Screening, Brief Intervention, and Referral to Treatment

An Evidence-Based Approach

SCREENING
The following information has been adapted from the SAMHSA Core Curriculum: *Screening Patients for Substance Use in Your Practice* Setting, and slides by the National Screening, Brief Intervention & Referral to Treatment (SBIRT) Addiction Technology Transfer Center (ATTC) Network.

This project was a collaboration with the National ATTC, the Institute for Research, Education & Training in Addictions (IRETA) and the University of Pittsburgh School of Nursing.
Project Funding

This project was supported in part by funds from the Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration (SAMHSA), Department of Health and Human Services (DHHS) under grant number 1U79TI025365, “SBIRT Training for Nurse Practitioners Across the Lifespan”. The information or content and conclusions are those of the author and should not be construed as the official position or policy of, nor should any endorsements be inferred by the Center for Substance Abuse Treatment, SAMHSA, DHHS, or the U.S. Government.
What is SBIRT?

SBIRT is a comprehensive, integrated, public health approach to the delivery of early intervention and treatment services

• For persons with substance use disorders and
• Those who are at risk of developing these disorders

Primary care, mental health, inpatient hospital, dental and community settings provide opportunities for intervention with at-risk substance users before more severe consequences occur

(SAMHSA, 2017)
Why Screen Universally?

- Drinking and substance use are common but often go undetected
  - Research has shown nearly 90% of adults in need of substance use treatment go untreated
- Screening provides opportunities to intervene
  - Earlier detection of health problems related to at-risk alcohol/substance use
  - Identify alcohol/substance use patterns that can increase risk of injury or illness
  - Educate about at-risk alcohol and substance use

(SAMHSA, 2017)
## Prevalence of Substance Use

<table>
<thead>
<tr>
<th>Substance</th>
<th>Female (12 years and older)</th>
<th>Male (12 years and older)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tobacco</td>
<td>20.2%</td>
<td>31.1%</td>
</tr>
<tr>
<td>Alcohol (current drinkers)</td>
<td>47.5%</td>
<td>57.1%</td>
</tr>
<tr>
<td>Illicit Drugs</td>
<td>7.3%</td>
<td>11.5%</td>
</tr>
</tbody>
</table>

(SAMHSA- NSDUH Series H-48, 2014)
Detect Risk Factors Early

Screening can lead to more effective intervention

- The clinician is often the first point of contact
- Patients often seen by clinician due to related health problems
- Early identification and intervention lead to better outcomes

(SAMHSA, 2013)
At-Risk Alcohol Use

- **Males assigned at birth:** No more than 4 drinks on any day and no more than 14 drinks per week
- **Females assigned at birth (and anyone age 65+):** No more than 3 drinks on any day and no more than 7 drinks per week

(NIAAA, 2017)
What is a Standard Drink?

12 oz of beer

5 oz of wine

1.5 oz of liquor
Number of deaths by risk factor, World, 2016

Total annual number of deaths by risk factor, measured across all age groups and both sexes.

1. High blood pressure: 10.46 million
2. Smoking: 6.32 million
3. High blood sugar: 5.61 million
4. High body-mass index (obesity): 4.53 million
5. High cholesterol: 4.39 million
6. Outdoor air pollution: 2.81 million
7. Alcohol use: 2.58 million
8. Household air pollution: 2.38 million
9. Diet low in fruits: 1.52 million
10. Diet low in vegetables: 1.37 million
11. Low physical activity: 1.16 million
12. Unsafe water source: 1.1 million
13. Unsafe sex: 0.96 million
14. Child wasting: 0.88 million
15. Poor sanitation: 0.88 million
16. Secondhand smoke: 0.83 million
17. Low birth weight: 0.78 million
18. No access to handwashing facility: 0.76 million
19. Drug use: 0.45 million
20. Low bone mineral density: 0.44 million
21. Child stunting: 0.16 million
22. Non-exclusive breastfeeding: 0.14 million
23. Vitamin-A deficiency: 0.04 million
24. Zinc deficiency: 0.02 million
25. Iron deficiency: 0.02 million
26. Discontinued breastfeeding: 0.01 million

Source: IHME, Global Burden of Disease (GBD)

(Global Burden of Disease Collaborative Network, 2017)

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Alcohol Use Pyramid

**Level of Use**
- Alcohol Use Disorder
- At-Risk or Harmful
- Low Risk or Abstinent

**Prevalence in US**
- ~ 5%
- ~ 25%
- ~ 70%

**Goals**
- Referral to Treatment
- Brief Intervention and/or Brief Treatment
- Education and Positive Reinforcement

(Babor, Higgins-Biddle, Saunders, Maristela, & Monteiro, 2001, b)
Don’t Ask-Don’t Tell?

