Opioid Addiction Treatment ECHO

For Providers and Primary Care Teams

Medication Treatment for Opioid Use Disorder

Developer: Joe Merrill, MD, University of Washington,
Charles Morgan MD, and Anne Griepp MD, Western New York Collaborative
And Miriam Komaromy, MD, University of New Mexico
Reviewer/Editor: Miriam Komaromy, MD, The ECHO Institute™
Updated by/Presenter: Gabriela Williams, PharmD, Eskenazi Health

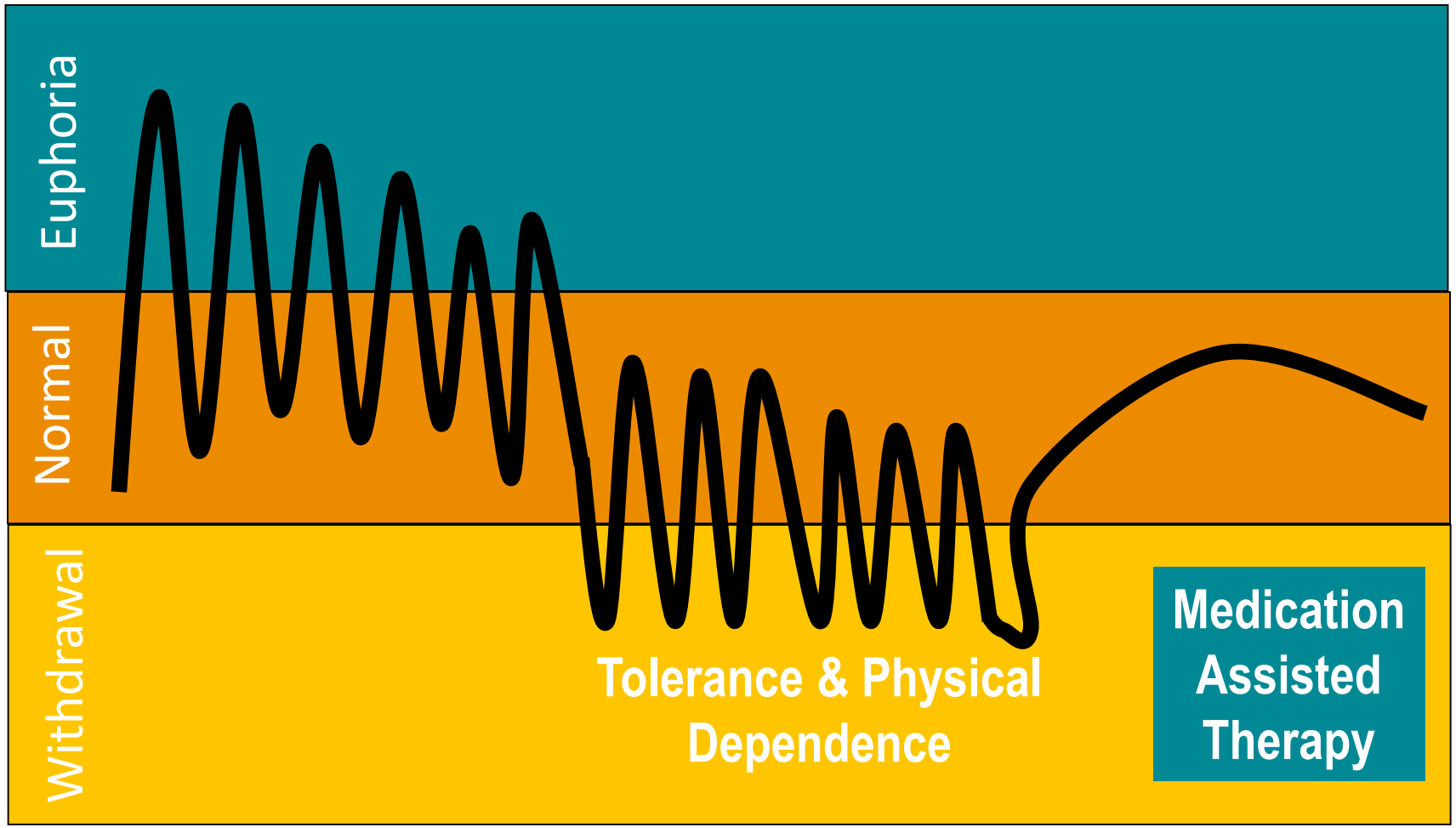
Disclosures

Joe Merrill, Charles Morgan, and Ann Griepp, Miriam Komaromy and Gabriela Williams have nothing to disclose.

