

**Screening for the Possibility of  
Co-occurring Mental Illness and Substance  
Use Disorder in the Behavioral Health Setting**

**Department of Human Services  
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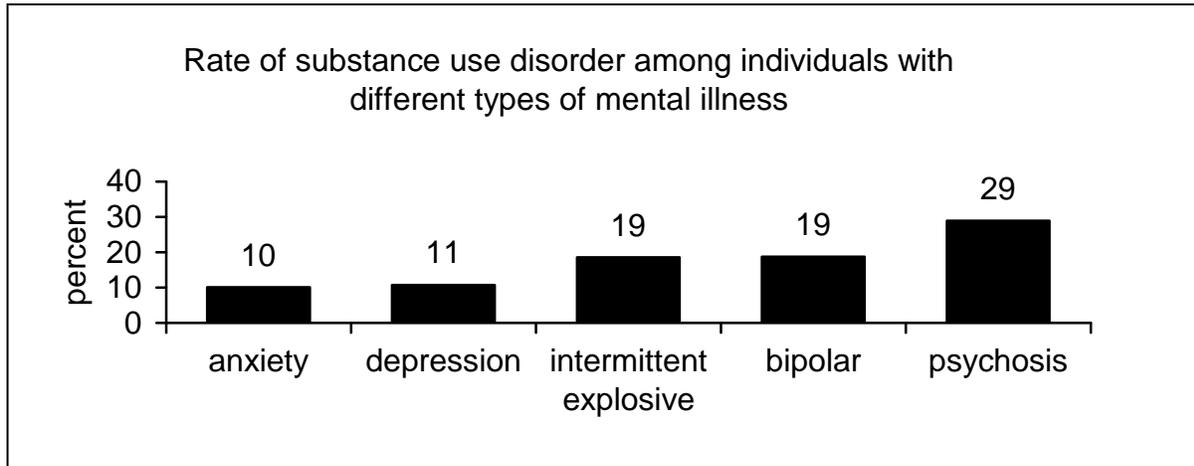
# **Screening for the Possibility of Co-occurring Mental Illness and Substance Use Disorder in the Behavioral Health Setting**

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## I. Why is screening for co-occurring disorders important?

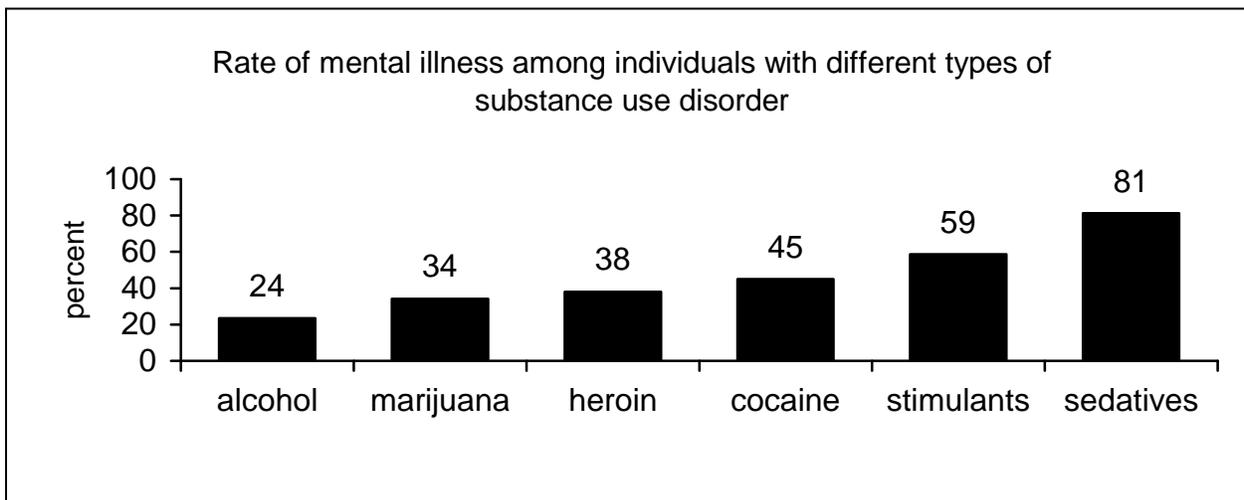
### Co-occurring disorders are common.

Clients who have mental illness are significantly more likely to have a substance use disorder than individuals who do not have mental illness.



Source: NSDUH, 2005, NCS-R, 2001-3

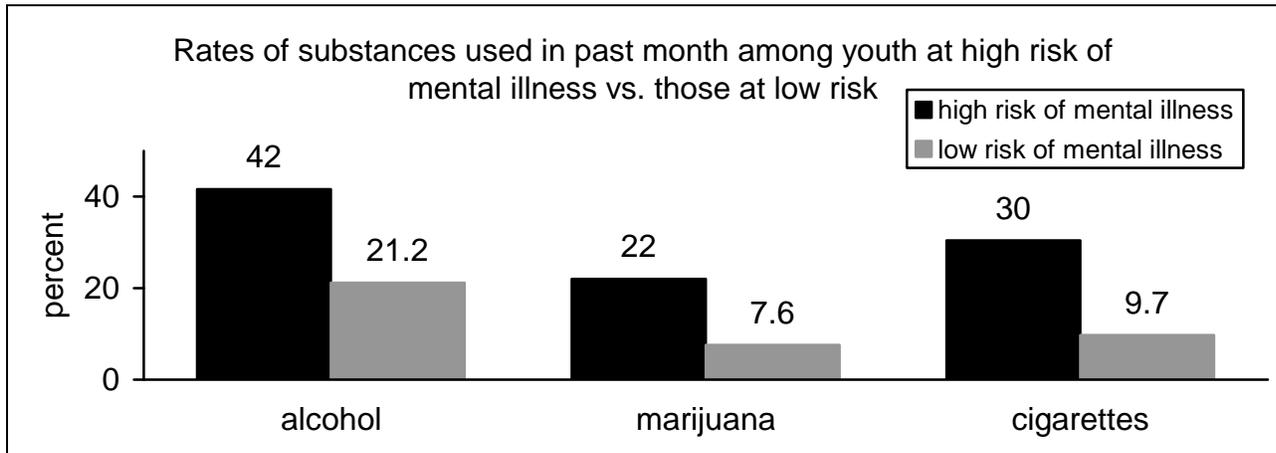
Similarly, clients with substance use disorders are much more likely to have a mental illness than people without substance use disorders. It is important to screen for substance use disorders in mental health settings and for mental illness in substance use treatment settings because they are very likely to be found there.



