Simple Screening Instrument for Substance Abuse

The Simple Screening Instrument for Substance Abuse (SSI-SA) was developed by the consensus panel of TIP 11, *Simple Screening Instruments for Outreach for Alcohol and Other Drug Abuse and Infectious Diseases* (Center for Substance Abuse Treatment 1994*c*). The SSI-SA has previously been called the Simple Screening Instrument for Outreach for Alcohol and Other Drug Abuse; the Simple Screening Instrument (SSI); and the Simple Screening Instrument for AOD (SSI-AOD). To avoid confusion, the consensus panel suggests using "SSI-SA" (Simple Screening Instrument for Substance Abuse) when referring to this screening instrument.

As a government-supported document, the SSI-SA is in the public domain, can be used without charge or permission and can be reproduced without limit, including the instructions. It is a 16-item scale, although only 14 items are scored so that scores can range from 0 to 14. These 14 items were selected by the TIP 11 consensus panelists from existing alcohol and drug abuse screening tools. A score of 4 or greater has become the established cut-off point for warranting a referral for a full assessment.

Since its publication in 1994 the SSI-SA has been widely used and its reliability and validity investigated. Peters and colleagues (2004) reported on a national survey of correctional treatment for COD. Reviewing 20 COD treatment programs in correctional settings from 13 States, the SSI-SA was identified as among the most common screening instruments used. Peters et al. (2000) found the SSI-SA to be effective in identifying substance-dependent inmates, and the SSI-SA demonstrated high sensitivity (92.6 percent for alcohol or drug dependence disorder, 87.0 percent for alcohol or drug abuse or dependence disorder) and excellent test-retest reliability (.97). Knight et al. (2000) also found the SSI-SA a reliable substance abuse screening instrument among adolescent medical patients.

Peters and Peyton (1998) evaluated a number of screening instruments for use by drug courts and found the Alcohol Dependence Scale/Addiction Severity Index - Drug Use section combined, the Texas Christian University Drug Dependence Screen (TCUDS), and the SSI-SA "to hold considerable promise for use with participants in drug court programs" (p. 17).

The Urban Institute (Moore and Mears 2003) interviewed practitioners within correction-based drug treatment programs in 13 States selected to include a diversity of regions and sizes. Again, the TCUDS and the SSI-SA were widely used, as was the Michigan Alcohol Screening Test (MAST). The TCUDS was deemed to produce fewer false positives than the SSI-SA. Winters (1995), in a small study of 95 clients from a drug evaluation program, found a sensitivity of 97.0 percent and specificity of 55.2 percent. "Overall classification accuracy or 'hit rate' was 84.2 percent . . .. [Thus] false classifications occurred in 15.8 percent of the sample, yet the majority of the errors are of the 'false positive' type . . . which is the preferred type of error for a screening test" (p. 3). For program administrators or clinicians considering the SSI-SA for their own screening purposes, the false-positive rate will produce more referrals than other screening instruments, such as the TCUDS, might produce. On the other hand, the SSI-SA is likely to correctly identify a high percentage of cooperative clients and to miss (false negatives) only a few—that is, only a few people who warrant a full evaluation and are likely to have a substance use disorder will be deemed by this screening instrument not to warrant a full assessment.

Choosing a screening instrument and designing a screening and assessment treatment process are complex challenges that typically require expert input.

Lastly, the National Health Care for the Homeless Council recently developed general recommendations for the care of homeless patients (Bonin et al. 2004). Within these guidelines are recommendations to consider the SSI-SA to screen for substance use problems (and the MHSF-III to screen for mental disorders).

The following sections are reprinted from TIP 11.

Development of the SSI-SA

Routine screening for substance abuse can be used to initiate the process of assessment by identifying a client's possible problems and determining whether he or she needs a comprehensive assessment. Ideally, a screening instrument for substance abuse should have a high degree of sensitivity: It should be broad in its detection of individuals who have a potential substance abuse problem, regardless of the specific drug or drugs being abused.

The substance abuse screening instrument presented in this section was designed to encompass a broad spectrum of signs and symptoms for substance use disorders. These conditions are characterized by substance use that leads to negative physical, social, and/or emotional consequences and loss of control over one's pattern and amount of consumption of the substance(s) of abuse.

