WELCOME
Addiction Medicine ECHO Clinic

The session will begin promptly at **12 pm**.

Please **mute** the audio on your device.

Sessions take place **Thursday on the 2nd and 4th week of the month**.

Please connect your **camera**.

Need technical assistance? Call 907.729.2622 or text your phone number into the chat.

Project ECHO®

ALASKA NATIVE MEDICAL CENTER

ALASKA NATIVE TRIBAL HEALTH CONSORTIUM

Foundation *for* Opioid Response Efforts

Recording

We will record the **didactic portion** of every session. After the session, the didactic portion of this clinic will be available on the ANTHC Addiction Medicine ECHO page.

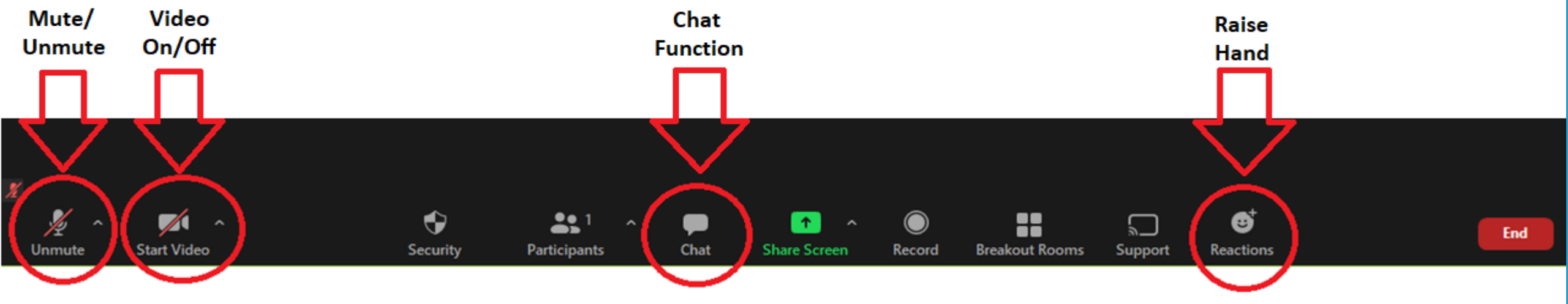
By participating in this clinic you are consenting to be recorded.

If you do not wish to be recorded, please email behavioralhealth@anthc.org at least one week prior to the ECHO Clinic you plan to attend.

Some Helpful Tips

- Please mute microphone when not speaking
- Use chat function
- Position webcam effectively
- Test both audio & video

Need technical assistance? Use the chat function or call 907-317-5209



ANTHC Clinical ECHO Series

Approved Provider Statements:

In support of improving patient care, Alaska Native Medical Center (ANMC) is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

Contact Hours:

ANMC designates this activity for a maximum of 25 contact hours, including 12 total pharmacotherapeutics contact hours, commensurate with participation.

Financial Disclosures:

None of the presenters and planners for this educational activity have any relevant relationship(s) to disclose with ineligible companies whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients.

Approved for 1 CHAP CE

Conflict of Interest Disclosures:

None of the presenters and planners for this educational activity have any relevant relationship(s) to disclose with ineligible companies whose primary business is producing, marketing, selling, re-selling, or distributing healthcare products used by or on patients.

Requirements for Successful Completion:

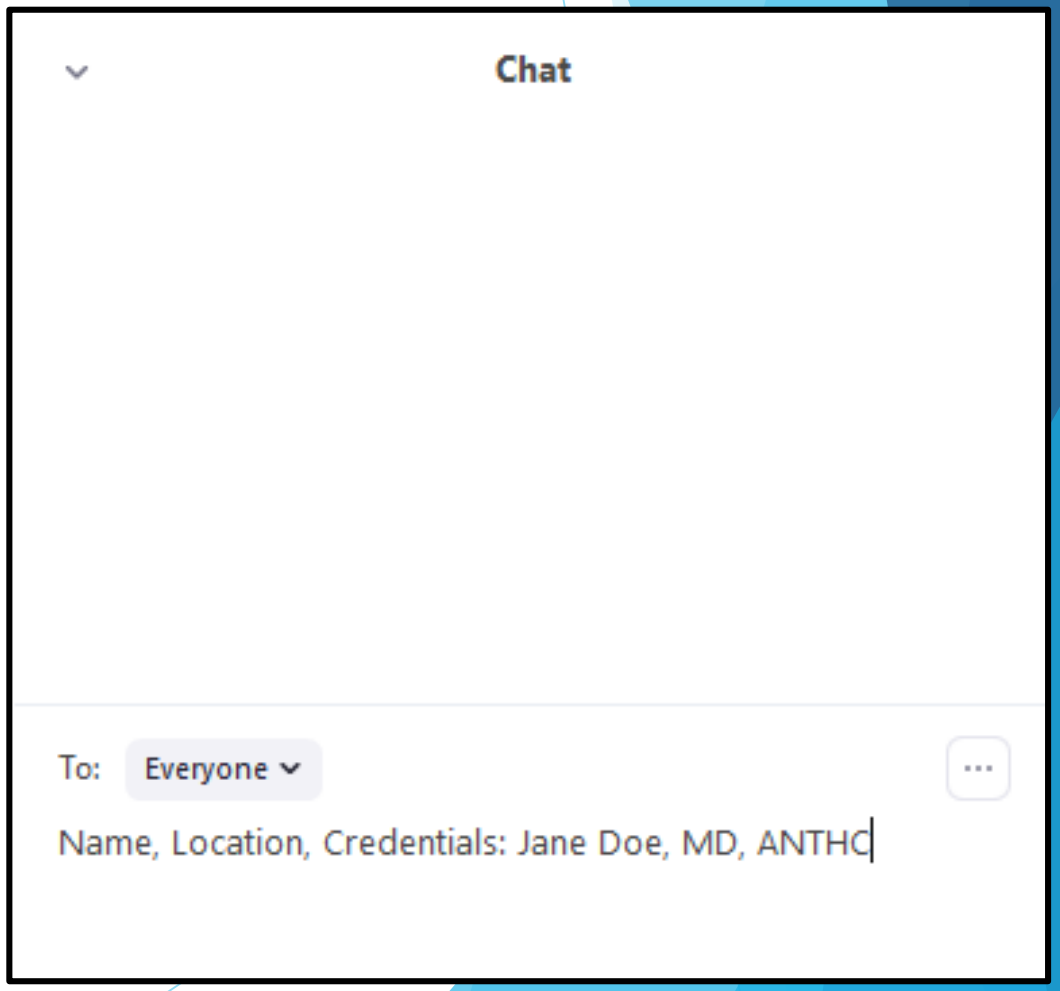
To receive CE credit be sure you are included in attendance record as directed by the facilitator/session moderator, and complete the course evaluation or post session survey via this link: https://forms.gle/QhwCeGTf4zLNwpBX7

For more information contact Jennifer Fielder at jlfielder@anthc.org or (907) 729-1387

Introductions

Addiction Medicine ECHO

- Please introduce yourself in the chat :
  - Name
  - Location
  - Profession/Credentials
  - *Note*: The chat will be saved as our attendance record for continuing education credits.



Outpatient Alcohol Withdrawal Management

- Dr. Sarah Spencer, DO

Financial Disclosures

- I have no financial conflicts of interest to disclose
- I am currently employed by the Ninilchik Traditional Council
- I work as a treatment consultant for the Opioid Response Network in Alaska, as well as for other non-profit agencies.
- I am the volunteer medical director of the Homer Exchange, Alaska's only rural syringe access program

