

Substance Use

Screening, Assessment and Brief Intervention

Immersion Training in Addiction Medicine Programs 2024

Jeffrey H. Samet, MD, MA, MPH

John Noble Professor of Medicine and Professor of Public Health

Daniel P. Alford, MD, MPH

Professor of Medicine and Director, Clinical Addiction Research and Education (CARE) Unit

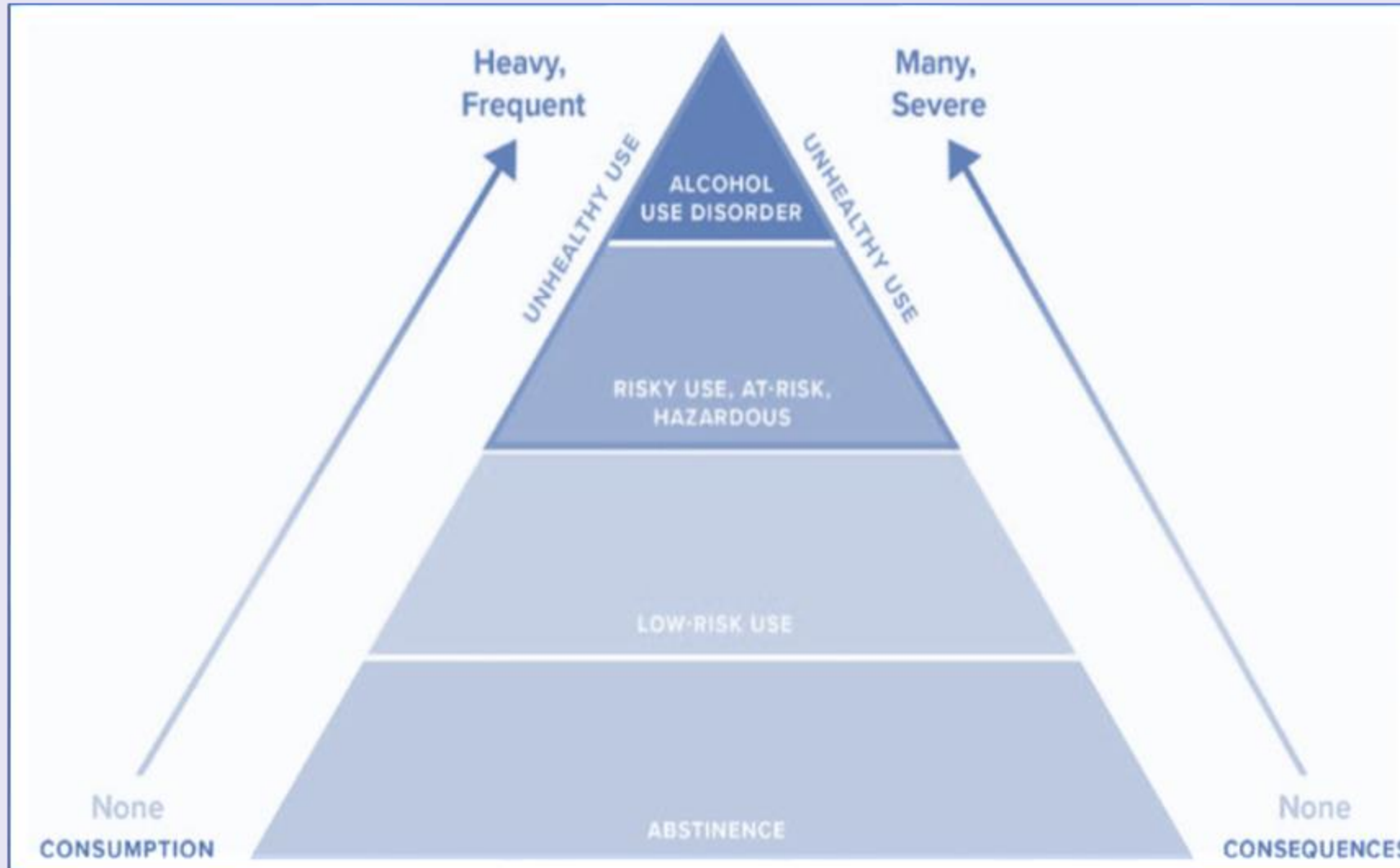


Substance Use Disorder (SUD)

