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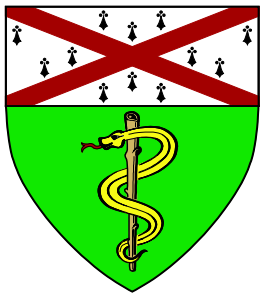

Screening, Brief Intervention & Referral to Treatment (SBIRT) Training Manual

For Alcohol and Other Drug Problems

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I. Overview of the Manual

This manual is an adaptation of an earlier manual on Emergency Department (ED) clinician administered brief intervention for harmful and hazardous alcohol drinkers. The current manual is designed to provide the medical practitioner with the necessary skills to easily and effectively perform 1) evidence based screening, 2) a brief intervention, the Brief Negotiation Interview (BNI) and 3) a facilitated referral to treatment for alcohol and other drug problems. Special attention is given to decision-making process regarding whether to use the brief intervention to promote a reduction of use or abstinence versus a referral to a formal substance abuse treatment program. The following sections provide background information on and describe the critical components of administering screening tools for alcohol and other drugs in a variety of medical settings (e.g., ED, OB/Gyn, Pediatrics) and conducting BNIs for both use reduction and referral to treatment. Additional motivational and troubleshooting strategies, as well as other helpful resources (e.g., pros and cons of alcohol & drug use, withdrawal checklists, sample BNI dialogues) are provided. While the manual gives the reader a critical overview of SBIRT, participation in a 2-hour training course, followed by successful completion of a supervised test case is required to be fully prepared to effectively conduct SBIRT encounters with patients. Suggestions for periodic review of cases and feedback on performance, as well as booster training sessions, in order to ensure effective and consistent SBIRT implementation, are also provided.

II. Background Information

Introduction

Screening, Brief Intervention & Referral to Treatment (SBIRT) for alcohol and/or other drug problems are critical skills for the health care practitioner because the use of these substances and the myriad medical, social and legal problems they cause are highly prevalent, frequently undetected and treatable in a variety of medical settings. This introduction will cover each of these issues with an emphasis on evidence-based procedures to assist the health care practitioners in identifying and treating these problems in their day-to-day practices.

Prevalence of Alcohol & Drug Problems

Unhealthy alcohol use[1] is a major preventable public health problem resulting in over 100,000 deaths each year [2] and costing society over 185 billion dollars annually.[3] The effects of unhealthy alcohol use have far reaching implications not only for the individual drinker, but also for the family, workplace, community, and the health care system. Based on recent survey conducted in 2007, an estimated 19.9 million Americans aged 12 or older were currently using illicit drugs, including marijuana/ hashish, cocaine, heroin, hallucinogens, inhalants, or prescription-type psychotherapeutics used nonmedically. This estimate represents 8.0 percent of the population aged 12 years or older. In that same year, 23.2 million persons needed treatment for an illicit drug or alcohol problem.

For example, opioid dependence is a major public health concern and remains primarily an untreated medical condition in the United States. In 2006 there were approximately 560,000 individuals who used heroin in 2006, and 11.4 million individuals who had non-medical use of prescription opioids.[4] Economic costs of opioid dependence are estimated at greater than $21 billion/year and have far reaching implications for the individual, workplace, society and the healthcare system.[5] Untreated opioid dependence is associated with HIV transmission via injection drug use and high risk sexual behaviors.[6] However, treatment is associated with significant individual and society benefits,[7] and opioid agonist treatment, including methadone and buprenorphine, has been demonstrated to be the most effective treatment. However, opioid dependent patients often do not seek help through specialized treatment centers, but do frequently visit Emergency Departments (ED) of hospitals, either for medical consequences of theirs addictive disorder or for comorbid medical and psychiatric conditions.[8] Many of these patients, particularly young adults, have few if any other interactions with the health care system. Therefore, the medical visit may be their only contact with the treatment system and represents an ideal opportunity for screening, intervention and referral for treatment.

Lack of Detection

Of the 23.2 million people in need of treatment for substance abuse problems in 2007, only 2.4 million received treatment and 20.8 million did not receive treatment. Of the 20.8 million people who did not receive treatment, 1.3 million felt they needed treatment, 380,000 reported they made an effort to get treatment, and 955,000 reported making no effort to get treatment.[9] Much of the lack of treatment engagement is due to a lack of detection of problematic use by the health care provider.[1,15,39]

Brief Interventions Work for Alcohol, Tobacco and Other Drug Use

Brief interventions are short counseling session, ranging from 5-60 minutes that incorporate feedback, advice, and motivational enhancement techniques to assist the patient in reducing their alcohol consumption to low-risk guidelines thereby reducing their risk of illness/injury. The Brief Negotiation Interview (BNI) used in this grant was first developed in 1994 by Drs Edward Bernstein, Judith Bernstein and Gail D'Onofrio in consultation with Dr. Stephen Rollnick for Project ASSERT in the ED.[10,11] It was later refined and tested for hazardous and harmful drinkers in the ED by our research team.[12]

There is compelling evidence in the literature that brief interventions for alcohol problems are effective[13,14] in a variety of settings including primary care[15,16] and inpatient trauma settings.[17] ED-based randomized controlled trial testing the effectiveness of screening, brief intervention and referral to treatment have had mixed results. Researchers in Germany studied a computer-generated intervention in injured patients presenting to an ED and found a significant decrease in alcohol consumption in the intervention group,[18] while two other studies reported a similar decrease in alcohol consumption in the intervention and control groups but demonstrated significant reductions in negative consequences after the initial brief intervention session[19] or a booster session[20] in the intervention group. One study detected no difference in consumption between the intervention and control groups.[21] Our own study (see preliminary data section) that enrolled both injured and noninjured patients with harmful and hazardous drinking showed similar significant reductions in the control and BNI groups, without a treatment effect.[22] Cohort studies without control groups have shown a significant reduction in alcohol use.[23] A recently published study conducted at 14 ED sites that used a quasiexperimental comparison group design, in which we participated, revealed that screening, brief intervention and referral for treatment on patients with all degrees of unhealthy alcohol use was effective. A total of 1,132 patients were enrolled (581 control, and 551 intervention (BNI)). At 3-month follow-up, the BNI group reported consuming 3.25 fewer drinks per week than controls. Of the at risk drinkers, 37% no longer exceeded NIAAA low-risk guidelines compared *with 19% in the* control group, 95% CI 12% to 26% (see preliminary study section). A more recent meta-analysis of strategies targeting alcohol problems in the ED examined the extent to which interventions were effective in reducing alcohol consumption and related harm.[24] Meta-analysis revealed that interventions did not significantly reduce subsequent alcohol consumption, but were associated with approximately half the odds of experiencing an alcohol-related injury (OR=0.59, CI 0.42-0.84).

Brief interventions have long been shown to be effective in treating tobacco use and dependence in all populations including adolescents, pregnant women, older adults and racial and ethnic minorities.[25,26,27,28] As a result formal clinical practice guidelines have been developed for treating tobacco use by a US public Health Panel and Consortium. [29]

Few studies have investigated brief interventions in drug users. Bernstein and colleagues reported their experience with Project ASSERT in Boston, which used health promotion advocates to screen for alcohol and other drug use in an urban ED.[30] This cohort study showed that during a one year period of time, 2,931(41%) patients screened positively for substance abuse. Of the 1,096 enrolled in a follow up program, 245 kept a referral appointment and demonstrated a significant 45% reduction in severity of drug problems and a 56% reduction in alcohol use. More recently Bernstein and colleagues tested the impact of a single, structured encounter by similar peer educators that targeted cessation of dug use in a hospital's hospital "Walk-In" Clinics. [31] Of the 1175 patients enrolled, the intervention group at 6 months was more likely to be abstinent than the control group for cocaine (22.3% versus 16.9%), heroin (40.2% versus 30.6%), and both drugs (17.4% versus 12.8%). Another study evaluated the effect of a brief alcohol intervention for injection drug users at a needle exchange facility.[32] Significant reductions were observed in both treatment conditions; participants reported an

average of 12.0 drinking days at baseline and 8.3 at 6 months. Those in the brief intervention group were over two times more likely than controls to report reductions of 7 days or more, P<0.05.

These findings support further investigation of brief intervention for drug use in the ED. Given the chronic and relapsing nature of drug and alcohol dependence, the goal of these brief interventions may be to facilitate an effective referral for the patient to a formal treatment program which can have an impact on reducing drug use.

The Medical Visit is an Opportunity for Intervention

Given the significantly higher rate at which people see their medical doctors (versus a substance abuse specialist), the medical visit offers a potential "teachable moment" where health care practitioners have a unique opportunity to motivate change in alcohol and/or drug use behaviors.[33] In essence, the medical practitioner has a captive audience. Given the high prevalence and frequent lack of detection of alcohol and drug problems, as well as their negative consequences and positive response to evidence-based treatment, the health care practitioner armed with competent SBIRT skills can make the difference in forestalling the progression of risky use to dependence, or effectively motivating a patient who is already on the severe end of the spectrum to engage in a treatment program.

In the following 2 sections, we will review the steps needed to effectively administer the 2 main parts of SBIRT, that is 1) Screening and 2) Brief Intervention & Referral to Treatment

III. Screening

The components of evidence-based screening, where we are attempting to detect the type and level of substance use in our patients, include decisions around 1) what type of substance the screening is for, 2) what type of substance problem is of interest (i.e., harmful or hazardous use, dependence, lack of treatment), 3) what questions to ask and 4) how to score the screening measure.

For the first component of screening, decide what substance is of interest, alcohol or illicit drugs (e.g., cocaine, heroin, marijuana) or both. Then, based on Table 1, select the substance problem of interest. For alcohol, the choices are harmful or hazardous ("at-risk") drinking, dependence. For illicit substances, the choices are the same except for "at-risk" use, as there are no acceptable guidelines for non-risky use of drugs. Depending on the first two decisions, the health care provider will select the appropriate screening measure(s), and administer and score them as described below and in the "Additional Screeners" section.

TABLE 1: Substance, Problem, Screener

Substance	Problem	Screener
Alcohol	On a continuum from at risk… to dependence	**NIAAA quantity frequency:** Identifies those who are over low risk amounts **AUDIT, TWEAK:** (for pregnant women), **CRAFFT** (for adolescents): May offer additional information regarding negative consequences **CAGE**: ≥ 2 is a brief assessment for dependence
Illicit Drugs	On a continuum from use… to dependence	**NIAAA** Screener adapted for drugs **CAGE**-Adapted to Include Drugs (**CAGE-AID**), **DAST**, modified **CRAFFT** (for adolescents)

The most frequently used of the above screeners will be described in detail (administration and scoring procedures) below, while information on the other measures will be offered in section VIII "Additional Screeners" of this manual.

Screening procedures

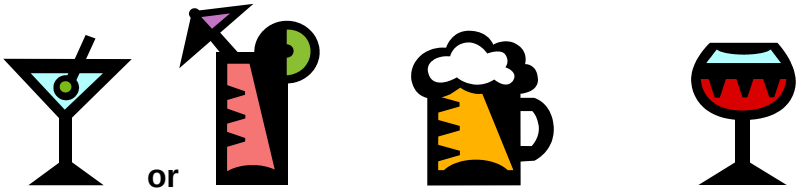
A) ALCOHOL

1) Harmful/Hazardous ("at-risk) drinking

The most commonly used screener for harmful/hazardous drinking is what is commonly referred to as the NIAAA (National Institute for Alcohol Abuse & Alcoholism) Quantity/Frequency screening In order to competently administer the NIAAA screener, one first needs to know the following information (see figure below) regarding what equals a "standard drink."

Figure 1:
WHAT IS A STANDARD DRINK?

1 Standard Drink equals:



drink made with 1.5 oz. of alcohol (whiskey, gin, etc.) **or** 12 oz. Beer 5 oz. wine

TABLE 2: NIAAA SCREENING for Harmful & Hazardous ("At-risk") Alcohol Use

1. How many days per week do you drink alcohol?
2. On a typical day when you drink, how many standard drinks do you have?
3. What is the maximum number of standard drinks you had on any given day in the past month?

TABLE 3: SCORING THE NIAAA SCREENER

# STANDARD DRINKS FOR AT-RISK (Hazardous*) DRINKING		
	Per Week**	**Per Occasion**
Men	>14	>4
Women	>7	>3
All > 65	>7	>3

**At-risk/Hazardous Drinking ALSO includes those who drink under potentially dangerous situations (e.g., while operating heavy machinery, while driving)*

Harmful Drinking pertains to those who (whether or not they score above the drinking limits in Table 3) have are currently experiencing at least one problem (medical/social) related to alcohol. They do, however, also often meet the above NIAAA guidelines for at-risk drinking.

** ***Sometimes even 1 drink is too much!*** *If you are:*

- *driving or planning to drive*
- *at work or returning to work*
- *pregnant, or breast feeding*
- *on medication*
- *have certain medical conditions*

2) Alcohol Dependence

The most common screener for more severe alcohol problems (a consistent pattern of problems related to alcohol in 1 area of a patient's life) and dependence (a consistent pattern of problems related to alcohol in 3 areas of a patient's life) is referred to as the "CAGE" screener.

TABLE 4: The ALCOHOL "CAGE" Screener

C: Have you ever thought you should **c**ut down on your drinking?

A: Have people **a**nnoyed you by criticizing your drinking?

G: Have you ever felt bad or **g**uilty about your drinking?

E: Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover? (**e**ye opener)

TABLE 5: SCORING THE ALCOHOL "CAGE" Screener

# CAGE Qs scored positive	Percent Likelihood of Dependence
1	Assess further*
2	64
3 or 4	86

*Assess further with the MINI-SCID (see Appendices of this manual)

B) ILLICIT DRUGS

1) Screening for Use

While there are no levels of drug use that would be considered low-risk vs at-risk, the health care provider may use the aforementioned NIAAA quantity/frequency questions to assess the level of current drug use in patients. The provider, however, needs to substitute "alcohol" for whatever illicit drug is being used by the patient and number of "standard drinks" with the relevant route and form of use (e.g., "bags" of IV heroin use, e.g., "blunts" of marijuana smoked).

2) Screening for Drug Dependence

As illustrated below, the CAGE screener has been adapted to include drug use. This screener is to be used to assess drug dependence in patients.

TABLE 6: ILLICIT DRUGS "CAGE" SCREENER **(CAGE-Adapted to Include Drugs)**

(CAGE-AID)

C: Have you ever thought you should **C**ut down on your drug use?

A: Have people **A**nnoyed you by criticizing your drug use?

G: Have you ever felt bad or **G**uilty about your drug use?

