

### **Screening and Identification**

### **Alcohol Consumption History**

- Ask all elderly patients at baseline, annual physical
- Elicit a specific weekly consumption
- Convert patient's response into standard drinks: 12 oz. of beer, 5 oz. of wine, or 1 ½ oz. of spirits.
- Ask about patients' maximum consumption on one day in the past one to three months
- Physical examination and screen for infections and any concurrent medical disorders ( eg anemia, UTI, chest )

### Screening questionnaires

Short Michigan Alcoholism Screening Questionnaire (Geriatric Version)

### **CAGE**

- Have you ever felt you ought to CUT DOWN on your drinking?
- Have people ANNOYED you by criticizing your drinking?
- Have you felt bad or GUILTY about your drinking?
- Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover (EYE OPENER)?

### Laboratory measures

\*Can be used to confirm clinical suspicion and monitor response to treatment.

|     | ·   |
|-----|---|
| GGT | 35-50% sensitive for detecting 4+ drinks/day  |
|     | Half-life four weeks  |
|     | <ul> <li>Also elevated by hepatic enzyme inducers (e.g., phenytoin), diabetes,</li> </ul> |
|     | obesity etc.  |
| MCV | Somewhat less sensitive than GGT  |
|     | At least three months to return to baseline   |
|     | <ul> <li>Also elevated by medications, folic acid and B12 deficiency, liver</li> </ul>    |
|     | disease, hypothyroidism etc.  |
|     |   |

<sup>1.</sup> Rosman, A.S. (1992). Utility and evaluation of biochemical markers of alcohol consumption. *Journal of Substance Abuse*, 4 (3), 277–297. 2. Sharpe, P.C. (2001). Biochemical detection and monitoring of alcohol abuse and abstinence. *Annals of Clinical Biochemistry*, 38 (Pt 6), 652–664.

<sup>\*</sup>Screen is positive if 2 "yes" out of 4 (men), 1 "yes" for women.

<sup>\*</sup>CAGE is retrospective - may indicate a past problem not current

<sup>1.</sup> Ewing, J.A. (1984). Detecting alcoholism: The CAGE questionnaire. *Journal of the American Medical Association*, 252 (14), 1905–1907. 2. Bradley, K.A., Boyd-Wickizer, J., Powell, S.H. & Burman, M.L. (1998). <u>Alcohol screening questionnaires in women: A critical review</u>. *Journal of the American Medical Association*, 280 (2), 166–171. 3. King, M. (1986). At risk drinking among general practice attenders: Validation of the CAGE questionnaire. *Psychological Medicine*, 16 (1), 213–217.



### **Diagnosis**

Most heavy drinkers are 'at-risk drinkers' or 'problem drinkers'. They drink above the low-risk guidelines, but are often able to drink moderately, have not suffered serious social consequences of drinking, and do not go through withdrawal. They often respond to brief physician advice and reduced drinking strategies.

**Alcohol-dependent** patients often have withdrawal symptoms, rarely drink moderately, continue to drink despite knowledge of social or physical harm, and spend a great deal of time drinking, neglecting other responsibilities. They generally require abstinence and more intensive treatment.

### At-risk drinking vs. alcohol dependence

|                                   | At-risk drinker                | Alcohol-dependent                                     |
|-----------------------------------|--------------------------------|---|
| Withdrawal symptoms               | No                             | Often   |
| Amount consumed                   | More than 14/week              | 40-60/week or more                                    |
| Drinking pattern                  | Variable; depends on situation | Tends to drink a set amount in the same circumstances |
| Social consequences               | Nil or mild                    | Often severe  |
| Physical consequences             | Nil or mild                    | Often severe  |
| Socially stable                   | Usually                        | Often not   |
| Neglect of major responsibilities | No                             | Yes   |

### Management of Older Adults with alcohol issues:

### Approach to office management

- · See the patient frequently, with alcohol at the top of the agenda
- Always ask about alcohol and express concern about ongoing drinking
- When feasible, ask a spouse, relative of friend to attend the visits
- Routinely offer pharmacotherapy (see below)

### Management of At Risk Drinking

- Review low-risk drinking guidelines
- Link alcohol to patient's own health condition if possible
- Emphasize that mood, sleep, energy level will improve with reduced drinking Ask patient to commit to a drinking goal: reduced drinking or abstinence
- If unwilling to commit, continue to ask about drinking at every office visit