- **Substance Use Disorder** a diagnostic term in DSM-5* recurrent use of alcohol or other drugs causing significant impairment, such as health problems, disability and failure to meet major responsibilities, craving, withdrawal and tolerance
- It combines the DSM-IV categories of **substance abuse** and **substance dependence** into a single disorder measured on a continuum from **mild, moderate, or severe**
- **Addiction** indicates the chronic stage of SUD (synonymous with “moderate to severe SUD”)

*American Psychiatric Association DSM-5 (2013)

Unhealthy Substance Use Spectrum



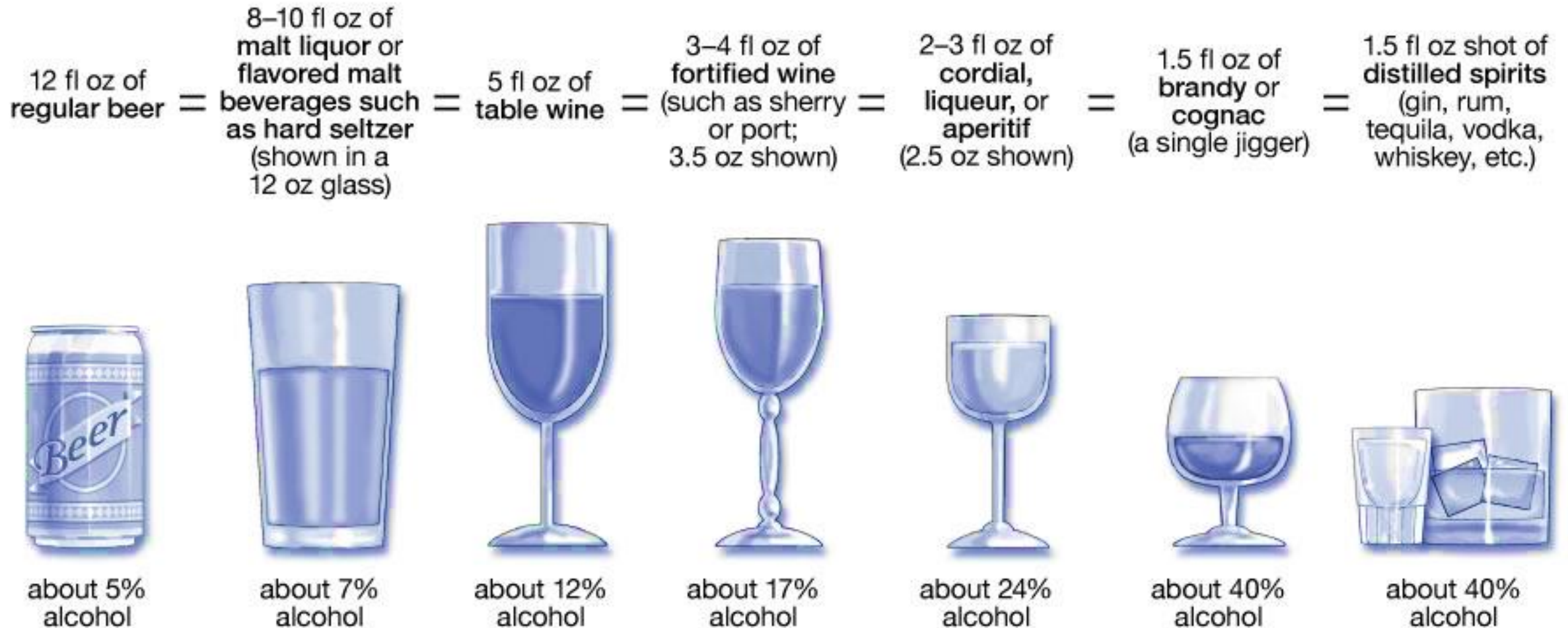
Case

A 28-year-old resident enjoys 2-3 beers 2-3 times a week after work.

Is the resident's alcohol use unhealthy or risky?



What is a Standard Drink?



Each drink shown above represents one U.S. standard drink and has an equivalent amount (0.6 fluid ounces) of "pure" ethanol.

Alcohol Use Guidelines

NIAAA risky use

- **Men (<65)**
 - >14 drinks/week, >4/occasion (“5+ drinks”)
- **Women (Men 65+)**
 - >7 drinks/week, >3/occasion (“4+ drinks”)

USDA, Dietary Guidelines 2020-25

Men: 2 drinks or less/day

Women: 1 drink or less/day

Any alcohol use?

