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District Addiction Consultation Service



The Pharmacist's Role in Managing Patients with Opioid Use Disorder

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Financial Disclosure

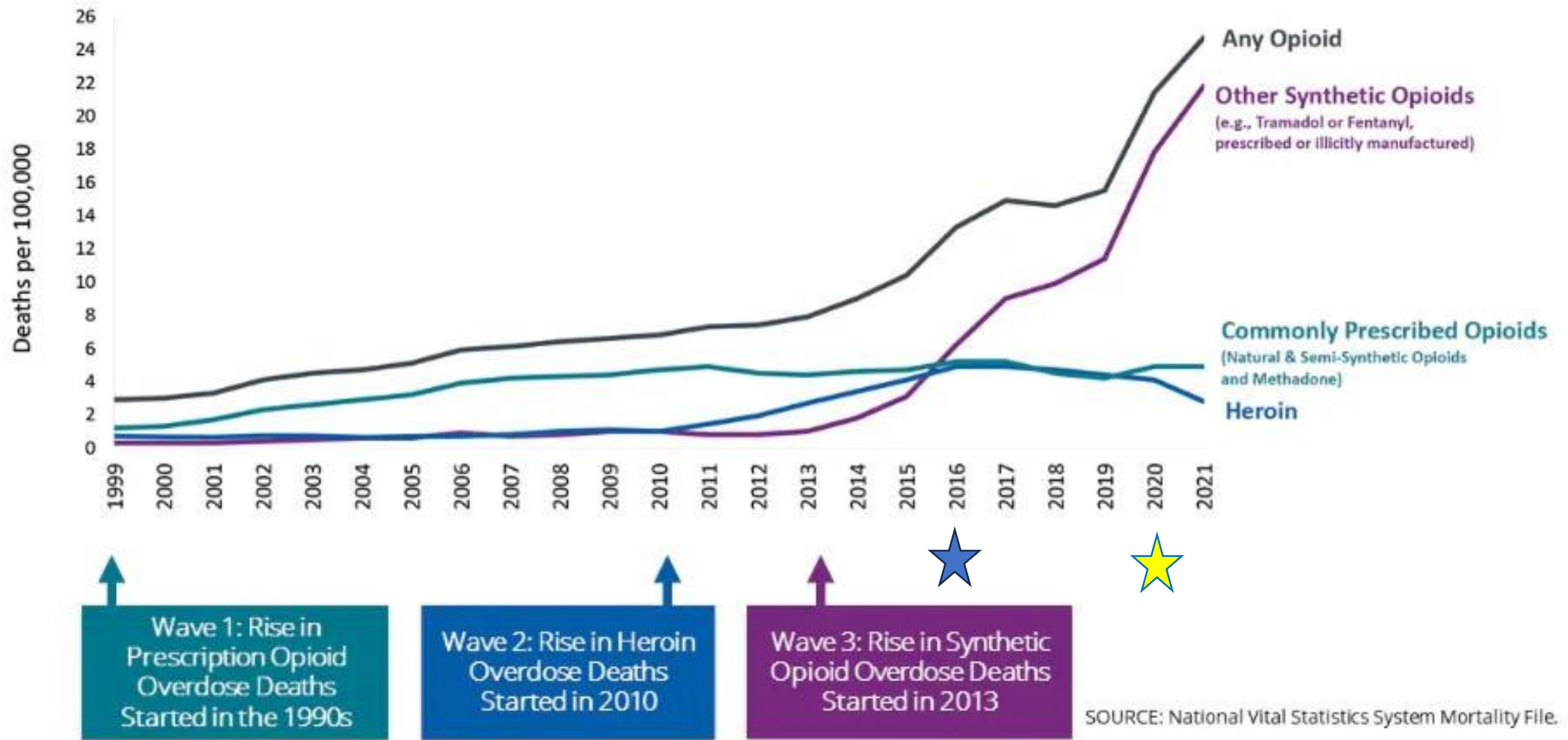
- *Bethany DiPaula, PharmD, BCPP, faculty for this activity, has no financial relationship(s) to disclose.*
- *None of the planners for this activity have financial relationships to disclose.*

Learning Objectives

- Describe the extent of the opioid crisis in the US
 - Cite examples of pharmacy harm reduction efforts
 - Identify opportunities where pharmacists can expand access to care for patients with opioid use disorder
 - Discuss strategies to address barriers and stigma in managing patients with opioid use disorder
-



Three Waves of Opioid Overdose Deaths



2016-polysubstance with stimulants (4th wave). Affecting disproportionately higher incidence of Black and American Indian/Alaska Native
 2020-xylazine

Adapted from <https://www.cdc.gov/opioids/basics/epidemic.html>. Accessed April 2024.



Knowledge Test

Which one of the following continues to be responsible for the majority of opioid overdose-related deaths?