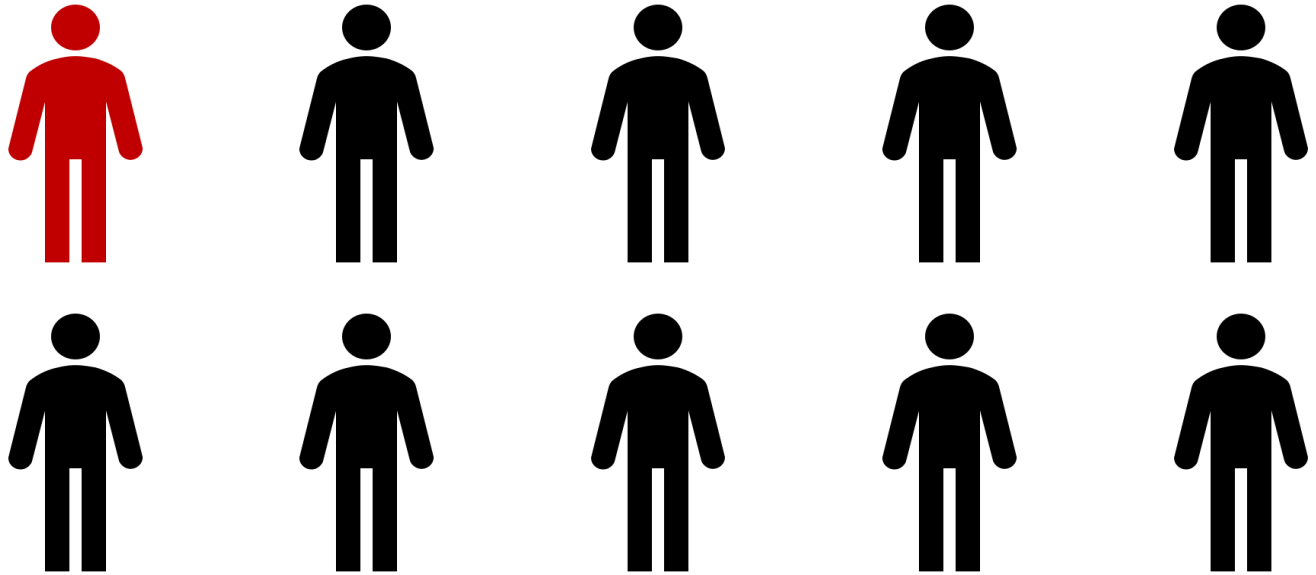
Special thanks

Thank you to Dr. Alyssa Peterkin, Dr. Shawn Cohen, Dr. Stephen Holt for allowing the use of there slides from the 2022 AMERSA conference

Objectives

1. Explain pathophysiology of alcohol withdrawal and how it impacts severity of withdrawal
2. Identify patients suitable for ambulatory detoxification based on comorbidities and other patient characteristics
3. Utilize outpatient alcohol detoxification strategies including the selection of appropriate pharmacotherapy and monitoring of patient progress.

EPIDEMIOLOGY

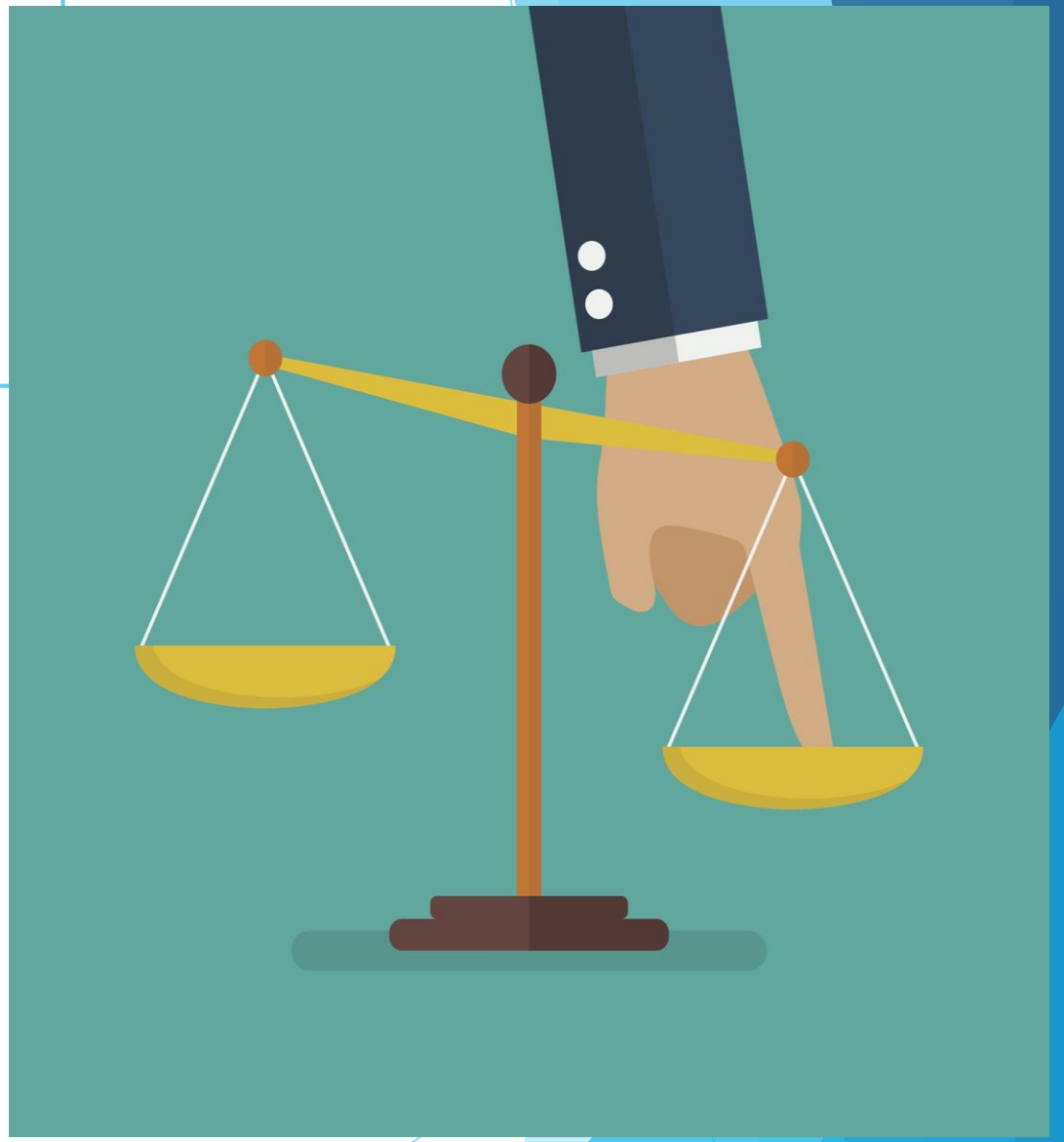


30 million people in the US have AUD (10.2%)
5% of hospital inpatients experience alcohol withdrawal
400K hospitalizations, $3.5 billion

