tip SC — Timely Information for Providers in South Carolina

*An outreach service for Medicaid providers to help identify and prevent potential gaps in evidence-based care, as well as detect fraud, abuse, overuse or inappropriate use.*

November 2023

# MEDICATION MANAGEMENT OF ALCOHOL USE DISORDER (AUD) IN PRIMARY CARE

https://www.schealthviz.sc.edu/tipsc-1

## PICK UP QUICK TIPS ON…Screening all patients for alcohol use and helping patients reduce risky alcohol consumption

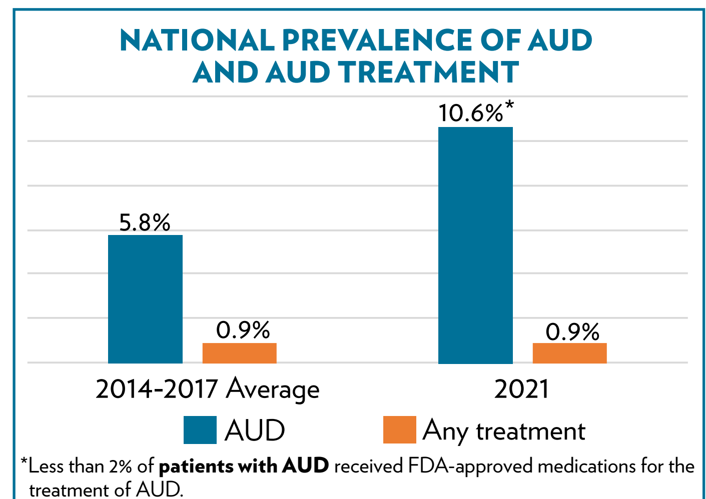
**Offer evidence-informed pharmacotherapy to patients with AUD based on patient goals and characteristics.**

### QUICK tip SC

**Patients with AUD need your long-term support. Talk to them about managing AUD just like you talk about other chronic conditions (e.g., hypertension, diabetes, opioid use disorder).**

## QUICK FACTS TO CONSIDER

- **Alcohol screening plus brief alcohol counseling** reduces drinking in patients who do not meet diagnostic AUD criteria.
- A patient with AUD is **more likely to schedule a visit for a medical problem** caused by alcohol use than to discuss concerns about drinking too much.
- More recent data shows that **most patients** who agree to treatment for AUD **have reduced drinking** and not abstinence **as their goal.** Both goal choices improve drinking-related outcomes.
- **Abstinence** likely produces more physical and mental health benefits than reduced drinking; initial reduced drinking may lead to abstinence.
- **Alcohol consumption** (frequency and intensity) and **alcohol-related deaths** increased during the COVID-19 pandemic; the relative increase in the death rate involving alcohol (25.9%) outpaced that from all causes (16.6%) in 2020.




*Less than 2% of **patients with AUD** received FDA-approved medications for the treatment of AUD.

https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health

## PRIMARY CARE – THE OPPORTUNITY TO ID, TREAT, MONITOR, & PREVENT

**Screen for alcohol use at least annually and when prescribing medication that interacts with alcohol.** Systematic screening of all patients takes away the impression of moral judgement, opens the door to **motivate at-risk patients to drink less,** and is a first step to **engage patients with AUD in treatment** tailored to their goals, including reduced drinking (abstinence does not resonate with all patients). Behavioral therapy, support groups, and medications are all part of AUD care.

### BRIEF SCREENING TOOLS VALIDATED FOR USE IN PRIMARY CARE TO DETECT UNHEALTHY DRINKING

| Tool | Description | Positive Score |
|---|---|---|
| Single-Item Alcohol Screening Questionnaire (SASQ) | One question: How many times in the past year have you had 5 (male)/ 4 (female) or more drinks in a day? | > 0 |
| Alcohol Use Disorders Identification Test-Consumption (AUDIT-C) | First three questions of the 10-item AUDIT (Score range 0 – 12) | Men: ≥ 4<br>Women: ≥ 3 |

**POSITIVE SCORE OR CONTRAINDICATION TO DRINKING?**

- **Conduct brief intervention[1]**
- **Score 7 — 12?… Assess for AUD and negotiate goals and treatment[2]**

*Improve AUDIT-C sensitivity for women by using “4 or more drinks” in question 3 about binge drinking*

**Conduct brief intervention for positive score**

**1.** VA/DoD requires brief intervention for score ≥ 5 in men and women **2.** Kaiser WA score is ≥ 7 to assess for AUD; VA/DOD suggests to assess if ≥ 8.

**KEY: Kaiser WA** Kaiser Foundation Health Plan of Washington; **VA/DoD** Department of Veterans Affairs and Department of Defense

## FOLLOW-UP ON POSITIVE AUD SCREENS — EDUCATE AND MOTIVATE

***Consider using the Drinking Alcohol handout to help facilitate discussions with your patients***

Primary care has the unique opportunity to **help motivate patients who drink more than medically safe** (yet do not meet criteria for AUD) reduce their alcohol consumption and minimize risks of alcohol-related adverse effects and AUD. If your evaluation identifies someone who is not drinking or at low risk, you can opt to reinforce their healthy choices.

