

Screening:

Technical Assistance (TA) Report for the Co-Occurring State Incentive Grants (COSIGs)

April 27, 2006
Updated June 2008

Background

Introduction

- ▶ **This report was prepared as part of a group process involving SAMHSA's Co-Occurring Center for Excellence (COCE) and the Co-Occurring State Incentive Grants (COSIGs) from 2003-2005.**
- ▶ **The content of this report is intended as an introduction to the topic of screening, rather than an exhaustive review.**
- ▶ **This report was updated in August 2007 and June 2008 for posting to the COCE Web**
- ▶ **The SAMHSA Federal Project Officer for COCE is Charlene E. Le Fauve, Ph.D. (CSAT).**

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Purpose and Utility of the Screening Report

Purpose:

- **To provide an overview on the process of selecting screening instruments to identify co-occurring substance use and mental disorders.**

Utility:

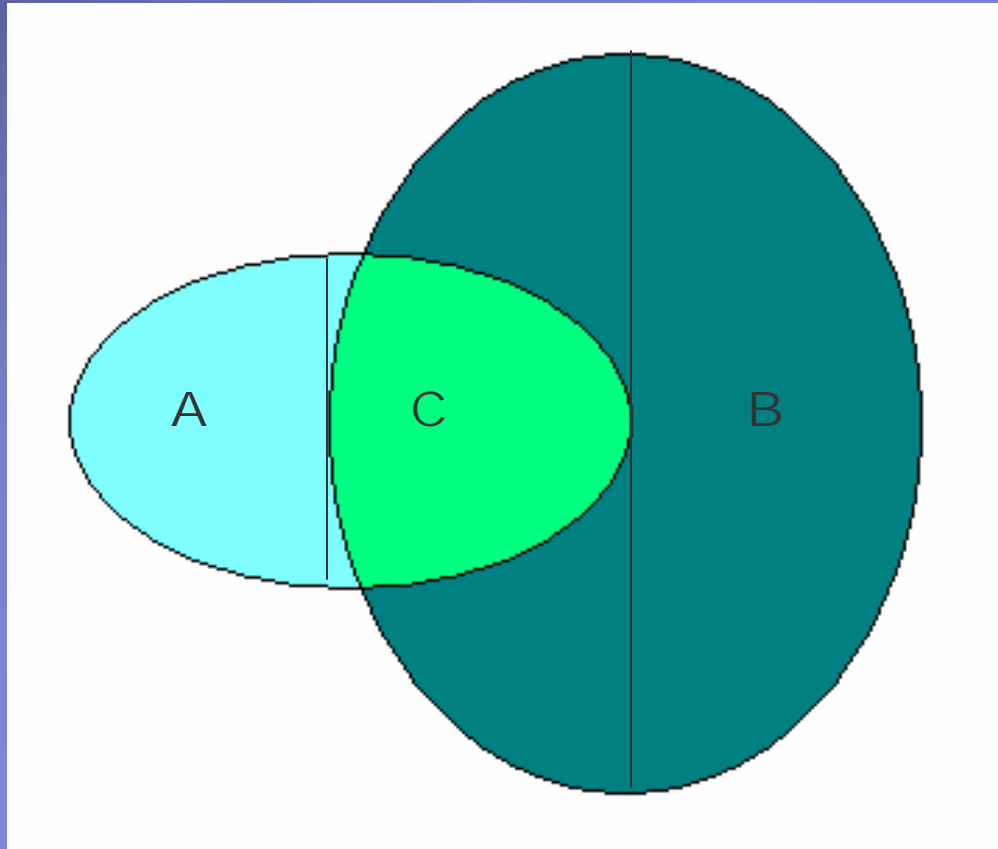
- **PowerPoint format allows the report to be used in multiple settings and with multiple target groups.**
- **The report can be partitioned where particular components are needed.**
- **The report was updated in August 2007 and will continue to be updated periodically to ensure that the information remains accurate over time to a broader audience via the COCE Web site.**