The view of substance abuse problems and disorders presented in this section and reflected in the screening instrument is consistent with that adopted by the World Health Organization and the American Psychiatric Association. Briefly stated, this view holds that substance abuse disorders are biopsychosocial disorders, causing impairment and dysfunction in physical, emotional, and social domains. Certain cognitive and behavioral signs and symptoms are also associated with substance abuse (see the observation checklist at the end of the screening instrument for substance abuse). Although many of these latter signs and symptoms can be the result of various medical, psychiatric, and social problems, individuals with a substance abuse disorder generally exhibit several of them.

The screening instrument for substance abuse was developed by first identifying five primary content domains, which are described in the sections that follow. The screening questions then devised were assigned to one or more of these categories. These screening questions were adapted from existing tools found in the published literature. Because most of these existing tools were designed to screen for alcohol abuse, many items needed to be revised to address other drugs. The sources for the screening items included in the instrument are shown in Figure H-1. TOP

Figure H-1. Sources for Items Included in the Simple Screening Instrument for Substance Abuse

Question No.	Source Instrument
1	Revised Health Screening Survey (RHSS)
2	Michigan Alcohol Screening Test (MAST)
3	CAGE
4	MAST, CAGE
5	History of Trauma Scale, MAST, CAGE
6	MAST, Drug Abuse Screening Test (DAST)
7	MAST, Problem-Oriented Screening Instrument for Teenagers (POSIT)
8	MAST, DAST
9	MAST, DSM-II-R
10	POSIT, DSM-III-R
11	POSIT
12	POSIT
13	MAST, POSIT, CAGE, RHSS, Alcohol Use Disorders Identification Test (AUDIT), Addiction Severity Index (ASI)

References for these sources appear at the end of this section.

Domains Measured by the Instrument

Substance consumption

A person's consumption pattern—the frequency, length, and amount of use—of substances is an important marker for evaluating whether he or she has a substance abuse problem. Questions 1, 10, and 11 in the substance abuse screening instrument were formulated in order to help delineate an individual's consumption pattern.

Patterns of substance consumption can vary widely among individuals or even for the same individual. Although substance use disorders often consist of frequent, long-term use of substances, addiction problems may also be characterized by periodic binges over shorter periods. TOP

Preoccupation and loss of control

The symptoms of preoccupation and loss of control are common in people with substance use disorders. Preoccupation refers to an individual spending inordinate amounts of time concerned

with matters pertaining to substance use. Loss of control is a symptom usually typified by loss of control over one's use of substances or over one's behavior while using substances. These symptoms are measured by screening test questions 2, 3, 9, 11, and 12.

The symptom of preoccupation is marked by an individual's tendency to spend a considerable amount of time thinking about, consuming, and recovering from the effects of the substance(s) of abuse. In some cases, the individual's behavior may be noticeably altered by his or her preoccupation with these matters. Such an individual may, for example, lose interest in personal relationships or may become less productive at work as a result of constant preoccupation with obtaining more of the substance of abuse.

Loss of control over substance use is typified by the consumption of more of the substance(s) of abuse than originally intended. Many persons with a substance abuse problem feel that they have no direct, conscious control over how much and how often they use substances. Such an individual may, for example, initially intend to have only one drink but then be unable to keep from drinking more. He or she may find it difficult or impossible to stop drinking once he or she has started. In other instances, a person who originally plans to use a drug for a short period of time may find that he or she is increasingly using it over longer periods than originally intended.

Loss of behavioral control, on the other hand, is typified by loss of inhibitions and by behaviors that are often destructive to oneself or others. In many cases, these behaviors do not occur when the individual is not using substances. A person with a substance use problem may begin taking unnecessary risks and may act in an impulsive, dangerous manner. Individuals who are intoxicated from substance abuse may, for example, have sex with someone in whom they ordinarily would not have a sexual interest, or they may start an argument or fight. TOP

Adverse consequences

Addiction invariably involves adverse consequences in numerous areas of an individual's life, including physical, psychological, and social domains. In the screening instrument for substance abuse, questions 5–9, 12, and 13 are designed to elicit adverse consequences of substance abuse.

