SCREENING FOR CO-OCCURRING DISORDERS USING THE DARTMOUTH ASSESSMENT OF LIFESTYLE INSTRUMENT (DALI)
MODIFIED DALI-14

October 2004

ACKNOWLEDGEMENTS

Some of the content for this manual was adapted from the following sources:

Summary of the California Board of Corrections Mentally Ill Offender Crime Reduction Grant Project Manager's Meeting presentation conducted by Roger H. Peters, PhD and Richard K. Sherman, MS, October 4, 2001.

Policy Statement #17 within the Criminal Justice/Mental Health Consensus Project Report issued June, 2002.

Co-Occurring Disorders Fact Sheet, Missouri Department of Mental Health, Division of Alcohol and Drug Abuse.

DALI, developed by Rosenberg et al (1998)[1] and validated for use with the culturally heterogeneous populations across New York State in a study conducted by the Center for the Study of Issues in Public Mental Health at the Nathan Kline Institute for Psychiatric Research, Orangeburg, NY[2].

Note: The Modified DALI-14 is so named since it scores 14 items of the DALI screen and utilizes a simplified, additive (i.e., unweighted) scoring method for ease of administering and reporting of results.

[1] Rosenberg SD, Drake RE, Wolford GL, Mueser KT, Oxman TE, Vidaver RM, Carrieri KL and Luckoor R. (1998). Dartmouth Assessment of Lifestyle Instrument (DALI): A substance abuse screen for people with severe mental illness. American Journal of Psychiatry 155(2): 232-238

[2] Alexander MJ, Haugland G, Koilpillai I, McCorry F, Bertollo D and Lin S. (2004) In preparation.

WHAT ARE CO-OCCURRING DISORDERS?

A person who has emotional/psychiatric problems and alcohol or drug abuse/dependence is said to have these co-occurring disorders. To recover fully, treatment is required for both problems.

HOW PREVALENT ARE CO-OCCURRING DISORDERS?

- According to a face-to-face survey of people in randomly sampled households across the U.S., thirty-seven percent of alcohol abusers and fifty-three percent of drug abusers also have at least one mental disorder.
- According to the National Household Survey on Drug Abuse, within the diagnosed mentally ill population, twenty percent currently abuse either alcohol or drugs and sixty percent will have abused either substance during their lifetime.
- Individuals with mental disorders are at increased risk for developing a substance abuse disorder and conversely, people with substance abuse disorders are at increased risk for developing a mental disorder.

WHAT TYPES OF SUBSTANCE USE PROBLEMS ARE SEEN WITH PEOPLE WITH CO-OCCURRING DISORDERS?

- Alcohol-related problems are the most commonly found substance-related problem among people with psychiatric diagnoses.
- Marijuana is the second most common drug of abuse among this population
- Crack/cocaine
- Heroin rising, but still rare
- Other substances

WHAT ARE THE GENERAL CHARACTERISTICS OF CLIENTS WITH CO-OCCURRING DISORDERS?

- Mental disorders and substance use problems have biological, psychological, and social components, so people with co-occurring disorders have disabilities, disadvantages, and psychosocial problems that interact with each other.
- Co-occurring disorders occur across the lifespan in both men and women.

- When one or both disorders are severe, consequences include inability to maintain stable housing or to stay employed, repeated cycles through treatment, probation, jail, or prison.
- People with less severe co occurring disorders are likely to be in relationships, often with another person using or abusing substances, and face the problems of intimate partner violence associated with these relationships.
- Use of even small amounts of alcohol or drugs may trigger recurrence of mental health symptoms.

WHAT ARE THE TREATMENT RELATED CHARACTERISTICS OF A CLIENT WITH CO-OCCURRING DISORDERS?

Clients with one or more severe co-occurring disorder are likely to use services only when in crisis, to be minimally engaged in treatment, and to be involved with the criminal justice system.

Some specific characteristics are:

- More rapid progression from initial use to substance dependence
- Inconsistent adherence to psychotropic medications
- Decreased likelihood of remaining engaged in treatment
- Greater rates of hospitalization
- More frequent suicidal behavior especially for clients with schizophrenia spectrum, major depressive or bipolar disorders. Fifteen to 25% of suicides are committed by persons who abuse alcohol. Suicide may also be associated with intoxication or withdrawal from addictive substances.
- Difficulties in social functioning
- Shorter time in remission of psychiatric symptoms

In addition, individuals with severe disorders are:

- More sensitive to substance effects
- Unlikely to develop dependence or medical signs of sustained, heavy use
- More likely to encounter substances and pressure to use
- More likely to experience negative outcomes

WHAT ARE THE BEHAVIORAL CHARACTERISTICS OF CLIENTS WITH CO-OCCURRING DISORDERS?

People with mental disorders will have the characteristics of the disorder they suffer from. Those with severe mental illness may have:

- Difficulty comprehending or remembering important information
- Inability to recognize the consequences of behavior, thereby affecting the ability to plan
- Poor judgment
- Disorganization
- Limited attention span
- Poor response to confrontation

They are likely to use substances to:

- Combat loneliness, social anxiety, boredom, insomnia
- Deal with stress or strong emotions like anger, pain, shame, guilt
- Relieve specific symptoms of mental illness or medication side effects

WHAT BENEFITS ARE ASSOCIATED WITH RECOVERY FOR CLIENTS WITH CO-OCCURRING DISORDERS?