A. Oxycodone

B. Fentanyl

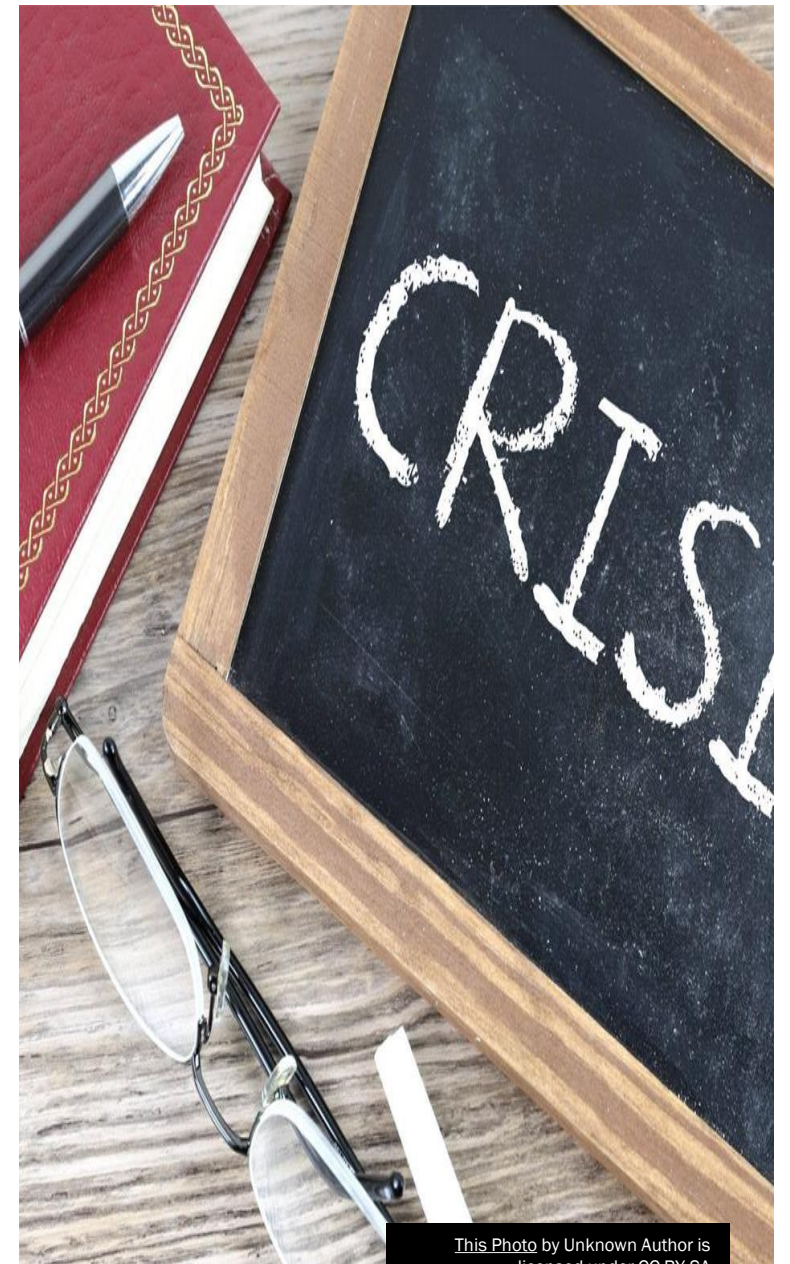
C. Tramadol

D. Heroin



Why are we here today?


- 6.1 million aged >12 yo met criteria for opioid use disorder (OUD)
 - 1.1 million (18.3%) with OUD received mOUD in past year
- Health Inequity (Less likely to receive mOUD)
 - Female
 - Non-Hispanic black adult
 - Unemployed
 - Located in nonmetropolitan area
 - Past-year comorbid cannabis use disorder



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Jones CM et al. JAMA Network Open 2023;6(8):e2327488. doi:10.1001/jamanetworkopen.2023.27488.

Substance Abuse and Mental Health Services Administration. (2023). Key substance use and mental health indicators in the United States: Results from the 2022 National Survey on Drug Use and Health (HHS Publication No. PEP23-07-01-006, NSDUH Series H-58). Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. <https://www.samhsa.gov/data/report/2022-nsduh-annual-national-report>. Accessed April 10, 2024



Pharmacists
want to help!

**Supportive
Environment
(Fight Stigma)**

**Screening
OUD/OD Risk
Call/text 988**

**Drug Take-Back
Programs**

**Sterile Syringe
Sales**

**Preexposure
Prophylaxis
(PrEP)**

**Naloxone
Rx/OTC**

mOUD

**XR Med
Administration**

**Collaborative
Drug Therapy
Management**

Opportunities for Pharmacists in OUD



Harm Reduction



Harm Reduction

What is it?

- **A set of practical strategies and ideas aimed at reducing negative consequences associated with drug use**

Examples

- **Person first language (person with OUD)**
- **Sterile Syringe Sales**
- **Drug Take Back**
- **Preexposure Prophylaxis (PrEP)**
- **Naloxone**
- **mOUD**

Naloxone





Naloxone Legislation

- All states/DC have legislation expand naloxone access to the community
- States allowing pharmacists to dispense naloxone directly to patients without Rx ↓ in fatal OD within 3 years of legislation

https://www.networkforphl.org/_asset/qz5pvn/network-naloxone-10-4.pdf

Abouk R. JAMA Intern Med 2019; 179:805-811.