E: Have you ever used drugs first thing in the morning to steady your nerves or avoid withdrawal (**E**ye opener)

TABLE 7: SCORING THE ILLICIT DRUGS "CAGE" SCREENER **(CAGE-Adapted to Include Drugs)**

# CAGE Qs scored positive	Percent Likelihood of Drug Dependence
1	Assess further*
2	64
3 or 4	86

*Assess further with the MINI-SCID (see Appendix 9)

Research Findings on Screening in Medical Settings

Internal Medicine

There are many instruments available for screening and brief assessment of alcohol problems. Their effectiveness varies according to their availability, ease of administration and test characteristics.[34] Our team has extensive experience evaluating the performance characteristics for screening for alcohol use in primary care.[35] The NIAAA has traditionally recommended that the practitioner ask 3 quantity and frequency questions[36] followed by the CAGE questionnaire.[37] More recently, NIAAA has advocated for a one question screen that determines whether a patient drinks heavily (5 or more drinks in a day for men or 4 or more for women.[38] The AUDIT,[39] a ten item questionnaire, was developed as a screening instrument for hazardous and harmful alcohol consumption as part of a 12-country World Health Organization study of brief alcohol interventions. Alcohol consumption, drinking behavior, and alcohol-related problems are assessed over the preceding year. A cutoff score of 8 out of a possible 41 is used as a positive indicator of hazardous/harmful drinking. The CAGE questionnaire is easy to administer, and performs relatively well when preceded by the quantity and frequency questions. Saitz reported the validity of using the CAGE as a screening tool for detecting alcohol use disorders in Latinos in the primary care setting.[40] While heavy drinking is as common in Latinos as in African Americans and non-Latino whites, serious consequences of heavy drinking are more common in Latinos than in other ethnic groups.[41] Despite its advantages the CAGE questionnaire may be biased in relation to certain groups; one researcher reported that when applied to women, Mexican-American patients and those with annual incomes above $40,000, they were consistently less likely to endorse each CAGE question "yes" after adjusting for the alcohol use disorder and pattern of alcohol consumption.[42] The Yale-SBIRT faculty has published systematic reviews on the performance characteristics of screening methods in primary care and ED setting. Our results have demonstrated, for instance, that the Alcohol Use Disorders Identification Test (AUDIT) has the best operating characteristics for detecting harmful and hazardous alcohol use in primary care, whereas the CAGE is better for detecting alcohol dependence.[43] These results also demonstrate the advantage of using formal screening instruments over clinical judgment or laboratory tests. The curricula on screening will emphasize the science (e.g. sensitivity, specificity) behind the use of various screening tools

Obstetrics and Gynecology

The American College of Obstetricians and Gynecologists recommend screening all women for at-risk drinking and illicit drug use.[44] Among pregnant women aged 15 to 44, 11.8% admit to drinking some alcohol during the previous month[45], which puts the fetus at risk for fetal alcohol syndrome, estimated at 1 in 100 children and the leading cause of mental retardation in the U.S.

Maternal alcoholism is also one of the leading preventable causes of fetal neurodevelopmental disorders.[46] Children from low income ethnic minority populations are vulnerable to the long-term effects of prenatal alcohol exposure, because their mothers are less likely to receive alcohol counseling during pregnancy.[47] Illicit drug use is associated with increased rates of sexually transmitted infections in women, including hepatitis and human immunodeficiency virus as well as depression, interpersonal violence, poverty and significant prenatal and neonatal complications.[48,49] Screens such as the TWEAK[50], T-ACE[51,52,53] or the NIAAA quantity and frequency questions are accurate in detecting women's patterns of use, which may differ than men.[54] The TWEAK was first designed to detect "at-risk" pregnant drinkers. It has been shown to have a high sensitivity & specificity in both primary care and general populations, ranging from 83%-100% and 68%-96% respectively, using a cutoff point of 3, when a weight of 2 is applied to tolerance and worry and a weight of 1 is applied to the other three.[55] Chang reviewed alcohol screening tests in pregnant women concluding that simple screening questionnaires, such as the T-ACE, were effective in detecting drinking problems.[55]

Pediatrics

Knight and colleagues developed the 6-item CRAFFT questionnaire as a brief alcohol and other drug screening test[56] and later validated its use in a general population of adolescent medical patients in comparison with a structured psychiatric diagnostic interview.[57] More recently Knight tested the validity of CRAFFT with the AUDIT, POSIT, and CAGE questionnaire in detecting alcohol disorders in 14-18 year olds in a routine adolescent clinic. The AUDIT, POSIT and CRAFFT were found to have acceptable sensitivity for identifying alcohol problems or disorders in this age group, but the CAGE was not recommended.[58] He also found that the CRAFFT was a reliable means of screening adolescents for other drug use.[59]

Emergency Medicine/Surgery

The American College of Emergency Physicians, and the Emergency Nurses Association has adopted the preferred NIAAA quantity and frequency questions followed by the CAGE questionnaire in their toolkits for SBIRT.[60] This is primarily due to ease of administration and acceptability by practitioners. Cherpitel[61] studied the operating characteristics of a variety of screens in the ED setting. Although CAGE had less sensitivity compared with TWEAK 75% to 87%, the CAGE is one less question and easy to remember. More recently Cherpitel studied RAPS4 (Rapid Alcohol Problems Screen) in the ED setting compared with ICD-10 and DSM-IV criteria for alcohol dependence and for harmful drinking. A positive response to any one of the four items gave a sensitivity of 93% and specificity of 87% for alcohol dependence, and sensitivities were high across gender and ethnic subgroups. Sensitivity and specificity for harmful drinking were lower (55% and 79%).[62]

Screening for illicit drug use

There are fewer rigorous evaluations or validated instruments of screening for these disorders, and screening occurs less frequently. Therefore, one of the goals will be to promote the use of validated screening instruments for drug use (e.g. CAGE-D, DAST and ASSIST) in the resident's practices. The 10-item Drug Abuse Screening Test (DAST-10)[63] though not lengthy requires more time to administer than quantity/frequency scales, and the individual items. Several studies have found that the 10-item DASTs is effective at screening for drug misuse with good internal reliability, validity, and temporal consistency.[64,65,66] The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) was recently developed for the World Health Organization (WHO) in an effort to screen for problem or risky use of tobacco, alcohol, cannabis, cocaine, amphetamine-type stimulants, sedatives, Hallucinogens, inhalants, opioids and 'other drugs' that do not fall into these categories. The instrument was developed to use across a broad range of countries and cultures in primary care settings.[67]

IV. Brief Intervention in SBIRT: An Overview of the Brief Negotiation Interview (BNI)

The Brief Negotiation Interview (BNI) described in this grant was first developed in 1994 by Drs Edward Bernstein, Judith Bernstein and Gail D'Onofrio in consultation with Dr. Stephen Rollnick for Project ASSERT in the ED.[68,69] It was later refined and tested for hazardous and harmful drinkers in the ED by the current investigator group.[70]

The BNI is a short counseling session that is done following screening and that incorporates brief feedback and advice with motivational enhancement techniques to assist the patient in changing alcohol and/or drug-related behaviors. The BNI procedure is patient-centered and the skills used are based in large part on the patient's motivation and readiness to change. The primary outcome of the BNI procedure is the patient's agreement to reduce alcohol/drug amounts or accept a referral to a formal specialized treatment center to decrease harm (medical problems or trauma). The interventionist and patient come to this agreement through a process of negotiation described in the following section.

<u>The following are the 4 steps of the BNI:</u>

1) Raise The Subject
- Establish rapport
- Raise the subject of alcohol or drug use
- Assess comfort

2) Provide Feedback
- Review patient's alcohol/drug use and patterns
- Make connection between alcohol/drug use and negative consequences
  In a variety of areas of life including: medical, legal, family and employment
- Make connection between alcohol/drug use and the medical visit
- Discuss issues related to physical dependence, such as tolerance and withdrawal

3) Enhance Motivation
- Assess readiness to change
- Boost motivation

4) Negotiate And Advise
- Negotiate goal
- Give advice
- Summarize and complete referral/or alcohol/drug agreement

Each step has critical components, specific objectives, actions and necessary preparations to be successful. Details of each step are provided in the following 2 sections, the first for patients who have screened positive for harmful or hazardous ("at-risk") drinking and the second for those who have screened positive for alcohol or drug dependence.

V. The 4 Steps of the BNI

The following is a detailed description of the actions to be taken during each of the 4 steps of the BNI. In each step, specific directions are given based on whether the patient screened positive for 1) Harmful or Hazardous ("At-risk") Drinking, in which case the BNI goal would be the patient's agreement to reduce alcohol use to below NIAAA "at-risk" levels and/or to avoid drinking in potentially harmful situations, or 2) Alcohol and/or Drug Dependence, in which case the goal would be the patient's agreement to follow-up with a referral to treatment or a reduction of use as the patient considers treatment options.

STEP1: Raise the Subject

Critical components:

1. Be respectful
2. Remember the patient is giving you permission to discuss his/her alcohol/drug use is an important aspect of the intervention
3. Avoid arguing or being confrontational
4. Be mindful of the patients possible physical discomfort

PREPARATION (<u>NOT</u> part of screening):

- Review medical record, Withdrawal Scale, if administered (See Appendix 9), any other additional assessments (See Section VIII. Additional Screeners)

OBJECTIVES	ACTION(S)	QUESTIONS/COMMENTS
Establish rapport	• Introduction and explanation of your role • Avoid a judgmental stance • Acknowledge the patients situation • Set a comfortable climate	*"Hello, I am ____ and I work here in the _____.*
Raise the subject	• Ask permission • Engage the patient	*"Would you mind if we spend a few minutes talking about your use of_____(fill in with alcohol or drug(s) of abuse)?"**<PAUSE>*** *"I want to talk about how it's affecting you and how we might be able to help."*

Assess discomfort	• Ask about any symptoms of alcohol and/or drug withdrawal see (if applicable)(see mini-SCID & Withdrawal scales in Appendix 9) • Reflective listening	*"Tell me about how you are feeling right now? When is the last time you drank/used any drugs?* *REFLECT on any stated connection between pattern of alcohol and/or drug use & discomfort/withdrawal symptoms*

SUMMARY OF STEP1

This first step sets the climate for a successful BNI. Asking permission to discuss the subject of alcohol/drug use formally lets the patient know that their wishes and perceptions are central to the treatment which later enhances that the patient will accept a referral to treatment if necessary. Further reflecting on patient acknowledged problems and discomfort related to their drug use (whether stated by the patient or assessed with other measures, such as the mini-SCID and/or withdrawal scales found in the "Appendices" section, motivates the patient to start considering compelling reasons for change, but without being confronted with this information in a harsh (i.e., non-motivational) manner.

STEP2: Provide Feedback

Critical components:

1. Review current alcohol/drug use and patterns and dependence symptoms
2. Compare the patients drinking to national norms Discuss the role of alcohol/drug use on difficult areas of life (financial, family, employment, health, legal)
3. Make the connection between alcohol/drug use and reason for medical visit and risk of HIV/AIDS (if applicable)
4. Discuss issues related to physical dependence such as withdrawal and need to continually use alcohol/drugs (if applicable)
5. Inform patient that a variety of treatments work effectively reduce and stop drug/alcohol use, and ask for patients positive treatment experiences

PREPARATION:

- Review: Screening results, medical chart, health Insurance information, other assessments, if administered (e.g., mini-SCID, withdrawal scales [See Appendix 9])
- Handout & Explain: **FOR HARMFUL/HAZARDOUS [HH] ALCOHOL DRINKERS;** NIAAA "Standard Drink" card, NIAAA Guidelines for Low-risk vs. at-risk drinking & National Drinking Norms (see Appendices 1-4). **FOR DEPENDENT PTS**: Treatment Referral List (Appendix 10),

FOR HH ALCOHOL DRINKERS:

OBJECTIVES	ACTION(S)	QUESTIONS/COMMENTS
Review patient's drinking patterns	• Review screening data • Express concern • Be non-judgmental	*"From what I understand you are drinking… "* *"We know that drinking above certain levels can cause problems such as … (refer to presenting medical problem/complaint if applicable, or, refer to future increased risk of illness and injury)."* *"I am concerned about your drinking."*
Make connection to medical visit (if applicable)	• Discussion of specific patient medical issues e.g., MVC, GI complaints, hypertension	*"What connection (if any) do you see between your drinking and this ED visit?* If patient states an accurate connection, reiterate it. If patient does not see connection where there is in fact one, then make one using facts, e.g., (MVC). Then say, *"We know that our reaction time decreases even with one or two drinks. Drinking at any level may impair your ability to react quickly when driving."*
Compare to National norms	• Give NIAAA guidelines specific to patient sex and age	*"These are what we consider high-risk, at-risk or risky drinking for your age and sex.* **[Show NIAAA Guidelines & National Norms] (See Table 3 &**

		Appendix 4). *By staying BELOW this high-risk level of drinking, you would be significantly less likely to experience illness, injury or other problems related to your drinking."* *OR for a more extended explanation…* *"So, in order to help you with all of this, I would like to talk with you a bit further about how your drinking might be affecting you. For example, I would encourage you to consider that drinking above certain levels (see and show NIAAA Alcohol Screener) could put you at risk for a wide range of problems, including medical, social and developing alcohol dependence. I would also like you to know that working with me to bring your drinking to at or below these levels helps you avoid those risks."*

FOR ALCOHOL AND/OR DRUG DEPENDENT PATIENTS

OBJECTIVES	**ACTION(S)**	**QUESTIONS/COMMENTS**
Review patient's alcohol and/or drug use & patterns	• Review screening data	*"From what I understand you are using… (fill in amounts from screening)." BUT DO NOT RE-SCREEN.*
Make a connection with life issues	• Ask for patient's feedback regarding negative consequences	*"Besides physical discomfort, how bothered are you by your alcohol and/or drug use, if at all?" OR "What problems has it caused you, if any?"* ***<PAUSE>***
	• Give feedback on CAGE (and/or other assessments, such as mini-SCID, withdrawal scales), if applicable	*ONLY IF PT NOT BOTHERED… "We know that alcohol and drug use can cause serious problems in your life. Based on what you told us in the screening, alcohol and/or drugs have…(LIST CAGE and/or other assessment ITEMS ENDORSED BY PT.)*
	• Be non-judgmental	
	• Express concern	***"I am concerned about your alcohol and/or drug use and how it seems to be affecting other things that are important to you." <PAUSE>***
	• Assess Drug use & HIV-risk connection	*"What connections might you see between your use of alcohol and/or drugs and HIV/AIDS risk?"*

		IF PATIENT STATES ANY ACCURATE & RELEVANT CONNECTION(S), reiterate them, acknowledge the patient's good insight and give additional relevant facts on HIV/AIDS risk. IF PATIENT DOES NOT STATE ANY ACCURATE & RELEVANT CONNECTIONS, MAKE the connection based on general caution regarding alcohol and/or drug use and HIV risk *SAMPLE: Any alcohol and/or drug use compromises good judgment. Without good judgment anyone can engage in HIV-risky behavior.*
Make connection to medical visit (if applicable)	• Discussion of specific patient medical issues, e.g., withdrawal, overdose, MVC or injury, infection, or any indirect consequence, treatment-seeking, etc.	*"What (if any) connection is there between your alcohol and/or drug use and this medical visit?"* ***<PAUSE>*** IF PATIENT SEES ANY ACCURATE & RELEVANT CONNECTION, reiterate what they have said. *SAMPLE: You're right,..[reiterate pt's connection]…that's a good connection to make.* IF PATIENT DOES NOT SEE AN ACCURATE CONNECTION, then make one using facts (if applicable) *SAMPLE: One of the things that we see as a connection is that your pattern of alcohol and/or drug use may have contributed to your fall, physical discomfort, or whatever they're in the ED for (if relevant).* IF THERE ACTUALLY IS NO CONNECTION between today's visit and alcohol and/or drug use, ask about any potential connections between drug use and overall health issues.
Discuss issues related to drug dependence	• Tell the patient that you will help him/her with these problems with a brief intervention	*"So, in order to help you with all of this, I would like to talk with you a bit further about how we might be able to help you reduce the problems associated with you*

	and referral to treatment	*drinking and/or drug use. For example, I wanted to encourage you to consider that there are a wide variety of treatment options available and that I am prepared to go over them with you (See and Show Treatment Referral List)."*
	• Tell the patient that a variety of different treatments work and that they have a choice of treatment center.	*"If you decide to accept our recommendation, you would be taking the first step towards addressing the problems connected with your drinking and/or drug use that we've been discussing."*

SUMMARY OF STEP 2

This step provides the opportunity to offer education related to specific patient issues. There is opportunity at four different levels that can be used towards the next step of enhancing motivation, i.e., (1) Linking the medical visit and the patient's alcohol/ drug use to the problems that they acknowledge they are feeling in their life such as financial, family, employment, health, and legal problems and; (2) Connecting the medical visit to the alcohol/drug use if possible, such as overdose, withdrawal, injury, lack of follow-up, risk of contracting HIV/AIDS, etc; and (3) discussing the cycle of tolerance, withdrawal and ongoing drug seeking behavior and ending with (4) should they decide to accept the recommendation, treatment would help.