Medications for Opioid Use Disorder

- Buprenorphine (sublingual and implantable)
- Naltrexone (oral and extended release injectable)
- Methadone

"Detox" has no long-term effect on outcomes; it is medication maintenance that saves lives and reduces relapse



Acute Use

Chronic Use

Alford, Boston University, 2012

Pharmacotherapy for Opioid Addiction: **Methadone**

- Most effective
  - ↑ survival, treatment retention, employment
  - ↓ illicit opioid use, hepatitis and HIV infections, criminal activity
- Highly regulated, dispensed at Opioid Treatment Programs (OTP)
  - Supervised daily dosing with take-home doses if stable
  - Counseling, urine testing
  - Psychiatric, medical services often not provided
  - **Illegal** to prescribe methadone **for addiction** in general practice
- Cost-effective
  - Every dollar invested generates $4-5 in savings

Pharmacotherapy for Opioid Addiction: **Methadone**

Daily, observed dosing

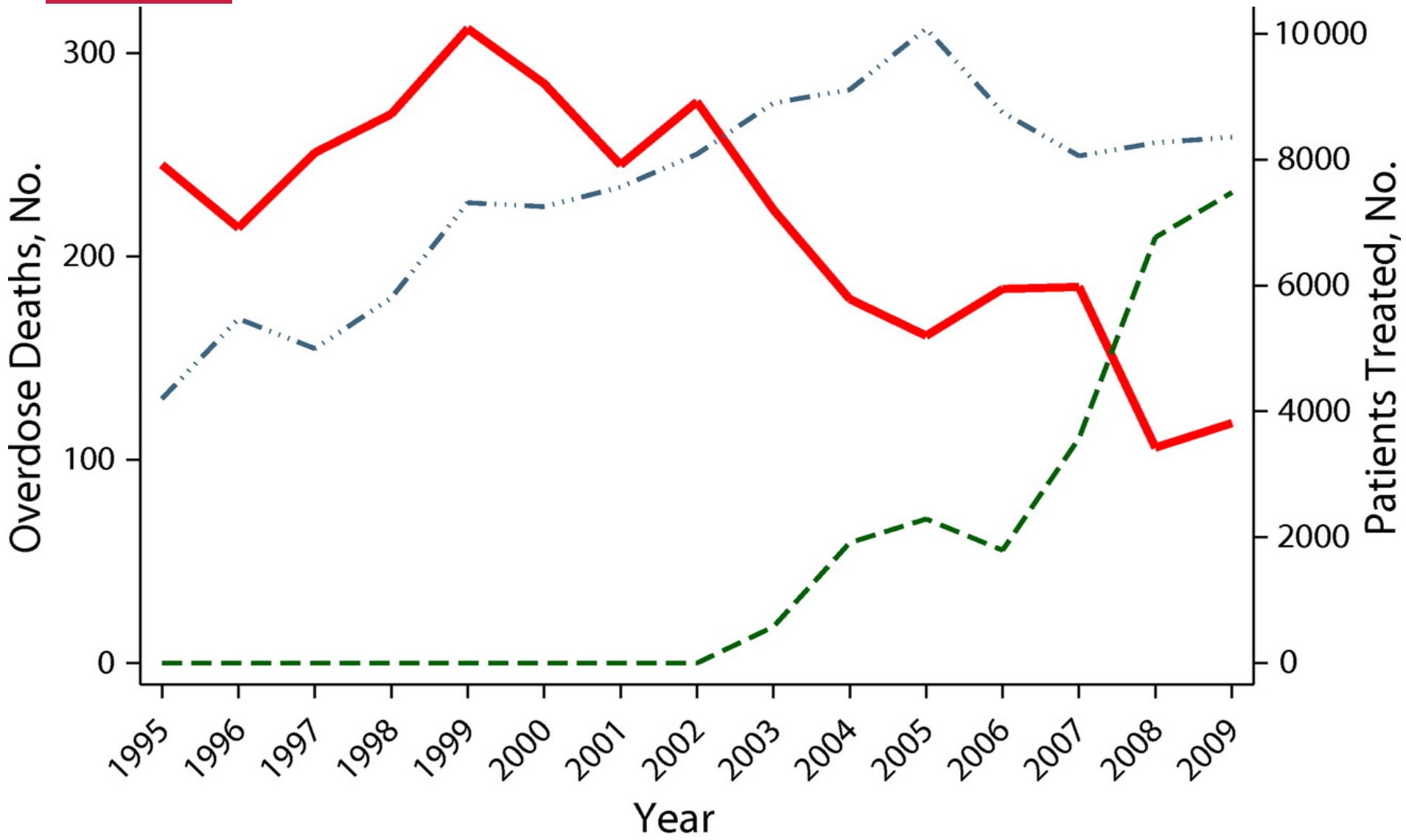
- Full opioid agonist
- Onset within 30-60 minutes
- Long-acting: Daily dosing effective for addiction
- Dose 20-40 mg for acute withdrawal
- >80 mg for craving and “blockade”
- To evaluate stability, ask about take-home doses
- **Multiple** medication interactions