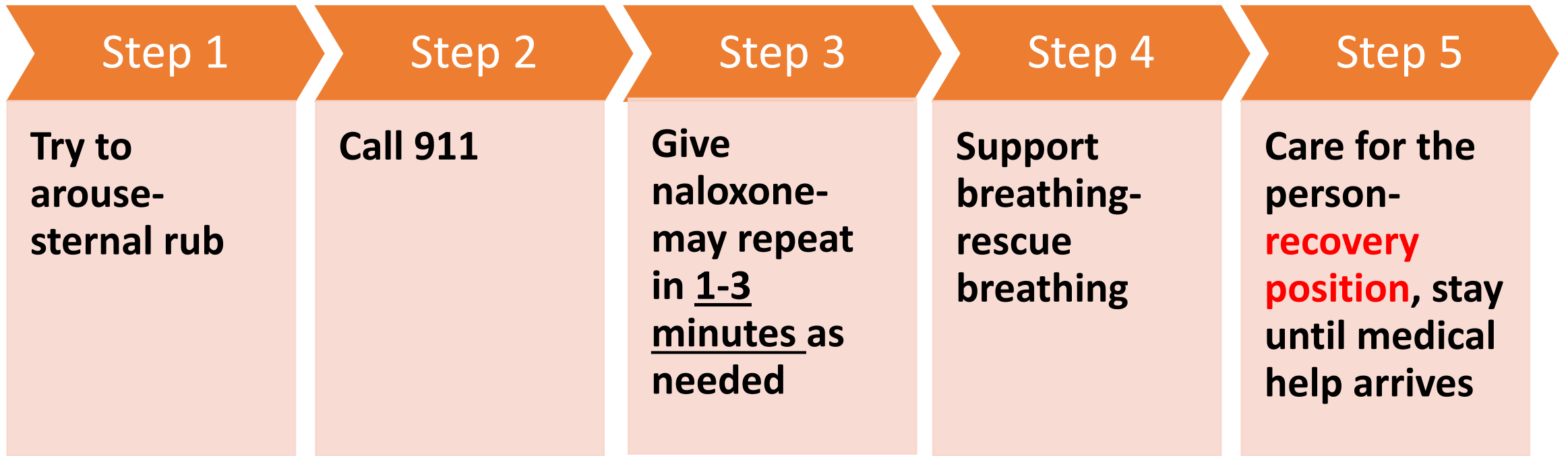
Opioid Overdose Signs/Symptoms

- Extreme sedation unresponsive to verbal arousal or sternal rub
- Difficulty breathing (slowed, shallow, not at all)
- Loud snoring, gurgling sounds (death rattle)
- Fingernails or lips blue/purple
- Skin pale/gray, clammy
- Pulse slow/erratic and/or low blood pressure



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Steps for Bystander Management of Opioid Overdose



Naloxone Saves Lives!

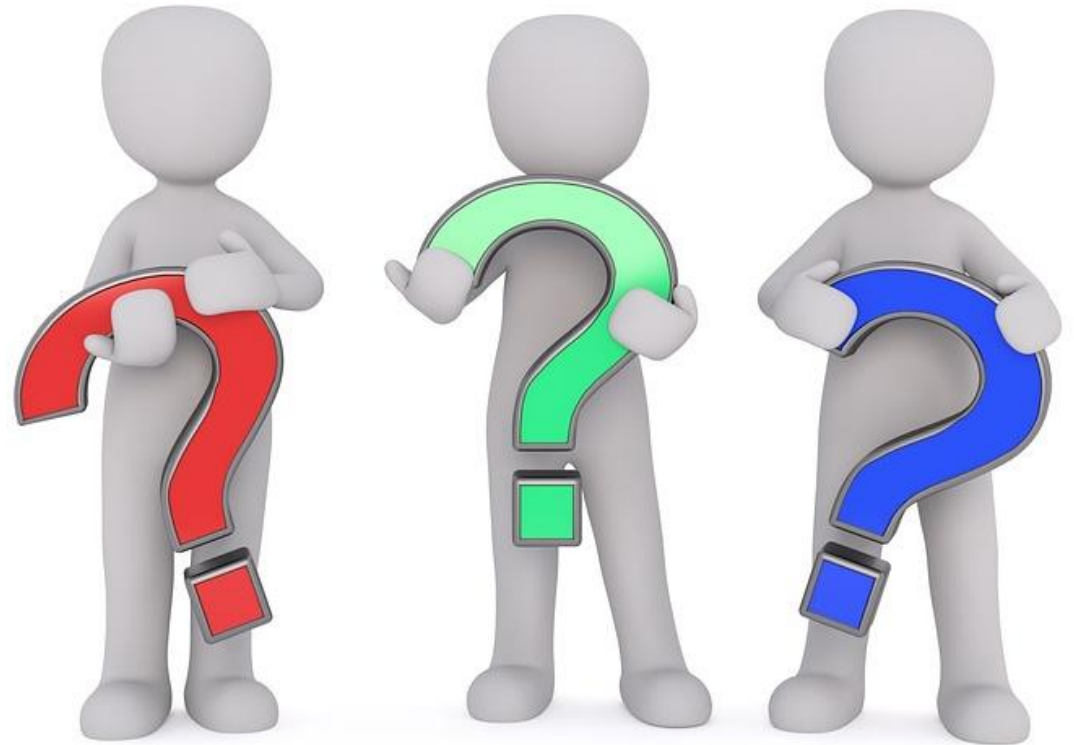
- Naloxone is a competitive mu-opioid receptor antagonist
 - Quickly and safely reverses opioid OD symptoms
- Survey of 11 states found **44%** of opioid deaths had bystanders present
- Based on CDC vital stats, **80%** of OD occur in a home
- Timely naloxone administration ↓ opioid OD-related morbidity/ mortality
 - **98%** who received bystander administered naloxone survived

Mattson CL, et.al. Opportunities to Prevent Overdose Deaths Involving Prescription and Illicit Opioids, 11 States, July 2016–June 2017. MMWR Morb Mortal Wkly Rep 2018;67:945–951.DOI: <http://dx.doi.org/10.15585/mmwr.mm6734a2external.icon>.

Moustaqim-Barrette A, et al. PLoS ONE.2021; 16(10): e0259126. <https://doi.org/10.1371/journal.pone.0259126>

Which potential bystanders should be offered naloxone?

- Patients with any history of SUD
- Friends and family of patients with history of SUD
- Patients with prior history of opioid OD
- Patients with RX for opioid
- Any patient requesting naloxone



Naloxone

Mechanism: opioid antagonist

Only effective for opioid overdose

Can be administered IN*, IM*, IV, SC

Response within 3-5 minutes

Duration of action ~30-90 minutes

Monitor for ≥ 4 hours for reemerging symptoms

Community Bystander Naloxone Formulations

Products	Formulations	Video Administration Instructions
Naloxone generic NS	Amphastar kit-2mg/2ml Nasal Spray 4mg/0.1 ml Nasal Spray	Amphastar: https://www.youtube.com/watch?v=qiemqJRUIwc
Narcan[®] NS (Rx/OTC) RiVive[®] NS (OTC-2024)	4mg/0.1 ml Nasal Spray 3mg/0.1ml Nasal Spray	https://www.youtube.com/watch?v=O5I983rQve8&t=56s https://www.harmreductiontherapeutics.org/
Kloxxado[®] NS	8mg/0.1 ml Nasal Spray	https://www.youtube.com/watch?v=O5I983rQve8&t=56s
Naloxone generic IM	0.4mg/ml vial and syringe	https://www.youtube.com/watch?v=ZFJX5O68Hxs&t=10s
Zimhi[®] IM	5mg/0.5ml prefilled syringe	https://zimhi.com/