Nonjudgmental conversation nuggets help **engage patients** you evaluate and identify **with AUD** (encompasses abuse and dependence) in open and honest discussion about problematic drinking patterns as well as treatment options and benefits. The Alcohol Symptom Checklist (see section below) can help with an AUD diagnosis and further promote discussions about AUD-related care.

**RAISE THE SUBJECT**

- *"I talk to all my patients about alcohol."*
- *"I would like to take a minute to talk about the alcohol screening question(s) you answered today."*

**PROVIDE FEEDBACK**

- *"Your score was positive for risky drinking." (give score if used AUDIT-C)*
- *"Drinking at this level may be contributing to the health problem you came in to see me about today."*
- *"It is my responsibility to tell you that drinking at this level can be harmful to your health."*
- *"I care about your health and safety – drinking at this level can cause health problems."*

**ASK, ADVISE, AND ASSIST**

- *"How do you feel about your drinking at the moment?"*
- *"Have you ever been worried about your drinking? In what way?"*
- *"So many people are grateful to be free of "needing" a drink."*
- *"When you are ready, I am here to help. There are medications, behavioral therapy, and support groups that can help reduce how much and how often you drink or help you quit."*

## ASSESSMENT AND DIAGNOSIS OF AUD

The **Alcohol Symptom Checklist aligns with DSM-5 criteria** to help identify patients with AUD and assess severity of their problematic pattern of alcohol use based on symptom count over the past year (mild [2-3], moderate [3-5], and severe [6 or more]). It may be more important to **distinguish between at-risk drinking and AUD** than to distinguish alcohol abuse (mild AUD) from dependence (moderate to severe AUD) when determining an individualized treatment plan.

**In the past 12 months…**

1. Did you find that drinking the same amount of alcohol has less effect than it used to or did you have to drink more alcohol to get intoxicated?
2. When you cut down or stop drinking did you get sweaty or nervous, or have an upset stomach or shaky hands? Did you drink alcohol or take other substances to avoid these symptoms?
3. When you drank, did you drink more or for longer than you planned to?
4. Have you wanted to or tried to cut back or stop drinking alcohol, but been unable to do so?
5. Did you spend a lot of time obtaining alcohol, drinking alcohol, or recovering from drinking?
6. Have you continued to drink even though you knew or suspected it creates or worsens mental or physical problems?
7. Has drinking interfered with your responsibilities at work, school, or home?
8. Have you been intoxicated more than once in situations where it was dangerous, such as driving a car or operating machinery?
9. Did you drink alcohol even though you knew or suspected it causes problems with your family or other people?
10. Did you experience strong desires or craving to drink alcohol?
11. Did you spend less time working, enjoying hobbies, or being with others because of your drinking?

## OFFER PHARMACOTHERAPY TO PATIENTS WITH AUD

**Co-create with your patient** a personalized treatment plan specific to their needs and goals of treatment based on your detailed assessment. **Individualize evidence-informed medication selection** based on the patient's goals for drinking, patient preference, co-morbidities, and medication profiles (see *Medications for AUD* table). Evidence for medication treatment in mild AUD is limited; most research has involved patients with moderate to severe AUD and some type of psychosocial support.

- Educate patients on **psychosocial treatment** options and **community resources** to support medication treatment.
- **Offer medications** to patients who meet the criteria for AUD and have no contraindications, **even if they decline psychosocial treatment.**

**Refer when appropriate** (e.g., pregnancy or considering pregnancy, more intensive treatment needed, patient preference). Find a treatment center at: https://findtreatment.gov/locator

## ONGOING MEDICATION MONITORING BEGINS WITH A BASELINE ASSESSMENT

***Use a standardized tool at baseline and ongoing to measure progress (e.g., AUDIT-C to assess consumption goals)***

### Baseline Assessment

Select laboratory tests and screens can help establish overall health status, identify alcohol-related issues, and influence medication selections, including:

- Hepatic and renal testing
- Complete blood count
- Testing for vitamin deficiencies (e.g., B12, thiamine)
- Depression screening (e.g., PHQ-9)*
- Tobacco and other substances
- Pregnancy test

**Highest risk of relapse is within the first 90 days**

### Ongoing Monitoring and Assessment

Follow-up with patients at 1 month (consider phone check-in at 1 week), then periodically. Reassess at 3 - 6 months and adjust treatment plan as needed. Evaluation markers may include:

- Adherence and side effects
- Progress toward alcohol consumption goals
- Other indicators of progress, including:
  - Involvement in support groups or programs
  - Stabilization of medical problems (e.g., improved liver function, controlled blood glucose, lower blood pressure)
  - Reduced anxiety
  - Improved sleep
  - Improved relationships
  - Improved performance at home, school, and work
- Medication-specific labs (e.g., naltrexone: liver function tests)
- Depression and suicide risk*

**AUD increases the risk of suicide; item 9 in the PHQ-9 (Patient Health Questionnaire 9-item depression scale) screens for suicidal ideation.*

## DOSING REGIMENS VARY

Some patients benefit from medication prescribed routinely over an extended or indefinite time; others may only want to take medication when faced with difficult or stressful events.