STEP3: Enhance Motivation

Critical components:

1. Assess readiness to change
2. Boost motivation
3. Use Open-ended Questions
4. Use of Reflective Listening

PREPARATION:

- "Readiness to Change Ruler" (Appendix 2)
- Handouts: Pros/Cons of Treatment (Appendix 3)

FOR HH ALCOHOL DRINKERS

OBJECTIVES	ACTION(S)	QUESTIONS/COMMENTS
Assess readiness to change	• Have patient self-identify readiness to change, on a scale of 1-10	**(Show Readiness Ruler (See Appendix 2])** *"On a scale from 1-10, how ready are you to change any aspect of your drinking?"*
Develop discrepan cy	• Identify areas to discuss	If patient says: - **≥ 2, ask "***Why did you choose that number and not a lower one?"* - **1 or unwilling, ask "***What would make this a problem for you?* Or, "*How important would it be for you to prevent that from happening?"* Or, *"Have you ever done anything you wished you hadn't while drinking?"* - **Discuss pros and cons of drinking (See Appendix 3)**
	• Use reflective listening	Restate what you think the patient meant by his or her statement. For example, in the context of discussing drinking less with friends, the statement *"It's difficult"*, maybe followed by, *"So it's difficult because you're worried about what your friends think"*, delivered with downward intonation.

FOR ALCOHOL AND/OR DRUG DEPENDENT PATIENTS

OBJECTIVES	ACTION(S)	QUESTIONS/COMMENTS
Assess readiness to change	• Have patient self-identify readiness to change, on a scale of 1-10	**[Show Readiness Ruler] (SEE Table 6)** *"On a scale from 1-10, how ready are you to enroll in a alcohol and/or drug treatment program?"* *"1 is not at all, 10 is right now"*
Enhance motivation	• Ask motivational questions	If patient says: - **≥ 2, ask "***Why did you choose that number and not a lower one?"(i.e., "What are some reasons you would engage in treatment?" "What else?"*
	• Reflect motivational answers	*Then REFLECT on their reasons and reinforce with clinical information (e.g.,"Treatment does in fact work to help reduce and eliminate use, as well as the problems connected with it"*
	• Ask about their initial reason to get a motivating answer	*Take the patient's answer from the above question and ask:* *"Why is that reason important to you?*
	• What if the pt picks a "1"?	- **1 or unwilling, ask "***What would it take for that "1" turn into a "2"? Or "Imagine you did go to treatment, how could that be helpful to you?* Or, "What would have to happen for you to be ready? "*How important would it be for you to prevent that from happening?"* - Reflect/reiterate positive reasons for change - **Discuss pros and cons of treatment (See Appendix 3)**
	• Additional motivational Strategies (ONLY if above does NOT lead to readiness to attend treatment) (OPTIONAL)	To explore more positive thoughts about treatment ask *"Why might you decide to go? Have you thought about going before? What were some of the reasons why? Why is it important to have this conversation now?"* *Would you mind If I gave you some possible reasons based on your screening?* *If pt says, "Yes" reflect on the possible consequences of treatment (i.e., revisiting the symptoms endorsed on the SCID)*

		If pt says, "No" discuss possible benefits of treatment (e.g., reversing the negative effects of drug dependence discussed in Step 1 & 2)
	• Summarize	*Offer summary reflection of patient's reasons for starting or considering treatment, ending with a reinforcement of the patient's autonomy… Ultimately, the decision to seek treatment is up to you.*

SUMMARY OF STEP 3

Patients who engage in risky alcohol use or who are alcohol and/or drug dependent spend much of their time justifying their use by rehearsing reasons to continue using. However, in Step 3 of the BNI, specific motivational enhancement techniques are utilized to reverse this so that the patient begins to clarify and, through provider reflections, reinforce highly personal reasons *in favor* of either reducing alcohol intake to low-risk levels or engaging in treatment for their alcohol and/or drug dependence (vs. continued use). The primary tools to promote such a discussion of reasons or motives for treatment engagement are 1) the readiness ruler question (1-10), 2) asking why they did not select a lower number and other questions about positive reasons offered, and 3) selectively reflecting on reasons that promote treatment-seeking. Exploring this gap between the patient's current situation and how their life might be if they reduced their intake or engaged in treatment, as well as stressing their autonomy and freedom to choose or not to choose these options, are the things that often tip the scale in terms of changing behavior.

STEP4: Negotiate and Advise

Critical components:

1. Negotiate a plan on how to cut back or engage in treatment and reduce harm
2. Direct advice
3. Drinking agreement or referral agreement and provide a information handout

Preparation:

- Agreement forms
- Information handout (Appendix 6)
- Treatment Referral List (Appendix 10)

FOR HH ALCOHOL DRINKERS

OBJECTIVES	ACTION(S)	QUESTIONS/COMMENTS
Negotiate goal	• Assist patient to identify a goal from a menu of options • Avoid being argumentative	Reiterate what pt says in Step 3 and say, *"What's the next step?"*
Give advice	• Deliver sound medical advice/education • Harm reduction	*"If you can stay within these limits you will be less likely to experience (further) illness or injury related to alcohol use."*
Summarize	• Provide a drinking agreement • Remain non-argumentative and non-judgmental • Provide health information sheet	*"This is what I have heard you say…Here is a drinking agreement I would like you to fill out, reinforcing your new drinking goals. This is really an agreement between you and yourself"* Agree to disagree if pt refuses to fill out agreement card or if s/he refuses to set a goal that is at or below NIAAA high-risk levels Suggest Primary care f/u for drinking level/pattern. Provide Health Information Sheet Do you have any questions for me? Thank patient for his/her time.

FOR ALCOHOL AND/OR DRUG DEPENDENT PATIENTS

OBJECTIVES	ACTION(S)	QUESTIONS/COMMENTS
Negotiate goal	• Assist patients selection of a next step goal • Avoid being argumentative	Reiterate what pt says in Step 3 and say, *"What's the next step?" [PAUSE]* *"Are you accepting the referral?* IF YES TO TREATMENT, Skip to bottom "Secure Referral" If NO, reiterate reasons patient gave above and <PAUSE> IF STILL NO, then ask if the patient might consider it and give advice below for patient to have, even if s/he does not want to consider it, and then SKIP TO "Provide Handouts"
Give advice	• Deliver sound medical advice/education • Harm reduction	*"If you enter a treatment program or referral from here you will be on the road to recovery. (see facilitated referral next page) Based on what you told me and what we know about alcohol and/or drug dependence I think you should……" Remember what we discussed in terms of decreasing the risk of contracting HIV(or transferring HIV if already infected)*
Complete Treatment Agreement & Secure Referral	• Select a treatment agency with patient's input • Review Treatment Agreement • Step out of interaction to make an appointment for the patient	*"Which of these programs might you be interested in?" [SHOW LIST]* *"Ok, based on your preferences, your insurance information and availability of program slots, I will make an appointment for you. I will be back to tell you about it as soon as possible."* *"But, before I go, I would like you to complete this referral agreement, which will reinforce your decision to seek formal drug treatment. This is really an agreement between you and yourself"* *[Pt waits for provider to return with a treatment referral]*

	• Provide a referral	*Here is your referral. It is for…[GIVE ALL DETAILS] "How does this sound to you?"* *IF PATIENT UNWILLING TO ATTEND, remind them that that is up to them, but that you would like them to have the referral and additional information (see below) should they change their mind.*
	• Summarize	Reflect on all of the patient's previously stated reasons for entering/considering treatment
	• Provide Handouts	Provide: - Agreement (Add Appointment Specifics, i.e., date, time, address, etc.) - Referral Pamphlet - Health Information Sheet
	• Wrap-up	- Ask the patient if s/he has any questions. ***<PAUSE>*** **-** Thank patient for his/her time.

SUMMARY OF STEP 4

In Step 4 of the BNI, the provider assists the patient in exploring a menu of options regarding reducing their alcohol intake (for HH Drinkers) or engaging in treatment (for alcohol and/or drug Dependent Patients). The provider also attempts to negotiate a formal agreement around one of these goals (i.e., alcohol reduction or a referral to a formal specialized alcohol/drug treatment program), where the patient ultimately complete and signs an agreement form. If the patient is not ready to make an agreement, then additional advice is given and options discussed in another attempt to negotiate and motivate the patient. However, the patient is the decision-maker and should ultimately be responsible for his/her plan. Step 4 is ended by asking if the patient if s/he has any questions about the information or instructions and by thanking them for their time.

VI. Additional Motivational Strategies

- **Refrain From Directly Countering Resistance Statements**

  For example, the patient may say "How can I have an alcohol and/or drug problem when I drink/use less than all my buddies?" You can reply noting that drug dependence can vary between patients and that it is worthy of further assessment and discussion, within the context of this brief interview and advice from treatment professionals.

- **Focus On The Less Resistant Aspects Of The Statement**

  For example, the above patient may be wondering about how much their alcohol and/or drug use is a problem. The response might be to restate his concern and ask about his level of drug use, which is the less resistant part of the statement. "It sounds like you're confused about how you could have an issue with your alcohol/drug use if you use less than all your friends. I'd like to explain this to you." (*And remember, this is a statement NOT a question, so the intonation should turn down at the end of the remark*).

- **Restate Positive or Motivational Statements**

  For example, if a patient says: "You know, now that you mention it, I feel like I have been drinking/using more than I wanted to lately," the medical practitioner could say, "It sounds like you realize that your drinking/use is out of your control." This serves to reinforce the patient's motivation-even if the motivational statement is a relatively weak one. If the patient says, "I guess I might have to change my drinking/drug use" this could be restated as "It sounds like you've been thinking about changing your drinking or stopping your use".

- **Other Helpful Hints**

  Encourage patients to think about previous times they have cut back or been abstinent, even for a few days.

  Praise patients for their willingness to discuss such a sensitive topic, their willingness to consider change, and their courage for considering treatment. Acknowledge how hard it is to find treatment options.

  View the patient as an active participant in the intervention.

VII. Common Problems

Certain problems may occur during the course of the intervention steps….

- **Refusal To Engage In The Discussion Of The Topic Of Alcohol or Drug Use**

Most patients will agree to discuss the topic, but in the unlikely event that someone outright refuses to discuss it at all, tell the patient that you will respect their wishes and that all you will be doing is giving him/her 3 pieces of information:

ALCOHOL:

1. His/her drinking exceeds low-risk drinking limits (or is harmful);
2. Low-risk drinking limits recommended for patient's age and sex; and,
3. You are concerned and that s/he should cut down to low-risk drinking limits to avoid future harm (Steps 2 and 4 only).

DRUGS:

1. His/her drug use meets criteria for dependence, which requires treatment
2. There is no safe level of drug use
3. You are concerned and that s/he should cut down and stop to avoid future harm (Steps 2 and 4 only).

- **Refusal To Self-Identify Along The Readiness Ruler**

When this happens, it is usually a problem with understanding the numbers. There are several ways of dealing with this:

1. Anchor the numbers with descriptors, such as "1" means not ready at all or 0 per cent ready, and 10 means completely ready or 100% ready to change.
2. Ask "What would make this a problem for you?" Or, "How important is it for you to change any aspect of your alcohol/drug use?"
3. Discussion of Pros and Cons (See Appendix 3).

- **Unwilling To Associate Visit With Alcohol or Drug Use**

Don't force the patient to make the connection, but be sure that he/she hears that in your medical opinion there is a connection. However, this connection may not be the thing that ultimately motivates the patient to change. If this happens try to find some other negative consequence of alcohol/drug use that the patient <u>can</u> agree bothersome enough to consider decreasing or stopping their alcohol/drug use.

- **Not Ready To Bring Drinking Patterns Down to Low-Risk Limits**

Tell the patient that the <u>best</u> recommendation is to cut back to low-risk drinking limits, but that any step in that direction is a good start. The patient's goal is then written on the drinking agreement. Regardless of the individual goal, the patient also receives the practitioner's advice for low-risk drinking on the patient health information handout.