Advise staying in treatment until social, medical, psychiatric, legal, and family issues are stable.

- “Detox” therapy has no long-term effect on outcomes
- Longer duration, higher dose treatment most effective
- For some patients, methadone therapy should be lifelong, as risk of relapse is high after cessation

Pharmacotherapy for Opioid Addiction: **Buprenorphine**

- 2000 Federal Drug Addiction Treatment Act ("DATA-2000"):
  - Made office-based addiction treatment by physicians legal
  - Must complete 8-hour training and obtain federal waiver
- 2002: Suboxone (buprenorphine/naloxone) FDA approved
  - Outcomes much superior to psychosocial treatment alone
  - Longer treatment duration is more effective
- Compared to methadone:
  - Similar abstinence from illicit opioids and decreased craving
  - Lower retention in treatment
  - Can be prescribed in general practice, lowering barriers to treatment

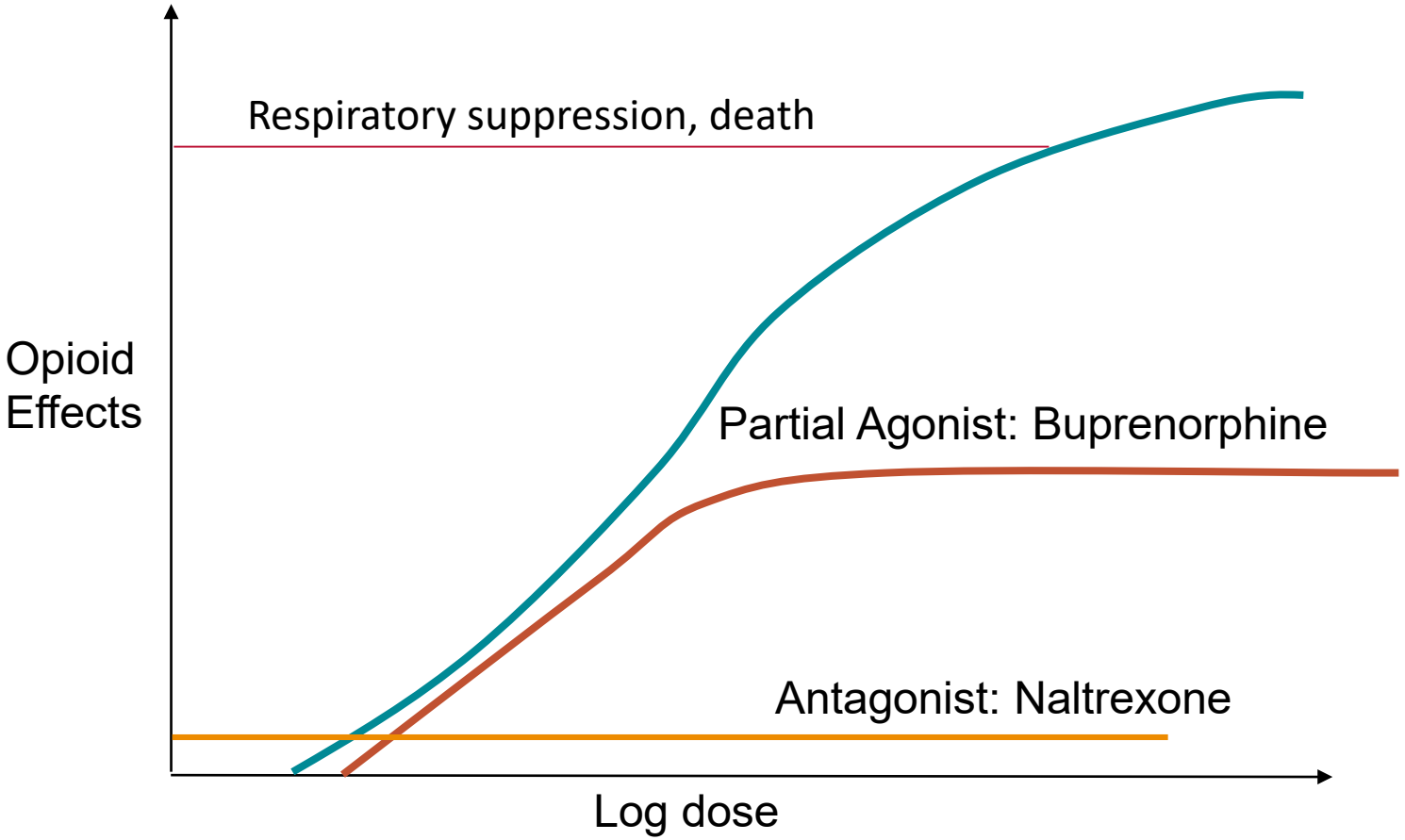


Schwartz, AJPH, 2012

Pharmacotherapy for Opioid Addiction: **Buprenorphine**

- Partial opioid agonist, so safer than methadone
- High mu receptor affinity, so blocks other opioids
- Formulated with naloxone - abuse deterrent
- Sublingual dosing and newer implant (Probuphine) and extended release subcutaneous injectable (Sublocade)
- Can precipitate withdrawal in tolerant patients
- Requires induction after patient enters mild-moderate withdrawal
- Implant approved for stable patients on ≤8 mg buprenorphine
- Extended release subcutaneous injectable approved in those initiated on transmucosal buprenorphine 8-24mg/day after a minimum of 7 days

Why is Overdose Potential Low with Buprenorphine?



Agonist: Methadone, Heroin, etc.

Buprenorphine in Primary Care

- Advantages of buprenorphine in primary care:
  - Setting built for chronic disease management
  - Reduces the stigma of addiction treatment
  - Facilitates management of mental health and medical co-morbidities and preventive care
  - Important tool when problems arise during chronic opioid therapy
  - Public health benefit: increases local access to lifesaving care
- Highly gratifying form of treatment!