Examples of adverse physical consequences resulting from substance abuse include experiencing blackouts, injury and trauma, or withdrawal symptoms or contracting an infectious disease associated with high-risk sexual behaviors. One of the most serious health threats to people with substance use disorders, particularly those who inject drugs intravenously, is infection with HIV, the causative agent of AIDS.

Adverse psychological consequences arising from substance abuse include depression, anxiety, mood changes, delusions, paranoia, and psychosis. Negative social consequences include involvement in arguments and fights; loss of employment, intimate relationships, and friends; and legal problems such as civil lawsuits or arrests for abuse, possession, or selling of illicit drugs.

As an individual's use continues over time and addiction takes hold, adverse consequences tend to worsen. Thus, people in the very early stages of addiction may have fewer adverse consequences than those in the later stages. Individuals in the early stages of addiction may

therefore not make the connection between their substance abuse and the onset of negative consequences. For this reason, some of the items directed at identifying substance-related adverse consequences in the screening instrument attempt to obtain this information without making an overt association with substance abuse. TOP

Problem recognition

Making a mental link between one's use of substances and the problems that result from it—such as difficulties in personal relationships or at work—is an important step in recognizing one's substance abuse problem. Questions 2–4 and 13–16 in the substance abuse screening instrument are problem recognition items. Some of these items ask about past contacts with intervention and treatment services, because both research and clinical experience indicate that a history of such contacts can be a valid indicator of substance abuse problems.

Some individuals who have experienced negative consequences resulting from their substance abuse will report these problems during a screening assessment. Clients who show insight about the relationship between these negative consequences and their use of substances should be encouraged to seek help.

Many, if not most, people who abuse substances, however, do not consciously recognize that they have a problem. Other reasons why a person may not disclose a substance abuse problem include denial, lack of insight, and mistrust of the interviewer. These individuals cannot be expected to respond affirmatively to "transparent" problem recognition items—those in the form of direct questions, such as "Do you have a substance problem?"—during a screening interview. For these individuals, questions must be worded indirectly in order to ascertain whether negative experiences have ensued from the use of substances. TOP

Tolerance and withdrawal

Substance abuse, particularly prolonged abuse, can cause a variety of physiological problems that are related to the development of tolerance and withdrawal. Questions 5 and 10 are aimed at determining whether an individual has experienced any of the signs of tolerance and withdrawal.

Tolerance is defined as the need to use increasing amounts of a substance in order to create the same effect. If tolerance has developed and the individual stops using the substance of abuse, it is common for withdrawal effects to emerge.

Withdrawal from stimulants and related drugs often includes symptoms of depression, agitation, and lethargy; withdrawal from depressants (including alcohol) often includes symptoms of anxiety, agitation, insomnia, and panic attacks; and withdrawal from opioids produces agitation, anxiety, and physical symptoms such as abdominal pain, increased heart rate, and sweating.
TOP

Administration of the Simple Screening Instrument

Two versions of the simple screening instrument are presented in this section. They have been designed to be administered in the form of either an interview (Figure H-2) or a self-

administered test (Figure H-3) to individuals who may be at risk of having a substance abuse problem. TOP

Figure H-2. Simple Screening Instrument for Substance Abuse Interview Form

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Note: **Boldfaced questions** constitute a short version of the screening instrument that can be administered in situations that are not conducive to administering the entire test. Such situations may occur because of time limitations or other conditions.

Introductory statement:

"I'm going to ask you a few questions about your use of alcohol and other drugs during the past 6 months. Your answers will be kept private. Based on your answers to these questions, we may advise you to get a more complete assessment. This would be voluntary—it would be your choice whether to have an additional assessment or not."

During the past 6 months. . .

