Tribal MAT
A unified response to the opioid crisis in California Indian Country

Project ECHO
University of California Los Angeles
Integrated Substance Abuse Programs

Treatment of Alcohol Use Disorder

Tuesday, September 21st, 2021

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A unified response to the opioid crisis in California Indian Country

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Indigenous Land Acknowledgement

- We respectfully acknowledge that we live and work in territories where Indigenous nations and Tribal groups are traditional stewards of the land.
- Please join us in supporting efforts to affirm Tribal sovereignty across what is now known as California and in displaying respect, honor and gratitude for all Indigenous people.

Whose land are you on?

Text your ZIP code 1-855-917-5263 or enter your location at https://native-land.ca

The use of affirming language inspires hope and advances recovery.

LANGUAGE MATTERS.

Words have power.

PEOPLE FIRST.

The ATTC Network uses affirming language to promote the promises of recovery by advancing evidence-based and culturally informed practices.

ATTC Addiction Technology Transfer Center Network

Funded by Substance Abuse and Mental Health Services Administration

Disclosures

There are no relevant financial relationships with ACCME-defined commercial interests for anyone who was in control of the content of this activity.

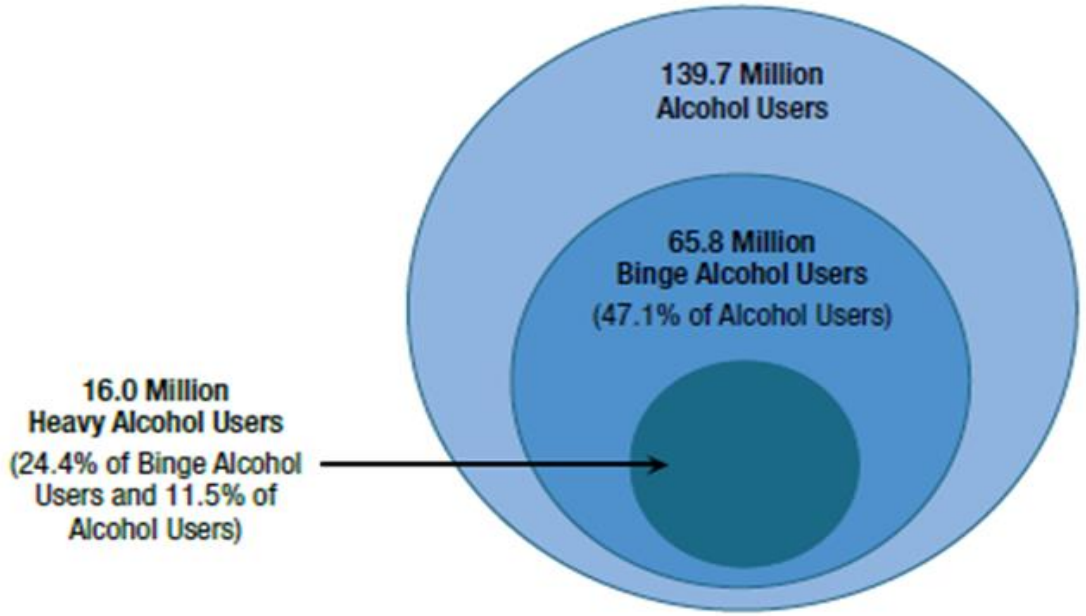
Objectives

- Recall 2 validated alcohol screening tools that can be used in the primary care setting.
- Recall 3 FDA-approved medications to treat AUD
- Identify pros and cons of these medications and how to selectively match these medications with specific AUD patients

Alcohol Use is Prevalent

Nearly 86% of US population reported using Alcohol at least once in their lifetime.

Figure 6. Current, Binge, and Heavy Alcohol Use among People Aged 12 or Older: 2019



NSDUH 2019

Rise in Alcohol Use with COVID-19 Pandemic

- 54% increase in national sales of alcohol the week ending March 21, 2020
- Stress and uncertainty
- Impacts on daily life and functioning: working from home, manage children's schooling, unemployment, work on frontlines
- Isolation –Decrease access to treatment programs, sobriety support groups
- Sharper rise amongst women

