

**ALCOHOL SCREENING and BRIEF  
INTERVENTION (ASBI)  
PROGRAM IMPLEMENTATION and  
OPERATIONS MANUAL**

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**March, 2008**



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## **ASBI Frequently Asked Questions (FAQ'S)**

**The IHS Office of Clinical and Preventive Services has developed an active injury and alcohol control program called ASBI. It targets young, non-dependent alcohol/drugs users who present to IHS –Tribal Hospitals and Clinics with an injury related to alcohol and drug misuse. Via ASBI, reductions in repeat injury (recidivism) and lower alcohol consumption may reach up to 50%. Listed below are some frequently asked questions about ASBI.**

### **What is the Problem?**

Injury is the number one cause of death for people between 15 and 44 years of age. Traumatic injury caused by alcohol misuse is an unresolved major clinical problem for Native Americans and Alaskan Natives causing immense personal, family and community suffering. The sheer number and the magnitude of traumatic injuries cause stress on our emergency personnel and can overwhelm our facilities, with inordinate costs and impacts on operating budgets and contract care funds.

- ∞ Alcohol related deaths are seven times higher in Native Americans/Alaskan Natives than in the remainder of the U.S. population.
- ∞ The fatality rate from motor vehicle collisions is two times higher in Native Americans/Alaskan Natives than in the remainder of the of U.S. population.
- ∞ Native Americans/Alaskan Natives have the highest percentage of alcohol-related collisions.
- ∞ Alcohol-related injury is typically not a one-time event but rather an escalating series of recurring events. Patients seen in a trauma center with an alcohol-related injury are twice as likely to die from a subsequent injury.

### **How much is too much to drink?**

The National Institute of Alcohol Abuse and Alcoholism offers specific guidelines for men and women regarding the maximal thresholds for low-risk drinking:

1. Men should not drink more than fourteen drinks in any week and not more than four drinks in any given day.
2. Women should not drink more than seven drinks in any week and not more than three drinks in any given day.

People who drink below these levels may still be at risk for alcohol-related injuries, medical and/or other alcohol-related problems. However, drinking above these amounts is known to place individuals at high risk.

### **What is a standard drink?**

A standard drink is 12 oz of beer, 1.5 oz of spirits or 5 oz of wine.

### **What is ASBI?**

ASBI stands for Alcohol Screening and Brief Intervention. It is a targeted prevention program incorporating alcohol screening, brief feedback, and motivational interviewing to assist patients in connecting their drinking behavior with their current injury or medical problem. Patients are then encouraged to take action to reduce their risks.

### **What is a Targeted Prevention Program?**

Instead of providing a program to every person who presents to a medical provider, a targeted prevention program focuses on the subset of individuals who are at particular risk for a problem based on their membership in a designated population segment. This concentration on a specific group maximizes intervention impact by directing services to those who will specifically benefit from them. The ASBI program is such a program, targeting young adults with risky alcohol or drug behaviors.

### **Who does ASBI target?**

ASBI targets the young, non-dependent but Harmful or Hazardous Drinker. This is the person whose alcohol consumption places him or her at high-risk for injury or other related harm but who does not have a physical dependence on alcohol and who as of yet has not had major problems related to his or her drinking. The Harmful or Hazardous Drinker is capable of changing alcohol consumption behavior but needs motivation to do so. In addition, because most young adults have few, if any, preventive visits to a medical provider, targeting a program to an acute care visit for injury may be the only opportunity to capture those in need of assistance for their drinking.

### **Why “Target” the Emergency Department, Primary Care and Behavioral Health Clinics?**

This is where the Hazardous Drinkers present with their resulting injuries and where “The Window of Opportunity” presents itself. Providers should be tuned to this and provide the ASBI in these “Opportunistic” situations. High risk patients are most easily recognized in these initial and acute care settings. These patients need to be “screened” for alcohol and drugs during these initial encounters. They may receive their Brief Intervention at some later stage according to local ASBI protocol.

### **Is there a Standard ASBI Protocol?**

No, each hospital and clinic will establish its own. It is important to screen initially and follow through with the Brief Negotiated Interview (BNI) within the “Teachable Moment,” which may be up to several days. The BNI, therefore, can be done in a follow-up clinic or on the ward for hospitalized patients.

### **When do the more seriously injured patients get an ASBI?**

Trauma Patients transferred to Regional Trauma Centers will receive an ASBI there. The IHS-Tribal providers need to recognize this and provide follow-up “Booster” ASBI according to protocol.

### **What can ASBI achieve?**

ASBI has been demonstrated to reduce alcohol consumption and related injuries in targeted patients:

- ∞ 32% reduction in drinking and driving at six months
- ∞ 47% reduction in repeat injuries requiring an Emergency Department visit or hospital admission at one year
- ∞ Significant, prolonged reductions in alcohol consumption

**How long does ASBI take?**

ASBI only takes a few minutes to provide. Screening tools, such as the AUDIT-C questionnaire can be offered in written or verbal form. The brief negotiated interview may take as little as five to ten minutes.

**Who can perform ASBI?**

ASBI is performed by any trained health care provider. A variety of different provider backgrounds have been used for ASBI programs ranging from trauma surgeons and nurses to social workers and community health educators. The key to being a successful provider is compassionate, non-judgmental listening and the ability to guide patients to the connection between their alcohol consumption and their injury. ASBI providers need to be trained to understand the stages of change and how to negotiate a patient through the pathway.

**What is the IHS ASBI Implementation Goal?**

The goal is to introduce ASBI to all hospitals in 2007 and to all primary care clinics and behavioral health clinics in 2008. Primary Care clinics and Behavioral Health clinics will be crucial additions to the program because many people with lesser injuries do not seek medical attention in an acute or emergent care setting. Moreover, it has been shown that a brief booster session in which a health care provider reviews the patient's progress with his or her drinking goals is extremely helpful and such session could be performed at any health care visit.

**Are there other drugs or "Dys-behaviors" that ASBI could impact?**

The core intervention that ASBI is based on, motivational interviewing, was initially developed as a technique to help with smoking cessation and has proven very successful. At present, initial studies suggest that approaches similar to ASBI are effective in reducing the use of other drugs such as marijuana, cocaine and heroin at six months of follow up. Larger and longer term studies are underway. Additional research is in process involving the use of screening and brief intervention for domestic violence.

**Who supports ASBI?**

Alcohol Screening and Brief Intervention has been recommended for adults in primary care settings by the United States Preventive Services Task Force and in emergency departments and trauma centers by the Society for Academic Emergency Medicine as well as by the American College of Surgeons Committee on Trauma. Implementation of the IHS-Tribal ASBI Program is fully endorsed by the IHS-Tribal Health System as well as all the Area Office Chief Medical Officers and Behavioral Health Consultants. The program aligns with former IHS Director, Dr. Charles Grim's three Health Initiatives: Behavioral Health, Chronic Care, and Health Promotion/Disease Prevention. In addition, a number of federal agencies are in full support of the program such as Substance Abuse and Mental Health Services Administration, the White House Office of National Drug Control Policy, the Centers for Disease Control and Prevention and the National Highway Traffic Safety Administration.

**What is the ASBI Manual?**

This IHS ASBI Manual provides the concept, scientific and programmatic background, basic steps, important infrastructure information and key implementation steps. It is a soup to nuts, one-stop-shopping experience for you to develop your ASBI program.

**Who do I call for additional help?**

**There is expertise in each IHS Area Office. Both the Chief Medical Officer (CMO) and the Behavioral Health Consultant (BHC) are experienced with this IHS-Tribal ASBI program.**

**Likewise the Office of Clinical and Preventive Services (OCPS) in Rockville can help. The lead person at the OCPS is David R. Boyd MDCM.**



## ***Preface***

### **Origin of the Alcohol Screening and Brief Intervention (ASBI) Program**

Injuries and premature deaths due to trauma remain an ever-present source of concern in many Native American and Alaska Native communities. Targeting high risk drinkers using the Alcohol Screening and Brief Intervention (ASBI) to reduce recurrent trauma offers health care providers an opportunity to significantly decrease such events. Endorsed by the Indian Health Service (IHS) Office of Clinical and Preventive Services, the ASBI program takes advantage of the already significant integration of clinical programs in AI/AN health programs to provide a concrete and empirically based approach to trauma reduction. It bridges the IHS disciplines of trauma, emergency care, behavioral health, alcohol and substance abuse and injury prevention.

The program directly addresses former Director Dr. Charles Grim's three key initiatives of Behavioral Health, Chronic Care, and Health Promotion/Disease Prevention to reduce health disparities. American Indians and Alaska Natives suffer higher rates of alcohol-related injuries, especially motor vehicle fatalities, and higher rates of alcohol-related illnesses than any other racial or ethnic group. The first of Dr Grim's initiatives, Behavioral Health, aims to "apply methods of behavior change, prevention counseling and interview methods"<sup>1</sup> towards treatment and prevention. The other initiatives both target enhancing and improving disease prevention and health promotion as well as protecting against chronic disease. ASBI uses motivational interviewing to target critical change opportunities in at risk alcohol users and reduce risk for future trauma.

Dr. Charles Grim said at the April 2007 ASBI Telemedicine Conference:

"The success of this ASBI program will require the understanding and cooperation of many key leaders of IHS and Tribal Clinical, Behavioral, Emergency, Medical, and Administrative programs. We can, within our existing resources, effectively develop and deliver on this ASBI program concept. I believe we can implement and evaluate ASBI as we have in other areas like diabetes. This program can be another IHS "Model for the Nation."

"We have all experienced the frustration and futility of trying to control and diminish the Trauma, Injury-Alcohol Cycle. Alcohol and trauma remain two of the most prominent causes of morbidity and mortality in Indian Country. We will be saving lives, limbs, and health-care dollars as well as diminishing the unnecessary family and community grief caused by accidental death in young American Indians."<sup>2</sup>

The IHS-Tribal ASBI Program was developed by Dr. David Boyd, Dr. Anthony Dekker, and Dr. Jim Flaherty. Administrative and professional support comes from Dr. Rick Olsen, Dr. Jon Perez, Mr. Jim Stone, and Dr. Peter Stuart. The program is fully endorsed by the Area Office Chief Medical Officers and Behavioral Health Consultants and widely by clinicians throughout the Service Unit Clinics. It has also been supported with consultations and program assistance from national leaders in the field such as Dr.

