MASSACHUSETTS GENERAL HOSPITAL
PSYCHIATRY ACADEMY

Substance Use Disorders in the Emergency Department: Front door to treatment

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Disclosures

"Neither I nor my spouse/partner has a relevant financial relationship with a commercial interest to disclose."

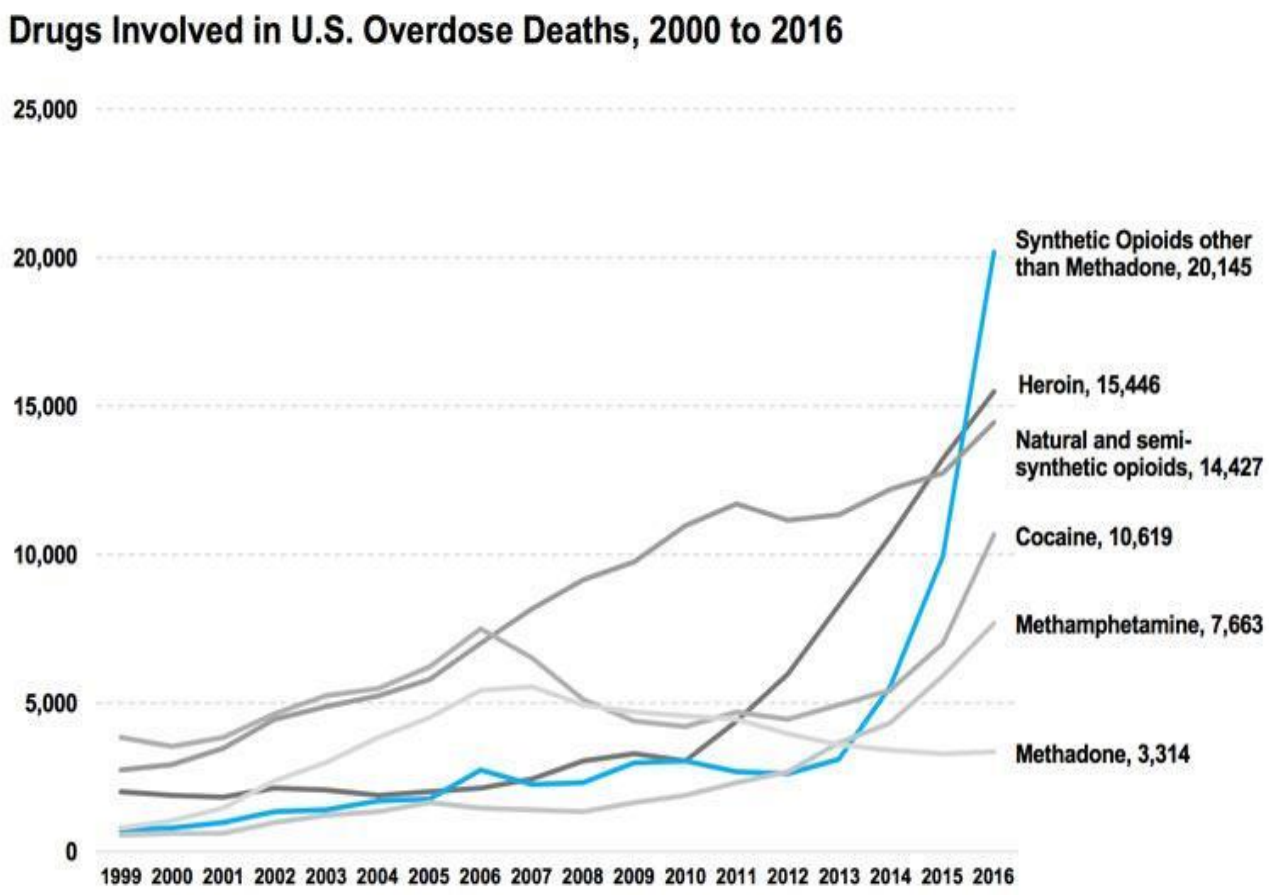
Background

- From 2006 to 2013 the rate of Emergency Department (ED) visits involving SUD increased by 37%

- EDs disproportionately provide medical care for individuals with SUDs and are critical access points to treatment

(Weiss AJ, Barrett ML, Heslin KC, Stocks C, 2016)