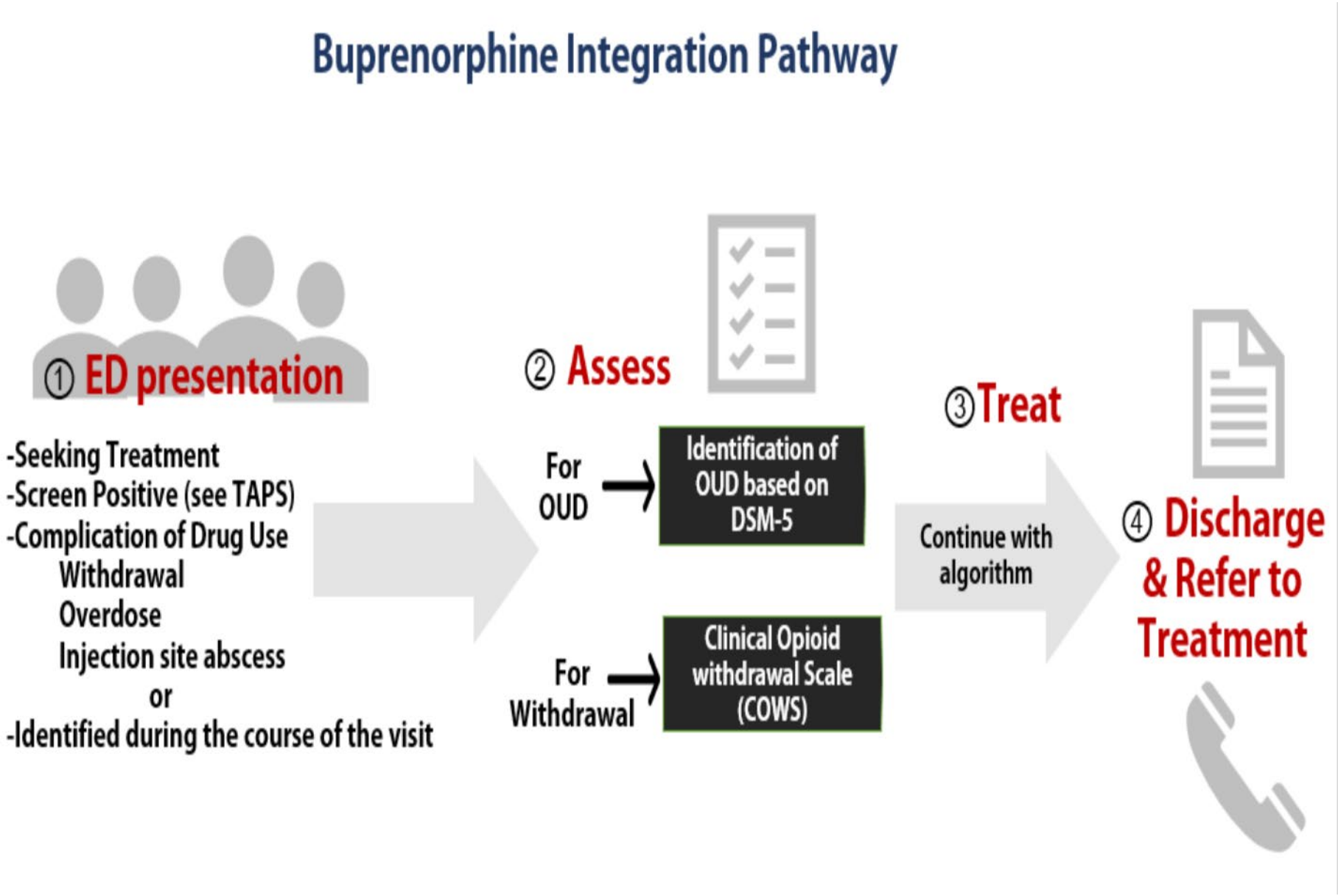
Naltrexone

- Opioid antagonist that blocks other opioids
- Does not lead to physical dependence, or to withdrawal when stopped
- Causes acute withdrawal in opioid-dependent patients
- Can be used in office-based settings without added training
- Effective in alcohol use disorder treatment
- Two formulations available:
  - Oral ReVia 50 mg PO daily
  - Injectable Vivitrol 380 mg IM monthly

Naltrexone for Opioid Use Disorder

- Requires opioid abstinence prior to initiation, a major barrier since most treatment-seeking patients are actively using opioids
- Russian studies show benefit in population where opioid substitution therapy is not available
- Recent study (Lancet 2018) found that relapse events were higher with extended release naltrexone when compared to buprenorphine – most or all of the difference in relapse was due to induction failure with extended release naltrexone
  - In patients successfully initiated on naltrexone, relapse rates were similar compared to buprenorphine

ED Evaluation for Buprenorphine



https://medicine.yale.edu/edbup

ED-Initiated Buprenorphine

Diagnosis of Moderate to Severe Opioid Use Disorder

Assess for opioid type and last use

Patients taking methadone may have withdrawal reactions to buprenorphine up to 72 hours after last use

Consider consultation before starting buprenorphine in these patients

COWS

(0-7) none - mild withdrawl

Dosing: None in ED

Waivered provider able to prescribe buprenorphine?