↑ **All-Cause Mortality** (Zhao J. *JAMA Network Open*. 2023)

- low-volume alcohol use (1.3-24 g/d), associated with higher all-cause mortality

↑ **Cardiovascular Dz** (Biddinger KJ. *JAMA Network Open*. 2022)

Carcinogen (Klein WMP. *JAMA*. 2019)

- breast, oral, pharynx, liver, esophagus, colorectum

Teratogen (Bandoli G. *Pediatrics*. 2019)

- Fetal Alcohol Spectrum Disorders

Drug Use

Any drug use = risky? What about cannabis?

Screening and Behavioral Counseling Interventions to Reduce Unhealthy Alcohol Use in Adolescents and Adults

Screen for unhealthy alcohol use in primary care settings in adults, including pregnant women...provide persons engaged in risky or hazardous drinking with brief behavioral counseling interventions to reduce unhealthy alcohol use. *(since 1996, updated November 2018)*

Screening for Unhealthy Drug Use

Screen by asking questions about unhealthy drug use in adults...should be implemented when services for accurate diagnosis, effective treatment, and appropriate care can be offered or referred. *(Screening refers to asking questions about unhealthy drug use, not testing biological specimens.) (since June 2020)*

Who in this family has unhealthy substance use?



Screening Workflow

Screen for Unhealthy Substance Use (SISQ, AUDIT-C, TAPS)

'Single' Item Screening Questions (SISQ)

Alcohol

“Do you sometimes drink beer wine or other alcoholic beverages?”

“How many times in the past year have you had 5 (4 for women) or more drinks in a day?”

➤ **Positive** = greater than “never” (*82% sensitive, 79% specific for unhealthy alcohol use*)

Drug

“How many times in the past year have you used an illegal drug or used a prescription medication for non-medical reasons?”

➤ **Positive** = greater than “never” (*100% sensitive, 74% specific drug use disorder*)

NIAAA. Clinicians Guide to Helping Patients Who Drink Too Much, 2007.

Smith PC, Saitz R. J Gen Intern Med 2009

Smith PC, Saitz R. JAMA Intern Med 2010

Saitz R et al. J Studies Alcohol Drugs. 2014

McNeely J et al. Validation for self-administration. J Gen Intern Med. 2015

Alcohol Use Disorders Identification Test

Consumption items (AUDIT-C)

Score	0	1	2	3	4
How often do you have a drink containing alcohol?	Never	Monthly or less	2-4 times per month	2-3 times per week	4+ times per week
How many units of alcohol do you drink on a typical day when you are drinking?	1-2	3-4	5-6	7-9	10+
How often have you had 6 or more units if female, or 8 or more if male, on a single occasion in last year?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily

Scored 0 - 12

≥4 men

Unhealthy alcohol use: (*sensitivity: 86%, specificity 72%*); **AUD:** (*sensitivity 79%, specificity 56%*)

≥3 women

Unhealthy alcohol use: (*sensitivity 66%, specificity 94%*); **AUD:** (*sensitivity 80%, specificity 87%*)

Screening for Unhealthy Substance Use

Tobacco, Alcohol, Prescription meds and other Substances (TAPS)

(TAPS-1) In the **past 12 months**, how often have you:

1. Used any **tobacco** product (cigarettes, e-cigarettes, cigars, pipes or smokes tobacco)?
2. Had (**5** [males], **4** [females]) **or more drinks** containing **alcohol** in **one day**?
3. Used any **drugs** including marijuana, cocaine or crack, heroin, methamphetamine, hallucinogens, ecstasy?
4. Used any **prescription medications** just for the feeling, more than prescribed, or that were not prescribed for you? (e.g., opioid pain relievers, medications for anxiety or sleeping, medications for ADHD)

Response options:

- ☐ **Daily or almost daily**
- ☐ **Weekly**
- ☐ **Monthly**
- ☐ **Less than monthly**
- ☐ **Never**

If positive on **TAPS-1** (i.e., other than “never”) use **TAPS-2**, which consists of brief substance-specific questions to determine risk level ranging from “problem use” to “use disorder”

Screening Workflow

Screen for Unhealthy Substance Use (SISQ, AUDIT-C, TAPS)

