

# Screening, Brief Intervention and Referral to Treatment (SBIRT) for Unhealthy Alcohol and Drug Use

Jared W. Klein, MD, MPH Assistant Professor Division of General Internal Medicine University of Washington School of Medicine

April 5, 2022



#### **Guest Speakers**

Jamie Darnton, MD Clinical Instructor Division of General Internal Medicine University of Washington School of Medicine

Jocelyn James, MD Assistant Professor Department of Psychiatry and Behavioral Sciences University of Washington School of Medicine



#### No conflicts of interest or relationships to disclose



#### Learning objectives

At the conclusion of this talk, learner will be able to:

- Compare the evidence for, and limitations of, SBIRT for addressing unhealthy alcohol and drug use.
- Assess two specific screening tools used as part of SBIRT for alcohol and drug use.
- Identify two strategies for implementing SBIRT in your clinical setting.



# April is... ALCOHOL AWARENESS MONTH

More than half of the people who were treated for substance use were from alcohol use Almost everyday 30 people die in a motor vehicle accident that involved alcohol 88,000

People die each year

in america from alcohol related causes

Long-term alcohol use can negatively impact your body



http://www.hopatconglakeregionalnews.com/

## Outline

- What is SBIRT?
- What is the evidence supporting SBIRT?
- How might you implement SBIRT in primary care?
- How might you implement SBIRT in other settings?
- Discussion / Q&A



