

SBIRT: Brief and Effective Screening for Hazardous Substance Use

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SBIRT: BRIEF AND EFFECTIVE SCREENING FOR HAZARDOUS SUBSTANCE USE

Goal:

The learner will be able to appropriately screen for and identify hazardous substance use and triage patients with substance use problems to their appropriate level of care.

After completing this module participants will be able to:

- Select appropriate screening tools and evaluations for hazardous substance use based on patient history and characteristics
- Screen patients effectively for substance use problems
- Interview the patient to clarify responses to screening for substance use problems
- Interpret hazardous substance use history and screening results

Professional Practice Gaps

Screening and brief intervention for alcohol use in primary care are effective in helping patients reduce substance use problems.^{1,2} Unfortunately, few PCPs are routinely providing substance use screening or intervention with their patients.³⁻⁵

WHAT CAN YOU DO?

What Can You Do To Help These Patients?



MR. RENNIE

Mr. Nathan Rennie has a torn ACL and sees you for a pre-operative appointment. He has 2-3 drinks a day. Is that a problem?



MR. MARTIN

Mr. Mike Martin is suffering from the flu and admits to drinking 5 drinks several times per week. He's a bartender.

Will discussing substance use do any good?

**MS. MASON**

Ms. Ashley Mason is visiting the clinic for an upper respiratory infection, which she has frequently. She smokes one and a half packs per day and has smoked for the past ten years. Do you have the time to help her quit smoking?

**MRS. CAPELLO**

Mrs. Elise Capello had a brief intervention at her last appointment to help her reduce her drinking to healthy limits, but she has not reduced her drinking and has started using sedatives to manage her "nerves."

Where do you refer her? What follow up is needed?

WHAT IS SBIRT?

Screening

Screening can be a quick interview question asking about tobacco, alcohol, and drug use (including the use of illicit drugs and the misuse of prescription drugs) with just a few questions, such as "Have you ever used tobacco?" or "Do you sometimes drink beer, wine, or other alcoholic beverages?" An even better option is to use one of several validated, quick, straightforward questionnaires presented in this module. Longer "structured screening" questionnaires can be used to follow up on positive initial screening results -- they provide a broader picture of your patients' substance use/misuse problems. Note: As tablet computers or kiosk screening becomes more common, clinics may start with the longer screening instruments and skip the shorter initial quick screens.

Brief Intervention

Brief interventions can be accomplished with just a few questions or comments, such as, "What is the hardest part about quitting tobacco?" or "What would you gain if you stopped drinking alcohol?" The physician, nurse, nurse practitioner, physician assistant, and many other health professionals in the clinical setting can be part of the process so that no one provider is over-burdened.

Referral to Treatment

Referral to treatment is important when the issue is not appropriate for your care setting or your area of expertise.

HOW TO HELP

Screening followed by **Brief Intervention** along with **Referral** (or treatment when indicated) can help patients decrease alcohol, tobacco or other drug use.

WHY SBIRT IS IMPORTANT

Substance Use Problems Are Common

Over 21 million people in the U.S. have a substance use disorder⁶ and approximately 20 to 25% of primary care patients have a current substance use problem or health problem related to tobacco, alcohol, or drug use.^{7,8} That means as many as 1 in 4 of the patients you see today could benefit from your screening and brief intervention or referral to treatment.

- Excessive alcohol use is the 3rd leading cause of preventable death in the US, with more than 2,200 Americans dying from overdose each year.⁹
- Tobacco is the leading cause of preventable death in the US.
- Illegal drug use is alarmingly prevalent: Around 9.2% of the population aged 12 or older reports using illegal drugs within the past month. Additionally, over 47,000 die from drug overdoses each year.⁹
- Approximately 20.2 million of the population over age 18 had substance use disorder in the past year¹⁰. 16.3 million had alcohol use disorder and 6.2 million had a drug use disorder.¹¹

Why Should You Make This Change To Your Practice?

1. **YOU** can initiate change in the above statistics and make a difference in the health of patients by asking as few as 1-2 simple questions, such as "In the past year, how many times have you misused prescription drugs?"¹² If the answers are positive, you can intervene briefly and potentially improve their health. Unfortunately, few health care providers routinely provide screening for all substances, and even fewer provide brief interventions.³⁻⁵ Those who do screen for current use often neglect to ask about past use and treatments.
2. SBIRT is an evidence-based practice. Using SBIRT is effective at reducing alcohol and drug use in patients who screen positively.^{3,7}

PRACTICE TIPS

- **For inpatient settings**
The Joint Commission for hospitals has adopted standards for tobacco and alcohol screening and intervention.
- **Medicare/Medicaid and SBIRT**
Medicare/Medicaid have recognized the value of screening and brief intervention by adding related billing codes.

SCREENING: WHO AND FOR WHAT?

An Introduction to Screening

Screening can be:

- a quick interview question asking about tobacco, alcohol and drug use (both illicit drugs and misuse of prescription drugs)
- use of one of the screening tools covered in this section that, if positive, can be followed up with longer screening questionnaires.



In short, **all** adolescent and adult patients should be screened for tobacco, alcohol, and drug use, for clinical substance use disorders, and for risk of substance use disorders.

Who

Several professional organizations (AMA, ASAM, CSAT, AAP, NIAAA) support substance abuse screening as a standard part of every adolescent and adult patient interview.

Screening should be universally applied: What you see without screening is just the tip of the iceberg the VAST majority of risky use goes undetected without universal screening. The United States Preventive Services Task Force recommends screening all patients for all substance use due to the efficacy of a universal approach.¹⁴

In addition to screening for substance use, the USPSTF has indicated that all adults should be screened for depression. This recommendation now includes pregnant and postpartum women, as well as those who do not indicate prior evidence of depression.¹⁵

For What

Substance Use Disorder "A medical illness caused by repeated misuse of a substance or substances...characterized by clinically significant impairments in health, social function, and impaired control over substance use and are diagnosed through assessing cognitive, behavioral, and psychological symptoms".⁹ A person who meets 2-3 of the criteria outlined in the APA's DSM-5 has mild substance use disorder, while those who meet 4-5 have moderate, and 6-7 have severe substance use disorder.¹⁶

Note: The diagnoses of *Substance Abuse* and *Substance Dependence* formerly found in the DSM-IV TR, have been combined to form a single diagnosis, *Substance Use Disorder*, in the DSM-5 (2013).

PRACTICE TIP

"At-risk" is a clinical descriptor useful in identifying a need for prevention, rather than a diagnosis. It means significant risk factors for substance use disorders or unhealthy substance use that falls short of a clinical diagnosis. It includes any use of tobacco, illicit drugs, or misuse of prescription drugs and excessive use of alcohol short of addiction (any

alcohol use for adolescents). Health or other personal risks are still a problem, even if substance use is less than a clinical syndrome.

All "At Risk" substance use should be the target of at least a brief intervention.

SPOTTING SIGNS AND SYMPTOMS

Everyone should be screened, not just those who exhibit signs and symptoms that suggest suspicious behavior of substance use disorders. Many people with substance misuse would slip through if you relied solely on such evidence. However, signs and symptoms are important, because they may be useful in identifying patients who do not answer screening questions truthfully. Multiple signs and symptoms do not necessarily mean the individual has a substance use disorder but do mean that further questions are needed.

Common Signs and Symptoms of Substance Use Problems

Physical	Headaches, sleep disorders, sexual dysfunction, gastrointestinal problems, liver disease, respiratory problems (sinusitis for snorted drugs, cough for smoked drugs), pupils dilated or constricted
Behavioral	Agitation, anxiety, anger, irritability, depression, mood swings, unusually fast or slow movements
Family	Marital problems (including separation and divorce), abuse or violence, family members' anxiety and depression, behavioral problems among their children
Social	Loss of long-standing friendships, spending time with other individuals with substance use problems, social isolation, loss of interest in regular activities
Work or School	Missing work or school, poor performance, frequent job changes or relocations
Legal	Arrests, DUIs, theft, drug dealing
Financial	Sizable recent debt, borrowing money from friends/relatives, selling possessions (presumably for drug money)

Adapted from Trachtenberg and Fleming, 1994

Signs/Symptoms for Specific Substances

Stimulants	Excitatory symptoms, such as increased energy, lack of sleep, and increased blood pressure and pulse.
Depressants	Tends to slow down all the body systems.
Methamphetamine	Leads to dental problems in chronic users ("meth mouth")
Injection of opioids and other drugs	Scarring at vein sites (and elsewhere)

VIDEO: FIRST STEP: SIMPLY ASK

Initial screening questions help determine which patients require further screening/assessment. Screening starts with questions that identify which patients use or have ever used tobacco, alcohol, or illicit drugs; or have misused prescription drugs.

Ensure that your questioning encompasses all possible substances, even substances that may not fall into the categories listed. For example, designer drugs may not fall into these categories, e-cigarettes a patient uses may not contain tobacco, and marijuana is not an illicit drug in certain areas.

Asking During Patient Interview

Screening questions may be included in the patient interview. Asking about substance use shows the patient that you feel it is important and that this is a topic that you can discuss with him or her.