Rates of Nonfatal Overdoses Treated in ED



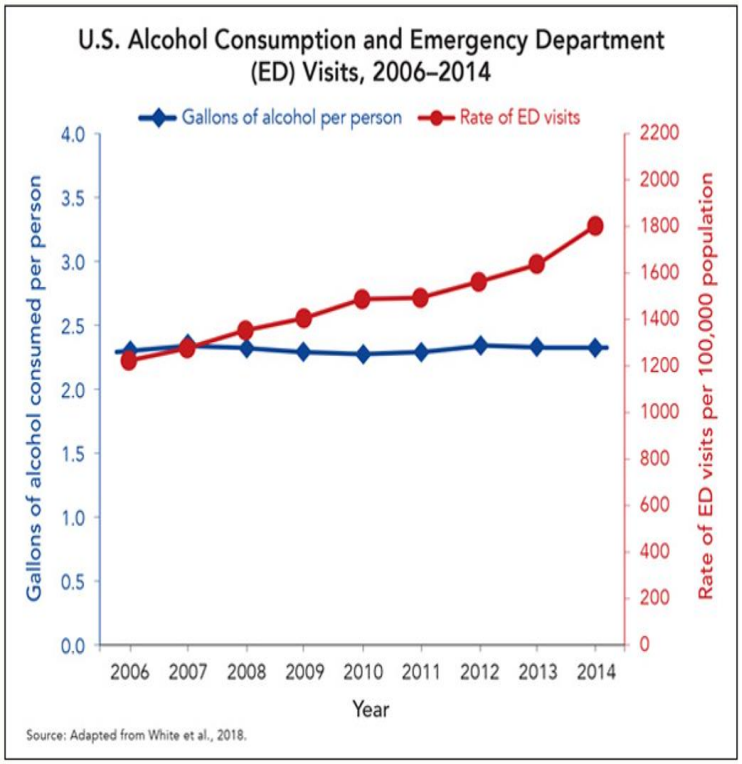
In 2019, overdoses co-involving opioids and other substances increased:

Cocaine – 23.6%
Amphetamine – 17.1%
Benzodiazepine – 18.7%

ED visits involving alcohol increased annually

- 61.6% increase from 3,080,214 to 4,976,136.
- Cost increased 272% from $4.1 billion to $15.3 billion
- Acute alcohol-related ED visits increased 51.5% from 1,801,006 to 2,728,313
- Chronic alcohol-related visits increased 75.7% from 1,279,208 to 2,247,823