NSDUH 2021
Steele, *J Addict Med*, 2020
Owens, *HCUP #249*

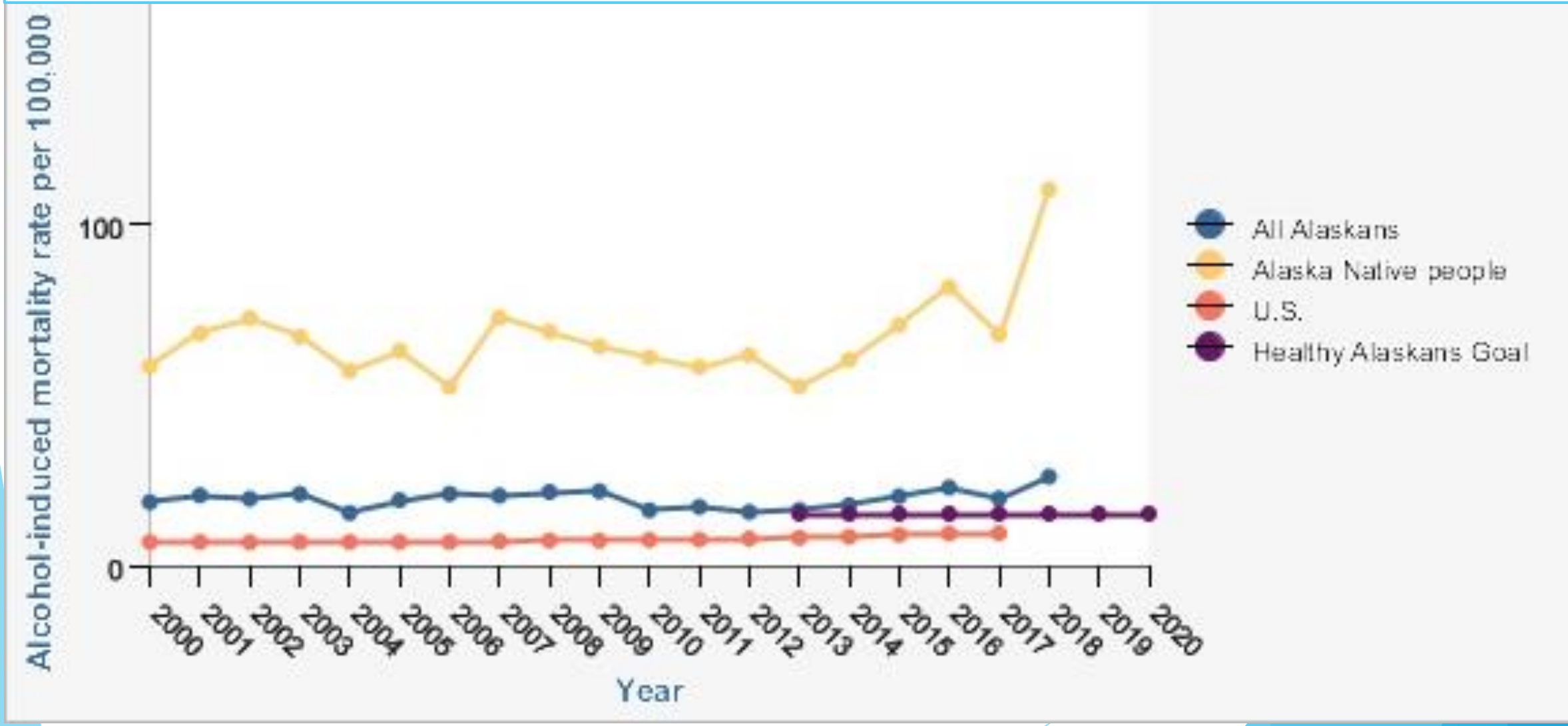
DISPARITIES IN ALCOHOL USE DISORDER

- Prevalence of AUD higher in
  - 18-25yo
  - Men
  - Identify as American Indian or Alaska Native
  - Non Hispanic, White
- Alcohol-related deaths increasing fastest in women and AI/AN
- Stigma, systemic inequality, systemic racism are drivers



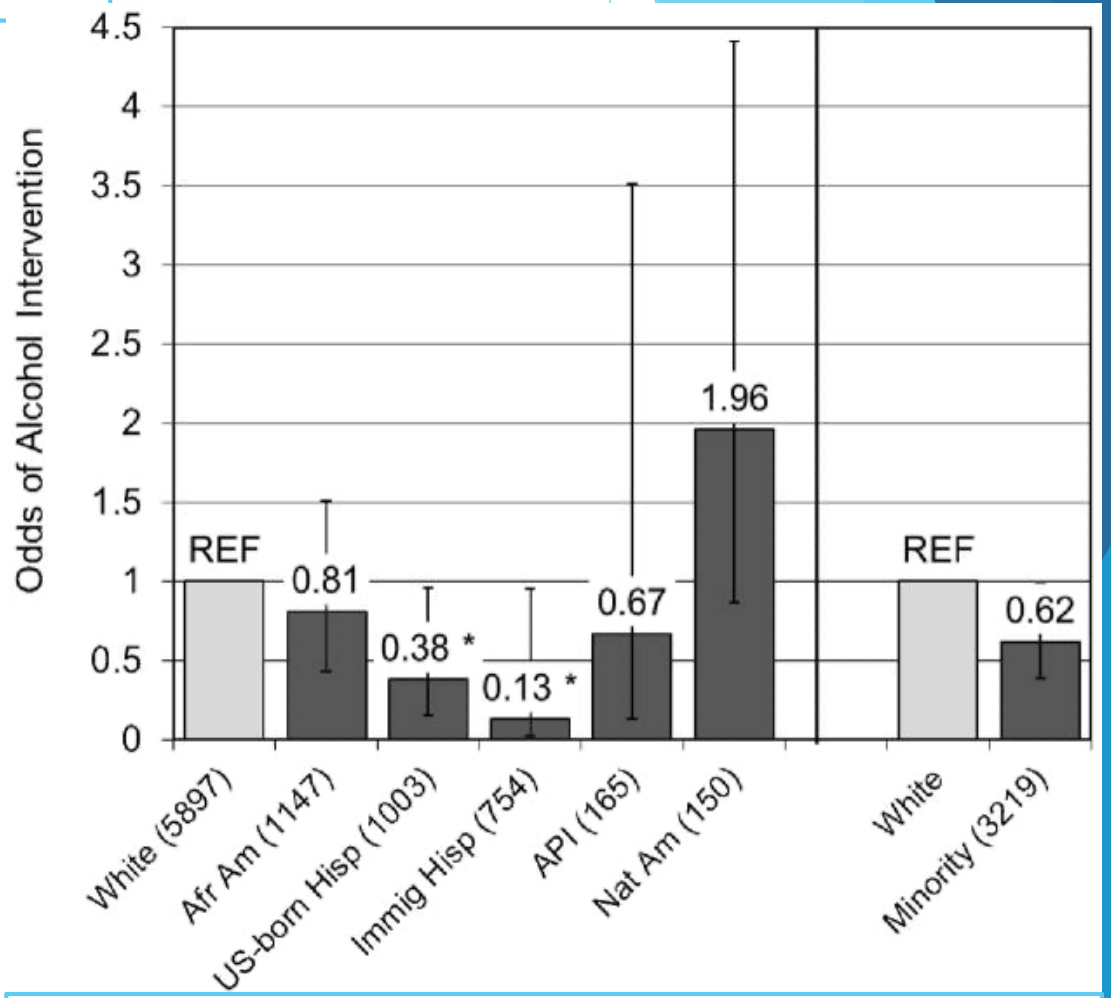
NSDUH 2020
Spillane, JAMA Network Open, 2020
Williams Drug Alcohol Depend. 2017
Owens Drug Alcohol Depend. 2018

Alaska Native people at 110.3 per 100,000 had rates of alcohol-induced mortality that were 8 times higher than those experienced by non-Hispanic whites at 13.0 per 100,000 in 2018



DISPARITIES IN TREATMENT

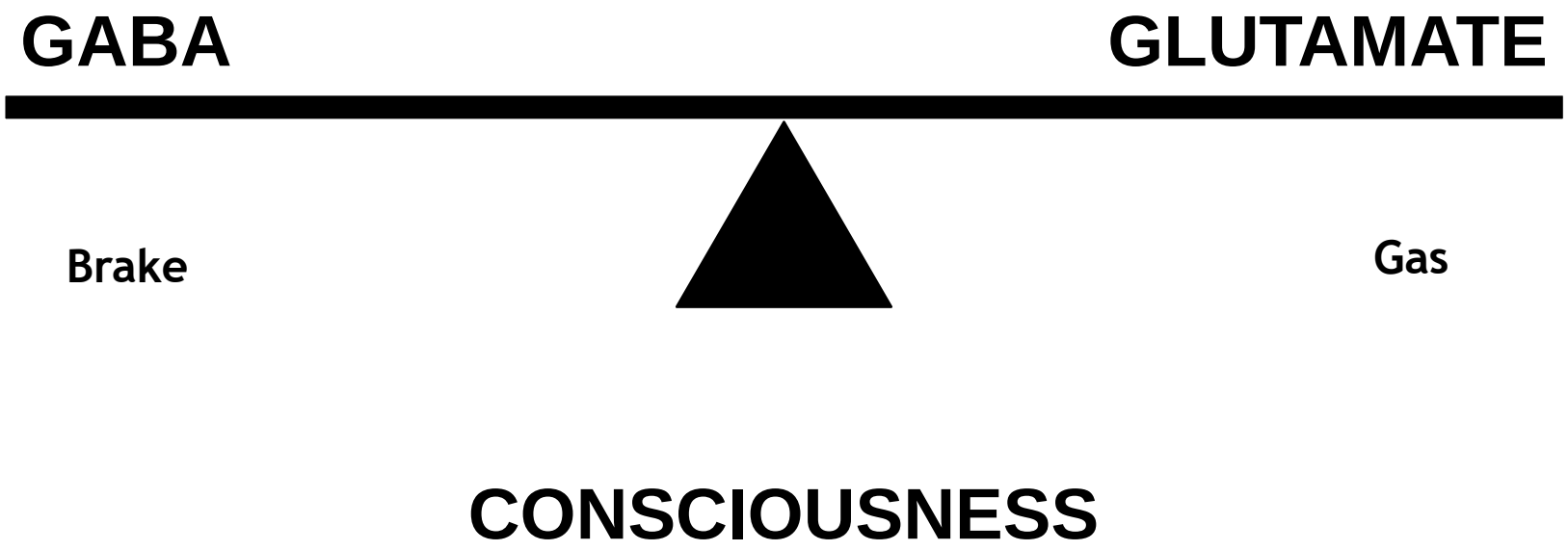
- Disparities in who is offered information, brief intervention and treatment
  - Racial/ethnic minorities more likely mandated to addiction treatment via criminal legal system
- Use of medications for AUD abysmally low for all groups
- Stigma, systemic inequality, systemic racism are drivers