SAMHSA's Definition of Co-Occurring Disorders (COD)

- ▶ **The term refers to co-occurring substance use (abuse or dependence) and mental disorders. Clients said to have co-occurring disorders have one or more mental disorders as well as one or more disorders relating to the use of alcohol and/or other drugs (CSAT 2006a).**

Co-Occurring Mental and Substance Use Disorders

Mental Disorders (A)



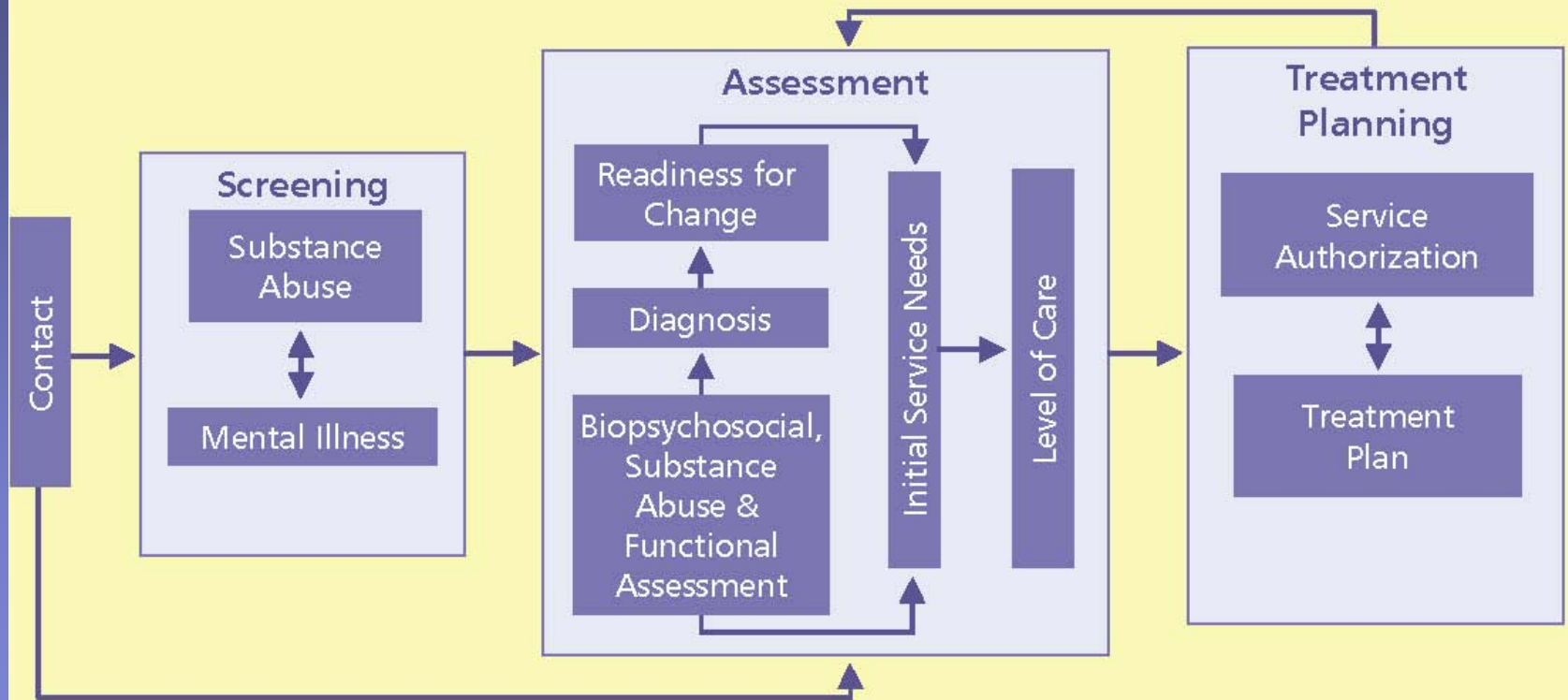
Co-Occurring Disorders (C)

