Alcohol Abuse and Addiction Management Protocol

All Team Members: Patient Self-Management Education and Support

Alcohol is the most commonly abused drug in the United States. About 18 million people in the US have an alcohol abuse disorder - classified as either alcoholism (alcohol dependence) or alcohol abuse.[1] In 2007, the estimated cost of excessive alcohol consumption in New Mexico was more than $2.8 billion, or $1,400 per person.[2] The statistics below highlight the importance of screening all patients for alcohol abuse during the initial intake process.

- Over the last 15 years, New Mexico's death rate for alcohol related injury (motor vehicle crashes, drowning, suicide, homicide, etc.) has consistently been among the worst in the nation ranging from 1.4 to 1.8 times the national rate.[3]
- Over the past 25 years, New Mexico's rate of Alcohol-related Chronic Liver Disease (AR-CLD) has increased 14% while the national rate has decreased 24%.[4]
- Since 1998, the death rate from AR-CLD has been 45-50% higher than the death rate from alcohol-related motor vehicle crashes.[5]

Alcohol Screening - All Patients

CHW/RN - Initial Screening

[1] National Institute on Alcohol Abuse and Alcoholism website http://www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/alcohol-use-disorders
[2] *The State of Health in New Mexico 2013,* NM Department of Health
[3] *The State of Health in New Mexico 2013,* NM Department of Health
[4] *New Mexico Substance Abuse Epidemiology Profile*, New Mexico Department of Health, October 2010
[5] *New Mexico Substance Abuse Epidemiology Profile*, New Mexico Department of Health, October 2010

- screen all patients for alcohol use during initial intake using the NIDA Quick Screen (refer to ***Alcohol and Other Drugs Screening Protocol***)
- assess any patients with high or moderate risk scores for alcohol use on readiness to change using the Stages of Change Model (refer to ***Introduction to Stages of Change Model*** Power Point from ECHO Care face-to-face training)
- provide basic information about treatment options for alcohol dependence, including medication-assisted treatment (MAT), for any patients with high or moderate risk scores for alcohol use (see MAT section below)
- provide harm reduction education to any patients with high or moderate risk scores for alcohol use (refer to ***Harm Reduction for Alcohol and Other Drugs***)
- refer any patients with high or moderate risk scores for alcohol use to NP/PA and counselor for further assessment

NP - Patients with High or Moderate Risk Screening Scores: Initial Assessment

- assess for alcohol dependence (using DSM-5 Alcohol Substance Use Disorder criteria)
- assess likelihood of alcohol withdrawal syndrome, and need for medical management of withdrawal
- assess for co-occurring substance use or psychiatric disorders and/or concurrent medical conditions → refer to counselor as needed
- assess for possible drug interactions with prescribed medications
- complete **history and physical exam**, including assessment for high blood pressure, high glucose levels, heart disease, and liver disease, including labs for liver function testing (LFTs)
- provide further education on treatment options

NP - Patients with High or Moderate Risk Screening Scores: Initial Assessment

- Initial labs to assess:
  - Liver Function Tests
    - AST is typically higher than ALT in chronic alcohol use
    - Elevated GGT plus elevated AST has high specificity for heavy alcohol use
    - Carbohydrate-deficient Transferrin (CDT) has low sensitivity (poor screen) and high specificity (good confirmation) for recent (2-4 weeks) heavy alcohol use
  - Complete Blood Count
    - Mean Corpuscular Volume (MCV) can be elevated in alcohol-induced macrocytic anemia
    - Platelets are also often decreased in heavy drinkers