Video: The video “SBIRT: Screen for Substance Use – Negative Screen,”¹⁷ which illustrates a patient having no substance use problems being asked about substance use, can be found here: <https://www.youtube.com/watch?v=5LjhAJMTwml>.

Asking Via Questionnaire

Alternatively, screening questions can be in forms filled out annually by the patient in the waiting room OR asked quickly by a medical assistant or nurse when taking the patient to a treatment room. Screening through questionnaires tends to be more effective for tobacco and alcohol than for drugs; many people are less ready to admit to misuse of prescription drugs or the use of illegal substances. Computerized screening forms are being used increasingly. Patients generally accept questions about substance use as part of a comprehensive health assessment.¹⁸ Asking about substance use along with other questions on behavior and lifestyle helps reduce stigma and patient anxiety.

BUILDING RAPPORT

For clinicians and counselors who are inexperienced and may be new to the field, quickly building rapport with a patient can be a challenge. There are a number of things to consider when speaking with a patient to promote communication.

Avoiding Stigma

Patients may be uncomfortable with the stigma surrounding alcoholism, illegal drug use, or prescription drug misuse and prefer that the topic is ignored or dismissed. Using appropriate language can help clinicians to build rapport with the patient. Throughout this activity, the example dialogues are carefully worded to maximize the patient's willingness to respond to questioning. Notice in the following example how the provider maintains a neutral and professional attitude, never giving the patient a reason to be defensive or insecure:

Provider: *May I ask about your alcohol use?*

Patient: *Sure. Well, you know alcoholism runs in my family.*

Provider: *Thank you for sharing that information. I have a few more questions: Do you sometimes drink beer, wine, or other alcoholic beverages?*

Patient: *Yes, but mostly only on weekends.*

Provider: *How many days per week do you have a drink?*

Patient: *Friday, Saturday, and Sunday for sure. Then usually once in the middle of the week if I have a bad day of work. So I guess 4.*

Provider: *I think we can all have a bad day of work sometimes. On a typical drinking day, how many alcoholic beverages do you drink?*

Patient: *Somewhere between 3 and 5, depending on how I'm feeling, so maybe an average of 4.*

Person-First Language

Person-first language instead of disease-first language introduces the person before the disability or disorder to acknowledge that they are not their disease. For example, a patient "has alcohol use disorder" rather than "is an alcoholic." Here are some examples of using person-first language:

Provider: *(To parents) Our clinic has a doctor who works well with children with autism.*

Nurse: *(To provider) The patient in room 3 is a man with major depressive disorder.*

Nurse: *(To patient) Our facility is specially designed for people with a physical disability.*

QUIZ: BUILDING RAPPORT

Read the following dialogue and answer the quiz question below.

Provider: *Is it okay if I ask a few questions about your tobacco, alcohol, and drug use?*

Patient: *Yes, that's fine.*

Provider: *In the past year, how often have you had at least 5 drinks of alcohol in one day?*

Patient: *I sometimes drink socially, but never that much.*

Provider: *How often have you used tobacco products in the past year?*

Patient: *Everyday.*

Provider: *Have you misused prescription drugs during the past year?*

Patient: *No.*

Provider: *Have you used illegal drugs in the past year?*

Patient: *Nope.*

Which of the following would be the best segue to screen the patient's tobacco use further?
Choose one

1. We need to talk about your tobacco addiction. Could you tell me more about it?
 - Feedback: Incorrect. While it is likely the patient does have an addiction to a tobacco product, or tobacco in general, making this assumption is unfair, even if it is true. If the patient is addicted, pointing this out without having all the facts can make them defensive.
2. Let's talk about your tobacco use.
 - Feedback: Incorrect. While the patient may be addicted to tobacco and fully aware of its health impacts, this is an authoritarian approach. Opening up dialogue would likely go better if you gave the patient some option.
3. Can you tell me more about your tobacco problem?
 - Feedback: Incorrect. While the patient may be addicted to tobacco and fully aware of its health impacts, calling it a problem can feel accusatory and make the patient defensive.
4. You answered that you did use tobacco in the past year. Can you tell me more about that?
 - Feedback: Correct! This segue avoids making any assumptions or judgment about the tobacco use.

STRUCTURED SCREENING/ASSESSMENT TOOLS

There are dozens of effective screening tools, several of which have been validated for use in primary care.^{19–21} Some are as short as two to four questions; "structured screening" tools are more detailed.

Several screening/assessment tools are considered "structured screening tools," because they provide an in-depth assessment of the seriousness of the hazardous substance use including quantity and frequency, effects on the individual's life, and symptoms. Structured screening is more likely to be reimbursable by insurance.



SCREENING FOR ALCOHOL USE

Initial Questions About Alcohol: SIASQ

Gauge *quantity* and *frequency* of the patient's alcohol use starting with a few simple questions. The following questions form the Single Item Alcohol Screening Questionnaire (SIASQ),²² which takes less than a minute. With positive responses, ask further questions.

STEP 1: ASK A SCREENING QUESTION ABOUT ALCOHOL USE:

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

STEP 2. IF THEY SOMETIMES DRINK ALCOHOL, DETERMINE HEAVY DRINKING IN THE PAST YEAR:

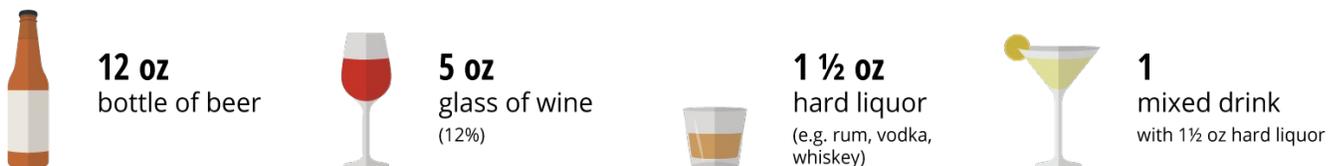
"How many times in the past year have you had..."

- ...5 or more drinks in a day?" (for men)
- ...4 or more drinks in a day?" (for women)

To help the patient answer this question accurately, define what you mean by a "drink." A standard drink is:

- 12 ounces of beer
- 5 ounces of wine
- 1.5 ounces of 80-proof spirits

1 Standard Drink is Equal to



STEP 3. BASED ON THEIR RESPONSE TO THE QUESTION ABOUT HEAVY DRINKING DAYS, IF THEY HAVE:

- Any heavy drinking days in the past year as determined by step 2 is considered a positive screening. Continue by further assessing their drinking as described later in this section.

The SIASQ is recommended for use in primary care by the VA/DoD guidelines for substance use disorder, due to its simplicity and that it is easy to remember.

DRINKING LIMITS TO RECOMMEND

Recommend that patients stay within low-risk limits for their health: The Dietary Guidelines Advisory Committee,²³ recommended:

- Women: No more than 1 drink per day on average
- Men: No more than 2 drinks per day on average

Recommend limits for drinking in a single day:²⁴

- Women: No more than 3 drinks in any single day
- Men: No more than 4 drinks in any single day

Note that higher limits in the accompanying NIAAA guideline were focused on achieving low risk for developing alcohol use disorder. However, "low risk" is not the same as "no risk." The lower limits in the Dietary Guidelines recommendation from the USDA considered wider health ramifications and the latest evidence on risk for developing alcohol use disorder.

ALCOHOL SCREENING: AUDIT

The Alcohol Use Disorders Identification Test (AUDIT) is a screen for detecting at-risk or hazardous drinking. The AUDIT can be used as an alternative to the NIAAA guide's initial questions about alcohol use outlined on the previous page. The AUDIT consists of 10 questions about alcohol use and takes 2-4 minutes. It can be given as a survey that the patient fills out. It can be used in primary care and multiple other settings. It has been used internationally and can be used in multiple cultures. The AUDIT looks at drinking quantity and other issues not included in some quick screening tools.²⁵ For example, it detects binge drinking that might not qualify for a diagnosis of alcohol use disorder.

Evidence

Test Features

- **Estimated time:** About 3 minutes to administer and score
- **Length:** 10 items. A shorter version of the AUDIT also is used in primary care and consists of the first 3 questions of the AUDIT:
 1. *How often do you have a drink containing alcohol?*
 2. *How many standard drinks containing alcohol do you have on a typical day drinking?*
 3. *How often do you have six or more drinks on one occasion?*
- **Administered by:** Patient interview or Self-Report.
- **Intended settings:** Primary care, emergency rooms, psychiatric clinics, courts, jails, prisons, armed forces, industries, colleges, and universities
- **Scoring and Interpretation:** Scoring is done by hand and takes approximately 1 minute.
 1. Add total points for all questions (maximum 40). Sub-scales include amount and frequency of drinking, alcohol dependence, and consequences of alcohol use.
 2. A score of 8 or more for men or 4 or more for women generally indicates harmful or hazardous drinking and suggests the need for further assessment of the problem.