Larry Gentilello, Dr. Carl Soderstrom, Dr. Daniel Hungerford, Dr. Janet Selway, Dr. Carol Schumer, Dr. Gail D'Onofrio, Dr. Linda Degutis, Dr. Susan Boyd, and Ms. Carol Rottenbiller. The scientific review and technical writing for the manual was by Dr. Karen Milman, a resident from Johns Hopkins University.

## **The Alcohol Screening and Brief Negotiated Intervention Program**

Injury is the number one cause of death for people ages 15 to 44 and, in the Native American and Alaskan Native populations, motor vehicle collisions are the leading cause of injury death, twice the rate of the rest of the U.S. population.<sup>3</sup> Across all other racial and ethnic groups, Native Americans and Alaskan Natives have the highest percentage of motor vehicle collisions related to alcohol.<sup>4</sup> Trauma and alcohol-related death and disability in the Native American and Alaskan Native population have reached immense proportions, with enormous personal, family and community consequences. The Indian Health Service is working to provide leadership to expand practices for trauma control both by improving Trauma and Emergency Medical Services (EMS) Systems and through increasing injury prevention methods. The purpose of this manual is to introduce a new approach of “targeted” injury prevention technology into acute care settings with the Alcohol Screening and Brief Intervention (ASBI) program.

## **The Current Indian Health Service/Tribal Trauma and EMS System**

Throughout the United States, considerable progress has been made in the utilization of Trauma and EMS Systems concepts and operations, including the designation of Trauma Centers and the upgrading of trauma care capabilities in community hospitals. IHS and Tribal Trauma Care programs are patterned after and integrated into their respective regional trauma and EMS systems. As a result, obvious improvements in the quality of pre-hospital care, transportation, “protocol-driven” hospital resuscitation, definitive care, and transfer to regional trauma centers have occurred. Unfortunately, limitations in the IHS and Tribal Trauma Care and EMS systems remain, such as those due to shortages of professionals and lack of advanced equipment. Perhaps the largest of these disadvantages affecting the injured patient is the remoteness of many AI/AN healthcare sites because all trauma care is affected by time delay prior to resuscitation, stabilization and definite surgery. Current consensus thinking among the nation’s trauma surgeon community is that the existing trauma system is operating at a maximal level and that it is the nature of location and type of injury occurring that limits patient survival. As succinctly put by Dr. Ronald Maier in the September 2005 Journal of Trauma, “Improvements in care have not reduced the incidence of trauma-related deaths that occur at the scene (approximately 50%). These numbers will only change when prevention efforts are increased.”<sup>5</sup> This particular journal issue focused on the conference proceedings of multiple trauma associations as they discussed the issue of trauma and alcohol/drug misuse and how to control complications, mortality and recidivism. One conclusion from the conference was the next step for significant trauma care gains, the next trauma frontier, is the field of injury prevention.

## **An Ounce of Prevention?**

Not unlike Trauma Centers in the rest of the United States, in the Indian Health Service/Tribal Trauma Care System, the typical patient tends to be a young, 18-35 year

old, male, alcohol misusing but not dependent drinker, who likely has not made the connection between his alcohol consumption and present injury. He is at high risk of repeating the alcohol-injury event and killing or harming himself or others as the events escalate. In fact, evaluation of alcohol-related injuries seen across acute care settings reveals that these are not one-time events but tend to be a pattern of recurring injury. One critical study showed that patients intoxicated on admission to a trauma center were two and a half times more likely to be readmitted for a second injury than those who were sober.<sup>6</sup> In addition, the National Highway Traffic Safety Administration reports that fatally injured American Indians have the highest percentage of previous DWI and license suspensions compared to all other groups.<sup>3</sup> Overall, studies demonstrate that “compared with other trauma patients, patients who test positive for alcohol or other drugs at the time of admission to a trauma center are more likely to die from a subsequent injury,” a finding “most apparent for trauma patients who are younger than 45 years of age.”<sup>7</sup> Specifically in the IHS setting, analysis of six years of records from the Billings Area Health Service showed that 38% of people who died due to alcohol-related injury had been seen in the health care system for a previous alcohol-related injury within six months prior to death.<sup>8</sup>

### Striking Statistics

- **25-55% test positive for alcohol in the Trauma Center or Emergency Department**
- **25-50% have a diagnosable “Alcohol Use” problem**
- **The above patients are 3.5 times more likely to be re -admitted for another trauma episode**
- **Death from repeat trauma is 6 times greater than for the general population**

—Carl Soderstrom MD, FACS<sup>9</sup>

This tragically high number of repeat visits illustrates the opportunity for prevention. Each presentation of a patient with an alcohol-related injury to a medical provider offers a potential for divergence in a patient’s path. Developed in high volume trauma centers and busy emergency facilities, ASBI capitalizes on this chance to intervene in the alcohol-injury cycle. By providing a positive environment and empathetic communication during Alcohol Screening (AS) the health care provider connects with the patient and is then able to progress through a pre-scripted Brief Motivational Interview (BI). Most patients who are targeted by ASBI have never received alcohol screening or counseling, as they rightfully consider themselves to be neither alcoholics nor in need of counseling. Yet they are in need of an intervention. ASBI has demonstrated meaningful effects of decreased substance use and repeat injuries in young, non-dependent hazardous alcohol users.

## **IHS ASBI PROGRAM GOAL**

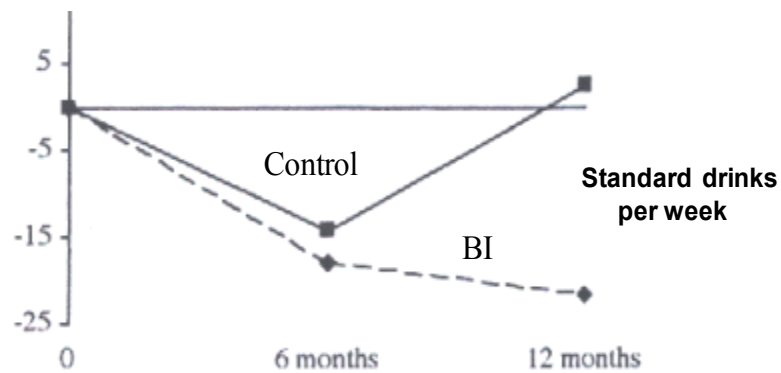
***“ALCOHOL SCREENING AND A BRIEF NEGOTIATED INTERVIEW, DURING THE TEACHABLE MOMENT, AFTER INJURY, CAN BE EFFECTIVE IN REDUCING RE-INJURIES (RECIDIVISM) UP TO 50% FOR SEVERAL YEARS”***

---David Boyd MDCM, FACS<sup>10</sup>

### **ASBI, Worth a Pound of Cure**

There are numerous studies demonstrating the reduction of both alcohol consumption and alcohol-related injuries after receiving Alcohol Screenings and Brief Negotiated Interviews in a variety of settings. Due to difficulty of execution, there are the fewest number of trials in trauma centers and emergency department settings. In a randomized controlled trial of ASBI in young adults seen for alcohol-related injuries in an emergency department, at a follow-up point of six months, Monti et al. demonstrated a 32% reduction in drinking and driving along with half the occurrence of alcohol-related injuries in the patients who received ASBI compared to the standard care group. These young adults also had significantly fewer traffic violations and alcohol-related social problems.<sup>11</sup> At twelve months, another trial showed a reduction in alcohol intake by four drinks per week as well as a 47% reduction in repeat injuries, which lasted up to several years.<sup>12</sup> Figure 1 demonstrates the reduction in alcohol consumption in this trial. Traffic problems were also reviewed in a randomized control study led by Schermer, who followed participants receiving a motivational interview in the emergency department for three years. This study revealed that there were significantly lower rates of DUI arrests in people who received ASBI than in those who did not.<sup>13</sup> ASBI offered in the trauma or emergency department setting appears to decrease alcohol consumption and alcohol-related injuries.

**Alcohol Interventions in a Trauma Center as a Means of Reducing the Risk of Injury Recurrence**  
 Gentilello LM (Dunn CW) et al: Ann Surg 1999;230:473 -483



**Figure 1. Large randomized controlled trial reveals that alcohol consumption reduces in both groups at six months but remains reduced in the Brief Intervention group whereas the control group returns to pre-injury alcohol consumption levels at one year.<sup>12</sup>**

ASBI studies in primary care settings consistently shows reductions in alcohol consumption. A meta-analysis of the literature with pooled outcome results found drinkers who received a brief intervention to be twice as likely to decrease drinking as those who did not receive the intervention.<sup>14</sup> A study in primary care centers in seven countries demonstrated that men who received ASBI reduced their drinking intensity by 15% and significantly more than those who did not.<sup>15</sup> Moreover, in other trials, these results have been demonstrated to last up to four years.<sup>16</sup>

Reductions in alcohol consumption indicate an alteration in behavior, which also suggests the potential for changes in other risky behaviors such as those predisposing a person to injury. Across a variety of settings, it is clear that ASBI significantly reduces alcohol consumption.<sup>15, 17-20</sup> Although not all studies have evaluated the effect of Brief Interventions on injury reductions, the trend is clearly implicated. During the four year follow-up of young adults in a primary care based randomized clinical trial, those receiving the brief intervention not only significantly reduced their drinking but also had significantly fewer emergency department visits, motor vehicle crashes, motor vehicle events and arrests for controlled substances or liquor violations than those who did not receive the intervention.<sup>21</sup> In addition, the Cochrane Library's Systematic Review found that brief counseling interventions reduced the relative risk of injury death by 35%, although this reduction was not statistically significant.<sup>22</sup> Furthermore, if alcohol is the attributable cause in up to 45% of injuries, then it follows that reducing alcohol consumption will reduce the frequency of injuries.<sup>23</sup>

## **Implementation: Championing a New Paradigm**

The introduction of ASBI into acute care settings throughout the IHS/Tribal Health System's acute care settings is expected to reduce recidivism in patients with alcohol-related injuries. The plan is to introduce ASBI to all hospitals in 2007 and in all Primary Care and Behavioral Health clinics in 2008; this represents a system-wide implementation policy. The ASBI program is consistent with former IHS Director Charles Grim's Health Initiatives to decrease health disparities in behavioral health, chronic diseases, and health promotion/disease prevention.<sup>1</sup> Implementation is also fully supported not only by the IHS Director and Headquarters but also by Area Office Chief Medical Officers and Behavioral Health Consultants. During 2007, there were five ASBI train-the-trainer conferences, several hospital service unit train-the-trainer sessions, and four national ASBI introductory presentations, resulting in the introduction of ASBI to over 500 IHS professionals. There were neither negative reviews nor negative responses to the program. ASBI was found to be consistent with current IHS clinical practices and treatment methodologies.