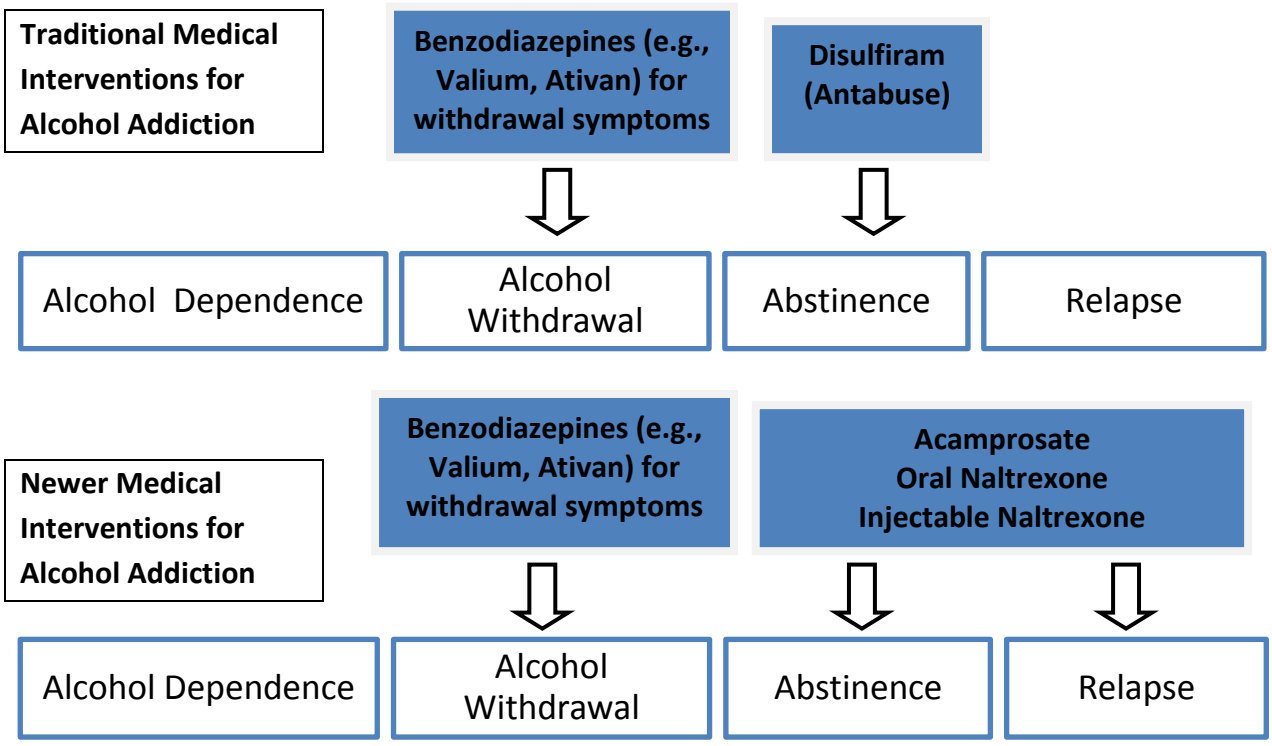
- Prescribe oral thiamine (to help prevent Wernicke's/Korsakoff's syndrome, at least 100 mg po daily for 10 days; if patient continues to drink, continue thiamine indefinitely
- offer combined Hepatitis A/B vaccine (Twinrix) for any patients with signs of liver disease

CHW - Patients with High or Moderate Risk Screening Scores: Initial Assessment

- provide counseling for patients referred by NP for co-occurring substance use or psychiatric disorders → refer to psychiatrist or for in-patient treatment as needed
- use the Stages of Change Model and Motivational Interviewing to assess and assist referred patients to develop a realistic action plan for change

Treatment Options for Alcohol Abuse and Addiction: a brief history

For many years, support through Alcoholics Anonymous (founded in 1935) and counseling were the only treatment options for alcohol abuse. Disulfiram (Antabuse) was the first medicine approved for the treatment of alcohol addiction (1951). There are now several other medications approved for alcohol abuse treatment and ongoing research for new medications and behavioral therapies.



Definition of a Standard Drink:

5 ounces of wine = 12 ounces of beer = 1.5 ounces of 80-proof spirits = 1 standard drink

Use the guideline above to calculate the number of drinks that a patient is consuming. Note that a patient may count one 44 oz cup of vodka and juice as "1 drink." Educating patients on what constitutes a Standard Drink can help them more realistically understand how much they are drinking compared to others. It can also be helpful to ask what containers they use. Refer to the graphic below to calculate how much they are drinking.