Naloxone Administration



Used with permission from Adapt Pharma



Photo Credit: North Carolina Harm Reduction Coalition (NCHRC)



Photo credit: Bethany DiPaula

Naloxone Intranasal Kit

- Remove caps from needle-less syringe
- Screw nasal atomizer into top of syringe
- Remove cap from prefilled vial of naloxone
- Gently twist naloxone vial into delivery device

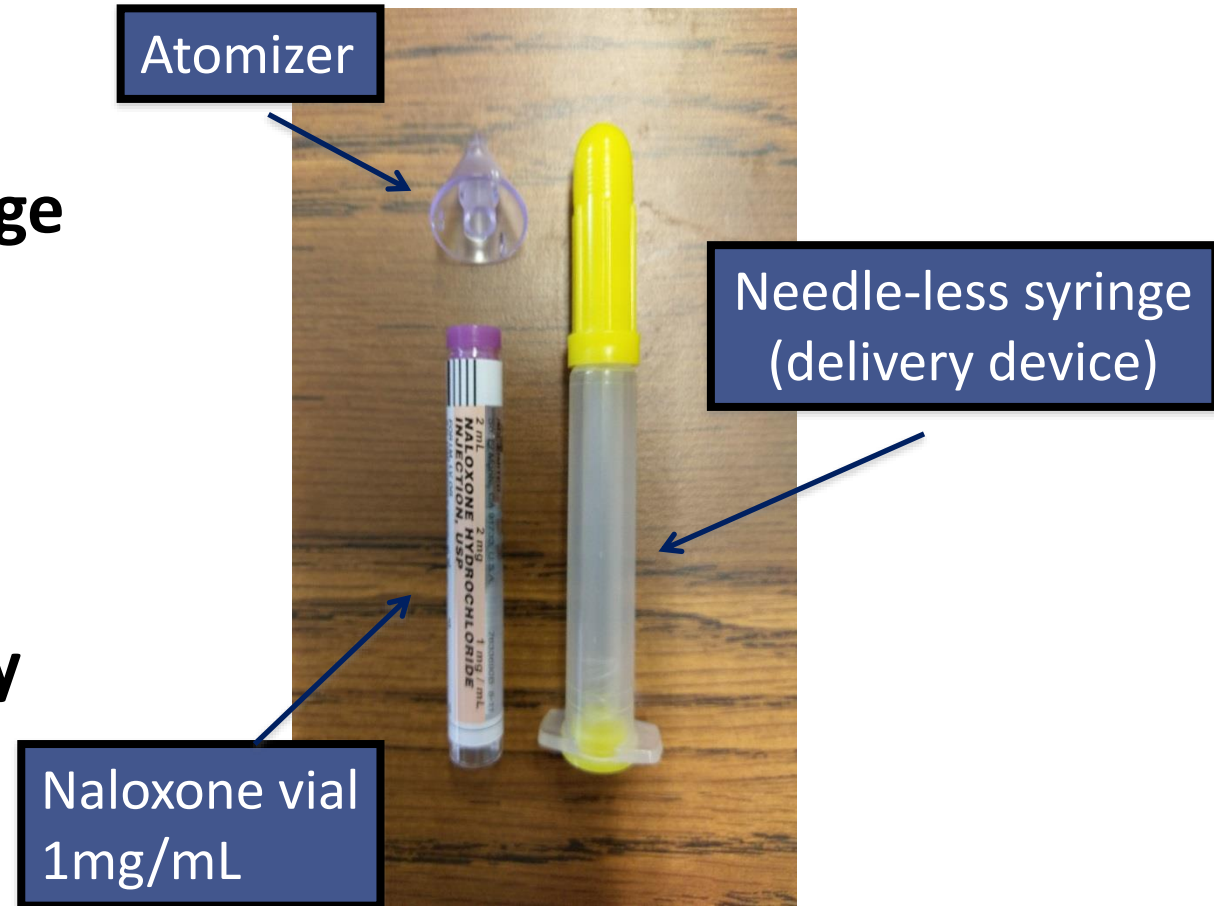


Photo credit: Bethany DiPaula

Naloxone IN Administration

Tilt back head to prevent naloxone from running out of nose



Spray **one-half** (1ml) of the naloxone in each nostril



Used with permission from Adapt Pharma

Spray **1 spray** into nostril

Administering Intramuscular Naloxone



- 1 ml
- Shoulder
- Thigh
- Can inject through clothing

When every moment matters during an opioid overdose emergency rescue situation

ZIMHI IS GIVEN IN 4 SIMPLE STEPS

HOW TO USE ZIMHI¹

PRESS

needle into outer thigh after twisting off needle cap.

PUSH

plunger until it clicks to inject and hold for 2 seconds before removing needle.

PULL

the safety guard over the needle using one hand, with fingers behind the needle.

PLACE

the used syringe back into its blue case and close it.



911

Get emergency help.

If the patient is unresponsive after 2 to 3 minutes, give an additional dose of ZIMHI using a new device.