YES

Unobserved buprenorphine induction and referral for ongoing treatment

NO

Referral for ongoing treatment

(≥8) mild - severe withdrawl

Dosing: 4-8mg SL*

Observe for 45-60 min
No adverse reaction

If initial dose 4mg SL repeat 4mg SL for total 8mg

Observe **

Waivered provider able to prescribe buprenorphine?

YES

Prescription
16mg dosing for each day until appointment for ongoing treatment

NO

Consider return to the ED for 2 days of 16mg dosing (72-hour rule)
Referral for ongoing treatment

All Patients Receive:
-Brief Intervention
-Overdose Education
-Naloxone Distribution

Notes:

***Clinical Opioid Withdrawal Scale (COWS) ≥ 13** (Moderate-Severe) consider starting with 8 mg buprenorphine or buprenorphine/naloxone SL

** Patient remains in moderate withdrawal may consider adding additional 4mg and observation for 60 minutes

Warm hand-offs with specific time & date to opioid treatment providers/ programs within 24-72 hours whenever possible

All patients should be educated regarding dangers of benzodiazepine and alcohol co-use

Ancillary medication treatments with buprenorphine induction are not needed

A Guide for Patients Beginning Buprenorphine Treatment at Home

Before you begin you want to feel very sick from your withdrawal symptoms

It should be at least . . .

- **12 hours** since you used heroin/fentanyl
- **12 hours** since snorted pain pills (Oxycontin)
- **16 hours** since you swallowed pain pills
- **48-72 hours** since you used methadone

You should feel at least three of these symptoms . . .

- Restlessness
- Heavy yawning
- Enlarged pupils
- Runny nose
- Body aches
- Tremors/twitching
- Chills or sweating
- Anxious or irritable
- Goose pimples
- Stomach cramps, nausea, vomiting or diarrhea

Once you are ready, follow these instructions to start the medication

DAY 1:
8-12mg of buprenorphine

Most people feel better the first day after 8-12mg. (Dosing depends on how early on the first day you started)

Step 1.

Take the first dose

4mg

Wait 45 minutes

- Put the tablet or strip under your tongue
- Keep it there until fully dissolved (about 15 min.)
- Do NOT eat or drink at this time
- Do NOT swallow the medicine

Step 2.

Still feel sick? Take next dose

4mg

Wait 6 hours

Most people feel better after two doses = 8mg

Step 3.

Still uncomfortable? Take last dose

4mg

Stop

- Stop after this dose
- Do not exceed 12mg on Day 1

DAY 2:
16mg of buprenorphine

Take one 16mg dose

Most people feel better with a 16mg dose

16mg

Repeat this dose until your next follow-up appointment

If you develop worsening symptoms while starting buprenorphine before your scheduled outpatient appointment return to the emergency department

UNM HEALTH SCIENCES CENTER ECHO

https://medicine.yale.edu/edbup/

Summary: Medications for Opioid Use Disorder

- Prescription opioid and heroin epidemics are major public health problems
- Medications are an essential component of evidence-based treatment
- Methadone and buprenorphine are the most effective pharmacotherapies for opioid use disorder
- Naltrexone can also be used, but patients must go through an opioid-free period (7-10 days) prior to induction
- Primary care teams can play an important role in treatment of opioid use disorders and prevention of overdose

References:

J Addict Med. 2014 Sep-Oct;8(5):299-308. doi: 10.1097/ADM.0000000000000059.
Unobserved "home" induction onto buprenorphine.
Lee JD[1], Vocci F, Fiellin DA