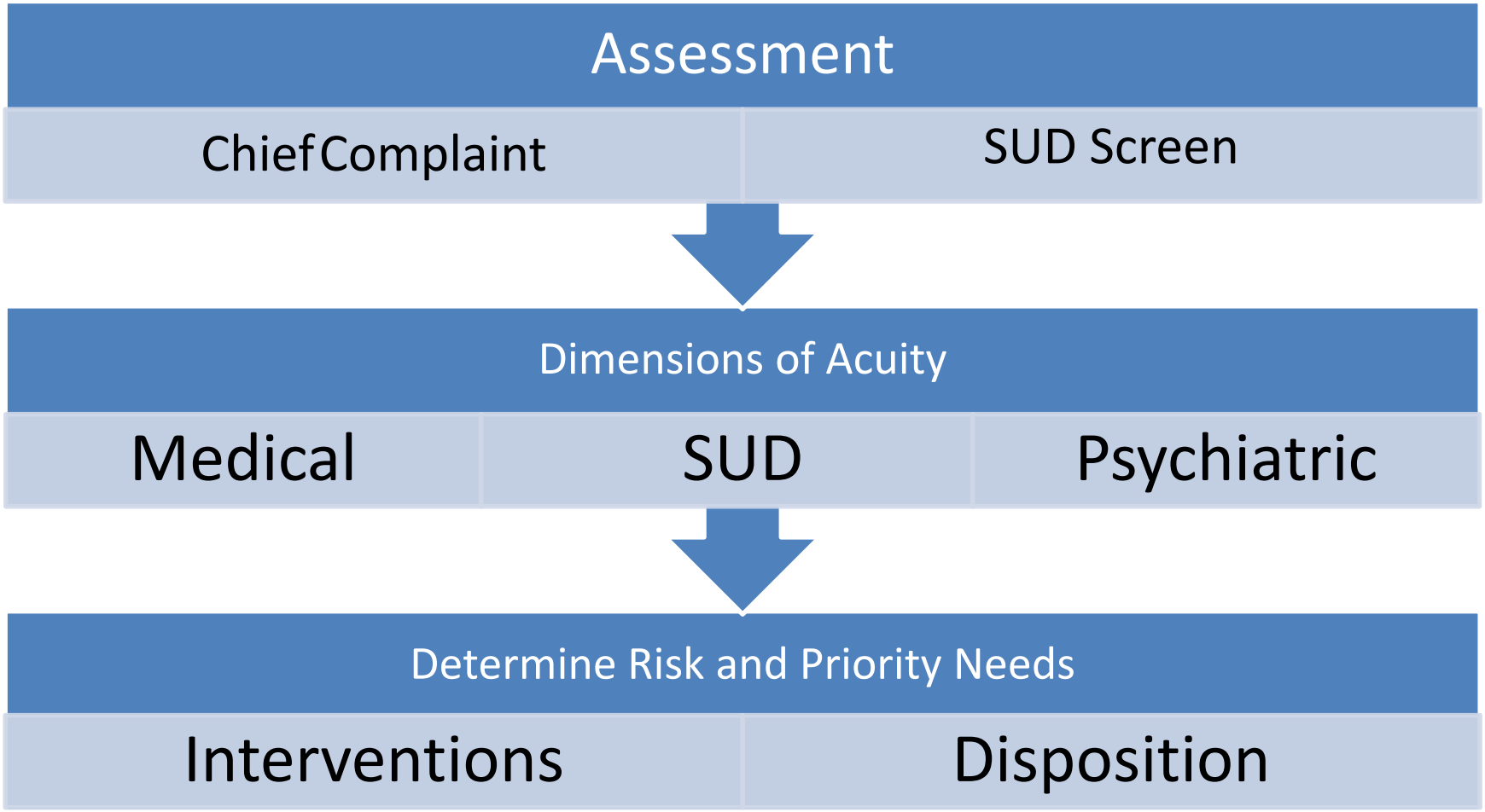
(White et al., 2018)



Evaluation and Treatment

- ED clinicians provide assessment, treatment, and link patient to further care
- ED visit is an opportunity to identify needs and initiate treatment for SUD
- Provide screening, psychosocial, pharmacological interventions, referrals to treatment, and harm reduction

ED Work Flow


Assessment
Chief Complaint
SUD Screen
Dimensions of Acuity
Medical
SUD
Psychiatric
Determine Risk and Priority Needs
Interventions
Disposition

Screening and Assessment

- Screening for SUD as part of overall assessment of patient in ED
- Asking questions about alcohol and substance use is an integral part of assessment of every patient
- Started at triage; expanded on as indicated
- *Quick and easy*
- Screening for unhealthy alcohol use and/or drug use

Single Question Screeners

NIAAA for alcohol use

- How many times in the past year have you had X or more drinks in a day?

- X=5 for men
- X=4 for women

NIDA for drug use

- In the past year have you used an illegal or prescription drug for non-medical reasons?

- Yes/No

Dimensions of Patient Acuity

- Intoxication/withdrawal states
- Medical complications/co-morbidity
- Psychiatric acuity/co-morbidity
- Treatment goals/trajectory
- Active use/remission
- Substances used
- Environmental factors
- Overdose
- Capacity

