#### The Webinar will begin promptly at 11:00am

Due to the number of participants, you will be automatically placed on mute as you join to ensure good quality sound. If you would like to comment or ask a question, please use the "chat feature"

Send your questions to the host via the chat window in the Zoom meeting.

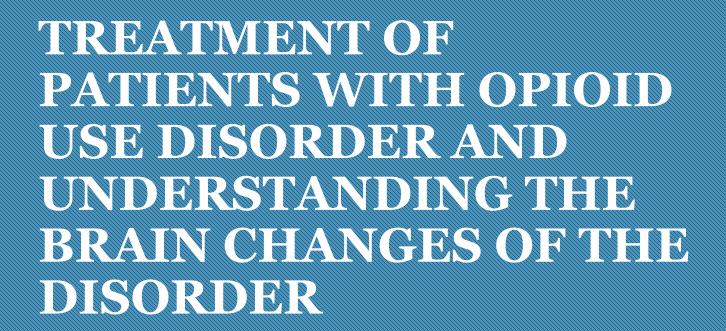
Q+A will open at the end of the presentation.

Follow-up questions?

**Contact** 



Elaine Henry ehenry@healthmanagement.com







#### PRESENTED BY:

Shannon Robinson, MD Scott Haga, BSW, MPAS, PA-C

Wednesday, March 24, 2021 11:00AM – 12:00PM EST

The Integrated Care Technical Assistance Program (ICTA) is managed by the DC Department of Health Care Finance (DHCF) in partnership with the DC Department of Behavioral Health (DBH). This project is supported by the Centers for Medicare and Medicaid Services (CMS) of the U.S. Department of Health and Human Services (HHS) as part of a financial assistance award totaling \$4,616,075.00 with 100 percent funded by CMS/HHS. The contents are those of the author(s) and do not necessarily represent the official views of, or an endorsement by, CMS/HHS, or the U.S. Government.

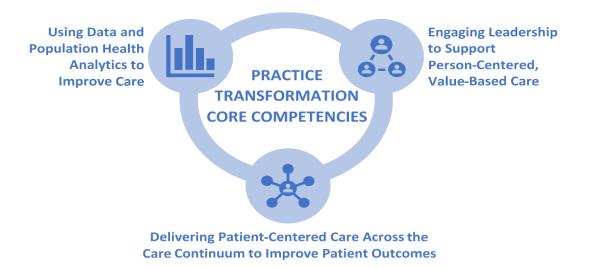
#### WHAT IS THE ICTA PROGRAM?





- >>> The Integrated Care Technical Assistance Program (ICTA) is a five-year program aimed to enhance Medicaid providers' capacity and core competencies to deliver whole person care for physical, behavioral health, SUD and social needs of beneficiaries.
- >> The ICTA Program is managed by the DC Department of Health Care Finance (DHCF) in partnership with the DC Department of Behavioral Health (DBH). Health Management Associates will provide the training and technical assistance.

The goal is to improve care and Medicaid beneficiary outcomes within three practice transformation core competencies:

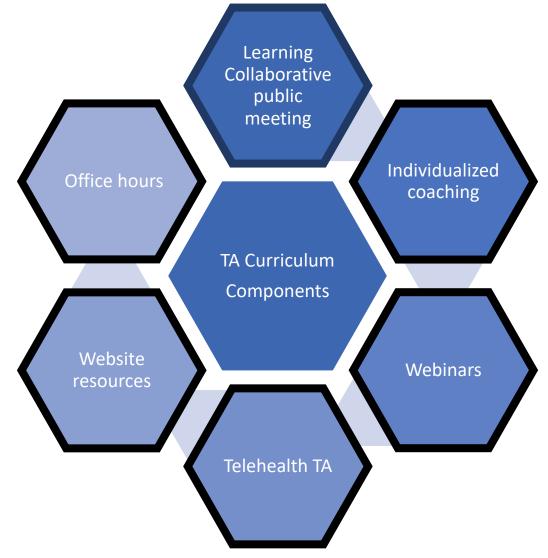


#### ICTA TECHNICAL ASSISTANCE





- >>> The program offers several components of coaching and training. Material is presented in various formats. The content is created and delivered by HMA subject matter experts with provider spotlights.
- All material is available on the project website: Integratedcaredc.com
- Educational credit is offered at no cost to attendees for select elements.









Shannon Robinson, MD TA Coach/SME srobinson@healthmanagement.com



Scott Haga, BSW, MPAS, PA-C TA Coach/SME shaga@healthmanagement.com

#### **DISCLOSURES**





Faculty	Nature of Commercial Interest
Shannon Robinson, MD	Dr. Robinson discloses that she is an employee of Health Management Associates, a national research and consulting firm providing technical assistance to a diverse group of healthcare clients.
Scott Haga, BSW, MPAS, PA-C	Mr. Haga discloses that he is an employee of Health Management Associates, a national research and consulting firm providing technical assistance to a diverse group of healthcare clients.
Elizabeth Wolff, MD, MPA	Dr. Wolff discloses that she is an employee of Health Management Associates, a national research and consulting firm providing technical assistance to a diverse group of healthcare clients.