Screen negative

for unhealthy substance use

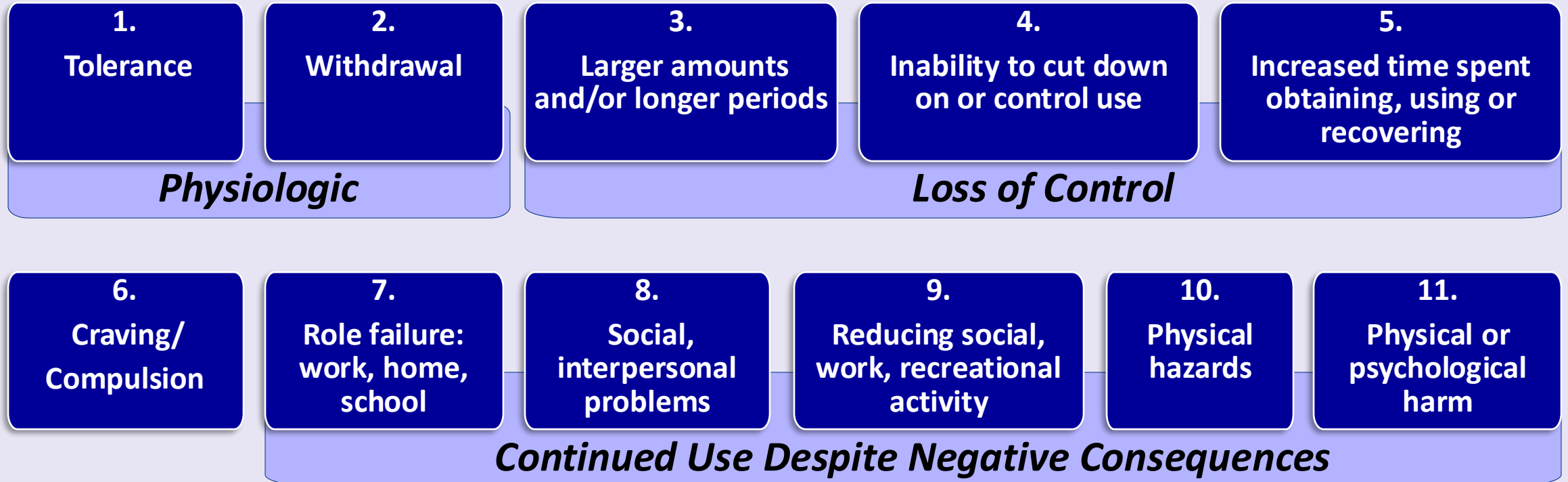
Positive reinforcement

Screen positive

for unhealthy substance use

Screen (Assess) for SUD
DSM-5, AUDIT

DSM-5 Substance Use Disorders (SUD)



Mild SUD: 2-3 Criteria
Moderate SUD: 4-5 Criteria
Severe SUD: ≥ 6 Criteria

DSM-5 Questionnaire

Hallgren KA et al. *Alc Clin Exp Res*. 2022

**In the
past 12
months...**

Mild AUD: 2-3 points
Moderate AUD: 4-5 points
Severe AUD: ≥ 6 points

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?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
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?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
3. When you drank, did you drink more or for longer than you planned to?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
4. Have you wanted to or tried to cut back or stop drinking alcohol, but been unable to do so?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
5. Did you spend a lot of time obtaining alcohol, drinking alcohol, or recovering from drinking?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
6. Have you continued to drink even though you knew or suspected it creates or worsens mental or physical problems?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
7. Has drinking interfered with your responsibilities at work, school, or home?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
8. Have you been intoxicated more than once in situations where it was dangerous, such as driving a car or operating machinery?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
9. Did you drink alcohol even though you knew or suspected it causes problems with your family or other people?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
10. Did you experience strong desires or craving to drink alcohol?	No <input type="checkbox"/>	Yes <input type="checkbox"/>
11. Did you spend less time working, enjoying hobbies, or being with others because of your drinking?	No <input type="checkbox"/>	Yes <input type="checkbox"/>

Screening for AUD

Alcohol Use Disorder

Identification Test (AUDIT)

- 10 questions (score: 0-40)
- Most widely validated in a wide range of racial/ethnic groups
- **8+** is unhealthy alcohol use
- **15+** suggests moderate to severe AUD

