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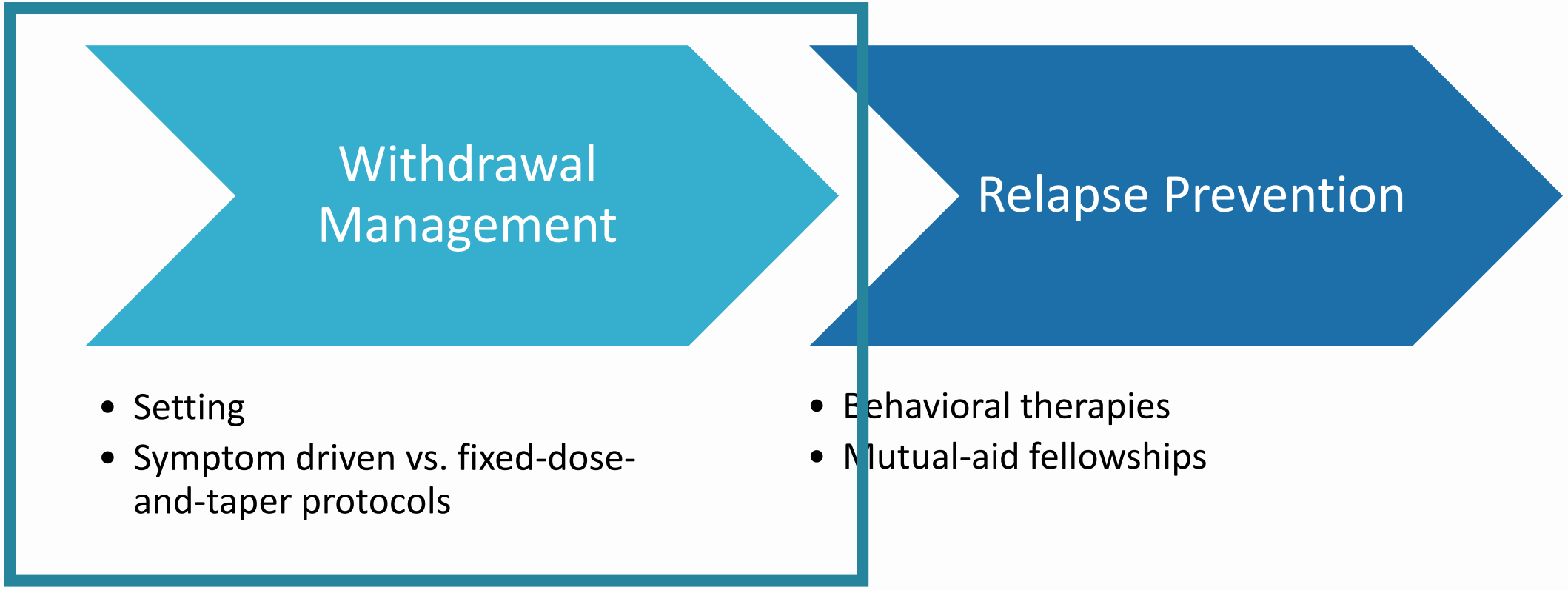
Alcohol Use Disorder treatment involves 2 phases



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Determining the safety of ambulatory, medically managed alcohol withdrawal

Ambulatory Setting Safer	Inpatient/Residential Treatment Safer
What is the patient's home environment?	
• Patient has a safe, sober, supportive home environment	• Patient lives alone • Unstable housing • Experiencing ongoing trauma • Substance use by others in home
What is the patient's cognitive status?	
• Cognitively intact • Individually manage medication or has someone who can help them manage medication	• Patients with cognitive impairment • Doesn't have anyone who is able and willing to manage their medications for them

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Determining the safety of ambulatory, medically managed alcohol withdrawal

