---|
| 2017 | 11 | 11 | 6 | 19 | 37 | 24 | 45 | 61 |
| 2018 | 8 | 12 | 7 | 11 | 28 | 19 | 33 | 47 |
| 2019 | 13 | 7 | 2 | 18 | 36 | 21 | 39 | 59 |
| 2020 | 26 | 10 | 9 | 21 | 44 | 38 | 53 | 74 |
| 2021 | 25 | 16 | 12 | 24 | 44 | 34 | 68 | 77 |
| 2022 | 14 | 7 | 6 | 19 | 43 | 32 | 44 | 67 |

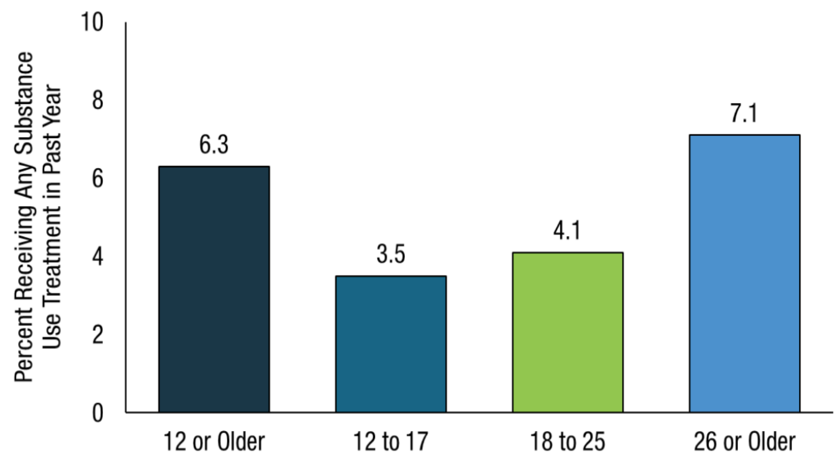
Source: DC Office of the Chief Medical Examiner

# Substance Use Treatment

## Need for Substance Use Treatment in the Past Year: Among People Aged 12 or Older; 2021




## Received Any Substance Use Treatment in the Past Year: Among People Aged 12 or Older Who Had an Illicit Drug or Alcohol Use Disorder in the Past Year; 2021




Note: Need for Substance Use Treatment is defined as having an illicit drug or alcohol use disorder in the past year or receiving substance use treatment at a specialty facility.

Source: Substance Abuse and Mental Health Services Administration

# Access Barriers to OUD Treatment

| | Patient-Identified | Provider-identified | Administrator-identified or systems level |
|---|---|---|---|
| **Stigma** | Social stigma<br>Self-stigma<br>Buprenorphine stigma | Social stigma<br>Stigma of patients with OUD<br>Buprenorphine stigma | |
| **Treatment experiences and beliefs** | Willpower more important than treatment<br>Treated poorly by treatment center staff<br>Rigid treatment structure | Lack of patient need/demand for buprenorphine<br>Lack of interest/motivation in prescribing | Perception of anti-pharmacotherapy attitudes among providers |
| **Knowledge Gaps** | Lack of education on OUD treatment<br>Uncertainty about where to obtain care | Lack of training on OUD<br>Lack of confidence in treating OUD<br>Perception that OUD medication not effective | Lack of provider awareness of buprenorphine |
| **Logistics** | High out of pocket costs<br>Long wait times<br>“Fist-fail” policies | Time constraints<br>Low insurance reimbursement<br>Inability to refer to psychosocial supports<br>Diversion concerns<br>Lack of institutional support | Prior authorizations<br>Cost<br>Requirements for concurrent counseling or<br>Stepped treatment |

Mackey K, Veazie S, Anderson J, Bourne D, Peterson K. Barriers and Facilitators to the Use of Medications for Opioid Use Disorder: a Rapid Review. *J Gen Intern Med*. 2020;35(Suppl 3):954-963. doi:10.1007/s11606-020-06257-4

# Approach To Treatment

Substance use disorder took my son. When will we treat people with this horrific disease?

All FDA approved medications and naloxone should be available for all patients.

The Prescription Drug Monitoring Program should be checked regularly

Patients referral for psychosocial treatment based on psychosocial needs

The venue for treatment should be considered carefully

# Goals of Treatment

Reduction in dependency on substance

Reduction in withdrawal symptoms

Prevention of death from substance

# MEDICATIONS FOR OPIOID OVERDOSE, WITHDRAWAL, & ADDICTION

**Medications for opioid overdose, withdrawal, and addiction are safe, effective and save lives.**

The National Institute on Drug Abuse supports research to develop new medicines and delivery systems to treat opioid use disorder and other substance use disorders, as well as other complications of substance use (including withdrawal and overdose), to help people choose treatments that are right for them.