Source: NSDUH, 2005.

Mental illness and substance use disorder often begin in adolescence, so screening for co-occurring disorders is important in this age group as well. In Minnesota, for example, use of

alcohol, marijuana, and cigarettes is much higher among youth at high risk for mental illness than among those at low risk.



Source: Park, 2008.

### **Co-occurring disorders can be treated successfully.**

When a co-occurring disorder is undetected, the untreated disorder can interfere with treatment, and impair recovery for the treated disorder. Integrated treatment improves outcomes for both disorders and also leads to better housing, employment, educational, and social outcomes for individuals with co-occurring disorders (Mueser et al, 2003; TIP 42)  
<<http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat5.chapter.74073>>).

### **Screening is cost-effective.**

Screening with brief, well-validated measures for co-occurring disorders, like screening for any other health problem, is an efficient and cost-effective way to detect the need for further diagnostic assessment. As noted in TIP 42, “The screening process for co-occurring disorders detection 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.*”

As a specific example, a full mental health diagnostic assessment for an adolescent may cost medical assistance \$149.62 under current reimbursement rates, but mental health screening done as part of a Child and Teen Check-up costs only \$23.16.

## **II. Who should be screened for co-occurring disorders?**

Individuals requesting mental health services or chemical dependency services should be screened for the possibility of a co-occurring mental illness and substance use disorder **UNLESS** a co-occurring disorder is already known and documented.

Anyone undergoing routine screening for one type of disorder should also be screened for the other disorder. For example, the current standard for Child and Teen Check-ups is mental health screening every 2 years after age 4. An adolescent could be screened for co-occurring disorders 3 times between the ages of 12 and 18 by following these routine screening guidelines.

### III. What makes a good screening tool for co-occurring disorders?

#### The tool is practical.

To be most useful in a clinical setting, the tool should be short (only a few items) and not take much time (fewer than 5 minutes). The wording should be easy for most clients to understand. It should be easy for staff to give and score and require little or no training to use. Flexible administration options are preferable, so that the screen can either be read to clients or filled out by them on paper or computer. Availability in languages other than English may be important in some settings. Finally, the tool should be of no or little cost to use.

#### The tool should be reliable, valid, and efficient.

There should be evidence that it is **reliable** (that it is internally consistent and performs consistently over time).

The tool should also be **valid**, meaning that it correlates with other known tests or behaviors that demonstrate the same construct, and correctly discriminates between what it intends to measure and other related constructs. When validity is determined by comparing the screening measure to a full diagnostic assessment, the important measures are **sensitivity**, which is percentage of individuals who do have a disorder who correctly score positive on a screen (called “true positives”), and **specificity**, which is the proportion without a disorder who correctly score negative on the screen (“true negatives”).

The goal in creating and selecting a screening tool is to find one that maximizes both sensitivity and specificity. There is no perfect tool that reaches 100% on both (which would look like the chart below), but tools that range between 70-90% on sensitivity and specificity are considered acceptable. Preference should be given to high specificity, though; as noted by Mueser et al. (2003): “. . . it is preferable to ‘cast a wide net’ and to be over-inclusive rather than be under-inclusive in identifying clients with co-occurring disorders.”

A third measure of efficiency is total classification **accuracy**. This is simply the percentage of all individuals with and without diagnoses on the full diagnostic test who are correctly classified as positive and negative by the screening tool. A statistic indicating overall accuracy is **area under the curve** (AUC). The better the overall accuracy of a tool, the more efficient it is considered to be.



Sensitivity is like a net’s ability to catch most of the “big fish” you want to keep.



Specificity is like its ability to let out most of the “little fish” you don’t want to keep.

How a perfect screening tool would work:		Diagnostic test result	
		Disease present n=200	Disease absent n=800
Screening test result	Positive screen n=200	200 True positive 100% sensitivity	0 False positive
	Negative screen n=800	0 False negative	800 True negative 100% specificity

**The tool should work in major client subpopulations.**

The measure should be validated in large, diverse samples and should have good properties in major subgroups where the measure may be used. In particular, mental health screening tools should have evidence of working well in the substance use treatment population, and substance use screening tools should work well in mental health treatment populations.

**IV. What are some screening tools for that meet these criteria?**

There are hundreds of screening tools for the detection of mental illness and substance use disorder, varying greatly in the characteristics and properties listed above. Below three tools are described in detail that are among the shortest, highest quality, and best validated tools for screening for co-occurring disorders. When considering other tools, they should be compared against the qualities of these three screening measures.

The websites listed below provide more detailed information about the origins of the tools and contain certain versions of the tools. However, clearer, more easily scored and reproducible copies of these screening tools appear at the end of this document.