Anchoring Bias

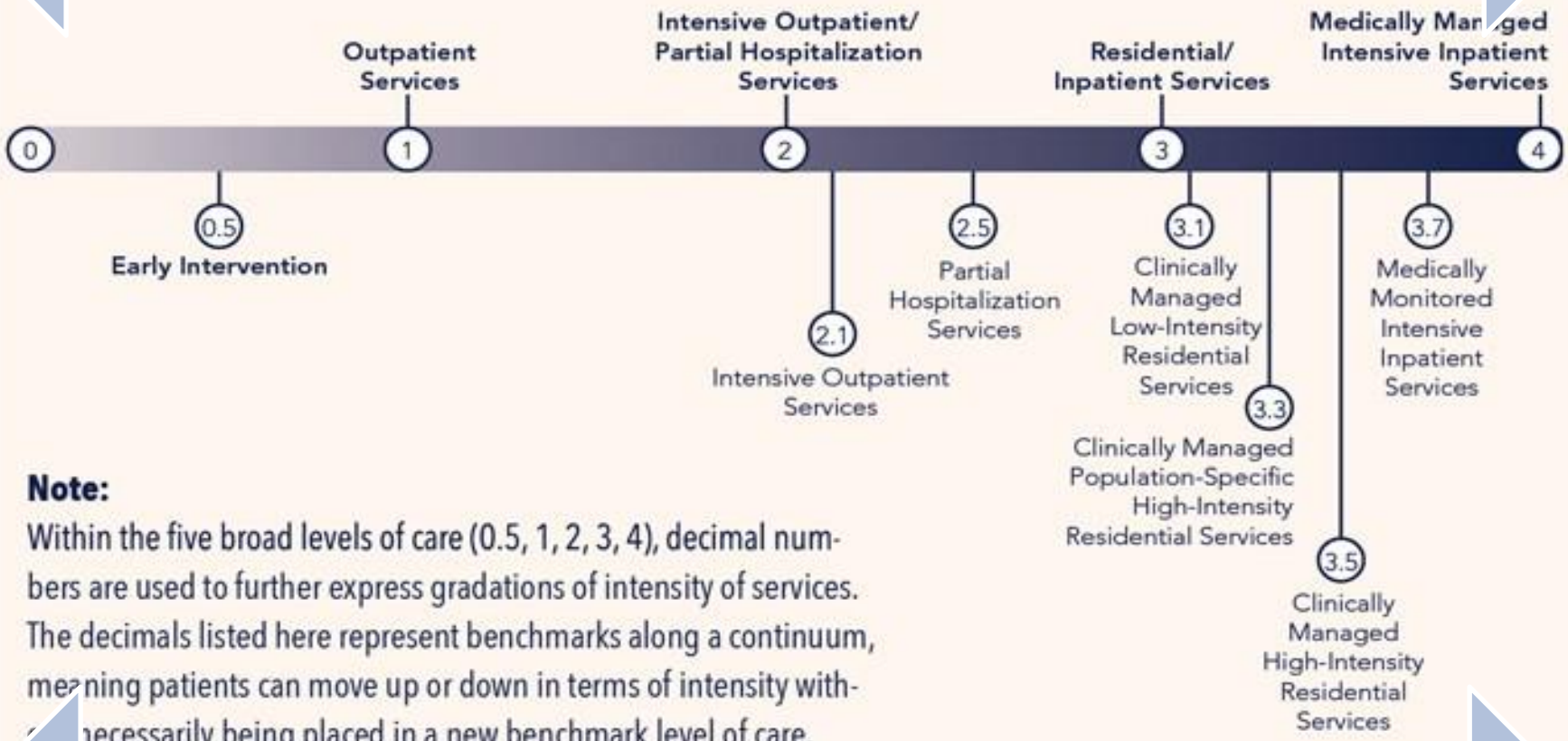
- Predisposition that explains our willingness to accept a patient's initial diagnosis made without further thought
- Be careful not to allow anchoring bias to impact your assessment of patients with SUD.

(Seifter, 2015)

Priority of Needs

- Determine risk level
- Based on present severity of each dimension
- Interaction between dimensions
- Present acuity level of SUD
  - Not active but at risk
  - Need motivational enhancement
  - Instability in multiple dimensions
  - Require 24 recovery environment
  - Complicated withdrawal, psychiatric, medical factors

Continuum of Care



Note:

Within the five broad levels of care (0.5, 1, 2, 3, 4), decimal numbers are used to further express gradations of intensity of services. The decimals listed here represent benchmarks along a continuum, meaning patients can move up or down in terms of intensity without necessarily being placed in a new benchmark level of care.