#### **AGENDA**



# Treatment of Patients with Opioid Use Disorder Understanding the Brain Changes of the Disorder

- >> Welcome and Program Announcements
- >> Review the neuroscience of addiction
- >> Treatment of opioid use disorder
  - >> Why use medication
  - >> State the data for abstinence-based treatment
  - >>> Review 3 FDA approved medications for OUD, including mechanism of action (MOA)
  - >> Review overdose reversal agent and it's MOA
- >> Closing Remarks/Q&A

# OBJECTIVES: BY THE END OF THE WEBINAR, THE LEARNER WILL BE ABLE TO...





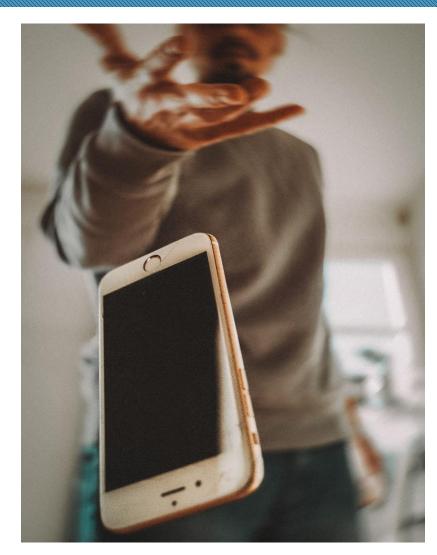
- Explain at least one principle regarding the basic neuroscience of addiction
- 2. State the data on abstinence-based treatment
- 3. List 4 FDA approved medications for OUD/ overdose (OD) and their mechanism of action



Image permitted by DC Department of Health Care Finance

#### **POLLING QUESTION**





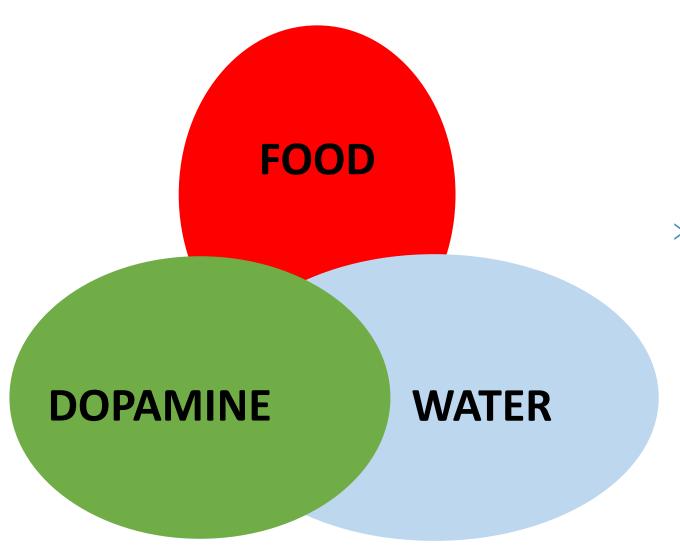
Do you feel people with substance use disorders should be able to stop using on their own?

Image provided by Unsplash Photos

# BRAIN CHANGES ASSOCIATED WITH SUBSTANCE USE DISORDERS





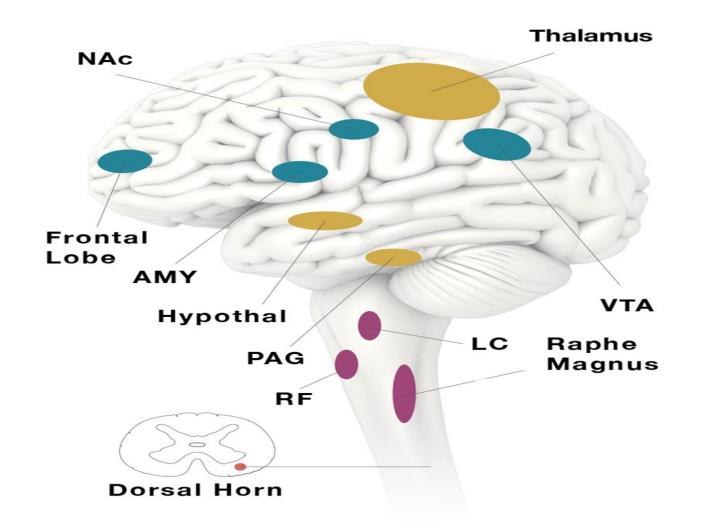


>> Addiction Neuroscience 101 Vidhttps://www.youtube.com/w atch?v=bwZcPwIRRcc&feature <u>=youtube</u>