### **Strategic Approach of ASBI**

- **A Targeted Injury Control Initiative**
- **Alcohol Screening in Acute Care Settings: Trauma, ED and Primary Care Clinics**
- **Utilizes Multiple Providers**
- **Low Cost Implementation**
- **Cost Effective Intervention**
- **Offers Universal Screening of Other Substance Abuse and "Injurious" Behaviors**

In addition, Alcohol Screening and Brief Intervention has been endorsed both by the Society for Academic Emergency Medicine with an "alpha rating" for use in the Emergency Department<sup>24,25</sup> as well as by the United States Preventive Services Task Force, who find good evidence for use in primary care settings.<sup>26,27</sup> The planned use of ASBI in the IHS-Tribal settings is consistent with other government, professional screening and intervention activities such as The Substance Abuse and Mental Health Services Administration's similar Screening, Brief Intervention, Referral and Treatment Program (SBIRT)<sup>28</sup>; furthermore, the American College of Surgeon's Committee on Trauma endorses SBIRT and works cooperatively with IHS ASBI program on several levels.

It is the belief that all IHS and Tribal facilities can implement the program now. The prime issue will be the identification of local ASBI "Champions" to accomplish it. The program is applicable in a variety of settings from emergency departments to behavioral health clinics and can utilize a variety of health care providers from

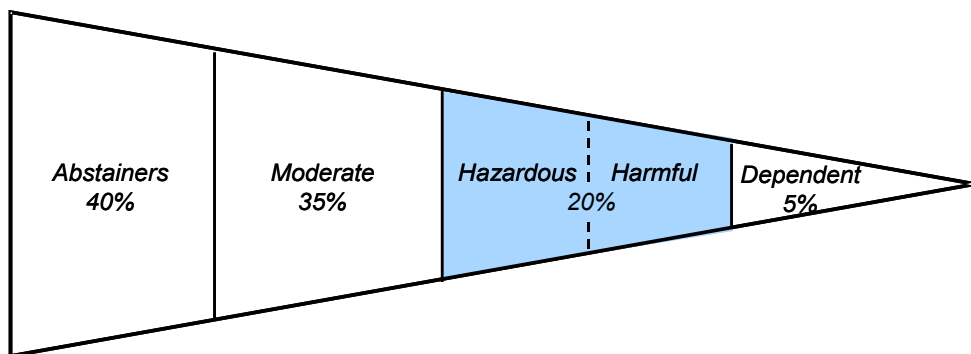
physicians to nurses, social workers and community health educators. Local implementation will require individual skill, creativity and cultural understanding. A new outlook may be required, as often health care providers have developed negative stereotypes and/or attitudes towards the alcohol-using trauma patient and will need to be encouraged towards creating a more optimistic environment and positive interactions with these potentially challenging patients. Application of the program should follow the ASBI methodology described in the literature and outlined in this manual. It is understood and expected that each healthcare setting will maintain the key components of the program, such as utilizing the AUDIT-C for screening and the Yale BNI, but adapt to their own unique strengths and resources. As with the IHS diabetes program, IHS is in the position to lead the path in models of care. When fully implemented, the ASBI program will be the largest, targeted alcohol-injury intervention to date.

### A Targeted Approach: Alcohol Screening

The ASBI program is targeted at a specific subset of injured people who present for medical care: The Hazardous or Harmful Drinker. Screening, with a tool such as AUDIT-C will reveal who fits into this category because it may not be evident based on clinical presentation alone.

Alcohol use occurs on a continuum, ranging from people who abstain from alcohol altogether or drink only on rare occasions to those who are physical dependent or have severe alcohol-related problems. This continuum is shown in Figure 2 and a detailed description of each category along the continuum is provided in Table 1. The National Institute of Alcohol Abuse and Alcoholism (NIAAA) provides guidelines that state men should not consume more than fourteen alcoholic beverages in a given week or more than four in a given day and women should not consume more than seven alcoholic beverages in a given week or three drinks in a given day.<sup>29</sup> Nonetheless, it is estimated that 20% of the U.S. population consumes over these guidelines and therefore falls into the categories of Hazardous or Harmful Drinker.<sup>29-31</sup>

**Figure 2. The Spectrum of Alcohol Consumption by User Type. Categories are based on NIAAA description.**<sup>29-31</sup>





**Table 1. Types of Drinkers**<sup>29-31</sup>

Category of Drinker	Description
Abstainer	Drinks no alcohol
Moderate	Drinks within NIAAA guidelines, alcohol use does not affect health or result in problems
Hazardous/At Risk	Drinks at greater than NIAAA guidelines and alcohol use puts them at risk for injury, illness or other social problems
Harmful/Problem	Currently experiencing problems (medical and/or social) related to alcohol use and has a high likelihood of drinking greater than NIAAA guidelines
Dependent	Drinking has lead to physical dependence (i.e. withdraw symptoms) and/or severe problems. Meets criteria for dependence based on assessment criteria such as DSM-IV

In the U.S. heavy alcohol consumption appears to peak in young adulthood. In the 2006 National Survey on Drug Use and Health (NSDUH), current alcohol use was the highest in people aged 21-25, as was binge drinking, referring to the consumption of more than five alcoholic beverages in a single occasion.<sup>32</sup> Overall, 42% of young adults aged 18-25 surveyed reported episodes of binge drinking in the previous thirty days. Moreover, not only was binge-drinking reported in 31% of American Indians of all ages, but also that number was consistent in adolescents aged 12 to 20.<sup>32</sup> These statistics place the percentage of adolescent American Indians who are binge drinkers as the highest across all ethnic and racial groups. Given this information, it is expected there will be a high number of young adults presenting to the IHS clinics in the Hazardous or Harmful Drinker categories.

### **The ASBI TARGET Patient**

- **Acute Injury initiated medical encounter**
- **Clinical Assessment**
- **Injury Related to Risky Behavior**
- **Risky Behavior has an Alcohol Basis**
- **Not a Diagnosis on “Alcoholism”**
- **Not an Assessment of “Intoxication.”**
- **Blood Alcohol (BAC) Not Required**

## **Addressing the Prevention Paradox**

In the U.S., it is estimated that for every one dependent drinker, there are more than six hazardous or harmful drinkers.<sup>33</sup> Even so, most alcohol programs focus on the dependent drinker, the “alcoholic.” The assumption has been that we should focus our efforts on the patients with the most severe problems. Although this might make sense on an individual level, on a population level, a different picture emerges. As Gregory Rose explains, the concept of the Prevention Paradox describes the situation in which “a large number of people at a small risk may give rise to more cases of disease than the small number who are at a high risk.”<sup>34</sup> It is true that the average Hazardous and Harmful Drinker has a lower risk of injury and less severe alcohol-related problems than the average Dependent Drinkers. However, the situation changes when we look at the number of alcohol-related problems in each group. Because there are so few Dependent drinkers and there are so many more Hazardous and Harmful Drinkers, this latter group actually accounts for a majority of alcohol-related problems. Therefore, even if we were able to “cure” 100% of Dependent Drinkers, we would still not have addressed the biggest part of society’s “alcohol problem.”

A study in emergency departments in Boone County, Missouri evaluated this concept by calculating the “population attributable fraction” associated with drinking before an injury. It calculated how many alcohol-related injuries occurred in each category of drinkers. The results showed that “alcohol-related problems in a population come more from moderate drinkers than from heavy drinkers because there are so many more moderate drinkers.”<sup>35</sup>

It follows that we can maximize the impact of an intervention, by focusing on the part of the population that has most problems. There is another advantage to this strategy: patients with less severe alcohol problems are more likely to get better because as individuals they have fewer barriers to overcome to make changes in their lives.<sup>36</sup> Screening young, injured patients to identify Hazardous and Harmful Drinkers will have the largest impact, resulting in the greatest decrease of alcohol-related injuries.

## **The Teachable Moment: Brief Negotiated Intervention**

The event of an injury that brings a young person to medical attention creates a “teachable moment” during which the person is motivated to re-evaluate his or her actions in connection with recent events. Performance of ASBI in the acute care setting takes advantage of the short window of opportunity to ensure the Brief Negotiated Intervention coincides with the natural tendency for self-assessment that is the “teachable moment,” thereby maximizing its effectiveness.<sup>37</sup> The exact time frame for maximum impact is unknown; however, it is thought ASBI should be provided prior to discharge from the acute care setting or at least within one week of the visit.

Over just a few minutes, the Brief Negotiated Interview compassionately guides patients to make the association between their hazardous or harmful drinking and their injury as well as assisting them in the decision to reduce risky alcohol consumption. Using a pre-set framework, such as the Yale Brief Negotiated Intervention Training Manual,<sup>30</sup> a healthcare provider offers feedback regarding the patient's drinking habits, the injury event, and national drinking norms; enhances motivation via assessment of the patient's readiness to change; and negotiates a patient-oriented drinking behavior goal.