VIII. Additional Screeners

AUDIT (**ALCOHOL USE DISORDERS IDENTIFICATION TEST)**

AUDIT

For the following questions about drinking, please keep in mind that for our purposes, one drink equals: one 12 oz. beer, or one 5 oz. glass of wine, or one 12 oz. wine cooler, or one 1 ½ oz. shot of liquor or one mixed drink containing 1 shot of liquor

1. How often do you have a drink containing alcohol?
   ☐…Never **[0]**
   ☐…Monthly or less **[1]**
   ☐…Two to four times a month **[2]**
   ☐…Two to three times a week **[3]**
   ☐…Four or more times a week **[4]**

2. How many drinks containing alcohol do you have on a typical day when you are drinking? [Code number of standard drinks]
   ☐…1 or 2 **[0]**
   ☐…3 or 4 **[1]**
   ☐…5 or 6 **[2]**
   ☐…7 to 9 **[3]**
   ☐…10 or more **[4]**

3. How often do you have six or more drinks on one occasion?
   ☐…Never **[0]**
   ☐…Less than monthly **[1]**
   ☐…Monthly **[2]**
   ☐…Weekly **[3]**
   ☐…Daily or almost daily **[4]**

4. How often during the last year have you found that you were not able to stop drinking once you had started?
   ☐…Never **[0]**
   ☐…Less than monthly **[1]**
   ☐…Monthly **[2]**
   ☐…Weekly **[3]**
   ☐…Daily or almost daily **[4]**

☐ **SUBTOTAL pg1**

5. How often during the last year have you failed to do what was normally expected from you because of drinking?
   ☐…Never **[0]**
   ☐…Less than monthly **[1]**
   ☐…Monthly **[2]**
   ☐…Weekly **[3]**
   ☐…Daily or almost daily **[4]**

6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?
   ☐…Never **[0]**
   ☐…Less than monthly **[1]**
   ☐…Monthly **[2]**
   ☐…Weekly **[3]**
   ☐…Daily or almost daily **[4]**

7. How often during the last year have you had a feeling of guilt or remorse after drinking?
   ☐…Never **[0]**
   ☐…Less than monthly **[1]**
   ☐…Monthly **[2]**
   ☐…Weekly **[3]**
   ☐…Daily or almost daily **[4]**

8. How often during the last year have you been unable to remember what happened the night before because you had been drinking?
   ☐…Never **[0]**
   ☐…Less than monthly **[1]**
   ☐…Monthly **[2]**
   ☐…Weekly **[3]**
   ☐…Daily or almost daily **[4]**

9. Have you or someone else been injured as a result of your drinking?
   ☐…No **[0]**
   ☐…Yes, but not in the last year **[2]**
   ☐…Yes, during the last year **[4]**

10. Has a relative or friend, or a doctor or other health worker been concerned about your drinking or suggested you cut down?
    ☐…No **[0]**
    ☐…Yes, but not in the last year **[2]**
    ☐…Yes, during the last year **[4]**

☐

TOTAL

AUDIT TOTAL SCORE INTERPRETATION:
A score of **8 or more** is associated with harmful or hazardous drinking.
A score of **13 or more** in women, and **15 or more** in men, is likely to indicate Alcohol dependence.

Substance Abuse Screening Instrument (O4/05)

The Drug Abuse Screening Test (DAST) was developed in 1982 and is still an excellent screening tool. It is a 28-item self-report scale that consists of items that parallel those of the Michigan Alcoholism Screening Test (MAST). The DAST has "exhibited valid psychometric properties" and has been found to be "a sensitive screening instrument for the abuse of drugs other than alcohol.

The Drug Abuse Screening Test (DAST)

Directions: The following questions concern information about your involvement with drugs. Drug abuse refers to (1) the use of prescribed or "over-the-counter" drugs in excess of the directions, and (2) any non-medical use of drugs. Consider the past year (12 months) and carefully read each statement. Then decide whether your answer is YES or NO and check the appropriate space. Please be sure to answer every question.

		YES	NO
1.	Have you used drugs other than those required for medical reasons?	___	___
2.	Have you abused prescription drugs?	___	___
3.	Do you abuse more than one drug at a time?	___	___
4.	Can you get through the week without using drugs (other than those required for medical reasons)?	___	___
5.	Are you always able to stop using drugs when you want to?	___	___
6.	Do you abuse drugs on a continuous basis?	___	___
7.	Do you try to limit your drug use to certain situations?	___	___
8.	Have you had "blackouts" or "flashbacks" as a result of drug use?	___	___
9.	Do you ever feel bad about your drug abuse?	___	___
10.	Does your spouse (or parents) ever complain about your involvement with drugs?	___	___
11.	Do your friends or relatives know or suspect you abuse drugs?	___	___
12.	Has drug abuse ever created problems between you and your spouse?	___	___
13.	Has any family member ever sought help for problems related to your drug use?	___	___
14.	Have you ever lost friends because of your use of drugs?	___	___
15.	Have you ever neglected your family or missed work because of your use of drugs?	___	___
16.	Have you ever been in trouble at work because of drug abuse?	___	___
17.	Have you ever lost a job because of drug abuse?	___	___
18.	Have you gotten into fights when under the influence of drugs?	___	___
19.	Have you ever been arrested because of unusual behavior while under the influence of drugs?	___	___
20.	Have you ever been arrested for driving while under the influence of drugs?	___	___
21.	Have you engaged in illegal activities in order to obtain drug?	___	___
22.	Have you ever been arrested for possession of illegal drugs?	___	___
23.	Have you ever experienced withdrawal symptoms as a result of heavy drug intake?	___	___
24.	Have you had medical problems as a result of your drug use (e.g., memory loss, hepatitis, convulsions, bleeding, etc.)?	___	___
25.	Have you ever gone to anyone for help for a drug problem?	___	___
26.	Have you ever been in a hospital for medical problems related to your drug use?	___	___
27.	Have you ever been involved in a treatment program specifically related to drug use?	___	___
28.	Have you been treated as an outpatient for problems related to drug abuse?	___	___

Scoring and interpretation: A score of "1" is given for each YES response, except for items 4,5, and 7, for which a NO response is given a score of "1." Based on data from a heterogeneous psychiatric patient population, cutoff scores of 6 through 11 are considered to be optimal for screening for substance use disorders. Using a cutoff score of 6 has been found to provide excellent sensitivity for identifying patients with substance use disorders as well as satisfactory specificity (i.e., identification of patients who do not have substance use disorders). Using a cutoff score of <11 somewhat reduces the sensitivity for identifying patients with substance use disorders, but more accurately identifies the patients who do not have a substance use disorders. Over 12 is definitely a substance abuse problem. In a heterogeneous psychiatric patient population, most items have been shown to correlate at least moderately well with the total scale scores. The items that correlate poorly with the total scale scores appear to be items 4,7,16,20, and 22.

CRAFFT (used for screening for adolescents for alcohol and/or drug dependence)

C: Have you ever ridden in a Car driven by someone (including yourself) who was “high” or had been using alcohol or drugs?

R: Do you ever use alcohol or drugs to Relax, feel better about yourself or fit in?

A: Do you ever use alcohol or drugs while you are by yourself (Alone)

F: Do your family or Friends ever tell you that you should cut down on your drinking or drug use?

F: Do you ever Forget things you did while using alcohol or drugs?

T: Have you gotten in Trouble while you were using alcohol or drugs?

TWEAK (used for screening pregnant and non-pregnant women for alcohol dependence)

T**:** How many drinks does it take before you begin to feel the effects of the alcohol? (>2 indicates Tolerance.)

W: Have close friends or relatives Worried about or complained about your drinking in the past year?

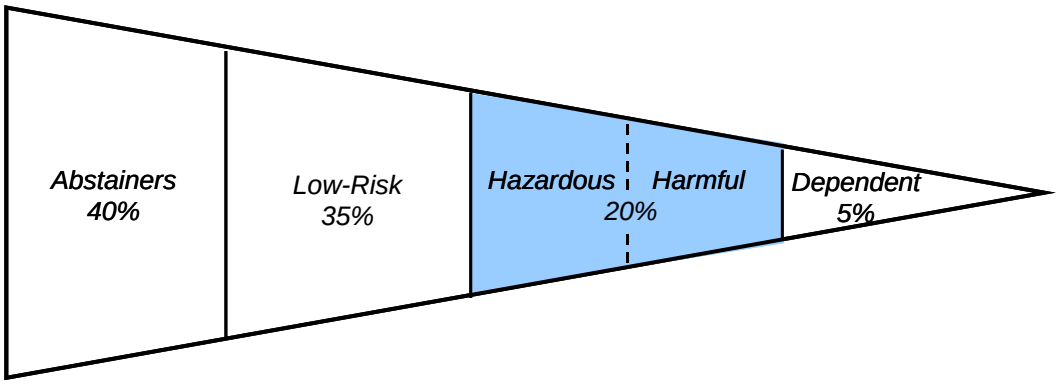
E**:** Have you ever taken a drink to steady your nerves or to get over a hangover? (Eye-opener)

A: has a close friend or relative ever told you about things you said or did while you were drinking that you could not remember? (Amnesia)

K: Have you ever felt the need to cut (Kut) down on your use of alcohol?

IX. APPENDICES

Appendix 1: THE SPECTRUM OF ALCOHOL USE



TYPES OF DRINKERS:

Abstainers	Drink no alcohol.
Low-risk	Drink within NIAAA guidelines (TABLE 1). Alcohol use does not affect health or result in problems.
Hazardous (At Risk)	Exceed NIAAA consumption guidelines. Alcohol use puts them at risk for injury/illness or social problems.
Harmful (Problem)	Currently experiencing problems (medical/social) related to alcohol; often exceed NIAAA guidelines for low-risk drinking.(TABLE 2)
Dependent	Physically dependent on alcohol (experience withdrawal symptoms); meet criteria for dependence based upon assessment criteria such as DSM-IV-TR

Appendix 2: The "READINESS RULER"

(Referred to in Step 3 of the BNI)

READINESS RULER

Not ready at all Completely ready

1 2 3 4 5 6 7 8 9 10

Appendix 3: PROS AND CONS FOR DRUG/ALCOHOL USE & TREATMENT

(Referred to in Step 3 of the BNI)

Reasons to Quit or Cut Down on Drinking

To live longer, and feel better
To consume fewer empty calories (alcohol has no nutritional value)
To sleep better
To be less likely to have a stroke
To improve blood pressure control
To reduce the possibility of death from liver disease
To prevent problems with medications
To decrease the likelihood of falls or other injuries
To prevent memory loss that may lead to loss of independence
To be able to care for myself longer
To be a better parent or grandparent
To reduce the possibility that I will die in a car crash
Other reasons:_____

Reasons for Drinking

I enjoy the taste
It enhances meals
For pleasure in social situations
To more easily socialize
Other people expect that I will drink with them
To relax or relieve stress
To cope with feelings of anger
To cope with feelings of boredom
To deal with momentary feelings of depression
To deal with momentary feelings of loneliness
To deal with feelings of frustration
To relieve the stress of arguments with family members or friends
It's something I do when I'm smoking
It's something I do when I'm watching T.V.
It's something I do with certain friends or relatives
To help me sleep
To relieve pain

Reasons to enter drug treatment

To spend less money
To avoid constantly seeking drugs
To do a better job at home
To do a better job at work
To live longer, and feel better
To sleep better
To be able to care for myself longer
To be able to care for my children better
To be a better son/daughter, wife/husband, parent or grandparent
To reduce the possibility that I will die
Other reasons:_____

Reasons for ongoing drug use

Boredom
Habit
I enjoy the taste or the way that it feels
For pleasure in social situations
To more easily socialize
Other people expect that I will use when I am with them
To relax or relieve stress
To cope with feelings of anger
To cope with feelings of anxiety
To cope with feelings of boredom
To deal with momentary feelings of depression
To deal with momentary feelings of loneliness
To deal with feelings of frustration
To relieve the stress of arguments with family members or friends
It's something I do when I'm watching T.V.
It's something I do with certain friends or relatives
To help me sleep
To relieve pain
To make me feel better
Other reasons:

Appendix 4: NATIONAL NORMS FOR ALCOHOL USE

(Referred to in Step 2 of the BNI)

Alcohol Consumption Norms for U.S. Adults

Drinks per week	Total %	% Men	% Women
0	35	29	41
1	58	46	68
2	66	54	77
3	68	57	78
4	71	61	82
5	77	67	86
6	78	68	87
7	80	70	89
8	81	71	89
9	82	73	90
10	83	75	91
11	84	75	91
12	85	77	92
13	86	77	93
14	87	79	94
15	87	80	94
16	88	81	94
17	89	82	95
18	90	84	96
19	91	85	96
20	91	86	96
21	92	88	96
22	92	88	97
23-24	93	88	97
25	93	89	98

Source: 1990 National Alcohol Survey, Alcohol Research Group, Berkeley, Courtesy of Dr. Robin Room

Appendix 5: DRINKING/DRUG USE AGREEMENT & REFERRAL AGREEMENT

(Referred to in Step 4)

DRINKING/DRUG USE AGREEMENT

Date: _____

I, _____, agree to the following goals:

Alcohol

___ I will not drink at all

Or

___ Number of drinks week: _____

Number of drinks per occasion: _____

Drugs

___ I will not use _____ at all.

(list drugs)

___ I will use my prescription medications only as prescribed

Follow-up_____ With _____ MD/APRN

Patient Signature:_____

REFERRAL ACCEPTANCE

Date: _____

I, _____agree to accept the

following treatment referral to (name of referral location):

_____

_____

_____

Patient signature: _____

Appendix 6: HEALTH INFORMATION HANDOUT

(Referred to in Step 4 of the BNI)

(FRONT)

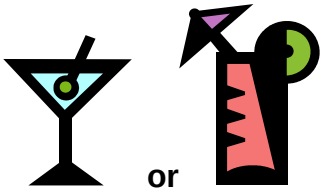
Please read the following important information, about reducing risky health behaviors, which may apply to you.

Health Risk	What we know…	What you can do…
Smoking	• It's not healthy to smoke. • There are many options available to help you stop.	We recommend that you speak with your primary care physician for his or her advice. ➢ Or you may call: (203) 688-9999 [8-5; M-F]
Exercise	• It's healthy to exercise on a regular basis. • The amount of exercise recommended on a daily basis is 30 minutes.	We recommend that you speak with your primary care physician for his or her advice. ➢ Or you may call: (203) 688-9999 [8-5; M-F]
Alcohol Use	• Drinking above low risk limits will increase your risk for illness and/or injury. • Please see the drinking information for your sex and age, on the back of this paper. • It's never good to drink and drive.	We recommend that you speak with your primary care physician for his or her advice. ➢ Or you may call: (203) 688-9999 [8-5; M-F]
Safety Issues	• It is always healthy to take safety precautions. • Always use a seatbelt when in a car. • Always wear a helmet while biking, riding a motorcycle or rollerblading.	We recommend that you speak with your primary care physician for his or her advice. ➢ Or you may call: (203) 688-9999 [8-5; M-F]

(BACK)

WHAT IS A STANDARD DRINK?

1 Standard Drink equals:



or

mixed drink made with 1.5 oz. of alcohol (whiskey, gin, etc.)

12 oz. Beer

5 oz. wine

HOW MUCH IS TOO MUCH?