Substance Use Continuum

Serially Assess and Monitor

- Modify patient level of care based on:
  - phase of illness
  - clinical status
  - co-occurring conditions (medical/psychiatric)
  - treatment needs/patient preferences
  - Intensiveness and types of treatment adjusted along with the level of care where treatment is delivered

Detoxification

- Acute treatment for withdrawal in the ED
- Inpatient medical treatment of acute withdrawal
- Hospital or detox facility
  - Alcohol or benzodiazepine withdrawal
  - Methadone/buprenorphine/clonidine for opioid
- ALOS is 4-6 days
- Severe and unstable withdrawal may require higher medical intensity and hospital admission
- Comorbidity is a factor

** DETOX in isolation is not TREATMENT but often 1st step**

Interventions for Alcohol

- Focused on protecting those at-risk from further harm; ongoing monitoring
- Start on detox protocols while in ED; CIWA
- Motivational interviewing and support with entering treatment
- Recovery Coach
- Patients who received a direct referral from ED to SUD treatment facility were 30 times more likely to enroll in treatment than those with an indirect referral who were discharged home first

Alcohol Withdrawal Assessment

CIWA Scale for Alcohol Withdrawal	
Agitation 0-7____	Nausea/Vomiting 0-7____
Sweating 0-7____	Tremor 0-7____
Auditory Disturbances 0-7____	Visual Hallucinations 0-7____
Headache 0-7____	Tactile Disturbances 0-7____
Orientation and Clouding of the Sensorium 0-4____	Total Score_____ 0-8 = no meds needed; **9-14 = medication indicated (treat with bzd here)**; 15-20 = moderately severe; more than 20 = severe withdrawal, at risk for imminent seizure if not treated

Interventions for Opioid Use

- Treating opioid withdrawal with agonist (buprenorphine or methadone) while patient in the ED
  - Augment with symptomatic medication management
- Continuing medications for opioid use disorder (MOUD) during hospitalization
- Starting buprenorphine or methadone in the ED and referring to treatment
  - For methadone must f/u with opioid treatment program (OTP)
  - Buprenorphine give prescription to bridge until appointment
- At home buprenorphine induction and referral

Opioid Withdrawal Assessment

COWS Scale for Opioid Withdrawal	
Pulse Rate 0-4 _____	GI Upset 0-5____
Sweating 0-4____	Tremor 0-4____
Restlessness 0-5____	Yawning 0-4____
Pupil Size 0-5____	Anxiety/Irritability 0-4____
Bone or Joint Aches 0-4____	Piloerection 0-5____
Rhinnorea/Lacrimation 0-4____	Total Score_____ 5-12 = mild; **13-24 = moderate (treat with bupe here)**; 25-36 = moderately severe; more than 36 = severe withdrawal

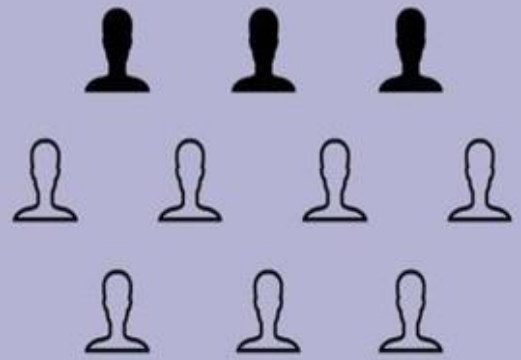
98% of patients receive aspirin after a heart attack
30% receive MOUD after an overdose

Methadone And Buprenorphine Are Associated With Reduced Mortality After Nonfatal Opioid Overdose

RETROSPECTIVE COHORT, MASSACHUSETTS PUBLIC HEALTH DATASET, 2012-2014

17,568 opioid overdose survivors
with ambulance or hospital encounter

Only 3 in 10 receive MOUD*
over 12 months of follow-up



*Medication for Opioid Use Disorder

Mortality at 12 months:
4.7 deaths / 100 person-yrs

Association of MOUD* with mortality:

Methadone ↓ 53%

Buprenorphine ↓ 37%

Naltrexone** ↔

** *limited by small sample*

Larochelle et al. *Annals of Internal Medicine*. 2018.

Medication Review

	Patient selection	Pharmacology	Administration	Treatment Setting	Prescribing
Methadone	OUD that meet federal criteria for OTP admission.	Opioid receptor full agonist.	Daily oral administration at OTP. **patients may also have take home medication.*	Opioid Treatment Program	Medication dispensed at OTPs only.
Buprenorphine	OUD	Opioid receptor partial agonist.	Transmucosal, implant or injection. Can be filled at pharmacy.	No limitation to treatment setting	Physicians and APPs who have a waiver to prescribe.
Naltrexone	OUD or AUD abstained from opioids 7-14 days.	Opioid receptor antagonist.	Daily tablet or once per 28d IM injection.	No limitation to treatment setting	No special waiver required.