- If reduced drinking goal chosen:
  - o Have patient specify when, where and how much they intend to drink
  - o Give tips on avoiding intoxication (see below)
  - Ask patient to keep a daily record of drinks consumed
- Monitor GGT and MCV at baseline and follow-up
- Identify triggers to drinking (e.g., emotions, social events), develop plan to deal with triggers
- Have regular follow up
- Consider referral to alcohol treatment program if problem persists

1. Fleming, M.F., Barry, K.L., Manwell, L.B., Johnson, K. & London, R. (1997). <u>Brief physician advice for problem alcohol drinkers: A randomized controlled trial in community-based primary care practices</u>. *Journal of the American Medical Association*, 227 (13), 1039–1045. 2. Kahan, M., Wilson, L. & Becker, L. (1995). <u>Effectiveness of physician-based interventions with problem drinkers: A review</u>. *Canadian Medical Association Journal*, 152 (6), 851–859.

### Factors contributing to alcohol use in the elderly

- Grief due to loss of spouse, adult children moving away etc.
- Boredom due to retirement and loss of roles
- Chronic pain
- Depression
- Insomnia
- Loneliness and isolation: Difficult to leave house to attend treatment or participate in non-drinking activities
- Shame, especially among women, which may make them reluctant to disclose their drinking and seek help

### Strategies to Avoid Intoxication (Harm Reduction Approach)

- Drink no more than one standard drink per hour, and no more than two drinks per day
- Sip drinks, don't gulp
- Avoid drinking on an empty stomach.
- Dilute drinks with mixer
- Alternate alcoholic with non-alcoholic drinks
- Put a 20-minute "time-out" between the decision to drink and taking the drink
- Avoid people and places associated with heavy drinking

#### Falls due to intoxication

- If cognitive or visual impairment or ataxia, recommend abstinence. If drinking have a sober person present
- For other patients, advise no more than one drink per hour (see strategies to avoid intoxication)
- Don't drink within one hour of bedtime
- · Ask for assistance if need to walk while intoxicated
- Taper off benzodiazepines

#### Failure to thrive

- Due to combination of depression, cognitive impairment, chronic intoxication and withdrawal, poor nutrition etc.
- Often requires hospital admission and discharge to supportive environment or long term care home



### Management of Alcohol Dependence

- Explain health effects of alcohol, linking them to patient's condition; reversible with abstinence
- Explain that within days and weeks of abstinence, most patients have improved sleep, mood, energy level
- Explain that alcohol dependence is a chronic illness: it can happen to 'good' people; effective treatments are available; prognosis is good with treatment
- Ask whether patient is willing to commit to a drinking goal (abstinence or reduced drinking)
- If the patient is not ready to commit, ask about drinking & readiness to change at each visit
- If ready to commit, negotiate a drinking goal in writing + daily log:
  - o Abstinence more likely to be successful
  - o If reduced drinking goal chosen, encourage a time-limited trial
- Consider planned detoxification if at risk for withdrawal (6+ drinks/day, morning or afternoon tremor/anxiety)
- Treat concurrent conditions e.g. anxiety, depression, hypertension, liver disease
- Encourage patient to keep away from people & places associated with drinking:
  - Spend time with family, friends
  - Go for walk daily as health permits
  - Regular wake and sleep hours
  - Regular activities outside the house as feasible
- Review options for formal treatment residential, day or outpatient
- Arrange follow-up; routinely monitor drinking through self-report, GGT, MCV
- Encourage access to local addiction services through:
  - the Connex DART database or through a local directory
  - Consider home alcohol treatment services if available
- AA provides group support, practical advice, helps to overcome loneliness and boredom
  - o Or senior specific counseling program
  - Alanon for families or caregivers
- Acknowledge successes, even if partial or temporary
  - If relapse, encourage patient to contact you & reconnect with local addiction services including seniors program and or AA & aftercare

AA: Gossop, M., Harris, J. Best, D., Man, L.H., Manning, V., Marshall, J., et al. (2003). Is attendance at Alcoholics Anonymous meetings after inpatient treatment related to improved outcomes? A 6-month follow-up study. Alcohol and Alcoholism, 38 (5), 421–426.