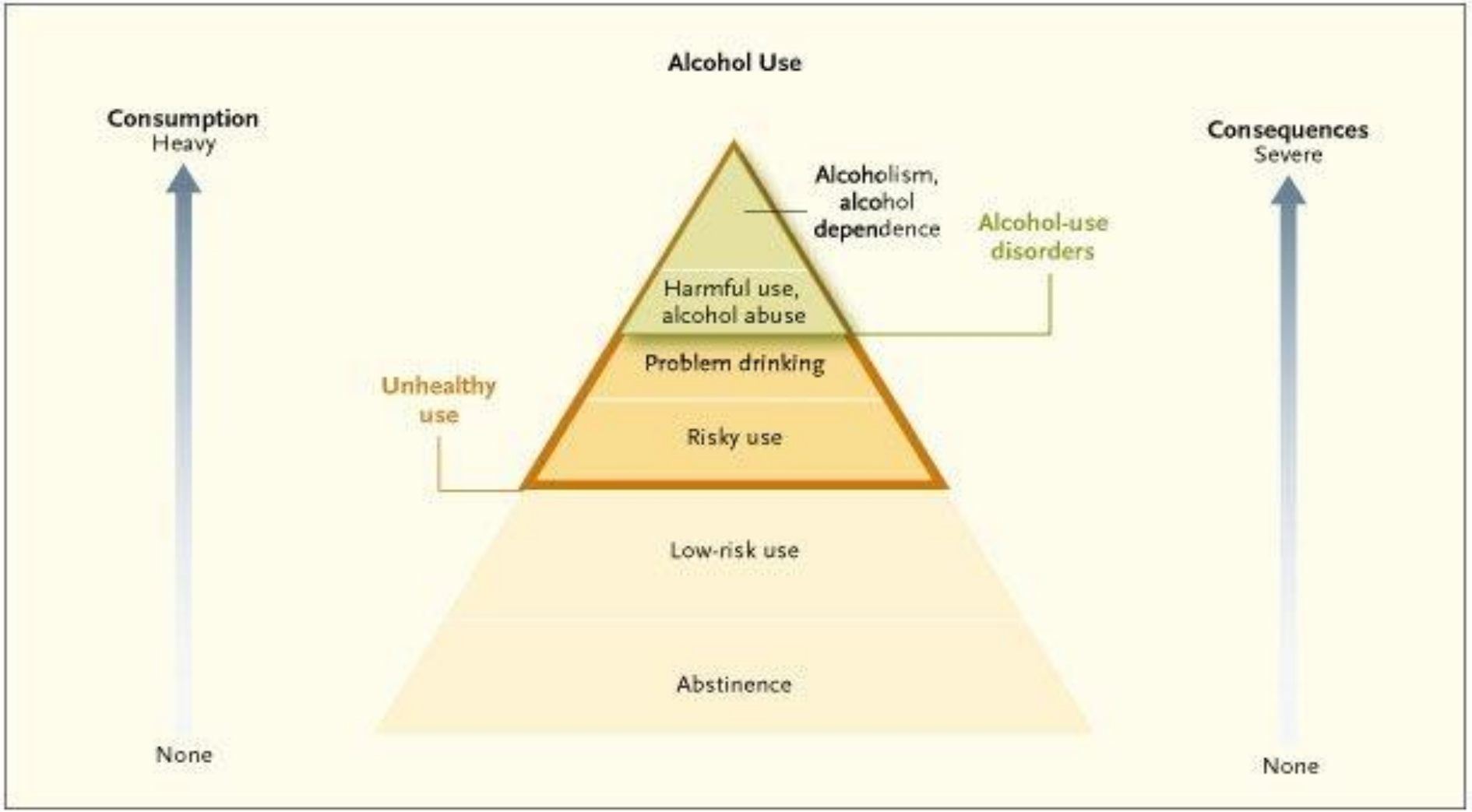
Pollard et al.JAMA Network Open.2020;3(9):e2022942.