VIDEO: AUDIT SCREENING

Video: The video “SBIRT AUDIT Screening,”²⁶ which explains the AUDIT and illustrates a patient being interviewed using the AUDIT, can be found here:

<https://www.youtube.com/watch?v=RHcalohcunU>

The video shows a provider conducting an AUDIT interview with a client:

1. She first explains the test's purpose and how long it will take.
2. She asks the questions one at a time, with very little variation from the actual wording of the questionnaire.
 - Her responses are neutral and limited. Sometimes she simply repeats what he says, but she does provide some support for responding, clarifying the questions as needed, and asking further questions to clarify the client's ambiguous responses.
3. She then interprets this client's AUDIT score of 14 points according to the following key:

AUDIT Criteria

- 8-15** Simple advice
- 16-19** Brief counseling and continued monitoring
- 20+** Further diagnostic evaluation

1. She determines that he drinks at a level warranting simple advice and motivational enhancement to reduce his drinking level.

QUIZ: AUDIT

Question: What are the benefits of the AUDIT screening tool? (Select all that apply)

Choose all that apply

1. It can be used in primary care settings
 - Feedback: Correct. This is true, and all of the choices listed are benefits of the AUDIT screening tool.
2. A short version is available for use in primary care which consists of just 3 questions
 - Feedback: Correct. This is true and all of the choices listed are benefits of the AUDIT screening tool.
3. The AUDIT may be self-administered or administered as part of a general health interview
 - Feedback: Correct. This is true and all of the choices listed are benefits of the AUDIT screening tool.

4. The AUDIT requires approximately 2-4 minutes.
 - Feedback: Correct. This is true and all of the choices listed are benefits of the AUDIT screening tool.

VIDEO: AUDIT

Video: The video “AUDIT Screening Tool,”²⁷ which shows another example of the full, 10-question AUDIT being used in a patient interview, can be found here:

https://www.youtube.com/watch?v=Xdsz__MaC1g

AUDIT C: SHORT VERSION

The videos showed a providers conducting an interview clients using the whole AUDIT, but the first three questions can be used to screen. But if results were negative after the first 3 questions, the provider could stop. The AUDIT-C uses just the first 3 questions from the AUDIT and can be used as a screening tool.²⁸

1. How often do you have a drink containing alcohol?
 - Never
 - Monthly
 - 2-4 times a month
 - 2-3 times a week
 - 4 or more times a week
2. How many standard drinks containing alcohol do you have on a typical day?
 - 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
 - Weekly

The AUDIT-C is scored on a scale of 0 to 12. Points are scored as follows: a=0, b=1, c=2, d=3, e=4. In women, 3 or more is positive. In men, 4 or more is positive. In this case, the patient scores a total of 8 (5 + 1 + 2) and thus screens positive. The provider would continue to ask the remaining 5 AUDIT questions. However, if she had screened negatively, the provider could have stopped at that point.

FURTHER ASSESSING PROBLEM ALCOHOL USE

If Initial Screening Was Positive, Continue the Assessment

If an alcohol screening was positive – that is, the patient answered yes to the Single Item Alcohol Screening Questionnaire (SIASQ)²² revealing at least one heavy drinking day in the past year OR had a positive AUDIT-C screening (score of 3 or more for women and 4 or more for men) further assessment is needed. In the case of the AUDIT-C, you can start by completing the full AUDIT. Further assessment after a positive screening with the SIASQ can be completed using the NIAAA Helping Patients Who Drink Too Much guide.¹⁸

1. Ask these patients the following questions and multiply the results to get their weekly average:

- *On average, how many days a week do you have an alcoholic drink?*
- *On a typical drinking day, how many drinks do you have?*

Be sure to record their answers in the patient record.

2. The next step is to assess the patient for alcohol use disorder, an important step that is beyond the scope of the SBIRT process. Refer to the current DSM manual for the diagnostic criteria.

PRACTICE TIP

Additional alcohol screening tools are available for specific populations; for example:

- TWEAK, which is specifically for alcohol use in pregnant woman.²⁹
- MAST-G, which is specifically for alcohol use in the elderly.³⁰
- Alcohol Screening and Brief Intervention for Youth, published by NIAAA is a guide for screening youth about alcohol using a few questions. One question pertains to use by their friends and the other question pertains to their own use of alcohol.

VIDEO: HOW TO SCREEN: CAGE

Description

An alternative screening tool for alcohol use that is widely used is the CAGE.

The CAGE consists of 4 questions that ask about lifetime use of alcohol.³¹ The CAGE is short, easy to remember, and easy to incorporate into a clinical interview.³² It is better at detecting abuse and dependence than for at-risk or hazardous drinking.³²

C

Cut down – Have you ever felt you ought to cut down on your drinking?

A

Annoyed – Have people annoyed you by criticizing your drinking?

G

Guilty – Have you ever felt bad or guilty about your drinking?

E

Eye-opener – Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover?

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Note: A related screening tool, the CAGE-AID, adds drugs to the above questions.

Target Audience

The target population of this screening instrument is adults.

The T-ACE, derived from the CAGE, was developed in order to identify risky drinking behavior (defined by more than 1 ounce consumption daily) in pregnant women.^{33,34}

Administration

The CAGE is a short questionnaire that can be self-administered or verbally administered by a health-care provider.³²

Sensitivity and Specificity

A review of ten studies of the CAGE in primary care reported sensitivities ranging from 21% to 94% and specificities from 77% to 97% for alcohol use disorders.⁸

Scoring and Interpretation

Scoring

- No answers = 0 points
- Yes answers = 1 point
- Total max score = 4 points

Interpretation

- Accepted cutoff is 2 positive responses³¹
- CSAT (1997) recommends setting the cutoff at 1 positive response.

Example of a Patient Interview:

Video: The video “CAGE Screening Tool”.³⁵ which illustrates a patient being interviewed using the CAGE screening questions, can be found here:

<https://www.youtube.com/watch?v=0mOg2rcCbjM>

VIDEO: DIAGNOSING ALCOHOL USE DISORDER

To follow-up after a positive screening test for alcohol use, a provider might want to further assess the patient for alcohol use disorder or refer the patient to a substance use counselor

for this evaluation. The following video illustrates a provider assessing a patient for alcohol use disorder in a patient interview.

Video: The video “Diagnosing Alcohol Use Disorder”.³⁶ which illustrates a patient being interviewed about the criteria of Alcohol Use Disorder, can be found here: [_ href="https://www.youtube.com/watch?v=zGuiEbaAk3g](https://www.youtube.com/watch?v=zGuiEbaAk3g)

SCREENING FOR DRUG USE

Screening Questions About Drug Use

Be sure to ask about misuse of prescription drugs and use of illicit drugs.³⁷ For providers practicing in states where marijuana has been legalized, and no longer illicit, a separate question will need to be asked regarding marijuana use.

Ask this evidence-based screening question regarding drug use:

Single-Question Drug Screening Test

How many times in the past year have you used an illegal drug?

How many times in the past year have you used a prescription medication for non-medical reasons (for example, because of the experience or feeling it caused)?

Scoring: Any illegal drug use or misuse of prescription medication is considered positive and suggests the need for further evaluation.

Because of the risk of relapse, consider asking about past use as well:

- *Have you ever used illegal drugs or misused prescription medication?*³⁸

Note that these three simple questions about drug use together with the 3 question AUDIT-C make a brief screening tool that covers all substances other than tobacco.

The next step:

Patients who use any drugs or have a history of using them in the recent past should receive further screening as described in the following pages.

AUDIT-C PLUS 2

For a quick 5-question screening that covers alcohol and drugs, the National Council for Mental Health³⁹ guideline on SBIRT recommends the AUDIT-C plus 2 which adds two drug-related questions to the AUDIT-C's 3 question screening on alcohol. The drug-related questions regarding the past 3 months are:

1. How often have you used marijuana?
2. How often have you used an illegal drug or a prescription medication for non-medical reasons? (if needed, add “for example, for the feeling or experience it caused.”)

Like the AUDIT-C, the choices are: Never, Monthly or less, 2-4 times a month, 2-3 times a week, 4+ times a week.

The next step: Patients who use any drugs or have a history of using them in the recent past should receive further screening.

Prescription Drug Monitoring Programs (PDMPs)

Prescription drug monitoring programs, available in the majority of states, track pharmacy activity and can give you a report on your patient's prescriptions for scheduled substances. A pattern of obtaining prescriptions from multiple pharmacies and/or providers is called "doctor shopping" and may indicate a drug use disorder, diversion, or under-treated pain. A report should be obtained for all patients who are taking prescription pain medications or other scheduled substances and also for those for whom such a prescription is being considered. Look for the prescription monitoring program in your state.

DRUG SCREENING: DAST 10

Brief Description

An example of a structured screening tool for drug use is the DAST-10. It consists of 10 questions and takes around 3 minutes. It can be used in primary care and several other settings with adults and adolescents.⁴⁰ It is sensitive for detecting drug use disorders.⁴¹

Purpose & Evidence

- **Purpose:** The Drug Abuse Screening Test (DAST) assesses problems and consequences related to drug (including prescription) misuse. Primary care physicians can use this tool to assess for potential substance use disorders in all new patients.
- **Target population:** Adults and adolescents
- **Evidence:**
 - Very high internal consistency and reliability on full version⁴⁰

Test Features

- **Estimated time:** About 3 minutes to administer and score
- **Length:** 10 items
- **Administered by:** Self-Report
- **Intended settings:** Primary care, psychiatric clinics, inpatient
- **Scoring and Interpretation:** Each positive response receives 1 point.