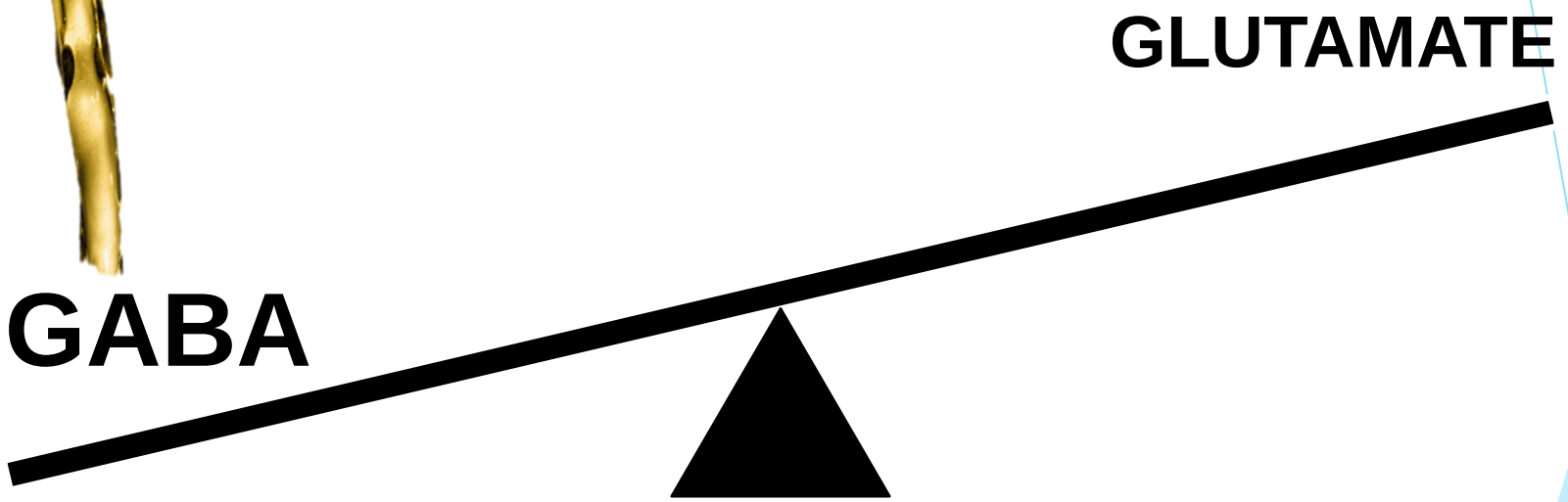


Racial/ethnic differences in the odds of receiving an alcohol intervention over 3 years

NSDUH 2020
Pinedo. DAD. 2021
Mulia et al Psychiat Serv. 2014

PATHOPHYSIOLOGY





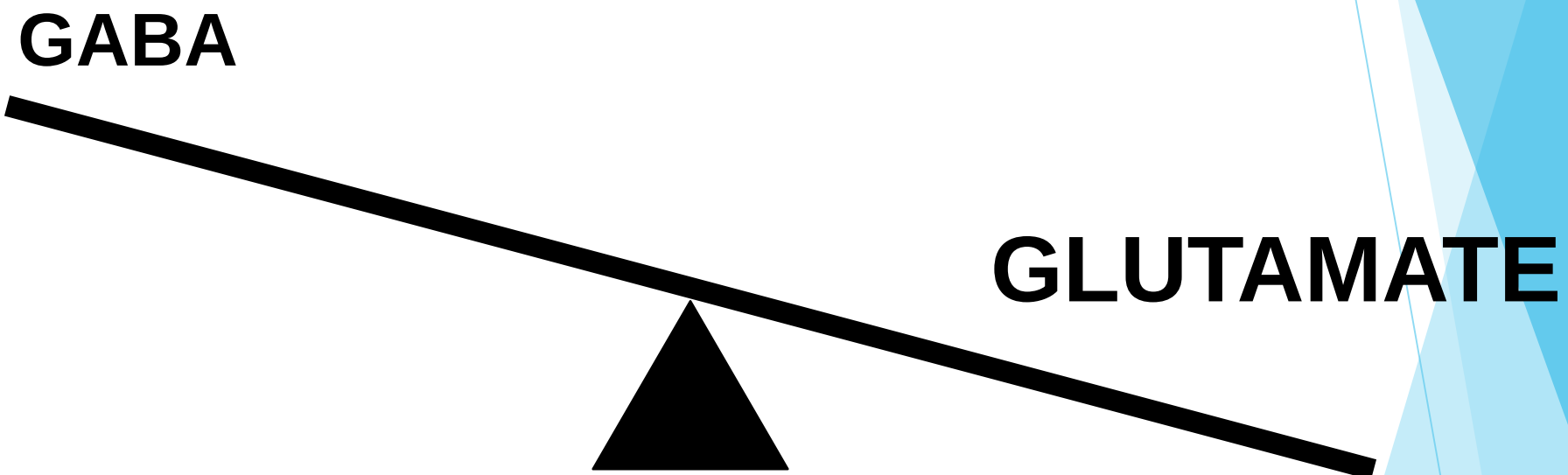
Putting on the brakes

Alcohol Use

GABA **GLUTAMATE**

Long term compensation

Dixit, *Pharmacotherapy*, 2016



“Pedal to the metal”

ALCOHOL WITHDRAWAL

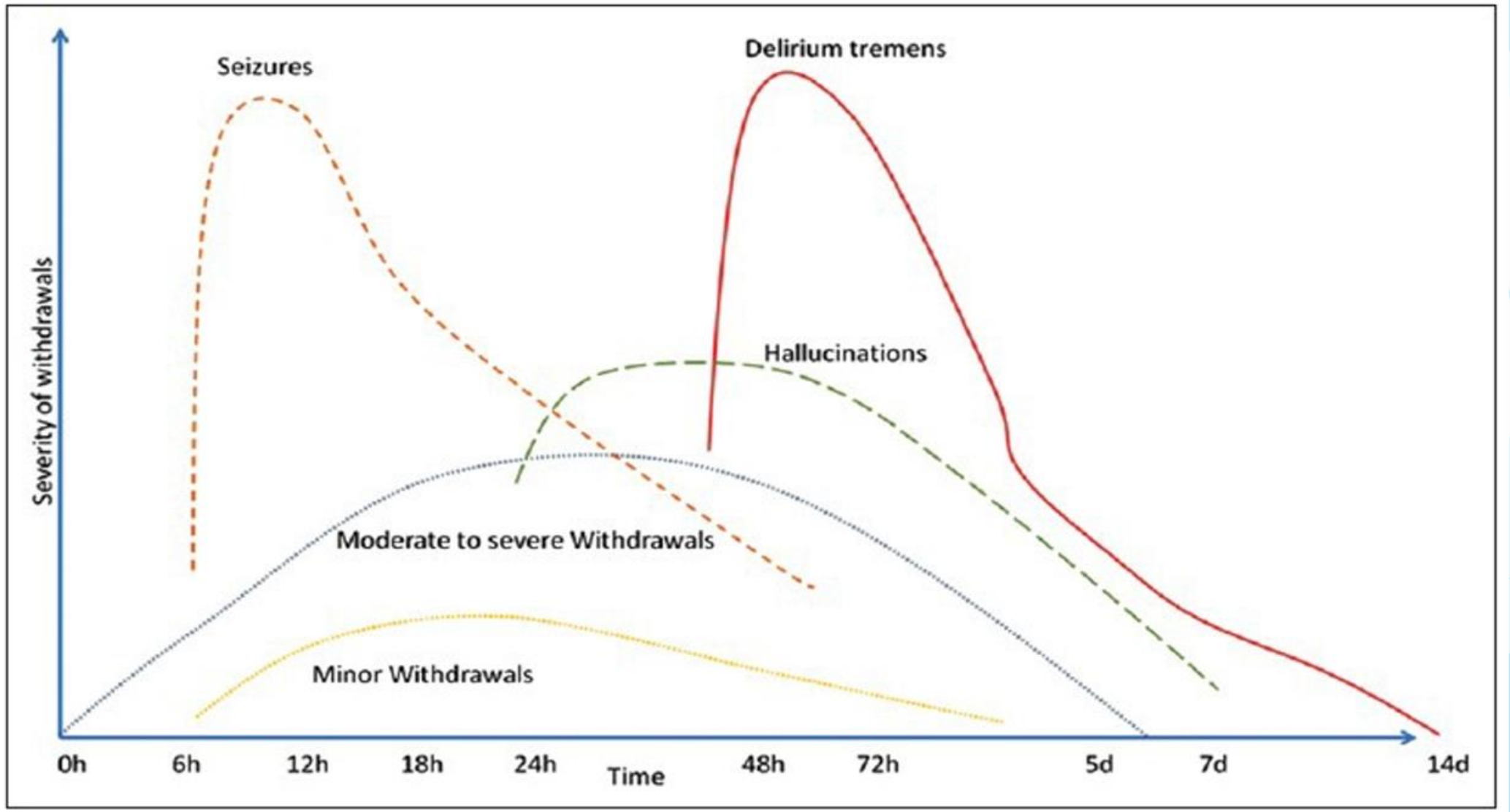
UNCOMPLICATED WITHDRAWAL

- Early sx
  - Anxiety, diaphoresis, nausea, vomiting, tremor, nystagmus
  - Early hallucinations

COMPLICATED WITHDRAWAL

- 5% of withdrawal
- 3-5 days
  - SIRS
  - Disorientation, paranoia, psychosis
- Seizures peak 24hrs

TIMELINE OF WITHDRAWAL SYMPTOMS



Kattimani,
Ind Psychiatry J, 2013

WHERE IS ALCOHOL WITHDRAWAL TREATED?