### The Four Key Steps of the Yale Brief Negotiated Interview

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- 1. Raise The Subject**
- 2. Provide Feedback**
- 3. Enhance Motivation**
- 4. Negotiate And Advise**

A key philosophy in the Brief Negotiated Interview is that change is a process, adhering to Prochaska and DiClemente's Transtheoretical Model. This model asserts there are five major stages of change: pre-contemplation, contemplation, preparation, action, and maintenance, each with unique characteristics and obstacles. Interventions should therefore be targeted to an individual's particular stage.<sup>38</sup> Although a successful Brief Negotiated Intervention results in a decrease in alcohol consumption and risk behavior in a patient, inspiring such a patient to transition to the next stage of change and closer to this ideal is also considered a positive outcome. ASBI is not a one-size fits all program; providers must meet the patient at his or her level of readiness, thus allowing for more open discussion about individual motivators and hindrances to behavioral change.

A number of studies have investigated general motivators for change in patients with alcohol-related injuries seen in emergency departments. A survey of minor-injury patients who tested positive for alcohol revealed that how aversive the injury was and perception of degree of alcohol involvement in the injury-event were both positively associated ( $p < 0.008$ ) with motivation to change. Negative consequences attributed to drinking prior to injury strengthened this association.<sup>39</sup> Other studies have reiterated these results, emphasizing the effect of injury severity and the number of anticipated consequences on a person's motivation to change.<sup>40</sup> Astute health care providers will recognize each individual's motivators to change along with their readiness to change and use them as stimuli for thought and incentive to reduce risk. The Brief Negotiated Interview concludes with the provider reviewing the many potential behavioral options and assisting the patient in determining a future goal. Together they work out a written drinking agreement.

Implementation studies to evaluate the feasibility of ASBI in emergency and trauma settings have demonstrated high acceptance by patients. In an implementation evaluation of a busy trauma center in which 26% of the patients were American Indians, survey results indicated that most American Indian patients found it highly acceptable for a medical provider to discuss alcohol use with them. They expressed even greater interest in discussing their own individual alcohol use.<sup>50</sup> This data suggests that ASBI would be a welcome intervention within the IHS-Tribal Health Care System. The ASBI concepts, principles and practices from busy trauma Centers can be effectively transported to IHS and Tribal hospitals and clinics. This is commonly done in everyday and in all medical fields.

### **ASBI INFORMATION TRANSFER**

**The operational concepts of the Opportunistic Intervention, Readiness for Change and the Teachable Moment are transferred from the Trauma Center not the Sophisticated Surgical Care.**

**Patients with lesser injuries have similar statistical risk for Recidivism and Death.**

**David R. Boyd MDCM, FACS**

#### **Boosters: Re-energize**

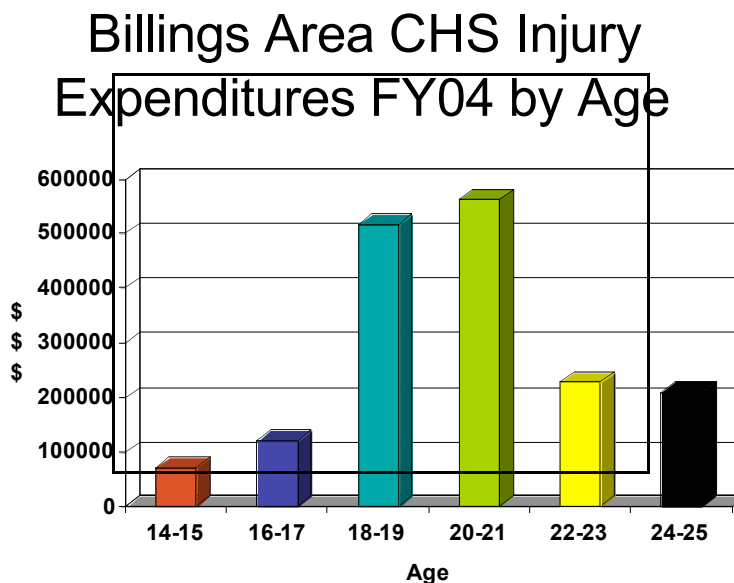
Trials of ASBI suggest that a follow-up, booster session can be very useful to reinforce the details for the patient. This session can take the form of a letter, phone-call or return visit. Gentilello's study, which demonstrated a 47% decrease in trauma center recidivism, sent a hand-written follow-up letter, summarizing the ASBI session to patients one month later.<sup>12</sup> Another trial utilized a telephone booster at one and three months, during which drinking habits were again assessed, initial goals were reviewed and progress on those goals was discussed.<sup>51</sup> Participants in this group had significantly lower levels of alcohol consumption one year later. Yet other study designs opted to have participants return to the clinic seven to ten days after the initial ASBI session to review the content of the initial session, discuss post-discharge experiences and offer the patient feedback as to how to strengthen the plan in light of new experiences.<sup>52, 53</sup> These repeat visits consistently rank as highly effective. The IHS ASBI program intends to utilize existing health-service unit structure to offer booster sessions as the patient comes for primary care and other follow-up visits as described in the following operational manual. Structure of the booster sessions will be locally determined but the chart will have an identifiable marker so that providers at subsequent health encounters will be able to identify patients who have received ASBI and be able to provide a booster discussion.

### A Penny Saved: Trauma and Contract Care Resources Salvaged

As with any new technology, when asked to add it to one's repertoire, two questions arise: How long will it take to perform? And how much does it cost? The answers are far simpler than one might expect. A feasibility study for implementing ASBI for young adults ages 18-39 in an emergency department showed mean times for screening and performing the intervention to be 4 and 14 minutes respectively.<sup>54</sup> This is expected to be on the high end of intervention time frames.

As ASBI requires no new physical technology, this is essentially a low-to-no-cost modality to implement. Estimates of costs vary, but they are immediately overwhelmed when compared to cost-savings. Problem drinkers have a substantially higher rate of injury-related medical care utilization than non-drinkers, with twice the rate of emergency department visits. One study reviewing health insurance claims revealed problem drinkers incur medical costs estimated at three times those of a non-drinker (RR 3.05,  $p < 0.001$ ).<sup>55</sup> Given these high costs of injury-related medical care, a reduction in recidivism results in an enormous cost savings. As an example of the potential trauma costs savings, for the fiscal year 2004, in just a small section of the population targeted by ASBI in the Billings Service Area, Trauma Contract Health Services (CHS) costs for patients 18-21 years of age were greater than one million dollars (Figure 3).<sup>56</sup>

Figure 3. Billings Service Area Fiscal Year 2004 Trauma Contract Health Services (CHS) expenditures by patient age.



In comparison, if ASBI were used, Gentilello estimates of cost savings of \$89 per patient screened and \$330 per patient intervened.<sup>57</sup> Another way to put this is a

savings of \$3.81 per health care dollar spent when examining the costs to implement versus the cost reduction found in the decrease of injuries. Similarly, Flemming found as similar cost benefit with a \$43,000 reduction in future health care cost for every \$10,000 invested.<sup>16</sup> He did not include the cost reductions as a result of fewer motor vehicle collisions or crime in his calculation. Moreover, none of these cost savings estimates account for the potential ability to recoup costs beginning in 2008 as ASBI will become billable via the newly developed CPT and HCPCS codes available. The bottom line is that ASBI is good for both patient care and the bottom line.

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## STEP BY STEP GUIDE FOR IMPLEMENTATION

### I. Step One: Champions Needed

- A. Find a Champion. There must be a Leader, an individual who has the inspiration and enthusiasm to take the initiative to start the ASBI program in the service unit or clinic.
1. This person can be a physician, nurse, administrator or other health provider. His or her background is not what matters, but rather, it is the dedication, passion, and ability to gather support and guide others that is critical.
  2. Leadership is an on-going process, not a one time spurt of energy or interest. The Champion should be committed to implementing ASBI and have the endurance to take the program from starting concept to a detailed and finished product.
- B. Form a Leadership Group/Committee. Developing a health service program is not a one person job. Implementing a program requires broad collaboration of all service unit personnel.
1. The first task of the Champion is to get others on-board. This is a group process. He or she needs to energize key personnel in the Emergency Department, Primary Care Clinics, Behavioral Health Clinics, and Surgery and Pediatric Divisions.
  2. Of these individuals, a select group should be chosen to work long-term on developing and implementing the ASBI Program. This group will conceptualize how the program can best fit the service unit or clinic given its specific resources.
- C. Perform a stakeholder analysis. This means take a look at anyone who has the power to affect the implementation of the program both positively and negatively and determine a plan to engage that person. Remember these stakeholders are health care providers, administrators, other staff members, other alcohol treatment providers, community members, patients, and others. The goal is to motivate as many people as possible to sponsor the program.
1. Identify and rally key supporters: In every organization and environment, there are certain key people who hold the power of persuasion and influence, without whose support, no program will succeed.
    - a. Identify which of these individuals support ASBI and enliven their enthusiasm. Unite them towards the goal of accomplishing the ASBI Program.
    - b. Visit them individually; bring them information about the program and how it will benefit them. Answer any questions they may have and listen to their suggestions.

- c. Make a specific “ask” for support; formally get their commitment. Do not be afraid to request a specific action, such as talking to a detractor about the program or making a public statement.
    - d. Do not forget to check in frequently with the supporters, providing them with updates on how the program implementation is proceeding and the successes along the way.
  - 2. Identify and minimize critical detractors: It is important to know who has the power to block the program, at what stage in program development this may occur, and what may be the cause of this interruption. The goal is to prevent or minimize any roadblocks.
    - a. Identify who objects to the program and potential reasons for their opposition. Brainstorm how to respond to these reasons in a manner that answers, diminishes or eliminates them.
    - b. Meet with these individuals to discuss their concerns and identify potential adjustments that can be made to the program to gain their support.
    - c. Reinforce to the individuals the background of the program and the multitude of benefits it will provide.
    - d. Attempt to minimize the power with which these people will object so that the program may proceed.
  - 3. Motivate the disinterested into action: Perhaps the largest number of people will simply show neither support nor objection to the program. The goal with this group is to sway them into action so that they become supporters and not detractors.
    - a. Talk up the benefits of the ASBI Program to everyone. Educate all personnel on the magnitude of the alcohol-injury problem and the effect that this program could have.
    - b. Get community support. Go outside the health care system to garner enthusiasm and interest in the program.
- D. Present the program and process for implementation to the medical staff. Authorization to proceed with full approval by the medical leadership and administration provides the backbone for the program.
  - 1. Have a meeting with full staff, present the program, explain the process that will need to occur, and get full empowerment to implement the program.
  - 2. Discuss with medical staff the complex issues involving implementing a program that focuses on the needs of the alcohol-misusing patient such as addressing the attitudes and beliefs that health care providers might have towards this population.
    - a. Suggest that this may require the difficult step of overhauling status quo as many providers may not recognize the target

population of this program is not the Dependent Drinker but rather the At-risk Hazardous/Harmful drinker, a different population than they are used to thinking about in regards to alcohol.