#### **BRAIN REGIONS**



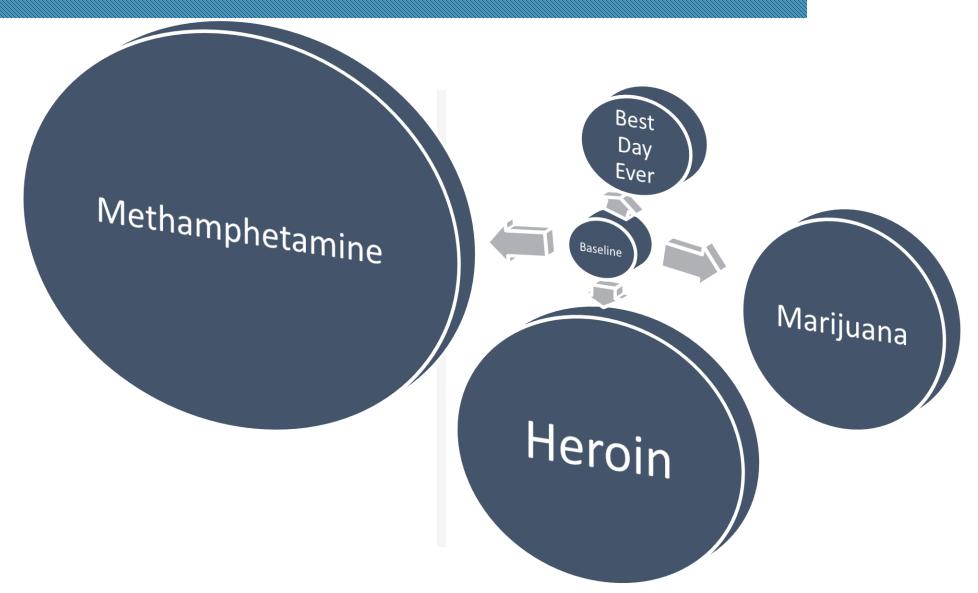




#### **DOPAMINE RESPONSE**



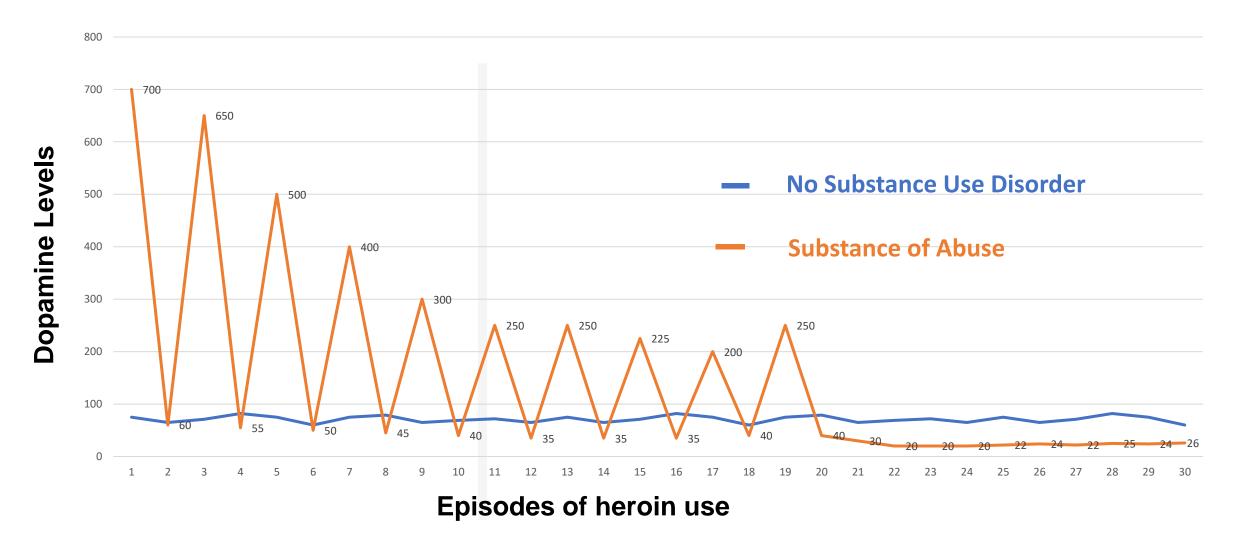




#### DOPAMINE LEVELS VS. EPISODES OF HEROIN USE







#### **CRAVING INTENSITY**

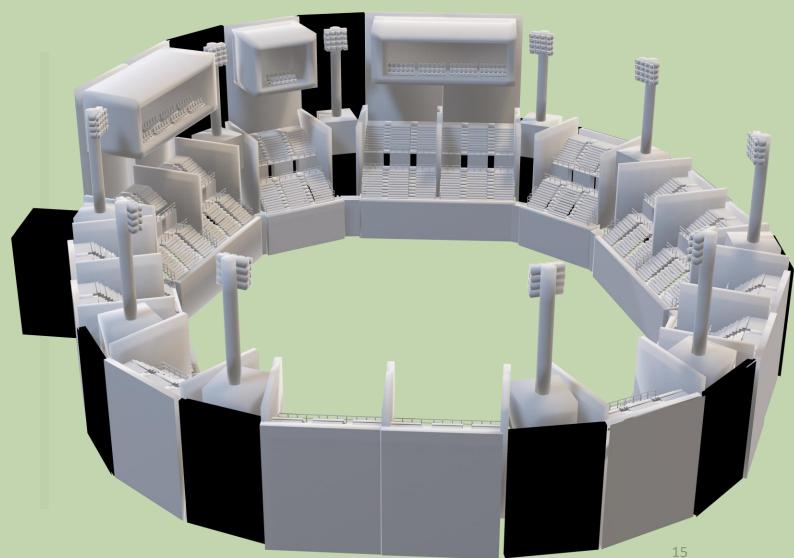






A direct, or indirect force pulling someone towards a substance or behavior





#### **BEHAVIOR**







Lack of Dopamine Survival Mode









Craving

**Primal** Action



#### CHATTERFALL #2





- What would you do if you were starving or dehydrated?
- >>> Would you steal food or fluids if you didn't have funds to pay for them?
- Would you ask the store clerk or manager for food or fluids in exchange for work or on credit?
  - >> Wait to press enter

Image provided by Unsplash Photos

#### CHATTERFALL #3







Image provided by Unsplash Photos

>>> Do you believe that SUD is a moral failing?

>> Wait to press enter

# TREATMENT











Kayla is a 23-year-old with a positive pregnant test during a primary care visit for persistent nausea. Upon examination, Kayla is found to be 11 weeks pregnant. She states the pregnancy was not expected but she wants to keep the pregnancy. In response to questions from an evidence-based verbal screening tool, she indicates she takes both oxycodone and hydrocodone for persistent back pain that resulted from a car accident when she was 19. She is still complaining of back pain and is worried that as the pregnancy goes on, her back pain will worsen. Kayla acknowledges she takes more than prescribed amounts of opioids and she wants assistance with her opioid use and her pain.