Ambulatory Setting Safer	Inpatient/Residential Treatment Safer
What is the patient's current medical and psychiatric status?	
• Stable medical and/or psychiatric conditions • Lowered seizure threshold	• Unstable medical and/or psychiatric conditions • Lowered seizure threshold
What is the patient's prior experience with alcohol withdrawal?	
• No history of withdrawal seizures or delirium tremens	• History of withdrawal seizures or delirium tremens ('kindling effect')
What is the patient's current substance use pattern?	
• Patient is only using alcohol (with or without nicotine)	• Patient is using other substances (except nicotine)

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Medically Managed Alcohol Withdrawal Protocols

Symptom Driven

- Benzodiazepine dosed based on **Clinical Institute Withdrawal Assessment for Alcohol Revised** (CIWA-Ar) scoring
- CIWA-Ar administration frequency decreases as withdrawal symptoms stabilize and improve
- Used in the hospital or residential treatment setting
- Decreases amount of medication needed and length of withdrawal

CIWA-Ar

Clinical Institute Withdrawal Assessment of Alcohol Scale, Revised (CIWA-Ar)

Patient:_____ **Date:**_____ **Time:**_____ (24 hour clock, midnight = 00:00)

Pulse or heart rate, taken for one minute:_____ **Blood pressure:**_____

NAUSEA AND VOMITING -- Ask "Do you feel sick to your stomach? Have you vomited?" Observation.
1 no nausea and no vomiting
2mild nausea with no vomiting
2
3
4 intermittent nausea with dry heaves
5
6
7 constant nausea, frequent dry heaves and vomiting

AUDITORY DISTURBANCES -- Ask "Are you more aware of sounds around you? Are they harsh? Do they frighten you? Are you hearing anything that is disturbing to you? Are you hearing things you know are not there?" Observation.
1 not present
2very mild harshness or ability to frighten
2 mild harshness or ability to frighten
3 moderate harshness or ability to frighten
4 moderately severe hallucinations
5 severe hallucinations
6extremely severe hallucinations
7 continuous hallucinations

VISUAL DISTURBANCES -- Ask "Does the light appear to be too bright? Is its color different? Does it hurt your eyes? Are you seeing anything that is disturbing to you? Are you seeing things you know are not there?" Observation.
1 not present
2very mild sensitivity
2 mild sensitivity
3 moderate sensitivity
4moderately severe hallucinations
5 severe hallucinations
6 extremely severe hallucinations
7 continuous hallucinations

ORIENTATION AND CLOUDING OF SENSORIUM -- Ask "What day is this? Where are you? Who am I?"
0 oriented and can do serial additions
1 cannot do serial additions or is uncertain about date
2 disoriented for date by no more than 2 calendar days
3 disoriented for date by more than 2 calendar days
4 disoriented for place/or person

TACTILE DISTURBANCES -- Ask "Have you any itching, pins and needles sensations, any burning, any numbness, or do you feel bugs crawling on or under your skin?" Observation.
1 none
2very mild itching, pins and needles, burning or numbness
2 mild itching, pins and needles, burning or numbness
3 moderate itching, pins and needles, burning or numbness
4 moderately severe hallucinations
5 severe hallucinations
6extremely severe hallucinations
7 continuous hallucinations

TREMOR -- Arms extended and fingers spread apart. Observation.
1 no tremor
2not visible, but can be felt fingertip to fingertip
2
3
4 moderate, with patient's arms extended
5
6
7 severe, even with arms not extended

HEADACHE, FULLNESS IN HEAD -- Ask "Does your head feel different? Does it feel like there is a band around your head?" Do not rate for dizziness or lightheadedness. Otherwise, rate severity.
1 not present
2 very mild
3 mild
4 moderate
5 moderately severe
6 severe
7 very severe
8 extremely severe

AGITATION -- Observation.
0 normal activity
1 somewhat more than normal activity
2
3
4 moderately fidgety and restless
5
6
7 paces back and forth during most of the interview, or constantly thrashes about

Total **CIWA-Ar** Score _____
Rater's Initials _____
Maximum Possible Score 67

PAROXYSMAL SWEATS -- Observation.
0 no sweat visible
1 barely perceptible sweating, palms moist
2
3
4 beads of sweat obvious on forehead
5
6
7 drenching sweats

ANXIETY -- Ask "Do you feel nervous?" Observation.
0 no anxiety, at ease
1 mild anxious
2
3
4 moderately anxious, or guarded, so anxiety is inferred
5
6
7 equivalent to acute panic states as seen in severe delirium or acute schizophrenic reactions

 This assessment for monitoring withdrawal symptoms requires approximately 5 minutes to administer. The maximum score is 67 (see instrument). Patients scoring less than 10 do not usually need additional medication for withdrawal.