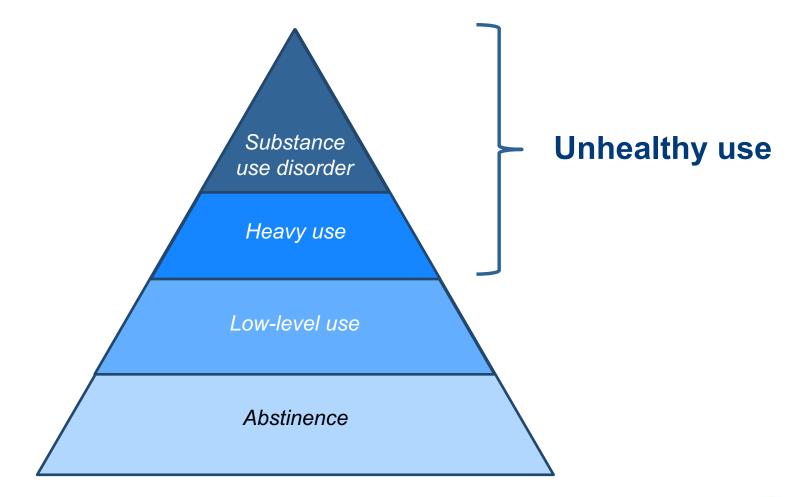




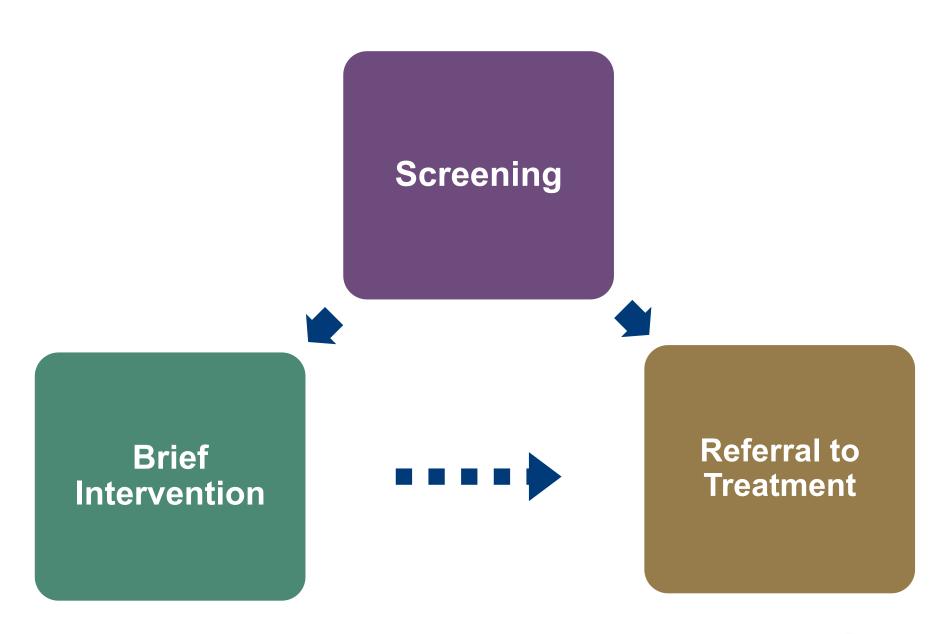
#### Screening



#### What are we screening for?









#### History of SBIRT

100 WORLD HEALTH ORGANIZATION DISTR. : GENERAL(E) WHO/MNH/DAT/86.3 V ORGANISATION MONDIALE DE LA SANTE ENGLISH ONLY Alcoholism - p+ c nags seccearing Alcohol consumption 6 cen - 2 WHO COLLABORATIVE PROJECT ON THE IDENTIFICATION AND TREATMENT OF PERSONS WITH HARMFUL ALCOHOL CONSUMPTION REPORT ON PHASE I THE DEVELOPMENT OF A SCREENING INSTRUMENT John B. Saunders Royal Prince Alfred Hospital Sydney, Australia and Olaf G. Aasland National Directorate for the Prevention of Alcohol and Drug Problems Oslo, Norway

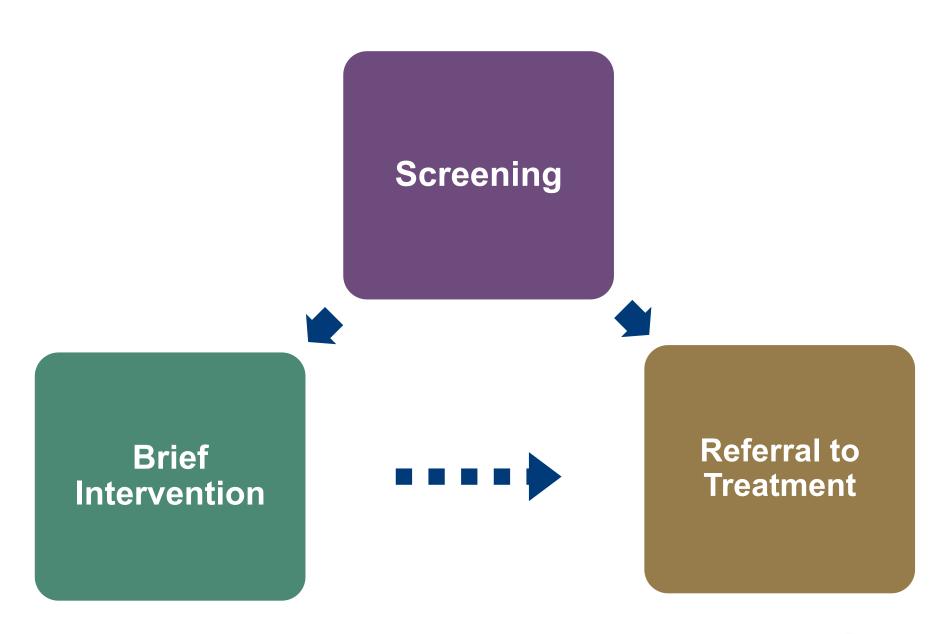


https://apps.who.int/iris/handle/10665/62031

# Purpose of SBIRT

- Institute universal screening as public health intervention
  - Targeted to non-treatment seeking individuals
- Normalize alcohol (and drug) use discussions as part of routine medical care
- Identify and intervene early to prevent:
  - Progression from unhealthy drinking/use to alcohol/drug use disorder
  - Acute and chronic complications of heavy drinking/drug use
- For those with substance use disorders, to offer treatment options







"Do you sometimes drink beer, wine or other alcoholic beverages?"