ZIMHI can be administered **through clothing, including jeans.**

Maryland Naloxone Standing Order-March 23, 2023

Formulation	Instructions for Use per Maryland Standing Order
<p>Naloxone Intranasal</p> <ul style="list-style-type: none">• 4mg/0.1ml (Narcan[®], Generic)• 8mg/0.1ml (Kloxxado[®])	<p>For intranasal administration <i>NARCAN[®] 4 mg/0.4mL</i> nasal spray. Include Directions for use: Administer a single spray of NARCAN[®] in one nostril. (Do not "prime" or test the spray device before spraying it into the nostril, as this will waste the medicine). Repeat after 3 minutes if no or minimal response.</p>
<p>Naloxone Intranasal Kit</p> <ul style="list-style-type: none">• 2mg/2ml	<p>For intranasal administration 2mg/2mL single-dose Luer-Jet prefilled syringe. Include one luer-lock mucosal atomization device per dose dispensed. Directions for use: Spray 1 mL in each nostril. Repeat after 3 minutes if no or minimal response</p>
<p>Naloxone Intramuscular</p> <ul style="list-style-type: none">• 0.4mg/ml (Generic)	<p>For intramuscular injection 0.4mg/mL in 1mL single dose vials. Include one 3cc, 23g, 1" syringe per dose dispensed. Directions for use: Inject 1 mL IM in shoulder or thigh. Repeat after 3 minutes if no or minimal response.</p>

Naloxone Standing Order Facts

- Reissued March 2023 by Laura Herrera Scott, MD, MPH, Secretary, Maryland Department of Health
 - Expires June 2024
- Authorizes any pharmacist who is licensed in Maryland to dispense:
 - **2 doses of naloxone** and
 - **Supplies necessary for administration to any individual**
- Applicable to all patient regardless age or prior overdose training
- How to find a copy of the naloxone standing order:
 - Request faxed copy by emailing mdh.naloxone@maryland.gov
- Free naloxone mailed to home may be available. Patients can contact local Overdose Response Program

<https://health.maryland.gov/pha/NALOXONE/Pages/Home.aspx>. Accessed April 10,2024

https://drive.google.com/file/d/1qRRh8f0_sfMA9umccUgQ33ppmK3cQRHY/view . Accessed April 10, 2024



Naloxone OTC



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- Narcan[®] NS 4mg (Emergent BioSolutions)
 - Approved and available 2023
- RiVive[®] NS 3mg
 - Approved 2023. Available 2024
- Pros: ↓ stigma, ↑ access
- Cons?

New Opioid Antagonist Nalmefene (Opvee[®])

- Available in October 2023 with Rx from Indivior
- Structurally similar to naltrexone
- ↑ Duration of action compared with naloxone
- Admin instructions
 - Spray into nostril. Repeat every 2-5 minutes as needed
- Side effects similar to naloxone
 - nausea, vomiting, tachycardia, HTN, pain, fever, dizziness, nasal discomfort
 - Precipitated withdrawal
- Advantages in managing OD TBD

Pharmacists Increasing Access Points for mOUD!



Medications to Treat OUD

Opioid Antagonist Therapy

- Naltrexone

Opioid Agonist Therapy

- Methadone
- Buprenorphine/Naloxone



Need...

Barriers to wide-spread access to mOUD remain

Mainstreaming Addiction Treatment Act (MAT Act)

Effective as of January 3, 2023

Removes DATA “X” waiver

Allows **ANY** healthcare professional with DEA license to prescribe buprenorphine for OUD