Sullivan, J.T.; Sykora, K.; Schneiderman, J.; Naranjo, C.A.; and Sellers, E.M. Assessment of alcohol withdrawal: The revised Clinical Institute Withdrawal Assessment for Alcohol scale (**CIWA-Ar**). *British Journal of Addiction* 84:1353-1357, 1989.

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Medically Managed Alcohol Withdrawal Protocols

Sample Symptom Driven Treatment Protocol

1. Monitor vital signs and CIWA-Ar every hour upon admission until CIWA-Ar < 8 for two consecutive hours
2. Monitor vital signs and CIWA-Ar q 2 hours until CIWA-Ar < 8 over four consecutive hours
3. Monitor vital signs and CIWA-Ar q4 hours until CIWA-Ar < 8 over eight consecutive hours
4. Monitor vital signs and CIWA-Ar every 8 hours until CIWA-Ar < 8 over sixteen consecutive hours, then stop protocol

- Give one dose of protocol medicine if CIWA-Ar > 8 and resume monitoring vital signs and CIWA-Ar hourly as above
- Notify medical staff if: BP > 160/100 or < 85/50, HR > 110 or < 50, RR > 22 or < 10, T > 101F, CIWA-Ar > 20
- Oral adjuncts: folic acid 1mg daily, thiamine 100mg daily, ondansetron 8mg every 8 hours as needed for nausea/vomiting, trazadone 100mg or melatonin 6 mg as needed for sleep, Depakote ER 500mg twice daily, nicotine patch as needed for nicotine withdrawal

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Medically Managed Alcohol Withdrawal Protocols

Fixed-Dose and Taper

- More often used in ambulatory and outpatient settings
- Taper over 3 to 5 days most typical
- GABAergics preferred if patient has risk for misuse or overdose with benzodiazepines or needs to avoid medication that shows positive on drug screening tests

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Medically Managed Alcohol Withdrawal Protocols

Sample fixed-dose and taper protocols

- Benzodiazepine, oral dosing: Chlordiazepoxide 25mg, Diazepam 10mg or Lorazepam 2mg
- Day 1: Take one every 6 hours
- Day 2: Take one every 8 hours
- Day 3: Take one every 12 hours
- Day 4 and 5: Take one at bedtime
- Do NOT drink ANY alcohol while taking this medication. Do not drive or operate heavy machinery while taking this medication. If withdrawal symptoms or cravings intolerable, notify clinician and/or seek emergency care immediately
- Oral adjuncts: folic acid 1mg daily, thiamine 100mg daily, ondansetron 8mg every 8 hours as needed for nausea/vomiting, trazadone 100mg or melatonin 6 mg as needed for sleep

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Medically Managed Alcohol Withdrawal Protocols

Sample fixed-dose and taper protocols

- GABAergic oral dosing
  - **Carbamazepine 200 mg:**
    - Day 1: Take one every 6 hours
    - Day 2: Take one every 8 hours
    - Day 3: Take one every 12 hours
    - Day 4: Take one at bedtime
  - **Valproic acid 500mg:**
    - Take one twice daily for 5 to 7 days
- If withdrawal symptoms or cravings intolerable, notify clinician and/or seek emergency care immediately
- Oral adjuncts: folic acid 1mg daily, thiamine 100mg daily, ondansetron 8mg every 8 hours as needed for nausea/vomiting, trazadone 100mg or melatonin 6 mg as needed for sleep