**Is there evidence for targeted (PRN or as needed) dosing in patients with a goal of reduced heavy drinking?**

The most evidence for this targeted dosing strategy is with oral naltrexone. Patients take 50 mg of oral naltrexone 1 - 2 hours before drinking is anticipated or during any stressful times or any risky drinking situation (e.g., wedding reception).

PRN naltrexone dosing controls drinking by blocking the reinforcing effects of alcohol and reducing the desire to continue drinking on drinking days or when cravings arise. The ideal candidate is someone interested in drinking less. It should not be used in patients desiring abstinence.

PRN dosing is not discussed in the American Psychiatric Association guidelines and is an off-label use of naltrexone.

*Adapted with permission from the Vermont Academic Detailing Program. Prevention and Management of Alcohol Use Disorder. January 2023. (personal communication, November 13, 2023).*

# MEDICATIONS FOR ALCOHOL USE DISORDER (AUD)[1]

South Carolina Medicaid and Blue Cross Blue Shield of South Carolina **PAYERS COVER** all medications and dosage forms listed in this table.

Guidelines and guidances suggest **CONTINUING MEDICATION** at least 6 months to a year. Patients may need medication for an even longer duration.

| | Medication (Brand Example) Strength(s) Dosage Form(s) | FDA Approved | Typical AUD Dosing (Daily Dose Range) | Titration to Daily Dose Required (Suggested Titration) | Abstinence Prior to Initiation | AUD BENEFIT | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Increased Abstinence | Reduced Number of Drinking Days | Reduced Heavy Drinking | Reduced Cravings |
| **FIRST LINE** | Naltrexone 50 mg Tablet | Y | 50 mg PO once daily (12.5 - 100 mg)[2] | N | Not required[3] | Y | Y | **Y** | **Y** |
| | Naltrexone ER (Vivitrol®) 380 mg Injection | Y | 380 mg IM injection monthly or every 4 weeks | N | Not required[8] | Y | Y | **Y** | **Y** |
| | Acamprosate (Campral®)[10] 333 mg Delayed-Release Tablet | Y | 666 mg PO three times daily | N | Preferred[11] | **Y** | Y | N | Y |
| **SECOND LINE** | Disulfiram (Antabuse®)[10] 250, 500 mg Tablet | Y | 250 mg PO once daily (125 - 500 mg) | N | Required (suggested time range 24 - 48 hours) | Y | For patients committed and motivated towards abstinence | | |
| | Topiramate IR (Topamax®) Tablet, Sprinkle Capsule, Oral Solution | N | 200 - 300 mg PO per day in two divided doses (25 - 300 mg)[15] | Y (25 - 50 mg once weekly)[16] | Not needed | Y | Y | Y | Y |
| | Gabapentin IR (Neurontin®) Tablet, Capsule, Oral Solution | N | 600 mg PO three times daily (300 - 1800 mg) | Y (300 mg every 1 - 2 days)[18] | Not needed | Y | Y | Y | Y |

**1.** Other pharmacotherapy options with limited/inconsistent evidence: baclofen, ondansetron, prazosin, and varenicline. **2.** Outside FDA labeled dosing. **3.** Reports of improved results if abstinent ≥ 4 days. **4.** Do not use in acute hepatitis; FDA labeling states to discontinue if acute hepatitis symptoms arise. **5.** FDA labeling states to use caution as primary metabolite is excreted in urine. **6.** Must be off all opioids 7-10 days prior; 14 days if previously on buprenorphine or methadone. **7.** A naltrexone card or tag aids in situations that require emergency pain management. **8.** FDA labeling states patients should be abstinent prior to initiation. **9.** Use 1.5 inch needle for very lean patients; consider alternate treatment for obese patients. **10.** Available as generic only. **11.** May improve results if abstinent (abstinent time range of 3-7 days reported). **12.** FDA labeling states if CrCl 30 - 50 ml/min reduce dose to 333 mg TID. **13.** Consider dose reduction to 666 mg BID. **14.** Caution patients on hidden alcohol products (e.g., red wine vinegar, alcohol-containing medications). **15.** Do not stop abruptly. **16.** Initiate with 25 mg once daily for first week. **17.** FDA labeling states if CrCl < 70 ml/min to reduce dose to 50% and titrate more slowly. **18.** Initiate at 300 mg, typically adminstered as a single bedtime dose. **19.** Expert opinion to reduce dose. **20.** FDA labeling states to reduce dose for CrCl < 60 ml/min (refer to FDA labeling for dosing details).