### Management of common alcohol-related depression, anxiety, insomnia, mood and anxiety disorders

- May be primary or alcohol-induced.
- Alcohol-induced disorders tend to resolve within weeks of abstinence/reduced drinking, whereas primary disorders remain the same or improve only marginally.

### Management

- Always ask about mood in patients with alcohol problems, and ask about alcohol use in patients with mood or anxiety problems.
- Treat alcohol and mood disorders concurrently.



- Consider a trial of antidepressant medication if:
  - o Symptoms persist after four weeks of abstinence
  - o Patient unable to sustain abstinence for several weeks
  - o Primary mood disorder: depression precedes drinking; strong family history
  - Severe depression (suicidal ideation, hospital admissions)
- Long-term benzodiazepine use in heavy drinkers creates risk of accidents, overdose and misuse.

Nunes, E.V. & Levin, F.R. (2004). <u>Treatment of depression in patients with alcohol or other drug dependence: A meta-analysis</u>. *Journal of the American Medical Association*, 291 (15), 1887–1896.

### Insomnia, non-restorative sleep

| Cause                      | Comment                      | Management               |
|----------------------------|------------------------------|--------------------------|
| Sleep apnea                | May contribute to Abstinence |                          |
|                            | hypertension, accidents,     |                          |
|                            | arrhythmias                  |                          |
| Alcohol withdrawal         | Can cause night-time         | Abstinence, treat        |
|                            | seizures                     | withdrawal               |
|                            |                              |                          |
| Subacute alcohol           | Common in first few weeks    | Anti-alcohol medications |
| withdrawal                 | of abstinence                | e.g. acamprosate,        |
|                            |                              | topiramate               |
|                            |                              |                          |
| Chronic night-time alcohol | Causes rebound REM &         | Abstinence               |
| use                        | fitful sleep                 | Trazodone, tryptophan.   |
|                            |                              |                          |
|                            |                              | Avoid benzodiazepines.   |

| Alcoholic live | er disease   |  |  |  |
|----------------|--|--|--|--|
| Fatty liver    | First and most common phase of alcohol liver disease                   |  |  |  |
|                | Usually asymptomatic, reversible with abstinence                       |  |  |  |
|                | Large liver on exam and U/S  |  |  |  |
| Alcoholic      | Usually asymptomatic but occasionally very severe                      |  |  |  |
| hepatitis      | Diagnose elevated AST > ALT  |  |  |  |
|                | Advise patient that repeated and prolonged hepatitis may lead to       |  |  |  |
|                | cirrhosis  |  |  |  |
| Cirrhosis      |  |  |  |  |
| Risk           | Over 10-20 years, 10–20% risk of cirrhosis with: 6 drinks/day (men), 3 |  |  |  |
|                | drinks/day (women)   |  |  |  |
| Physical       | Spider nevai, gynecomastia(estrogen not metabolized)                   |  |  |  |
| signs          | Ascites, peripheral edema, right heart failure (low albumin, portal    |  |  |  |
|                |  |  |  |  |