**The K6:**

The K6 (Kessler, et al., 2002, 2007) is a 6-item screen designed to detect serious mental illness in the past 30 days. The screen has been included in the National Health Interview Survey, the National Household Survey on Drug Abuse, and on several national surveys in other countries. [http://www.hcp.med.harvard.edu/ncs/k6\\_scales.php](http://www.hcp.med.harvard.edu/ncs/k6_scales.php)

During the past 30 days, about how often did you feel....	None of the time	A little of the time	Some of the time	Most of the time	All of the time
a. ....nervous?	0	1	2	3	4
b. ....hopeless?	0	1	2	3	4
c. ....restless or fidgety?	0	1	2	3	4
d. ....so depressed that nothing could cheer you up?	0	1	2	3	4
e. ....that everything was an effort?	0	1	2	3	4
f. ....worthless?	0	1	2	3	4

### The CAGE-AID:

The CAGE-AID (Brown & Rounds, 1995) is a 4-item screen for substance use disorder. It is a reworded version of the widely-used CAGE (Ewing, 1984) adapted to include drugs.

<<http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat5.table.46449>>

<<http://lib.adai.washington.edu/instruments/>>

1. Have you ever felt you ought to cut down on your drinking or drug use?     \_\_\_yes \_\_\_no
2. Have people annoyed you by criticizing your drinking or drug use?     \_\_\_yes \_\_\_no
3. Have you ever felt bad or guilty about your drinking or drug use?     \_\_\_yes \_\_\_no
4. 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?     \_\_\_yes \_\_\_no

The CAGE-AID typically asks about these symptoms during the past year, but in some studies a shorter time frame has been used to screen for more recent substance use problems. Another adaptation asks for “yes” and “no” answers separately for drinking and for drug use.

### The GAIN-SS:

The GAIN-SS (Dennis, Chan & Funk, 2006) is a conjoint screening measure for both mental illness and substance use disorder (there is also a 4<sup>th</sup> section on crime and violent behavior).

While the GAIN-SS is copyrighted by Chestnut Health Systems, the State of Minnesota Department of Human Services maintains a license for the following users:

- Enrolled and Approved Minnesota Health Care Program Providers
- MCO contracted providers with Minnesota Department of Human Services
- Approved treatment providers licensed under Minnesota Rule 31
- County social service and county juvenile corrections staff
- Approved assessors under Minnesota Rule 25
- Approved Minnesota gambling treatment providers
- Minnesota Department of Human Services State Operated Services
- Minnesota tribal entities

Contact DHS for questions about the license agreement or to be added to the license agreement.

The first 5-item screen detects internalizing mental illness; the second screen detects externalizing disorders; and the 3<sup>rd</sup> detects substance use disorders. All three can be used together as a conjoint screen, or each section can be used individually.

[http://www.chestnut.org/LI/gain/GAIN\\_SS/index.html](http://www.chestnut.org/LI/gain/GAIN_SS/index.html)

IDScR	Past month	2-12 months ago	1+ years ago	Never
1. <u>When was the last time</u> you had <u>significant</u> problems				
a. with feeling very trapped, lonely, sad, blue, depressed, or hopeless about the future?.....	3	2	1	0
b. with sleep trouble, such as bad dreams, sleeping restlessly or falling asleep during the day?.....	3	2	1	0
c. with feeling very anxious, nervous, tense, scared, panicked or like something bad was going to happen?.....	3	2	1	0
d. with becoming very distressed and upset when something reminded you of the past?.....	3	2	1	0
e. with thinking about ending your life or committing suicide?	3	2	1	0

EDScR	Past month	2-12 months ago	1+ years ago	Never
2. <u>When was the last time</u> that you did the following things <u>two</u> or <u>more</u> times?				
a. lied or conned to get things you wanted or to avoid having to do something?.....	3	2	1	0
b. had a hard time paying attention at school, work or home?.....	3	2	1	0
c. had a hard time listening to instructions at school, work or home?.....	3	2	1	0
d. were a bully or threatened other people?.....	3	2	1	0
e. started physical fights with other people?.....	3	2	1	0

SDScR	Past month	2-12 months ago	1+ years ago	Never
3. <u>When was the last time</u> ...				
a. you used alcohol or other drugs weekly or more often?.....	3	2	1	0
b. you spent a lot of time either getting alcohol or other drugs, using alcohol or other drugs, or feeling the effects of alcohol or other drugs?.....	3	2	1	0
c. you kept using alcohol or other drugs even though it was causing social problems, leading to fights, or getting you into trouble with other people?.....	3	2	1	0
d. your use of alcohol or other drugs caused you to give up, reduce or have problems at important activities at work, school, home or social events?.....	3	2	1	0
e. you had withdrawal problems from alcohol or other drugs like shaky hands, throwing up, having trouble sitting still or sleeping, or that you used any alcohol or drugs to stop being sick or avoid withdrawal problems?.....	3	2	1	0

**What are the practical aspects of these tools?**

All three screening tools are very practical to use in clinical settings. They are short, have relatively simple wording, are easy to use and score, come in at least one other language, and cost little or nothing to use.

	<b>K6</b>	<b>CAGE-AID</b>	<b>GAIN-SS</b>	
Topic	mental health	substance use	mental health	substance use
Brevity	6 items	4 items	2 screens, 5 items each	5 items
Simplicity of wording*	reading level grade 4.3	reading level grade 4.9	reading level grade 8.8, 6.0	reading level grade 10.6
Ease of scoring	add points across 6 0-4 scales  13+ is positive	count yeses  1+ is positive	count 2s & 3s on each 0-3 scale  1+ is positive	count 2s & 3s on each 0-3 scale  1+ is positive
Flexibility of administration	self-administered or interview	self-administered or interview	self-administered, interview or computer	self-administered, interview or computer
Languages available other than English	Arabic, Spanish (for Spain), other international languages	Spanish, other international languages	Spanish Russian	Spanish Russian
Cost	none	none	none if added to state license	none if added to state license

\*grade level averaged across 5 indexes, calculated at <<http://www.addedbytes.com/readability/>>

**What are their reliability, validity, efficiency, and usefulness in major subpopulations?**

All three screening tools have good psychometric properties, and have been validated in the treatment subpopulation of interest. For example, the K6 and GAIN-SS mental health screening tools are **valid** among individuals with substance use disorders, and the CAGE-AID and GAIN-SS substance use screening tools are **valid** among individuals who have mental illness. They have also been tested in reasonably large and diverse populations.