Carefully consider risk-benefit of **NALTREXONE** in patients with alcohol-related **LIVER DYSFUNCTION** (LFTs ≥ 3-5 times ULN). Reduced drinking due to naltrexone may result in overall LFT reduction.

Refer to package inserts for **MORE DETAIL** on drug interactions, adverse effects, and medication monitoring: https://dailymed.nlm.nih.gov/dailymed/.

| CO-OCCURING CONDITIONS TO CONSIDER | | | | | | | Comments and Other Concerns |
|---|---|---|---|---|---|---|---|
| Hepatic Dysfunction | Hepatic Failure | Renal Dysfunction | Renal Failure | Older Adult (≥ 65) | Low Body Weight (< 60 kg) | On Opioids | |
| ⚠ | ✗[4] | ✓ | ⚠[5] | ✓ | ✓ | ✗[6,7] | **May prefer if goal is to reduce heavy drinking and cravings;**<br>Consider if co-occurring AUD and OUD;<br>Minimal side effects — nausea most common, typically subsides if abstinent (take with food to decrease GI effects);<br>Consider IM injection if adherence is a concern; IM injection requires special acquisition, storage, and administration procedures |
| ⚠ | ✗[4] | ✓ | ⚠[5] | ✓ | ⚠[9] | | |
| ✓ | ✓ | ⚠<br>Reduce dose[12] | ✗ | ✓ | ⚠[13] | ✓ | **May prefer if goal is abstinence;**<br>Three times daily dosing and large tablet size may reduce adherence (cannot crush, split or chew tablet);<br>Minimal side effects — diarrhea most common, often dose-related and transient |
| ⚠ ⚠ | ✗ | ⚠ | ⚠ | ⚠ | ✓ | ✓ | Supervised dosing improves efficacy;<br>Educate patient on disulfiram-alcohol reaction (can occur up to 14 days after the last dose);[14]<br>Contraindicated in severe myocardial disease, coronary occlusion, and psychoses;<br>Side effects (drowsiness most common) may limit use |
| ⚠ | ⚠ | ⚠<br>Reduce dose[17] | ⚠<br>Reduce dose[17] | ⚠ | ⚠ | ⚠ | Side effects may limit use, most are dose-dependent, and may dissipate over time;<br>Cognitive dysfunction, paresthesias, weight loss, and anorexia among most common;<br>May decrease contraceptive effectiveness;<br>Among first-line considerations for AUD and co-occurring PTSD in VA Guidelines |
| ✓[19] | ✓[19] | ⚠<br>Reduce dose[20] | ⚠<br>Reduce dose[20] | ⚠ | ✓ | ⚠ ⚠ | Caution for potential misuse;<br>Dizziness, drowsiness, ataxia, peripheral edema among most common side effects |

**KEY:** ✓ Reported as safe to use or no evidence of risk reported; ⚠ Use with caution; ⚠ ⚠ Use with extreme caution; ✗ Do not use

**BID** Twice daily; **CrCl** Creatinine clearance; **FDA** Food and Drug Administration; **GI** Gastrointestinal; **IM** Intramuscular; **IR** Immediate release; **LFT** Liver function tests; **OUD** Opioid Use Disorder; **PO** By mouth; **PTSD** Post-traumatic Stress Disorder; **VA** United States Department of Veterans Affairs; **TID** Three times daily; **ULN** Upper limit of normal

# REFERENCES


Alcohol Facts and Statistics. National Institute on Alcohol Abuse and Alcoholism (NIAAA). 2023. https://www.niaaa.nih.gov/alcohols-effects-health/alcohol-topics/alcohol-facts-and-statistics. Accessed November 30, 2023.

Alcohol use disorder (AUD): drug comparison chart. RxFiles Academic Detailing. November 2023. https://www.rxfiles.ca/RxFiles/uploads/documents/members/CHT-Alcohol-Use-Disorder.pdf. Accessed August 15, 2023.

Avery J. Naltrexone and alcohol use. Am J Psychiatry. 2022;179:886-7.

Barber CM, Terplan M. Principles of care for pregnant and parenting people with substance use disorder: the obstetrician gynecologist perspective. Front Pediatr. 2023 May 24;11:1045745. doi: 10.3389/fped.2023.1045745.

Batki SL, Pennington DL, Lasher B, et al. Topiramate treatment of alcohol use disorder in veterans with posttraumatic stress disorder: a randomized controlled pilot trial. Alcohol Clin Exp Res. 2014 Aug;38(8):2169-77. doi: 10.1111/acer.12496.