Substance Use Disorders (B)

Source: Adapted from Osher, F.C. (1996)

Relationships among Screening, Assessment and Treatment Planning

Figure 1: Relationships Among Screening, Assessment, and Treatment Planning



CSAT (2005)

Screening

Definitions & Features

Definition: Screening

- ◆ A formal process of testing to determine whether a client does or does not warrant further attention at the current time in regard to a particular disorder and, in this context, the possibility of a co-occurring substance or mental disorder.
- ◆ The screening process for co-occurring disorders (COD) seeks to answer a “yes” or “no” question: Does the substance abuse [or mental health] client being screened show signs of a possible mental health [or substance abuse] problem?
- ◆ Note that the screening process does not necessarily identify what kind of problem the person might have, or how serious it might be, but determines whether or not further assessment is warranted.

(CSAT 2005)

Integrated Screening

- ▶ **Integrated screening addresses both mental health and substance abuse, each in the context of the other disorder.**
- ▶ **A comprehensive screening process also includes exploration of a variety of related service needs including medical, housing, victimization, trauma and so on.**

CSAT (2006b,2005)

The Goal: Integrated Screening

- ▶ **All individuals presenting for treatment of a substance use disorder should undergo, at a minimum, screening for any co-occurring mental disorders.**
- ▶ **All individuals presenting for treatment of a mental disorder should undergo, at a minimum, screening for any co-occurring substance use disorders.**

Features of Screening Instruments

- a) Precise**
- b) Brief**
- c) Low cost**
- d) Easy to administer (minimal staff training required)**
- e) Consumer friendly**

Measures of Precision Defined

- **Sensitivity: the probability that the screening test is positive given that the person has the disorder. This is also known as the true positive rate. A large sensitivity means that a negative test implies ruling out the disorder.**
- **Specificity: the probability that the screening test is negative given that the person does not have the disorder. This is also known as true negative rate. A large specificity means that a positive test implies ruling in the disorder.**
- **Overall Accuracy: is the combination of sensitivity and specificity – the probability that the screening test is positive given that the person has the disorder combined with the probability that the screening test is negative given that the person does not have the disorder.**

Screening Procedures

Screening Protocol and Processes

- **Screening processes always should define a protocol for determining which clients screen positive and for ensuring that those clients receive a thorough assessment.**
- **Screening process establishes precisely how any screening tools or questions are to be scored and indicates what constitutes scoring positive for a particular possible problem (often called “establishing cut-off scores”).**
- **The screening protocol details exactly what takes place after a client scores in the positive range.**
- **The screening protocol provides the necessary standard forms to be used to document the results of all later assessments and to document that each staff member has carried out his or her responsibilities in the process.**

Counselor Role in Screening

- **All counselors can be trained to screen for co-occurring substance use and mental disorders.**
- **Screening often entails having a client respond to a specific set of questions, evaluating the response, and then taking the next “yes” or “no” step in the process depending on the results and the design of the screening process.**
- **In substance abuse or mental health treatment settings, every counselor or clinician who conducts intakes should be able to screen for the most common COD and know how to implement the protocol for obtaining COD assessment information and recommendations.**

What is a Minimum Screening Requirement

- ▶ **At a minimum, the program is responsible for conducting screening that:**
 - 1. Gathers information about thoughts, behavior or impulses related to self-harm or harm to others.**
 - 2. Screens for the presence of co-occurring substance use and mental disorders.**

Mental Disorder Screening in Substance Abuse Treatment Settings

- ▶ **Screen for mental health symptoms and mental disorders.**
- ▶ **Screen for acute safety risk: suicide, violence, inability to care for oneself, HIV and hepatitis C virus risky behaviors, and danger of physical or sexual victimization.**
- ▶ **Regardless of the setting, all clients should be screened for past and present victimization and trauma.**

Substance Abuse Screening in Mental Health Settings

- ▶ **Screen for substance use, substance related problems, and substance-related disorders.**
- ▶ **Screen for acute safety risk related to serious intoxication or withdrawal.**