DAST-10 Criteria

- 1-2** Monitor patient and reassess later
- 3-5** Investigate substance use further

- 6+ Address the problem immediately

DRUG SCREENING: NM ASSIST

Brief Description

Another example of a structured screening tool for drug use is the NM ASSIST, which can be used as an alternative to the DAST 10. It consists of 15 questions and takes 15 minutes. It assesses for illicit drug use and non-medical use of prescription drugs. Online and print versions exist. The online version focuses on drug use and follows the NIDA Quick Screen described above¹² if the Quick Screen is positive for drug use.

Purpose & Evidence

- **Purpose:** The NIDA-Modified **A**lcohol, **S**moking and **S**ubstance Involvement Screening Test (NIDA-Modified ASSIST) assesses frequency of use and abuse of substances (e.g., alcohol, tobacco, prescription and illegal drugs, and controlled medications) to determine if an intervention is necessary. An online NIDA Quick Screen, discussed earlier in this guide starts with a pre-screening question that directs the online user to continue on to the full NIDA-Modified ASSIST if indicated.
- **Target population:** Adults
- 1. **Evidence:** The ASSIST, from which this test is adapted, has excellent accuracy for detecting substance use disorder and other abuse.⁴² It is validated internationally.⁴³

Test Features

- **Estimated time:** About 15 minutes to administer and score
- **Length:** 7 multidimensional items. Use with NIDA Quick Screen as a prescreen.
- **Administered by:** Online or by patient interview. The online version, starting with the NIDA Quick Screen, automatically skips questions that do not apply to the patient and thus takes less time. It is also more accurate and convenient.¹²
- **Intended settings:**
Primary care
- **Scoring and Interpretation:** Computerized versions do this automatically. A "Substance Involvement Score" reveals risk for Illicit or non-medical prescription drug use in general and for each substance the patient has ever used: Lower Risk (0-3), Moderate Risk (4-26), and High Risk (27+). Treatment recommendations are made for each risk level.

Sample substance abuse score range from the online version

Cannabis Total – 6 Moderate Risk
Inhalants Total – 2 Lower Risk

COMBINED ALCOHOL AND DRUG SCREENING

CAGE-AID Brief Description

CAGE-AID (Adapted to Include Drugs) is a quick screening tool with four questions that takes approximately 1 minute. It is like CAGE but adapted to include drug use. It does *not* ask about tobacco or assess the severity of the problem.⁴⁴

CAGE-AID Questions

The CAGE or CAGE-AID should be preceded by these two questions:

1. *Do you drink alcohol?*
2. *Have you ever experimented with drugs?*

If the patient only drinks alcohol, then ask the CAGE questions. If the patient has experimented with drugs, ask the CAGE-AID questions. The CAGE questions are simply the CAGE-AID questions seen below without the mention of drug use.

CAGE-AID questions:

C

Cut down – Have you ever felt you ought to cut down on your drinking or drug use?

A

Annoyed – Have people annoyed you by criticizing your drinking or drug use?

G

Guilty – Have you ever felt bad or guilty about your drinking or drug use?

E

Eye-opener – Have you ever had a drink or used drugs first thing in the morning to steady your nerves or to get rid of a hangover?

Reprinted with permission from Brown & Rounds, 1995.⁴⁵

Purpose & Evidence

- **Purpose:** The CAGE-AID is a version of the CAGE alcohol screening questionnaire, adapted to include drug use. It assesses likelihood and severity of alcohol and drug use disorder.
- **Target population:** Adults and adolescents
- Advantages/Limitations
- Evidence

Test Features

- **Estimated time:** Brief, approximately 1 minute to administer and score
- **Length:** 4 items
- **Administered by:** Patient Interview or Self-Report

- **Intended settings:** Primary care
- **Scoring and Interpretation:** Of the 4 items, one or more positive responses (a "yes" answer) is considered a positive screening result, and substance use should be further addressed with the patient.

KEY POINT:

- Patients who answer "yes" to one or more questions on the CAGE/CAGE-AID should have further assessment.

POLL: WHICH OF THE FOLLOWING SCREENING METHODS FOR SUBSTANCE USE PROBLEMS DO YOU USE OR PLAN TO USE IN YOUR PRACTICE?

Choices

1. Patient interview only
 - 19% (470 votes)
2. Separate screening tools for each substance
 - 14% (331 votes)
3. NIDA modified ASSIST
 - 10% (245 votes)
4. CAGE-AID
 - 51% (1241 votes)
5. None of the above
 - 5% (132 votes)

Total votes: 2419

SCREENING FOR TOBACCO USE

Initial Questions About Tobacco Use

All patients should be screened for tobacco use.⁴⁶

Screening Question

Ask: *Have you ever used tobacco?*

- If **no**, encourage them never to start.
- If **yes**: Ask: *Are you currently using tobacco?*
 - If **yes**, continue with screening/assessment questions for tobacco users described in the following pages.
 - If **no**, ask: *When did you last use tobacco?*

Ask: *How often are you exposed to cigarette smoke?*

Next Step

For patients who use tobacco: Patients who use tobacco currently should be further screened/assessed as described in the following pages.

For patients who recently quit tobacco: Patients who have recently recovered (past year) should be given a brief intervention to prevent relapse, covered later in this training. Those who quit over a year ago and who have stabilized in their abstinence may simply need encouragement not to relapse.

For patients regularly exposed to tobacco smoke: Patients should be counseled regarding the health risk of second and third hand smoke, particularly if they are at high risk for cardiovascular disease.

The USDHHS guideline: Treating Tobacco Use and Dependence: 2008 Update describes screening, counseling and pharmacological treatment for tobacco use.⁴⁶

Guidelines

Guidelines from the U.S. Preventive Services Task Force (USPSTF) recommend that clinicians ask all adults about tobacco use, recommend that those who use tobacco stop using it and provide behavioral interventions and FDA-approved pharmacotherapy to help them stop.⁴⁷

ASSESSING TOBACCO USERS

Further evaluation of current tobacco users

Ask those who use tobacco, the following:

1. Type of tobacco used

- Type of tobacco and brand name?

1. Level of dependence on tobacco

- Length of use (in months or years)?
- Amount used per day on average?
- After you wake up do you smoke your first cigarette or use other forms of tobacco in less than 30 minutes?

1. Readiness to quit

- How interested are you in stopping smoking or stopping use of other forms of tobacco? (Not at all? A little? Some? Very?)

Tobacco Use Assessment Form

Tobacco screening questions can be presented in a questionnaire, such as the *Tobacco Use Assessment Form* (Adapted from ⁴⁸) provided in the "External Resources" section.

E-Cigarettes and Other Products

It is important to assess your patient for e-cigarettes (slang: vapes) and other tobacco products, such as smokeless tobacco. These products can have negative health

consequences, and may justify a brief intervention or referral for treatment, but are often neglected in tobacco screening.

PRACTICE TIPS

Be sure to mark the patient record so that the patient's tobacco use status can be seen at a glance.

FYI

If you choose a screening tool that does not include questions on tobacco use, such as the CAGE or CAGE-AID, you will need to screen separately for tobacco use.

COMPREHENSIVE SCREENING TOOLS

Asking About All Substances: Alcohol, Drugs, and Tobacco

It is important to screen all patients for all substance use: alcohol, drug use (illicit drugs and/or misuse of prescription drugs), and tobacco use. The following instruments screen for all three substances at once.

NIDA Quick Screen

This comprehensive screening tool, screens for alcohol, drug, and tobacco use in adults, consists of only four questions, and takes just a few minutes. It is available online and for free as the first part of the NIDA Drug Screening Tool. This tool first determines whether the patient has used any substances in the past year. If they have not, the survey ends there. Scoring is automatic. Advantages of this system are its comprehensiveness, easy access online, and automatic scoring.

NIDA QUICK SCREEN QUESTIONS

1. In the past year, how often have you used alcohol?
(4+ in one day for women, 5+ in one day for men)

Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily
-------	------------------	---------	--------	--------------------------
2. How often have you used tobacco products in the past year?

Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily
-------	------------------	---------	--------	--------------------------
3. Have you misused prescription drugs during the past year?

Never	Once or Twice	Monthly	Weekly	Daily or Almost Daily
-------	------------------	---------	--------	--------------------------
4. Have you used illegal drugs in the past year?

Never	Once or	Monthly	Weekly	Daily or
-------	---------	---------	--------	----------

Twice

Almost Daily

If the patient screens positively for alcohol or tobacco, the provider is directed to assessment tools for those substances. If the patient screens positively for illegal or prescription drug use, the survey continues to a full drug assessment tool, also online, called the NIDA-Modified ASSIST.