People with mental illness who are able to attain and sustain recovery from substance abuse have three or more positive quality of life factors, such as:

- Regular engagement in enjoyable activity
- Decent, stable housing
- Loving relationships with someone sober who accepts the person's mental illness
- Positive, valued relationship with treatment professional
- When actively engaged in treatment, clients with co-occurring disorders are actually more likely to attend outpatient groups

WHAT IS THE PURPOSE OF SCREENING FOR CO-OCCURRING DISORDERS?

The purpose of a screening instrument, such as the DALI, in mental health treatment settings is to identify clients with high likelihood of having a substance use problem that could compromise successful treatment outcomes. A high screen score will prompt a referral for a more thorough substance use assessment. Screening should be completed in a timely manner to assist in developing a comprehensive treatment plan.

High prevalence, low treatment and low engagement rates, as well as the under identification of co-occurring disorders in treatment settings highlight the need for better detection and assessment procedures. Treatment and psychosocial outcomes have been poor for mental health consumers who have substance use problems. The absence of assessment of co-occurring disorders

has been identified as a major barrier to effective treatment and prevention. The screening process allows a clinician to assess whether there are signs that a client with a mental disorder has a substance abuse problem as well. If a problem is identified, the client should be referred for a more detailed assessment and an appropriate referral. Adequate assessment of the full picture of a client's co-occurring disorders occurs over time in an established trusting relationship with a skilled clinician.

Screening for substance abuse problems is the first step in good clinical practice for clients with co-occurring disorders. Screening demonstrates to the client that the program is committed to identifying and addressing the full range of their problems. The therapeutic relationship is initiated when these problems are brought out into the open and treatment options and limits are discussed in a context of respect and acceptance.

WHEN SHOULD SCREENING OCCUR?

Alcohol and substance abuse greatly influence symptoms of mental illness, and vice versa. Abuse of addictive substances like alcohol, opiates, and cocaine may precipitate mental disorders like depression and psychotic disorders are sometimes secondary to use of crack cocaine, hallucinogens, alcohol, and ecstasy. On the other hand, withdrawal from substances may exacerbate symptoms of mental disorders when substance use has been a way for the person to cope with depression, loneliness, boredom, or anxiety. When both disorders are identified, they should be considered as primary and should be treated. In addition, HIV and Hep-C positive clients may exhibit symptoms, such as dementia, due to the disease itself or the medication regimen. Substance related affective symptoms (depression, mania) usually clear within two weeks of abstinence; psychotic symptoms usually clear within days to a week of abstinence while symptoms of anxiety may take up to six months to clear. The best time for administration of the DALI must still be determined and will be included in a final version of the DALI manual. The goal is to screen the client when their sensorium are not clouded by alcohol or other drugs—at a minimum, the client should be stabilized prior to screening. Thereafter, a clinician may conduct subsequent screens as appropriate based upon their clinical judgment.

CRITICAL OBSERVATIONS BY STAFF SHOULD NEVER BE REPLACED BY ANY SCREENING TOOL.

HOW ACCURATE IS SCREENING?

Screens are first line identifiers and as such, are imperfect. They may either under identify or over identify the condition they are designed to detect. Standard screens help avoid these problems, and follow up assessments are key to adequately identifying and incorporating co-occurring disorders into a comprehensive treatment plan. The final DALI manual will include additional information about multiple sources of information and their limitations; for example, information on biological samples and collateral or clinical staff reports will be included.

When an effective screen like the DALI is implemented properly, staff are more likely to identify someone who truly has an alcohol or substance use problem, but it will incorrectly identify some others as having a substance use problem when one is not present. Screening increases the likelihood of discovering high-risk cases; only a relatively small percentage of follow-up processes (substance use assessments) are conducted when they are not needed.

WHAT IS THE DALI-14 SCREEN?

While only 14 items are scored, the DALI is a 17-item questionnaire that may be completed in about 10 minutes. It includes questions from widely used alcohol and substance abuse screens (e.g. CAGE, MAST, TWEAK) that have been found to best identify substance abuse problems among people with severe mental illness. The screen is divided into 2 sections to ask separately about problems with alcohol and illicit drugs (marijuana, crack/cocaine).

The DALI was developed because in people with severe mental illness, traditional screens often lack overall accuracy: they focus on the characteristics of dependence rather than the drug or alcohol related problems that characterized high-risk populations. Multimodal assessment is really the best practice in this population: This includes using probability estimates derived from base rates and history; a self report instrument designed specifically for this population; concurrent procedures to circumvent the problem of unreliable and invalid self reports, such as lab evaluations; collateral reports; physical signs and symptoms; demographic characteristics, clinical correlates and indirect measures.