- Outpatient clinic
- Short term medically managed withdrawal "detox"
- Hospital

BENEFITS OF AMBULATORY TREATMENT

- Safe
- Patient preference → TRUST
- Cheaper
- Decrease hospital burden

Hayashida, NEJM 1989

Figure 3. Prediction of Alcohol Withdrawal Severity Scale (PAWSS)

PART A: THRESHOLD CRITERIA: **("Y" or "N", no point)**

Have you consumed any amount of alcohol (i.e., been drinking) within the last 30 days?
OR did the patient have a "+" blood alcohol level (BAL) on admission? _____

IF the answer to either is YES, proceed with test:

PART B: BASED ON PATIENT INTERVIEW: **(1 point each)**

1. Have you been recently intoxicated/drunk within the last 30 days? _____
2. Have you ever undergone alcohol use disorder rehabilitation treatment or treatment for alcoholism? (i.e., inpatient or outpatient treatment programs or AA attendance) _____
3. Have you ever experienced any previous episodes of alcohol withdrawal, regardless of severity? _____
4. Have you ever experienced blackouts? _____
5. Have you ever experienced alcohol withdrawal seizures? _____
6. Have you ever experienced delirium tremens, or DT? _____
7. Have you combined alcohol with other "downers" like benzodiazepines or barbiturates during the last 90 days? _____
8. Have you combined alcohol with any other substance of abuse during the last 90 days? _____

PART C: BASED ON CLINICAL EVIDENCE: **(1 point each)**

9. Was the patient's BAL on presentation ≥ 200? _____
10. Is there evidence of increased autonomic activity? (e.g., HR > 120 bpm, tremor, sweating, agitation, nausea) _____

TOTAL SCORE: _____

Notes: *Maximum score = 10. This instrument is intended as a SCREENING TOOL. The greater the number of positive findings, the higher the risk for the development of AWS. A score of ≥ 4 suggests HIGH RISK for moderate to severe (complicated) AWS; prophylaxis and/or treatment may be indicated.*

Source: Adapted **Source:** Adapted from Maldonado JR, Sher Y, Ashouri JF, et al. The "prediction of alcohol withdrawal severity scale" (PAWSS): systematic literature review and pilot study of a new scale for the prediction of complicated alcohol withdrawal syndrome. *Alcohol.* 2014;48(4):375-390.

Principles of Triage

Historical	Social & Environmental
Physical Exam	Labs

WHO CAN BE MANAGED IN THE CLINIC

Support system

Only mild or moderate symptoms

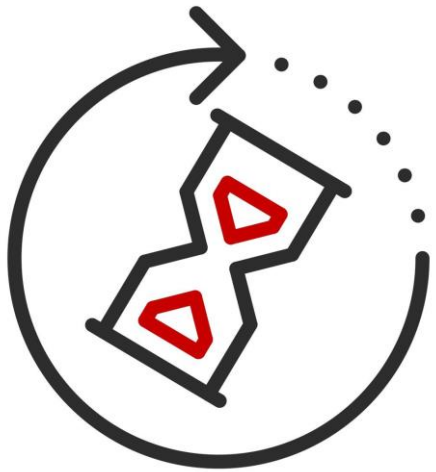
Frequent check ins

No history of severe withdrawal

No significant comorbidities

LONG VS SHORT-ACTING BENZODIAZEPINES

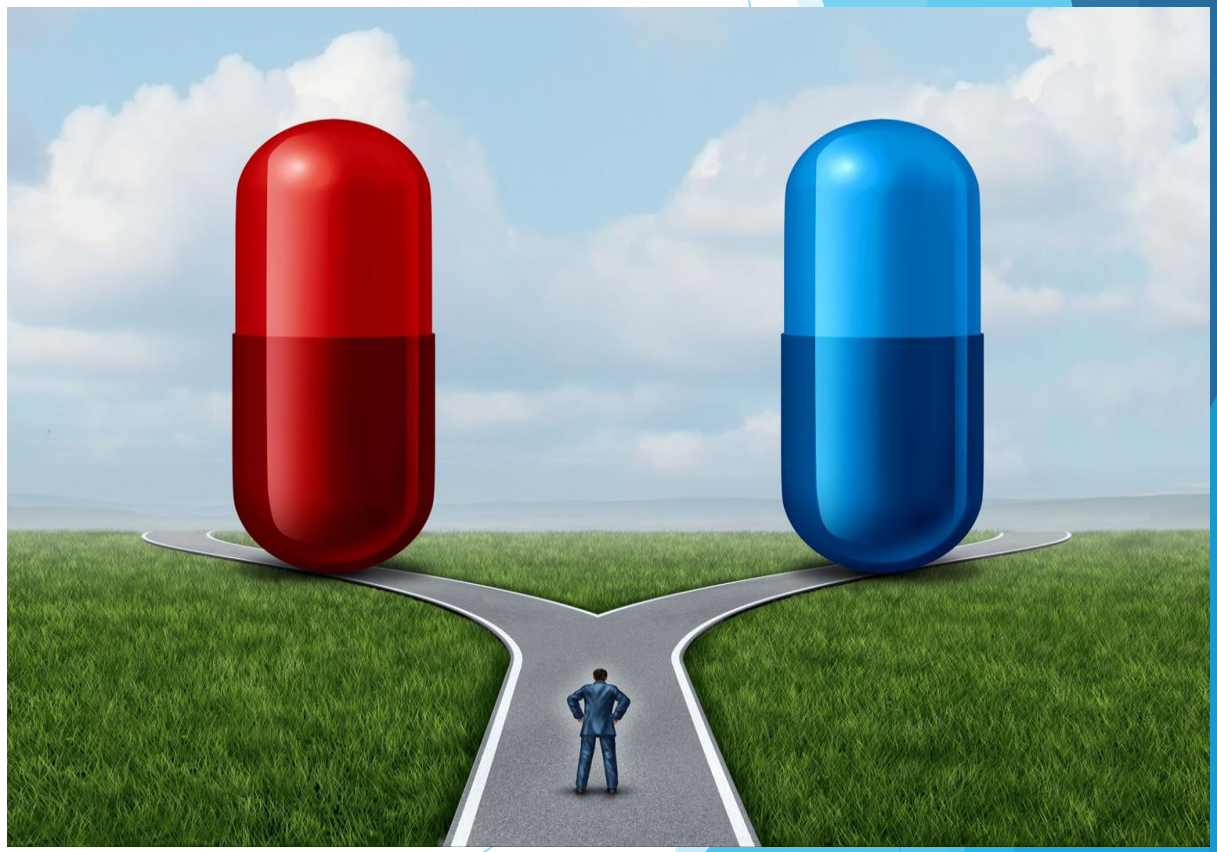
- Long-acting preferred
- Diazepam vs chlordiazepoxide
- 50mg chlordiazepoxide = 10mg diazepam