	<b>K6</b>	<b>CAGE-AID</b>	<b>GAIN-SS</b>	
Topic	mental health	substance use	mental health	substance use
Reliability	.89-.92	.80-.90	IDscr: .79 EDscr: .81	.78
Sensitivity/specificity/AUC in general population  (see references marked ‘*’ in Resources)	AUC=.87-.88 sens/spec=.36/.96 from pilot, U.S. surveys  AUC=.86-.93 surveys in other nations	sens/spec=.71/.76 hospital patients 18-49, past year  sens/spec=.79/.77 adult primary care	IDscr: AUC=.96 sens/spec=.97/.74  EDscr: AUC=.95 .97/.81 EDscr	AUC=.97 sens/spec=.97/.73
Validated in treatment population  (see references marked ‘**’ in Resources)	AUC=.86 sens/spec=.76/.81  individuals with substance use disorders in national survey	AUC=.88 sens/spec=.86-.92/.71-.87 public psychiatric hospital inpatients  AUC=.996 sens/spec=.91/.98 adolescents, outpatient mental health care	IDscr: sens/spec=.97/.74  EDscr: sens/spec=.97/81  individuals in substance use treatment	sens/spec: .97/.80  adults with mental illness
Validated in diverse populations	AUC= .86 men .84 women .87 White .84 African American .86 Hispanic (all individuals with substance use disorders)	one study in mostly African American sample; validity/reliability study in American Indians; more sensitive than CAGE in women, different income, education levels, substance use disorders	GAIN-SS developed in varied settings with diverse populations, including adolescents  mental health treatment population: 39% African American, 48% White, 5% Hispanic.	

## V. How does screening fit with a Rule 25 assessment?

The revised Rule 25 assessment (anticipated distribution August 2009) will meet the criteria of a standardized screening tool for screening for mental health issues. The 2009 Rule 25 version will incorporate the Global Appraisal of Individual Needs–Short Screener (GAIN-SS).

## **VI. How do I conduct screening for co-occurring disorders?**

### **Develop rapport.**

Begin with other questions such as other routine intake questions, questions on topics such as medical, family, or social history, other health habits, stress and ways of coping. Tie the screening questions into the client's concerns and reasons for seeing you.

### **Gain parental consent (if needed)**

When working with youth it is often a best practice to provide the parent or legal guardian with information on the purpose and benefits of screening and to seek permission or written consent to screen. Particularly when services are being sought voluntarily, parental input and buy-in at the beginning of the process make it more likely that the family will seek on-going services.

### **Explain why the questions are being asked and normalize them.**

One way to “normalize” asking the screening questions is to ask about similar symptoms and problems among family and friends before asking the individual. Another is to note that because these are such common problems, the screening questions are routinely asked of all clients. It is also important to explain that the screener is useful to you and the agency to try to find the best services possible for the individual.

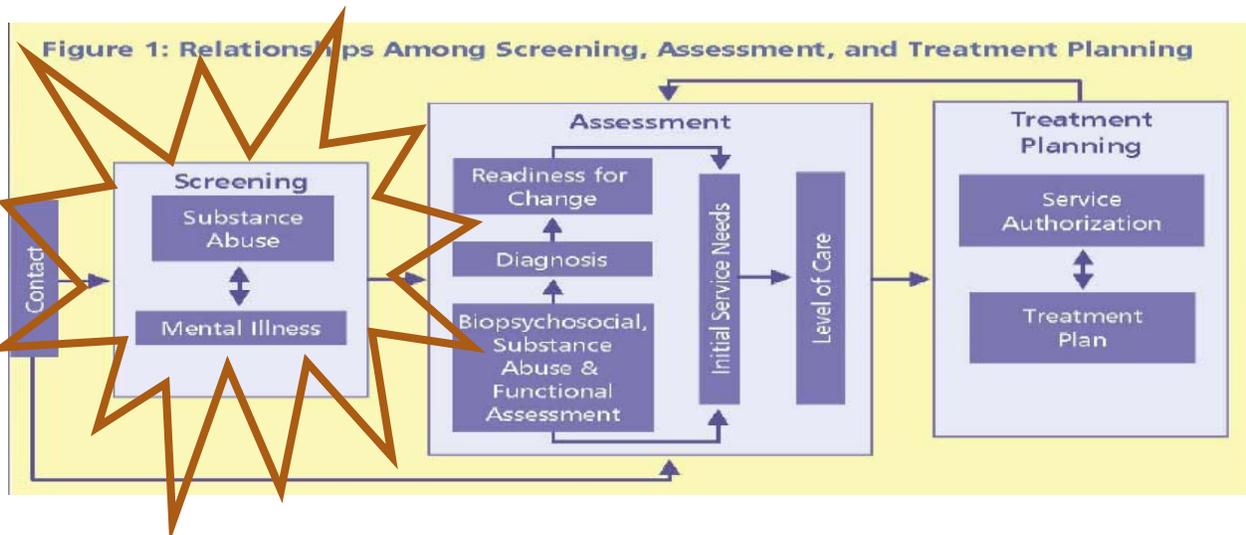
The user manual for the GAIN-SS gives an example of a possible introduction to screening: “To help us get a better understanding of any problems you might have, how they are related to each other, and what kind of services might help you the most, I would like to spend about 5 minutes asking you a few questions as part of a short screener that we use with many of our clients. Your answers are private and will be used only for your treatment and to help us evaluate our own services.” (Dennis et al, 2008, p. 6)

### **Give any specific instructions that accompany the screening tool.**

These usually include what the questions are about, what the timeframe is for the questions, and how to mark answers.