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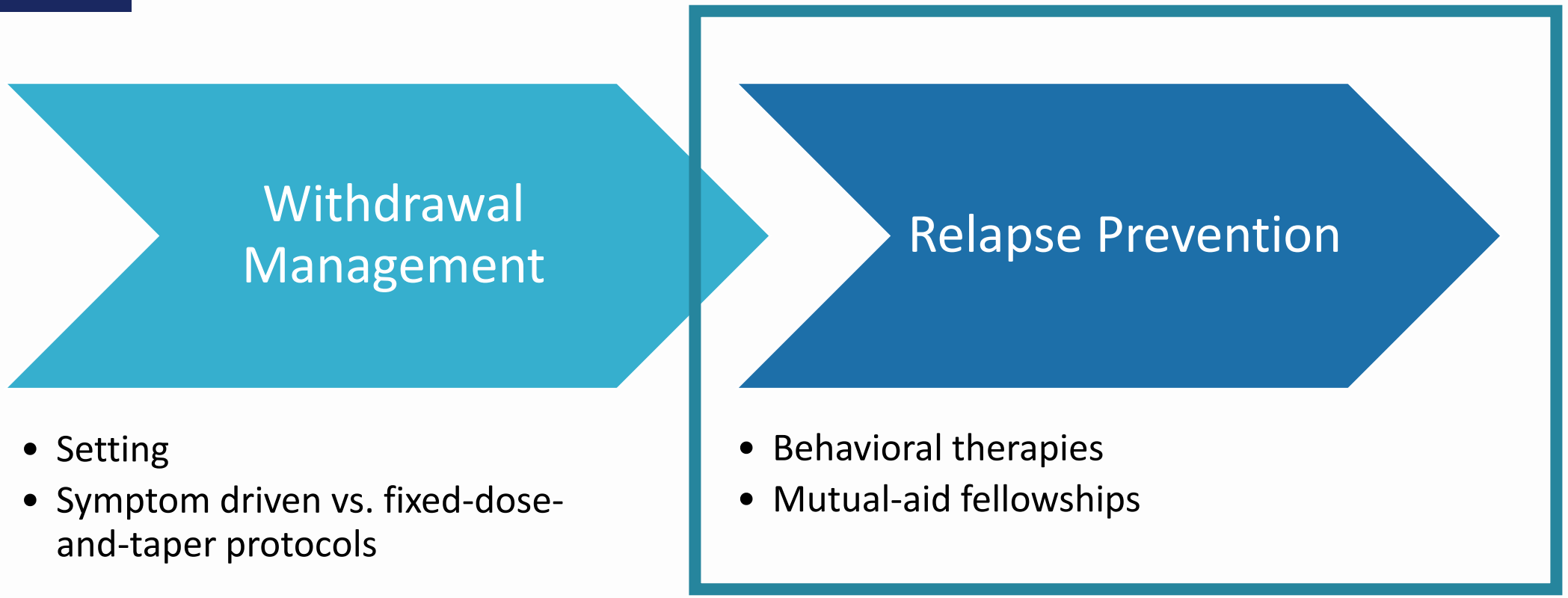
Alcohol Use Disorder treatment involves 2 phases



- Setting
- Symptom driven vs. fixed-dose-and-taper protocols

- Behavioral therapies
- Mutual-aid fellowships

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Relapse Prevention

Behavioral Therapies

- Cognitive Behavioral Therapy
- Contingency Management
- Motivational Interviewing
- Twelve Step Facilitation

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Relapse Prevention

Mutual-Aid Fellowships

- 12 Step
  - Alcoholics Anonymous (AA): open to persons who desire to stop drinking; a person does not have to be sober or already in recovery to attend
  - Alanon: open to persons who are struggling with AUD in their family
  - Alateen: open to teens and young adults with AUD in their family
- Smart Recovery
  - Does not involve acknowledgement of a ‘higher power’
- Mutual-aid fellowships