|               | hypertension)  |  |  |  |
|---------------|--|--|--|--|
|               | Firm liver edge  |  |  |  |
|               | Splenomegaly (portal hypertension)   |  |  |  |
|               | Asterixis, signs of encephalopathy   |  |  |  |
| Diagnostic    | ↑ GGT (enzyme induction)   |  |  |  |
| tests         | ↑ AST > ALT (alcoholic hepatitis)  |  |  |  |
|               | ↑ INR, ↑ bilirubin, ↓ albumin (liver unable to synthesize protein)                                       |  |  |  |
|               | ↑ bilirubin, low platelets (due to splenomegaly & portal hypertension)                                   |  |  |  |
|               | U/S: unreliable, except if splenomegaly present(portal hypertension)                                     |  |  |  |
|               | Check for other causes of cirrhosis e.g. Hepatitis B, C  |  |  |  |
|               | If concerned about encephalopathy, check serum ammonia   |  |  |  |
|               | Biopsy if cause uncertain  |  |  |  |
|               | Dispoy in saudo arrestram  |  |  |  |
| Outpatient me | dical management of cirrhosis  |  |  |  |
|               |  |  |  |  |
| Prevent       | Abstinence. 5-year survival in cirrhosis with complications: abstainers,                                 |  |  |  |
| progression   | 60%; still drinking, 34%. Risk of variceal bleed with recent heavy                                       |  |  |  |
|               | drinking 10x greater than with abstinence  |  |  |  |
|               |  |  |  |  |
|               | Avoid NSAIDs, acetaminophen only in low doses     Avoid NSAIDs, acetaminophen only in low doses          |  |  |  |
|               | Immunize against Hepatitis B     Abstingness grapial if hopatitis C uve (alcohol use greatly accelerate) |  |  |  |
|               | Abstinence crucial if hepatitis C +ve (alcohol use greatly accelerates)                                  |  |  |  |
| 15            | progression of cirrhosis)  |  |  |  |
| Liver         | Most effective treatment for cirrhosis   |  |  |  |
| transplant    | To get on transplant list, patients require abstinence of 6 months to                                    |  |  |  |
| Enceph-       | 2 years + treatment program  |  |  |  |
| ·             | <ul><li>Avoid benzodiazepines</li><li>Low protein diet</li></ul>   |  |  |  |
| alopathy      | <ul> <li>Low protein diet</li> <li>Lactulose if at high risk or early signs:</li> </ul>                  |  |  |  |
|               | o poor concentration, day-night reversal, inattention, slow  |  |  |  |
|               | responses  |  |  |  |
|               | <ul> <li>Urgent intervention for triggers: electrolyte imbalance, blood loss,</li> </ul>                 |  |  |  |
|               | high protein meal, benzodiazepines, infection  |  |  |  |
| Ascites       | Low salt diet  |  |  |  |
|               | Moderate fluid intake  |  |  |  |
|               | Judicious use of diuretics   |  |  |  |
| Portal        | Regular endoscopic measurement of portal pressures   |  |  |  |
| hypertension  | Nadolol if portal hypertension   |  |  |  |
|               |  |  |  |  |

Lucey, M.R., Connor, J.T., Boyer, T.D., Henderson, J.M., Rikkers, L.F. & DIVERT Study Group. (2008). Alcohol consumption by cirrhotic subjects: Patterns of use and effects on liver function. *American Journal of Gastroenterology*, 103 (7), 1698–1706.



### Other alcohol-related medical problems Hypertension

- Consumption of 3+ drinks/day can cause or exacerbate hypertension
- Patients with alcohol-induced HTN tend to be refractory to antihypertensive medication
- HTN resolves within weeks of abstinence/reduced drinking

### **Neurological conditions**

- Alcohol-induced dementia, cerebellar ataxia, peripheral neuropathy, parkinsonism
- Conditions often improve with abstinence, over weeks/months.

### **Dilated cardiomyopathy**

- Presents with heart failure and arrhythmias
- Excellent prognosis; sometimes completely resolves within months of abstinence
- GI Bleed (gastritis, esophagitis, Mallory-Weiss tear, esophageal varices)

### **DELIRIUM DURING WITHDRAWAL**

 Heightened sense of anxiety, tremulousness, visual, auditory hallucinations and other perceptual disturbance, fluctuating level of consciousness.

### **Guidelines for Withdrawal Management (Alcohol)**

\*Proviso: requires individual assessment of risks and benefits

| At risk             | At least six drinks/day for 1+ weeks   |  |  |
|---------------------|--|--|--|
|                     | More severe in elderly   |  |  |
|                     | If seizures or DTs in past, at risk for future seizures/DTs                                  |  |  |
| Clinical features   | Starts 6-12 hours after last drink, peaks at 24-72 hours, resolves in 3 to 10 days or longer |  |  |
|                     | TREMOR is most reliable clinical feature   |  |  |
|                     | <ul> <li>Postural, intention, ataxic gait. Not a resting tremor.</li> </ul>                  |  |  |
|                     | <ul> <li>Ask patient to hold arms extended, reach for an object,</li> </ul>                  |  |  |
|                     | walk across room   |  |  |
|                     | Other features: Sweating, vomiting, anxiety, tachycardia,                                    |  |  |
|                     | hypertension   |  |  |
| Monitoring of       | CIWA (see below*)  |  |  |
| treatment           | If unavailable, monitor response by severity of tremor                                       |  |  |
| response            | Treatment completed when patient has minimal   |  |  |
|                     | postural/intention tremor or ataxia, and appears comfortable                                 |  |  |
| Benzodiazepine      | <ul> <li>Lorazepam dose 2-4 mg SL/PO/IM/IV q 1-2 H for CIWA = 10+,</li> </ul>                |  |  |
| treatment in the ED | If history of seizures, give at least 3 doses  |  |  |
| or hospital         | • Lower dose (0.5 – 1mg) if in liver failure or respiratory failure, on                      |  |  |
|                     | high doses of opioids or other sedating drugs  |  |  |
| Delirium tremens    | Late complication (day 3-7) of severe, inadequately treated                                  |  |  |
|                     | withdrawal   |  |  |
|                     | More common in patients with concurrent medical illness                                      |  |  |