Screening Instruments

COCE/COSIG Evaluation Findings

Full List of Screening Instruments Reviewed by COCE/COSIG Workgroup

Instruments with a Mental Disorder Focus

- Brief Symptom Inventory (BSI)**
- The Mental Health Screening Form-III (MHSF-III)**
- K10**
- Referral Decision Scale (RDS)**

Instruments with a Substance Use Disorder Focus

- CAGE Questionnaire (CAGE)**
- Dartmouth Assessment of Lifestyle (DALI)**
- Drug Abuse Screening Test (DAST)**
- Short Alcohol Dependence Data Questionnaire (SADD)**
- Simple Screening Instrument for Substance Abuse (SSI-SA)**
- TCU-Drug Screen II (TCUDS)**

Instruments with a Focus on Substance Use and Mental Disorders

- Addiction Severity Index (ASI)**
- Global Appraisal of Individual Needs – Short Screener (GAIN SS)**
- Massachusetts Youth Screening Instrument (MAYSI)**
- Mini-International Neuropsychiatric Interview (M.I.N.I. Screen)**

COCE Criteria for Evaluating Screening Instruments

The following criteria were used to evaluate the instruments for appropriate application in the context of program needs and capacities:

Purpose

Clinical utility: Detection
Clinical utility: Placement
Clinical utility: Treatment Planning
Clinical Utility: Outcome
Severity Measure

Methodological Considerations

Norms available
Reliability on re-administration
Internal consistency
Validity
Effects of demographics or background on validity
Setting Applicability

Administration

Administration Format
Administration time
Complexity of scoring
Computer scoring
Interpretive Reports
Required skill level
Intensity of required training
Alternative language availability
In public domain

Matrix of Screening Instruments* with Selection Criteria Findings

	Mental Health (MH) Focus				Substance Use (SU) Focus							MH and SU Focus			
	<u>BSI</u>	<u>MHSF-111</u>	<u>K10</u>	<u>RDS</u>	<u>CAGE</u>	<u>DALI</u>	<u>DAST</u>	<u>SADD</u>	<u>SSI-SA</u>	<u>TCUDS</u>	<u>ASI</u>	<u>GAIN SS</u>	<u>MAYSI-2</u>	<u>MINI Screen</u>	
Purpose															
Clinical Utility: Detection	√	√	√	√	√	√	√	√	√	√	√	√	√	√	
Clinical Utility: Placement	-	-	-	√	-	-	√	√	-	√	√	√	-	√	
Clinical Utility: Treatment Planning	√	-	-	-	-	-	√	-	-	-	√	-	-	-	
Clinical Utility: Outcome	√	-	-	-	-	-	-	-	-	-	-	-	-	-	
Severity Measure	√	-	-	√	√	√	-	√	-	√	√	√	√	-	
Methodological Considerations															
Norms available	√	√	√	√	√	√	√	√	-	√	-	-	√	√	
Reliability on re-administration	√	√	√	√	√	√	√	√	√	√	√	√	√	√	
Internal consistency	√	√	√	√	√	√	√	√	√	√	√	√	√	√	
Validity	√	√	√	√	√	√	√	√	√	√	√	√	√	√	
Setting applicability SU=Substance Use MH=Mental Health JJ=Junvenile Justice CJ=Criminal Justice	Mixed	SU	Mixed	CJ	Mixed	MH	Mixed	Mixed	Mixed	Mixed	CJ	Mixed	Mixed	JJ	Mixed

Legend: √ = Yes - = No

* Information contained in the table was derived from TIP 42 (CSAT, 2005), Assessing Alcohol Problems (NIAAA, 2003) or specific sites containing instruments (see URLs contained in the Instrument Descriptions that follow). Information in the table may change over time based on advances in research and/or formats available.