- → If yes, "In the past year, have you consumed [4 or more / 5 or more] drinks in a day?"
  - → If yes, this is **POSITIVE** and warrants further discussion



#### Single item screen – alcohol

- Validated in a cohort of 286 adults in the primary care setting
- Gold standard was a combination of:
  - 30-day timeline follow back for >14/7 drinks per week or >4/3 drinks per day OR
  - Had any alcohol-related problems on the Short Inventory of Problems OR
  - Met criteria for alcohol use disorder based on the Composite International Diagnostic Interview (CIDI) Substance Abuse Module



J Gen Intern Med. 2009;24(7):783.

### Single item screen – alcohol

• Sensitivity = 82% for unhealthy alcohol use

Positive likelihood ratio = 4.0

• Specificity = 79% for unhealthy alcohol use

Negative likelihood ratio = 0.2

Performs similarly to 3-item AUDIT-C

# Limitations

- Conducted at single site
- High proportion of patients opted out
- Validated in English only

J Gen Intern Med. 2009;24(7):783.



#### Gender-based drinking recs are controversial!

- Dietary guidelines for Americans 2020-25
  - ≤2 drinks per day for men
  - ≤1 drink per day for women
- NIAAA heavy alcohol use
  - ≥5 drinks per day for men
  - ≥4 drinks per day for women
- [Non-evidence-based consideration...] May be reasonable to advise
  - ≤1 drink per day for everyone



#### Single item screen – other drugs

- "How many times in the past year have you used an illegal drug or used a prescription medication for nonmedical reasons?"
  - Can clarify, "for instance because of the experience or feeling it caused."
- →If any use, this is **POSITIVE** and warrants further discussion



#### Single item screen – other drugs

- Validated in a cohort of 286 adults in the primary care setting
- Gold standard was a combination of:
  - Met criteria for alcohol use disorder based on the Composite International Diagnostic Interview (CIDI) Substance Abuse Module OR
  - Had any drug-related problems on the Short Inventory of Problems



### Single item screen – other drugs

- Sensitivity = 94% for drug problem/DUD
  - Positive likelihood ratio = 11
- Specificity = 91% for drug problem/DUD

- Negative likelihood ratio = 0.07

- Performs similar to 10-item DAST
- Limitations
  - Conducted at single site
  - High proportion of patients opted out
  - Validated in English only

Arch Intern Med. 2010;170(13):1155.



## Other screening tools

- AUDIT-C (3 items)
- AUDIT (10 items, extensively validated)
- CRAFFT (adolescents)
- DAST (10 items, validated in addiction treatment)
- ASSIST (up to 80 items)
- 4Ps Plus (pregnancy, alcohol + drug use)



## Other screening tools

- AUDIT-C (3 items)
- AUDIT (10 items, extensively validated)
- CRAFFT (adolescents)
- DAST (10 items, validated in addiction treatment)
- ASSIST (up to 80 items)
- 4Ps Plus (pregnancy, alcohol + drug use)



#### AUDIT-C

#### Please circle the answer that is correct for you.

1. How often d	lo you have a di	ink containing alco	hol?		SCORE
Never (0)	Monthly or less (1)	Two to four times a month (2)	Two to three times per week (3)	Four or more times a week (4)	<u> </u>
2. How many drinking?	drinks containii	ng alcohol do you ha	ave on a typical day	when you are	
1 or 2 (0)	3 or 4 (1)	5 or 6 (2)	7 to 9 (3)	10 or more (4)	
3. How often de	o you have six o	r more drinks on or	ne occasion?		
Never (0)	Less than Monthly (1)	Monthly (2)	Two to three times per week (3)	Four or more times a week (4)	
TOTAL SCOR Add the number		n to get your total sco	ore.		

Maximum score is 12. A score of  $\geq$  4 identifies 86% of men who report drinking above recommended levels or meets criteria for alcohol use disorders. A score of > 2 identifies 84% of women who report hazardous drinking or alcohol use disorders.





## Other screening tools

- AUDIT-C (3 items)
- AUDIT (10 items, extensively validated)
- CRAFFT (adolescents)
- DAST (10 items, validated in addiction treatment)
- ASSIST (up to 80 items)
- 4Ps Plus (pregnancy, alcohol + drug use)



#### Alcohol screening questionnaire (AUDIT)

Our clinic asks all patients about alcohol use at least once a year. Drinking alcohol can affect your health and some medications you may take. Please help us provide you with the best medical care by answering the questions below.