Tip: Check out SAMHSA's TIP 63 for more about MAT options

Methadone

If currently in care at an OTP:

- Contact OTP to confirm last dose date and amount
- If unable to confirm, generally give between 10-40mg

If not currently in care at an OTP:

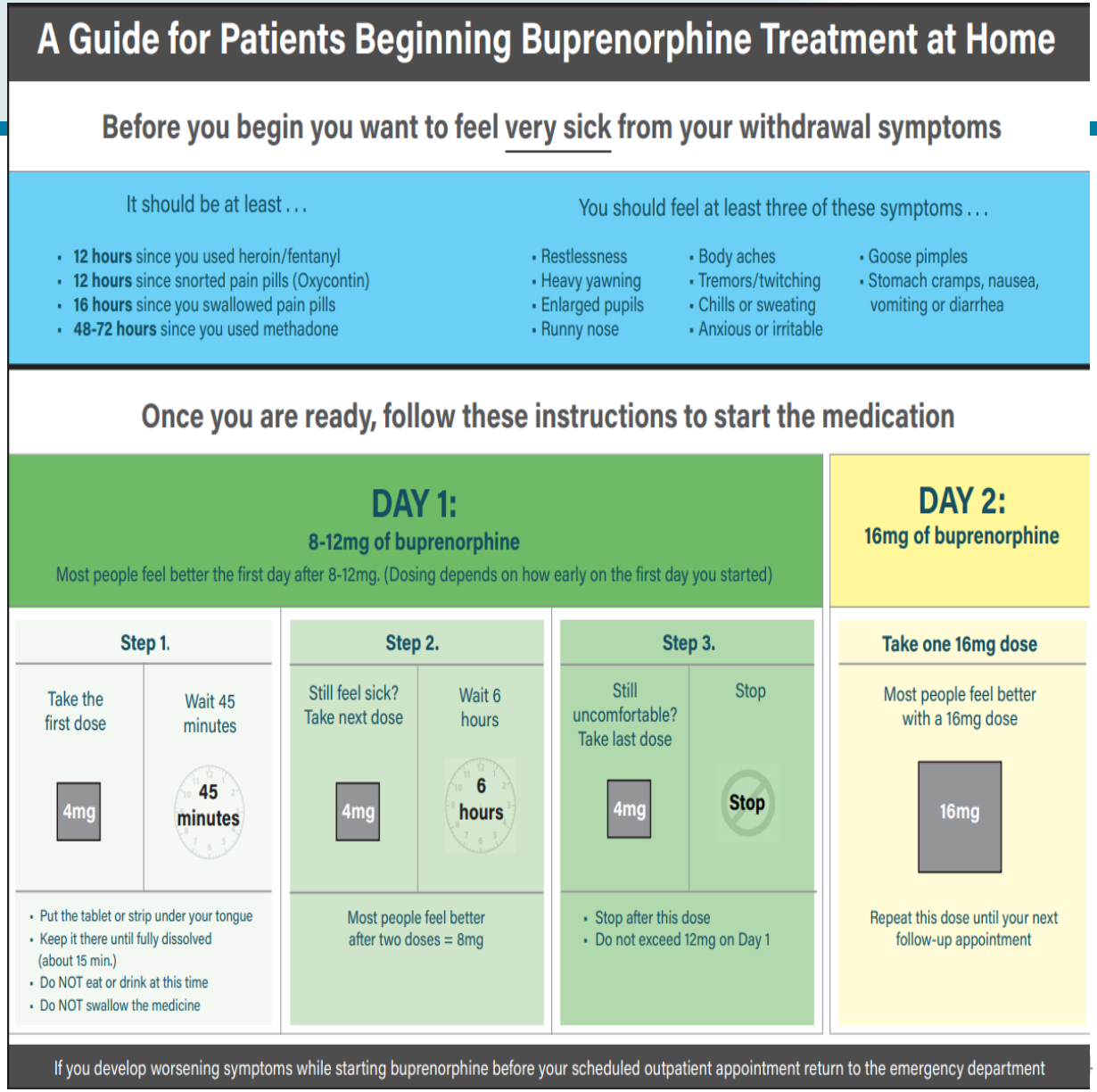
- 40 mg in first day/may give in divided doses
- Follow your institutions protocols; Go slow
- Can not be prescribed on discharge for OUD
- Will need to be connected to OTP at discharge
- Documentation of last dose