A comparison of **buprenorphine induction** strategies: patient-centered **home**-based inductions versus standard-of-care office-based inductions.
Cunningham CO, Giovanniello A, Li X, Kunins HV, Roose RJ, Sohler NL.
J Subst Abuse Treat. 2011 Jun;40(4):349-56

Statement of the American Society Of Addiction Medicine Consensus Panel on the use of **buprenorphine** in office-based treatment of opioid addiction.
Kraus ML, Alford DP, Kotz MM, Levounis P, Mandell TW, Meyer M, Salsitz EA, Wetterau N, Wyatt SA; American Society Of Addiction Medicine..
J Addict Med. 2011 Dec;5(4):254-63. doi:

Collaborative care of opioid-addicted patients in primary care using **buprenorphine**: five-year experience.
Alford DP, LaBelle CT, Kretsch N, Bergeron A, Winter M, Botticelli M, Samet JH.
Arch Intern Med. 2011 Mar 14;171(5):425-31.

Buprenorphine maintenance versus placebo or **methadone** maintenance for opioid dependence.
Mattick RP, Breen C, Kimber J, Davoli M.
Cochrane Database Syst Rev. 2014

NIDA (2016). Understanding Drug Abuse and Addiction: What Science Says. Retrieved January 2, 2017, from https://www.drugabuse.gov/understanding-drug-abuse-addiction-what-science-says

Psychosocial combined with agonist maintenance treatments versus agonist maintenance treatments alone for treatment of **opioid** dependence.
Amato L, Minozzi S, Davoli M, Vecchi S.
Cochrane Database Syst Rev. 2011 Oct 5;(10):CD004147

Lancet. 2003 Feb 22;361(9358):662-8.
1-year retention and social function after buprenorphine-assisted relapse prevention treatment for heroin dependence in Sweden: a randomised, placebo-controlled trial.
Kakko J[1], Svanborg KD, Kreek MJ, Heilig M.

Am J Public Health. 2013 May;103(5):917-22. doi: 10.2105/AJPH.2012.301049. Epub 2013 Mar 14.
Opioid agonist treatments and heroin overdose deaths in Baltimore, Maryland, 1995-2009.
Schwartz RP[1], Gryczynski J, O'Grady KE, Sharfstein JM, Warren G, Olsen Y, Mitchell SG, Jaffe JH

Cochrane Database Syst Rev. 2008 Apr 16;(2):CD006140. doi: 10.1002/14651858.CD006140.pub2.
Sustained-release naltrexone for opioid dependence.
Lobmaier P[1], Kornør H, Kunøe N, Bjørndal A

Lancet. 2011 Apr 30;377(9776):1506-13. doi: 10.1016/S0140-6736(11)60358-9.
Injectable extended-release naltrexone for opioid dependence: a double-blind, placebo-controlled, multicentre randomised trial.
Krupitsky E[1], Nunes EV, Ling W, Illeperuma A, Gastfriend DR, Silverman BL.

Lancet. 2018 Jan 27;391(10118):309-318.. doi: 10.1016/S0140-6736(17)32812-X.
Comparative effectiveness of extended-release naltrexone versus buprenorphine-naloxone for opioid relapse prevention (X:BOT): a multicentre, open-label, randomised controlled trial.
Lee JD, Nunes EV Jr, Novo P, et al.

Collaborative care of opioid-addicted patients in primary care using buprenorphine: five-year experience.
Alford DP, LaBelle CT, Kretsch N, Bergeron A, Winter M, Botticelli M, Samet JH.
Arch Intern Med. 2011 Mar 14;171(5):425-31.

Prev Med. 2015 Nov;80:10-1. doi: 10.1016/j.ypmed.2015.04.002. Epub 2015 Apr 11.
Vermont responds to its opioid crisis.
Simpatico TA[1]

Yale School of Medicine (2019). ED-Initiated Buprenorphine. Retrieved April 22, 2019 from https://medicine.yale.edu/edbup/