Native American Alcoholism Facts and Statistics

- Heavy alcohol use: 9.2% of Native Americans of ages 12 and older; highest rate of any ethnic group
- One of the highest rate of fetal alcohol spectrum disorders in the US
- Highest rate of deaths from alcohol poisoning per million people
- 2014 Rate of co-occurring disorders 8.8% compared to national average of 3.3%
- More likely than other ethnic groups to need treatment for alcohol use disorder

americanaddictioncenters.org/rehab-guide/addiction-statistics/native-americans

Spectrum of Alcohol Use



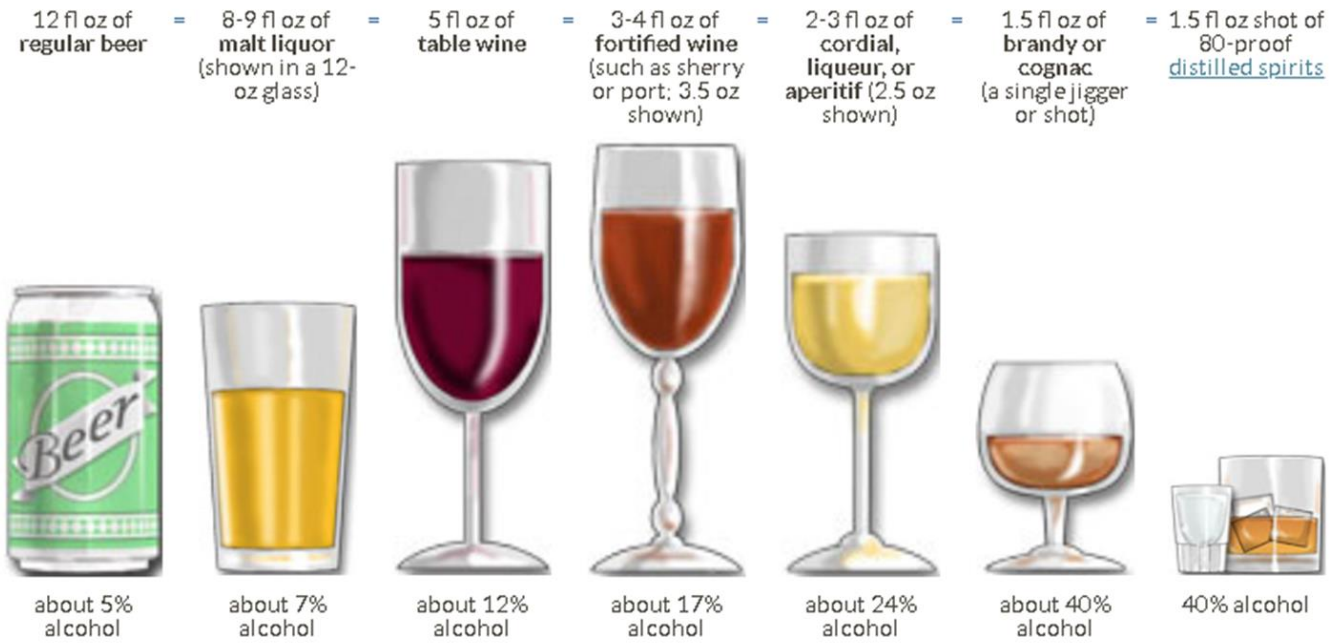
Excessive Alcohol Use Definitions

Binge Drinking

- 4+ drinks females
- 5+ drinks males

Heavy Drinking

- 8+ drinks/week females
- 15+ drinks/week males



Why Screen for Excessive Alcohol Use?

- 261 deaths/day
- Leading case of preventable deaths in US
- Shorten lives average 29 years
- Cost $249 billion in 2010
- Automobile crashes, accidental and intentional injury, social and legal problems

cdc.gov/alcohol/features/excessive-alcohol-deaths.html

Screening
US Preventative Services Task Force (USPSTF)

Recommends screening for unhealthy alcohol use in primary care settings in adults 18 years or older, including pregnant women and providing persons engaged in risky or hazardous drinking with brief behavioral counseling interventions to reduce unhealthy alcohol use. (B recommendation)

JAMA.2018;320(18):1899-1909.

Validated screening methods for AUD

Single Question Screening

How many times in the past year have you had five (for men) or four (for women and all adults older than 65) or more drinks per day?

AUDIT-C (Abbreviated three-item questionnaire)

AUDIT (10 Item questionnaire)

AUDIT-C

AUDIT-C

Please circle the answer that is correct for you.