Blodgett JC, Del Re AC, Maisel NC, Finney JW. A meta-analysis of topiramate's effects for individuals with alcohol use disorders. Alcohol Clin Exp Res. 2014 Jun;38(6):1481-8. doi: 10.1111/acer.12411.

Bradley KA, DeBenedetti AF, Volk RJ, Williams EC, Frank D, Kivlahan DR. AUDIT-C as a brief screen for alcohol misuse in primary care. Alcohol Clin Exp Res. 2007 Jul;31(7):1208-17. doi: 10.1111/j.1530-0277.2007.00403.x.

British Columbia Centre on Substance Use (BCCSU), B.C. Ministry of Health and B.C. Ministry of Mental Health and Addictions. Provincial guideline for the clinical management of high-risk drinking and alcohol use disorder. 2019. Vancouver, B.C.: BCCSU. Available at: https://www.bccsu.ca/clinical-care-guidance/. Accessed June 7, 2023.

Bush K, Kivlahan DR, McDonell MB, Fihn SD, Bradley KA. The AUDIT alcohol consumption questions (AUDIT-C): an effective brief screening test for problem drinking. Ambulatory Care Quality Improvement Project (ACQUIP). Alcohol Use Disorders Identification Test. Arch Intern Med. 1998 Sep 14;158(16):1789-95. doi: 10.1001/archinte.158.16.1789.

Butt PR, White-Campbell M, Canham S, et al. Canadian Guidelines on alcohol use disorder Among Older Adults. Can Geriatr J. 2020 Mar 30;23(1):143-148. doi: 10.5770/cgj.23.425.

Canadian Research Initiative in Substance Misuse. Canadian Guideline for the Clinical Management of High-Risk Drinking and Alcohol Use Disorder. October 2023. www.helpwithdrinking.ca. Accessed November 16, 2023.

Centers for Disease Control and Prevention. Planning and implementing screening and brief intervention for risky alcohol use: a step-by-step guide for primary care practices. Atlanta, Georgia: Centers for Disease Control and Prevention, National Center on Birth Defects and Developmental Disabilities. June 2014. Accessed October 12, 2023.

Charlet K, Heinz A. Harm reduction-a systematic review on effects of alcohol reduction on physical and mental symptoms. Addict Biol. 2017 Sep;22(5):1119-1159. doi: 10.1111/adb.12414.

Clinical Guidelines: Alcohol Use Disorder. Community Behavioral Health. 2022 Nov. https://cbhphilly.org/wp-content/uploads/2022/12/CBH_CPG_AUD_2022-11.pdf. Accessed June 7, 2023.

Darvishi N, Farhadi M, Haghtalab T, Poorolajal J. Alcohol-related risk of suicidal ideation, suicide attempt, and completed suicide: a meta-analysis. PLoS One. 2015;10(5):e0126870.

DeVido J, Bogunovic O, Weiss RD. Alcohol use disorders in pregnancy. Harv Rev Psychiatry. 2015 Mar-Apr;23(2):112-21. doi: 10.1097/HRP.0000000000000070.

Drugs for Alcohol Use Disorder. Med Lett Drugs Ther. 2021 Dec 13;63(1639):193-8.

Dunn KE, Strain EC. Pretreatment alcohol drinking goals are associated with treatment outcomes. Alcohol Clin Exp Res. 2013 Oct;37(10):1745-52. doi: 10.1111/acer.12137.

Dunn J, Cohen A. Unhealthy drinking in adults screening and intervention guideline. Kaiser Permanente. 2023 Oct. https://wa-provider.kaiserpermanente.org/static/pdf/public/guidelines/alcohol-adult.pdf . Accessed November 2, 2023.

Evoy KE, Morrison MD, Saklad SR. Abuse and Misuse of Pregabalin and Gabapentin. Drugs. 2017 Mar;77(4):403-426. doi: 10.1007/s40265-017-0700-x.

Garbutt JC, Kranzler HR, O'Malley SS, Gastfriend DR, Pettinati HM, Silverman BL, Loewy JW, Ehrich EW; Vivitrex Study Group. Efficacy and tolerability of long-acting injectable naltrexone for alcohol dependence: a randomized controlled trial. JAMA. 2005 Apr 6;293(13):1617-25. doi: 10.1001/jama.293.13.1617. Erratum in: JAMA. 2005 Apr 27;293(16):1978. Erratum in: JAMA. 2005 Jun 15:293(23):2864.

Haber PS, Riordan BC, Winter DT, et al. New Australian guidelines for the treatment of alcohol problems: an overview of recommendations. Med J Aust. 2021 Oct 4;215 Suppl 7:S3-S32. doi: 10.5694/mja2.51254.

Hallgren KA, Witwer E, West I, et al. Prevalence of documented alcohol and opioid use disorder diagnoses and treatments in a regional primary care practice-based research network. J Subst Abuse Treat. 2020 Mar;110:18-27. doi: 10.1016/j.jsat.2019.11.008.