### **Score the screening tool, follow-up on responses, and decide on referral.**

Review the screening responses with the individual to determine if any questions were unclear or any responses ambivalent. When a final score is determined, follow your agency's policy for referral for further assessment, if appropriate. As shown below, screening is just the first step in the process of arriving at an appropriate treatment plan for the individual.



Source: Center for Substance Abuse Treatment. 2006.

<http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat5.chapter.74073>

Three on-line videos provide more information about the process of screening. The first, by Washington Institute, explains the multi-step process of screening and assessment used in Washington State. At Step 3 the video explains in detail how to screen with the GAIN-SS

1. Go to: <http://depts.washington.edu/washinst/>
2. Click on “[COD Instructor Training Materials \(Adult & Adolescent\)](#)--(includes GAIN Assessment Information)”
3. Click on “HERE” in “B) Curriculum and Resource Materials for Individual Providers: Click [HERE](#) for both Adult & Adolescent Training Resources”
4. Click on one of the video formats in “Steps 2 & 3 (12:16) ([.mov](#)) ([.wmv](#))”; advance to 7:02 to start with Screening with the GAIN-SS

In addition, two on-line video clips from different sources illustrate the use of a screening tool in a clinical setting, this time the original CAGE screen for alcohol use disorders. The first clip demonstrates the ineffective use of the screening tool; the second demonstrates more effective use of the same tool. To see these pair of videos:

1. Go to : <http://www.bu.edu/act/mdalcoholtraining/cases.html> and click on “View Case One.”
2. Then go to <http://video.biocom.arizona.edu/video/videoLibrary/aztelem/IHS/default.html> and click on one of the video file types next to “Demonstrations and Vignettes.”

## VII. Where can I get more information?

### Resources on the K6 (\*indicates the source article; \*\*indicates validation in the treatment population):

Cairney, J., Veldhuizen, S., Wade, T. J., Kurdyak, P., & Streiner, D. L. 2007. Evaluation of 2 measures of psychological distress as screeners for depression in the general population. *Can J Psychiatry*, 52(2): 111-20.

Furukawa, T. A., Kawakami, N., Saitoh, M., Ono, Y., Nakane, Y., Nakamura, Y., Tachimori, H., Iwata, N., Uda, H., Nakane, H., Watanabe, M., Naganuma, Y., Hata, Y., Kobayashi, M., Miyake, Y., Takeshima, T., & Kikkawa, T. 2008. The performance of the Japanese version of the K6 and K10 in the World Mental Health Survey Japan. *Int J Methods Psychiatr Res*, 17(3), 152-8.

Furukawa, T. A., Kessler, R. C., Slade, T., & Andrews, G. 2003. The performance of the K6 and K10 screening scales for psychological distress in the Australian National Survey of Mental Health and Well-Being. *Psychol Med*, 33(2), 357-62.

Kessler, R. C., Andrews, G., Colpe, L. J., Hiripi, E., Mroczek, D. K., Normand, S. L., Walters, E. E., & Zaslavsky, A. M. 2002. Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychol Med*, 32(6): 959-76.

\*Kessler, R. C., Barker, P. R., Colpe, L. J., Epstein, J. F., Gfroerer, J. C., Hiripi, E., Howes, M. J., Normand, S. T., Manderscheid, R. W., Walters, E. E., & Zaslavsky, A. M. 2007. Screening for serious mental illness in the general population. *Arch Gen Psychiatry*, 60, 184-189.

\*\*Swartz, J.A. & Lurigio, A.J. 2006. Screening for serious mental illness in populations with co-occurring substance use disorders: Performance of the K6 scale. *J Subst Abuse Treat*, 31 (3), 287-96.

Veldhuizen, S, Cairney, J, Kurdvak, P, & Streiner, DL. 2007. The sensitivity of the K6 as a screen for any disorder in community mental health surveys: a cautionary note. *Can J Psychiatry*, 52(4), 256-9.

### Resources on the CAGE-AID (\*indicates the source article; \*\*indicates validation in the treatment population):

\*Brown, R.L. & Rounds, L.A. 1995. Conjoint screening questionnaires for alcohol and other drug abuse: Criterion validity in a primary care practice. *Wis Med J*, 9,:135-140.

Brown, R.L, Leonard, T., Saunders, L.A, & Papasouliotis O. 1998. The prevalence and detection of substance use disorders among inpatients ages 18 to 49: an opportunity for prevention. *Prev Med*, 27(1), 101-10.

\*\*Couwenberg, C., Van Der Gaag, R.J., Koeter, M., DeRuiter, C., & Van den Brink, W. 2009. Screening for substance abuse among adolescents: validity of the CAGE-AID in youth mental health care. *Subst Use Misuse*, 44(6), 823-34.

\*\*Dyson, V., Appleby, L., Altman, E., Doot, M., Luchins, D. J., & Delehant, M. 1998. Efficiency and validity of commonly used substance abuse screening instruments in public psychiatric patients. *J Addictive Diseases*, 17(2): 57-76.

Leonardson, G.R., Kepmer, E., Ness, F.K., Koplin, B.A., Daniels, M.C., & Leonardson, G.A. 2005. Validity and reliability of the audit and CAGE-AID in Northern Plains American Indians. *Psychol Rep*, 97(1), 161-6.

### **Resources on the CAGE:**

Because the CAGE-AID is such a recent development from the CAGE instrument, there is considerably more validation of the original instrument\*, particularly in the population of individuals with mental illness.\*\* Several of these references are included below as additional, indirect support for the validity of the CAGE-AID.

\*\*Breakey, W.R., Calabrese, L., Rosenbladd, A., Crum, R.M. 1998. Detecting alcohol use disorders in the severely mentally ill. *Community Ment Health J*, 34(2), 165-74.

\*\*Dervaux, A., Bavle, F.J., Laqueille, X., Bourdel, M.C., Leborgne, M., Olie, J.P., & Krebs, M.O. 2006. Validity of the CAGE questionnaire in schizophrenic patients with alcohol abuse and dependence. *Schizophr Res*, 81(2-3), 151-5.