NIDA-Modified ASSIST

This online tool follows the NIDA Quick Screen if there is a positive result. It can be used with adults and adolescents and covers most common drugs. It provides assessment detail beyond just screening.⁴³

Brief Screener for Tobacco, Alcohol, and Other Drugs (BSTAD)

Brief self-administered questionnaire or clinician-administered interview for adolescents. Includes questions on alcohol, drugs, and tobacco regarding use within last year, 90 days, and 30 days.⁹

Screening to Brief Intervention (S2BI)

Used for adolescents. Initial 3-questions asks about tobacco, alcohol, and marijuana. If use is indicated, questionnaire continues to ask about prescription or illegal drugs, inhalants, and synthetic drugs.⁹

QUIZ: WHAT SUBSTANCE IS OMITTED MOST OFTEN IN SCREENING?

Question What substance is skipped most often in screening?

Choose one

1. Misuse of prescription drugs
 - Feedback: Correct. Many providers do not ask about misuse of prescription drugs when screening for substance misuse.
2. Illegal drugs
 - Feedback: Incorrect. Many providers do not ask about misuse of prescription drugs when screening for substance misuse.
3. Alcohol
 - Feedback: Incorrect. Many providers do not ask about misuse of prescription drugs when screening for substance misuse.
4. Tobacco
 - Feedback: Incorrect. Many providers do not ask about misuse of prescription drugs when screening for substance misuse.

VIDEO: SCREENING CHILDREN AND ADOLESCENTS

Special Considerations for Children and Adolescents

There are several special considerations in screening adolescents for substance use:⁴⁹

- Build rapport early so that trust is already established when discussions about substance use are needed.
- At risk use is especially important in children and adolescents because
 - Even first use can result in unintentional injury or death with naive use and relatively higher level of risk-taking behavior on the average
 - Higher level of risk for developing addictions neurodevelopmentally
- Any use of alcohol is considered at risk, unlike adults.
- Use developmentally appropriate screening tools, such as the CRAFFT
- Any use should be identified followed by assessment as to where the youth falls on the spectrum from early experimental use through severe substance use disorder.

CRAFFT

CRAFFT is a 6-question screening tool that takes 5 minutes. It is used for adolescents under the age of 21. It does *not* ask about tobacco or assess the severity of the problem.^{50,51}

It begins by asking the adolescent if they have used alcohol, marijuana, or anything to get "high" in the past 12 months. A positive response from the patient for use of any of these substances will advise the provider to begin with the series of 6 questions, ordered by the CRAFFT mnemonic. A positive response on 2 or more of the 6 questions indicates a need for further assessment.

Interview Example

Video: The video "SBIRT in Pediatrics: Teen Alcohol Use Case - Good Doctor example - PART I: Screening".⁵² which illustrates a young patient being interviewed regarding substance use, can be found here: https://www.youtube.com/watch?v=2c_uddHJbwg

SPECTRUM OF SUBSTANCE USE FOR CHILDREN AND ADOLESCENTS

Stage	Description
Abstinence	"No use" to "a few sips/puffs"
Experimentation	First one or two times used
Limited use	Use with friends in low risk situation without resulting problems at predictable times, such as weekends
Problematic use to Mild Substance Use Disorder	Use in a high risk situation, e.g., driving or that results in problems, such as a fight or school suspension; use for emotional

	regulation. (1-3 of the criteria for substance use disorder)
Moderate substance use disorder	Use associated with recurring problems or that interferes with functioning, such as school, personal care, etc. (4-5 criteria for substance use disorder)
Severe substance use disorder	Compulsive use, dependence, loss of control (6 or more criteria for substance use disorder)

QUIZ: SUBSTANCE USE SCREENING

Question: Which of the following patients should be screened for substance use?

Choose one

1. Patients who display one or more "Red Flags" (signs of substance misuse)
 - Feedback: Incorrect. If you only screen people with red flags you will miss some people with relatively less candid substance use. All adolescent and adult patients should be screened for all substance use, past and present, including tobacco and exposure to 2nd hand tobacco smoke, alcohol, illicit drugs, and misuse of prescription drugs.
2. Patients with whom you have an established relationship
 - Feedback: Incorrect. All adolescent and adult patients should be screened for all substance use, past and present, including tobacco and exposure to 2nd hand tobacco smoke, alcohol, illicit drugs, and misuse of prescription drugs.
3. Patients for whom you are considering prescribing potentially addictive medications
 - Feedback: Incorrect. This is too limited. All adolescent and adult patients should be screened for all substance use, past and present, including tobacco and exposure to 2nd hand tobacco smoke, alcohol, illicit drugs, and misuse of prescription drugs.
4. All adolescent and adult patients
 - Feedback: Correct. All adolescent and adult patients should be screened for all substance use, past and present, including tobacco and exposure to 2nd hand tobacco smoke, alcohol, illicit drugs, and misuse of prescription drugs.

COMMUNICATION SKILLS FOR SCREENING

Preparation

When trying a new screening instrument, read it aloud before administering it to patients. For example, try reading the sample script for the NIDA-Modified ASSIST:

Provider: *Hi, I'm _____. Nice to meet you. If it's okay with you, I'd like to ask you a few questions that will help me give you better care. The questions relate to your experience with*

alcohol, tobacco, and other drugs. By "drugs" I mean both "street drugs" and prescribed (like pain medications), if you have taken them for reasons or in doses other than being prescribed them. I ask these questions only to better diagnose and provide any treatments you might need.

Wording

Reading or repeating screening questions as they are written is important because these tests were validated using these words. Providers can repeat or clarify questions, but it is best not to modify them.

Provider: *Have people annoyed you by criticizing your drinking or drug use?*

Patient: *Have they annoyed me or I annoyed them?*

Provider: *Have people annoyed you by criticizing your drinking or drug use?*

The clinician patiently repeated the question, clarifying for the patient that the question asks about the patient's *own annoyance* with the reactions of others to the patient's substance use, not the annoyance of others with them. This question in the CAGE or CAGE-AID screening tools sometimes causes confusion, because providers and patients may misunderstand it to be about the annoyance of others.

MOTIVATIONAL INTERVIEWING TECHNIQUES

Communication to Build Patient Rapport

Effective communication skills can improve the effectiveness of screening. Patients who are abusing alcohol or drugs may be reluctant to tell the truth. The following techniques from motivational interviewing may help establish rapport and get the patient to open up:

Ask Open-Ended Questions

Provider: *Tell me more about your marijuana use*

This is more effective than asking the patient if their marijuana use is a problem, which is likely to be answered, "No."

Be Sensitive to the Patient's Own Perspective

Provider: *Anything you say about your drinking stays between us and I only use to understand your needs and how I might help, so please feel free to be open and honest when answering my questions.*

Listen Reflectively

Patient: *Paraphrase what you heard from them to let them know you are listening carefully.*

Provider: *I lost all my friends. It seems like no one wants to be close to me since I started using a lot of drugs.*

It sounds like your drug use makes you feel pretty isolated.

Convey a Non-Judgmental Attitude

Provider: *I am not here to judge you. Instead, I want to help you make the best possible decisions about your use of alcohol.*

Empathize with the Patient

Provider: *I know this is not the easiest topic to talk about, and I appreciate that you are willing to talk with me about it.*

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Note: Additional Motivational Interviewing skills are covered later in the training.

PRACTICE TIP

Pauses are a powerful way to draw people out without asking further questions. After making a simple question or a reflective statement, pause and wait patiently. Most people will fill the pause.

DISCUSSING SCREENING RESULTS

After scoring the screening tool, you can review or confirm with the patient his or her responses and use the opportunity to explain why their answers make you concerned about their health.

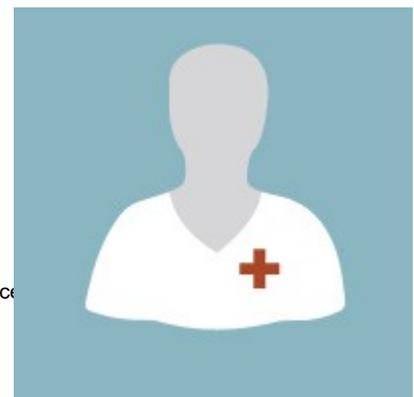
Note: It is important to let clients know the health risks associated with even low to moderate drinking. Current research suggests that even low to moderate drinking increases a person's risk for alcohol-related cancer by 38%. Heavy drinking increases the risk of developing these cancers by 51%. It is important to note that the most current research suggests that there are no net health benefits to drinking alcohol.⁵⁴

Provider: *I looked over the health assessment that you completed with our nurse and a few of your answers caught my attention. For instance, I am concerned about your drinking habits and how they may impact your health. Can we talk about that?*

STAFF ROLE IN SCREENING

Staff Role

Keep in mind that many of the SBIRT steps can be completed by multiple staff: medical assistant, physician assistant, nurse



practitioner, social worker, or counselor. Throughout this activity, dialogue examples will be given for different medical staff. The various screening tools are designed for simple administration and scoring while the later steps simply require an understanding of the brief intervention steps and motivational interviewing.

Flow of Information

Each standardized screening tool includes instructions for administration and scoring so they can be administered and scored by staff with minimal training. If initial screening is completed via a self-administered, computer or paper, standardized health assessment or by staff interview, a system for flagging responses of concern, such as those that suggest unhealthy alcohol use, needs to be in place. "Flagging" of positive responses can be achieved by a note in the patient record or use of alerts in certain electronic medical records for this purpose. It can be a very quick, simple process once it is set up and becomes part of the routine.