1. Have you used alcohol or other drugs? (Such as wine, beer, hard liquor, pot, coke, heroin or other opioids, uppers, downers, hallucinogens, or inhalants.) (yes/no)

2. Have you felt that you use too much alcohol or other drugs? (yes/no)

3. Have you tried to cut down or quit drinking or using drugs? (yes/no)

4. Have you gone to anyone for help because of your drinking or drug use? (Such as Alcoholics Anonymous, Narcotics Anonymous, Cocaine Anonymous, counselors, or a treatment program.) (yes/no)

5. Have you had any of the following?

- Blackouts or other periods of memory loss
- Injury to your head after drinking or using drugs
- Convulsions, or delirium tremens ("DTs")
- Hepatitis or other liver problems
- Feeling sick, shaky, or depressed when you stopped drinking or using drugs
- Feeling "coke bugs," or a crawling feeling under the skin, after you stopped using drugs
- Injury after drinking or using drugs
- Using needles to shoot drugs

6. Has drinking or other drug use caused problems between you and your family or friends? (yes/no)

7. Has your drinking or other drug use caused problems at school or at work? (yes/no)

8. Have you been arrested or had other legal problems? (Such as bouncing bad checks, driving while intoxicated, theft, or drug possession.) (yes/no)

9. Have you lost your temper or gotten into arguments or fights while drinking or using drugs?

(yes/no)

10. Are you needing to drink or use drugs more and more to get the effect you want? (yes/no)

11. Do you spend a lot of time thinking about or trying to get alcohol or other drugs? (yes/no)

12. When drinking or using drugs, are you more likely to do something you wouldn't normally do, such as break rules, break the law, sell things that are important to you, or have unprotected sex with someone? (yes/no)

13. Do you feel bad or guilty about your drinking or drug use? (yes/no)

Now I have some questions that are not limited to the past 6 months.

14. Have you ever had a drinking or other drug problem? (yes/no)

15. Have any of your family members ever had a drinking or drug problem? (yes/no)

16. Do you feel that you have a drinking or drug problem now? (yes/no)

- Thanks for answering these questions.
- Do you have any questions for me?
- Is there something I can do to help you?

Notes: _____

_____

_____

_____

_____

Observation Checklist

The following signs and symptoms may indicate a substance abuse problem in the individual being screened:

- Needle track marks
- Skin abscesses, cigarette burns, or nicotine stains
- Tremors (shaking and twitching of hands and eyelids)
- Unclear speech: slurred, incoherent, or too rapid
- Unsteady gait: staggering, off balance
- Dilated (enlarged) or constricted (pinpoint) pupils
- Scratching
- Swollen hands or feet
- Smell of alcohol or marijuana on breath
- Drug paraphernalia such as pipes, paper, needles, or roach clips
- "Nodding out" (dozing or falling asleep)
- Agitation
- Inability to focus
- Burns on the inside of the lips (from freebasing cocaine)

Figure H-3. Simple Screening Instrument for Substance Abuse Self-Administered Form

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Directions: The questions that follow are about your use of alcohol and other drugs. Your answers will be kept private. Mark the response that best fits for you. Answer the questions in terms of your experiences in the past 6 months.

During the last 6 months. . .

1. Have you used alcohol or other drugs? (Such as wine, beer, hard liquor, pot, coke, heroin or other opioids, uppers, downers, hallucinogens, or inhalants)

___ Yes ___ No

2. Have you felt that you use too much alcohol or other drugs?

___ Yes ___ No

3. Have you tried to cut down or quit drinking or using alcohol or other drugs?

___ Yes ___ No

4. Have you gone to anyone for help because of your drinking or drug use? (Such as Alcoholics Anonymous, Narcotics Anonymous, Cocaine Anonymous, counselors, or a treatment program.)

___ Yes ___ No

5. Have you had any health problems? For example, have you:

___ Had blackouts or other periods of memory loss?

___ Injured your head after drinking or using drugs?

___ Had convulsions, delirium tremens ("DTs")?

___ Had hepatitis or other liver problems?

___ Felt sick, shaky, or depressed when you stopped?

___ Felt "coke bugs" or a crawling feeling under the skin after you stopped using drugs?

___ Been injured after drinking or using?

___ Used needles to shoot drugs?

6. Has drinking or other drug use caused problems between you and your family or friends?

___ Yes ___ No

7. Has your drinking or other drug use caused problems at school or at work?

___ Yes ___ No

8. Have you been arrested or had other legal problems? (Such as bouncing bad checks, driving while intoxicated, theft, or drug possession.)