Dhalla, S. & Kopec, J.A. 2007. The CAGE questionnaire for alcohol misuse: a review of reliability and validity studies. *Clin Invest Med*, 30(1), 33-41.

\*\*Dyson, V., Appleby, L., Altman, E., Doot, M., Luchins, D. J., & Delehant, M. 1998. Efficiency and validity of commonly used substance abuse screening instruments in public psychiatric patients. *J Addictive Diseases*, 17(2): 57-76

\*\*Etter, M. & Etter, J. 2004. Alcohol consumption and the CAGE test in outpatients with schizophrenia or schizoaffective disorder and in the general population. *Schizophrenia Bulletin*, 30(4): 947-956.

\*Ewing, J.A. 1984. Detecting alcoholism: The CAGE questionnaire. *JAMA: Journal of the American Medical Association*, 252:1905-1907.

Malet, L., Schwan, R., Boussiron, D., Aublet-Cuvelier, B., & Llorca, P.M. 2005. Validity of the CAGE questionnaire in hospital. *Eur Psychiatry*, 20(7), 484-9.

\*\*Mayfield, D., McLeod, G., & Hall, P. 1974. The CAGE questionnaire: Validation of a new alcoholism instrument. *Am J Psychiatr*, 131, 1121-1123.

\*\*Rosenberg, S. D., Drake, R. E., Wolford, G. L., Mueser, K. T., Oxman, T. E., Vidaver, R. M., Carrieri, K. L., & Luckoor, R. 1998. Dartmouth Assessment of Lifestyle Instrument (DALI): A substance use disorder screen for people with severe mental illness. *Am J Psychiatry*, 155: 232-238. (has data on CAGE)

\*\*Teitelbaum, L.M. & Carey, K.B.. 2000. Temporal stability of alcohol screening measures in a psychiatric setting. *Psychol Addict Behav*, 14(4), 401-4.

**Resources on the GAIN-SS (\*indicates the source article; \*\*indicates validation in the treatment population):**

\*Dennis, M. L., Chan, Y., & Funk, R. R. 2006. Development and validation of the GAIN Short Screener (GSS) for internalizing, externalizing and substance use disorders and crime/violence problems among adolescents and adults. *The Am J on Addictions*, 15: 80-91.

Dennis, M. L., Feeney, T., Stevens, L. H., & Bedoya, L. 2008. Global Appraisal of Individual Needs–Short Screener (GAIN-SS):Administration and Scoring Manual Version 2.0.3. Bloomington, IL: Chestnut Health Systems.  
<[http://www.chestnut.org/LI/GAIN/GAIN\\_SS/GAIN-SS\\_Manual.pdf](http://www.chestnut.org/LI/GAIN/GAIN_SS/GAIN-SS_Manual.pdf)>

\*\*Integrated Dual Diagnosis Services for the Peoria County Criminal Justice System [data file]. Principal Investigator: Mark Godley, Ph.D. Funded by: SAMHSA, Center for Mental Health Services Grant Number: SM53877-01 to Peoria County. Project Period: October 2001-September 2004. Data provided via personal communication from Dr. Michael Dennis, Chestnut Org.

Sacks, S., Melnick, G., Cohen, C., Banks, S., Friedmann, P. D., Grella, C., Knight, K., & Zlotnick, C. 2007. CJDATS Co-Occurring Disorders Screening Instrument (CODSI) for Mental Disorders (MD). *Criminal Justice & Behavior*, 34(9), 1198-1215. (data on GAIN-SS)

**Other cited resources:**

Center for Substance Abuse Treatment. 2006. *Screening, Assessment, and Treatment Planning for Persons With Co-Occurring Disorders*. COCE Overview Paper 2. DHHS Publication No. (SMA) 06-4164 Rockville, MD: Substance Abuse and Mental Health Services Administration, and Center for Mental Health Services. <[http://coce.samhsa.gov/cod\\_resources/PDF/OP2-ScreeningandAssessment-8-13-07.pdf](http://coce.samhsa.gov/cod_resources/PDF/OP2-ScreeningandAssessment-8-13-07.pdf)>

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## **VIII. The K6, CAGE-AID, and GAIN-SS Screening Instruments**

**K6**  
**Self-administered version**

Scoring:

**Add up the circled numbers.**

A sum of **13 or more** is positive and suggests the need for further assessment.

## K6

The following questions ask about how you have been feeling during the **past 30 days**. For each question, please circle the number that best describes how often you had this feeling.

<b>During the past 30 days, about how often did you feel....</b>	<b>None of the time</b>	<b>A little of the time</b>	<b>Some of the time</b>	<b>Most of the time</b>	<b>All of the time</b>
a. ....nervous?	0	1	2	3	4
b. ....hopeless?	0	1	2	3	4
c. ....restless or fidgety?	0	1	2	3	4
d. ....so depressed that nothing could cheer you up?	0	1	2	3	4
e. ....that everything was an effort?	0	1	2	3	4
f. ....worthless?	0	1	2	3	4

## **K6**

### **Interviewer-administered version**

If interviewer administered:

All bolded words in questions should be emphasized by voice inflection.

All parenthetical phrases in questions are optional.

"IF NECESSARY" means " the interviewer should prompt the client with the response categories, using the truncated wording when specified, until the client has learned them well enough to respond without prompting.

If the client gives responses that are not included among the pre-specified responses (e.g., a response of "quite a bit of the time"), repeat the response options once and code the response as a refusal if the client continues to give a response other than those that are pre-specified.

"IF VOLUNTEERED" means if the client gives one of the specified responses, that response should be recorded without additional probing.

Scoring:

**Add up the circled numbers.**

A sum of **13 or more** is positive and suggests the need for further assessment.