- DTs with severe autonomic hyperactivity: treat with high doses of short-acting benzodiazepines
- If not respond or DTs severe, may need ICU admission for midazolam and propofol

<sup>\*</sup> Sullivan JT, Sykora K, Schneiderman J, Naranjo CA & Sellers EM (1989) Assessment of alcohol withdrawal: The revised Clinical Institute Withdrawal Assessment for Alcohol scale (CIWA – Ar) In British Journal of Addiction 84:1353 – 1357 (<a href="https://www.cbhallc.com/Documents/4a-DETOX%20Guidelines.pdf">www.cbhallc.com/Documents/4a-DETOX%20Guidelines.pdf</a>

| Planned office management of v          | vithdrawal   |
|---|--|
| Indications:                            | -Patient socially stable -No history of severe withdrawal (seizures, prolonged ED visits or hospitalization for withdrawal) -Patient firmly commits to abstinence and a treatment plan (e.g., AA, disulfiram etc.) after office visit  |
| Protocol:  Home management of alcohol w | -Schedule morning office visit -Advise patient to have last drink the night before. If shows up intoxicated, send home/WMS (withdrawal management service) -If possible, have room set aside for patient -Lorazepam 1-4 mg q 1-2 hrs for CIWA > 10, (Diazepam should be avoided in the elderly – prolonged duration of action) -Send to ED if withdrawal not improving after 2-3 doses -Send home or Withdrawal Management Services when CIWA < 8, or minimal tremor; should go home accompanied by family member or make arrangements for ongoing supervision -Phone or office follow-up in one to two days |
| Indications:                            | -Office management not feasible -A spouse, relative or friend agrees to dispense the medication -No history of severe withdrawal (seizures, delirium, hospital admissions) -Treatment plan is in place (anti-alcohol   |
|   | medication, ongoing counselling, AA etc.) -No hepatic decompensation (ascites, encephalopathy) -Patient agrees not to drink while taking medication  |



| Protocol: | -Have last drink the night before          |
|-----------|--|
|           | -Take lorazepam 1-2 mg PO/SL every 4 hours |
|           | as needed for tremor                       |
|           | -Prescribe no more than 12 mg lorazepam    |
|           | -Reassess the next day (by phone or in     |
|           | person)                                    |
|           | -Office visit within 2-3 days              |

### **Treatment with Medications**

### Medications for at-risk drinking and alcohol dependence

- Anti-alcohol medications should be routinely offered to alcohol-dependent patients. They reduce alcohol use, have a good safety profile, and help retain patients in psychosocial treatment.
- Disulfiram, naltrexone, acamprosate: Level I evidence of effectiveness
- Topiramate, gabapentin, (baclofen): Level II evidence, not officially indicated for alcohol dependence.
  Therefore Level I medications should be tried first. Document the clinical rationale for use of topiramate,
  baclofen. Secondly obtain coverage for naltrexone acamprosate (Section 8). Baclofen can cause or
  worsen depression
- Disulfiram causes a toxic reaction if patients drink. It is most effective when dispensed by a person who
  observes the patient taking the medication. Naltrexone reduces the reinforcing effects of alcohol, and
  alcohol cravings. Acamprosate may work by reducing cravings and subacute withdrawal symptoms such
  as insomnia and anxiety. The choice of medication is based on individual considerations (side effects, cost
  etc.).
- Titrate dose until cravings are mild and patient is abstinent, or troublesome side effects emerge
- Duration of treatment: Three to six months or longer. Discontinue when patient is abstinent for at least several months and remains confident that he or she no longer needs the medication to prevent relapse. Discontinue when patient remains confident that he or she no longer needs it to prevent relapse. Restart medication should the patient relapse.
- For patients on Ontario Drug Benefits, the physician must apply for an Individual Clinical Review to obtain coverage for naltrexone and acamprosate. Disulfiram is available as a compounded medication. The patient can ask his/her pharmacy to arrange for compounding.