Hallgren KA, Matson TE, Oliver M, Caldeiro RM, Kivlahan DR, Bradley KA. Practical assessment of DSM-5 alcohol use disorder criteria in routine care: High test-retest reliability of an Alcohol Symptom Checklist. Alcohol Clin Exp Res. 2022 Mar;46(3):458-467. doi: 10.1111/acer.14778.

The healthcare professional's core resource on alcohol: additional links for patient care. National Institute on Alcohol Abuse and Alcoholism. 2023. https://www.niaaa.nih.gov/health-professionals-communities/core-resource-on-alcohol/additional-links-patient-care. Accessed September 6, 2023.

Heinälä P, Alho H, Kiianmaa K, Lönnqvist J, Kuoppasalmi K, Sinclair JD. Targeted use of naltrexone without prior detoxification in the treatment of alcohol dependence: a factorial double-blind, placebo-controlled trial. J Clin Psychopharmacol. 2001 Jun;21(3):287-92. doi: 10.1097/00004714-200106000-00006.

Hoggatt KJ, Simpson T, Schweizer CA, Drexler K, Yano EM. Identifying women veterans with unhealthy alcohol use using gender-tailored screening. Am J Addict. 2018 Mar;27(2):97-100. doi: 10.1111/ajad.12689.

Holt SR. Alcohol use disorder: Treatment overview. UpToDate. 2022 Mar. https://www.uptodate.com/contents/alcohol-use-disorder-treatment-overview. Accessed September 18, 2023.

Isaacs JY, Smith MM, Sherry SB, Seno M, Moore ML, Stewart SH. Alcohol use and death by suicide: a meta-analysis of 33 studies. Suicide Life Threat Behav. 2022;52(4):600-614. doi:10.1111/sltb.12846.

Jefee-Bahloul H, Jorandby L, Arias AJ. Topiramate Treatment of Alcohol Use Disorder in Clinical Practice. J Addict Med. 2019 Jan/Feb;13(1):23-27. doi: 10.1097/ADM.0000000000000444.

Jonas DE, Amick HR, Feltner C, et al. Pharmacotherapy for adults with alcohol use disorders in outpatient settings: a systematic review and meta-analysis. JAMA. 2014 May 14;311(18):1889-900. doi: 10.1001/jama.2014.3628.

Jonas DE, Garbutt JC, Brown JM, et al. Screening, behavioral counseling, and referral in primary care to reduce alcohol misuse [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2012 Jul. Report No.: 12-EHC055-EF.

Kaner EF, Beyer FR, Muirhead C, et al. Effectiveness of brief alcohol interventions in primary care populations. Cochrane Database Syst Rev. 2018 Feb 24;2(2):CD004148. doi: 10.1002/14651858.CD004148.pub4.

Kelty E, Terplan M, Greenland M, Preen D. Pharmacotherapies for the treatment of alcohol use disorders during pregnancy: time to reconsider? Drugs. 2021 May;81(7):739-748. doi: 10.1007/s40265-021-01509-x.

Kranzler HR, Armeli S, Tennen H, et al. Targeted naltrexone for early problem drinkers. J Clin Psychopharmacol. 2003 Jun;23(3):294-304. doi: 10.1097/01.jcp.0000084030.22282.6d.

Kranzler HR, Tennen H, Armeli S, et al. Targeted naltrexone for problem drinkers. J Clin Psychopharmacol. 2009 Aug;29(4):350-7. doi: 10.1097/JCP.0b013e3181ac5213.

Kranzler HR, Feinn R, Morris P, Hartwell EE. A meta-analysis of the efficacy of gabapentin for treating alcohol use disorder. Addiction. 2019 Sep;114(9):1547-1555. doi: 10.1111/add.14655..

Laaksonen E, Koski-Jännes A, Salaspuro M, Ahtinen H, Alho H. A randomized, multicentre, open-label, comparative trial of disulfiram, naltrexone and acamprosate in the treatment of alcohol dependence. Alcohol Alcohol. 2008 Jan-Feb;43(1):53-61. doi: 10.1093/alcalc/agm136. Epub 2007 Oct 27.

Leung JG, Narayanan PP, Markota M, et al. Assessing naltrexone prescribing and barriers to initiation for alcohol use disorder: a multidisciplinary, multisite survey. Frontiers Psychiatry. 2022;13:856938.

Mason BJ, Quello S, Goodell V, Shadan F, Kyle M, Begovic A. Gabapentin treatment for alcohol dependence: a randomized clinical trial. JAMA Intern Med. 2014 Jan;174(1):70-7. doi: 10.1001/jamainternmed.2013.11950.

McPheeters M, O'Connor EA, Riley S, et al. Pharmacotherapy for alcohol use disorder: a systematic review and meta-analysis. JAMA. 2023 Nov 7;330(17):1653-1665. doi: 10.1001/jama.2023.19761.