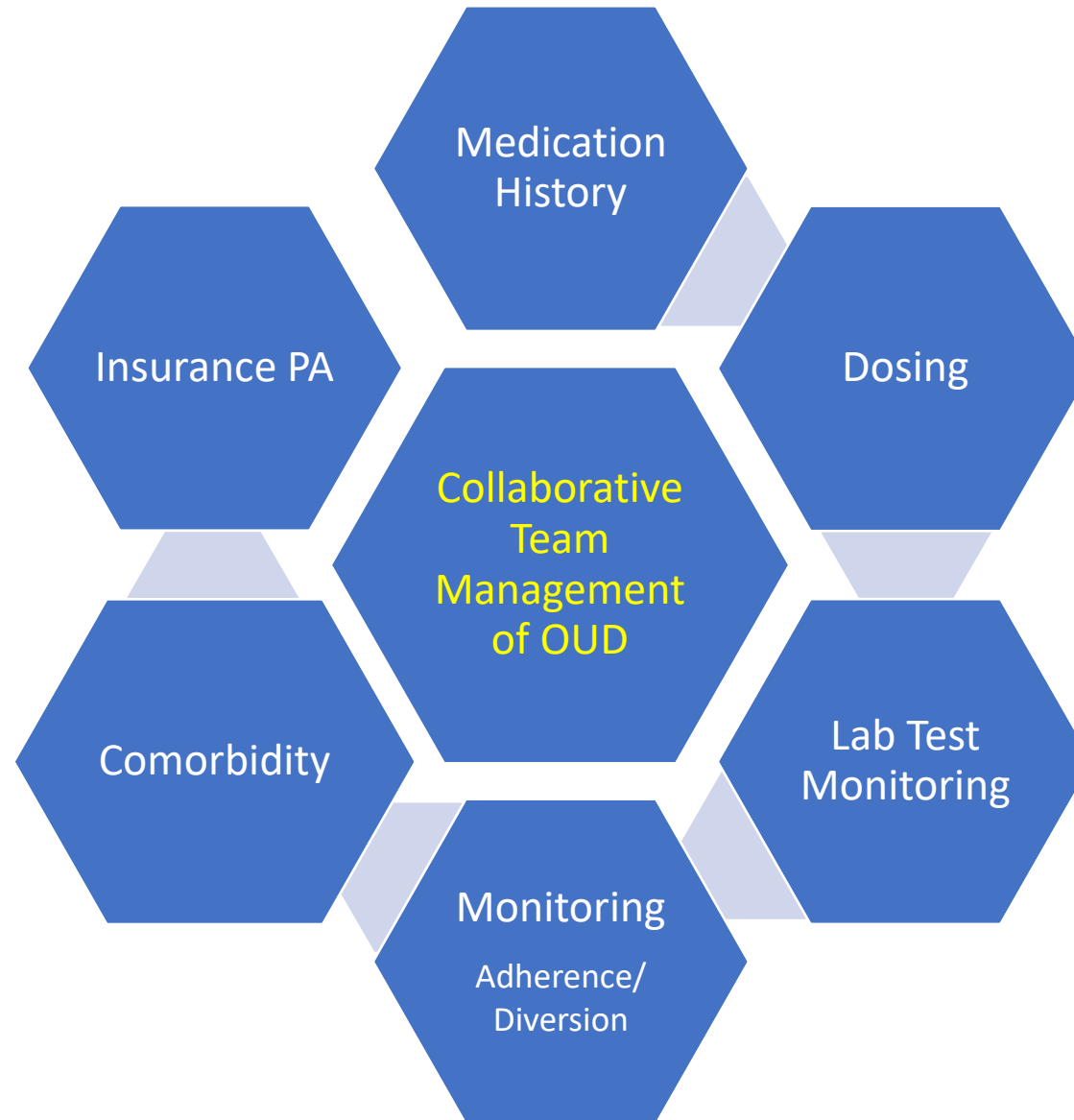
Diverse Collaborative Practice Settings

- Patient population: indigent, underserved
- Setting: Urban vs rural, Inpatient/Ambulatory
- Examples
 - FQHC
 - Health Department
 - VA
 - Integrated Primary Care Clinics/Specialty Clinics



Pharmacist Collaboration: Share the Load!

Person-centered care takes a village



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Standard

Micro
(low-dose)

Macro
(high-dose)

Buprenorphine Initiation



Inpatient Prescribing of Methadone/Buprenorphine

mOUD during Hospitalization (Code of Federal Regs Title 21 Sec 1306.07)

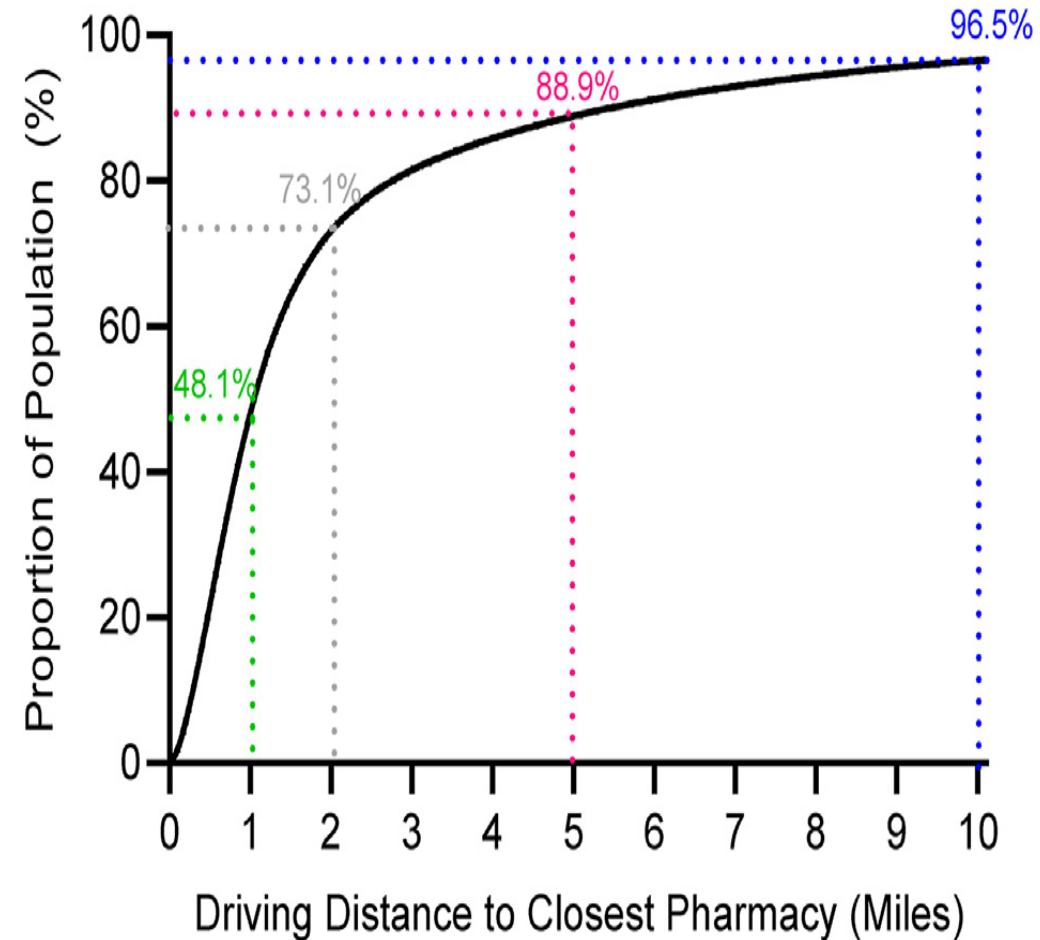
- No limitations in hospital to administer or dispense methadone or buprenorphine “to maintain or detoxify a person as an incidental adjunct to medical or surgical treatment of conditions other than addiction”
- Consult with outpatient provider/OTP to obtain treatment history

Buprenorphine/Methadone on Discharge (72-hour Rule)