___ Yes ___ No

9. Have you lost your temper or gotten into arguments or fights while drinking or using other drugs?

___ Yes ___ No

10. Are you needing to drink or use drugs more and more to get the effect you want?

___ Yes ___ No

11. Do you spend a lot of time thinking about or trying to get alcohol or other drugs?

___ Yes ___ No

12. When drinking or using drugs, are you more likely to do something you wouldn't normally do, such as break rules, break the law, sell things that are important to you, or have unprotected sex with someone?

___ Yes ___ No

13. Do you feel bad or guilty about your drinking or drug use?

___ Yes ___ No

The next questions are about your lifetime experiences.

14. Have you ever had a drinking or other drug problem?

___ Yes ___ No

15. Have any of your family members ever had a drinking or drug problem?

___ Yes ___ No

16. Do you feel that you have a drinking or drug problem now?

___ Yes ___ No

Thanks for filling out this questionnaire.

Use of the screening instrument should be accompanied by a careful discussion about confidentiality[8] issues. The interviewer should also be clear about the instrument's purpose and should make it understood that the information elicited from the instrument will be used to benefit, not to punish, the individual being screened.

Ideally, the screening test should be administered in its entirety. Situations may arise, however, in which there is inadequate time to administer the entire test. Street outreach community workers, for example, may have very limited time with an individual.

In such situations, a subset of the screening instrument can be administered. The four boldfaced questions—1, 2, 3, and 16—constitute the short form of the screening instrument. These items were selected because they represent the prominent signs and symptoms covered by the full screening instrument. Although this abbreviated version of the instrument will not identify the variety of dimensions tapped by the full instrument and is more prone to error, it may serve as a starting point for the screening process.

Notes on the screening questions

The screening instrument begins with a question about the individual's consumption of substances (question 1). This question is intended to help the interviewer decide whether to continue with the interview—if the response to this first question is no, continued questioning may be unnecessary.

Questions 2–4 are problem recognition items intended to elicit an individual's assessment of whether too much of a substance is being used, whether attempts have been made to stop or control substance use, and whether previous treatment has been sought. Answers to these questions may help the service provider understand how the individual thinks and feels about his or her use of substances. People who later report negative consequences as the result of their substance use but who nevertheless answer "no" to these problem recognition questions may have poor insight about their substance abuse or may be denying the severity of their substance problem.

Questions 5–12 were designed to determine whether an individual has experienced any adverse consequences of substance abuse. These include medical, psychological, social, and legal problems that often are caused by substance abuse and addiction. Some questions are intended to elicit symptoms of aggression (question 9), physical tolerance (question 10), preoccupation (question 11), and loss of control (question 12). Question 13 is designed to tap feelings of guilt, which may indicate that the individual has some awareness or recognition of a substance problem; questions 14 and 16 are intended to measure the respondent's awareness of a past or present problem; and question 15 elicits the individual's family history of substance abuse problems.

Parenthetical words or phrases that accompany some of the screening questions are intended to provide the interviewer with specific examples of what is being looked for or to help the respondent understand the question. For instance, question 1 asks whether an individual has used substances, and the wording in parentheses prompts the administrator to ask about specific substances of abuse. TOP

Scoring and interpretation

A preliminary scoring mechanism for the screening instrument is provided in Figure H-4. TOP

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[8] Confidentiality is governed by the Federal "Confidentiality of Alcohol and Drug Abuse Patient Records" regulations (42 C.F.R. Part 2) and the Federal "Standards for Privacy of Individually Identifiable Health Information" (45 C.F.R. Parts 160 and 164). TOP

Figure H-4. Scoring for the Simple Screening Instrument for Substance Abuse

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Name/ID No.: _____ Date: _____

Place/Location: _____

Items 1 and 15 are not scored. The following items are scored as 1 (yes) or 0 (no):

___ 2	___ 7	___ 12
___ 3	___ 8	___ 13
___ 4	___ 9	___ 14
___ 5 (any items listed)	___ 10	___ 16
___ 6	___ 11	

Total score: ___ Score range: 0–14

Preliminary interpretation of responses:

Score Degree of Risk for Substance Abuse

0–1 None to low

2–3 Minimal

≥4 Moderate to high: possible need for further assessment

Questions 1 and 15 are not scored, because affirmative responses to these questions may provide important background information about the respondent but are too general for use in scoring. The observational items are also not intended to be scored, but the presence of most of these signs and symptoms may indicate a substance abuse problem.