Medication for the Treatment of Alcohol Use Disorder: A Brief Guide. U.S. Department of Health and Human Services Substance Abuse and Mental Health Services Administration. 2015 Oct. https://store.samhsa.gov/product/Medication-for-the-Treatment-of-Alcohol-Use-Disorder-A-Brief-Guide/SMA15-4907.

National Collaborating Centre for Mental Health (UK). Alcohol-Use Disorders: Diagnosis, assessment and management of harmful drinking and alcohol dependence. Leicester (UK): British Psychological Society (UK); 2011.

National Survey on Drug Use and Health. Substance Abuse and Mental Health Services Administration. https://www.samhsa.gov/data/data-we-collect/nsduh-national-survey-drug-use-and-health. Accessed September 6, 2023.

Nevenansky J. 63 Alcohol relapse statistics and facts. Urban Recovery 2023. https://www.urbanrecovery.com/blog/alcohol-relapse-statistics#:~:text=During%20the%20first%2090%20days,a%20primary%20trigger%20for%20relapse. Accessed November 9, 2023

O'Malley SS, Corbin WR, Leeman RF, et al. Reduction of alcohol drinking in young adults by naltrexone: a double-blind, placebo-controlled, randomized clinical trial of efficacy and safety. J Clin Psychiatry. 2015 Feb;76(2):e207-13. doi: 10.4088/JCP.13m08934.

Oslin DW, Lynch KG, Maisto SA, et al. A randomized clinical trial of alcohol care management delivered in Department of Veterans Affairs primary care clinics versus specialty addiction treatment. J Gen Intern Med. 2014 Jan;29(1):162-8. doi: 10.1007/s11606-013-2625-8.

Paquette CE, Daughters SB, Witkiewitz K. Expanding the continuum of substance use disorder treatment: nonabstinence approaches. Clin Psychol Rev. 2022 Feb;91:102110. doi: 10.1016/j.cpr.2021.102110.

Perry C, Liberto J, Milliken C, et al; VA/DoD Guideline Development Group. The Management of Substance Use Disorders: Synopsis of the 2021 U.S. Department of Veterans Affairs and U.S. Department of Defense Clinical Practice Guideline. Ann Intern Med. 2022 May;175(5):720-731. doi: 10.7326/M21-4011.

Popish SJ, Wells DL, Himstreet JH. Alcohol Use Disorder (AUD): Leading the Charge in the Treatment of AUD A VA Clinician's Guide. U.S. Department of Veterans Affairs. 2022 Feb.

Prescribing pharmacotherapies for patients with alcohol use disorder. Substance Abuse and Mental Health Services Administration. 2021. https://store.samhsa.gov/sites/default/files/SAMHSA_Digital_Download/PEP20-02-02-015.pdf. Accessed June 14, 2023.

Reducing or quitting drinking? An extensive review of health benefits. Recovery Research Institute. 2017 Mar. https://www.recoveryanswers.org/research-post/reducing-or-quitting-drinking-an-extensive-review-of-health-benefits/. Access October 19, 2023.

Reus VI, Fochtmann LJ, Bukstein O, Eyler AE, et al. The American Psychiatric Association Practice guideline for the pharmacological treatment of patients with alcohol use disorder. Am J Psychiatry. 2018 Jan 1;175(1):86-90. doi: 10.1176/appi.ajp.2017.1750101.

Rubinsky AD, Kivlahan DR, Volk RJ, Maynard C, Bradley KA. Estimating risk of alcohol dependence using alcohol screening scores. Drug Alcohol Depend. 2010 Apr 1;108(1-2):29-36. doi: 10.1016/j.drugalcdep.2009.11.009.

Santos GM, Ikeda J, Coffin P, et al. Targeted oral naltrexone for mild to moderate alcohol use disorder among sexual and gender minority men: a randomized trial. Am J Psychiatry. 2022 Dec 1;179(12):915-926. doi: 10.1176/appi.ajp.20220335. Epub 2022 Oct 26.

Senthilkumar H, Abou Haidar A, Kauffman B, Peterson R, Bharati R. Increasing alcohol screening and Brief intervention rates using the office champions model in family medicine practices. Family Practice Management. 2022 Jul;29(4):25-30.

Sinclair JD. Evidence about the use of naltrexone and for different ways of using it in the treatment of alcoholism. Alcohol Alcohol. 2001 Jan-Feb;36(1):2-10. doi: 10.1093/alcalc/36.1.2.

Skinner MD, Lahmek P, Pham H, Aubin HJ. Disulfiram efficacy in the treatment of alcohol dependence: a meta-analysis. PLoS One. 2014 Feb 10;9(2):e87366. doi: 10.1371/journal.pone.0087366.

Tetrault JM, O'Connor PG. Risky drinking and alcohol use disorder: Epidemiology, clinical features, adverse consequences, screening, and assessment. UpToDate. 2022 Apr. https://www.uptodate.com/contents/risky-drinking-and-alcohol-use-disorder-epidemiology-clinical-features-adverse-consequences-screening-and-assessment. Accessed 2023.