Binge Drinking - What you and your patients need to know

Binge drinking is a pattern of alcohol consumption that brings the blood alcohol concentration (BAC) level to 0.08% (legal limit) or more – usually 5 or more drinks in a row for men and 4 or more drinks in a row for women. It is the most common form of excessive alcohol use in the US - 1 in 6 US adults report binge drinking 4x/month with an average of 8 drinks per binge.[6] Although binge drinkers are not necessarily alcohol dependent, there are many health risks associated with binge drinking, including

[6] Fact Sheets - Binge Drinking, CDC, 2012. http://www.cdc.gov/alcohol/fact-sheets/binge-drinking.htm

motor vehicle accidents and other types of alcohol-related injury. Binge drinking large quantities of alcohol at one time can also lead to alcohol poisoning (alcohol overdose), which can be fatal.

Alcohol Withdrawal - What you and your patients need to know

Alcohol withdrawal refers to symptoms that may occur when suddenly stopping alcohol use after long-term or heavy use. Symptoms usually start within 2-10 hours after taking the last drink and can range from mild (shaking, sweating, nausea, headache) to severe (hallucinations) and even life-threatening (delirium tremens - DTs). Delirium tremens is a medical emergency and can include grand mal-type seizures, delirium and heart arrhythmias.

Common time-frame of alcohol withdrawal:

Time since last drink	Symptoms
0 – 24 Hours	Elevated blood pressure, elevated heart rate, sweating, anxiety
24 – 48 Hours	Seizure
48-72 Hours	Delirium Tremens (waxing-waning consciousness, hallucinations, confusion, difficulty speaking)
	Death (If DTs are not treated aggressively)

Definitions of withdrawal:

1. Simple Withdrawal: Sweating, tremor, anxiety, palpitations
2. Complicated Withdrawal: Seizure or Delirium Tremens

Risk factors for ANY withdrawal:

1. Former history of withdrawal
2. Conscious with a B.A.L. over 0.3 % by volume (A BAL of 0.3 should result in unconsciousness in someone without significant tolerance to alcohol; Remaining conscious at this level indicates significant tolerance, and a high likelihood of withdrawal symptoms if drinking is interrupted).

Risk factors for complicated withdrawal:

1. Former history of withdrawal seizure or Delirium Tremens (Patients with this history require medically-supervised withdrawal given the high likelihood of experiencing complicated withdrawal again)
2. Traumatic brain injury
3. Acute illness (increases the likelihood of DTs)

Patients who are at risk for complicated withdrawal should be in an inpatient setting during alcohol withdrawal. Outpatient management of alcohol withdrawal may be appropriate if the patient does not have risk factors for complicated withdrawal, does not have other significant medical or psychiatric illness, and lives with a responsible adult who can help to monitor patient and administer medications.

Table 1, Medications for use in outpatient management of alcohol withdrawal

	Medication options	Fixed schedule dosing	Symptom-triggered dosing
Day 1	Chlordiazepoxide (Librium) * Lorazepam (Ativan) ** Oxazepam (Serax) **	25-50 mg po q 6 hours 1-2 mg po q 8 hours 30 mg po q 8 hours	25-50 mg po q 4 hours 2 mg po q 6 hours 30 mg po q 6 hours
Day 2	Chlordiazepoxide (Librium) * Lorazepam (Ativan) ** Oxazepam (Serax) **	25-50 mg po q 6 hours 1-2 mg po q 8 hours 30 mg po q 8 hours	25-50 mg po q 4 hours 2 mg po q 6 hours 30 mg po q 6 hours
Day 3	Chlordiazepoxide (Librium) * Lorazepam (Ativan) ** Oxazepam (Serax) **	25 mg po q 8 hours 1 mg po q 8 hours 15 mg po q 8 hours	25 mg po q 6 hours 1 mg po q 6 hours 15 mg po q 6 hours
Day 4	Chlordiazepoxide (Librium) * Lorazepam (Ativan) ** Oxazepam (Serax) **	25 mg po q 8 hours 1 mg po q 8 hours 15 mg po q 8 hours	25 mg po q 6 hours 1 mg po q 6 hours 15 mg po q 6 hours
Day 5	Chlordiazepoxide (Librium) * Lorazepam (Ativan) ** Oxazepam (Serax) **	25 mg po q 12 hours 1 mg po q 12 hours 15 mg po q 12 hours	25 mg po q 8 hours 1 mg po q 8 hours 15 mg po q 8 hours