Verster and Buning,2000; Strang1999

Buprenorphine Induction

- OUD; not presently dependent
  - Start low, go slow
- Opioid dependent; in active W/D
  - Be aware of Fentanyl; do not induce unless moderate withdrawal (COWS 13 to 15) is observed
  - Buprenorphine 4mg SL q2-4 hours PRN, up to 12-16mg SL daily first day
- Opioid dependent; not in active W/D
  - High risk for precipitated W/D; COWS, Observed initiation, potential micro-dosing
  - Home induction; patient education, prescription or take home kit
- Appointment for follow up/bridge appointment

NIDA's Guide for Home Induction of Buprenorphine



Circumstances DATA 2000 waiver not required

- Prescribers can maintain or detoxify a person with buprenorphine as an adjunct to medical or surgical conditions other than OUD

- Patients with OUD who are hospitalized for a primary medical problem other than opioid use, such as myocardial infarction, may be given opioid agonist medications such as methadone and buprenorphine to prevent opioid withdrawal that would complicate the primary medical problem

Three Day Rule

- Allows non-waivered providers to administer (but not give outpatient prescription) opioid medications to a patient for the purpose of relieving acute withdrawal symptoms while arranging for the patient's referral for treatment, under these conditions:
- Not more than one day's medication may be administered or given to a patient at one time
- Treatment may not be carried out for more than 72 hours
- The 72-hour period cannot be renewed or extended
- To give buprenorphine prescription for use after leaving hospital must be a waivered provider

(Title 21, Code of Federal Regulations, Part 1306.07(b))

Use a Risk-Benefit Framework

NOT…

- Is the patient good or bad?
- Does the patient deserve treatment with MOUD?
- Should this patient be punished or rewarded?
- Should I trust the patient?

RATHER…

- Do the potential benefits of MOUD outweigh untoward effects and risks for this patient?
- What are the risks of not providing MOUD for this patient?

Hospitalized patients

- Initiating methadone in hospital:
  - 82% present for follow-up addiction care
- Initiating buprenorphine vs detox:
  - Buprenorphine: 72.2% enter into treatment after discharge
  - Detoxification: 11.9% enter treatment after discharge

J Gen Intern Med. Aug 2010; 25(8): 803–808; JAMA Intern Med 2014 Aug;174(8):1369-76.)

Referral

- Office-Based Opioid Treatment Program (OBOT)
  - Outpatient program that provides FDA-approved medications for OUD (Buprenorphine and Naltrexone)
- Opioid Treatment Program (OTP)
  - Daily medication for OUD by dispensing Methadone (buprenorphine)
- Outpatient withdrawal management if stable to remain in community
- Medication evaluation; Naltrexone for AUD/OUD
- Counseling, behavioral, and supportive therapies
- Psychiatric treatment and medication management
- Intensive out patient programs
- Low threshold treatment

Opioid Overdose

- Monitoring and high priority for treatment
- Careful after reversal
- Immediate access to care
- MOUD
- Use of a peer navigator or recovery coach post-opioid overdose ED care
- Take home nasal naloxone

Nasal Naloxone

2018 advisory from Jerome Adams, the 20th US Surgeon General, supports clinicians to prescribe or dispense naloxone to individuals at risk of opioid overdose and their friends and family and to increase the awareness, possession and use of naloxone among at risk populations and broader communities

Harm reduction

- Safe Injection Supplies, condoms
- HIV/ HCV/STI testing
- PrEP, PEP
- Community Health Worker, Recovery coach
- Information and referrals; ID, SSP, disposal sites
- Supervised consumption services

Effective SUD Management in ED

- Screening
- Initiating treatment, pharmacotherapy
- Directly link patients to treatment
- Management of competing priorities
- Know available resources for referrals
- Enhancing access by having providers obtain waiver to prescribe buprenorphine
- Harm Reduction

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