AUDIT C	Questions	0	1	2	3	4
	1. How often do you have a drink containing alcohol?	Never	Monthly or less	2-4 times a month	2-3 times a week	4 or more times a week
	2. How many drinks containing alcohol do you have on a typical day when you are drinking?	1 or 2	3 or 4	5 or 6	7 to 9	10 or more
	3. How often do you have six or more drinks on one occasion?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
	4. How often during the last year have you found that you were not able to stop drinking once you had started?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
	5. How often during the last year have you failed to do what was normally expected of you because of drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
	6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
	7. How often during the last year have you had a feeling of guilt or remorse after drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
	8. How often during the last year have you been unable to remember what happened the night before because of your drinking?	Never	Less than monthly	Monthly	Weekly	Daily or almost daily
	9. Have you or someone else been injured because of your drinking?	No		Yes, but not in the last year		Yes, during the last year
	10. Has a relative, friend, doctor, or other health care worker been concerned about your drinking or suggested you cut down?	No		Yes, but not in the last year		Yes, during the last year

Screening for Alcohol Use Disorder

CAGE – best acronym but past its prime...

- **Have you ever** felt you should C*ut down* on your drinking?
- **Have people** A*nnoyed* you by criticizing your drinking?
- **Have you ever** felt bad or G*uilty* about your drinking?
- **Have you ever** taken a drink first thing in the morning (E*ye-opener*) to steady your nerves or get rid of a hangover?

Screening Results in Primary Care

- 10-20% unhealthy alcohol use
 - Of those, 20% with AUD
- 3% unhealthy drug use
 - Of those, 33% with DUD

Mertens JR et al. *Alcoholism: Clinical Exp Res.* 2005

In past 12 months...

- 62% any alcohol use
 - Of those, 22% with AUD
- 28% any drug use (marijuana 21%, cocaine 7%, opioids 5%, heroin 4%, sedatives 4%)
 - Of those, 50% with DUD

Wu LT, McNeely J, et al. *Drug Alcohol Depend.* 2017

Screening Workflow

Screen for Unhealthy Substance Use (SISQ, AUDIT-C, TAPS)

Screen negative
for unhealthy substance use

Positive reinforcement

Screen positive
for unhealthy substance use

Screen (Assess) for SUD
AUDIT, DSM-5

SUD unlikely

**Brief
Intervention**

Monitor

SUD likely

**Brief
Intervention**

Treat +/- Refer

Brief Intervention (BI) for Alcohol

50+ Years of Trials



- Efficacy for reducing self-reported consumption
 - 3-4 fewer drinks/week
 - 10-12% less unhealthy use at 1 year
- No evidence it prevents developing AUD
- Less effect on moderate to severe AUD
- Evidence is mixed for ED and inpatient as most patients identified have a mod/severe AUD
- **BUT** repeat, and be available when patients are ready and counsel long-term

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

Jonas DE et al. Ann Intern Med 2012;157:645-54.

Kaner et al. Drug and Alcohol Review 2009;28:301-23

Beich et al. BMJ 2003;327:536

Bertholet et al. Arch Intern Med. 2005;165:986

Kristenson H, et al. Alcohol Clin Exp Res 1983;7:203 (mortality, 3-16 yrs)

Fleming MF et al. Alcohol Clin Exp Res. 2002;26(1):36-43 (cost)

Cuijpers et al. Addiction 2004;99: 839-845 (mortality)

Brief Intervention (BI) for Drugs



- Previous studies found BI may help some patients reduce their illicit drug use
 - RCT in urgent care setting¹
 - Observational study in general medical settings²
- However, RCTs^{3,4} found BI in primary care settings **not effective** for reducing illicit drug use or prescription drug misuse
- With efficacy for BI for drugs uncertain, the goal is to **identify, diagnose and treat**

“Clinicians should look beyond BI...to more complex longitudinal care to address illicit drug use and prescription drug misuse.”

Saitz R et al. JAMA. 2014

1. Bernstein J, et al. *Drug Alcohol Depend.* 2005

2. Madras BK, et al. *Drug Alcohol Depend.* 2009

3. Saitz R, et al. *JAMA.* 2014

4. Roy-Byrne P, et al. *JAMA.* 2014

Brief Intervention

Brief Negotiated Interview (BNI)



Eight Steps:

1. Follow-up Screening Results
2. Explore Pros and Cons
3. Review Health Risks
4. Summarize and Ask Key Question
5. Explore Readiness
6. Negotiate Goals
7. Explore Confidence
8. Arrange Follow-up

Step 1: Follow-Up Screening Results

1. Ask permission
2. Ask open ended questions

- “Is it OK if we talk about your use of [X]?”
- *Explore problems mentioned in screening, if present.*
You mentioned you have cut back on your marijuana use ... Can you tell me more about that?”