Examples of Screening Results

Significant results on admission screening:

BLOOD PRESSURE 160/90; CAGE-AID POSITIVE: 2 OUT OF 4 QUESTIONS

Vital signs and substance use

BP: 120/90, PULSE: 68, TEMP. 98.0, SUBSTANCE USE: NIDA QUICK SCREEN – NEGATIVE

PRACTICE TIP

Use of Electronic Health Records (EHR). Select an electronic medical record that has an expectation to screen for all substances: tobacco, alcohol, illicit drugs, or misuse of drugs. Choose EHRs where the user must go through this step in admitting a new patient and in periodic updating of the medical history. Also, the electronic record should have some mechanism of reminding the provider of any positive screening results.

TECHNOLOGY-SUPPORTED CARE

Treatment Technology

Emerging technologies have made it possible to support patient treatment inside the office and expand the exchange of information outside of office visits:⁹

- Telehealth delivery systems, such as electronic health records (EHR), allow for the exchange of patient information between providers, creating a more coordinated care approach for total health.



- Patient portals allow for web-based delivery of information.
- Mobile apps that can be used for patient education are readily available wherever the patient uses a mobile device and can be used to provide patient education.
- Telemedicine provides remote clinical services to patients through the use of two-way, real-time interactions, such as through video conference calling. It allows patients to receive diagnosis and care for a number of ailments when they are unable to physically get to the medical office.

Assessments

Electronic assessments can help aid in early intervention for substance abuse, and also help your patients with their overall addiction treatment needs. Studies show that patients are more likely to disclose substance use within an online/digital setting rather than in face-to-face assessments.⁹ Studies have also shown that web-based, evidence-based assessments are effective in determining levels of substance use and identifying those who may benefit from treatment.⁹ These types of assessments can be utilized for early interventions, which will, in turn, improve treatment outcomes for those who need addiction support. NIDA has developed one such online screening tool. See the External Resources.

Interventions

Electronic interventions can be utilized to support and extend care outside the office setting. Ongoing electronic interventions, such as automatic motivational calls to patients with substance use issues, may help them to decrease their substance use over time and be more encouraged to work towards continued overall abstinence.⁹

To find one of the many apps available that support recovery, direct patients to search their mobile app store for terms such as "substance abuse recovery apps" or "addiction apps".

COMORBID SUBSTANCE USE DISORDER AND MENTAL HEALTH DISORDERS

Overview

Chronic substance use is associated with increased risk for many mental health conditions, listed below. One reason mental health problems contribute to developing substance use problems is that many individuals attempt to self-medicate their mental health symptoms through substance use. Conversely, chronic substance use can lead to mental health problems. In either event, it is important to discover mental health problems in people struggling with substance use problems through mental health screening.

Co-occurrence of substance use disorder(s) with mental disorder(s) is often called a "dual diagnosis." The incidence is high at around 7.9 million adults or around 45% of those seeking treatment for substance use disorder.⁵⁵

For example, data from a classic study found the following prevalence for mental health disorders one year after the participants had been identified as alcohol dependent (the DSM diagnosis at the time).^{56,57}

1. Mood Disorders: 29.2%
2. Major Depressive Disorder: 27.9%
3. Bipolar Disorder: 1.9%
4. Anxiety Disorders: 36.9%
5. Generalized Anxiety Disorder (GAD): 11.6%
6. Panic Disorder: 3.9%
7. Post Traumatic Stress disorder (PTSD): 7.7%

Depression

Depression is the most common mental health disorder co-occurring with substance use disorders.⁵⁵ The U.S. Preventive Services Task Force (USPSTF) has indicated that all adults should be screened for depression, even in the absence of a past history.¹⁵ It is particularly relevant in patients having substance use disorders, giving the frequency with which they are co-morbid. Screening tools suggested by the USPSTF include the Patient Health Questionnaire, the Hospital Anxiety and Depression Scales in adults, the Geriatric Depression Scale in older adults, and the Edinburgh Postnatal Depression Scale in postpartum and pregnant women. Noting the severity of each condition is also important.

Other Mental Health Disorders

Anxiety is also common in persons with substance use disorders. PTSD is particularly common. As many as 40% of patients who are drug dependent report symptoms of PTSD.⁵⁸

Personality disorders, bipolar, Attention Deficit and Hyperactivity Disorder (ADHD), and psychosis are among the other mental health diagnoses with a relatively high incidence of substance use disorder.

LAB TESTS

Appropriate use of drug testing to improve patient care

For patients who are abusing drugs other than alcohol, there are a few instances when drug testing may be useful.⁵⁹

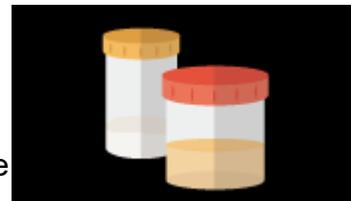
- When you suspect the presence of drugs but the patient denies use
- When the patient has unexplained physical signs of drug use
- When treating patients who have a history of substance use disorder and/or relapse
- When the patient needs medication prescribed that has serious contraindications with alcohol or drugs that are used
- To confirm information that the patient provided during the interview about his/her

substance use

A special note regarding alcohol: Interviews and questionnaires have greater sensitivity and specificity than urine tests that measure biochemical markers for alcohol¹⁸.

Administering an on-site drug test

In a primary care setting, urine drug testing (UDT) is the most commonly used method of drug testing, because of the ease of obtaining the sample and the potential for high concentration of the substance for up to four days post-drug use. "Point of care" tests are increasingly being used to provide quick results – in as little as five minutes. A point-of-care urine drug test will typically only reveal a specific class of drug but not a single drug or the concentration of the substance in the specimen.⁶⁰ These tests are getting increasingly sensitive and specific.



Interpreting urine drug test results

Providers should not immediately assume that the patient with a positive test result has a substance use disorder;⁶¹ many factors need to be considered. For example, ask patients what prescription, over-the-counter, and herbal medications they are taking, because they might cause false positives or negatives. Consider following up a positive or unexpected result with a confirmatory laboratory-based test to confirm a positive point-of-care test or to get more information, such as on specific drugs. Discuss positive lab test results with the laboratory to learn the possibility of false negative and false positive results. Include all urine test results and interpretation in the patient's chart. If the results point to a substance use disorder after other possibilities are ruled out, meet with the patient to discuss.

MEDICAL CONDITIONS COMORBID WITH SUBSTANCE USE DISORDERS

Overview

Chronic substance use is associated with increased risk for many medical conditions. Part of following up on positive screening for problematic substance involves assessing them for these conditions. Conversely, patients having these medical conditions should be carefully screened for substance use problems. The list of such conditions is extensive. The following are just some of the most common. The External Resources section refer to more extensive lists.

Alcohol

Medical problems associated with chronic alcohol use include the following:

- Hepatic encephalopathy
- Cardiomyopathy
- Arrhythmia

- Alcoholic hepatitis and fatty liver/steatosis
- Liver cirrhosis
- Sleep Disorder
- Pancreatitis
- Cancer (heightened risk): Oral, Esophageal, Throat, Liver, Breast

24,62,63

Drugs

Medical problems associated with misuse of prescription drugs and other drug abuse include the following:

- Risk for addiction to IV drug use
- Risk for overdose

Medical problems associated with intravenous drug use include the following:

- Risk for contracting HIV, Hepatitis B or C, Tuberculosis, and Syphilis
- Tissue infections and abscesses
- Pulmonary complications
- Occult infection
- Increased risk of STDs – chlamydia, gonococcal disease, and human papilloma virus

64–66

Tobacco

Medical problems associated with tobacco use include the following:

- Increased risk of many forms of cancer, especially lung, laryngeal, and oral cancer
- Increased cardiovascular risk
- Chronic obstructive pulmonary disease (COPD)/Emphysema
- Periodontal disease / Premature tooth loss
- Many other medical conditions are caused or made worse by tobacco use. The list is too long to include here. The reader is referred to the Surgeon General's Report for a more detailed list: Health Consequences of Smoking. See the External Resources section.

67,6869

Medical problems associated with environmental tobacco smoke exposure include the following:⁷⁰

- Otitis media
- Increased cardiovascular risk and heart disease
- Increased risk of certain forms of cancer

- Frequent as thma attacks
- Increased respiratory infections and symptoms
- Increase risk of lung cancer

PUTTING IT ALL TOGETHER

Information gained through the following gives the "big picture" regarding a patient's substance use:

- Screening
- History and physical
- Lab tests (if any)
- Interview

This gives enough information to proceed with a brief intervention, if warranted, during the same appointment. A brief intervention can usually be initiated without definitive lab results as long as you have some knowledge of the patient's possible substance use disorder.

Brief interventions are covered in the next module in this training activity

Keep In Mind

Determine whether an intervention is needed based on the level of risk determined by screening:

- No intervention necessary
- Brief intervention in primary care
- Brief intervention in primary care plus referral

QUIZ: CASE STUDY – MR. NATHAN RENNIE

Read the following case information and answer the question at the bottom.