- Public health experts recommend alcohol screening and brief intervention (ASBI) should happen more often
  - ASBI can reduce drinking by 25% in people who drink too much (CDC, 2014)
- Alcohol use and drug issues are often unidentified
  - 1 out of 6 adults discussed alcohol use with a health professional (McKnight-Eily et al., 2015)
  - Only 29% of trauma surgeons screened patients for alcohol problems (Danielson et al., 1999)
What Can We Do?

- Identify use, at-risk use, and harmful use; with a validated screening tool
- Connect use/at-risk use to health related issues
- Encourage cutting back
- Conduct a brief intervention
- Refer for formal assessment/treatment, as necessary
SBIRT as a Response Option

Primary Prevention

Brief Intervention

AUD Treatment

Abstinence

Infrequent Use

At-Risk Use

Alcohol Use Disorder

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SBIRT Effectiveness

Harris County (Texas) Hospital District Study:

- Patients reporting any days of heavy drinking dropped from 70% at intake to 37% at 6-month follow-up
- Patients reporting any days of drug use dropped from 82% at intake to 33% at follow-up

(InSight Project Research Group and The InSight Project Research Group, 2009)
SBIRT Cost-Effectiveness

- Alcohol SBIRT generates costs savings and improves health in both ED and outpatient settings
- EDs provide better effectiveness at a lower cost and greater social cost reductions than outpatient

(Barbosa et al., 2015)
Patient Outcome Studies

• The SAMHSA Cross-site evaluation included a sample of over 17000 patients (Aldridge, Linford, & Bray, 2017)

• Patients receiving SBIRT reduced alcohol use by 36%, heavy alcohol use by 43%, and drug use by 75%

• Intensity of intervention was associated with reduced use

• Patient Testimonies- http://www.youtube.com/watch?v=jWY6qWqHttg
What is screening?

- A preliminary assessment
  - Indicates probability that a specific condition is present
- Opportunity for education, early intervention
- Alerts provider to risks for interactions with medications or other aspects of treatment
- Offers opportunity to engage patient further
- Reduce high-risk activities for people without an AUD

(Winters et al. 1994)
Screening and Intervening: Barriers

- Lack of awareness and knowledge about tools for screening
- Sense of not having enough time
- Discomfort with initiating discussion about substance use/at-risk use
Screening in a Practice Setting

- Most practices use a teaming approach

(SAMHSA, 2013)
Pre-screening Tools

Validated, brief pre-screening tools:

- The NIDA Single-Question Screening for Drug Use
- The NIAAA Single-Question Screening for Alcohol Use
- The AUDIT-C (3 item screen)

Based on previous experiences with SBIRT, screening will yield **75% negative responses**.

If you get a positive screen, you should ask further assessment questions.

(SAMHSA, 2013)
Alcohol Pre-Screen
NIAAA Single-Question Screening for Alcohol Use

“How many times in the past year have you had $X$ or more drinks in a day?”

*For men $X=5$, women $X=4$

- Identifies at-risk alcohol use
- Positive screen= 1 or more times
- Follow positive screens with more detailed screening/ possibly a brief intervention

(NIAAA, 2007)
Drug Pre-Screen
NIDA Single-Question Screening Test for Drug Use

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

- Identifies substance use risk
- Positive screen = 1 or more
- Follow positive screens with more detailed screening/possibly a brief intervention

(National Institute on Drug Abuse, 2011)
Alcohol Pre-Screen

AUDIT-C

1. How often do you have a drink containing alcohol?
   - a. Never
   - b. Monthly or less
   - c. 2-4 times a month
   - d. 2-3 times a week
   - e. 4 or more times a week

2. How many standard drinks containing alcohol do you have on a typical day?
   - a. 1 or 2
   - b. 3 or 4
   - c. 5 or 6
   - d. 7 to 9
   - e. 10 or more

3. How often do you have six or more drinks on one occasion?
   - a. Never
   - b. Less than monthly
   - c. Monthly
   - d. Weekly
   - e. Daily or almost daily