- b. Remind them that for the program to be successful this must be a full fledged effort.

## II. **Step Two: Create a Time Line**

- A. Outline a time frame for implementation of each stage of the ASBI Program. Successful deployment of any new process requires both big picture planning and managing the details. By breaking the project into smaller tasks, it becomes more achievable. The IHS-Tribal ASBI Program can be initiated almost immediately in all service units; however, to be successful it must be well organized and have full staff support
  1. Implementation is never trouble free. Corrections can be made along the way.
  2. Consideration can be given to staged or incremental implementation.
- B. Stick to these Deadlines. Staying on target for smaller objectives gives a sense of accomplishment to supporters and demonstrates effectiveness to detractors. Small cycles of change that build on each other are often more effective than one major push. It will build momentum and may even attract manpower.
- C. Remember other potential applications. The technique of screening and brief negotiated interviewing will prove invaluable and application to other agents of abuse and “dys-behaviors” will evolve. Allow flexibility in program design for future changes but do not try to force too much at once.
- D. Sell the goals. Enthusiasm is contagious!

## III. **Step Three: Determine the Alcohol Screening Process**

- A. Determine Where and When ASBI is to be offered. The goal for the IHS-Tribal ASBI program is initial introduction into Emergency Departments and Acute Care Settings. The program will later be expanded into all Primary Care and Behavioral Health Clinics.
  1. All injured patients between the ages of 18-35 should be screened. Because such a large proportion of trauma injuries involve alcohol, the IHS-Tribal ASBI Program believes that all injured patients in this age group need to be screened.
  2. Exactly what physical location within the Emergency Department or Acute Care Setting and at what time during the clinical

encounter screening occurs should be determined by the leadership group based on the individual nature of the service unit.

3. Screening should be performed in a clinically appropriate manner with assured confidentiality.

B. Decide who will provide Alcohol Screening.

1. Alcohol Screening can be performed by any trained medical provider. It can be offered by doctors, nurses, other allied health providers, trained health educators or others.
2. The decision as to who will perform screening should be guided by time availability, knowledge and experience, willingness to perform, understanding of change, and interpersonal skills.

C. Choose how Alcohol Screening is to be performed. Upon initiating screening, it is recommended that the health care provider offer an explanation to the patient regarding the content of the upcoming questions and that they are asked of all injured patients.

1. The leadership group may wish to settle on a standardized introductory statement to screening that all providers are required to use.
2. The following are two suggested introductions from the World Health Organization:
  - a. "Now I am going to ask you some questions about your use of alcoholic beverages during the past year. Because alcohol use can affect many areas of health (and may interfere with certain medications), it is important for us to know how much you usually drink and whether you have experienced any problems with your drinking. Please try to be as honest and accurate as you can be."<sup>1</sup>
  - b. "As part of our health service, it is important to examine lifestyle issues likely to affect the health of our patients. This information will assist in giving you the best treatment and highest possible standard of care. Therefore, we ask that you complete this questionnaire that asks about your use of alcoholic beverages during the past year. Please answer as accurately and honestly as possible. Your health worker will discuss this issue with you. All information will be treated in strict confidence."<sup>1</sup>
3. If a provider, other than the one screening, is to perform the Brief Negotiated Interview, it will be useful to explain to patients that an additional provider may be speaking to them.

D. Select the method for Alcohol Screening. For the IHS-Tribal ASBI Program, the **highly** advised alcohol screening method is the AUDIT-C. It is a brief, three question screening tool that has been demonstrated to

have high specificity and sensitivity in identifying patients with hazardous or harmful drinking patterns.<sup>2,3</sup> The AUDIT-C can be offered in either written or verbal format.

1. Health care providers performing the AUDIT-C should be given pocket cue cards with the screening tool printed on them to help assist them.
2. It is important for providers to clarify what is meant by a standard drink: one 12-oz.can of beer, one 5-oz.glass of wine, one shot of spirits (1.5oz). A picture diagram is provided in Appendix C to demonstrate.

E. Teach how the AUDIT-C is to be Scored.

1. If a woman's score is  $\geq 4$  or a man's score is  $\geq 5$  than the AUDIT-C is considered positive for hazardous drinking and the patient should receive a Brief Negotiated Interview.
2. If any patient's score is greater than 8, that person should receive both a Brief Negotiated Interview and a referral to treatment.
3. Patient's whose scores are below these levels should receive very brief feedback about the results of their screening tests that reminds them to continue to monitor their drinking levels to remain at low-risk.
4. Additional information regarding scoring is provided in Appendix B.
5. It is important to remember that not all patients who have alcohol misuse problems will present intoxicated; for this, and other reasons described, blood alcohol levels are NOT required for the IHS-Tribal ASBI program.

## AUDIT-C

1. How often do you have a drink containing alcohol?  
Never (0pts), Monthly or less (1pt), Two to four times a month(2 pts)  
Two to three times a week (3pts), Four times or more a week (4pts)
2. How many drinks containing alcohol do you have on a typical day when you are drinking?  
1-2 (0 pts), 3 -4 (1pts), 5 -6 (2pts), 7 -9 (3pts), >10 (4pts)
3. How often do you have six or more drinks on one occasion?  
Never (0pts), Less than monthly (1pt), Monthly (2pts), Weekly(3pts),  
Daily or almost daily (4 pts)

SCORE  $\geq 4$  for women or  $\geq 5$  for men indicates at -risk drinking

- F. Formalize the required documentation for Alcohol Screening. Keeping a record that Alcohol Screening has occurred is a critical step in the ASBI program because it both allows for coordination of follow-up, so that the patient can proceed to the Brief Negotiated Interview and receive appropriate medical care, and it assists with future evaluation of the ASBI program.
1. Alcohol screening and the results of screening can be captured using various codes available in the Resource and Patient Management System (RPMS) Electronic Health Record. See Appendix E for further details on the appropriate use these codes.
  2. If paper records are being used screening activities and screening results should be documented by providers in a consistent manner and Data Entry staff should be trained to recognize and enter these elements into RPMS.
  3. Proper documentation of screening activities and screening results will help ensure that Brief Negotiated Interviews are done when indicated.
  4. There are new CPT/HCPCS that allow for billing of Alcohol Screening and Brief Intervention; however they require that both components be documented in the clinical record. In addition, the duration of the screening and intervention must take at least 15 minutes. For details, see Appendix E.
  5. After removing patient identification information, documentation within the electronic health record may also be used via RPMS to evaluate the success of the program. See Appendix E.
  6. The leadership group may also wish to create other pathways for documentation that facilitate the progress of the patient through the ASBI Program.

#### **IV. Step Four: Determine the Process for the Brief Negotiated Interview**

- A. Ensure appropriate patients receive the Brief Negotiated Interview. Because the Brief Negotiated Interview may occur in a variety of settings, often distinct from the location at which the initial alcohol screening occurred, the leadership group must determine a process by which patients are clearly identified and offered the intervention.
1. The method chosen for documenting alcohol screening and those results should take into account the need for information transfer to providers who will be performing the Brief Negotiated Interview.
  2. The leadership group may need to develop a method to schedule patients for follow-up appointments and/or to track their progress in the program to ensure no attrition from the program.
  3. The patient must be alert at the time of the intervention.
- B. Determine Where and When the Brief Negotiated Interview will occur. At this time there are four recommended pathways for a patient after



presenting to an acute care setting with an alcohol-related injury and screening positive for hazardous or harmful alcohol use.

1. The patient screens positive and receives the Brief Negotiated Interview while still in the acute care setting of initial presentation.
2. The patient screens positive in the acute care setting and receives the Brief Negotiated Interview at a follow-up visit in the Primary Care or Surgical Clinic within **seven** days of the initial presentation.
3. The patient screens positive in the acute care setting and has been admitted to the hospital due to the injury. He receives the Brief Negotiated Interview while an inpatient, up to several days after admission but still prior to discharge from the hospital.
4. The patient screens positive in the acute care setting but is transferred to an outside trauma center due to the severity of injuries. In this pathway, the patient ideally will participate in a Brief Negotiated Interview while an inpatient at the outside trauma center; however, he will also be referred back to either the IHS-Tribal Primary Care or Behavioral Health Clinics immediately upon return to the area for a Brief Negotiated Interview and follow-up.

## Possible Paths for the ASBI Patient

- Presents for acute injury, then receives BI:
  - at the emergency department or primary care clinic visit
  - in the outpatient clinic follow -up for injury within 7 days
  - after hospital admission , on the service unit within several days but prior to discharge
  - if transferred to trauma center, at that location but with back referral to IHS -Tribal Primary Care or Behavioral Health for follow -up
- Primary Care and Behavioral Clinic Surveillance
- During “Universal Screening ” for other substances and injurious behaviors

C. Decide who should provide it? It will be necessary to institute a protocol for who will perform the Brief Negotiated Interview.

1. There may be a different provider type in each setting: Emergency Department, acute care visit at the Primary Care Clinic, Hospital Ward, follow-up visit to the Surgical/Primary Care Clinic, or referral to Behavioral Health Clinic.
2. As with alcohol screening, the same key characteristics of willingness to offer the intervention, excellent interpersonal skills,

nonjudgmental attitude, and understanding of the process of change are required in the provider.