Matrix of Screening Instruments* with Selection Criteria Findings (continued)

			Mental Health (MH) Focus			Substance Use (SU) Focus						MH and SU Focus			
		<u>BSI</u>	<u>MHSF-111</u>	<u>K10</u>	<u>RDS</u>	<u>CAGE</u>	<u>DALI</u>	<u>DAST</u>	<u>SADD</u>	<u>SSI-SA</u>	<u>TCUDS</u>	<u>ASI</u>	<u>GAIN SS</u>	<u>MAYSI-2</u>	<u>MINI Screen</u>
Administration															
Administration Format: S=Self report I=Structured interview C=Computer administered		S, C	S, I	S, I	I	S, C, I	I	S, I	S, I	S, I	S	I	S, C, I	C, I	C, I
Administration time (in minutes)		≤10	≤15	≤10	≤5	≤1	≤20	≤5	≤5	≤5	≤10	≤60	≤5	≤15	≤15
Complexity of scoring		Med	Low	Low	Med	Low	Low	Low	Low	Low	Low	High	Low	Low	High
Computer scoring		√	-	√	-	-	-	-	-	-	√	√	√	-	√
Interpretive reports		√	-	-	-	-	-	-	-	-	-	√	-	-	-
Required skill level: C=Trained, non-clinician D=Clinician		D	C	C	C	C	D	C	C	C	C	C	C	C	C
Intensity of required training		Low	Low	Low	Low	Low	Low	Low	Low	Low	Low	High	Med	Low	Med
Alternate language version available		√	√	√	-	√	√	√	√	-	√	√	√	√	√
In public domain *: certain exceptions exist		-	√	√	No*	-	-	No*	√	√	√	√	-	√	No*

Legend: √ = Yes - = No

* Information contained in the table was derived from TIP 42 (CSAT, 2005), Assessing Alcohol Problems (NIAAA, 2003) or specific sites containing instruments (see URLs contained in the Instrument Descriptions that follow). Information in the table may change over time based on advances in research and/or formats available.

Screening Instruments: Brief Descriptions

Author/Developer's Instrument Descriptions

Instruments with a Focus on Mental Disorders

- ▶ **Brief Symptom Inventory (BSI), Author/Developer: Pearson Assessments.** The BSI is designed to reflect psychological symptom patterns of psychiatric and medical patients as well as nonpatients. It is especially appropriate in the following settings: in clinical situations where debilitation results in reduced attention and endurance, in research with limited interview schedules, and in outpatient clinics where testing procedures demand brevity. It is frequently used in measuring patient progress during treatment or in the assessment of treatment outcomes.
www.pearsonassessments.com/tests/bsi.htm
- ▶ **Mental Health Screening Form III (MHSF-III),** Authors: J.F.X. Carroll & John J. McGinley (2004). The MHSF III is a two-page, 18-question screening instrument for adult clients seeking services at substance abuse treatment programs. The instrument is still undergoing testing and validation, but has been found to be reliable and valid in preliminary testing. It may be reproduced at no charge without permission. Citation of the source is appreciated.
<http://www.asapnys.org/resources/mhscreen.pdf>
- ▶ **K10.** Author: Ronald Kessler et al (2003). The National Center for Health Statistics supported the development of the K10 to be used in the redesigned National Health Interview Survey (NHIS). As described in more detail in Kessler et al. (2003), The K10 scale is brief, easy to administer and score, and has shown excellent accuracy, sensitivity, and specificity in studies of samples from the general population. It accurately screens for severe psychological distress associated with serious mental illness among individuals with substance use disorders and across different psychiatric disorders. It incorporates an assessment of the degree of functional impairment, as well. The 10 items of the K10 assess the frequency with which a respondent experienced symptoms of generalized psychological distress, such as nervousness, tiredness, hopelessness, and restlessness, which often accompany serious mental illness. It performs well in detecting psychiatric disorders and is effective in identifying persons with severe psychiatric impairment and a need for further assessment and intervention. In treatment settings, clinicians would probably be most interested in using the K10 to screen for any psychiatric disorder rather than for a particular disorder. A six-item version of this scale (the K6) is also available and has been found to be psychometrically sound. The K10 is used in the Australian and Canadian equivalents of the National Health Interview Survey.
http://www.hcp.med.harvard.edu/ncs/k6_scales.php
- ▶ **Referral Decision Scale (RDS).** Authors: Linda A. Teplin and James Swartz (1989). The RDS was developed to detect persons in the criminal justice system who have a high probability of having a serious mental illness.