- A 3-question pre-screen
- Next steps determined by score

(Babor, Higgins-Biddle, Saunders, Maristela, & Monteiro, 2001, a)
Interpretation of AUDIT-C

• The AUDIT-C is scored on a scale of 0-12
  — A score of 0 reflects no alcohol use
  — In men, a score of 4+ is considered positive
  — In women and anyone 65+, a score of 3+ is considered positive

• If AUDIT-C score is positive, it should be followed up with the full AUDIT

(NIAAA, 2013)
<table>
<thead>
<tr>
<th>Screen</th>
<th>Target Population</th>
<th># of Items</th>
<th>Assessment</th>
<th>Setting (most common)</th>
<th>Type</th>
</tr>
</thead>
</table>
| ASSIST (WHO) | -Adults  
-Validated in many cultures/languages | 8 | Hazardous, harmful, or dependent drug use (including injection drug use) | Primary Care | Interview |
| AUDIT (WHO) | -Adults and adolescents  
-Validated in many cultures and languages | 10 | Identifies alcohol problem use and dependence. Can be used as a pre-screen to identify patients in need of full screen/brief intervention | Different settings  
-AUDIT C- Primary Care (3 questions) | Self-admin, Interview, or computerized |
| DAST-10 | Adults | 10 | To identify drug-use problems in past year | Different settings | Self-admin or Interview |
| CRAFFT | Adolescents | 6 | To identify alcohol and drug abuse, risky behavior, & consequences of use | Different settings | Self-admin |
| CAGE-AID | Adults and youth >16 | 4 | -Signs of dependence, not risky use | Primary Care | Self-admin or Interview |
| TWEAK | Pregnant women | 5 | -Risky drinking during pregnancy. Based on CAGE  
-Asks about number of drinks one can tolerate, alcohol dependence, & related problems | Primary Care, Women’s organizations, etc. | Self-admin, Interview, or computerized |

(Addiction Technology Transfer Center (ATTC) Network, 2013)
AUDIT

Alcohol Use Disorders Identification Test
About the AUDIT

- Acronym: Alcohol Use Disorders Identification Test
- Developed by the World Health Organization (WHO)
- Includes 10 brief questions
- Designed specifically for use in primary care
- Proven to demonstrate levels of drinking behavior
  - Evaluated over a period of two decades
  - Accurate across age, gender and different cultures
  - Cross-national standardization

(NIAAA, 2013)
Introducing the AUDIT

“Now I am going to ask you some questions about your use of alcoholic beverages during the past year. Because alcohol use can affect many areas of health (and may interfere with certain medications and treatment), it is important for us to know how much you usually drink and whether you have experienced any problems with your drinking. Please try to be as honest and as accurate as you can be.”
Full AUDIT

Domains and Item Content of the AUDIT

<table>
<thead>
<tr>
<th>Domains</th>
<th>Question Number</th>
<th>Item Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazardous</td>
<td>1</td>
<td>Frequency of drinking</td>
</tr>
<tr>
<td>Alcohol</td>
<td>2</td>
<td>Typical quantity</td>
</tr>
<tr>
<td>Use</td>
<td>3</td>
<td>Frequency of heavy drinking</td>
</tr>
<tr>
<td>Dependence</td>
<td>4</td>
<td>Impaired control over drinking</td>
</tr>
<tr>
<td>Symptoms</td>
<td>5</td>
<td>Increased salience of drinking</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>Morning drinking</td>
</tr>
<tr>
<td>Harmful</td>
<td>7</td>
<td>Guilt after drinking</td>
</tr>
<tr>
<td>Alcohol</td>
<td>8</td>
<td>Blackouts</td>
</tr>
<tr>
<td>Use</td>
<td>9</td>
<td>Alcohol-related injuries</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>Others concerned about drinking</td>
</tr>
</tbody>
</table>

(NIAAA, 2013)
## Interpretation of AUDIT

<table>
<thead>
<tr>
<th>Score</th>
<th>Degree of Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-7</td>
<td>No Problems at this time</td>
</tr>
<tr>
<td>8-15</td>
<td>Hazardous &amp; Harmful Alcohol Use</td>
</tr>
<tr>
<td>16-19</td>
<td>High Level of Problematic Use, Possible Use Disorder</td>
</tr>
<tr>
<td>20-40</td>
<td>Possible/Likely Alcohol Use Disorder</td>
</tr>
</tbody>
</table>