Perry, CNS Drugs. 2014

BENZODIAZEPINES VS GABAPENTIN

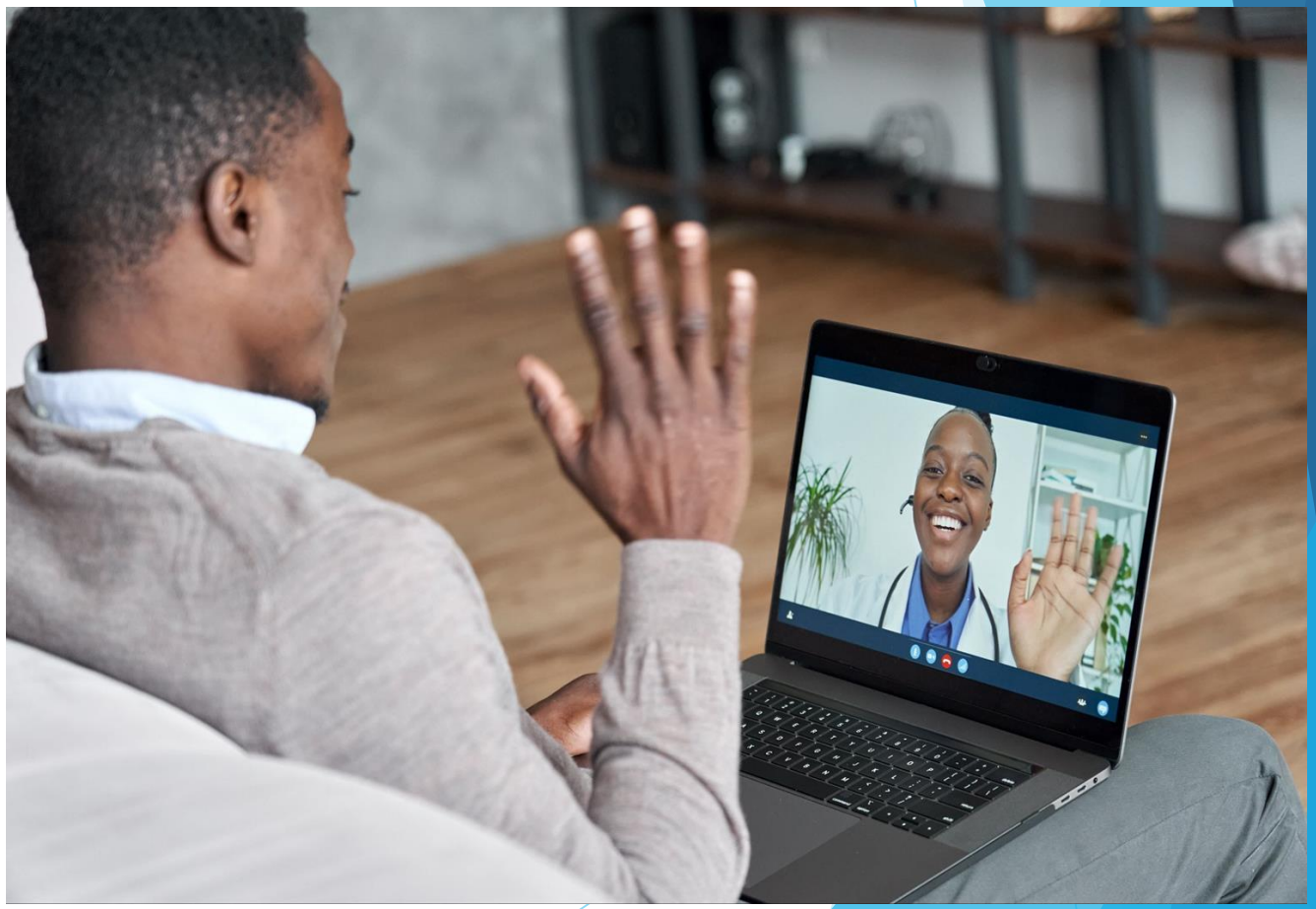
- Safety?
- Sedation?
- "Kindling phenomenon"?
- Higher risk patients?
- Active withdrawal symptoms?



Myrick et al, Alcohol Clin Exp Res. 2009
Stockj, Ann Pharmacother. 2013

MONITORING

- Daily or every other day check-ins
- In-person or telemedicine



TRIAGING PEOPLE APPROPRIATE FOR AMBULATORY MANGEMENT OF ALCOHOL WITHDRAWAL SYNDROME (AWS)

Evaluate with history/physical (Labs not necessary)

↓

Currently in moderate or severe alcohol withdrawal?

Yes → Patient-centered discussion about hospital-based treatment of AWS*

↓ No

Recent history of severe alcohol withdrawal (seizure or delirium tremens)?

Yes → Patient-centered discussion about hospital-based treatment of AWS*

↓ No

Relative contraindications: comorbidities (4Cs^), pregnant, unstable psychiatric disease, or psychosocial complexity?

Yes → Patient-centered discussion about hospital-based treatment of AWS*

↓ No

Ambulatory AWS treatment

*While in these situations hospital withdrawal management is recommended, particularly if recent severe withdrawal, ambulatory management is still safer than no management in a patient who declines hospital evaluation

^CHF/heart failure NYHA Class 2+, decompensated cirrhosis, CKD Stage 3+, or COPD on O2.

AMBULATORY ALCOHOL WITHDRAWAL TREATMENT

Best Practices

1. Start in the morning and don't taper alcohol before
2. Check in every other day, can use telehealth (video preferred) to make more accessible
3. Recommend hospitalization if:
seizures, altered mental status, using more PRNs than prescribed
4. Don't forget to address and treat AUD

AMBULATORY ALCOHOL WITHDRAWAL REGIMENS

	Diazepam based^	Gabapentin based
Day 1	10mg q6hrs*	300mg q6hrs*
Day 2	10mg TID	300mg TID
Day 3	10mg BID	300mg BID
Day 4	10mg once	300mg once
Additional PRNs	5 x 10mg pills	5 x 300mg pills

^Can substitute chlordiazepoxide 50mg for diazepam 10mg

*If >10 drinks per day double dose on first day (Dr Holt Expert opinion)

THE CURB SIDERS ADDICTION MEDICINE

Amato, *Cochrane* 2010
Holbrook, *CMAJ* 1999
Mayo-Smith, *JAMA* 1997
Leung, *Ann Pharmacother*, 2015
Curbsiders Addiction Medicine, Episode 2

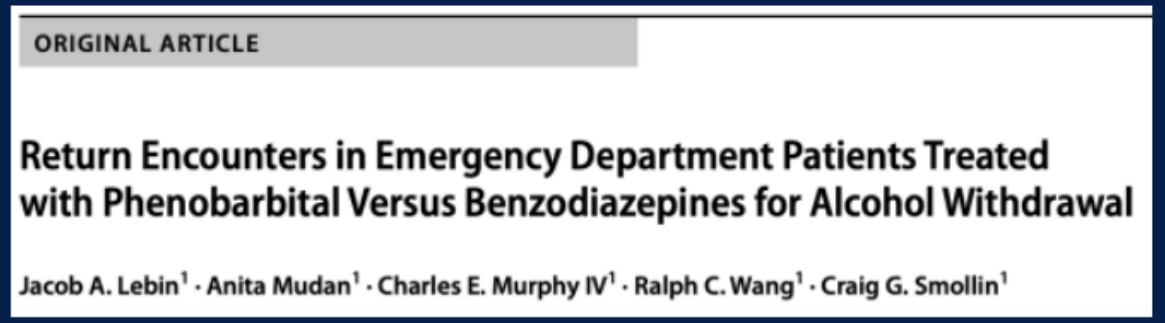
Phenobarbital in the ED

Original Contribution

A prospective, randomized, trial of phenobarbital versus benzodiazepines for acute alcohol withdrawal☆

Gregory W. Hendey MD*, Robert A. Dery MD, Randy L. Barnes MD, Brandy Snowden MPH, CCRP, Philippe Mentler PharmD

- IV PHB *v*. IV lorazepam + PO chlordiazepoxide
- 44 patients, mild-to-moderate AWS
- No difference in effectiveness or symptoms 48 hours after discharge



ORIGINAL ARTICLE

Return Encounters in Emergency Department Patients Treated with Phenobarbital Versus Benzodiazepines for Alcohol Withdrawal

Jacob A. Lebin[1] · Anita Mudan[1] · Charles E. Murphy IV[1] · Ralph C. Wang[1] · Craig G. Smollin[1]

- Stratified according to ED management:
  - BDZ only
  - PHB only
  - Combination of both agents
- PHB group: less likely to return to ED within 3 days of index visit

[1]Hendey G, et al. (*Am J Emerg Med* 2011); [2]Lebin JA, et al. (*J Med Toxicol* 2022)

The ASAM Clinical Practice Guideline on Alcohol Withdrawal

- Phenobarbital can be used as an alternative in Level 2-WM settings (Ambulatory Withdrawal Management with Extended Onsite Monitoring)
  - Particularly with contraindication for benzodiazepine
  - Narrow therapeutic window and extended half-life, recommend experienced clinicians