One drink equals:	eer	5 oz. wine		1.5 oz. liquor (one sh	ot)
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?	0 - 2	3 or 4	5 or 6	7 - 9	10 or more
3. How often do you have four 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, in 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, in the last year
	0	1	2	3	4

Have you ever been in treatment for alcohol use? □ Never □ Currently □ In the past



http://www.sbirtoregon.org/screening-forms/

## Other screening tools

- AUDIT-C (3 items)
- AUDIT (10 items, extensively validated)
- CRAFFT (adolescents)
- DAST (10 items, validated in addiction treatment)
- ASSIST (up to 80 items)
- 4Ps Plus (pregnancy, alcohol + drug use)



#### **Drug Screening Questionnaire (DAST)**

Using drugs can affect your health and some medications you may take. Please help us provide you with the best medical care by answering the questions below.

methamphetamines (speed, crystal)
 cannabis (marijuana, pot)
 inhalants (paint thinner, aerosol, glue)
 tranquilizers (valium)
 other \_\_\_\_\_\_

#### How often have you used these drugs? Monthly or less Weekly Daily or almost daily

1. Have you used drugs other than those required for medical reasons?	No	Yes
2. Do you abuse more than one drug at a time?	No	Yes
3. Are you always able to stop using drugs when you want to?	No	Yes
4. Have you ever had blackouts or flashbacks as a result of drug use?	No	Yes
5. Do you ever feel bad or guilty about your drug use?	No	Yes
6. Does your spouse (or parents) ever complain about your involvement with drugs?	No	Yes
7. Have you neglected your family because of your use of drugs?	No	Yes
8. Have you engaged in illegal activities in order to obtain drugs?	No	Yes
9. Have you ever experienced withdrawal symptoms (felt sick) when you stopped taking drugs?	No	Yes
10. Have you had medical problems as a result of your drug use (e.g. memory loss, hepatitis, convulsions, bleeding)?	No	Yes

Have you ever injected drugs? 🗆 Never 🗆 Yes, in the past 90 days 🗆 Yes, more than 90 days ago

Have you ever been in treatment for substance abuse?  $\Box$  Never  $\Box$  Currently  $\Box$  In the past



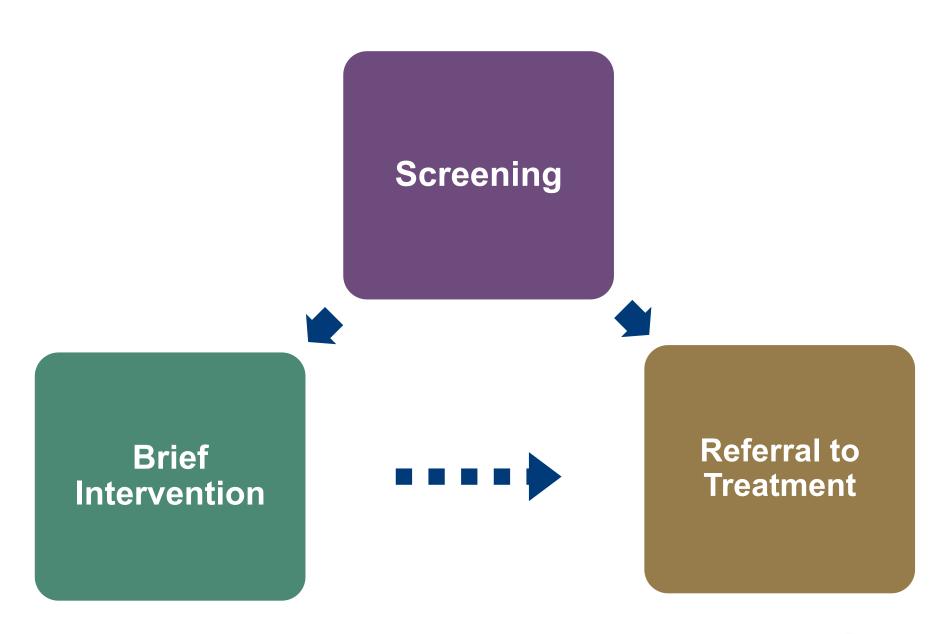
#### http://www.sbirtoregon.org/screening-forms/

I II III IV 0 1-2 3-5 6+

## Limitations of screening tools

- Trade-off between simplicity and amount of information provided
- Generally focus on past year use (not lifetime use)
- No screening tools is perfect!