Ms. B is a 20-year-old patient here for a contraception visit. She screens positive on your practice's alcohol screening questionnaire and on further discussion says she would like to quit, has tried cutting back herself but 'that never works; if I have one, I'm not remembering the rest of the night'. She is a college student and was only drinking on the weekends, but now drinks 5 to 6 nights out of the week, 'a lot, until I pass out, I guess 10-12 shots and a few beers too'. She denies use of any other substance except cannabis which she smokes once every week or two as it usually makes her more paranoid than relaxed. She takes a cannabidiol 'gummy' or two daily. She has no other medical problems or history, no psychiatric history, is not suicidal and is taking no other medications besides Depo-Provera every 3 months. She is passing her classes this semester but barely. She has no history of seizures and no prior treatment for substance use of any kind. She moved back in with her parents, who are sober and supportive, after last semester as they hoped the move would help her cut back on 'partying'. She wants to finish out the semester as if she takes a leave of absence she will lose a needed scholarship.

You suggest:

A. Referral to a residential program for medical management of withdrawal and then 30 days of residential treatment

B. Ambulatory withdrawal and AA attendance

C. Ambulatory withdrawal and referral to an intensive outpatient treatment program

D. Option of 2 or 3

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Prescribing Relapse Prevention Medication in Practice

- Relapse prevention medications can be prescribed by any clinician with prescribing authority
- GABAergics can be started without a period of sobriety:
  - Topiramate
    - Titrated slowly by 25-50 mg daily dose increases weekly
    - Patients continue drinking during dose titration, with gradual reduction in alcohol consumption noted as dose increases
    - Monitor blood chemistry for development of metabolic acidosis
  - Gabapentin
    - Can be started at the time of alcohol cessation to prevent withdrawal symptoms and then continued to decrease relapse risk
    - 900-1800 mg daily in divided doses
    - No routine lab monitoring needed

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Prescribing Relapse Prevention Medication in Practice

- Start 3-7 days after patients last alcohol use (can be used with withdrawal medications)
  - Acamprosate
    - 666 mg (2 pills) TID or 999 mg (3 pills) BID dosing **unless** CrCl<30 then 333 mg (1 pill) TID
    - No need to monitor renal function after initial determination of CrCl
    - Can increase depressive symptoms
  - Naltrexone
    - 50mg (1 pill) daily or monthly injectable
    - Can cause decreased appetite and nausea, with these side effects usually subsiding after the first month of treatment
    - Monitor liver function (increase greater than 5 times the upper limit of normal an indication for stopping naltrexone or not starting if already that elevated at baseline)

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Prescribing Relapse Prevention Medication in Practice

- If a patient relapses on a therapeutic dose of one medication, another may be tried
- Combining relapse prevention medications is now being studied
  - Naltrexone combined with gabapentin has shown greater efficacy than either medication alone in some patient populations
- Most relapse prevention medications should be continued for at least the first 6 months of recovery and can be continued indefinitely as long as side effects are tolerable
  - The GABAergics should be tapered if being discontinued and not stopped abruptly
- Patients should be monitored at least monthly when starting and stopping relapse prevention medications

Mr. A is a 61 year old well known to your practice. He has diabetes, hypertension and hypercholesterolemia and was recently admitted to the hospital for shortness of breath and diagnosed with congestive heart failure. You are seeing him today for his post-discharge follow-up visit. In reviewing his hospital records prior to today's visit, you note that he was also treated for alcohol withdrawal. In reviewing his inpatient test results, you note his echocardiogram was suggestive for alcoholic cardiomyopathy and his liver function tests were slightly elevated at less than two times the upper limit of normal.

During the visit with Mr. A, he somewhat sheepishly mentions that while he hasn't started drinking again, he has been depressed since his recent divorce and thinking about 'having a cold one, just one' the last two days. He's been stressed from this recent 'health scare' and with missing work. He is worried about how going back to drinking would affect his health.

You suggest:

A. Starting acamprosate for relapse prevention

B. Starting disulfiram for relapse prevention

C. Starting naltrexone for relapse prevention

D. Another alcohol 'detox' with lorazepam