- D. Explain the method to be used for the Brief Negotiated Interview. The IHS-Tribal ASBI program endorses adherence to the procedures outlined in the Yale University, School of Medicine, *Alcohol Screening and Brief Intervention Project: BNI Training Manual*<sup>4</sup> that is attached in Appendix A.
1. Provision of the Brief Negotiated Interview *must* occur at a clinically appropriate time and location.
  2. Both privacy and confidentiality *must* be assured.
  3. The four key steps to the Brief Negotiated Interview are: raise the subject, provide feedback, enhance motivation, and negotiate and advise.
  4. Because the Brief Negotiated Interview *may* entail assisting a patient in outlining a plan for change, providers need to be aware of local treatment options, support groups, traditional healers and other community resources which are available for patients. Leadership groups should make this information easily available for providers in case they should need it.
  5. It is recommended that providers have cue cards to assist them in offering the intervention and patient handouts readily available. See Appendix C.
- E. Formalize the required documentation for the Brief Negotiated Interview. As with alcohol screening, documentation that a Brief Negotiated Interview has occurred is vital to ensure quality health care treatment, continuity of care in the ASBI program, billing, and evaluation of the program itself.
1. As with Alcohol Screening, follow the recording method for the Electronic Health Record or paper chart to document that a Brief Negotiated Interview has been provided
  2. The leadership group will need to create additional documentation pathways to ensure transfer of more detailed information in the patient's record.
  3. Having a clear indication of a patient's status allows for better communication between health care providers and improves the quality of care offered. If it is clear in a patient's chart that he or she has received ASBI and what the patient's drinking goals are, future health care providers will be able to monitor the patient for alcohol-related problems and provide boosters as needed.
  4. Proper documentation will also allow for billing. Alcohol Screening and Brief Intervention has recently received approval for HCPCS codes that result in reimbursement from Medicaid and CPT codes for private insurance. See Appendix E for more details.

## V. Step Five: Set Up a Process for Booster Sessions

- A. Indicate who will receive booster sessions. Because research demonstrates greater effectiveness of ASBI in patients who receive a booster session, the IHS-Tribal ASBI program strongly recommends that all patients be given a booster.
1. The leadership group should establish a process to schedule outpatient follow-ups specifically for ASBI boosters for all patients receiving the intervention. Included in this procedure should be a method to encourage and monitor attendance at these appointments as well as the protocol regarding who will provide the booster.
  2. Patients returning from admission to a trauma center outside of the IHS-Tribal system will have a note in their charts and the above process should also be followed for those who screened positive.
    - a. Direct communication with the regional trauma center's chief medical officer will assist in this arrangement.
    - b. Dr. David Boyd and IHS Headquarters will also assist with this process. The notation will become required as part of the Discharge Planning and Reimbursement Contract for health facilities contracting with IHS.
- B. Create the process for a formal boosters session
1. A formal booster session should include a review of the patient's negotiated drinking goals, the patient's progress towards these goals since the previous visit, any challenges faced, and a motivational discussion as to what the patient plans to do for future change. Additional information regarding alcohol consumption may be offered. Some sessions could be a repeat of the entire ASBI intervention.
  2. At minimal, these formal booster sessions should occur at the first return post-injury medical visit as well as thirty days and six months after the initial alcohol-related injury that brought the patient to medical attention.
  3. It is critical that these sessions maintain the same compassionate approach towards the patient and his or her stage of change as the initial Brief Interview.
- C. Set up a system for subsequent booster sessions.
1. There should be an obvious notation in the chart to serve as a reminder for all health care providers that this patient has screened positive and received a Brief Negotiated Interview.
  2. As with smoking cessation, every subsequent medical encounter will thus turn into an opportunity for health care providers to discuss the patient's drinking patterns and health consequences.

All providers should perform boosters on an as-needed basis and review the patient's drinking goals.

## **VI. Step Six: Build Communication Pathways between Physical and Behavioral Health**

- A. Improve communication between health care divisions. The IHS-Tribal ASBI Program requires the cooperation and consultation across virtually every health care discipline.
1. Ensure Behavioral Health providers in the service unit fully understand the motivation, mission, and methods of the ASBI Program and support the procedures determined above.
  2. Create a system to communicate regularly between divisions. Input will be useful as the ASBI Program expands.
- B. Ensure connections for patient care. Because in many areas where the IHS-Tribal ASBI program is to be implemented, there are community based alcohol treatment programs which are separate from the Behavioral Health Clinics, it is critical that relationships between these entities are established.
1. Set up a system of communications between Behavioral Health Clinics and community resources as well as with other participants in the IHS-Tribal ASBI Program.
  2. Create linkages for referral to such community based alcohol treatment programs.
  3. Investigate other resources available including costs, availability, and services offered.

## **VII. Step Seven: Training**

- A. Decide who will be trained in ASBI. A variety of health care providers can perform ASBI and the decision as to who will offer it and in what setting will depend upon time, availability and each service unit's structure. Nonetheless, to both maximize support for the program and allow for flexibility, it is recommended that all primary care providers and support staff be trained in the procedure.
- B. Use all available ASBI training modalities.
1. Provide everyone with the Yale University, School of Medicine, *Alcohol Screening and Brief Intervention Project: BNI Training Manual*<sup>4</sup> that is attached in Appendix A of this manual. Offer screenings of or access to the corresponding DVD, *The Emergency Practitioner & The Unhealthy Drinker: Motivating Patients for Change*.<sup>5</sup>
  2. Schedule In-Service activities which allow providers to practice the skills they have learned after studying the manual and DVD.

Provide cue cards that assist with screening and interviewing to keep. See Appendix C.

3. Encourage practitioners to attend on-going in-service activities, the National IHS ASBI Train-the-Trainer and other IHS Primary Care Clinic and Behavioral Health Conferences that address ASBI. Also, provide access to on-line lectures and meetings.

C. Educate Medical Staff on the Electronic Health Record and ASBI.

1. Provide hands-on or webex based trainings demonstrating appropriate tracking and documentation procedures.
2. Orient new providers routinely.

D. Educate Medical Coders on the new CPT/HCPCS codes.

1. Providing the service of ASBI to a patient is considered separate and distinct from all other services provided during that same visit thus the effort should not be considered when selecting the level of Evaluation and Management service provided at that session.
2. Instead, an additional CPT code is added, recording the work effort that was offered. The codes are:
  - a. 99408 Alcohol and/or substance (other than tobacco) abuse structured screening (i.e. AUDIT) and brief intervention (SBI) services; 15-30 minutes in duration
  - b. 99409 SBI service greater than 30 minutes in duration
  - c. If an intervention is not required based on the results of the screening, *then* the work effort ought to be included in selection of the appropriate Evaluation and Management service for the session.
3. In addition there are two CPT HCPC Codes:
  - a. H0049 Alcohol and/or Drug Screening
  - b. H0050 Alcohol and/or Drug Services, Brief Intervention, Per 15
4. CMS has created G-codes for reporting comparable services for Medicare FFS clients:
  - a. G0396 Alcohol and/or substance (other than tobacco) abuse structured assessment and brief intervention services; 15-30 minutes
  - b. G0397 Assessment greater than 30 minutes

## VIII. Step Eight: Full Time Roll-Out

- A. Document the agreed upon procedures. After decisions are finalized, create a formal document for the service unit official ASBI Program Policy. Have it authorized and signed by the Chief Medical Officer, Service Unit Administrator and attendant staff members.
- B. Implement the program. When ready, get the program started. It's show-time! There are always minor adjustments that need to be made during

the first few weeks. The ASBI Champion should be prepared to provide significant on-site support for the first week.

## **IX. Step Nine: Evaluation and Modifications**

- A. Responsibility for the Program. The Champion will help lead the program and ensure functionality as a “chief sponsor” for the Service Unit’s Clinical Director. The Leadership Group may wish to appoint individuals responsibility for various aspects of the program; however, ultimate accountability follows the usual chain of authority.
- B. Set up a method to evaluate the process and make improvements. As with all new programs, it will be useful to assess various aspects along the way and make adjustments. Suggestion for items to monitor include:
1. The progression of patients through the program from initial presentation during the acute injury to follow-up for booster sessions.
  2. The number of patients involved in the program through time.
  3. The quality of care provided and how well it is standardized.
  4. How well communications are functioning across the program.
  5. The effectiveness of record keeping: documentation of screening, results, provision of Brief Negotiated Interview.
  6. Whether or not billing is performed, and if so, is it done correctly?
  7. The satisfaction levels of patients and staff.
- C. Set up a method to evaluate the outcome of the program. The long-term success of the ASBI Program depends upon both quality of program implementation and ability to achieve the goal of decreasing alcohol misuse and related injuries. After the program becomes operational, evaluating movement towards goal becomes important. A system should be designed to correctly measure:
1. Are there increases over time in the number of patients screened for alcohol misuse?
  2. Are there increases in the number of those who screen positive who receive an intervention?
  3. Other choices of items to evaluate should be added as desired.
  4. In addition, items for research to evaluate program effectiveness may include:
    - a. Are there decreases in alcohol consumption?
    - b. Are there decreases in alcohol-related injuries and illnesses?

## **X. Step Ten: Sharing Success**

- A. Publicize your program. Because Service Units throughout the IHS-Tribal Health System will be implementing the ASBI Program, we will want to hear about your success. Tell others what works well and what challenges you have faced. Attend local and national ASBI conferences.

- B. Assist Others. Again, other areas are undergoing similar processes to yours. Although each area is unique, we can benefit from the experience and success of each other. Talk about it.