## K6

Q1a. The following questions ask about how you have been feeling during the **past 30 days**. About how often during the past 30 days did you feel **nervous**—would you say **all** of the time, **most** of the time, **some** of the time, a **little** of the time, or **none** of the time?

- 0. NONE
- 1. A LITTLE
- 2. SOME
- 3. MOST  DON'T KNOW (IF VOLUNTEERED)
- 4. ALL  REFUSED (IF VOLUNTEERED)

Q1b. During the past 30 days, about how often did you feel **hopeless**—**all** of the time, **most** of the time, **some** of the time, a **little** of the time, or **none** of the time?

- 0. NONE
- 1. A LITTLE
- 2. SOME
- 3. MOST  DON'T KNOW (IF VOLUNTEERED)
- 4. ALL  REFUSED (IF VOLUNTEERED)

Q1c. During the past 30 days, about how often did you feel **restless or fidgety** (IF NECESSARY: **all, most, some, a little, or none** of the time?)

- 0. NONE
- 1. A LITTLE
- 2. SOME
- 3. MOST  DON'T KNOW (IF VOLUNTEERED)
- 4. ALL  REFUSED (IF VOLUNTEERED)

Q1d. During the past 30 days, about how often did you feel **so depressed that nothing could cheer you up?** (IF NECESSARY: **all, most, some, a little, or none** of the time?)

- 0. NONE
- 1. A LITTLE
- 2. SOME
- 3. MOST  DON'T KNOW (IF VOLUNTEERED)
- 4. ALL  REFUSED (IF VOLUNTEERED)

Q1e. During the past 30 days, about how often did you feel **that everything was an effort** (IF NECESSARY: **all, most, some, a little, or none** of the time?)

- 0. NONE
- 1. A LITTLE
- 2. SOME
- 3. MOST  DON'T KNOW (IF VOLUNTEERED)
- 4. ALL  REFUSED (IF VOLUNTEERED)

Q1f. During the past 30 days, about how often did you feel **worthless** (IF NECESSARY: **all, most, some, a little, or none** of the time?)

- 0. NONE
- 1. A LITTLE
- 2. SOME
- 3. MOST  DON'T KNOW (IF VOLUNTEERED)
- 4. ALL  REFUSED (IF VOLUNTEERED)

**CAGE-AID**  
**Original version**  
**Self-administered or interviewer-administered**

The instrument author recommends asking these questions before deciding how to ask the CAGE-AID questions:

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

If the client has experimented with drugs and drinks alcohol, ask the CAGE-AID questions. If the clients only drinks alcohol, ask the questions without reference to drugs, and if the client has tried drugs but does not drink alcohol, ask the questions without reference to alcohol.. If neither, do not give the CAGE-AID.

A time frame can be added at the beginning. For example, “In the past 12 months, have you ever...”

Scoring:

Add up the number of “yes” responses.

A score of **1 or more** “yeses” is a positive result and suggests the need for further assessment..

## **CAGE-AID**

1. Have you ever felt you ought to cut down on your drinking or drug use?   \_\_\_YES \_\_\_NO
2. Have people annoyed you by criticizing your drinking or drug use?   \_\_\_YES \_\_\_NO
3. Have you ever felt bad or guilty about your drinking or drug use?   \_\_\_YES \_\_\_NO
4. 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?   \_\_\_YES \_\_\_NO

**CAGE-AID**  
**DDCAT toolkit Appendix C version**  
**Self-administered or interviewer-administered**

This version of the CAGE-AID appears in the appendix of the Dual Diagnosis Capability in Addiction Treatment (DDCAT) toolkit, Appendix C. The variation is that answers for alcohol and for drug use are given separately rather than combined. It is not known if the psychometric properties that apply to the original CAGE-AID also apply to this modified version.

Scoring:

Add up the number of “yes” responses.

A score of **1 or more** yeses is positive and suggests the need for further assessment.

## **CAGE-AID**

1. Have you ever felt you should **C**ut down on your drinking or drug use?  
Drinking: YES\_\_\_ NO\_\_\_  
Drug Use: YES\_\_\_ NO\_\_\_
  
2. Have people **A**nnoyed you by criticizing your drinking or drug use?  
Drinking: YES\_\_\_ NO\_\_\_  
Drug Use: YES\_\_\_ NO\_\_\_
  
3. Have you ever felt bad or **G**uilty about your drinking or drug use?  
Drinking: YES\_\_\_ NO\_\_\_  
Drug Use: YES\_\_\_ NO\_\_\_
  
4. 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 (**E**ye opener)?  
Drinking: YES\_\_\_ NO\_\_\_  
Drug Use: YES\_\_\_ NO\_\_\_

## GAIN-Short Screener (GAIN-SS)

conjoint screener  
recency version 2.0.3

### Scoring

Count the number of **2s and 3s** for each subscale.

A score of **1 or more on any subscale** is positive and suggests the need for further assessment for the corresponding disorder.

### Example:

The client's past-year symptoms are scored by counting the number of **2s and 3s** on each subscale:

- o Internalizing Disorder Screener: count number of 2s and 3s on items 1a to 1e (score range is 0-5)
- o Externalizing Disorder Screener: count number of 2s and 3s on items 2a to 2e (score range 0-5)
- o Substance Disorder Screener: count number of 2s and 3s on items 3a to 3e (score range 0-5)

Be sure to **count instead of sum** the raw answers. For example, if the client's responses for the items in the Internalizing Disorder Screener (IDSc4) were:

- 1a = 3 (past month)
- 1b = 2 (2-12 months ago)
- 1c = 3 (past month)
- 1d = 1 (more than 12 months ago)
- 1e = 0 (never)

the IDScr score would be 3, since 1a, 1b, and 1c are rated either 2 or 3 and reflect past-year symptoms.

See the GAIN-SS manual for further information.