1. How often do you have a drink containing alcohol?					**SCORE**
Never (0)	Monthly or less (1)	Two to four times a month (2)	Two to three times per week (3)	Four or more times a week (4)	_____
2. How many drinks containing alcohol do you have on a typical day when you are drinking?					
1 or 2 (0)	3 or 4 (1)	5 or 6 (2)	7 to 9 (3)	10 or more (4)	_____
3. How often do you have six or more drinks on one occasion?					
Never (0)	Less than Monthly (1)	Monthly (2)	Two to three times per week (3)	Four or more times a week (4)	_____
TOTAL SCORE Add the number for each question to get your total score.					_____

Maximum score is 12. A score of ≥ 4 identifies 86% of men who report drinking above recommended levels or meets criteria for alcohol use disorders. A score of > 2 identifies 84% of women who report hazardous drinking or alcohol use disorders.

Medications for Alcohol Use Disorders

Naltrexone - Reduces pleasurable effects of alcohol

Acamprosate - Reduces post-acute withdrawal symptoms

Disulfiram - Discourages drinking by making it unpleasant

Common Characteristics of FDA Approved Medications to treat AUD

- Not a cure
- Not alcohol substitution drug
- Not addictive or habit forming
- Should be prescribed in conjunction with counseling
- Better drinking outcomes (with counseling) than placebo (with counseling)
- Higher efficacy with initial abstinence: 4-7 days
- Prescribed <9% Americans with AUD

FDA Approved Medications for AUD

Naltrexone

Revia, generic

50mg orally

$27/month

FDA approved 1994

Naltrexone (Vivitrol)

380mg ER

Injectable

$1372/month

FDA approved 2006

Mechanism

- Opioid receptor antagonist
- If alcohol consumption less rewarding, drinking will decrease.

Efficacy

- Increase rates of NO heavy drinking (NNT=8.6)
- Compliance problem with daily dosing
- Monthly injectable vivitrol

Safety

- Do not give to patients on prescribed or illicit opiate use (acute alcohol withdrawal)
- Caution with liver disease

What does the research say about extended-release Naltrexone?

- Participants did not maintain complete abstinence more frequently than those receiving placebo
- Participants had a greater reduction in the number of heavy drinking days than those receiving placebo
- Participants with a 7-day abstinence period from alcohol prior to treatment initiation had a greater reduction in the number of heavy drinking days than those receiving placebo

FDA Approved Medications for AUD

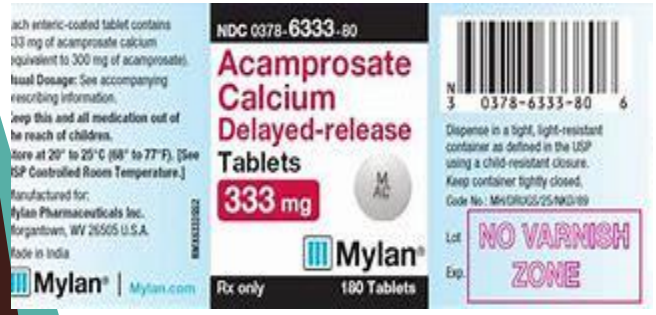
Acamprosate

(Campral)

1998mg orally

$108/month

FDA approved 2004



Mechanism

- Heavy drinking and withdrawal dysregulate the balance between neuronal excitation (glutamate) and inhibition (GABA)
- When drinking stops-glutamate activity too high
- **Glutamate receptor modulator** -restores balance (homeostasis) in glutamergic transmission

Efficacy

Increases rates of abstinence in studies up to 1 year (NNT=7.5)

Safety

- Not metabolized by the liver, excreted renally
- Safe in patients with hepatic impairment

www.niaaa.nih.gov

What does the research say about Acamprosate?

- Participants treated with acamprosate were able to maintain complete abstinence more frequently than those treated with placebo
- Participants treated with acamprosate had a greater reduction in the number of drinking days during the entire study than those treated with placebo
- In the studies, participants treated with acamprosate were able to regain complete abstinence after one relapse more frequently than those treated with placebo

SOURCES: Palc et al. (1997); Sass et al. (1996); Paille et al. (1995); Mason et al. (2006).