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## Acknowledgments

*The IHS-Tribal ASBI Program would like to offers Special Thanks and Recognition to:*

Nancy M. Bill, MPH CHES  
Joyce M. Boyd, MDCM MPH  
Susan J. Boyd, MD  
Harry Brown, MD  
Steve-Sid Caesar  
Mark F. Carroll, MD  
Vickie Claymore-Lahammer, PhD  
Pete Conway, Med  
Theresa Cullen, MD, MS  
Linda C. Degutis, DrPH  
Anthony Dekker, DO  
Terry D. Dennis, MD  
Carlo DiClemente, PhD  
Gail D. D'Onofrio, MD MS  
James Flaherty, MD  
Daniel V. Foster, PhD  
Larry M. Gentilello, MD  
Denise Grenier, MSW, LCSW  
Sandra Haldane, RN  
Howard Hays, MD, MSPH  
Colleen Hayes RN, MHS  
Carla Huber, RN  
Daniel Hungerford, DrPH  
Janine Jones  
Stephanie Klepacki  
Chris Lamer, Pharm D, BCPS, CDE  
Kathleen B. Masis, MD  
Karen Milman, MD MPH  
Charles North, MD  
Richard D. Olson, MD MPH  
Jon T. Perez, PhD  
Doug Peter, MD  
Gary Quinn, MSW  
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Tom Stegbauer, MBA  
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Carl Soderstrom, MD  
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*Appendix A*  
**THE YALE BRIEF NEGOTIATED  
INTERVIEW MANUAL**

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**APPENDIX A: THE YALE BRIEF NEGOTIATED INTERVIEW MANUAL**



**PROJECT ED HEALTH II**  
**BNI Training Manual**

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## I. Overview of the YALE BNI Manual

This manual is designed to provide the Emergency Department (ED) practitioner with the necessary skills to easily and effectively perform a brief intervention, the Brief Negotiation Interview (BNI), with ED patients who have been identified as harmful or hazardous alcohol drinkers and enrolled in a Federally-funded randomized clinical trial testing the efficacy of the BNI as compared to Standard Care (SC). All subjects will have consented to participate in the study. The following sections provide background information and the goals of the study, and describe the critical components of the BNI. An easy to follow, step-by-step approach to performing the BNI is also included. The study protocol to be followed by ED practitioners (EPs) administering the BNI to subjects is provided along with additional motivational and troubleshooting strategies. While the manual gives the reader a critical overview of the BNI, participation in a 2-hour training course, followed by successful completing of a test case is required to be ready to begin enrollment. Periodic feedback and booster sessions will be offered during the course of enrollment to ensure effective and consistent performance.

## II. Background Information

Unhealthy alcohol use<sup>1</sup> is a major preventable public health problem resulting in over 100,000 deaths each year<sup>2</sup> and costing society over 185 billion dollars annually.<sup>3</sup> 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.

There is a high prevalence of alcohol related problems in ED patients.<sup>4,5,6</sup> In specific populations such as trauma patients, alcohol has been shown to be a major contributing factor in up to 50% of major trauma cases<sup>7</sup> and 22% of minor trauma cases.<sup>8</sup> Therefore, the need for effective and practical interventions aimed at reducing the deleterious effects of drinking among harmful and hazardous drinkers that can be administered by ED practitioners, is critical.

Patients presenting to the ED represent the entire spectrum of unhealthy alcohol-use as described in empirically-based guidelines from the National Institute of Alcohol Abuse and Alcoholism (NIAAA) illustrated in Figure 1.<sup>9</sup> This includes hazardous drinkers who are at risk for injury and illness because they drink in excess of low-risk drinking guidelines to dependent drinkers. (See Table 2)

This study focuses on harmful and hazardous drinkers, including the hazardous (at-risk) drinker who exceeds the NIAAA consumption guidelines for low-risk drinking, but who is not currently experiencing any problems, and the harmful (problem) drinker, who is experiencing problems.<sup>10</sup> These problems may be may be medical, such as injuries or illness; or behavioral such as driving while intoxicated. In the US, approximately 20% of individuals  $\geq$  12 years of age fall into this category.<sup>11</sup> Harmful drinkers also include

anyone presenting with an injury/illness related to alcohol even if the patient's alcohol consumption does not exceed the NIAAA guidelines for low-risk drinking. For example, even 2 drinks may impair an individual's reaction time and coordination, leading to consequences such as a motor vehicle crash (MVC), fall while dancing, etc.

There is compelling evidence in the literature that screening and brief intervention (SBI) for alcohol problems is effective in reducing alcohol consumption and associated consequences.<sup>12</sup> An evidence-based review on SBI identified 39 published studies including 30 randomized controlled trials and 9 cohort studies.<sup>13</sup> A positive effect was demonstrated in 32 of these studies. Multiple studies have demonstrated the efficacy of BI in a variety of setting, including general populations, primary care, emergency departments and in-patient trauma care units.

To date there have been four randomized controlled studies specifically relevance to ED practitioners. (See Table 2) Two are specific to adolescents.

#### 1. Adolescents with an alcohol-related event (2 Studies)

Monti et al,<sup>14</sup> compared usual care to the use of a brief motivational interview (MI) to reduce alcohol-related consequences and alcohol use among adolescents (aged 18-19 years) in an ED following an alcohol-related event. Follow-up assessments showed that both conditions decreased their alcohol consumption, but patients who received the MI had a significantly lower incidence of drinking and driving, traffic violations, alcohol-related problems ( $p < .05$ ), alcohol-related injuries ( $p < .01$ ) than those who received usual care. However, the generalizability of the results of this study may be limited because the population was limited to injured adolescents, all interventions were performed by trained social workers hired for the project, and there was a relatively high refusal rate. Monti's results are similar to other BI in primary care settings<sup>15</sup> in that there were reductions in alcohol consumption in both groups, but a reduction in negative consequences in only the treatment group, and may suggest that a more intense intervention or associated booster may result in differences between conditions.

Spirito and colleagues<sup>16</sup> studied adolescents ages 13 to 17 who were treated in an ED for an alcohol-related event. The adolescents were eligible to participate in the study if they had evidence of alcohol in their blood, breath, or saliva ( $N = 142$ ), or if they reported drinking alcohol in the 6 hours before the injury that required treatment in the ED ( $N = 10$ ). The participants underwent a battery of assessments that took an average of 45 minutes to complete. They reported their drinking behavior over the past 12 months and completed the Adolescent Drinking Questionnaire (which assesses behavior over the past 3 month), the Young Adult Drinking and Driving Questionnaire, and the Adolescent Injury Checklist. Furthermore, at the beginning of the study the investigators administered the Adolescent Drinking Inventory (ADI) to identify adolescents with potential alcohol problems warranting a treatment referral and for use in the personal feedback component of the intervention condition. The ADI is a 24-item measure of severity of alcohol involvement, with a score of  $> 15$  indicating that referral

for alcohol problems is needed. Participants were then randomly assigned to receive standard care or a motivational interview.

Researchers interviewed the adolescents by phone after 3 months and contacted them in person after 6 and 12 months. The investigators found that adolescents in both groups drank less alcohol during the 12-month follow up period. However, adolescents in the MI group with a baseline ADI score indicating problematic alcohol use improved significantly in two outcomes, average number of drinking days per month (frequency) and frequency of high-volume drinking (binging). Based on these findings, the investigators recommend that adolescents who are treated in the ED for an alcohol-related injury should be screened for pre-existing alcohol problems and should receive a brief intervention if the screen is positive.

## 2. Injured Harmful/Hazardous (HH) Drinkers

Longabaugh and colleagues at Brown University published a clinical trial with injured, harmful/hazardous drinkers in the ED setting. Patients were randomized to standard care (SC), immediate BI, immediate BI followed by a booster or comprehensive intervention session subsequent to the ED visit (BIB). Patients receiving the BIB, but not BI patients, reduced alcohol-related negative consequences and alcohol-related injuries more than did those in the SC group. All three groups reduced their days of heavy drinking. This study demonstrates that a booster session may be helpful; however this study was limited to injured patients. However, 31% of patients actually assigned to return to the booster session in person did not return. It is possible that a booster session by telephone may be a better solution in ED populations. Their follow-up rate of 83% by phone would support this. However, translation to the real world setting is difficult as the intervention was lengthy, up to an hour, and performed by trained non-ED staff social workers. The demonstration of decreased drinking behavior in all three arms of this study raises the concern that lengthy research assessments, focused on alcohol-related behavior, may serve as an intervention or affect subject reporting. Of note, the generalizability of these findings is unclear because the number of patients who were eligible for the study but not randomized was not reported.

## 3. Admitted Trauma Patients

Gentilello, recently studied a subset of hospitalized trauma patients who screened and/or tested positively for the full spectrum alcohol problems, i.e., at-risk drinking to alcohol dependence. He reported a decrease in alcohol consumption in the intervention group who received a BI compared to control group ( $p < .03$ ), which was most apparent in patients with mild to moderate problems ( $p < .01$ ). In a 3 year follow-up period there was a 47% reduction in injuries requiring ED visit, and 48% reduction in injuries requiring hospital admission.<sup>9</sup> Among the methodological challenges in interpreting the results of this study is the spectrum of alcohol problems that patients presented with. The inclusion of alcohol dependent patients makes it difficult to compare this population with a heterogeneous ED population with only harmful and hazardous drinking. The generalizability of this study is somewhat limited by the fact that a single, doctorate level

psychologist performed all of the interventions. Finally, follow-up rates were low, approximately 50% at 12 months.

Patients presenting to the ED are more likely to have alcohol-related problems than those presenting to primary care.<sup>18</sup> The ED visit offers a potential “teachable moment” due to the possible perceived negative consequences associated with the event.<sup>19</sup> In essence, the emergency practitioner has a captive audience.

### **III. Overview of the BNI**

The BNI is a short, 5-7 minute counseling session that incorporates brief feedback and advice with motivational enhancement techniques to assist the patient in changing his/her drinking patterns.<sup>20,21,12</sup> In most cases this means lowering alcohol consumption to low-risk limits and thereby reducing the risk of illness/injury. 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 product of the BNI procedure is the patient’s agreement to reduce either alcohol use or its ability to cause harm (medical problems or trauma). The practitioner and patient come to this agreement through a process of negotiation described in the following section.

## IV. Components of the BNI

The BNI procedure consists of 4 major steps:

- 1) **Raise The Subject**
  - ∞ Establish rapport
  - ∞ Raise the subject of alcohol use
- 2) **Provide Feedback**
  - ∞ Review patient's drinking amounts and patterns
  - ∞ Make connection between drinking and ED visit (if applicable)
  - ∞ Compare patient's level of drinking to national norms
- 3) **Enhance Motivation**
  - ∞ Assess readiness to change
  - ∞ Develop discrepancy between patient's drinking and problems or potential problems related to alcohol
- 4) **Negotiate And Advise**
  - ∞ Negotiate goal
  - ∞ Give advice
  - ∞ Summarize and complete drinking agreement

Each step has critical components, specific objectives, actions and necessary preparations to be successful. Details of each step are provided in the following pages. Prior to detailing the actual BNI procedure, it is important for the ED practitioner to know how the administration of the BNI coincides with the overall study protocol. A sample of the BNI dialogue appears in Table 8.