FDA-approved medications for opioid addiction, overdose, and withdrawal work in various ways.

**Opioid Receptor Agonist**
Medications attach to opioid receptors in the brain to block withdrawal symptoms and cravings.

**Opioid Receptor Partial Agonist**
Medications attach to and partially activate opioid receptors in the brain to ease withdrawal symptoms and cravings.

**Opioid Receptor Antagonist**
Medications block activity of opioid receptors in the brain to prevent euphoric effects (the high) of opioids and alcohol and help reduce cravings.

**Adrenergic Receptor Agonist**
A medication that attaches to and activates adrenergic receptors in the brain and helps alleviate withdrawal symptoms.

REDUCES OPIOID USE AND CRAVINGS

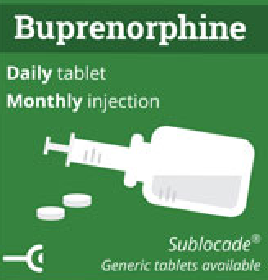
**Methadone**
**Daily** liquid or tablet

*Dolophine®, Methadose®*
*Generics available*

**Naltrexone**
**Monthly** Injection

*Vivitrol®*

**Buprenorphine**
**Daily** tablet
**Monthly** injection



*Sublocade®*
*Generic tablets available*

**Buprenorphine/ Naloxone**
**Daily** film under the tongue or tablet

*Zubsolv®, Suboxone®*
*Generics available*

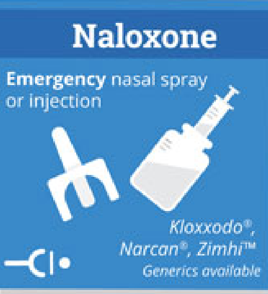
TREATS WITHDRAWAL SYMPTOMS

**Lofexidine**
**As-needed** tablet

*Lucemyra®*

REVERSES OVERDOSE

**Naloxone**
**Emergency** nasal spray or injection



*Kloxxodo®, Narcan®, Zimhi™*
*Generics available*

NIH National Institute on Drug Abuse

*Source: National Institute on Drug Abuse; National Institutes of Health; U.S. Department of Health and Human Services.*

nida.nih.gov

# Treatment

| | Methadone (CII) | Extended Release Injectable Naltrexone (XR-NTX) | Buprenorphine (CIII) |
|---|---|---|---|
| **MOA and Pharmacology** | **Full mu-opioid receptor agonist**, long half-life, once daily dosing | **Mu-opioid receptor antagonist**, not addictive and does not provide analgesia | **Partial mu-opioid receptor agonist**, long half-life (SL up to 36 hrs.), **ceiling effect**, blocks intoxicating effects of opioids |
| **Side Effects** | Resp. depression, constipation, sedation, QTc prolongation | Injection site reactions, toothache, LFT elevation, insomnia, nasopharyngitis | Resp. depression, constipation, sedations, vomiting, dizziness, blurred vision,<br>SL film: oral hypoesthesia, mucosal erythema or glossodynia, **dental problems** |
| **Routes of Administration used in MAT** | Orally as solid or commonly as liquid concentrate | IM | SL, buccal tablet, buccal film.<br>SQ* and subdermal** |
| **Phase of Treatment** | Medically supervised withdrawal, maintenance | Prevention of relapse to opioid dependence | Medically supervised withdrawal, maintenance |

*Provider and pharmacy must be certified in REMS program and only dispense to provider for administration
**Prescribers must be certified in REMS program to insert/remove implants

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# Contraindications and precautions

| Medication | Contraindication | Warning and Precaution |
|---|---|---|
| **Methadone** | Hypersensitivity, resp. depression, severe bronchial asthma/ hypercapnia, paralytic ileus | Qtc prolongation, diversion, misuse and physical dependence are possible, RD with CNS depressants, head injury, increased intracranial pressure, liver disease**, CYP3A4,2C19,2B6, 2C9, 2D6 interactions**, concomitant SUD and psychiatric disorders |
| **Buprenorphine (all formulations)** | Hypersensitivity | Diversion, misuse and physical dependence are possible, RD with CNS depressants, neonatal withdrawal, not recommended with severe hepatic impairment, possible sedation, precipitated withdrawal |
| **Naltrexone (oral and injectable)** | Hypersensitivity to drug or diluent, patients dependent on opioids, patients receiving opioid, patient in acute opioid withdrawal | Vulnerability to overdose, injection site reactions, precipitated opioid withdrawal, monitor for depression and suicidality, emergency reversal of opioid blockade may require critical care setting, eosinophil pneumonia has been reported, administer IM with caution patients with thrombocytopenia or coagulation disorder |