If you drink more than this you can put yourself at risk for illness and/or injury:

	# Drinks*	
	Week	**Occasion**
Men	14	4
Women	7	3
All age >65	7	3

** ***Sometimes even 1 drink is too much!*** *If you are:*

- *driving or planning to drive*
- *at work or returning to work*
- *pregnant, or breast feeding*
- *on medication*
- *have certain medical conditions*

Appendix 7: CASE EXAMPLE OF BNI DIALOGUE FOR ALCOHOL USE REDUCTION

SPEAKER	DIALOGUE	PROCEDURE
Physician	Hello, I am Dr. Jones. Would you mind spending a few minutes talking about your use of alcohol?	**RAISE THE SUBJECT**
Patient	Ok, like what?	
Physician	From what I understand you were drinking tonight and were involved in a car crash. You told the nurse that you drink 2-3 days a week and usually have 6-8 beers per occasion. I am concerned because that level of drinking can put you at risk for illness or injuries, such as why you are here today. What connection do you see between your drinking and this ED visit?	**PROVIDE FEEDBACK** Make Connection
Patient	None really. I mean, I really had the right of way. I had a few beers. What is the problem with that? I can hold my alcohol well. He ran into me. You know that intersection between Grand and College Ave. I was going south on College and he just smacked right into me. I didn't see him at all. I am in kind of a rush. I need to get out of here, but it wasn't my fault	
Physician	I believe that is was not your fault. I know that busy intersection. However we know that drinking even small amounts such as 1 or 2 drinks can reduce your reaction time. As you know, we avoid crashes almost every day. Drivers run stop signs, backup without looking etc. At that very intersection there are near- misses everyday. Do you think that you might have seen that other car approaching and avoided the crash if you had not been drinking? I don't know for sure, I was not there, but it is one thing I would like you to consider.	
Patient	Well, I said that I didn't see him at all. I didn't see him until the crash	
Physician	So one thing, you might have seen him if you weren't drinking any amount. It is clear that legally you had the right of way. I am also concerned about the amount you drink. Based on a large amount of research and national information we know that if you drink above certain levels puts you at risk for injuries and illness. For your age and sex that means the upper limits of low risk drinking are no more than 14 drinks per week, and no more than 4 drinks on any occasion. A standard drink is one 12 ounce can of beer, 5 ounces of wine or 1 ½ ounces of distilled spirits.	Show NIAAA guidelines
Patient	Yeah, I guess I am over that.	

SPEAKER	DIALOGUE	PROCEDURE
Physician	Well now that we have discussed the risks of further injury when drinking over the recommended amounts, how ready are you to change any aspect of your drinking?	**ENHANCE MOTIVATION** Readiness to change
Patient	I don't know, maybe a 5	
Physician	OK, so that is good, you are halfway or 50% there. Why not less? In other words why did you not pick a 1 or 2? What are some reasons why you think some changes need to be made?	Develop discrepancy
Patient	Well, I am here I guess, and I can tell that my neck and back are really going to hurt tomorrow. But I really do like to drink with my friends. Normally I do not drink and drive, but I needed to be somewhere after, so I drove myself.	
Physician	So you already know that drinking and driving is not a good idea and that was a rare event for you. But rare events can sometimes lead to consequences, like today. So I guess you are ready because you don't think that it's a good idea to drink and drive. On the other hand you enjoy drinking with your friends. Any disadvantages to that?	Reflection
Patient	We normally go out on Friday and Saturdays. Sometimes on Thursdays and then I'm a little late to work on Friday. It takes the morning and lots of coffee to clear my head.	
Physician	So what I hear your saying is that there are two reasons why you are dissatisfied with your drinking. First is that you ended up in the ED and will probably have some muscles aches and pains for a few days, and second that sometimes you are slow at work. That could cause you trouble I suspect with your boss. In addition I have given you some information regarding the risks of drinking over the recommended limits. So, where does that leave you now? (or what is the next step?) What agreement could you make between you and yourself regarding your drinking levels?	**NEGOTIATE & ADVISE** Summarize Negotiate goal
Patient	Well, I'm definitely not going to drink and drive. That is a big deal because even though I thought I could, I probably can't. I don't know about the limits. I can stay within 14 a week, but I don't know about the 4 at a time. I will try but it is often a long game we are watching.	
Physician	So no more drinking and driving, and you are going to try to keep it to 4 beers per occasion, knowing that it's tough at times but you are willing to try.	
Patient	OK	
Physician	Good luck. I would also recommend that you follow-up with your primary care doctor and discuss how you are doing with the agreement. Thanks for your time	Follow-up Thank patient

Appendix 8: CASE EXAMPLE OF BNI DIALOGUE FOR REFERRAL TO A DRUG TREATMENT PROGRAM

SPEAKER	DIALOGUE	PROCEDURE
Physician	Hello, I am Dr. Jones. Would you mind spending a few minutes talking about your use of opioids?	**RAISE THE SUBJECT**
Patient	Ok, like what?	
Physician	"I would like to take some time to talk with you about the issues related to your use and then to explore how we might be able to help with that." How are you feeling right now?	
Patient	Not great at all. I like it; it makes me feel good, but it would be great to slow down a little or take a break on some days without getting sick. I'm feeling really bad right now.	
Physician	Sounds like you're in a lot of physical discomfort and that using less would really be something you'd like to do. We'd be happy to help you with that.	
Patient	Alright…well…	**PROVIDE FEEDBACK**
Physician	From what I understand you use heroin intravenously everyday, about 4-5 bags a day throughout the day, and that it's caused you some problems. Tell me more about those problems.	Make Connection
Patient	Well, I mean…nothing I can't handle, but life does seem to suck right now. People can't take my crap anymore, especially my boss.	
Physician	So, it sounds like heroin has caused some relationship and work problems for you. Although you are able to keep your job it's getting tougher.	
Patient	Yes, I spend more and more time trying to get heroin and it's hard to find clean needles. Sometimes I have to share needles.	
Physician	So sharing needles can lead to real health problems and spending more time trying to find the drug certainly takes you away from your work. How does it affect other parts of your life?	
Patient	Well I had to drop out of my adult ed classes. And I lost my friends and girlfriend because I have no time to hang with them.	
Physician	This must be a very hard time for you. So you're telling me that both your work and personal life are in a mess and the fact that you're sharing needles is putting your health at even greater risk. What connection do you see between your drug use and this medical visit?	

SPEAKER	DIALOGUE	PROCEDURE
Patient	I'm dope sick and I don't know what to do anymore. I thought you could help me out. Look, at least I'm being straight with you and not giving you a whole story about fake pain.	
Physician	We *can* help you with this by getting you a referral to a drug treatment center **right now.** Treatment works – it can help you reduce and stop your heroin use, which is escalating to a point where you're always in some degree of withdrawal. So, let's next talk about how ready you might be to do engage in treatment. On a scale from 1-10, how ready are you to go to the appointment we arrange for you, where 1 means not ready at all and 10 means totally ready?	**ENHANCE MOTIVATION** Readiness to change
Patient	I don't know, maybe a 5	
Physician	OK, so that is good, you are halfway or 50% there. Why not less? In other words why did you not pick a 1 or 2? What are some reasons why you think starting this treatment would be good for you?	Evoke "Change Talk"
Patient	Well, I am here because I have no place left to get my stuff and I'll just get more and more sick. I'm also tired of this pattern and miss my girlfriend.	Beginning "Change Talk"
Physician	Those are 2 good reasons, anything else?	Open Question to elicit more "Change Talk"
Patient	My girlfriend did say that she'd consider taking me back if I ever got into treatment.	More "Change Talk"
Physician	So, even though the answer to this question should be obvious, tell me in your own words why it would be important to you to start treatment and get your girlfriend back?	
Patient	Because she's the only person that has ever gotten me and really understood why I am this way. And she's totally drug-free – she's never even touched the stuff. I know I can get her back.	Deeper "Change Talk"
Physician	So it sounds like starting treatment would give you a number of things that are very important to you. In the short-run, it would make you much more physically comfortable and you wouldn't have to be running around anymore. It could also help things between you and your boss, because you wouldn't have to be running around anymore and you might even re-connect with your friends. But most importantly, it would help you get back together with your girlfriend. Now, if you don't mind, I'd like to add one more thing to the list (wait for permission). You would also reduce the risk of contracting HIV/AIDS.	Reflection of "Change Talk"

SPEAKER	DIALOGUE	PROCEDURE
Patient	I've always thought about all the bad stuff heroin was doing to me, which only made me want to use more. Now, you make it sound like I could *get* a lot of good stuff from doing this treatment.	Commitment Talk
Physician	So, what's the next step, if any?	**NEGOTIATE & ADVISE**
Patient	I want to try it. How do I start?	Summarize
Physician	Well I'm going to review this list with you so we can identify the best place for you to get help and I will call to try to get an appointment with you today. Because it is sometimes helpful to write down our goals and plans, I'm going to ask you to fill out this agreement sheet. It is an agreement between you and your self and is not a part of your medical records. I think you've made an excellent decision and I wish you all the best. Thank you for your time.	Negotiate goal Follow-up Thank patient

Appendix 9: OTHER RESOURCES FOR ASSESSING ALCOHOL AND DRUG DEPENDENCE

Mini-SCID Symptoms for Alcohol & Other Drugs (Referred to in Steps 1 and 2 of the BNI)

a. Needing to use more (name the drug/drug class selected) to get the same effect that you did when you first started taking it
b. When you reduced or stopped using (name the drug/drug class selected), having withdrawal symptoms (aches, shaking, fever, weakness, diarrhea, nausea, sweating, heart pounding, difficulty sleeping, or feel agitated, anxious, irritable, or depressed), or using any drug(s) to keep yourself from getting sick (withdrawal symptoms) or so that you would feel better.
c. Finding that when you used (name the drug selected), you end up taking more than you thought you would.
d. Trying to reduce or stop taking (name the drug selected) but failed.
e. On the days that you used (name the drug/drug class selected), spending substantial time (>2 hours) obtaining, using, or in recovering from the drug, or thinking about the drug.
f. Spending less time working, enjoying hobbies, or being with others because of your drug use.
g. Continuing to use (name the drug selected), even though you knew that the drug caused you health or mental problems.

Clinical Opiate Withdrawal Scale

For each item, circle the number that best describes the patient's signs or symptom. Rate on just the apparent relationship to opiate withdrawal. For example, if heart rate is increased because the patient was jogging just prior to assessment, the increase pulse rate would not add to the score…

Project #: 1☐☐☐ Date:☐☐-☐☐-☐☐ RA:☐☐☐ Time (military) ☐☐☐☐
Reason for this assessment:_____

Resting Pulse Rate: ____beats/minute *Measured after patient is sitting or lying for 1 minute* ☐ 0… pulse rate 80 or below ☐ 1… pulse rate 81-100 ☐ 2…pulse rate 101-120 ☐ 4… pulse rate greater than 120	**GI Upset**: *Over last ½ hour* ☐ 0…no GI symptoms ☐ 1…stomach cramps ☐ 2…nausea or loose stool ☐ 3…vomiting or diarrhea ☐ 5…multiple episodes of diarrhea or vomiting
Sweating: *Over past ½ hour not accounted for by room temperature or patient activity.* ☐ 0…no report of chills or flushing ☐ 1…subjective report of chills or flushing ☐ 2…flushed or observable moistness on face ☐ 3…beads of sweat on brow or face ☐ 4…sweat streaming off face	**Tremor:** *Observation of outstretched hands* ☐ 0…No tremor ☐ 1…tremor can be felt, but not observed ☐ 2…slight tremor observable ☐ 4…gross tremor or muscle twitching
Restlessness: *Observation during assessmen*t ☐ 0…able to sit still ☐ 1…reports difficulty sitting still, but is able to do so ☐ 3…frequent shifting or extraneous movements of legs/arms ☐ 5…Unable to sit still for more than a few seconds	**Yawning:** *Observation during assessment* ☐ 0…no yawning ☐ 1…yawning once or twice during assessment ☐ 2…yawning three or more times during assessment ☐ 4…yawning several times/minute
Pupil size: ☐ 0…pupils pinned or normal size for room light ☐ 1…pupils possibly larger than normal for room light ☐ 2…pupils moderately dilated ☐ 5…pupils so dilated that only the rim of the iris is visible	**Anxiety or Irritability:** ☐ 0…none ☐ 1…patient reports increasing irritability or anxiousness ☐ 2…patient obviously irritable anxious ☐ 4…patient so irritable or anxious that participation in the assessment is difficult
Bone or Joint aches: *If patient was having pain previously, only the additional component attributed to opiates withdrawal is scored* ☐ 0…not present ☐ 1…mild diffuse discomfort ☐ 2…patient reports severe diffuse aching of joints/muscles ☐ 4…patient is rubbing joints or muscles and is unable to sit still because of discomfort	**Gooseflesh skin:** ☐ 0…skin is smooth ☐ 3…piloerrection of skin can be felt or hairs standing up on arms ☐ 5…prominent piloerrection
Runny nose or tearing: *Not accounted for by cold symptoms or allergies* ☐ 0…not present ☐ 1…nasal stuffiness or unusually moist eyes ☐ 2…nose running or tearing ☐ 4…nose constantly running or tears streaming down cheeks	*The total score is the sum of all 11 items…* Total Score: ☐☐

Score: 5-12 = mild; 13-24 = moderate; 25-36 = moderately severe; more than 36 = severe withdrawal

OBJECTIVE OPIOID WITHDRAWAL SCALE (OOWS)

Observe the patient during a 5 minute observation period then indicate a score for each of the opioid withdrawal signs listed below (items 1-13). Add the scores for each item to obtain the total score

Project #: 1☐☐☐ Date:☐☐-☐☐-☐☐ RA:☐☐☐ Time (military) ☐☐☐☐

	Date							
	Time							
1	**Yawning** 0 = no yawns 1 = ≥ 1 yawn							
2	**Rhinorrhoea** 0 = < 3 sniffs 1 = ≥ 3 sniffs							
3	**Piloerection** (observe arm) 0 = absent 1 = present							
4	**Perspiration** 0 = absent 1 = present							
5	**Lacrimation** 0 = absent 1 = present							
6	**Tremor** (hands) 0 = absent 1 = present							
7	**Mydriasis** 0 = absent 1 = ≥ 3 mm							
8	**Hot and cold flushes** 0 = absent 1 = shivering / huddling for warmth							
9	**Restlessness** 0 = absent 1 = frequent shifts of position							
10	**Vomiting** 0 = absent 1 = present							
11	**Muscle twitches** 0 = absent 1 = present							
12	**Abdominal cramps** 0 = absent 1 = Holding stomach							
13	**Anxiety** 0 = absent 1 = mild – severe							
	TOTAL SCORE							

WITHDRAWAL SCALES FOR ALCOHOL, CANNABIS, COCAINE & BENZODIAZEPINES

Alcohol

Alcohol Withdrawal Assessment Scoring Guidelines (CIWA - Ar)

Nausea/Vomiting - Rate on scale 0 - 7

0 - None
1 - Mild nausea with no vomiting
2
3
4 - Intermittent nausea
5
6
7 - Constant nausea and frequent dry heaves and vomiting

Tremors - have patient extend arms & spread fingers. Rate on scale 0 - 7.
0 - No tremor
1 - Not visible, but can be felt fingertip to fingertip
2
3
4 - Moderate, with patient's arms extended
5
6
7 - severe, even w/ arms not extended

Anxiety - Rate on scale 0 - 7
0 - no anxiety, patient at ease
1 - mildly anxious
2
3
4 - moderately anxious or guarded, so anxiety is inferred
5
6
7 - equivalent to acute panic states seen in severe delirium or acute schizophrenic reactions.