MEDICATION DOSING FOR ALCOHOL WITHDRAWAL MANAGEMNT

Sample Medication Regimens

Regimen	Description, Examples
Benzodiazepines (doses in chlordiazepoxide)	
Typical single dose	Mild withdrawal (CIWA-Ar <10): 25–50 mg PO Moderate withdrawal (CIWA-Ar 10–18): 50–100 mg PO Severe withdrawal (CIWA-Ar ≥19): 75–100 mg PO
Symptom-triggered	25–100 mg PO q4–6h when CIWA-Ar ≥10. Additional doses PRN.
Fixed-dose	Taper daily total dose by 25–50% per day over 3–5 days by reducing the dose amount and/or dose frequency. Additional doses PRN. Day 1: 25–100 mg PO q4–6h Day 2: 25–100 mg PO q6–8h Day 3: 25–100 mg PO q8–12h Day 4: 25–100 mg PO at bedtime (Optional) Day 5: 25–100 mg PO at bedtime
Front loading	Symptom-triggered: 50–100 mg PO q1–2h until CIWA-Ar <10. Fixed-dose: 50–100 mg PO q1–2h for 3 doses.
Phenobarbital	
Typical single dose	10 mg/kg IV infused over 30 minutes or 60–260 mg PO/IM.
Monotherapy	Symptom-triggered in the ICU: 130 mg IV q30m to target a RASS score of 0–1. Fixed dose in the ED: Loading dose 260 mg IV, then 130 mg IV q30m at physician's discretion. Fixed dose in ambulatory management: Loading dose 60–120 mg PO. Then 60 mg PO q4h until patient is stabilized. Then 30–60 mg PO q6h tapered over 3–7 days. Additional doses PRN.
Adjunct therapy	Single dose in the ED: 10 mg/kg IV infused over 30 minutes. Escalating dose in the ICU: After maximum diazepam dose (120 mg). if RASS ≥1, escalating dose of 60 mg → 120 mg → 240 mg IV q30m to target RASS score of 0 to -2.
Carbamazepine (Tegretol)	
Monotherapy	600–800 mg total per day tapered to 200–400 mg/d over 4–9 days.
Adjunct therapy	200 mg q8h or 400 mg q12h.
Gabapentin (Neurontin)	
Monotherapy	Loading dose 1200 mg, then 600 mg q6h on Day 1 or 1200 mg/d for 1–3 days, tapered to 300–600 mg/d up to 4–7 days. Additiona doses PRN.
Adjunct therapy	400 mg q6–8h.
Valproic acid (Depakene)	
Monotherapy	1200 mg/d tapered to 600 mg/d over 4–7 days or 20 mg/kg/d.
Adjunct therapy	300–500 mg q6–8h.

Phenobarbital Adjuncts

- For the patient not yet in acute withdrawal, or acute withdrawal is attenuated, but ongoing treatment is needed.
  - clonidine 0.1 mg PO q 6 hours PRN anxiety
    sometimes continued for 1 – 2 weeks after protocol:
    0.1mg PO q 8 hours PRN or qHS PRN
  - VPA 500 mg PO BID x 2 – 4 weeks

[1]Kawasaki SS, et al. (*J Subst Abuse Treat* 2012)

TREAT ALCOHOL USE DISORDER!!!!

Harris, *Psychiatry Serv*, 2012
Joudrey, *Addict Sci Clin Pract*, 2019
Mark, *Drug Alcohol Depend,* 2003
Stephens, *J Hosp Med,* 2018
Wei, *JGIM*, 2015
Curbsiders Addiction Medicine, Episode 4

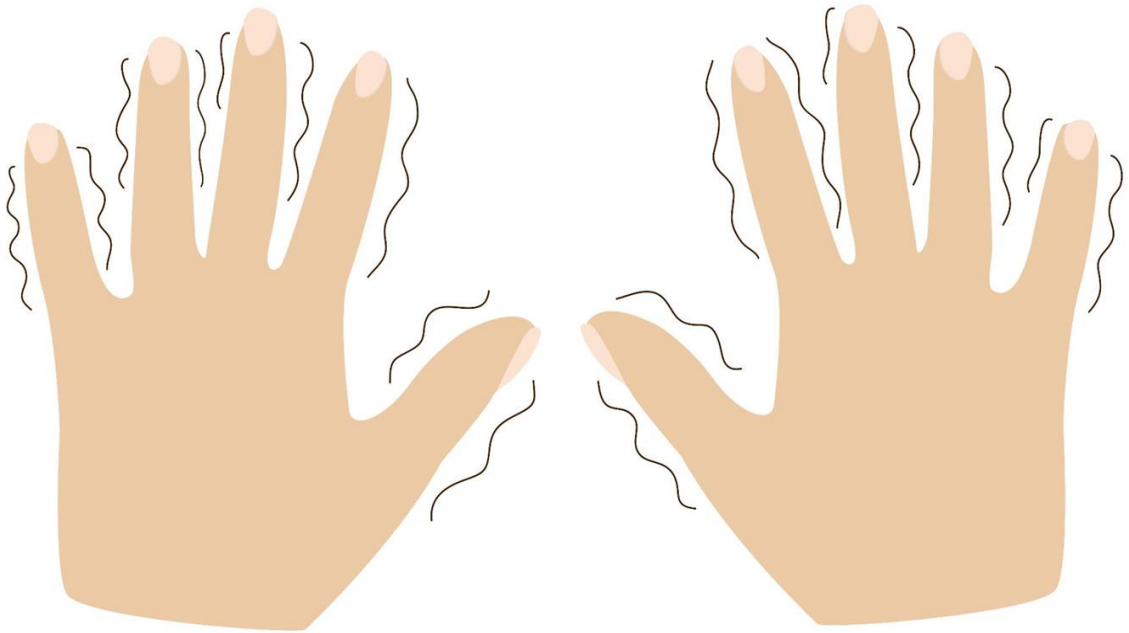
EXAMPLE CASE 1

A 39 year old woman, presents to your office for a routine follow-up. Review of her chart reminds you that she has a history of diet controlled diabetes, gastroesophageal reflux disease (GERD), and major depressive disorder.

While you start the visit intending to address these issues, the patient interjects to say, "I need help with my drinking."

CASE CONTINUED

After discussing her alcohol use you diagnosed her with severe alcohol use disorder. Her goal is to stop using alcohol but she hasn't been able to go 24 hours without alcohol use in 6 months as she begins to feel anxious and "shaky" around that time.



CASE CONTINUED

She has no history of severe withdrawal but since her last visit with you years ago she was diagnosed during an admission to another hospital with compensated cirrhosis

Collateral - Wife at home is ”fed up” with her drinking and willing to help with ambulatory alcohol withdrawal monitoring if needed

Example Case 2

- Your second patient, seen at 10am on a Monday morning, is a 38 year old man with a 20 year history of generalized anxiety, PTSD, and AUD. He has a history of multiple prior ED visits for alcohol withdrawal or intoxication, though typically leaves prematurely before treatment is completed as hospital settings make him exceedingly anxious.
- He has no history of cardiac, pulmonary, or renal disease. He has elevated transaminases, but no evidence of cirrhosis. He drinks 6-8 beers daily over the past 3 years, and his last drink was earlier this morning. He does not use any other substances, and exhibits no withdrawal symptoms in the office. Three years ago, during an admission for pancreatitis, he developed DTs and required a brief ICU stay.
- He lives with two other male roomates, who he considers friends, one of whom does not drink alcohol. Would you consider this patient a candidate for ambulatory withdrawal management? Why or why not? What would be your initial treatment plan?

EXAMPLE CASE 3

- It's now 11am, and your third patient also presents for alcohol withdrawal management. She is a 58 year old woman with a history of panic disorder, mild benzodiazepine use disorder, and AUD. She has never been hospitalized for alcohol complications, though had a psychiatric admission 15 years ago for suicidal ideation.
- She has no history of cardiac, pulmonary, or renal disease. She drinks 1-2 bottles of wine daily, and feels "jittery" on the rare days when she doesn't have any alcohol. She often takes 1-2mg of alprazolam that she gets from "a friend" when she feels "panicky". While she was able to make her appointment with you today, she has a history of many missed appointments due to transportation issues - she does not have a car. Her son would be able to check up on her after work each day, as needed. Her last drink was late last night. She hasn't had any alcohol yet today and looks anxious.
- Would you consider this patient a candidate for ambulatory withdrawal management? Why or why not? What would be your initial treatment plan?