Patient: Mr. Nathan Rennie

Age: 40 years old

Scenario: Mr. Rennie needs pre-surgical screening to repair a torn ACL. He tore his ACL 4 weeks ago during a neighborhood football game. During routine questioning, you ask Mr. Rennie about substance use. In pre-screening, he denies smoking or using illegal drugs or misusing prescription drugs, but he admits to using some alcohol.

Question: Of the following choices, which is(are) the best screening instrument(s) to use in

this case?

1. MAST-G

- Feedback: Incorrect. The MAST-G is appropriate for screening for alcohol use in seniors.

2. CRAFFT

- Feedback: Incorrect. The CRAFFT is appropriate for screening for alcohol or drug use in adolescents.

3. TWEAK

- Feedback: Incorrect. The TWEAK is appropriate for screening for alcohol use in adults, but mostly used for pregnant women.

4. CAGE

- Feedback: Partially Correct. The CAGE is appropriate for screening for alcohol use problems in adults. A more structured screening tool, such as the AUDIT would provide a more in-depth picture of the severity of the problem.

5. AUDIT

- Feedback: CORRECT. AUDIT is the best choice as it is appropriate for use with adults and will give more in depth information about his alcohol use than the CAGE.

VIDEO: CASE: MR. RENNIE CAGE INTERVIEW

The CAGE Interview Using a Patient-Centered Approach

Video: The video “Nathan CAGE #2”.⁷¹ which illustrates a patient being interviewed using the CAGE, can be found here: <https://www.youtube.com/watch?v=MDAay15544U>

Note: The clinician in this example used patient-centered language and questions while using the CAGE. Notice how this approach can lead to the patient being cooperative.



Provider: *I would like to ask a few questions, if I may, regarding drinking alcohol that are helpful in finding out if it might be affecting your health.*

Mr. Rennie: *Okay.*

Provider: *Have you ever felt the need to drink less than the number of drinks per day that you drink? (Cutting Back)*

Mr. Rennie: *Yes, there have been times when I thought it was best for me to limit myself to only one drink on work nights.*

Provider: *I see. And have you ever been **Annoyed** by people being critical about your drinking?*

Mr. Rennie: *No.*

Provider: *Okay. Has there ever been a time when you were drinking and you behaved in such a way, you felt bad about it afterward? For example, losing your temper and saying something you were sorry for later?*

Mr. Rennie: *I do have a shorter fuse when I'm drinking.*

Provider: *So would you say you have some **Guilt** about that?*

Mr. Rennie: *Yes.*

Provider: *All right. And finally, have you ever woke up after drinking the night before, feeling so bad you found having a drink made you feel better? (**Eye Opener**)*

Mr. Rennie: *No, I can't imagine. I'd think this would only make me feel sicker!*

DISCUSSION OF CAGE INTERVIEW

The clinician in the previous example used patient-centered language and questioning. As a result, Mr. Rennie was cooperative when answering the CAGE questions. Here is a breakdown of that conversation:

Provider: *I would like to ask a few questions, if I may, regarding drinking alcohol that are helpful in finding out if it might be affecting your health.*



Mr. Rennie: *Okay.*

Asking permission and putting Mr. Rennie at ease before firing questions at him yields a less defensive response. Ideas for putting the patient at ease include the following:

- Letting the patient know that you are going to ask a few questions and what they are about.
- Using a caring tone so that the patient understands you are on his side.

Provider: *Have you ever felt the need to drink less than the number of drinks per day that you drink? (**Cutting Back**)*

This question is worded in a way that does not accuse the patient of drinking in excess.

Provider: *I see. And have you ever been **Annoyed** by people being critical about your drinking?*

This is a simple way of asking the question with no unnecessary details added.

Provider: *Okay. Has there ever been a time when you were drinking and you behaved in such a way, you felt bad about it afterward? For example, losing your temper and saying something you were sorry for later?*

Mr. Rennie: *I do have a shorter fuse when I'm drinking.*

Provider: *So would you say you have some **Guilt** about that?*

Mr. Rennie: Yes.

Sometimes an example will be needed if you sense the patient is having trouble with the question.

Provider: All right. And finally, have you ever woke up after drinking the night before, feeling so bad you found having a drink made you feel better? (**Eye Opener**)

This a good way to ask the final question, which is relatively straight-forward.

QUIZ: MR. RENNIE – INTERPRETING CAGE RESULTS

Read the following case information and dialogue and answer the question at the bottom.



Patient: Mr. Nathan Rennie

Question: Based on this interview, did Mr. Rennie screen positive on the CAGE?

Choose one

1. Yes

- Feedback: Correct. Mr. Rennie had 2 positive answers. He has intentionally Cut back his usage and has felt Guilty about something he's done while drinking. He did not answer positively to the "Annoyed" (by the reactions of other people to his drinking) or Eye Opener (drinking to feel better the next morning) questions. Even one response is considered a positive test indicating "at risk" status and should receive further assessment to determine the severity of his problem. With two

positive responses, he has around a 72% chance of having an alcohol problem.⁷²

2. No

- Feedback: Incorrect. Mr. Rennie had 2 positive answers. He has intentionally Cut back his usage and has felt Guilty about something he's done while drinking. He did not answer positively to the "Annoyed" (by the reactions of other people to his drinking) or Eye Opener (drinking to feel better the next morning) questions. Even one response is considered a positive test indicating "at risk" status and should receive further assessment to determine the severity of his problem. With two positive responses, he has around a 72% chance of having an alcohol problem.⁷²

3. It still isn't clear

- Feedback: Incorrect. Mr. Rennie had 2 positive answers. He has intentionally Cut back his usage and has felt Guilty about something he's done while drinking. He did not answer positively to the "Annoyed" (by the reactions of other people to his drinking) or Eye Opener (drinking to feel better the next morning) questions. Even one response is considered a positive test indicating "at risk" status and should receive further assessment to determine the severity of his problem. With two positive responses, he has around a 72% chance of having an alcohol problem.⁷²

QUIZ: MR. RENNIE – NEXT STEP

Read the following case information and answer the question at the bottom.



Patient: Mr. Nathan Rennie

Age: 40 years old

Scenario: Mr. Rennie needs pre-surgical screening to repair a torn anterior cruciate ligament, torn 4 weeks ago during a neighborhood football game.

During routine questioning, you ask Mr. Rennie about substance use. In pre-screening, he denies smoking or using illegal drugs or misusing prescription drugs, but admits to using some alcohol. After you complete your screening, he says, "That's enough questions about that."

Question: Given Mr. Rennie's history and screening and interview results regarding his alcohol use, followed by this statement of resistance to further questions, which of the following is the best next step?

Choose one

1. Don't pursue the topic further, because Mr. Rennie obviously doesn't think he has a problem and doesn't want help.
 - Feedback: Incorrect. His alcohol use is an important problem to pursue. However, it needs to be done in a way that acknowledges his feelings of resistance. You

should try a brief intervention to help lower his resistance and encourage Mr. Rennie to discuss his drinking and consider cutting back.

2. Conduct a brief intervention

- Feedback: Correct. Because Mr. Rennie was resistant at first, provide a brief intervention to see if you can help decrease his resistance and encourage him to discuss his drinking.

3. Ignore his resistance and continue with an assessment of his alcohol use, because it is very important.

- Feedback: Incorrect. If Mr. Rennie is unwilling to admit that he has a drinking problem then he is unlikely to cooperate with your assessment of its severity. Instead, you should try a brief intervention and see if you can help lower his resistance and encourage him to discuss his drinking. After a brief intervention, he might be more open to an assessment.

MR. RENNIE – SIASQ FOR ALCOHOL SCREENING

The NIASQ Alcohol Screening Recommendations

After he screens positively via the SIASQ for at least once having a heavy drinking day (>5 drinks) in the past year, the NIAAA could be used to further explore his alcohol use. The National Institute on Alcohol and Alcohol Abuse has a straightforward screening process and brief pocket guide, presented in their 2005 Guidelines.



Nathan's responses to the NIAAA heavy drinking screening

Provider: *Do you sometimes drink alcoholic beverages?*

Mr. Rennie: *Yeah.*

Provider: *Okay, so how many times in the past year have you had 5 or more drinks in a day?*

Mr. Rennie: *Uh... I guess a few times.*

Provider: *On average, how many days a week do you have an alcoholic beverage?*

Mr. Rennie: *Every day, pretty much.*

Provider: *Okay, on a typical day, about how many drinks do you have?*

Mr. Rennie: *Only 2 or 3.*

SIASQ AND NIAAA INSTRUMENT CONTINUED



Mr. Rennie

Now you have established that Mr. Rennie's drinking is a concern:

- Mr. Rennie has had several heavy drinking days in the past year. Having 5 or more drinks in a day defines a heavy drinking day for men; it is 4 or more drinks in a day for women. Just one heavy drinking day is a positive screening result.
- Mr. Rennie's number of drinking days per week is also of concern because it should be no more than 14 drinks per week and he goes over that with the 2 to 3 drinks he has every day.