# Evaluation of Therapeutic Outcomes

**01**

Monitor for withdrawal reactions using validated scale

**02**

Assess medication side effects and drug interactions

**03**

Regular urine drug screens and PDMP profile review

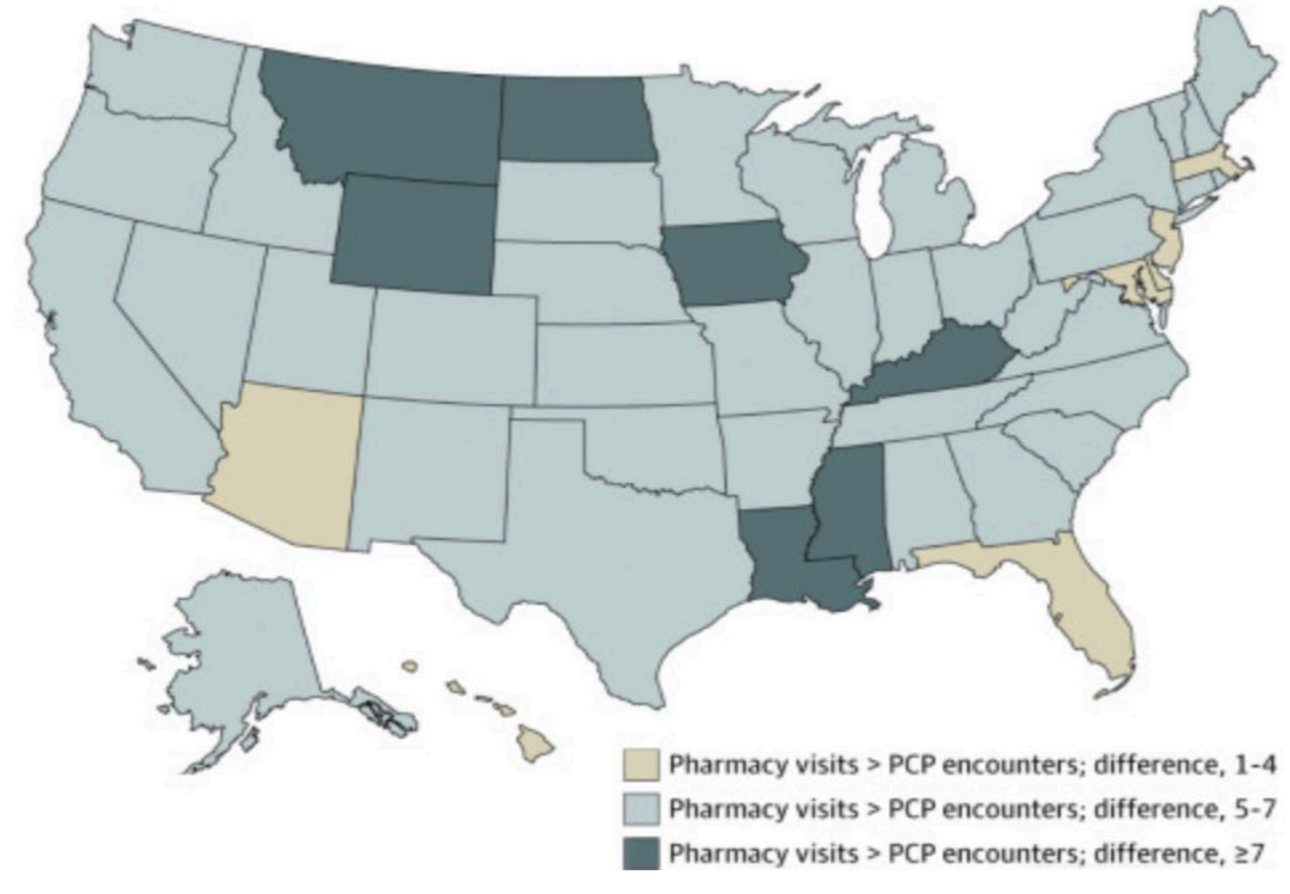
**04**

Continue patient education to ensure proper medication administration and safety

**05**

Ongoing psychosocial support

# HOW OFTEN DO PATIENTS SEE THEIR PHARMACIST?



Berenbrok LA, Gabriel N, Coley KC, Hernandez I. Evaluation of Frequency of Encounters With Primary Care Physicians vs Visits to Community Pharmacies Among Medicare Beneficiaries. *JAMA Netw Open.* 2020;3(7):e209132. doi:10.1001/jamanetworkopen.2020.9132