Type in the chat box, what's your next step with this patient?

Chatterfall 4

#### FDA APPROVED AGENTS OUD AND OD



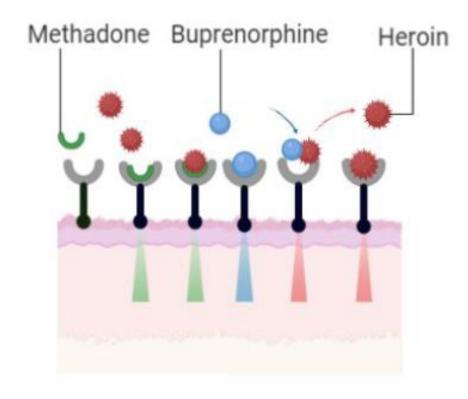


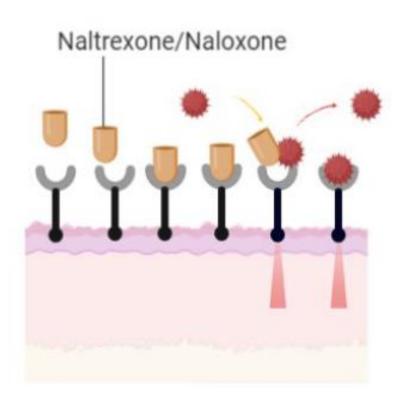
- >>> Agonist Treatment:
  - >> Methadone- approved for cough in 1940s, for OUD in 1972
  - >>Buprenorphine-approved in 1981 for pain; oral approved for OUD 2002, patch, implants & injection later
- >>> Antagonist Treatment:
  - »Naltrexone- oral approved 1984; injectable 2006 AUD, 2010 OUD
  - >>Naloxone- approved 1961, autoinjector 2014, nasal spray 2015

#### MU OPIOID RECEPTOR BINDING









Agonist Treatment

Antagonist Treatment

#### METHADONE OVERVIEW





### >> Who is appropriate?

- >>> 1 year of OUD (42 CFR)
- >> More severe OUD
- Unable to initiate or unsuccessful with buprenorphine
- Can manage or benefit from daily visit to the clinic

- Partial Mu opioid agonist without a <u>ceiling effect</u>
- Must start low & it takes longer to reach therapeutic dose
- Solution Street Stre
- > < 60mg/ d is NOT evidence-based
  </p>
- Typical dose 60-120mg/d for nonpregnant persons
- >> Higher doses in pregnancy
- Increase frequency of dosing in pregnancy

Source: ASAM National Practice Guidelines for the Treatment of OUD 2020

#### **BUPRENORPHINE OVERVIEW**





- Dosing <8 mg is NOT evidence-based and</p>
- Does not provide sufficient relief from cravings
- Typical dose 16 mg/ day nonpregnant pt
- Doses above 24-32 mg are no more effective
- Doses above ~32 mg do not cause more euphoria
- >> Higher doses in pregnancy & split dosing