*Metabolized by the liver; do not use in patients with significant liver disease

**Safer to use in patients with liver disease

Refer to ***Detoxification and Substance Abuse Treatment***, ***TIP 45***, SAMHSA, 2006 for detailed treatment information. http://www.ncbi.nlm.nih.gov/books/NBK64115/pdf/TOC.pdf

Medication-assisted Treatment (MAT) for Alcohol Addiction

Medication-assisted treatment (MAT) combines the use of prescription medications with counseling and behavioral therapies to treat addiction. MAT for alcohol addiction can help to:[7]

- regain a stable state of mind, free from alcohol-induced highs and lows
- provide freedom from thinking about alcohol all the time
- reduce problems of craving
- focus on lifestyle changes that lead back to healthy living

There are four (4) approved medications for the treatment of alcohol addiction - Disulfiram (Antabuse), Acamprosate (Campral), oral naltrexone (ReVia), and injectable naltrexone (Vivitrol). Each will be briefly discussed below.

Disulfiram (brand name **Antabuse®**) was the first medicine approved by the FDA for the treatment of alcohol addiction in 1951. It blocks the metabolism of alcohol in the body and causes unpleasant physical reactions when even small amounts of alcohol are consumed, including flushing, sweating, headache, nausea, vomiting, blurred vision, and anxiety. It does not treat alcohol withdrawal symptoms or reduce cravings for alcohol. Some facts on the use of Disulfiram include:

- it is a pill that must be taken once a day. Studies show that compliance is highest if given under supervision, including by a significant other at home.
- it should not be taken for at least 12 hours after drinking alcohol and its effects may last up to 2 weeks after a patient stops taking it
- may be useful for highly motivated patients, particularly in combination with therapy or other psychosocial support
- may be effective for short-term use in motivated patients to support abstinence when attending events where alcohol will be served (e.g., weddings, family gatherings)

[7] *Medication-Assisted Treatment for Alcohol Dependence,* Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury, US Dept. of Veterans Affairs, US Dept. of Defense

- Medicaid Salud insurance covers the cost of Antabuse pills.

Acamprosate (brand name **Campral®**) was approved by the FDA for use in the treatment of alcohol addiction in 2004. Although its mechanism of action is not clearly understood, it is believed to help restore the natural balance of neurotransmitters in the brain. It is best to start taking Acamprosate 2-3 days after stopping alcohol intake, but it is safe to start while still drinking. It decreases alcohol cravings and the pleasurability of drinking, but does not treat alcohol withdrawal symptoms. Some facts on the use of Acamprosate include:

- it is a pill that is taken 3X/day
- it is safe to use with liver disease
- It is contraindicated in severe renal disease
- European studies showed a positive effect for increased abstinence at 6 months compared with placebo, but a large American study did not show much effect (but patients were only followed for 2-4 months)
- mild side effects (diarrhea most common)
- slightly increased suicide effects (suicidal ideation, attempts and completions) when compared with a control group receiving placebo → patients on Campral need to be closely monitored for depression and suicidality. Many of the suicidality cases in the studies were associated with relapse to drinking.
- Medicaid Salud insurance covers the cost of Campral, but prior authorization is required.

Naltrexone is an opioid antagonist that is used for the treatment of both alcohol and opioid addiction. Naltrexone in pill form (brand names **Revia®** and **Depade®**) was approved by the FDA for the treatment of alcohol addiction in 1995; extended-release injectable naltrexone (brand name **Vivitrol®**) was approved for treatment of alcohol addiction in 2006. It is not fully understood how naltrexone works in the treatment of alcohol addiction, but it is thought that because naltrexone blocks the release of dopamine in the brain (↑ dopamine = ↑ feelings of pleasure and well-being), it decreases the pleasurability of alcohol. Some facts on the use of naltrexone include:

- is considered first-line medical treatment unless there are medical contraindications
- cannot be taken if patient has severe liver disease
- cannot be taken if patient needs opioids for pain relief
- it does help to prevent alcohol cravings, but does not treat withdrawal symptoms
- it does not cause negative physical symptoms if the patient drinks
- oral naltrexone is a pill taken once a day
- injectable naltrexone is a shot given once a month - is considered best option for patients who have trouble taking a pill every day
- injectable naltrexone is expensive ($700-1,000/month) vs. oral naltrexone ($100-200/month)

- Medicaid Salud insurance covers the cost of Revia pills; does not cover the cost of Vivitrol at this time.

Counseling and Psychosocial Support for the Treatment of Alcohol Abuse and Dependence

Treatment must address the whole person. Addiction is a multifaceted disease. It is the quintessential "biobehavioral disorder," with profound effects on a person's physical, emotional, and mental health as well as his or her family, colleagues, neighbors, and community.[8]

Psychosocial support is important for recovery from addiction for many reasons. It can:

- help motivate people to participate in drug treatment
- offer strategies for coping with drug cravings
- teach ways to avoid drugs and prevent relapse
- help individuals deal with relapse if it occurs
- help people learn to improve communication, relationship and parenting skills
- provide support for improved family dynamics

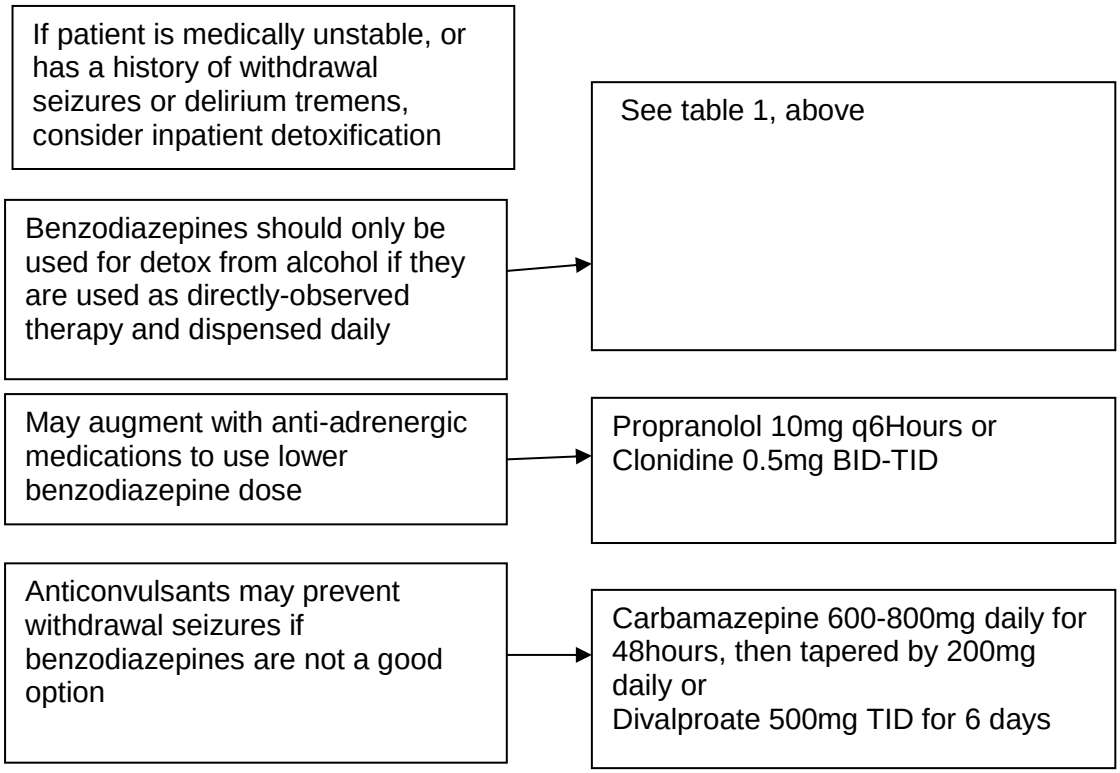
Psychosocial support can include one or a combination of the following:

- individual counseling
- family counseling
- group counseling
- 12-step programs (e.g. Alcoholics Anonymous)
- non-12-step peer support programs (e.g. Smart Recovery)
- individual peer support
- support from friends, family and co-workers
- support from staff at clinics and/or social service agencies

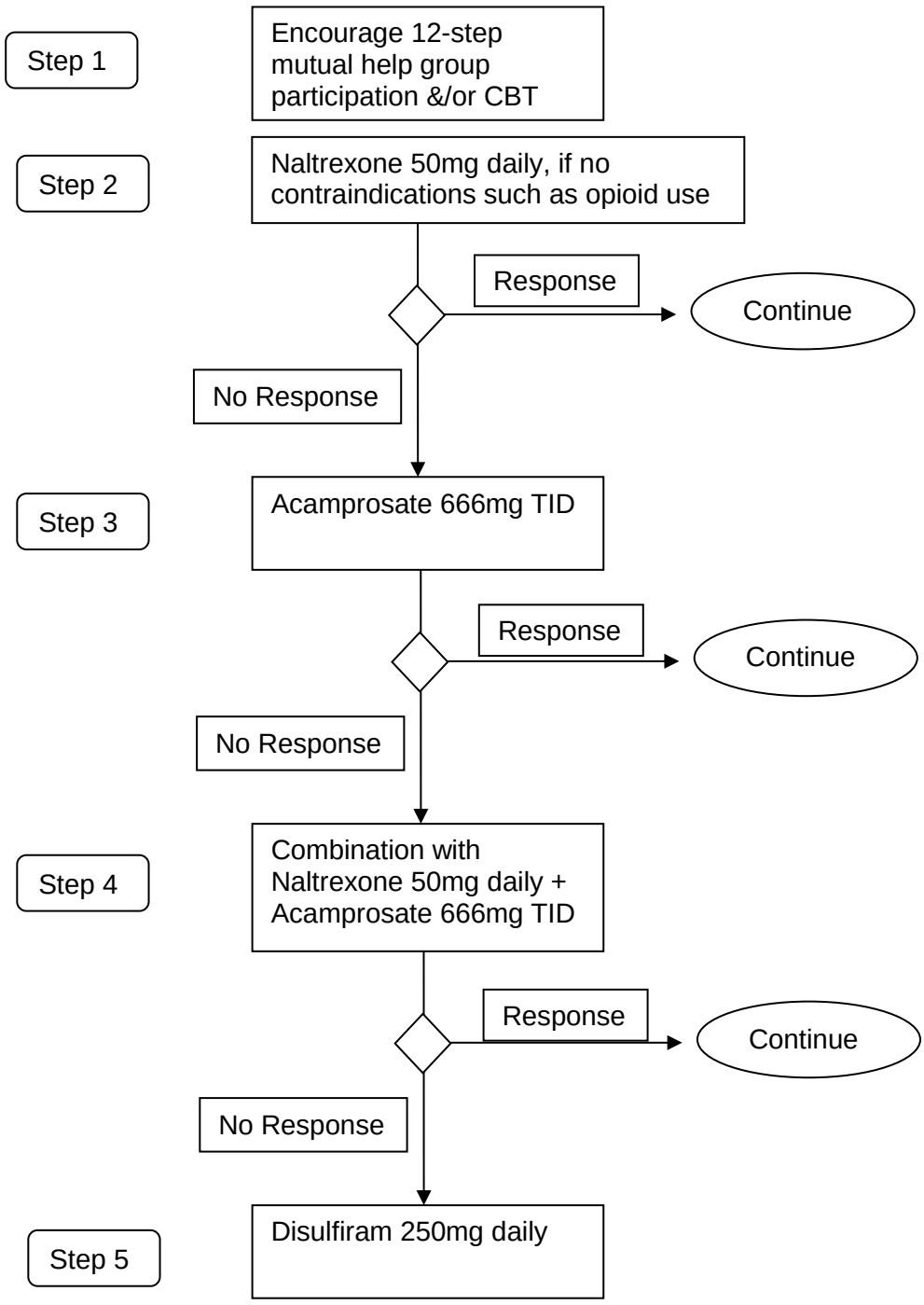
[8] *What Can We Expect From Substance Abuse Treatment?* CDC, February 2002