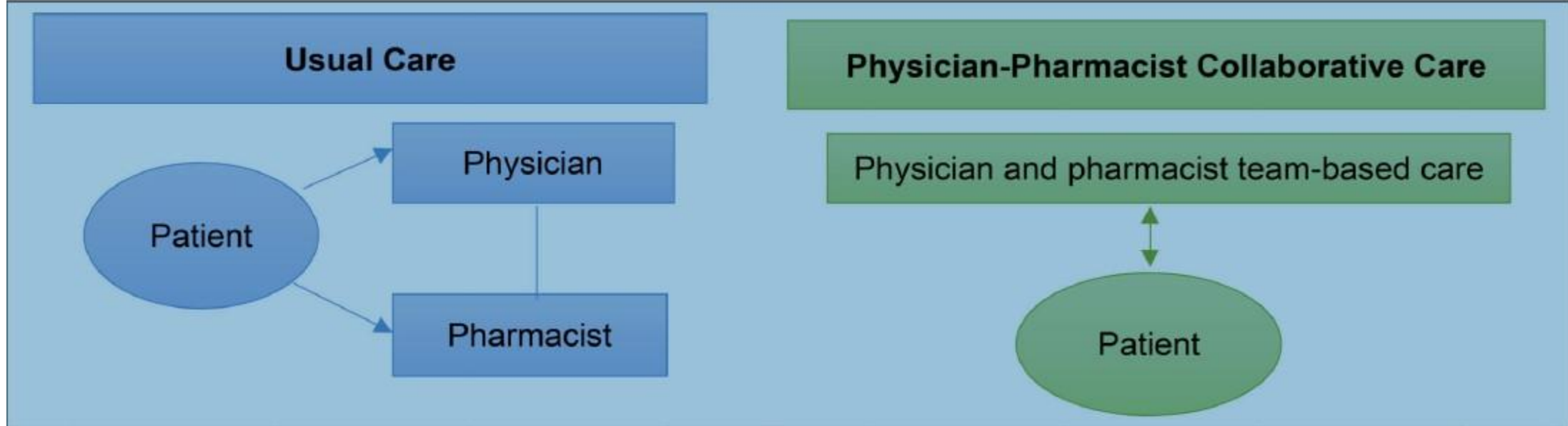
- Purpose: to provide practitioner flexibility in emergency situations when confronted with a patient undergoing withdrawal
- Can dispense up to 72 hours while arranging for referral to ongoing treatment
- 72-hour period cannot be renewed or extended

Community Pharmacy Accessibility

- Pharmacists are trusted healthcare professionals
- Community pharmacists are one of the most accessible sources for healthcare
 - 256 U.S. counties had 50% of residents with a distance >10 miles to closest pharmacy, but this represents 0.5% of U.S. population



Community Pharmacy Buprenorphine CDTM



- Pilot (6 MD, 6 pharmacists, 71 patients stable on bup \geq 3wks)
 - High treatment retention (88% x6mo) and adherence (95%)
 - Enhanced communication between MD/pharmacists
 - Consistent diversion monitoring
 - PDMP used 97% of visits
 - Good patient satisfaction (90%)
 - ↓ MD burdens
 - 0 substance-related OD

Community Pharmacy Buprenorphine CDTM

Unobserved Induction and ongoing follow up

*6BH pharmacies

*21 pharmacists

*100 patients

Among those stabilized/continued care

Pharmacy

*25:28 (89%) continued to attend at 1mo

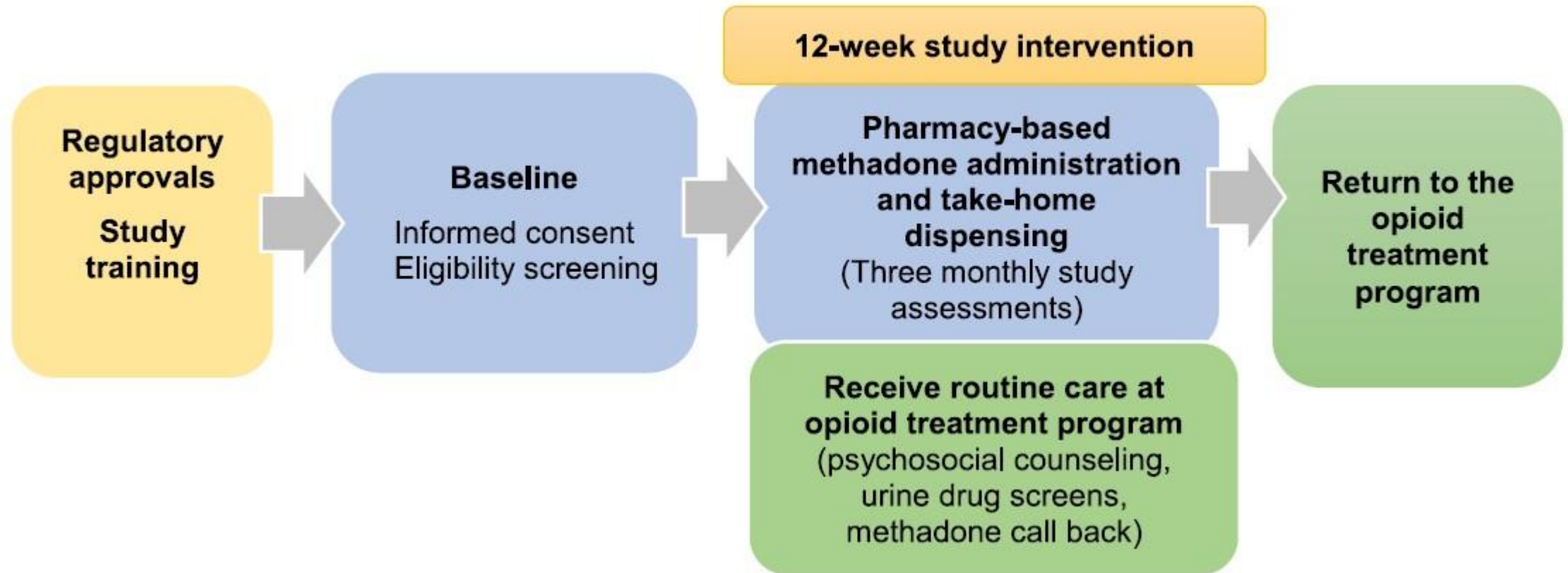
*Safety: 1 nonfatal OD, 2 non-OD-related ED visits

Standard Care

*5:30 (17%) continued to attend at 1 mo

*Safety: 2 nonfatal OD, 1 non-OD-related opioid ED visit

Community Pharmacy OTP Methadone CDTM



- 80% (16 of 20) retention at month.
 - Returned early to OTP: 2 due work/schedule change, 1 pregnancy, 1 non-study-related hospitalization
- 100% medication adherence among 16 patients retained