Tseng CW, Wong JB. Screening and behavioral counseling interventions to reduce unhealthy alcohol use in adolescents and adults: US Preventive Services Task Force recommendation statement. JAMA. 2018 Nov 13;320(18):1899-1909. doi: 10.1001/jama.2018.16789.

US Preventive Services Task Force; Curry SJ, Krist AH, Owens DK, Barry MJ, Caughey AB, Davidson KW, Doubeni CA, Epling JW Jr, Kemper AR, Kubik M, Landefeld CS, Mangione CM, Silverstein M, Simon MA, Watkins KE, Ober AJ, Lamp K, et al. Collaborative Care for Opioid and Alcohol Use Disorders in Primary Care: The SUMMIT randomized clinical trial. JAMA Intern Med. 2017 Oct 1;177(10):1480-1488. doi: 10.1001/jamainternmed.2017.3947.

van Amsterdam J, Blanken P, Spijkerman R, van den Brink W, Hendriks V. The added value of pharmacotherapy to cognitive behavior therapy And vice versa in the treatment of alcohol use disorders: a systematic review. Alcohol Alcohol. 2022 Nov 11;57(6):768-775.

Vermont Academic Detailing Program. Prevention and management of alcohol use disorder. January 2023. (personal communication, 2023).

Wagner E, Babaei M, British Columbia Centre on Substance Use, Columbia B. Provincial guideline for the clinical management of high-risk drinking and alcohol use disorder. British Columbia Centre on Substance Use; 2019 Dec.

Wallach JD, Rhee TG, Edelman EJ, Shah ND, O'Malley SS, Ross JS. U.S. prescribing of on-and-off-label medications for alcohol use disorder in outpatient visits: NAMCS 2014 to 2016. J Gen Intern Med. 2022 Feb;37(2):495-498. doi: 10.1007/s11606-021-06668-x.

White AM, Castle IP, Powell PA, Hingson RW, Koob GF. Alcohol-related deaths during the COVID-19 pandemic. JAMA. 2022 May 3;327(17):1704-1706. doi: 10.1001/jama.2022.4308.

Williams EC, Rubinsky AD, Chavez LJ, et al. An early evaluation of implementation of brief intervention for unhealthy alcohol use in the US Veterans Health Administration. Addiction. 2014 Sep;109(9):1472-81. doi: 10.1111/add.12600.

Willenbring ML, Massey SH, Gardner MB. Helping patients who drink too much: an evidence-based guide for primary care clinicians. Am Fam Physician. 2009 Jul 1;80(1):44-50.

Winslow BT, Onysko M, Hebert M. Medications for alcohol use disorder. Am Fam Physician. 2016 Mar 15;93(6):457-65.

Witkiewitz K, Saville K, Hamreus K. Acamprosate for treatment of alcohol dependence: mechanisms, efficacy, and clinical utility. Ther Clin Risk Manag. 2012;8:45-53. doi: 10.2147/TCRM.S23184.

Witkiewitz K, Falk DE, Litten RZ, et al. Maintenance of World Health Organization risk drinking level reductions and posttreatment functioning following a large alcohol use disorder clinical trial. Alcohol Clin Exp Res. 2019 May;43(5):979-987. doi: 10.1111/acer.14018.

Witkiewitz K, Kranzler HR, Hallgren KA, et al. Stability of drinking reductions and long-term functioning among patients with alcohol use disorder. J Gen Intern Med. 2021 Feb;36(2):404-412. doi: 10.1007/s11606-020-06331-x.

Product labeling references available upon request.


# WRITING GROUP


Writing Group (and Disclosures for Pharmaceutical Relationships): Sarah Ball, PharmD (none), Kelly Barth, DO (none), Sandra Counts, PharmD (none), Nancy Hahn, PharmD (none), Lauren Linder, PharmD (none), Jenna McCauley, PhD (none), Joseph McElwee, MD (none), William Moran, MD (none), Megan Pruitt, PharmD (none), Sophie Robert, PharmD (none), Chris Wisniewski, PharmD (none).



Acknowledgements: Dr. Karen Hartwell and Dr. Andrew Schreiner provided clinical input and support. Chloe Bays assisted with concept design and review. The MUSC Drug Information Center assisted with background research. Call 843.792.3896 or email druginfo@musc.edu for free access to MUSC's Drug Information Center to answer provider-specific questions and requests from materials delivered.


*The information contained in this summary is intended to assist healthcare professionals in the management of alcohol use disorder (AUD) in non-pregnant adults in the primary care setting. This information is advisory only and is not intended to replace sound clinical judgement, nor should it be regarded as a substitute for individualized diagnosis and treatment based on a patient's clinical presentation, including medical conditions and medications.*