| Anti-alcohol medications |   |   |  |              |
|--------------------------|---|---|--|--------------|
|                          | Action  | Side effects  | Precautions  | Dose         |
| Disulfiram               | Acetaldehyde<br>accumulates<br>when alcohol<br>consumed | If drink alcohol: vomiting, flushed face, headache x several hours  Without alcohol: Headache, anxiety, fatigue  Garlic-like taste in | To avoid reaction: (i) Wait at least 24 hours between last drink & first pill. (ii) If stop disulfiram, wait at least 7 days before drinking Alcohol reaction can cause severe hypotension & | 125 mg PO OD |



| Gabapentin  | Similar to  | Common side effects:   | Can cause renal stones (carbonic acid inhibitor  Rare: suicidal ideation   | Initial dose 300 mg  |
|-------------|---|--|--|--|
| Topiramate  | Modulates GABA system, may improve sleep and mood disturbance in early abstinence | Dose related neurological effects, resolve over time: Dizziness, ataxia, speech disorder etc. Sedation                         | Can cause weight loss – risk for underweight patients  Lower dose needed in renal insufficiency  Can cause glaucoma  | Initial dose 50 mg OD;<br>titrate by 50 mg to a<br>maximum dose of<br>200-300 mg daily |
| Acamprosate | Glutamate<br>antagonist   | Diarrhea   | Renal insufficiency  | 666 mg tid   |
|             |   | Triggers withdrawal in patients on daily opioids  Can cause reversible elevations in AST & ALT – order at baseline & 3-4 weeks |  |  |
| Naltrexone  | Competitive opioid/endorphin antagonist   | Nausea, headache, dizziness, insomnia, anxiety, sedation  Blocks analgesic action of opioids                                   |  | 25 mg OD x 3 days;<br>then 50 mg PO OD;<br>titrate to maximum<br>dose of 150 mg OD     |
|             |   | mouth Acne Prolonged use: peripheral neuropathy  | arrhythmias, esp in patients with heart disease or on antihypertensives  Psychosis at higher doses (500 mg).  Recommended dose appears safe in schizophrenia |  |



|          |              | Variety of CNS and GI side effects can occur.       |   | to 1500 mg/day  |
|----------|--------------|---|---|---|
| Baclofen | GABA agonist | Drowsiness, weakness Can cause or worsen depression | Lower dose with renal insufficiency Use with caution in patients on tricyclic antidepressants or MAO inhibitors | Initial dose 5 mg tid,<br>increase to 10 mg tid.<br>Maximum daily dose<br>80 mg |

Disulfiram: 1. De Sousa, A. & De Sousa, A. (2004). A one-year pragmatic trial of naltrexone vs disulfiram in the treatment of alcohol dependence. Alcohol and Alcoholism, 39 (6), 528–531. 2. De Sousa, A. & De Sousa, A. (2005). An open randomized study comparing disulfiram and acamprosate in the treatment of alcohol dependence. Alcohol and Alcoholism, 40 (6), 545–548. 3. Laaksonen, E., Koski-Jännes, A., Salaspuro, M., Ahtinen, H. & Alho, H. (2008). A randomized, multicentre, open-label, comparative trial of disulfiram, naltrexone and acamprosate in the treatment of alcohol dependence. Alcohol and Alcoholism, 43 (1), 53–61. 4. Mueser, K.T., Noordsy, D.L., Fox, L. & Wolfe, R. (2003). Disulfiram treatment for alcoholism in severe mental illness. American Journal on Addictions, 12 (3), 242–252. 5. Petrakis, I.L., Nich, C. & Ralevski, E. (2006). Psychotic spectrum disorders and alcohol abuse: A review of pharmacotherapeutic strategies and a report on the effectiveness of naltrexone and disulfiram. Schizophrenia Bulletin, 32(4), 644–654.

Natrexone: Anton, R.F., O'Malley, S.S., Ciraulo, D.A., Cisler, R.A., Couper, D., Donovan, D.M. et al. (2006). Combined pharmacotherapies and behavioral interventions for alcohol dependence: The COMBINE study: A randomized controlled trial. *Journal of the American Medical Association*, 295 (17), 2003–2017.