- Partial mu opioid agonist with a <u>ceiling</u> <u>effect</u>
- Someone Series Serie
  - The pt <u>must be in withdrawal before</u> <u>starting this;</u>
  - Otherwise, precipitate withdrawal occurs
- Tight binding and slow dissociation; therefore
- The addition of opioids is generally ineffective
- Sublingual or buccal, implant & long acting injectable

#### NALTREXONE OVERVIEW





- >> Who is appropriate?
- >> Patients with OUD who have:
  - » Positive reinforcement from normal stimuli
  - >> Haven't used while incarcerated, but have cravings or worries about relapse upon release
  - >> Occasionally uses (funerals)....
  - >> Had poor outcomes with buprenorphine and/or methadone
  - Also has a history of AUD
- Can be very useful after discontinuation of methadone or buprenorphine

- >> Mu opioid antagonist
- >> Does not treat withdrawal symptoms
- >> Does not treat dopamine depleted brain
- >> High affinity & competitive binding
- Must be opioid free x 7 days before starting
- Injectable-380mg every 28 days IM; AUD & OUD
- >> Oral 50-100mg/ day approved for AUD
- Studies show decreases in mortality for people taking methadone & buprenorphine, but at this time we do not have similar data for naltrexone\*

Source: Larochelle, et al. Medication for opioid use disorder after nonfatal opioid overdose and association with mortality. A cohort study. Annals of Internal Medicine. 169:3 (2018) 137-45.

#### **NALOXONE**





- >> Mu opioid antagonist
- >>> Shorter half life & more rapid onset of action than naltrexone
- >>> High affinity & competitive binding
- >> Opioid overdose reversal agent
- >> Intranasal or intramuscular by by-stander
- >> May require more than one dose, especially with fentanyl ODs
- >> Opioids have longer half life than naloxone
- >> CA Assembly Bill 2760- RX for naloxone
  - >>> > 90mg Morphine Milli Equivalents
  - >> Opioids + benzodiazepines
  - >> Increased risk of OD: History of OD or SUD

#### Source: www.druginserts.com

#### RISK OF OD





- >> Sobriety from opioids results in a loss of tolerance
  - Resulting in increased risk of OD with future use (especially if using same amount)
- >> This is true with naltrexone
  - >> Opioid receptor bound but off
- >> This is not true with methadone or buprenorphine
  - >> Opioid receptor bound but on
- >> On naltrexone you will not feel the effects of opioids
  - >> If stacking doses you could suddenly overcome blockade & die
- >> On methadone and buprenorphine
  - >> If stacking doses you can die as well, but may stop stacking before death as you feel the opioid effects
- >> Risk of OD greatest with no treatment

#### CHATTERFALL #5





>>> What is your organization currently doing around naloxone prescription or distribution?

- >> Wait to press enter
- >> Visit this website to see all the sites where you can obtain free naloxone in DC:
  - >> https://dchealth.dc.gov/NarcanDC

#### WHY USE MAT?





#### **Treat opioid withdrawal**

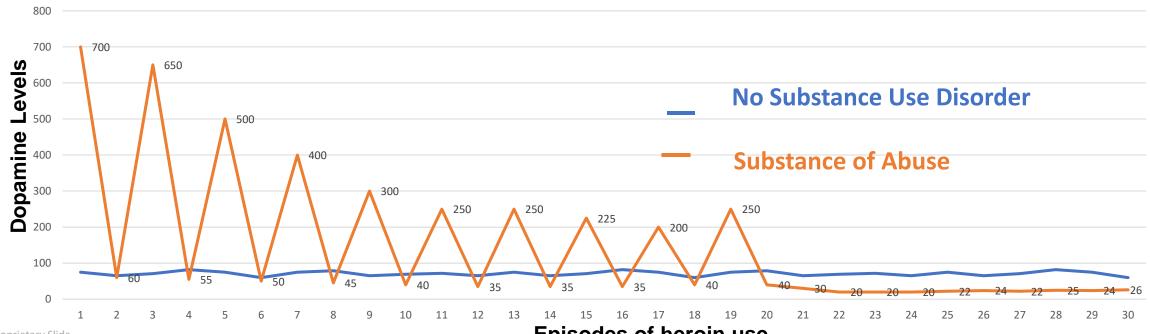
- Muscle pain, dilated pupils, nausea, diarrhea, abdominal cramping, piloerection
- > Lasts 3-7 days
  - >> Methadone
  - >> Buprenorphine

#### **Address dopamine depletion**

- >> Reward/motivation pathway
- Persists for months after people stop using
  - >> Methadone
  - » Buprenorphine