(Babor, Higgins-Biddle, Saunders, Maristela, & Monteiro, 2001, a)
DAST

Drug Abuse Screening Test
About the DAST

• Brief self-report questionnaire- 10 items
• Measures the degree of consequences related to drug use
  – Shortened version of DAST 28, containing 10 items, completed as self-report or via interview. DAST(10) consists of screening questions for at-risk drug use that parallel the MAST (an alcohol screening instrument)
  – Developed by Addiction Research Foundation, now the Center for Addiction and Mental Health
  – Yields a quantitative index of problems related to at-risk drug use

(Washington State Department of Social and Health Services, 2014)
Prescription Drug Misuse

Although many people take medications that are not prescribed to them, we are primarily concerned with—

- Opioids (oxycodone, hydrocodone, fentanyl, methadone)
- Benzodiazepines (clonazepam, alprazolam, diazepam)
- Stimulants (amphetamine, dextroamphetamine, methylphenidate)
- Sleep aids (zolpidem, zaleplon, eszopiclone)
- Other assorted (clonidine, carisoprodol)

(SAMHSA, 2013)
## Drug Abuse Screening Test

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

- Likely Substance Use Disorder (6+)
- High-Risk Use (3–5)
- At-Risk Use (1–2)
- Abstinent (0)

(SAMHSA, 2013)
# Interpretation of the DAST

## Guidelines for Interpretation of DAST-10

<table>
<thead>
<tr>
<th>Score</th>
<th>Degree of Problems Related to Drug Abuse</th>
<th>Suggested Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No problems reported</td>
<td>Encouragement and education</td>
</tr>
<tr>
<td>1-2</td>
<td>Low level</td>
<td>Risky behavior – feedback and advice</td>
</tr>
<tr>
<td>3-5</td>
<td>Moderate level</td>
<td>Harmful behavior – feedback and counseling; possible referral for specialized assessment</td>
</tr>
<tr>
<td>6-8</td>
<td>Substantial level</td>
<td>Intensive assessment and referral</td>
</tr>
</tbody>
</table>

(Washington State Department of Social and Health Services, 2014)
Screening: Summary

- Screening is the first step of the SBIRT process and determines the severity and risk level of the patient’s substance use.

- The result of a screen allows the provider to determine if a brief intervention or referral to treatment is a necessary next step for the patient.

(SAMHSA, 2013)
Key Points for Screening

• Screen **everyone**.

• Screen **both** alcohol and drug use including prescription drug abuse and tobacco.

• Use a validated tool.

• Prescreening is usually part of another health and wellness survey.

(SAMHSA, 2013)
Key Points for Screening

- Explore each substance; many patients use more than one.
- **Follow up** positives or "red flags" by assessing details and consequences of use.
- Use your MI skills and show **nonjudgmental, empathic** verbal and nonverbal behaviors during screening.

(SAMHSA, 2013)
Patient Interview

• The patient is not intoxicated or in need of emergency care at the time;
• The purpose of the screening is clearly stated in terms of its relevance to the patient’s health status;
• The interviewer is non-judgmental and non-threatening;
• The information patients need to understand the questions and respond accurately is provided; and
• Assurance is given that the patient’s responses will remain confidential.

(Babor, Higgins-Biddle, Saunders, Maristela & Monteiro, 2001a)
Next Steps- Brief Intervention

- For those not ready to change
  - May increase their motivation
- For those ready to change
  - Provides advice on appropriate goals and strategies
  - Provides support
References


Center for Substance Abuse Treatment. Simple Screening Instruments for Outreach for Alcohols and Other Drug Abuse and Infectious Diseases. Rockville: Center for Substance Abuse Treatment; 1994.
References


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References

National Institute on Alcohol Abuse and Alcoholism. (2013). Rethinking Drinking: Alcohol and your health (NIH Publication No. 10-3770)


Substance Abuse and Mental Health Services Administration (SAMHSA). Teaching SBIRT SAMHSA Core Curriculum – Screening Patients for Substance Use in Your Practice Setting [PowerPoint slides].


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References


U.S. Substance Abuse and Mental Health Services Administration (SAMHSA), 1994. Simple Screening Instruments for Outreach for Alcohol and Other Drug Abuse and Infectious Diseases.


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