➔ **Recommendation IV.5: For patients managed in an ambulatory setting, the following indications would necessitate transfer to a more intensive level of care such as Level 2-WM (if in a Level 1-WM setting) or an inpatient setting:**

- Agitation or severe tremor has not resolved despite having received multiple doses of medication, and the patient will not be continually monitored (e.g., treatment setting is closing)
- More severe signs or symptoms develop such as persistent vomiting, marked agitation, hallucinations, confusion, or seizure
- Existing medical or psychiatric conditions worsen
- Patient appears over-sedated
- Patient returns to alcohol use
- Syncope, unstable vital signs (low/high blood pressure, low/high heart rate)

References

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The ASAM

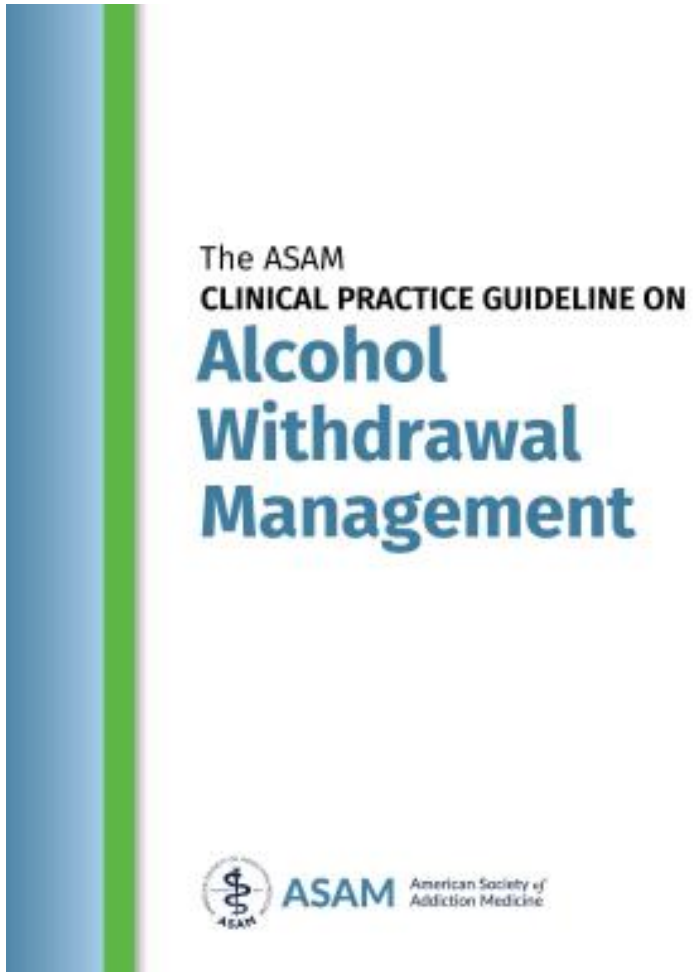
CLINICAL PRACTICE GUIDELINE ON

Alcohol Withdrawal Management

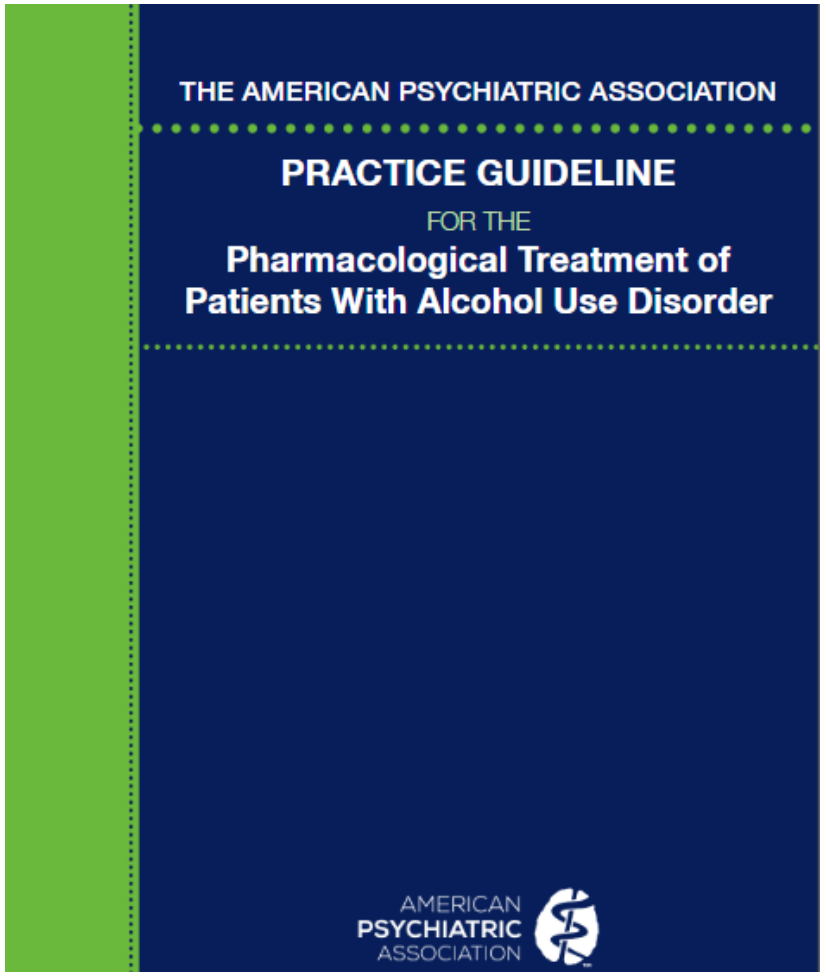
https://www.asam.org/quality-care/clinical-guidelines/alcohol-withdrawal-management-guideline

ASAM American Society of Addiction Medicine

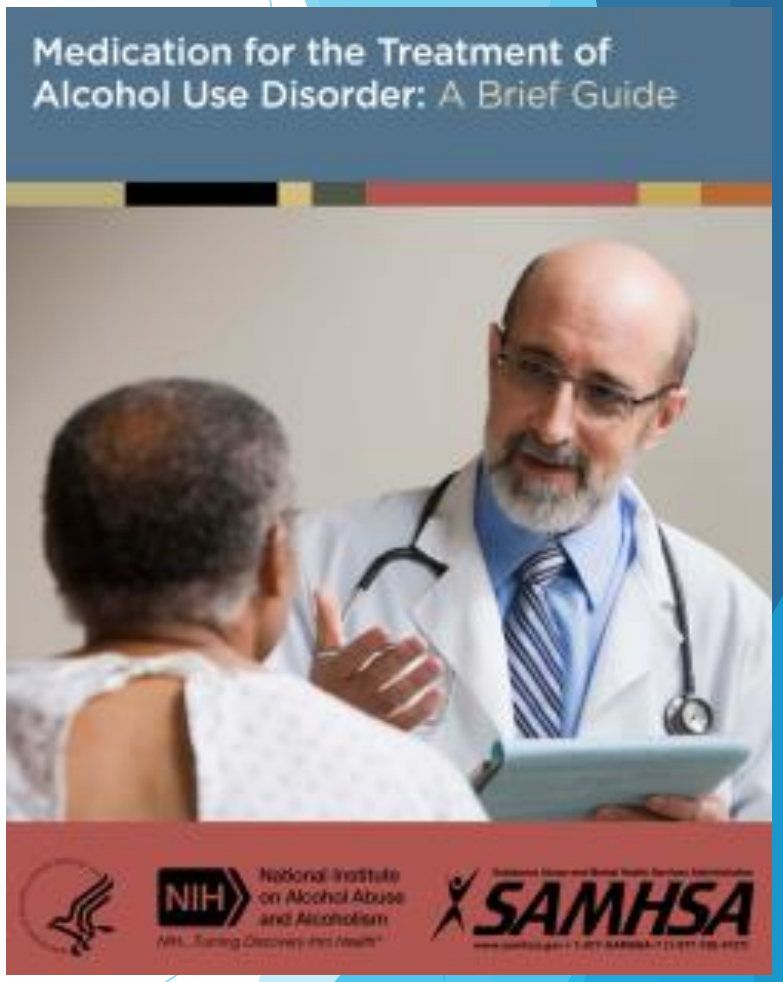
NATIONAL PRACTICE GUIDELINES



https://www.asam.org/quality-care/clinical-guidelines/alcohol-withdrawal-management-guideline



https://doi.org/10.1176/appi.ajp.2017.1750101



https://store.samhsa.gov/product/Medication-for-the-Treatment-of-Alcohol-Use-Disorder-A-Brief-Guide/SMA15-4907

Case Presentation

Project ECHO's goal is to protect patient privacy

- To help Project ECHO accomplish that goal, please only display or say information that doesn't identify a patient or that cannot be linked to a patient.
- **References: For a complete list of protected information under HIPAA, please visit www.hipaa.com**

Thank you for joining us today.
We appreciate your participation and hope to see you at the **NEXT ECHO Session:**

February 9th, 2021 from 12pm -1 PM

You will be receiving a follow up survey that we hope you will complete to help us improve. If you are requesting continuing education credits, you will be required to complete the survey to receive your CMEs.


quyana • gunalchéesh • háw'aa • way dankoo • igamsiqanaghhalek • tsin'aen • baasee' • 'awa'ahdah • qagaasakung • maasee' • mahsi' • chin'an • quyanaa