## What is a brief intervention?

Step	Example
Raise the subject	"I see that you sometimes drink more than 5 drinks per day. Can we talk about your alcohol use?"
Provide feedback	"You drink more than most patients I see."
Enhance motivation	"What do you like about drinking? What do you like less?"
Negotiate a plan	"What change would you like to make between now and your next visit?"







http://www.sbirtoregon.org

#### Attitude and approach matters!

- Non-judgmental, curious
- Focus on areas of strength
- Utilize motivational interviewing techniques
  - Develop discrepancy
  - Express empathy
  - Reflective listening
  - Support self-efficacy
- Recognize and enhance change talk



#### Strong evidence for alcohol in primary care

- Metanalysis of 23 studies in primary care settings
- Most studies include 10-15 minutes, multi-contact interventions
- Outcomes:

Mean Consumption <sup>+</sup>			
Results	Strength of Evidence		
3.6 fewer drinks/wk (95% CI, 2.4–4.8 drinks/wk); 10 trials; 4332 participants	Moderate		



Ann Intern Med. 2012;157(9):645.

### Strong evidence for alcohol in primary care

- Metanalysis of 23 studies in primary care settings
- Most studies include 10-15 minutes, multi-contact interventions
- Outcomes:

	Mean Consumptiont			
Results	Heavy Drinking Episodes‡			
3.6 fewe	Results	Strength of Evidence		
(95% drinks/ 4332	12% fewer participants reported heavy drinking episodes (95% CI, 7%–16%); 7 trials; 2737 participants	Moderate		



Ann Intern Med. 2012;157(9):645.

### Strong evidence for alcohol in primary care

- Metanalysis of 23 studies in primary care settings
- Most studies include 10-15 minutes, multi-contact interventions
- Outcomes:

Ann Inter

÷				
Results	Heavy Drinking Episodes‡			
3.6 fewe	Results Recommended Drinking Lin		nits	
(95%	12% fewer drinking	Results	Strength o Evidence	
JJZ		Achieved by 11% more participants (95% CI, 8%–13%); 9 trials; 5973 participants	Moderate	



#### There are a few limitations

- Included trials conducted in primary care setting
- Alcohol use was generally self-reported
- Study-related procedures could have influenced participants' behavior



# Limited effect for other drug use

- Systematic review of 52 trials of psychosocial interventions
- Examined abstinence and drug use intensity
- Psychosocial interventions were less effective for
  - Substances other than cannabis
  - Patients identified by screening (versus treatment-seeking)
  - Shorter interventions (versus more intensive)
  - Online/computer-based interventions (versus in-person)

 Despite this, USPSTF recommends screening for unhealthy drug use among adults 18+ (grade B evidence)



# What about other care settings?

### INPATIENT

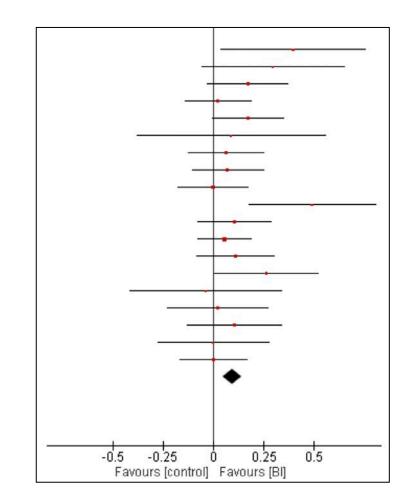
- Systematic review of 22 studies
- No effect on alcohol consumption after a single session.
- More than one session could be beneficial, especially for patients with less severe alcohol use disorder.