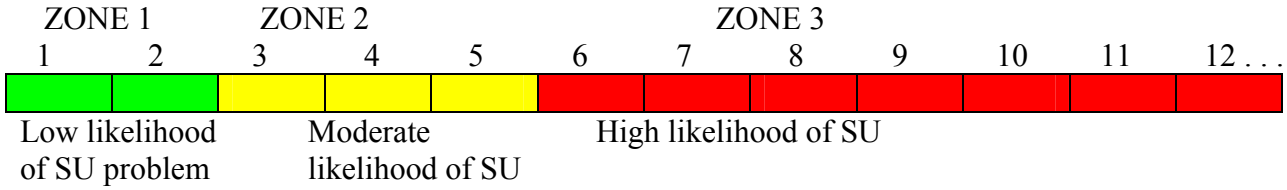
HOW SHOULD THE DALI-14 BE SCORED?

This section should be further developed in consultation with mental health policy/provider staff at agencies and in systems where it will be used

Scoring of the DALI-14 is straightforward and additive—each response that falls within column A in the screen counts as 1. The clinician adds all the positive responses for a total score, which ranges from 1 to 14. Remember, if a client answers affirmatively to questions, that does not mean they have a substance abuse problem; it simply means that they are reporting some use (for example some alcohol use does not indicate a *diagnosable* alcohol abuse problem).

WHAT SCORE SHOULD TRIGGER A REFFERAL FOR FURTHER ASSESSMENT?

The data suggest that the DALI-14 could be used with a specific cut point; however, it may be desirable to view the DALI-14 as having distinct zones along a continuum thereby giving agencies using the screen a certain amount of discretion based on clinical judgment and available resources. Below is a graphic depiction that illustrates the scoring zones for the DALI. All individuals who screen 6 or above should be sent for further assessment. For those who score in the moderate range there are trade-offs to be considered.



Zone 1 GREEN—no further action is indicated, based only on the screen

Zone 2 YELLOW—the client should be seriously considered for referral for a detailed diagnostic assessment

Zone 3 RED—the client should definitely be referred for a diagnostic assessment

WHAT IF THE CLIENT SCORES WITHIN ZONE 2?

Any client score within Zone 2 requires some clinical judgment as to whether or not the client should be referred for a detailed diagnostic assessment. Each agency has its own policies and procedures that should be followed. At the low end of Zone 2, more clients without a disorder will be identified while selecting scores at the high end will result in more clients with potential substance abuse disorders being missed.

SCORING THE DALI-14

NUMBER OF "A" RESPONSES FROM SECTION 1, PAGE 1 **These questions are about alcohol use (after 3 unscored items)**	
NUMBER OF "A" RESPONSES FROM SECTION 2, PAGE 2 **These questions are about cocaine and marijuana use**	
TOTAL NUMBER OF "A" RESPONSES, PAGES 1 & 2	

DALI-14
DARTMOUTH ASSESSMENT OF LIFESTYLE INSTRUMENT-MODIFIED

Client Name _____ ID _____

Weeks since admission _____ Interviewer _____

SECTION 1

Circle appropriate responses.			A	B
1. How many cigarettes do you smoke each day?	#_____		Not scored	
2. Have you tried to stop smoking cigarettes?	YES	NO	Not scored	
3. Do you control your diet for total calories (or do you watch what you eat)?	YES	NO	Not scored	
4. How much would you say you spent during the last 6 months on alcohol?			$50 or more	Less than $50
5. How many drinks can you hold without passing out? (If respondent doesn't know, ask how many do you think it would take?			More than 5	5 or Less
6. Have close friends or relatives complained about your drinking in the last 6 months?			YES	NO
7. Have you attended a meeting of Alcoholics Anonymous (AA) because of your drinking?			YES	NO
8. Do you sometimes take a drink in the morning when you first get up? (If respondent asks, say "a drink of alcohol.)			YES	NO
9. Since you started drinking, did you ever have a period where you didn't drink for 5 years? [Interviewer note: exclude periods of incarceration or hospitalization]			NO	YES
10. How many months ago did you start drinking again?			More than 0 months	0 months
PLEASE TOTAL THE NUMBER OF RESPONSES FROM COLUMN "A" ON THIS PAGE				

DALI-14

SECTION 2

	A	B
11. Have you used marijuana in the past 6 months?	YES	NO
12. Have you lost a job because of marijuana use**?**	YES	NO
13. How much would you say you spent in the last 6 months on marijuana? $_____	More than $0	$0
14. Have you been troubled at all in the past 6 months by marijuana problems?	YES	NO
15. Has cocaine abuse created problems between you and your spouse or other family members? [Interviewer note: Ask about partners or significant others]	YES	NO
16. Since you started using cocaine, did you ever have a period where you didn't use cocaine for 5 years? [Interviewer note: exclude periods of incarceration or hospitalization.]	NO	YES
17. Do you ever use cocaine when you're in a bad mood?	YES	NO
PLEASE TOTAL THE NUMBER OF RESPONSES FROM COLUMN "A" ON THIS PAGE		

SCORING THE DALI-14

NUMBER OF "A" RESPONSES FROM SECTION 1, PAGE 1	
NUMBER OF "A" RESPONSES FROM SECTION 2, PAGE 2	
TOTAL NUMBER OF "A" RESPONSES, PAGES 1 & 2	