Acamprosate: 1. Snyder, J.L. & Bowers, T.G. (2008). The efficacy of acamprosate and naltrexone in the treatment of alcohol dependence: A relative benefits analysis of randomized controlled trials. *American Journal of Drug and Alcohol Abuse, 34* (4), 449–461. 2. Rösner, S., Leucht, S., Lehert, P. & Soyka, M. (2008). Acamprosate supports abstinence, naltrexone prevents excessive drinking: Evidence from a meta-analysis with unreported outcomes. *Journal of Psychopharmacology, 22* (1), 11–23.

**Topiramate**: 1. Baltieri, D.A., Daró, F.R., Ribeiro, P.L. & de Andrade, A.G. (2008). Comparing topiramate with naltrexone in the treatment of alcohol dependence. *Addiction, 103* (12), 2035–2044. 2. Johnson, B.A., Rosenthal, N., Capece, J.A., Wiegand, F., Mao, L., Beyers, K. et al. (2007). <u>Topiramate for treating alcohol dependence</u>: A randomized controlled trial. *Journal of the American Medical Association, 298* (14), 1641–1651. 3. Ma, J.Z., Ait-Daoud, N. & Johnson, B.A. (2006). Topiramate reduces the harm of excessive drinking: Implications for public health and primary care. *Addiction, 101* (11), 1561–1568.

Gabapentin: Furieri, F. A. and E. M. Nakamura-Palacios (2007). "Gabapentin reduces alcohol consumption and craving: a randomized, double-blind, placebocontrolled trial." J Clin Psychiatry 68(11): 1691-700. Brower, K. J., H. Myra Kim, et al. (2008). "A randomized double-blind pilot trial of gabapentin versus placebo to treat alcohol dependence and comorbid insomnia." Alcohol Clin Exp Res 32(8): 1429-38. Anton, R. F., H. Myrick, et al. (2011). "Gabapentin combined with naltrexone for the treatment of alcohol dependence." Am J Psychiatry 168(7): 709-17

**Baclofen**: 1. Addolorato, G., Caputo, F., Capristo, E., Domenicali, M., Bernardi, M., Janiri, L., et al. (2002). <u>Baclofen efficacy in reducing alcohol craving and intake:</u> <u>A preliminary double-blind randomized controlled study</u>. *Alcohol and Alcoholism*, *37* (5), 504–508. 2. Addolorato, G., Leggio, L., Ferrulli, A., Cardone, S., Vonghia, L., Mirijello, A. et al. (2007). Effectiveness and safety of baclofen for maintenance of alcohol abstinence in alcohol-dependent patients with liver cirrhosis: Randomised, double-blind controlled study. *Lancet*, *370* (9603), 1915–1922.

### Prescribing benzodiazepines and opioids

- Risk of overdose and accidents greatly increased when combining benzodiazepines or opioids with alcohol
- Both medications should be routinely tapered in to the lowest effective dose in the elderly

Brunette, M.F., Noordsy, D.L., Xie, H. & Drake, R.E. (2003). <u>Benzodiazepine use and abuse among patients with severe mental illness and co-occurring substance use disorders</u>. *Psychiatric Services*, *54* (10), 1395–1401.



### **KEY FACTS:**

### Low-risk drinking guidelines for the elderly

#### No more than:

- 9 standard drinks per week for men
- 7 per week for women
- 2 drinks in one day (men and women)

**Standard drink** = 12-ounce (341ml) bottle of regular (5%) beer, five ounces (142 ml) of (12%) table wine or 1.5 ounces (43 ml) of 80-proof liquor.

Ask about size and alcohol content of beverage

### Avoid alcohol or drink only under supervision if:

- Frail elderly
- At risk for falls (ataxia, cognitive or visual impairment)
- On sedating medications (e.g. benzodiazepines, opioids)
- Medical illnesses made worse by alcohol, e.g. gastritis or ulcer, pancreatitis, liver disease
- Mood disorder

**Note**: Light drinking in the elderly associated with delayed cognitive decline and reduced risk of heart disease and type II diabetes. However, heavy drinking is more hazardous in the elderly than in younger adults, because they have higher alcohol levels per drink, lower tolerance to the intoxicating effects of alcohol, and are at greater risk for falls and other harms.

Prepared by:

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