FDA Approved Medications for AUD

Disulfiram (Antabuse)

125-500mg (orally)

$18/month (generic)

Approved 1951

Mechanism: Alcohol-disulfiram reaction

- Inhibits metabolism of alcohol
- Acetaldehyde builds up quickly
- Rapid onset of flushing, nausea, palpitations
- Psychological deterrent

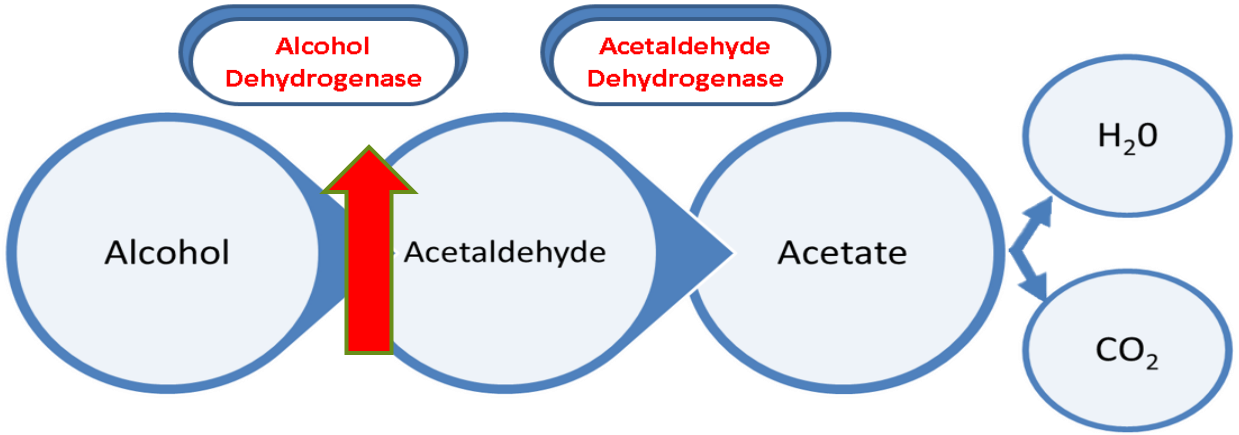
Efficacy

- Medication compliance
- Optimized with supervised administration
- Abstinent goal in highly motivated patient

Safety

- ≥12 hours after last alcohol use
- Caution with liver disease, drowsiness

Disulfiram-Alcohol Reaction



- Disulfiram works by blocking the enzyme acetaldehyde dehydrogenase
- This causes acetaldehyde to accumulate in the blood at 5 to 10 times higher the amount than would normally occur with alcohol alone

Disulfiram-Alcohol Reaction

Since acetaldehyde is toxic, a buildup of it produces a highly unpleasant series of symptoms

- throbbing in head/neck
- brief loss of consciousness
- throbbing headache
- lowered blood pressure
- difficulty breathing
- marked uneasiness
- copious vomiting
- nausea
- flushing
- sweating
- thirst
- weakness
- chest pain
- dizziness
- palpitation
- hyperventilation
- rapid heartbeat
- blurred vision
- confusion
- respiratory depression
- cardiovascular collapse
- myocardial infarction
- congestive heart failure
- unconsciousness
- convulsions
- death

What does the research say about disulfiram?

- Best efficacy in motivated patients with supervised dosing
- Participants treated with disulfiram did not maintain complete abstinence more frequently than those treated with placebo
- Participants treated with disulfiram had a greater reduction in the number of drinking days during the entire study than those treated with placebo
- According to a 2014 meta-analysis, based on open-label studies, disulfiram is a safe and efficacious treatment for alcohol use disorder

SOURCE: Skinner et al. (2014).

Off Label use of Gabapentin for AUD

- Mechanism: decreases excitation by decreasing release of glutamate. Increases GABA (inhibitory response).
- Safe and effective for mild alcohol withdrawal (benzos are gold standard)
- For relapse prevention –indicated as second-line or alternative to FDA approved meds (naltrexone and acomprosate)
- Early abstinence – improves sleep, cravings and mood; factors associated with relapse.
- Gabapentin + naltrexone, better than naltrexone alone (Anton et al)
- Monitor for misuse –higher risk in OUD, polysubstance use disorder, prisoners

Modesto-Lowe et al.Cleveland Clinic Journal of Medicine December 2019,86(12)815-823

Pros and Cons of AUD Medications

	Naltrexone	Acamprosate	Disulfiram
Abstinence required? Goal: reduced drinking vs abstinence?	Abstinence not needed	Abstinence increases effectiveness	Requires abstinence (caution hidden forms of etoh, i.e. mouthwash)
Metabolized by	Liver avoid >5x upper limit of normal (AST/ALT)	Renally cleared Contraindicated if CrCl<30	Liver
Side Effects	Fatigue, GI effects, nausea, dizziness, headache	GI, Diarrhea in 10-15%	*disulfiram reaction Contraindicated in significant CAD, psychosis, known hypersensitivity
Dosing	Daily oral (QD) Monthly injectable	2 pills (666mg) three times a day (TID)	Once Daily (125-500mg)
Opioid Use?	No	Yes	Yes

When, how and what to prescribe to treat AUD?