# What about other care settings?

## EMERGENCY DEPARTMENT

- Metanalysis of 28 studies
- Most studies included more extensive intervention (>15 min, +/- booster session)
- Statistically lower alcohol consumption at 12 months in brief intervention group (0.09 fewer drinks per occasion)
- Unclear clinical significance





Addiction. 2016;111(5):783.

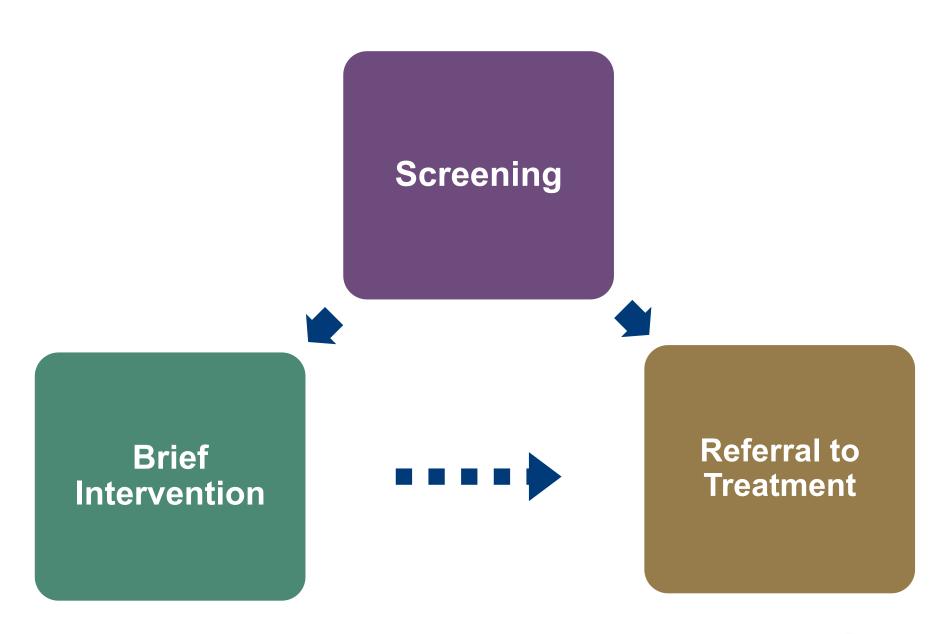
# Pros and cons of BI in hospital/ED settings

#### • Advantages:

- Opportunity to reach non-treatment seeking patients
- Can use blood alcohol level as part of screening algorithm
- Challenges:
  - More severe use disorder
  - Not treatment seeking
  - Lack of longitudinal relationship

• Re-framing the goal  $\rightarrow$  link with treatment







# Best practices for referral to treatment

- Review the patient's prior treatment experiences, if any
- Explore their preferences and any limitations
  - Inpatient versus outpatient
  - Medication versus behavioral versus both
  - Competing demands (school, work, family)
  - Insurance considerations
- Know your local resources
- Harm reduction = treatment





# **SBIRT Implementation Strategies**

- Engage key stakeholders
  - Leadership, front-line staff
  - Explain rationale, relate to institutional priorities
- Anticipate areas of resistance
  - Competing priorities
  - Time constraints
- Integrate screening tool(s) into workflow
  - Utilize EHR, if possible
  - Paperwork during check-in





# **SBIRT Implementation Strategies**

- Identify and train champions
- Consider a pilot
  - Single provider, teamlet or clinic within a larger system
- Monitor progress
  - Key metrics for each step
- Provide feedback and adjust as needed





The patient is a 52-year-old individual who presents to establish primary care. They are living with HIV and hypertension. Both conditions have been well-controlled.

During the intake process, they check the "I sometimes drink alcohol" box. The medical assistant provides the AUDIT-C tool for them to complete while awaiting the provider.