Author/Developer's Instrument Descriptions

Instruments with a Focus on Substance Use Disorders

- ▶ **CAGE.** Author: John Ewing. The CAGE is a 4-item, relatively nonconfrontational questionnaire for detection of alcoholism, usually phrased as "have you ever" but may be focused to delineate past or present alcohol problems. The CAGE is useful to family practice physicians, general internists and nurses. A complete copy of this instrument can be found in the National Institute on Alcohol Abuse and Alcoholism (NIAAA) publication "Assessing Alcohol Problems: A Guide for Clinicians and Researchers / 2nd edition," p.332-334. The CAGE-AID includes the same 4 items with minor revisions to allow screening for both alcohol and drug use disorders.
http://pubs.niaaa.nih.gov/publications/Assesing%20Alcohol/InstrumentPDFs/16_CAGE.pdf
- ▶ **Dartmouth Assessment of Lifestyle Instrument (DALI).** Authors: Rosenberg, S.D., Drake, R.E., Wolford, G.L., Mueser, K.T., Oxman, T.E., Vidaver, R.M., Carrieri, K.L., & Luckoor, R. (1998). The DALI is a brief screening instrument of 18 questions that detect recent (past 6 months) substance use disorders in people with severe mental illness. DALI identifies three types of substance disorders: alcohol, marijuana and cocaine. This instrument is in the public domain. The DALI has also been modified by New York State as a 2 page, 21-item version.
<http://dms.dartmouth.edu/prc/instruments/dali/>

Author/Developer's Instrument Descriptions

Instruments with a Focus on Substance Use Disorders (cont'd)

- **Drug Abuse Screening Test (DAST).** Author: Harvey A. Skinner. The DAST is a brief instrument designed for clinical and non-clinical screening to detect drug abuse or dependence disorders. It is most useful in settings in which seeking treatment for drug use problems is not the patient's stated goal. It was adapted from the Michigan Alcoholism Screening Test (MAST) to detect drug abuse or dependence pertaining to a range of psychoactive substances other than alcohol. The 28 self-report items cover a variety of consequences related to drug abuse without being specific about the drug, thus alleviating the necessity of using different instruments specific to each drug. A 20-item version of the DAST was found to have psychometric properties comparable with the 28-item version. Both versions are referred to as the DAST in the literature. In addition, the DAST provides a general measure of lifetime problem severity that can be used to guide further inquiry into drug-related problems and to help determine treatment intensity.
<http://eib.emcdda.europa.eu/index.cfm?fuseaction=public.content&nnodeid=3637&Slanguageisio=EN>
- **Short Alcohol Dependence Data (SADD).** Authors: Raistrick, Dunbar, & Davidson. The SADD questionnaire was derived from the Alcohol Dependence Data (ADD) questionnaire. More narrowly focused than the ADD, the SADD was also intended to be easier and faster to use than previous measures. As reported in the original publication (Raistrick, Dunbar, & Davidson, 1983), the SADD was designed to be "(i) suitable for patients seeking help with a drinking problem; (ii) a measure of present state dependence; (iii) sensitive across the full range of dependence; (iv) sensitive to change over time; and (v) relatively free of sociocultural influence"
http://pubs.niaaa.nih.gov/publications/assessing%20Alcohol/instrumentPDFs/61_SADD.pdf
- **Simple Screening Instrument for Substance Abuse (SSI-SA).** Author: Center for Substance Abuse Treatment. The SSI-SA was developed to screen patients in mental health settings for a broad spectrum of symptoms of co-occurring substance use disorders. The tool contains 16 questions that were derived from 13 other screening and assessment instruments found in published literature and covers five domains: substance consumption, preoccupation and loss of control, adverse consequences, problem recognition, and tolerance and withdrawal. The SSI-SA is in the public domain and can be used without charge or permission, and can be reproduced without limit. <http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat5.section.33643>
- **Texas Christian University Drug Screen (TCUDS).** Authors: Kevin Knight and Dwayne Simpson. The TCUDS is a brief screen to identify individuals with serious substance use histories for treatment options. It is widely used in criminal justice settings. <http://www.ibr.tcu.edu/pubs/datacoll/cjtrt.html>