# Most Texas pharmacies are not prepared to dispense buprenorphine/naloxone films & naloxone nasal spray

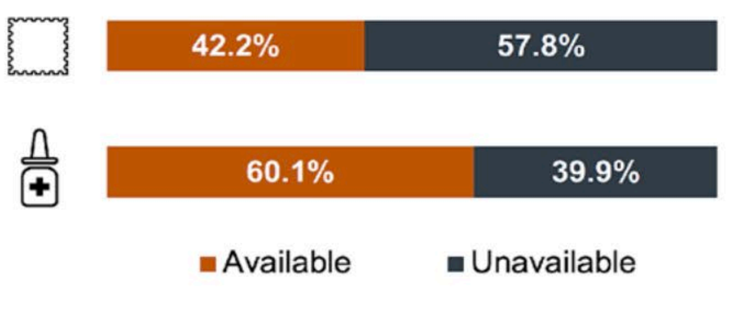
*A cross-sectional telephone audit with a secret shopper approach conducted in Spring 2020*

**704 pharmacies audited**
471 chains
233 independents

**BUP/NX 8/2mg**
generic #14 films

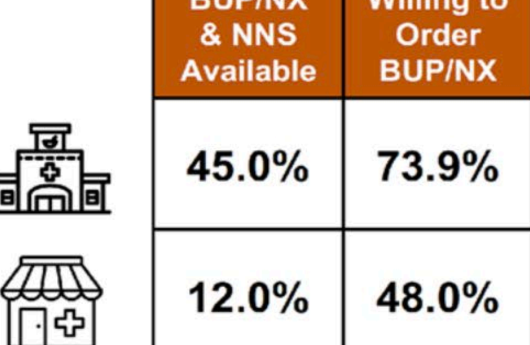
**NNS 4mg**
brand #1 box

**34.1% reported availability of both medications for prompt dispensing**




**62.2% without BUP/NX available were willing to order it (M = 2 days)**

**Availability & willingness to order were higher in chains vs independents**



| | BUP/NX & NNS Available | Willing to Order BUP/NX |
|---|---|---|
| Chain | 45.0% | 73.9% |
| Independent | 12.0% | 48.0% |

Hill LG, Loera LJ, Evoy KE, Torrez SB, Renfro ML, Zagorski CM, Perez JC, Jones SM, Reveles KR. Availability of buprenorphine/naloxone films and naloxone nasal spray in community pharmacies in Texas, USA. *Addiction*. DOI: 10.1111/ADD.15314