It is expected that people with a substance abuse problem will probably score 4 or more on the screening instrument. A score of less than 4, however, does not necessarily indicate the absence of a substance abuse problem. A low score may reflect a high degree of denial or lack of truthfulness in the subject's responses. The scoring rules have not yet been validated, and thus the substance abuse screening instrument needs to be used in conjunction with other established screening tools when making referrals. TOP

Referral Issues

The substance abuse screening instrument, as a first step in the process of assessment for substance abuse problems, can help service providers determine whether an individual should be referred for a more thorough assessment. When an individual with a potential substance abuse problem is identified through the instrument, the interviewer has the further responsibility of linking the individual to resources for further assessment and treatment.

Agencies and providers using the substance abuse screening instrument should be prepared to make an appropriate referral when the screening identifies a person with a possible substance abuse problem. A phone number written on a piece of paper is not likely to be effective in linking the individual to the appropriate resource for assessment and treatment. Rather, a thorough familiarity with local community resources is needed on the part of the service provider. The referring provider should take a proactive role in learning about the availability of appointments or treatment slots, costs, transportation needs, and the names of contact people at the agencies to which referrals are made.

Because many individuals identified as having possible substance abuse problems receive services from more than one agency, it is essential that one agency assume primary responsibility for the client. The ideal model is a case management system. Through personal contacts, case managers can help patients progress through various programs and systems, cut red tape, and remove barriers to access to services.

Providing effective services for substance abuse requires close cooperation among agencies. Community linkages can help increase the quality of treatment for patients, whereas interagency competition decreases the quality of comprehensive care.

Substance abuse problems should be seen within the larger context of other problems, both current and past, confronted by the individual. Current problems such as instability in housing and employment, homelessness, and hunger often represent immediate needs that are more pressing for the individual than treatment for his or her substance abuse. Past crises, such as incest, rape, and sexual abuse, can also affect how an individual responds to the screening questions.

Some of the items in the screening instrument may trigger emotional distress or a crisis. Reactions may sometimes include anxiety or depression, which may be accompanied by suicidal thoughts and behaviors. Agencies should therefore develop specific protocols to manage such crises. These protocols should include inhouse management and appropriate referrals and followup.

See appendix C, Glossary, for substance abuse screening terms. ↑ TOP

Sources for the Substance Screening Questions

Addiction Severity Index

McLellan AT, Luborsky L, Woody GE, O'Brien CP. An improved diagnostic evaluation instrument for substance abuse patients: The Addiction Severity Index. Journal of Nervous and Mental Disease 186:26-33. 1980.

AUDIT

Babor, T.F., De La Fuente, J.R., and Saunders, J. *AUDIT: Alcohol Use Disorders Identification Test: Guidelines for Use in Primary Health Care* . Geneva: World Health Organization, 1989.

CAGE

Mayfield D, McLeod G, Hall P. The CAGE questionnaire: Validation of a new alcoholism screening instrument. American Journal of Psychiatry 131:1121-1123. 1974.

DAST

Skinner HA. Drug Abuse Screening Test. Addictive Behavior 7:363-371. 1982.

DSM-III-R

American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders* , 3d Edition, Revised. Washington, DC: American Psychiatric Association, 1987.

History of Trauma Scale

Skinner HA, Holt S, Schuller R, Roy J, Israel Y. Identification of alcohol abuse using laboratory tests and a history of trauma. Annals of Internal Medicine 101:847-851. 1984. (PubMed)

MAST

Selzer ML. The Michigan Alcohol Screening Test: The quest for a new diagnostic instrument. American Journal of Psychiatry 127:1653-1658. 1971.

POSIT

Rahdert, E.R. *The Adolescent Assessment and Referral System Manual* . DHHS Pub. No. (ADM) 91 –1735. Rockville, MD: National Institute on Drug Abuse, 1991.

RHSS

Fleming MF, Barry KL. A three-sample test of a masked alcohol screening questionnaire. Alcohol 26:81-91. 1991.

Source: http://www.mhacg.org/simplescreen.htm