#### **Achieve desired outcomes**

- Retention in treatment
- Decreased opioid use
- 3. Improved birth outcomes
  - >> Methadone 1, 2, 3
  - >> Buprenorphine 1, 2, 3
  - >> Naltrexone 1, 2



#### WHY USE MAT?



#### **Treat opioid withdrawal**

- Using methadone or buprenorphine is recommended over abrupt cessation due to risk of relapse, OD & death
- Dpioid withdrawal management without ongoing treatment for OUD is NOT recommended
- Methadone & buprenorphine are more effective in reducing symptoms, retaining pts & completing withdrawal than alpha agonists
- Detox may cause fetal demise

#### Treat opioid use disorder

Abstinence based treatment results in 85% relapse within 1 year

#### **Achieve benefits of MAT**

>> See next slide

#### Sources:

Mattick, RP & Hall W (1996) Lancet 347: 8994, 97-100.

Mattick, RP, et al. (2009) Cochrane Systematic Review.

Lobmaier, P et al. (2008) Cochrane Systematic Review.

Krupitsky et al. (2011) Lancet 377, 1506-13.

Kakko et al. (2003) Lancet 361(9358),662-8.

Rich, JD, et al. (2015) Lancet

ASAM, (2020) National Practice Guidelines for the Treatment of OUD.

#### **CONSEQUENCES AND BENEFITS**



#### No MAT

- >> Fetus exposed to unstable opioid levels
- >> Mother less likely to get prenatal care
- Fetus & mother more likely to be exposed to morbidity & mortality from Intravenous Drug Use & risky behaviors
  - >> HIV, HCV
  - >> Endocarditis, cellulitis
  - >> Trauma
- >> Adverse Outcomes
  - >> Miscarriage
  - >> Preterm delivery
  - >> Fetal growth restriction
  - >> Fetal death

#### **MAT: Benefits**

- >> Improves adherence to prenatal & addiction care
- >> Improves maternal & fetal outcomes
- >> Reduces cravings & use
- >> Reduces overdose
- >> Reduces complication of Intravenous Drug Use
- >> Reduces criminal behavior
- » Neurological, cognitive and behavioral outcomes similar to non opioid exposed infants (up to 8 y)

#### TREATMENT DURING THE PANDEMIC





- >>> SAMHSA & State agencies strongly suggest use of telehealth or phone to avoid face to face interaction & possible spread of COVID-19
- >> Infectious disease risk for patients and onsite staff & during transportation; drain of limited healthcare resources if spread occurs
- >>> Telehealth/ telephone- in person exam NOT required during pandemic for starting buprenorphine but is still required for starting methadone in an OTP
- >> Changes affecting OTPs- increased take homes allowed

Source: https://www.samhsa.gov/sites/default/files/dea-samhsa-buprenorphine-telemedicine.pdf

#### TREATMENT OF OPIOID USE DISORDER





## Medication

Psychosocial

Peer/Mutual Support





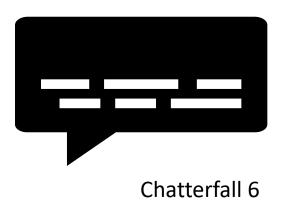






Type in the chat box, what's your next step with this patient?

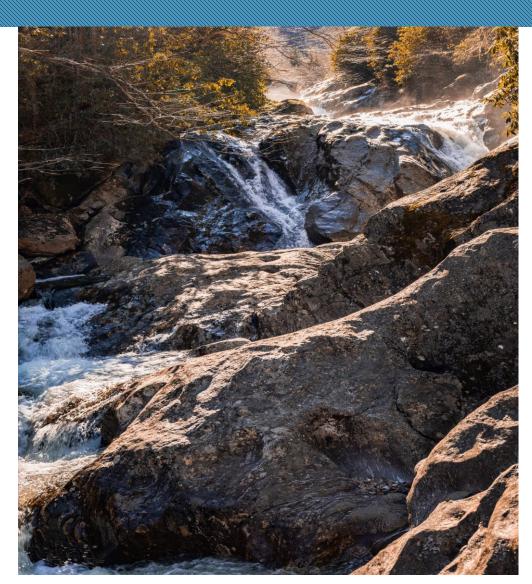
Would you do anything different, having seen this presentation, than before?



Kayla is a 23-year-old with a positive pregnant test during a primary care visit for persistent nausea. Upon examination, Kayla is found to be 11 weeks pregnant. She states the pregnancy was not expected but she wants to keep the child. In response to questions from an evidence-based verbal screening tool, she indicates she takes both oxycodone and hydrocodone for persistent back pain that resulted from a car accident when she was 19. She is still complaining of back pain and is worried that as the pregnancy goes on, her back pain will worsen. Kayla acknowledges she takes more than prescribed amounts of opioids and she wants assistance with her opioid use and her pain.

#### CHATTERFALL #7





Do you have x-waivered providers in your organization at this point in time?