Asking a few more questions will help to determine whether Mr. Rennie has alcohol use disorder and the severity:

Alcohol Use Disorder

In the DSM 5, having 2 or more of the following symptoms in a 12 month period means the individual has "alcohol use disorder".¹⁶ Severity of this disorder is added to the diagnosis, according to the number of criteria listed below that are met:

- Mild is 2-3 criteria
- Moderate is 4-5 criteria
- Severe is 6 or more criteria

In the former DSM classification, alcohol use disorder was divided into abuse and dependence diagnoses. Craving is a new criterion that has been added in the DSM 5, and having legal problems is no longer a criterion.

Alcohol Use Disorder Criteria

In the past 12 months has the patient:

1. not been able to cut down or stop alcohol use
2. not been able to stick to drinking limits
3. shown tolerance for alcohol
4. shown signs of withdrawal from alcohol
5. had cravings for alcohol
6. kept drinking despite problems
7. spent a lot of time drinking
8. spent less time on other matters in their life

9. risked bodily harm (drinking and driving, operating machinery, swimming)
10. had relationship trouble (family or friends)
11. had role failure (interference with home, work, or school obligations)

POLL: BASED ON THE CHOICES BELOW, WHAT DIAGNOSIS DO YOU THINK MR. RENNIE HAS?

1. At risk but no diagnosis
 - 9% (255 votes)
2. Alcohol use disorder mild (2-3 criteria)
 - 59% (1750 votes)
3. Alcohol use disorder moderate (4-6 criteria)
 - 33% (981 votes)
4. No alcohol problems
 - 0% (4 votes)

Total votes: 2990

POLL DISCUSSION



Mr. Rennie:

Responses to a few more questions would be needed to assign a diagnosis, but at this point, Mr. Rennie certainly appears to be at least at risk and may have alcohol use disorder. If so, it does not appear to be severe. You do not need a final diagnosis in order to make a brief intervention that can make a difference.

An example of using the structured screening tool, the AUDIT, for obtaining a more in-depth picture of a patient's alcohol use problem will be provided later in the training.

MODULE SUMMARY

Screening for alcohol use, illicit drug use, tobacco use, and prescription drug misuse is important and can be done simultaneously using a comprehensive screening tool, such as NIDA Quick Screen. All mentioned screening instruments are available in-module, as well as through the External Resources section.

Here is a summary of **recommended** skills, organized by core competencies:

PROVIDE PATIENT-CENTERED CARE

- Screen every patient for substance use problems with a question, such as this one from NIDA Quick Screen:
"In the past year, how many times have you used, or done, the following? Alcohol, tobacco products, illegal drugs, or misused prescription drugs? (Never, once or twice, monthly, weekly, daily or almost daily)"
- Follow up on positive pre-screening (any use) with assessment questions, such as NIAAA's guide for alcohol, AHRQ's guide for tobacco, or NIDA-Modified ASSIST (available online) for drugs.
- Look for red flags of substance use problems and clusters of symptoms that – when considered together – may indicate a substance use disorder
- Discuss screening responses with your patients to get more insight and information about their substance use
- Use screening results to determine if brief intervention will be sufficient or referral to treatment is needed
- Be sensitive and non-judgmental, listen and empathize in order to connect with the patient

USE EVIDENCE BASED CARE

- Standardized screening is the best way to detect a range of substance use disorders
- Select from dozens of validated screening tools that work best for your patient population
 - NIAAA recommends a simple 2-question assessment as a starting point to alcohol screening
 - CAGE is a simple brief screening tool that can be incorporated easily into a clinical interview: One or more "yes" answers requires further assessment
 - The NM ASSIST includes an initial question and then detailed questions about frequency and urge to use different substances and impact on the patient's life
- Consider using a urine drug test when:
 - there are unexplained physical signs of problem drug use
 - you suspect use but the patient denies it
 - patient has history of substance use disorder
 - prescribing medication with contraindications to alcohol/drugs
 - confirm what patient said about his/her substance use
 - NIAAA recommends against using urine testing as a screening tool for alcohol

EXTERNAL RESOURCES DESCRIBED IN THIS MODULE:

- [Implementing Care for Alcohol and Drug use in Medical Settings](#) This "SBIRT Change

Guide" was developed by the National Council for Behavioral Health with funding from the Substance Abuse and Mental Health Services Administration (SAMHSA). Published February 2018.

- [Alcohol Use Disorders Identification Test \(AUDIT\)](#)
The 10-question Alcohol Use Disorders Identification Test (AUDIT) was developed by the World Health Organization (WHO) specifically for primary care settings as a screen for detecting at-risk or hazardous drinking. A shorter version of the AUDIT also is used in primary care and consists of the first 3 questions of the AUDIT.
- [ASSIST](#)
ASSIST Questionnaire
- [AUDIT Scoring Guide](#)
Printable PDF version of the AUDIT substance abuse screening tool with information on how many points each answer response gets.
- [CAGE-AID](#)
CAGE-AID Questionnaire
- [Commentary: DSM-5 New Addiction Terminology, Same Disease](#)
Brief critique and explanation of the changes in terminology and classification for substance use disorder as described in DSM-5. The author highlights the impact of the changes in vocabulary as well as the potential fallacies created by them.
- [CRAFFT](#)
CRAFFT Questionnaire
- [DAST](#)
28 item screening tool for drug use available through US Preventive Services.
- [Health Effects of Alcohol: What You Need to Know](#)
NIAAA overview of health effects of alcohol
- [Helping Smokers Quit – A Guide for Clinicians](#)
A website that explains the 5 A's for tobacco cessation.
- [K6 Screening Scale](#)
The K6 Screening Scale is a brief interview for detecting psychiatric disorders in individuals with substance use disorders.
- [MAST-G](#)
The MAST-G (Michigan Alcoholism Screening Test-Geriatric Version) varies from the MAST in that the questions highlight the special employment and social situations of someone who is retired and how that can relate to alcohol abuse. The tool consists of 24 questions.
- [Medical Consequences of Drug Abuse](#)
Collection of web pages on medical effects of drug addiction organized by organ systems.
- [NIAAA Alcohol Screening and Brief Intervention for Youth](#)

- [NIAAA guide for practitioners on alcohol screening and brief interventions for youth](#)
- [NIAAA Clinician's Guide: Helping Patients Who Drink Too Much](#)
This Guide is written for primary care and mental health clinicians. It has been produced by the National Institute on Alcohol Abuse and Alcoholism (NIAAA), a component of the National Institutes of Health, with guidance from physicians, nurses, advanced practice nurses, physician assistants, and clinical researchers.
- [NIAAA Screening Pocket Guide](#)
The NIAAA's pocket guide on how to screen for heavy drinking
- [NIDA Quick Screen – Online](#)
The NIDA quick screen is an online screening tool for substance abuse filled out by the patient. Based on the patient's responses, it generates a substance involvement score that suggests the level of intervention needed. This is the short, online version of the longer screening tool, the NIDA Modified ASSIST.
- [NM ASSIST Screening Tool](#)
The NM ASSIST (NIDA-Modified Alcohol, Smoking, and Substance Involvement Screening Test) clinicians through a short series of screening questions and, based on the patient's responses, generates a substance involvement score that suggests the level of intervention needed.
- [SAMHSA Substance Use Disorders](#)
SAMHSA's breakdown on changes to substance-related addictive disorder diagnoses introduced by DSM-5.
- [Screening for Drug Use in General Medical Settings](#)
Screening for Drug Use in General Medical Settings: Resource Guide
- [Substance Use Screening, Brief Intervention, and Referral to Treatment for Pediatricians](#)
Published online October 31, 2011
PEDIATRICS Vol. 128 No. 5 November 2011, pp. e1330-e1340 (doi:10.1542/peds.2011-1754)
- [The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General, 2014](#)
This comprehensive report chronicles the devastating consequences of 50 years of tobacco use in the United States (from the website).
- [TIP 42: Substance Abuse Treatment for Persons With Co-Occurring Disorders](#)
This guideline provides in-depth information on co-occurring substance use and mental disorders, including terminology, detection and treatment. It also includes examples of common screening instruments for co-occurring disorders.
- [Tobacco, alcohol, and other drugs: The role of the pediatrician in prevention, identification, and management of substance abuse.](#)
American Academy of Pediatrics policy statement on the role of the pediatrician in

- prevention, identification, and management of substance abuse. Revised in 2005
- [Tobacco Use Assessment Form](#)
Tobacco Use Assessment Form
 - [Treating Tobacco Use and Dependence: 2008 Update](#)
Treating Tobacco Use and Dependence: 2008 Update, sponsored by the Public Health Service, includes new, effective clinical treatments for tobacco dependence that have become available since the 2000 Guideline was published. This update will make an important contribution to the quality of care in the United States and to the health of the American people. (From Their Website)
 - [TWEAK](#)
The TWEAK screening test consists of five questions designed to screen pregnant women for harmful drinking habits. The tool consists of questions from the CAGE as well as the MAST, regarding tolerance and amnesia.
 - [VA/DoD Clinical Practice Guideline for the Management of Substance Use Disorders Stabilization Pocket Card](#)
A reference tool used to provide clinicians with stabilization resources for substance use disorder within active duty and veteran populations, including resources on pharmacological treatment and substance titration.

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