<[http://www.chestnut.org/LI/gain/GAIN\\_SS/GAIN-SS\\_Manual.pdf](http://www.chestnut.org/LI/gain/GAIN_SS/GAIN-SS_Manual.pdf)>

## GAIN-Short Screener (GAIN-SS)

The following questions are about common psychological, behavioral or personal problems. These problems are considered significant when you have them for two or more weeks, when they keep coming back, when they keep you from meeting your responsibilities, or when they make you feel like you can't go on. After each of the following questions, please tell us the last time that you had the problem, if ever, by answering, "In the past month" (3), "2-12 months ago" (2), "1 or more years ago" (1), or "Never" (0).

IDScR	Past month	2-12 months ago	1+ years ago	Never
1. <u>When was the last time</u> you had <u>significant</u> problems				
a. with feeling very trapped, lonely, sad, blue, depressed, or hopeless about the future?.....	3	2	1	0
b. with sleep trouble, such as bad dreams, sleeping restlessly or falling asleep during the day?.....	3	2	1	0
c. with feeling very anxious, nervous, tense, scared, panicked or like something bad was going to happen?.....	3	2	1	0
d. with becoming very distressed and upset when something reminded you of the past?.....	3	2	1	0
e. with thinking about ending your life or committing suicide?	3	2	1	0

EDScR	Past month	2-12 months ago	1+ years ago	Never
2. <u>When was the last time</u> that you did the following things <u>two or more times</u> ?				
a. lied or conned to get things you wanted or to avoid having to do something?.....	3	2	1	0
b. had a hard time paying attention at school, work or home?.....	3	2	1	0
c. had a hard time listening to instructions at school, work or home?.....	3	2	1	0
d. were a bully or threatened other people?.....	3	2	1	0
e. started physical fights with other people?.....	3	2	1	0

SDScR	Past month	2-12 months ago	1+ years ago	Never
3. <u>When was the last time</u> ...				
a. you use alcohol or other drugs weekly or more often?.....	3	2	1	0
b. you spent a lot of time either getting alcohol or other drugs, using alcohol or other drugs, or feeling the effects of alcohol or other drugs?.....	3	2	1	0
c. you kept using alcohol or other drugs even though it was causing social problems, leading to fights, or getting you into trouble with other people?.....	3	2	1	0
d. your use of alcohol or other drugs caused you to give up, reduce or have problems at important activities at work, school, home or social events?.....	3	2	1	0
e. you had withdrawal problems from alcohol or other drugs like shaky hands, throwing up, having trouble sitting still or sleeping, or that you used any alcohol or drugs to stop being sick or avoid withdrawal problems?.....	3	2	1	0

**GAIN-Short Screener (GAIN-SS)**

separate screeners  
recent version 2.0.3

Scoring: Same as for conjoint screener.

## GAIN-SS IDScr

The following questions are about common psychological, behavioral or personal problems. These problems are considered significant when you have them for two or more weeks, when they keep coming back, when they keep you from meeting your responsibilities, or when they make you feel like you can't go on. After each of the following questions, please tell us the last time that you had the problem, if ever, by answering, "In the past month" (3), "2-12 months ago" (2), "1 or more years ago" (1), or "Never" (0).

IDScr	Past month	2-12 months ago	1+ years ago	Never
1. <u>When was the last time</u> you had <u>significant</u> problems				
a. with feeling very trapped, lonely, sad, blue, depressed, or hopeless about the future?.....	3	2	1	0
b. with sleep trouble, such as bad dreams, sleeping restlessly or falling asleep during the day?.....	3	2	1	0
c. with feeling very anxious, nervous, tense, scared, panicked or like something bad was going to happen?.....	3	2	1	0
d. with becoming very distressed and upset when something reminded you of the past?.....	3	2	1	0
e. with thinking about ending your life or committing suicide?	3	2	1	0

**GAIN-SS**  
**EDScr**

The following questions are about common psychological, behavioral or personal problems. These problems are considered significant when you have them for two or more weeks, when they keep coming back, when they keep you from meeting your responsibilities, or when they make you feel like you can't go on. After each of the following questions, please tell us the last time that you had the problem, if ever, by answering, "In the past month" (3), "2-12 months ago" (2), "1 or more years ago" (1), or "Never" (0).

EDScr	Past month	2-12 months ago	1+ years ago	Never
2. <u>When was the last time</u> that you did the following things <u>two</u> <u>or more times</u> ?				
a. lied or conned to get things you wanted or to avoid having to do something?.....	3	2	1	0
b. had a hard time paying attention at school, work or home?.....	3	2	1	0
c. had a hard time listening to instructions at school, work or home?.....	3	2	1	0
d. were a bully or threatened other people?.....	3	2	1	0
e. started physical fights with other people?.....	3	2	1	0

**GAIN-SS**  
**SDscr**

The following questions are about common psychological, behavioral or personal problems. These problems are considered significant when you have them for two or more weeks, when they keep coming back, when they keep you from meeting your responsibilities, or when they make you feel like you can't go on. After each of the following questions, please tell us the last time that you had the problem, if ever, by answering, "In the past month" (3), "2-12 months ago" (2), "1 or more years ago" (1), or "Never" (0).

SDScr	Past	2-12	1+	
3. <u>When was the last time...</u>	month	months	years	Never
a. you use alcohol or other drugs weekly or more often?.....	3	2	1	0
b. you spent a lot of time either getting alcohol or other drugs, using alcohol or other drugs, or feeling the effects of alcohol or other drugs?.....	3	2	1	0
c. you kept using alcohol or other drugs even though it was causing social problems, leading to fights, or getting you into trouble with other people?.....	3	2	1	0
d. your use of alcohol or other drugs caused you to give up, reduce or have problems at important activities at work, school, home or social events?.....	3	2	1	0
e. you had withdrawal problems from alcohol or other drugs like shaky hands, throwing up, having trouble sitting still or sleeping, or that you used any alcohol or drugs to stop being sick or avoid withdrawal problems?.....	3	2	1	0