# Pharmacy Related Barriers

LACK OF TIME

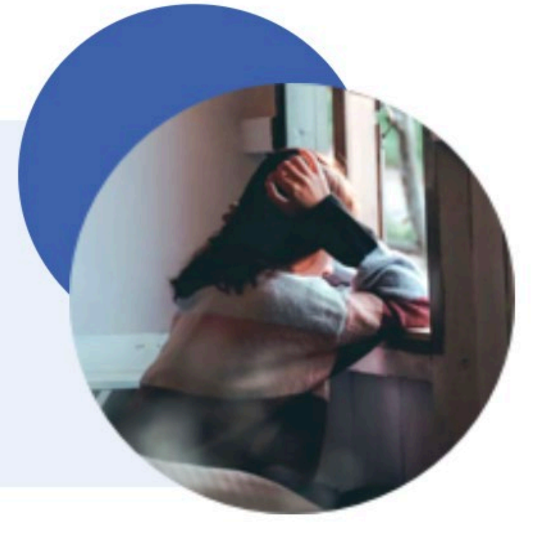
Insufficient Knowledge

# Pharmacy Related Barriers

# ENDING THE STIGMA OF ADDICTION

Learn about stigma

See how stigma affects the opioid epidemic



Learn how you can help

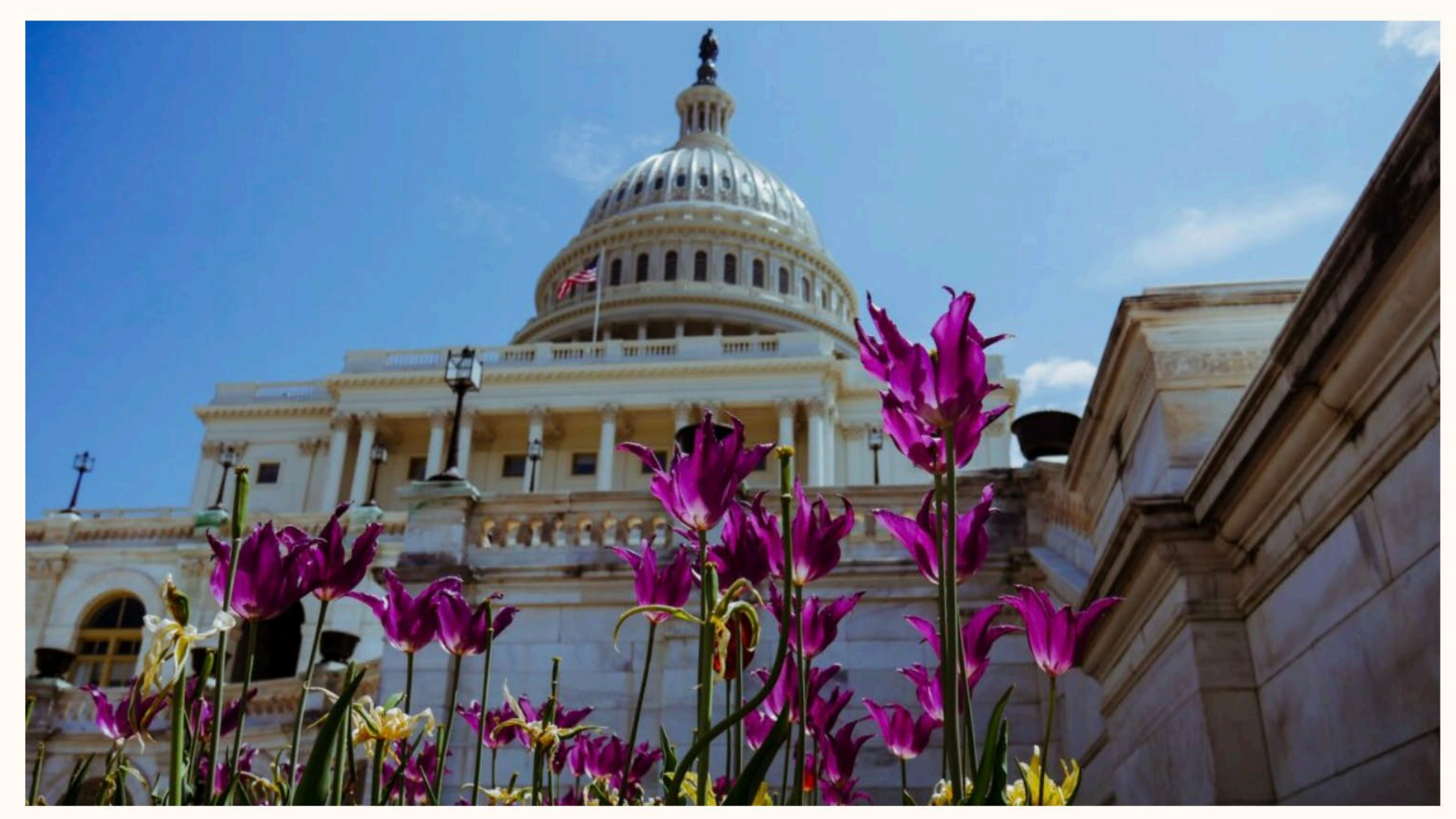
https://www.shatterproof.org/

# Talking To Patients About Buprenorphine And Naloxone

| Instead of… | Use… |
|---|---|
| Addict<br>User/ Substance or drug abuser/ Junkie<br>Former addict / Reformed addict | Person with substance use disorder<br>Person with opioid use disorder/ Patient<br>Person in recovery/ Person who previously used drugs |
| Habit | Substance use disorder /Drug addiction |
| Abuse | Use/ Misuse/ Used other than prescribed |
| Clean | Abstinent from drugs/ Testing negative<br>Being in remission or recovery |
| Dirty | Person who uses drugs/ Testing positive |
| Addicted baby | Baby born to mother who used drugs while pregnant |