Author/Developer's Instrument Descriptions

Instruments with a Focus on Substance Use and Mental Disorders

- ▶ **Addiction Severity Index (ASI).** Author: Thomas McLellan. The ASI gathers information on seven areas of client's life: Medical, employment or support, drug and alcohol use, legal, family history, family and social relationships, and psychiatric problems. Composite scores reflect a client's current status, hence, successive assessments can be used to monitor changes and evaluate treatment outcomes. Available from Treatment Research Institute (TRI): <http://www.tresearch.org/ASI.htm>
- ▶ **Global Appraisal of Needs (GAIN) -Short Screener.** Authors: Dennis, M.L., Chan, Y-.F., & Funk, R.R. (2006). The GAIN is for use with adolescents and adults entering substance abuse, mental health, and criminal justice systems to quickly identify those who would have a disorder based on the full GAIN, and place them in programs that provide appropriate interventions. The instrument contains 20 items across four dimensions: internalizing disorders, externalizing disorders, substance disorders, and crime/violence. It has good potential for identifying people with co-occurring disorders, but also rules out those who do not have a disorder. It is easy to use, can be administered by staff with minimal training or direct supervision. http://www.chestnut.org/LI/gain/GAIN_SS/index.html

Author/Developer's Instrument Descriptions

Instruments with a Focus on Substance Use and Mental Disorders (cont'd)

- **Massachusetts Youth Screening Instrument (MAYSI) –Version 2.** Authors: Thomas Grisso and Richard Barnum. The MAYSI is a brief screening instrument to identify youth in the juvenile justice system who may have special mental health needs. The instrument can be used at any entry or transitional placement point in the juvenile justice system. The instrument alerts staff to potential mental/emotional distress and certain behavior problems that might require an immediate response (Alcohol/Drug Use, Angry-Irritable, Depressed-Anxious, Somatic Complaints, Suicide Ideation, Thought Disturbance, Traumatic Experiences). Use of the instrument is unlimited with the purchase of the manual and registration with The National Youth Screening Assistance Project (MAYSI 2 technical assistance office).
<http://www.prpress.com/books/maysi2.html>
- **Mini International Neuropsychiatric Interview (MINI).** Authors: David V. Sheehan, Professor of Psychiatry and Director of Psychiatric Research, University of South Florida College of Medicine, and Yves Lecrubier, L'Hôpital de la Salpêtrière (National Institute for Health and Medical Research) in Paris, France. The MINI is a short, structured diagnostic interview that covers 20 psychiatric disorders and substance use disorders. Administration time is approximately 15-30 minutes. The M.I.N.I. has been translated into 43 languages and is used by mental health professionals and health organizations in more than 100 countries. It is the structured psychiatric interview of choice for psychiatric evaluation and outcome tracking in clinical psychopharmacology trials and epidemiological studies. There are a number of other versions of the instrument available, including the MINI Screen (modified) and MINI Plus. Distributed by Medical Outcomes Systems, Inc. <https://www.medical-outcomes.com/indexSSL.htm>

Conclusions

- ◆ **Unique screening instruments may be needed for different purposes or in specific settings.**
- ◆ **The need exists for further empirical validation of existing screening Instruments and for the development of new instruments that address co-occurring disorders simultaneously.**
- ◆ **There should be equivalent attention to and resources for Screening & Assessment, and for the parallel development of consensus- and evidence-based treatment services.**

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