Agitation - Rate on scale 0 - 7
0 - normal activity
1 - somewhat normal activity
2
3
4 - moderately fidgety and restless
5
6
7 - paces back and forth, or constantly thrashes about

Paroxysmal Sweats - Rate on Scale 0 - 7.
0 - no sweats
1- barely perceptible sweating, palms moist
2
3
4 - beads of sweat obvious on forehead
5
6
7 - drenching sweats

Orientation and clouding of sensorium - Ask, "What day is this? Where are you? Who am I?" Rate scale 0 - 4
0 - Oriented
1 – cannot do serial additions or is uncertain about date

2 - disoriented to date by no more than 2 calendar days

3 - disoriented to date by more than 2 calendar days
4 - Disoriented to place and / or person

Tactile disturbances - Ask, "Have you experienced any itching, pins & needles sensation, burning or numbness, or a feeling of bugs crawling on or under your skin?"
0 - none
1 - very mild itching, pins & needles, burning, or numbness
2 - mild itching, pins & needles, burning, or numbness
3 - moderate itching, pins & needles, burning, or numbness
4 - moderate hallucinations
5 - severe hallucinations
6 - extremely severe hallucinations
7 - continuous hallucinations

Auditory Disturbances - Ask, "Are you more aware of sounds around you? Are they harsh? Do they startle you? Do you hear anything that disturbs you or that you know isn't there?"
0 - not present
1 - Very mild harshness or ability to startle
2 - mild harshness or ability to startle
3 - moderate harshness or ability to startle
4 - moderate hallucinations
5 - severe hallucinations
6 - extremely severe hallucinations
7 - continuous hallucinations

Visual disturbances - Ask, "Does the light appear to be too bright? Is its color different than normal? Does it hurt your eyes? Are you seeing anything that disturbs you or that you know isn't there?"
0 - not present
1 - very mild sensitivity
2 - mild sensitivity
3 - moderate sensitivity
4 - moderate hallucinations
5 - severe hallucinations
6 - extremely severe hallucinations
7 - continuous hallucinations

Headache - Ask, "Does your head feel different than usual? Does it feel like there is a band around your head?" Do not rate dizziness or lightheadedness.

0 - not present
1 - very mild
2 - mild
3 - moderate
4 - moderately severe
5 - severe
6 - very severe
7 - extremely severe

Procedure:

1. Assess and rate each of the 10 criteria of the CIWA scale. Each criterion is rated on a scale from 0 to 7, except for "Orientation and clouding of sensorium" which is rated on scale 0 to 4. Add up the scores for all ten criteria. This is the total CIWA-Ar score for the patient at that time. Prophylactic medication should be started for any patient with a total CIWA-Ar score of 8 or greater (ie. start on withdrawal medication). If started on scheduled medication, additional PRN medication should be given for a total CIWA-Ar score of 15 or greater.
2. Document vitals and CIWA-Ar assessment on the Withdrawal Assessment Sheet. Document administration of PRN medications on the assessment sheet as well.
3. The CIWA-Ar scale is the most sensitive tool for assessment of the patient experiencing alcohol withdrawal. Nursing assessment is vitally important. Early intervention for CIWA-Ar score of 8 or greater provides the best means to prevent the progression of withdrawal.

Assessment Protocol a. Vitals, Assessment Now. b. If initial score ≥ 8 repeat q1h x 8 hrs, then if stable q2h x 8 hrs, then if stable q4h. c. If initial score < 8, assess q4h x 72 hrs. If score < 8 for 72 hrs, d/c assessment. If score ≥ 8 at any time, go to (b) above. d. If indicated, (see indications below) administer prn medications as ordered and record on MAR and below.	**Date**											
	Time											
	Pulse											
	RR											
	O_2 sat											
	BP											
Assess and rate each of the following (CIWA-Ar Scale):	**Refer to reverse for detailed instructions in use of the CIWA-Ar scale.**											
Nausea/vomiting (0 - 7) 0 - none; 1 - mild nausea ,no vomiting; 4 - intermittent nauses; 7 - constant nausea , frequent dry heaves & vomiting.												
Tremors (0 - 7) 0 - no tremor; 1 - not visible but can be felt; 4 - moderate w/ arms extended; 7 - severe, even w/ arms not extended.												
Anxiety (0 - 7) 0 - none, at ease; 1 - mildly anxious; 4 - moderately anxious or guarded; 7 - equivalent to acute panic state												
Agitation (0 - 7) 0 - normal activity; 1 - somewhat normal activity; 4 - moderately fidgety/restless; 7 - paces or constantly thrashes about												
Paroxysmal Sweats (0 - 7) 0 - no sweats; 1 - barely perceptible sweating, palms moist; 4 - beads of sweat obvious on forehead; 7 - drenching sweat												
Orientation (0 - 4) 0 - oriented; 1 - uncertain about date; 2 - disoriented to date by no more than 2 days; 3 - disoriented to date by > 2 days; 4 - disoriented to place and / or person												
Tactile Disturbances (0 - 7) 0 - none; 1 - very mild itch, P&N, ,numbness; 2-mild itch, P&N, burning, numbness; 3 - moderate itch, P&N, burning ,numbness; 4 - moderate hallucinations; 5 - severe hallucinations; 6 – extremely severe hallucinations; 7 - continuous hallucinations												
Auditory Disturbances (0 - 7) 0 - not present; 1 - very mild harshness/ ability to startle; 2 - mild harshness, ability to startle; 3 - moderate harshness, ability to startle; 4 - moderate hallucinations; 5 severe hallucinations; 6 - extremely severe hallucinations; 7 - continuous hallucinations												
Visual Disturbances (0 - 7) 0 - not present; 1 - very mild sensitivity; 2 - mild sensitivity; 3 - moderate sensitivity; 4 - moderate hallucinations; 5 - severe hallucinations; 6 - extremely severe hallucinations; 7 - continuous hallucinations												
Headache (0 - 7) 0 - not present; 1 - very mild; 2 - mild; 3 - moderate; 4 - moderately severe; 5 - severe; 6 - very severe; 7 - extremely severe												
Total CIWA-Ar score:												
PRN Med: (circle one) Diazepam Lorazepam	**Dose given (mg):**											
	Route:											
Time of PRN medication administration:												
Assessment of response (CIWA-Ar score 30-60 minutes after medication administered)												
RN Initials												

Scale for Scoring:
Total Score =
0 – 9: absent or minimal withdrawal
10 – 19: mild to moderate withdrawal
more than 20: severe withdrawal

Indications for PRN medication:
a. Total CIWA-AR score 8 or higher if ordered PRN only (Symptom-triggered method).
b. Total CIWA-Ar score 15 or higher if on Scheduled medication. (Scheduled + prn method)
Consider transfer to ICU for any of the following: Total score above 35, q1h assess. x more than 8hrs required, more than 4 mg/hr lorazepam x 3hr or 20 mg/hr diazepam x 3hr required, or resp. distress.

Patient Identification (Addressograph)

Signature/ Title	Initials	Signature / Title	Initials

Alcohol Withdrawal Assessment Flowsheet (revised Nov 2003)

Cannabis Withdrawal Assessment Scale

Drug & Alcohol Services Council, SA, 2002

Note: Total Score is indicative of increasing or decreasing severity of withdrawal. Scores are not directly linked to pharmacological management as occurs with alcohol scores based on the CIWA-Ar.

Surname: _____ **Given name:** _____

Date of birth: _____

Date													
Time													
Temperature													
Pulse													
Respiration rate													
Blood pressure													
Pupil size													
Reaction													
Weight													

Score range = 0-7

Restlessness/Agitation													
Racing thoughts													
Mood changes													
Feelings of unreality													
Fear													
Drowsiness													
Hunger													
Appetite													
TOTAL													

Sleep (0800 obs only)													
Other symptoms													

These questions refer to how the person is feeling **right now**, at the present moment.

1.	**Restlessness/Agitation—Observation** Ask 'Do you feel more restless than you are normally?'	**5.**	**Fear** Ask 'Do you feel fearful?'
	0 Normal activity 1 Somewhat more than normal activity 4 Moderately fidgety or restless 7 Unable to sit or stand still		0 No fear 1 Mildly fearful 4 Moderately fearful 7 Extremely fearful
2.	**Racing thoughts** Ask 'Are your thoughts racing?	**6.**	**Drowsiness—Observation** Ask 'Do you feel sleepy or drowsy?'
	0 No racing thoughts 1 Mild 4 Moderate 7 Severe		0 No drowsiness 1 Mild 4 Moderate 7 Severe, unable to stay awake
3.	**Mood changes—Observation** Ask 'Are your moods changing over a short period (hours)?'	**7.**	**Hunger** Ask 'Do you feel hungry?'
	0 No mood changes, feels stable 1 Mild 4 Moderate 7 Severe		0 No hunger 1 Mild 4 Moderate 7 Severe and constant feelings of hunger
4.	**Feelings of unreality** Ask 'Do you feel that things around you are not real or change in shape?'	**8.**	**Appetite** Ask 'Have you noticed any change in your appetite?'
	0 No 1 Mild 4 Moderate 7 Severe feelings of unreality, everything looks strange or different		0 No loss of appetite 1 Slight loss 4 Moderate 7 Complete loss of appetite, unable to eat at all
		9.	**Sleep** Ask 'How did you sleep last night?'
			0 Sufficient sleep 1 Some sleep 4 Moderate/restless sleep 7 No sleep

Cited in deCrespigny, C et al. 2003, *Alcohol Tobacco and Other Drugs Guidelines for Nurses and Midwives: Clinical Guidelines* Flinders University and Drug and Alcohol Services Council, Adelaide. Also available at wwww.dasc.sa.gov.au

Guidelines for Administration of the CSSA

The CSSA is a simple scale that reliably and validly measures cocaine withdrawal signs and symptoms. The scale is designed to be administered at each detoxification visit and measures withdrawal over the past 24 hours. It takes only a few minutes to administer and requires no special equipment. Almost any member of a clinical staff can be trained to administer the scale. The accuracy of the scale depends on the consistency of administration. For this reason, we have put together this set of guidelines for administration of the CSSA. We found that administering the scale according to these guidelines significantly improved scale reliability and validity.

When ascertaining the date of last use, pay close attention to the time of last use. For example, if someone states that his/her last cocaine use was last night, determine if the last use was after midnight. If the last cocaine use was after midnight, then record days since last use as zero.

To complete items one and two, it is important to limit the individual to the previous 24 hours. Ask the individual "How has your appetite been in the past 24 hours?" Compare this response with his/her usual food intake for a typical 24-hour period. Score appetite according to the guidelines provided within items one and two on the CSSA. If a person is hyperphagic, then he/she can not be hypophagic and vice versa. Thus, an individual can have a response of zero for both questions or can have a response greater than zero for item one or item two but not both.

To complete item three ask "Do you have, or have you had any cravings for cookies, candy or sweets in the past 24 hours?" Score his/her carbohydrate craving utilizing the guidelines provided on the CSSA to quantify his/her response.

To complete items four and five, cocaine craving and craving frequency, have the individual mark a vertical line at the appropriate spot representing his/her cocaine craving and another mark corresponding to his/her cocaine craving frequency on the appropriate scale. When scoring his/her mark, you should assess 'which position on the scale is closest to the new mark and assign an appropriate value. You cannot score his/her mark as fraction. It must be a whole number. Any mark between zero and one is scored as one. If the individual displays confusion in trying to distinguish the difference between cocaine craving and craving frequency, explain that cocaine craving is how much he/she wanted to use cocaine in the last 24 hours and the craving frequency is how often he/she wanted to use cocaine. Individuals who report some craving intensity on item four must report some craving frequency on item five, and likewise, patients who report some craving frequency on item five must also report some craving intensity on item four.

To complete item six, take the individual's radial pulse and assign the value defined by the given parameters representing his/her head rate.

To complete items seven and eight ask "How has your sleep been for the last 24 hours?" Compare the response with his/her usual sleep for a typical 24 hour period, and score his/her sleep according to the guidelines provided within items seven and eight on the

CSSA. Total sleep time, including naps is taken into account. Individuals cannot have both hyper and hyposomnia. Thus, an individual can have a response of zero for both items seven and eight, or can have a response greater than zero for item seven or eight but not both.

To complete items nine through thirteen, it is important not to lead the individual with your questioning. For example, begin inquiring about anxiety in item nine by asking "Have you felt anxious in the past 24 hours?" If the patient reports feeling some anxiety then inquire further about how anxious he/she has felt using the guidelines on the scale to help quantify his/her response. Complete the other four items following the same method.

To complete item fourteen begin by asking "Do you have difficulty trusting people?" If the individual reports suspicion, then probe further to determine how unrealistic and specific the suspicion is. Vague feelings of distrust are scored lower than articulated feelings of being harassed. True paranoid delusions are given the maximum score. This item requires the highest degree of interviewing skill and requires the interviewer to determine the validity of an individual's suspicion. Consequently, in recent test-reset reliability testing, this item received the lowest reliability rating and may eventually be eliminated from the revised scale.

To complete items fifteen through eighteen, it is important not to lead the individual with your questioning. For example to complete item fifteen ask "Have you been able to enjoy yourself over the last 24 hours?" To complete item seventeen ask "Have you had any thoughts about death in the past 24 hours?" Follow up positive responses with more specific inquiries using the guidelines in the scale to help quantitate responses.