>> Wait to press enter

#### REFERENCES



- >> ASAM, (2020) National Practice Guidelines for the Treatment of OUD.
- Mascola, M. Opioid Use and Opioid Use Disorder in Pregnancy, Am College of Obstetrics and Gynecology Committee Opinion 711 (2017) in conjunction with American Society of Addiction Medicine.
- Mattick, RP, et al. (2009) Methadone maintenance therapy versus no opioid replacement therapy for opioid dependence. Cochrane Systematic Review
- Mattick, RP, et al. (2014) Buprenorphine maintenance versus placebo or methadone maintenance for opioid dependence. Cochrane Systematic Review
- >> Lobmaier, P et al. (2008) Sustained-Release Naltrexone For Opioid Dependence. Cochrane Systematic Review
- Larochelle, et al. Medication for opioid use disorder after nonfatal opioid overdose and association with mortality. A cohort study. Annals of Internal Medicine. 169:3 (2018) 137-45
- Schwartz et al., "Opioid Agonist Treatments"; Judith I. Tsui et al., "Association of Opioid Agonist Therapy With Lower Incidence of Hepatitis C Virus Infection in Young Adult Injection Drug Users," JAMA Internal Medicine 174, no. 12 (2014): 1974–81, http://archinte.jamanetwork.com/article.aspx?articleid=1918926
- >> Metzger DS et al., "Human Immunodeficiency Virus Seroconversion Among Intravenous Drug Users In- and Out-of-Treatment: An 18-Month Prospective Follow-Up," Journal of Acquired Immune Deficiency Syndromes 6, no. 9 (1993): 1049–56, http://www.ncbi.nlm.nih.gov/pubmed/8340896
- >> Healthresearchfunding.org(2019) https://healthresearchfunding.org/24-opiate-addiction-recovery-statistics/ 24 Shocking Opiate Addiction Recovery Statistics
- >> Center for U.S. Policy (2019 February) Treatment for Opioid Use Disorder in Jails and Prisons

#### REFERENCES



- Principals of Drug Addiction Treatment: A Research Based Guide." National Institute on Drug Abuse. Ed. NIDA International Program
- Treatment Research Institute (TRI), Ed. "Cost Utilization Outcomes of Opioid Dependence Treatment" American Journal of Managed Care 2011
- >> Krupitsky, et. al. Injectable extended release naltrexone for opioid dependence: a double blind placebo controlled, multicenter randomized trial. 2011; Lancet 377: 1506-13.
- Xakko et al. 1-year retention and social function after buprenorphine-assisted relapse prevention treatment for heroin dependence in Sweden: a randomized, placebo-controlled trial. Lancet (2003) 361(9358):662-8
- Rich, JD, et al. Continuation versus forced withdrawal on incarceration in a combined US prison and jail: a randomised, open-label trial. Lancet (2015) 386 (9991): 350-359
- >> www.druginserts.com
- >> SAMHSA Tip 63 Medications for Opioids Use Disorder
- >> Vickers, AP Naltrexone and Pain Management. BMJ (2006); 322 (7534)132-3
- >> Sordo, L. Mortality risk during and after opioid substitution treatment: systematic review and meta-analysis of cohort studies. BMJ (2017); 357: j1550
- >> Walley, A. et al. Association between mortality rates and medication and residential treatment after inpatient medically managed opioid withdrawal: a cohort analysis, Addiction (2020)
- >> Lee, J. et al. Extended-release naltrexone to prevent opioid relapse in criminal justice offenders. The New England Journal of Medicine. 347: 13; 1232-42