- Consider when inadequate response to counseling
- Review pros and cons with patient, keeping in mind health status (hepatic, renal function) and patient goals: abstinence vs reduction
- On opioids or planned elective surgery
- Motivation and adherence capability
- If inadequate response, medications can be used sequentially or in combination and can be restarted in case of relapse
- Assess for external challenges

Outpatient Management of Alcohol Withdrawal Syndrome (AWS)

- Mild to moderate AWS can be treated outpatient
- No significant comorbid conditions
- Support person willing to monitor
- Benzodiazepines gold standard for treating AWS
- Anticonvulsants may be effective, have less abuse potential but they do not prevent seizures or delirium tremens
- Ideal to see patients daily

Am Family Physician 2013 Nov 1;88(9):589-595

Oral Medications Used to Treat AWS

Table 4. Fixed and Symptom-Triggered Dosing for Oral Alcohol Withdrawal Medications

Medication	*Fixed schedule*	*Symptom-triggered schedule**
Day 1		
Diazepam (Valium)	10 mg every 6 hours	10 mg every 4 hours
Chlordiazepoxide (Librium)	25 to 50 mg every 6 hours	25 to 50 mg every 4 hours
Lorazepam (Ativan)	2 mg every 8 hours	2 mg every 6 hours
Day 2		
Diazepam	10 mg every 8 hours	10 mg every 6 hours
Chlordiazepoxide	25 to 50 mg every 8 hours	25 to 50 mg every 6 hours
Lorazepam	2 mg every 8 hours	2 mg every 6 hours
Day 3		
Diazepam	10 mg every 12 hours	10 mg every 6 hours
Chlordiazepoxide	25 to 50 mg every 12 hours	25 to 50 mg every 6 hours
Lorazepam	1 mg every 8 hours	1 mg every 8 hours
Day 4		
Diazepam	10 mg at bedtime	10 mg every 12 hours
Chlordiazepoxide	25 to 50 mg at bedtime	25 to 50 mg every 12 hours
Lorazepam	1 mg every 12 hours	1 mg every 12 hours
Day 5		
Diazepam	10 mg at bedtime	10 mg every 12 hours
Chlordiazepoxide	25 to 50 mg at bedtime	25 to 50 mg every 6 hours
Lorazepam	1 mg at bedtime	1 mg every 12 hours

**—For patients with a SAWS (Short Alcohol Withdrawal Scale) score ≥ 12, or CIWA-Ar (Clinical Institute Withdrawal Assessment for Alcohol, Revised) score > 9.*

Table 3.

Oral Medications Used to Treat Alcohol Withdrawal Syndrome

MEDICATION	*TYPICAL SINGLE DOSE*	*COMMON ADVERSE EFFECTS*	*CONTRAINDICATIONS*
Benzodiazepines			
Chlordiazepoxide (Librium)	25 to 50 mg	Sedation, fatigue, respiratory depression, retrograde amnesia, ataxia, dependence and abuse	Hypersensitivity to drug/class ingredient, severe hepatic impairment, avoid abrupt withdrawal
Diazepam (Valium)	10 mg		
Lorazepam (Ativan)	2 mg		
Oxazepam	15 to 30 mg		
Anticonvulsants			
Carbamazepine (Tegretol)	600 to 800 mg	Dizziness, ataxia, diplopia, nausea, vomiting	Hypersensitivity to drug/class ingredient, hypersensitivity to tricyclic antidepressants, monoamine oxidase inhibitor use within the previous 14 days, hepatic porphyria
Gabapentin (Neurontin)	300 to 600 mg		
Oxcarbazepine (Trileptal)	450 to 900 mg		

Am Family Physician 2013 Nov 1;88(9):589-595

Behavioral Treatments

The FDA labeling on these medications is clear:

The medications should be used in combination with behavioral treatments for SUDs.

Good treatment is holistic, integrated and multifaceted, taking into account the physical, behavioral and spiritual wellbeing of the individual.

Medications can help us take care of the physical…

…we need to do the rest