Pharmacist Authority to Administer Medications

Based on data collected by NASPA (updated Dec 2021)



*Rules required and not yet promulgated

PRESENTED BY



Maryland

- Pharmacists can administer mOUD XR injections as of 2022!
 - Training during pharmacy school
 - Complete a training program (APhA, University of Maryland School of Pharmacy)



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Naltrexone Injection Administration



Must be opioid-free for
 ≥ 7 -10 days before
initiating

Refrigerate (allow to
come to room
temperature for 45
minutes before use)

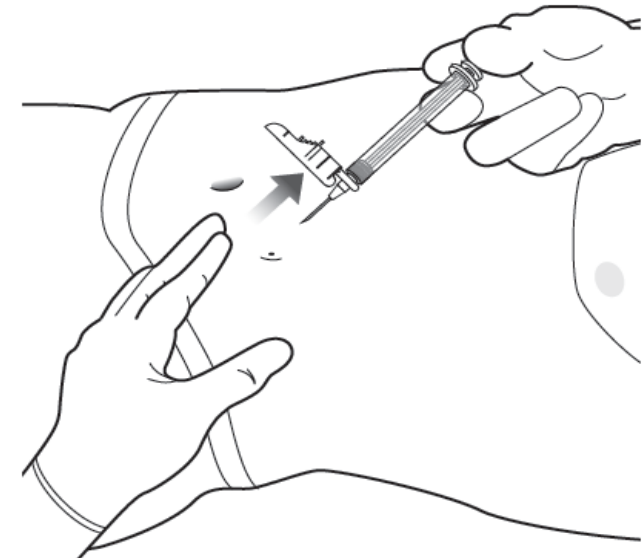
Must administer
intramuscularly to
gluteal muscle with
provided customized
needles

Alternate buttocks with
each consecutive
injection

Can administer without
oral first

Sublocade Administration

- Must be stored in refrigerator.
 - Remove ≥ 15 minutes before administering
- Do not remove foil packaging until ready to administer
- Must be administered as abdominal subcutaneous injection only by a healthcare provider
- **Warning:** IV administration can result in death.
 - Sublocade forms solid mass upon contact with body fluids
 - Occlusion, tissue damage, thrombo-embolic events (PE) can occur with IV administration
- REMS: available only through a restricted distribution program to \downarrow risk of harm/death from IV self-administration



Brixadi Administration

No refrigeration

SQ administration only-FluidCrystal®

- Use included needle
- Warning: IV administration can result in harm or death

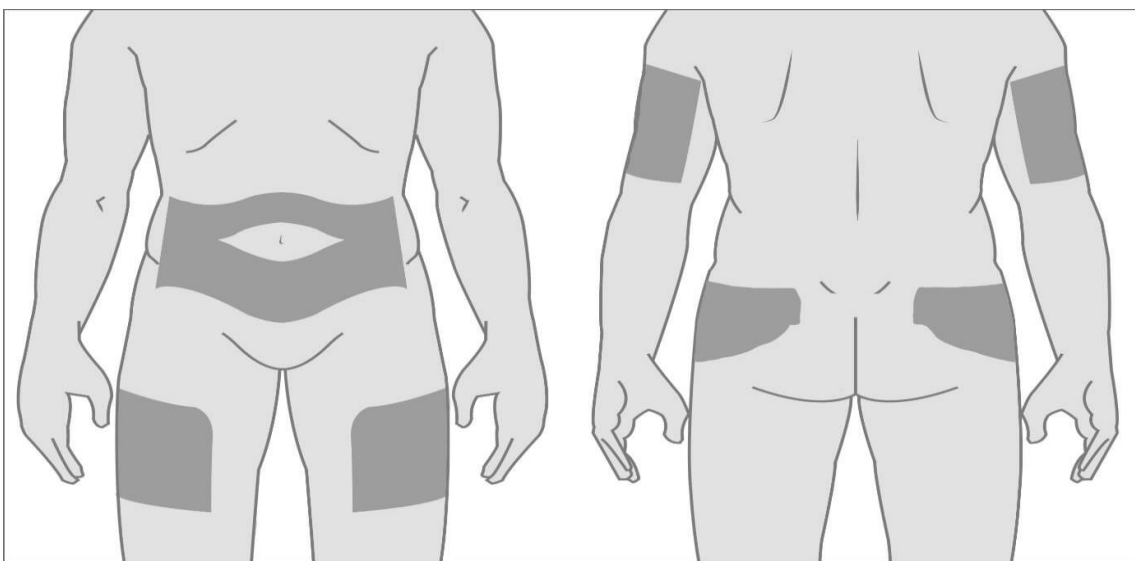
Available through REMS only

Multiple SQ injection sites. Inject slowly

- Rotate sites with weekly admin. No rotation for mo
- Upper arm (10% lower plasma levels) should only be used after steady state or 4 consecutive doses

Start with weekly administration

Administer test dose for those not already receiving buprenorphine treatment



Daily Buprenorphine SL Dose	Brixadi Weekly (x7d)	Brixadi Monthly (x28d)
≤ 6 mg	8 mg	n/a
8-10 mg	16 mg	64 mg
12-16 mg	24 mg	96 mg
18-24 mg	32 mg	128 mg



Knowledge Test

Which service(s) can Maryland pharmacists provide to patients with OUD?

- A. Syringe sales without Rx
- B. Administration of XR naltrexone or buprenorphine
- C. Naloxone using standing order
- D. All of the above



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Conclusion

- Pharmacy staff can be better used to address OUD treatment shortages and expand access to care!
- Pharmacists can play an important role for patients with OUD through
 - Harm reduction strategies
 - Enhancing access to evidence-based pharmacotherapy to treat OUD
 - Managing mOUD treatment



Discussion Questions

- What pharmacy barriers have you been facing when managing patients with OUD?
- What strategies are you using to address?
- Other questions/thoughts?