Step 2: Explore Pros and Cons

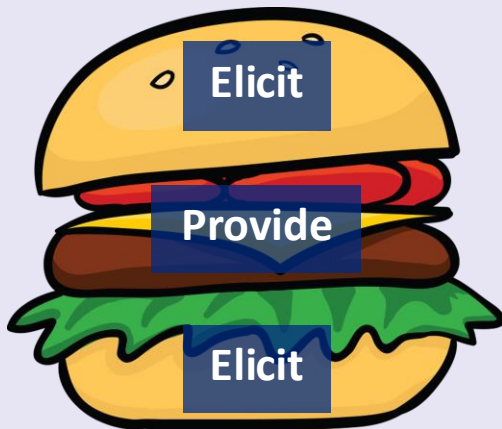
1. Ask PROS

2. Ask CONS

- What do you enjoy/like about [X]? What else?
- What do you enjoy less/regret about your [X] use?
What else?

Step 3: Review Health Risks

1. **Elicit**: information (knowledge) from patient
2. **Provide**: information
3. **Elicit**: response from patient to information provided



- What do you know about the health effects and/or risks of [X]?
- Would it be okay if I shared some additional information* with you?Provide the information
 - *Link any medical problems with [X] use*
 - *For alcohol, review lower risk drinking levels*
- What do you think about what I just told you?

Step 4: Summarize & Key Questions

1. Summarize what the patient's said so far
2. Use a key question to elicit response (change talk) from the patient

- So, to summarize, on the one hand, you said *[pros]*, **AND** on the other hand you said *[cons]* and we discussed *[risks]*...
- Did I get that right?
- **Where does that leave you with your [X] use?**



Step 5: Explore Readiness

1. Importance ruler
2. Ask about lower number

- To help me understand how you feel about making a change in your [X] use...
- On a scale of **0 to 10**, how important is it for you right now to change your [X] use?... “0 is not ready”, “10 completely ready”
- Why did you choose a [X] and not a lower number like a 1 or 2?

If they choose “a zero” - What would need to happen in your life to consider making a change?

Step 6: Negotiate Goals

- You mentioned some reasons to change.
- What type of changes might you make?
- Is it OK if I share some suggestions that might be helpful?

Cut back to lower risk amounts if:

- Risky drinking amounts without reported negative consequences
- *"You may want to cut back on your drinking in order to avoid risks"*

Abstain if:

- Negative consequences from [X] use
- Known medications or medical conditions that are risky with [X] use
- **Pregnant or trying to conceive**
 - *"You should stop drinking if you are pregnant or trying to get pregnant"*

- What are your thoughts about that?

Step 7: Explore Confidence

1. Explore confidence

2. Explore challenges

3. Suggest other strategies

- If you decide to change your use of X, on a scale of **0 to 10**, how **confident** are you that you will be successful?
 - What are some challenges to being successful?... reaching your goals?
 - How can you overcome those challenges?
 - Can I suggest other strategies that have helped other patients? **Recommend 1-2 strategies that may help*

Step 8: Arrange Follow-up

“I want to see you back soon to see how you are doing with your plan”

“Often times it is more difficult to make a change than initially thought”

“If your plan doesn’t work out as planned, I want to hear about what some of the challenges were”

“I appreciate your willingness to talk to me about this”

Brief Intervention

Brief Negotiated Interview (BNI)

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Addressing Different Stages of Change

pre-contemplation

No intention of
changing behaviour

contemplation

Aware a problem exists
No commitment to action

determination/ preparation

Intent upon
taking action

action

Active modification
of behaviour

maintenance

Sustained change –
new behaviour replaces old

relapse

Fall back into old
patterns of behaviour

Transtheoretical Model of Change

Prochaska & DiClemente

Prochaska JO, DiClemente CC.
J Consult Clin Psych. 1983

Summary

- Substance use disorders (mild, moderate, severe) replace diagnoses of abuse and dependence
- Screen to identify the spectrum of unhealthy alcohol and other drug use (i.e., risky use, use disorder)
- Screen with validated questions
- Use brief negotiated interview to address unhealthy substance use to help motivate patients to change