TREATMENT ALGORITHMS FOR ALCOHOL-RELATED DISORDERS (Adapted from American Psychaitric Association Treatment Guidelines)

ACUTE ALCOHOL WITHDRAWAL



ALCOHOL DEPENDENCE: a sample treatment algorithm



NP - Initial Treatment Phase

- review patient's medical history and lab results from initial H & P and order any further tests that may be indicated

- discuss medication treatment options with patient
- reinforce importance of not mixing alcohol with prescribed or over-the-counter medications (refer to ***Harmful Interactions: Mixing Alcohol with Medicines,*** National Institute on Alcohol and Alcoholism) http://pubs.niaaa.nih.gov/publications/Medicine/Harmful_Interactions.pdf
- check the **NM Prescription Monitoring Program** for any prescriptions for controlled substances http://www.rld.state.nm.us/boards/Pharmacy_Prescription_Monitoring_Program.aspx
- ensure that patient has received harm reduction education (refer to ***Harm Reduction for Alcohol and Other Drugs***)
- Prescribe oral thiamine (to help prevent Wernicke's/Korsakoff's syndrome, at least 100 mg po daily for 10 days; if patient continues to drink, continue thiamine indefinitely

NP - Monitoring Treatment/follow-up appointments

- order follow-up labs (e.g., LFTs) as needed (especially if patient is taking naltrexone)
- monitor patient for depression and suicidality (especially if patient is taking Campral) → refer to counselor as needed
- monitor patient for any alcohol-related medical problems and any medication-related problems
- continue to provide patient education and support as needed

  complete series of Hepatitis A/B vaccine (Twinrix) - 3 vaccinations over 6 months

CHW - Initial and Ongoing Treatment

- act as "point of contact" for patients needing additional education and/or support during alcohol treatment
- provide ongoing psychosocial support and/or referrals for 12-step and/or other peer support programs (AA http://www.newmexicoaa.org/, Smart Recovery www.smartrecovery.org, etc.)
- provide referrals for additional social services as needed, including programs for food, clothing, shelter, childcare, etc.

CHW & NP

- provide crisis counseling and/or ongoing therapy as needed to support patients in treatment
- perform or refer for any indicated psychiatric tests
- facilitate ongoing support groups as indicated by patient interest and caseload
- provide referrals for psychiatric consults or in-patient treatment as needed
- collaborate with patient to develop a relapse-prevention plan
- provide education, support, and consultation for other members of OIT as needed

Resources

- *Medication-Assisted Treatment for Alcohol Dependence*, Defense Centers of Excellence for Psychological Health and Traumatic Brain Injury, US Dept. of Veterans Affairs, US Dept. of Defense http://www.healthquality.va.gov/sud/SUDTool3PatientBookletFinalHiRes.pdf
- *Incorporating Alcohol Pharmacotherapies into Medical Practice*, A Treatment Improvement Protocol TIP 49, US Dept. of Health and Human Services, SAMHSA Center for Substance Abuse Treatment, 2009. http://www.ncbi.nlm.nih.gov/books/NBK64041/pdf/TOC.pdf
- *Detoxification and Substance Abuse Treatment*, A Treatment Improvement Protocol TIP 45, US Dept. of Health and Human Services, SAMHSA Center for Substance Abuse Treatment, 2006. http://www.ncbi.nlm.nih.gov/books/NBK64115/pdf/TOC.pdf
- *Harmful Interactions: Mixing Alcohol with Medicines*, National Institute on Alcohol and Alcoholism, NIH Publication No. 03-5329, Revised 2007 http://pubs.niaaa.nih.gov/publications/Medicine/Harmful_Interactions.pdf
- *Carbohydrate-Deficient Transferrin – A biomarker for long-term alcohol consumption,* Golka & Wiese, Journal of Toxicology and Environmental Health, Part B: Critical Reviews, 2010;7(4):319-337