COCAINE SELECTIVE SEVERITY ASSESSMENT

1. HYPERPHAGIA: .....

0= normal appetite
3-4 =eats a lot more than usual
7= eats more than twice usual amount of food

2. HYPOPHAGIA: .....

0= normal appetite
3-4= eats less than normal amount
7= no appetite at all

3. CARBOHYDRATE CRAVING: .....

0= no craving
3-4=strong craving for sweets half the time
7= strong craving for sweets all the time

4. COCAINE CRAVING: (Please have subject rate intensity on pg. 3) 0-7 .....

5. CRAVING FREQUENCY: (Please have subject rate intensity on pg. 3) 0-7 .....

6. BRADYCARDIA .....

	0	**1**	**2**	**3**	**4**	**5**	**6**	**7**
Apical Pulse	>64	64-63	62-61	60-59	58-57	56-55	54-53	<53

7. SLEEP 1: ☐
0= normal amount of sleep
3-4= half of normal amount
7= no sleep at all

8. SLEEP II: ☐
0= normal amount of sleep
3-4= could sleep or do sleep half the day
7= sleep or could sleep all the time

9. ANXIETY: ☐
0=usually does not feel anxious
3-4= feels anxious half the time
7= feels anxious all the time

10. ENERGY LEVEL: ☐
0=feels alert and has usual amount of energy
3-4= feels tired half the time
7=feels tired all the time

11. ACTIVITY LEVEL: ☐
0= no change in usual activities
3-4= participates in half of usual activities
7= no participation in usual activities

12. TENSION: ☐
0= rarely feel tense
3-4= feels tense half the time
7=feels tense most of the time

13. ATTENTION: ☐
0=able to concentrate on reading, conversation, tasks, and make plans without difficulty
3-4= has difficulty wit the above half the time
7= has difficulty with the above all the time

14. PARANOID IDEATION ☐
0= no evidence of paranoid thoughts
3-4= unable to trust anyone
7=feels people are out to get him/her
8=feels a specific person/group is plotting against him/her

15. ANHEDONIA ☐
0= ability to enjoy themselves remains unchanged
3-4= able to enjoy themselves half the time
7=unable to enjoy themselves at all

16. DEPRESSION ..... ☐

0= no feelings related to sadness or depression
3-4= feels sad or depressed half the time
7= feels depressed all of the time

17. SUICIDALITY ..... ☐

0= does not think about being dead
3-4=feels like life is not worth living
7= feels like actually ending life

18. IRRITABILITY ..... ☐

0= feels that most things are not irritating
3-4= feels that many things are irritating
7= feels that mostly everything is irritating and upsetting

Interviewer Initials:_____ Total: _____

Please rate the highest intensity of the desire for cocaine you have felt in the last 24 hours:

No desire at all — Unable to resist

Please identify on the line below, how often you have felt the urge to use cocaine in the last 24 hours:

Never — All the time

WITHDRAWAL ASSESSMENT TOOL – 1 (WAT – 1)

Patient Identifier														
	Date:													
	Time:													
Information from patient record, previous 12 hours														
Any loose /watery stools	No = 0 Yes = 1													
Any vomiting/wretching/gagging	No = 0 Yes = 1													
Temperature > 37.8°C	No = 0 Yes = 1													
2 minute pre-stimulus observation														
State	SBS[1] ≤ 0 or asleep/awake/calm = 0 SBS[1] ≥ +1 or awake/distressed = 1													
Tremor	None/mild = 0 Moderate/severe = 1													
Any sweating	No = 0 Yes = 1													
Uncoordinated/repetitive movement	None/mild = 0 Moderate/severe = 1													
Yawning or sneezing	None or 1 = 0 ≥2 = 1													
1 minute stimulus observation														
Startle to touch	None/mild = 0 Moderate/severe = 1													
Muscle tone	Normal = 0 Increased = 1													
Post-stimulus recovery														
Time to gain calm state (SBS[1] ≤ 0)	< 2min = 0 2 - 5min = 1 > 5 min = 2													
Total Score (0-12)														

WITHDRAWAL ASSESSMENT TOOL (WAT – 1) INSTRUCTIONS

- Start WAT-1 scoring from the **first day of weaning** in patients who have received opioids +/or benzodiazepines by infusion or regular dosing for prolonged periods (e.g., > 5 days). Continue twice daily scoring until 72 hours after the last dose.
- The Withdrawal Assessment Tool (WAT-1) should be completed along with the SBS[1] at least once per 12 hour shift (e.g., at 08:00 and 20:00 ± 2 hours). The progressive stimulus used in the SBS[1] assessment provides a standard stimulus for observing signs of withdrawal.

Obtain information from patient record (this can be done before or after the stimulus):

- ✓ **Loose/watery stools**: Score 1 if any loose or watery stools were documented in the past 12 hours; score 0 if none were noted.
- ✓ **Vomiting/wretching/gagging**: Score 1 if any vomiting or spontaneous wretching or gagging were documented in the past 12 hours; score 0 if none were noted
- ✓ **Temperature > 37.8°C**: Score 1 if the modal (most frequently occurring) temperature documented was greater than 37.8 °C in the past 12 hours; score 0 if this was not the case.

2 minute pre-stimulus observation:

- ✓ **State**: Score 1 if awake and distress (SBS[1]: ≥ +1) observed during the 2 minutes prior to the stimulus; score 0 if asleep or awake and calm/cooperative (SBS[1] ≤ 0).
- ✓ **Tremor**: Score 1 if moderate to severe tremor observed during the 2 minutes prior to the stimulus; score 0 if no tremor (or only minor, intermittent tremor).
- ✓ **Sweating**: Score 1 if any sweating during the 2 minutes prior to the stimulus; score 0 if no sweating noted.
- ✓ **Uncoordinated/repetitive movements**: Score 1 if moderate to severe uncoordinated or repetitive movements such as head turning, leg or arm flailing or torso arching observed during the 2 minutes prior to the stimulus; score 0 if no (or only mild) uncoordinated or repetitive movements.
- ✓ **Yawning or sneezing** > 1: Score 1 if more than 1 yawn or sneeze observed during the 2 minutes prior to the stimulus; score 0 if 0 to 1 yawn or sneeze.

1 minute stimulus observation:

- ✓ **Startle to touch**: Score 1 if moderate to severe startle occurs when touched during the stimulus; score 0 if none (or mild).
- ✓ **Muscle tone**: Score 1 if tone increased during the stimulus; score 0 if normal.

Post-stimulus recovery:

- ✓ **Time to gain calm state** (SBS[1] ≤ 0): Score 2 if it takes greater than 5 minutes following stimulus; score 1 if achieved within 2 to 5 minutes; score 0 if achieved in less than 2 minutes.

Sum the 11 numbers in the column for the total WAT-1 score (0-12).

[1]Curley et al. State behavioral scale: A sedation assessment instrument for infants and young children supported on mechanical ventilation. Pediatr Crit Care Med 2006;7(2):107-114.

Appendix 10: TREATMENT REFERRAL LIST
(Referred to in Step 4 of the BNI)

Local Alcohol and Drug Treatment Resources

APT Foundation-Access Center
One Long Wharf Dr, Suite 10, New Haven
(203) 781-4357
Walk-in Screening available: M-F: 7:30am-12pm
Methadone maintenance: *495 Congress Ave and 540 Ella Grasso Blvd*
Outpatient , methadone, and residential treatment for adolescents, men, women, including pregnant women, and women with children, Spanish-speakers, and HIV+ individuals.

Crossroads Inc.
42 Howe St and 54 East Ramsdell St, New Haven
(203) 387-0094, Dial "O"
M-F: 9am-5pm; Outpatient services and residential treatment facility for 18+ men, women, Spanish-speakers, dual-diagnosed, and HIV+ individuals.

Crossroads Inc.-Amethyst House
48 Howe St, 3rd flr, New Haven
(203) 821-3040
M-F: 9am-5pm; Residential treatment facility for women 18+ who are pregnant or have children, dual-diagnosed, and HIV+ individuals.

Grant Street Partnership
62 Grant St, New Haven
(203) 503-3350
M-F; 9am-5pm; Outpatient services (18+ men and women) and residential treatment facility (men only).

Hispanic Clinic Substance Abuse Unit (CMHC)
34 Park St, New Haven
(203) 974-5800; M, T, Th & F 9am-4:30pm, W: 11am-6:30pm; Outpatient services for Latino clients who primarily use alcohol (No IV drug users).

Hospital of St. Raphael Chemical Dependency
Chapel St, New Haven
(203)784-8790
M-F: 12:30-9pm. Outpatient services, including evening programs for men and women 16+.

Multicultural Ambulatory Addiction Services (MAAS)
426 East St, New Haven
(203) 495-7710
M-F 9am-5pm; Walk-ins: 8:30am-11:30am
Outpatient services, including methadone, for men and women 18+, especially African American and Latinos.

South Central Rehabilitation Center (SCRC)
232 Cedar St, New Haven
(203) 503-3300
24 hours a day, 7 days a week. Walk-ins: 5:30am-12:30pm. Detox, methadone, and triage facility for men and women 18+, including dual-diagnosed individuals.

Substance Abuse Treatment (SATU)
One Long Wharf Drive, New Haven
(203) 974-5777
M-F: 8:30am-5:30pm, walk-ins accepted; Central evaluation, referral, and outpatient services for men and women 17+, Spanish-speakers, those who are dual-diagnosed, and HIV+ individuals.

Taking Initiative Center (TIC)
514-516 Whalley Ave, New Haven
(203) 389-2970 ext 1317, M-F 8am-4:30pm
Drop-in center and outpatient services and referral for homeless of New Haven.

VA Research Programs
950 Campbell Ave, West Haven
(203) 937-4804
M-F: 7am-2pm
Opiates (including heroin)

(203) 937-4833
M-S: 7am-3pm
Opiates (including heroin) + cocaine/crack

Project

ED Health

Identifying health risks and providing access to treatment services

Project ED Health is a federally-funded research project operating in the Yale New Haven Hospital Adult Emergency Department. Study researchers identify eligible patients and offer them enrollment in a study which offers access to treatment services for opioid dependence.

Drug dependence affects people from all walks of life and backgrounds. Family, friends, coworkers or neighbors may be dependent on opioid drugs which could lead to problems including injuries, domestic violence or illnesses such as heart disease and cancer. Early intervention can help and is often cost effective. Like other chronic diseases, drug problems can be successfully treated.

Project ED Health researchers can provide you with information on new treatment options to help you feel better starting today!

The following services and/or community programs are available:

Infoline (referrals to all types of community services)		211
Alcohol and Drug Use:		
Alcoholics Anonymous (AA)		(866) 783-7712
Narcotics Anonymous (NA)		(800) 627-3543
ADRC (residential)		(860) 714-3700
Alliance (residential)		(866) 234-3433
Columbus House -Recovery House (walk-ins, residential)		(203) 772-2658
Connecticut Valley		(860) 262-5000
Continuum crisis/Respite		(203) 784-1161
Hall-Brooke (outpatient, residential)		(800) 543-3669
Merritt Hall (residential)		(800) 828-3396
Rushford Treatment Center (walk-ins, outpatient, residential)		(800) 542-4791
Salvation Army (walk-ins, residential)	-New Haven	(203) 865-0511
	-Hartford	(860) 527-8106
	-Bridgeport	(203) 367-8621
Silver Hill		(866) 542-4455
Stonington (outpatient, residential)		(800) 832-1022
Buprenorphine Physician Locator: http://buprenorphine.samhsa.gov/		
HIV/AIDS:		
AIDS Interfaith Network, Inc.		(203) 624-4350
AIDS Project New Haven		(203) 624-0947
Hispanos Unidos Contra el SIDA/AIDS, Inc.		(203) 781-0226
Primary Health Care/Other:		
CT Breast and Cervical Cancer Detection Program (M & Th only)		(203) 688-4562
Depression Clinic (CMHC)		(203) 974-7300
Dept of Social Services (194 Bassett St)		(203) 974-8000
Elderly Services (DSS)		(203) 974-8027
Fair Haven Community Health Center		(203) 777-7411
Gamblers Anonymous		(800) 266-1908
Healthy Start (prenatal care)		(203) 946-8187
Hill Health Care Center		(203) 503-3000
		(203) 776-9594
Husky Infoline		(800) 434-7869
Logisticare transportation (24 hrs, non-substance abuse, Title 19, Husky)		(888) 248-9895
Project ED Health		(203) 785-2946
YNHH Primary Care Center		(203) 688-2471
YNHH Women's Center		(203) 688-4101
Yale Physician Referral Service		(203) 688-2000

Appendix 11: Summary of Screening & Brief Intervention Studies[71]

PI(s) / Location	Title	Purpose
D'Onofrio/Fiellin Yale University	Models of SBIRT for Opioid Dependent Patients in the Emergency Department	RCT, ED Based SC, SBIRT, SBI+Bup 1, 2, 6, 12m follow-up N=360, opioid dependent
Roy-Byrne University of Washington	Brief Intervention in Primary Care for Problem Drug Use and Abuse	RCT, hospital PC BI Problem drug users
Field/Velasquez University of Texas	Multidisciplinary Approach to Reduce Injury and Substance Abuse	RCT, Trauma Center BA, BMI, BMI+B 3, 6, 12m follow-up Injured pts w/drug probs
Svikis Virginia Commonwealth University	Computer vs Therapist-Delivered Brief Intervention for Drug Abuse in Primary Care	RCT, General Med outpt SC, CA, CACI, CATI 1, 3, 6m follow-up N=680, heavy/problem SA

Comparison of Four Clinical Studies Evaluating the Effectiveness of Brief Interventions in Emergency Departments and Inpatient Trauma Units

Study	Study Design and Setting	Patient Population and Admission Criteria	Intervention	Followup Rate	Outcome	Effect
Monti et al. 1999	Design: Randomized controlled trial (RCT) Setting: Emergency Department (ED)	94 patients ages 18–19, admitted to an Emergency Department (ED) after an alcohol-related event • Positive blood alcohol concentration (BAC) or • Report of drinking prior to the event that precipitated treatment	• Standard care • One 35- to 40-minute brief intervention (BI) (motivational interview) Interventions performed by 12 experienced research assistants (bachelor's and master's level) No followup sessions	• 3 months (phone): 93% • 6 months (in person): 89%	• Decrease in alcohol consumption in both groups • Greater reduction alcohol-related injuries during the followup period in the BI group • Greater reduction other alcohol-related problems (e.g., drinking and driving, social and legal problems) in the BI Group	Positive effect with the BI
Gentilello et al. 1999	Design: RCT Setting: Inpatient Trauma Center	762 patients ages ≥18 admitted to a trauma center • BAC ≥100 mg/dL or • SMAST score ≥3 or • BAC 1–99 mg/dL and SMAST score of 1 or 2 or • BAC 1–99 mg/dL and elevated GGT or • SMAST score of 1 or 2 and elevated GGT	• Standard care • One 30-minute BI (motivational interview) Interventions performed by one Ph.D.-level psychologist Followup letter sent after 1 month	• 6 months: 75% • 12 months: 54%	• Greater reduction in alcohol-related injuries during the followup period in the BI group • Greater decrease in alcohol consumption in the BI group • Greater reduction in ED visits and hospitalizations in the BI group	Positive effect with the BI

Comparison of Four Clinical Studies Evaluating the Effectiveness of Brief Interventions in Emergency Departments and Inpatient Trauma Units continued

Study	Study Design and Setting	Patient Population and Admission Criteria	Intervention	Followup Rate	Outcome	Effect
Longabaugh et al. 2001	Design: RCT Setting: ED	539 patients ages 3 ≥18 with evidence of harmful or hazardous drinking, whose injury did not require hospitalization • Breath BAC ≥003 mg/dL or • Report of alcohol use 6 hours prior to injury or • AUDIT score ≥ 8	• Standard care • One 40- to 60-minute BI • One 40- to 60-minute BI followed by scheduled return visit (booster) 7–10 days later (BIB) Interventions performed by 8 clinically experienced research assistants (Ph.D., master's or bachelor's level)	1 year (phone, mail, in person): 83%	• Greater reduction in alcohol-related injuries during the followup period in the BIB group • Decreases in alcohol consumption in all groups • Greater reduction in alcohol-related negative consequences in the BIB group	Positive effect with the BIB
Spirito et al. 2004	Design: RCT Setting ED in an urban level-1 trauma center	Adolescents treated in an ED after an alcohol-related event • Positive for alcohol in breath, saliva, or blood or • Self-reported alcohol use 6 hours prior to injury Note: 47% of adolescents asked to participate refused	• Standard care (5 minutes) • One 35- to 45-minute BI (motivational interview) Interventions performed by 12 clinically experienced research assistants (bachelor's and master's level) No followup sessions	• 3 months (phone): 93.4% • 6 months (in person): 89.5% • 12 months (in person): 89.5%	• Greater reduction in frequency of drinking and binge drinking for patients with pre-existing problematic alcohol use in the BI group	Positive effect with the BI for problem drinkers

X. References

[1] Saitz, R. Clinical Practice. Unhealthy Alcohol Use. New England Journal of Medicine 352 (6): 596-607, 2005.