# MAT Act's passage is a critical step in overdose prevention

**December 2022**



# MAT Act: What’s New?

| | Pre-MAT Act | MAT Act |
|---|---|---|
| X-Waiver Registration, DEA ”X” prescribing number | ✓ | ✕ |
| Patient Limits | ✓ | ✕ |
| Eligible providers to prescribe buprenorphine for OUD. | ✓ | ✕ |
| X-Waiver training requirement | ✓ | ✕ |

**Figure 1.** Map of States with Laws Explicitly Authorizing Pharmacist Collaborative Practice Agreements, 2012



Note: Physician delegation is considered permissive in MI and WI, allowing physicians and pharmacists to enter into CPAs.

-1-

https://www.cdc.gov/dhdsp/pubs/docs/CPA-Team-Based-Care.pdf

# Evidence

EXPERIENCE | VOLUME 55, ISSUE 2, P187-192, MARCH 2015

Physician–pharmacist collaborative care model for buprenorphine-maintained opioid-dependent patients

Bethany A. DiPaula, PharmD, BCPP • Elizabeth Menachery, MD

DOI: https://doi.org/10.1331/JAPhA.2015.14177

INNOVATIVE PRACTICE Open Access

Development and implementation of a physician-pharmacist collaborative practice model for provision and management of buprenorphine/naloxone

Lindsay M. Mailloux, PharmD[1]; Matthew T. Haas, PharmD, BCPP, BCPS[2]; Janel M. Larew, PharmD, BCPS[3]; Beth M. DeJongh, PharmD, BCPP, BCPS[4]

DiPaula BA, Menachery E. Physician-pharmacist collaborative care model for buprenorphine-maintained opioid-dependent patients. *J Am Pharm Assoc (2003)*. 2015;55(2):187-192. doi:10.1331/JAPhA.2015.14177

Mailloux LM, Haas MT, Larew JM, DeJongh BM. Development and implementation of a physician-pharmacist collaborative practice model for provision and management of buprenorphine/naloxone. Ment Health Clin [Internet]. 2021;11(1):35-9. DOI: 10.9740/mhc.2021.01.035.

Addiction (Abingdon, England)

Author Manuscript HHS Public Access

## Buprenorphine physician-pharmacist collaboration in the management of patients with opioid use disorder: Results from a multisite study of the National Drug Abuse Treatment Clinical Trials Network

Li-Tzy Wu, William S. John, [...], and Paolo Mannelli

Wu LT, John WS, Ghitza UE, et al. Buprenorphine physician-pharmacist collaboration in the management of patients with opioid use disorder: results from a multisite study of the National Drug Abuse Treatment Clinical Trials Network. *Addiction*. 2021;116(7):1805-1816. doi:10.1111/add.15353

American Journal of Health-System Pharmacy: AJHP

Oxford University Press

## Leveraging pharmacists to maintain and extend buprenorphine supply for opioid use disorder amid COVID-19 pandemic

Alyssa M Peckham, PharmD, BCPP, Jennifer Ball, PharmD, BCACP, BCGP, [...], and Tran H Tran, PharmD, BCPS

Peckham AM, Ball J, Colvard MD, et al. Leveraging pharmacists to maintain and extend buprenorphine supply for opioid use disorder amid COVID-19 pandemic. *Am J Health Syst Pharm*. 2021;78(7):613-618. doi:10.1093/ajhp/zxab003

# Evidence

Physician-Delegated Unobserved Induction with Buprenorphine in Pharmacies

Green TC, Serafinski R, Clark SA, Rich JD, Bratberg J. Physician-Delegated Unobserved Induction with Buprenorphine in Pharmacies. *N Engl J Med*. 2023;388(2):185-186. doi:10.1056/NEJMc2208055

# Pharmacists Authority to Administer LAI MOUD

# THE PHARMACIST'S ROLE

- Collaborate with physicians
- Counsel patients to address patient-specific needs
- Educate patients, family members and caregivers
- Provide naloxone to high risk patients

# THE PHARMACIST'S ROLE

- Check PDMP for adherence and prescribing habits
- Address naloxone skepticism
- Obtain medical histories and assess for overdose risk
- Perform CMR's and Med. Recs

# THE PHARMACIST'S ROLE

- Use screening tools
- De-stigmatize buprenorphine and naloxone use
- Make recommendations to improve existing laws
- Work with state and local organizations to advocate for patient safety

# Thanks!

Do you have any questions?
Email me
careenjoan.franklin@howard.edu