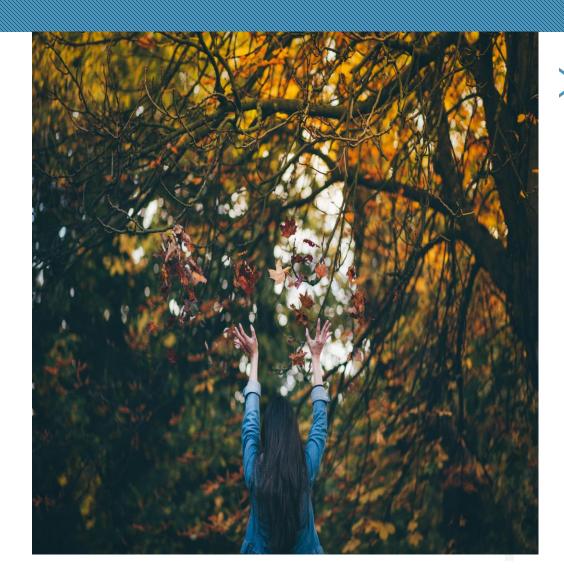
#### REFERENCES



- >> Reece-Stremtan, S. (2015) ABM Clinical Protocol #21: Guidelines for Breastfeeding and Substance Use or Substance. Breast Feeding Medicine. 10:3
- >> www.safeinpregnancy.com
- >> Chan, CF, et al. Transfer of naltrexone and its metabolite 6,beta-naltrexol into human milk, J Hum Lact. 2004 Aug;20(3):322-6
- >> Isemann B, Meinzen-Derr J, Akinbi H. Maternal and neonatal factors impacting response to methadone therapy in infants treated for neonatal abstinence syndrome. J Perinatol. 2011;31:25-9. PMID 20508596
- >> Pritham UA, Paul JA, Hayes MJ. Opioid dependency in pregnancy and length of stay for neonatal abstinence syndrome. J Obstet Gynecol Neonatal Nurs. 2012;41:180-90. PMID: 22375882
- >> Welle-Strand GK, et al. Breastfeeding reduces the need for withdrawal treatment in opioid-exposed infants. Acta Pediatr. 2014;102:1060-6. PMID: 23909865
- >> Cunningham, JA, Untreated remissions from drug use: the predominant pathway. Addict Behav. 1999 Mar-Apr;24(2):267-70

#### **CHATTERFALL**

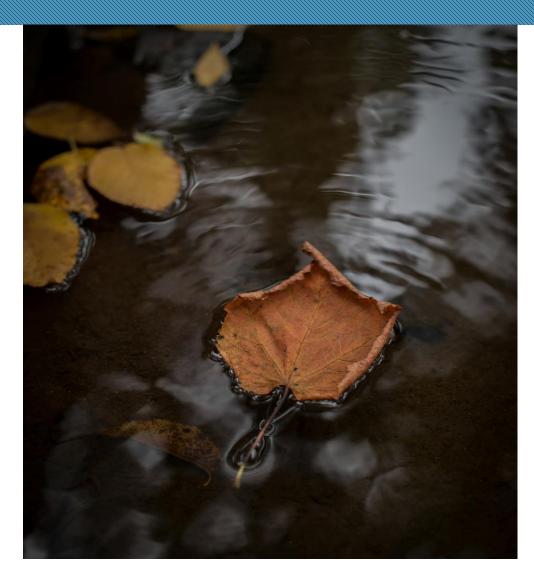




In the chat box please type one thing you learned about the neuroscience of addiction

#### **CHATTERFALL**

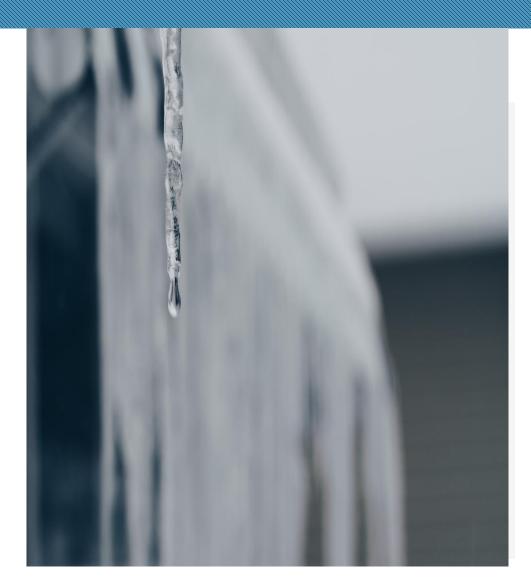




In the chat box please indicate how effective is abstinence-based treatment for OUD

#### **CHATTERFALL**





>>> In the chat box please list 4 FDA approved medications for OUD/ overdose (OD) and their mechanism of action

# Q&A







**Shannon Robinson, MD** srobinson@healthmanagement.com



Scott Haga, BSW, MPAS, PA-C shaga@healthmanagement.com

#### **EVALUATION POLLING QUESTION**





As a result of this webinar, I understand (check all that apply):

- 1. Recurrent substance use results in neuroadaptation in the brain
- 2. Abstinence based treatment for OUD results in relapse 85% of the time
- The names of the FDA approved medications for OUD/ Overdose and mechanisms of action

#### WRAP UP AND NEXT STEPS





- >> Please complete the online evaluation! If you would like to receive CME credit, the evaluation will need to be completed. You will receive a link to the evaluation shortly after this webinar.
- The webinar recording will be available within two days at: <a href="https://www.integratedcaredc.com/learning/">https://www.integratedcaredc.com/learning/</a>

#### >> TA Office Hour:

>> Monday, March 29, 2021, 11:00am -12:00pm EST with Shannon Robinson, MD \*The Zoom link for this webinar will provide you access to the TA Office Hour

#### >> Upcoming Webinar/TA Office Hour:

- Addressing Health Equity and Providing Culturally and Linguistically Effective Services, Thursday, April 15, 2021, 11:00am -12:00pm EST
- >> TA Office Hour: Tuesday, April 20, 2021, 11:00am 12:00pm EST
- >> For more information about the DC Integrated Care Technical Assistance Program, please visit: <a href="https://www.integratedcaredc.com/">https://www.integratedcaredc.com/</a>