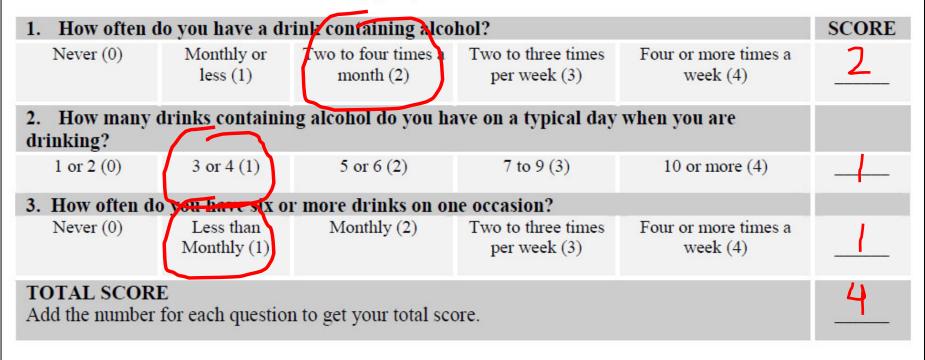
After introducing each other, the patient and provider review the completed AUDIT-C form:



# Case Example, cont.

#### AUDIT-C

Please circle the answer that is correct for you.



Maximum score is 12. A score of  $\geq$  4 identifies 86% of men who report drinking above recommended levels or meets criteria for alcohol use disorders. A score of > 2 identifies 84% of women who report hazardous drinking or alcohol use disorders.



# Case Example, cont.

- How might you raise the topic of alcohol use with this patient?
- What feedback would you consider providing?
- How would you evaluate the patient's motivation to change and enhance their motivation to reduce or stop drinking?
- What next steps might you propose?



## Resources

- There are MANY online resources:
  - https://www.samhsa.gov/sbirt/resources
  - https://medicine.yale.edu/sbirt/
  - http://www.sbirtoregon.org



# **Panel Discussion**



What screening tools do you find most practical? What might work best in your clinical setting?



What suggestions or tips do you have for performing brief interventions?



How is SBIRT implemented in your practice? What challenges do you struggle with?



# References

- Saunders, John B, Aasland, Olaf G & World Health Organization. Division of Mental Health. (1987).
   WHO Collaborative Project on the Identification and Treatment of Persons with Harmful Alcohol Consumption. Report on phase I : the development of a screening instrument / John B. Saunders and Olaf G. Aasland. World Health Organization.
- Smith PC, Schmidt SM, Allensworth-Davies D, Saitz R. Primary care validation of a single-question alcohol screening test. J Gen Intern Med. 2009 Jul;24(7):783-8.
- Smith PC, Schmidt SM, Allensworth-Davies D, Saitz R. A single-question screening test for drug use in primary care. Arch Intern Med. 2010 Jul 12;170(13):1155-60.
- Jonas DE, Garbutt JC, Amick HR, Brown JM, Brownley KA, Council CL, Viera AJ, Wilkins TM, Schwartz CJ, Richmond EM, Yeatts J, Evans TS, Wood SD, Harris RP. Behavioral counseling after screening for alcohol misuse in primary care: a systematic review and meta-analysis for the U.S. Preventive Services Task Force. Ann Intern Med. 2012 Nov 6;157(9):645-54.
- Patnode CD, Perdue LA, Rushkin M, Dana T, Blazina I, Bougatsos C, Grusing S, O'Connor EA, Fu R, Chou R. Screening for Unhealthy Drug Use: Updated Evidence Report and Systematic Review for the US Preventive Services Task Force. JAMA. 2020 Jun 9;323(22):2310-2328.
- Mdege ND, Fayter D, Watson JM, Stirk L, Sowden A, Godfrey C. Interventions for reducing alcohol consumption among general hospital inpatient heavy alcohol users: a systematic review. Drug Alcohol Depend. 2013 Jul 1;131(1-2):1-22.
- Schmidt CS, Schulte B, Seo HN, Kuhn S, O'Donnell A, Kriston L, Verthein U, Reimer J. Meta-analysis on the effectiveness of alcohol screening with brief interventions for patients in emergency care settings. Addiction. 2016 May;111(5):783-94.
- 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, 2014.



This Mountain West AIDS Education and Training (MWAETC) program is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling \$2,911,844 and as part of another award totaling \$400,000 with 0% financed with non-governmental sources.

The content in this presentation are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS, or the U.S. Government.