[2] McGinnis JM, Foege WH. Actual causes of death in the United States. JAMA. 1993;270:2207-12.

[3] Harwood HJ. Updating Estimates of the Economic Costs of Alcohol Abuse in the United States: Estimates, Update Methods and Data. Report prepared by the Lewin Group for the National Institute on Alcohol Abuse and Alcoholism, 2000.

[4] Substance Abuse and Mental Health Services Administration, Results from the 2006 National Survey on Drug Use and Health: National Findings, September 2007.

[5] Mark TL, Woody GE, Juday T, Kleber HD. The economic costs of heroin addiction in the United States. Drug Alcohol Depend. 2001 Jan 1;61(2):195-206.

[6] The NSDUH Report: Sexually Transmitted Diseases and Substance Use. Rockville, MD: Substance Abuse and Mental Health Services Administration (SAMHSA) Office of Applied Studies, 2007.

[7] Hubbard RL, Craddock SG, Anderson J. Overview of 5-year follow up outcomes in the drug abuse treatment outcome studies (DATOS). J. Subst Abuse Treat. 2003;25:125-134.

[8] Future of Emergency Care: Hospital-Based Emergency Care at the Breaking Point. Institute of Medicine Report, 2006. “Substance Abuse” The National Academies Press, Washington D.C.2006

[9] Substance Abuse and Mental Health Services Administration, Results from the 2007 National Survey on Drug Use and Health: National Findings, September 2008.

[10] D’Onofrio G, Bernstein E, Rollnick S. Motivating patients for change: a brief strategy for negotiation. In: Bernstein E, Bernstein J (eds). Case studies in Emergency Medicine and the health of the Public. Boston: Jones and Bartlett, 1996, pp 295-303.

[11] Bernstein E, Bernstein J, Levenson S. Project ASSERT: an ED-based intervention to increase access to primary care, preventive services, and the substance abuse treatment system. Ann Emerg Med. 1996;30:181-189.

[12] D’Onofrio G, Pantalon MV, Degutis LC, Fiellin DA, O’Connor PG. Development and implementation of an emergency practitioner-performed brief intervention for hazardous and harmful drinkers in the emergency department. Acad Emerg Med 2005;12:249-256.

[13] Bien TH, Miller WR, Tonigan JS. Brief interventions for alcohol problems: a review. Addiction 1993;88:315-335.

[14] D’Onofrio G, Degutis L. Preventive care in the Emergency Department: Screening and brief intervention for alcohol problems in the ED: A systematic review. Acad Emerg Med. 2002;9:627-638

[15] Fleming MF, Barry KL, Manwell LB, Johnson K, London R. Brief physician advice for problem alcohol drinkers: a randomized controlled trial in community-based primary care practices. JAMA 1997;277:1039-1045.

[16] Wilk AL, Jensen NM, Havighurst TC. Meta-analysis of randomized control trials addressing brief interventions in heavy alcohol drinkers. J Gen Intern Med 1997;12:274-283

[17] Gentilello LM, Rivara FP, Donovan DM, Jurkovich JG, Daranciang E, Dunn C, et al. Alcohol interventions in a trauma center as a means of reducing the risk of injury recurrence. Ann Surg 1999;230:473-484.

[18] Neuman T, Neuner B, Weiss-Gerlach E, Psych D, Tonnesen H, Gentilello LM et al. The effect of computerized tailored brief advice on at-risk drinking in subcritically injured trauma patients. J Trauma Inj Infect Crit Care 2006;61:805-14.

[19] Monti PM, Spirit A, Myers M, Colby SM, Barnett NP, Rohsenow DJ, Woolard R, Lewander W. Brief intervention for harm reduction with alcohol-positive older adolescents in a hospital emergency department. Journal of Consulting and Clinical Psychology 1999;67:989-994.

[20] Longabaugh RH, Woolard RF, Nirenberg TD, Minugh AP, Becker B, Clifford PR, Carty K, Sparadeo F, Gogineni R. Evaluating the effects of a brief motivational intervention for injured drinkers in the emergency department. J Stud Alcohol 2001;62:806-816.

[21] Daeppen JB, Gaume J, Bray P, Yersin B, Calmes JM, Givel JC et al. Brief alcohol intervention and alcohol assessment do not influence alcohol use in injured patients treated in the emergency department: a randomized controlled clinical trial. Addiction 2007;102:1224-33.

[22] D'Onofrio G, Pantalon MV, Degutis LC, Fiellin DA, Bush SH, Chawarski MC, Owens PH, O'Connor PG. Brief intervention for hazardous and harmful drinkers in the emergency department. Ann Emerg Med. 2008 (in press)

[23] Blow FC, Barry KL, Waltonb MA, Maio RF, CHermack ST, Bingham CR et al. The efficacy of two brief intervention strategies among injure, at-risk drinkers in the emergency department: impact of tailored messaging and brief advice. J Stud Alcohol 2006;67:568-78.

[24] Harvard A, Shakeshaft A, Sanson-Fisher R. Systematic review and meta-analyses of strategies targeting alcohol problems in emergency departments: interventions reduce alcohol-related injuries. Addiction 2007;103:368-376.

[25] Fiore MC, Bailey WC, Cohen SJ, et al Treating Tobacco Use and Dependence. A Clinical Practice Guideline. Rockville.. Md: US Dept of Health and Human Services;2000. AHRQ publication No. 96-0692

[26] Colby SM, Monti PM, Barnett NP, et al. Brief motivational interviewing in a hospital setting for adolescent smoking; a preliminary study. J Consult Clin Psychol. 1998;66:574-578

[27] Glynn TJ, Manley MW, Pechacek TF. Physician-initiated smoking cessation program: the National Cancer Institute trials. Prog Cin Biol Res. 1990;339:11-25

[28] American Medical Association. American Medical Association Guidelines for the Diagnosis and Treatment of Nicotine Dependence: How to Help Patients Stop Smoking. Washington, DC: American Medical Association; 1994

[29] A clinical practice guideline for treating tobacco use and dependence: A US public health service report. JAMA. 2000;283:3244-3254.

[30] Bernstein E, Bernstein J, Levenson S. Project ASSERT: an ED-based intervention to increase access to primary care, preventive services, and the substance abuse treatment system. Ann Emerg Med. 1997 Aug;30(2):181-9.

[31] Bernstein J, Bernstein E, Tassiopoulos K, Heeren T, Levenson S, Hingson R. Brief motivational intervention at a clinic visit reduces cocaine and heroin use. Drug alc dep.2004;77:49-59.

[32] Stein MD, Charuvastra A, Maksad J, Anderson BJ. A randomized trial of a brief alcohol intervention for needle exchangers (BRAINE).Addiction. 2002 Jun;97(6):691-700.

[33] D'Onofrio G, Bernstein E, Bernstein J, Woolard RH, Brewer PA, Craig SA, Zink BJ. Patients with alcohol problems in the emergency department, Part 2: Intervention and referral Acad Emerg Med 1998;5:1210-1217.

[34] Schorling JB, Buchsbaum DG. "Screening for alcohol and drug abuse." In: Samet JH, O'Connor PG, Stein MD (eds) Alcohol and Other Substance Abuse. Med Clin North Am. 1997;81:381-9.

[35] Fiellin DA, Reid MC, O'Connor, PG. Screening for alcohol problems in primary care: A systematic review. Archives of Internal Medicine 2000; 160:1977-1989.

[36] National Institute on Alcohol Abuse and Alcoholism. Helping Patients Who Drink Too Much: A Clinician's Guide. 2005 Edition.Bethesda, MD: National Institute on Alcohol Abuse and Alcoholism; 2005. NIH publication No. 05-3769 http://www.niaaa.nih.gov/Publications/EducationTrainingMaterials/default.htm. Accessed on 4/23/08.

[37] Ewing JA. Detecting alcoholism: the CAGE questionnaire. JAMA. 1984;252:1905-7.

[38]National Institute on Alcohol Abuse and Alcoholism. Helping Patients Who Drink Too Much: A Clinician's Guide. 2005 Edition.Bethesda, MD: National Institute on Alcohol Abuse and Alcoholism; 2005. NIH publication No. 05-3769 http://www.niaaa.nih.gov/Publications/EducationTrainingMaterials/default.htm. Accessed on 4/23/08.

[39] Saunder JB, Aasland OG, Babor TF. Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO collaborative project on early detection of persons with harmful alcohol consumption. Addiction. 1993;88:791-803.

[40] Saitz R, Lepore MF, Sullivan LM, Amaro H, Samet JH. Alcohol abuse and dependence in Latinos living in the United States. Arch Intern Med. 1999;159:718-724.

[41] Sutocky JW, Shultz JM, Kizer KW. Alcohol-related mortality in California, 1980 to 1989. Am J Public Health. 1993;83:817-823.

[42] Volk RJ, Cantor SB, Steinbauer JR, Cass AR. Item bias in the CAGE screening test for alcohol use disorders. J Gen Intern Med 1997;12:763-769.
[43] Fiellin DA, Reid MC, O'Connor, PG. Screening for alcohol problems in primary care: A systematic review. Archives of Internal Medicine 2000; 160:1977-1989.

[44] ACOG Committee Opinion No. 294: At-risk drinking and illicit drug use: Ethical issues in obstetric and gynecologic practice. Obstet Gynecol. 2004;103:1021-31.

[45] Office of Applied Studies (OAS) Substance Abuse and Mental Health Services Administration (SAMHSA). National Survey on Drug Use and Health. Rockville, MD: U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, 2005-2006.

[46] American Academy of Pediatrics. Committee on Substance Abuse and Committee on Children with Disabilities. Fetal alcohol syndrome and alcohol-related neurodevelopmental disorders. Pediatrics 2000;106:356-61.

[47] Abel EL. An update on incidence of FAS: FAS is not an equal opportunity birth defect. Neurtoxicol Terutol. 1995;17:437-443.

[48] Amaro H, Fried LE, Cabral H, Zuckerman B. Violence during pregnancy and substance abuse. Am J Public Health 1990;80:575-9.

[49] Hutchins E, DiPietro J. Psychosocial risk factors associated with cocaine use during pregnancy: a case-control study. Obstet Gynecol 1997;90:142-7.

[50] Chan AWK, Pristach EA, Welte JW, et al. Use of the TWEAK test in screening for alcoholism/heavy drinking in three populations. Alcohol Clin Exp Res. 1993;17:1188-92.

[51] Sokol FR, Martier SS, Ager JW. The T-ACE questions: Practical prenatal detection of risk-drinking. A J of Obstet Gynecol 1989;160:863-871.

[52] Russell M, Marier SS, Sokol FJ. et al. Screening for pregnancy risk-drinking. Alcohol Clin Exp Res. 1994;18:1156-61.

[53] Chang G. Alcohol-screening instruments for pregnant women. Alcohol Res Health 2001;25:204-9.

[54] Chang G, Wilkins-Hang L, Berman S, Goetz MA, Behr H, Hiley A. Alcohol use: improving identification. Obstet Gynecol 1998;91:892-8.

[55] Chang G. Alcohol-screening instruments for pregnant women. Alcohol Res Health 2001;25:204-9.

[56] Knight JR, Shrier LA, Bravender TD, Farrell M, Bilt JV, Shaffer HJ. A new brief screen for adolescent substance abuse. Arch Pediatr Adolesc Med 1999;153:591-96.

[57] Knight JR. Sherritt L, Shrier LA, Harris SK, Chang G. Validity of the CRAFFT substance abuse screening test among adolescent clinic patients. Arch Pediatr Adolesc Med. 2202;256:607-14.

[58] Knight JR, Sherritt L, Harris SK, Gates EC, Chang G. Validity of brief alcohol screening tests among adolescents: A comparison of the AUDIT, POSIT, CAGE, and CRAFFT. Alcohol Clin Exp Res. 2003;27:67-73.

[59] Levy S, Sherritt L, Harris SK, Gates EC, Holder DW, Kulig JW, Knight JR. Test-Retest reliability of adolescents' self-report of substance use. Alcohol Clin Exp Res, 2004;28:1236-1241.

[60] American College of Emergency Physicians. SBIRT toolkit. http://acepeducation.org/sbi/ Accessed on 4/23/08.

[61] Cherpitel CJ. Screening for alcohol problems in the emergency department. Ann Emerg Med. 1995;26:158-66.

[62] Cherpitel CJ. A bridf screening instrument for problem drinking in the emergency room: the RAPS4. J Stud Alcohol 2000;61:447-49.

[63] Skinner HA. The Drug Abuse Screening Test. Addict. Behav. 1982, 7, 363–371.

[64] Bohn MJ, Babor TF, Kranzler HR. Validity of the Drug Abuse Screening Test (DAST-10) in Inpatient Substance Abusers. [Monograph.] Prob. Drug Depend. 1991, 199, 233–235.

[65] Gavin DR, Ross HE, Skinner HA. Diagnostic Validity of the Drug Abuse Screening Test in the Asessment of DSM-III Drug Disorders. Br. J. Addict. 1989, 84, 301–307.

[66] Staley D, El-Guebaly B. Psychometric Properties of the Drug Abuse Screening Test in a Psychiatric Patient Population. Addict Behav 1990, 15, 257–264.

[67] WHO ASSIST Working Group (2002). The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST): development, reliability and feasibility. Addiction, 97 (9): 1183-1194.

[68] D'Onofrio G, Bernstein E, Rollnick S. Motivating patients for change: a brief strategy for negotiation. In: Bernstein E, Bernstein J (eds). Case studies in Emergency Medicine and the health of the Public. Boston: Jones and Bartlett, 1996, pp 295-303.

[69] Bernstein E, Bernstein J, Levenson S. Project ASSERT: an ED-based intervention to increase access to primary care, preventive services, and the substance abuse treatment system. Ann Emerg Med. 1996;30:181-189.

[70] D'Onofrio G, Pantalon MV, Degutis LC, Fiellin DA, O'Connor PG. Developmemnt and implementation of an emergency practitioner-performed brief intervention for hazardous and harmful drinkers in the emergency department. Acad Emerg Med 2005;12:249-256.

[71] D'Onofrio G, Degutis L. Screening and Brief Intervention in the Emergency Department, Alcohol Health and Research World 2005, in-press.