## V. Study Protocol

This study will be conducted in the ED at Yale-New Haven Hospital (YNHH) for an estimated 3.5 years, beginning in July of 2005.

ED patients aged 18 and above, who screen positive for harmful and hazardous drinking, are eligible for inclusion.

Excluded from the study will be patients who fall into any of the following categories:

- ∞ alcohol dependent (based on AUDIT score >19)
- ∞ non-English speakers
- ∞ currently enrolled in a substance abuse program
- ∞ seeking ED care for an acute psychiatric problem
- ∞ condition that precludes interview i.e., life threatening injury/illness
- ∞ in police custody
- ∞ unable to provide to 2 alternate contact numbers for follow-up

Patient eligibility will be determined by the study Research Associate (RA) through a series of steps, based on the criteria listed above. 900 eligible and consenting patients will be randomized to one of four study conditions by the RA; 2 groups will then complete an additional 20-30 minute baseline interview by telephone and receive a brief negotiated interview (BNI) performed by the ED Practitioner (EP). The RA will inform the EP when the patient is ready for the intervention. Every intervention will be audio taped with subject consent. The RA will assist with recorder set-up and provide intervention aids (e.g., the BNI laminated reference card, BNI show cards, drinking agreement and patient health information handout). Following the intervention, the EP will be asked a few brief questions by the RA that should take less than one minute. The questions are designed to collect information on the ED practitioner's medical care relationship with the patient, and details surrounding the intervention performed. After that, the RA will collect tape recorder with tape, study aids and carbon copy of the drinking agreement completed by the subject as part of the BNI.

## VI. Emergency Practitioner Roles and Expectations

Enrolled patients will be randomized into one of four study groups. Once the patient has been consented and enrolled into the study, the RA will inform you if a BNI needs to be performed and provide you with the necessary materials. It is now the EP's responsibility to complete the assigned intervention in a timely manner, prior to patient discharge. If you are not directly involved in the care of the patient, you will need to review the patient's record prior to beginning the BNI. The intervention should be conducted in a timely manner in a climate as quiet and private as possible.

### ➤ BNI Study Group

The BNI should be performed exactly as outlined in the procedural steps. (REFER to the 4 steps) It was designed to take approximately 5-7 minutes to complete. The intervention should conclude with the patient receiving a copy of the drinking agreement they have completed with you and a patient health information sheet. When finished, the RA will collect the audio tape recorder with tape and carbon copy of the drinking agreement. The RA will then ask you a few questions regarding the intervention lasting no longer than one minute.

### SUMMARY

- Review ED record before seeing the study patient
- Perform the BNI in a timely fashion, aware of patient discharge plans
- Adhere to the BNI script
- Ensure quality audio taping of BNI; keep recorder near conversation area
- Complete post-intervention debriefing with RA immediately after BNI
- Discuss any operational problems with Principal Investigator/Project Director

# STEP1: Raise the Subject

**Critical components:**

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

**PREPARATION:**

- ∞ Review ED record

OBJECTIVES	ACTION(S)	QUESTIONS/COMMENTS
Establish rapport	<ul style="list-style-type: none"><li>∞ Explain practitioner's role</li><li>∞ Avoid a judgmental stance</li><li>∞ Set the climate</li></ul>	<i>"Hello, I am ____."</i>
Raise the subject	<ul style="list-style-type: none"><li>∞ Engage the patient</li></ul>	<i>"Would you mind taking a few minutes to talk with me about your alcohol use?" &lt;PAUSE&gt;</i>

**SUMMARY**

This first step sets the climate for a successful BNI. Asking permission to discuss the subject of alcohol formally lets the patient know that their wishes and perceptions are central to the treatment.

# STEP2: Provide Feedback

## Critical components:

1. Review current drinking patterns
2. Compare patient's drinking to national norms
3. Make the connection between alcohol and reason for ED visit or other medical problems (if applicable)

## PREPARATION:

- ∞ Screening data provided by RA
- ∞ Charts & tables on norms provided by RA

OBJECTIVES	ACTION(S)	QUESTIONS/COMMENTS
Review patient's drinking patterns	<ul style="list-style-type: none"> <li>∞ Review screening data</li> <li>∞ Express concern</li> <li>∞ Be non-judgmental</li> </ul>	<p><i>"From what I understand you are drinking..."</i></p> <p><i>"We know that drinking above certain levels can cause problems such as ... (refer to presenting ED problem, or, refer to future increased risk of illness and injury). I am concerned about your drinking."</i></p>
Make connection to ED visit (if applicable)	<ul style="list-style-type: none"> <li>∞ Discussion of specific patient medical issues e.g., MVC, GI complaints, hypertension</li> </ul>	<p><i>"What connection (if any) do you see between your drinking and this ED visit? If patient sees connection, reiterate what they have said. If patient does not see connection, 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."</i></p>
Compare to National norms	<ul style="list-style-type: none"> <li>∞ Give NIAAA guidelines specific to patient sex and age</li> </ul>	<p><i>"These are what we consider the upper limits of low risk drinking for your age and sex. [Show Guidelines &amp; National Norms] (See Tables 2 and 3) By low risk we mean that you would be less likely to experience illness or injury if you stayed within these guidelines."</i></p>

## SUMMARY

Linking the ED visit to drinking and by comparing patient drinking patterns to National norms is a great motivator towards encouraging a change in the patient's drinking pattern. This is the opportunity to offer education related to specific patient issues.

# STEP3: Enhance Motivation

**Critical components:**

1. Assess readiness to change
2. Develop discrepancy
3. Reflective Listening
4. Open-ended questions

**PREPARATION:**

- ∞ "Readiness to Change Ruler" provided by RA
- ∞ Handouts of pros & cons for patient prompting (if needed) provided by RA

OBJECTIVES	ACTION(S)	QUESTIONS/COMMENTS
Assess readiness to change	∞ Have patient self-identify readiness to change, on a scale of 1-10	<b>[Show Readiness Ruler] (See Table 4)</b> <i>“On a scale from 1-10, how ready are you to change any aspect of your drinking?”</i>
Develop discrepancy	<ul style="list-style-type: none"> <li>∞ Identify areas to discuss</li> <li>∞ Use reflective listening</li> </ul>	<p>If patient says:</p> <ul style="list-style-type: none"> <li>- <b>≥ 2, ask</b> <i>“Why did you choose that number and not a lower one?”</i></li> <li>- <b>1 or unwilling, ask</b> <i>“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?”</i></li> <li>- <b>Discuss pros and cons (See Table 5)</b></li> </ul> <p>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 <i>“It’s difficult”</i>, maybe followed by, <i>“So it’s difficult because you’re worried about what your friends think”</i>, delivered with downward intonation.</p>

**SUMMARY**

Patients are often ambivalent about change. Developing discrepancies between the patient’s present behavior and their own expressed concerns may tip the scales towards readiness to change. Reflective listening is a way in which to check what the patient meant by a statement. Intonation should turn down at the end of the remark to encourage patient response.

# STEP4: Negotiate and Advise

**Critical components:**

1. Negotiate a plan on how to cut back and/or reduce harm
2. Direct advice
3. Drinking Agreement and patient health information handout

**Preparation:**

- ∞ Drinking Agreement provided by RA
- ∞ Patient health information handout provided by RA

OBJECTIVES	ACTION(S)	QUESTIONS/COMMENTS
Negotiate goal	<ul style="list-style-type: none"> <li>∞ Assist patient to identify a goal from a menu of options</li> <li>∞ Avoid being argumentative</li> </ul>	Reiterate what pt says in Step 3 and say, <i>“What’s the next step?”</i>
Give advice	<ul style="list-style-type: none"> <li>∞ Deliver sound medical advice/education</li> <li>∞ Harm reduction</li> </ul>	<i>“If you can stay within these limits you will be less likely to experience (further) illness or injury related to alcohol use.”</i>
Summarize	<ul style="list-style-type: none"> <li>∞ Provide a drinking agreement</li> <li>∞ Provide health information sheet</li> </ul>	<p><i>“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”</i></p> <p><b>Provide:</b></p> <ul style="list-style-type: none"> <li>- Drinking agreement (See Table 6; pt keeps 1 copy; 1 copy for study)</li> <li>- Provide Health Information Handout (See Table 7)</li> </ul> <p>Suggest Primary care f/u for drinking level/pattern. Thank patient for his/her time.</p>

**SUMMARY**

The EP should assist the patient in exploring a menu of options. However, the patient is the decision-maker and should ultimately be responsible for choosing a plan.

## VII. Additional Motivational Strategies

### ➤ Refrain From Directly Countering Resistance Statements

For example, the patient may say “How can I have a drinking problem when I drink less than all my buddies?” You can reply without insisting that there is a problem per se, but rather an issue that is worthy of further assessment and discussion, within the context of this brief interview.

### ➤ Focus On The Less Resistant Aspects Of The Statement

For example, the above patient may be wondering about how much drinking is considered to be problematic. The response might be to restate his concern and ask about his level of drinking, which is the less resistant part of the statement. “It sounds like you’re confused about how you could have an issue with your drinking if you drink 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 overdoing it with my drinking lately,” the EP could say, “You don’t need me to tell you you’ve been drinking a little too much lately, you’ve noticed yourself.”). 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” this could be restated as “It sounds like you’ve been thinking about changing”.

### ➤ Other Helpful Hints

Encourage patients to think about previous times they have cut back on their drinking.

Praise patients for their willingness to discuss such a sensitive topic, as well as their willingness to consider change.

View the patient as an active participant in the intervention.

## VIII. Common Problems

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

### ➤ Refusal To Engage In The Discussion Of The Topic Of Drinking

Most patients will agree to discuss the topic, because they have already consented to be in the study, 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 3 pieces of information:

1. His drinking exceeds low-risk drinking limits (or is harmful);
2. Low-risk drinking limits recommended for pts 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).

### ➤ 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 drinking?”
3. Discussion of Pros and Cons (refer to list).

### ➤ Unwilling To Associate Visit With Alcohol Use

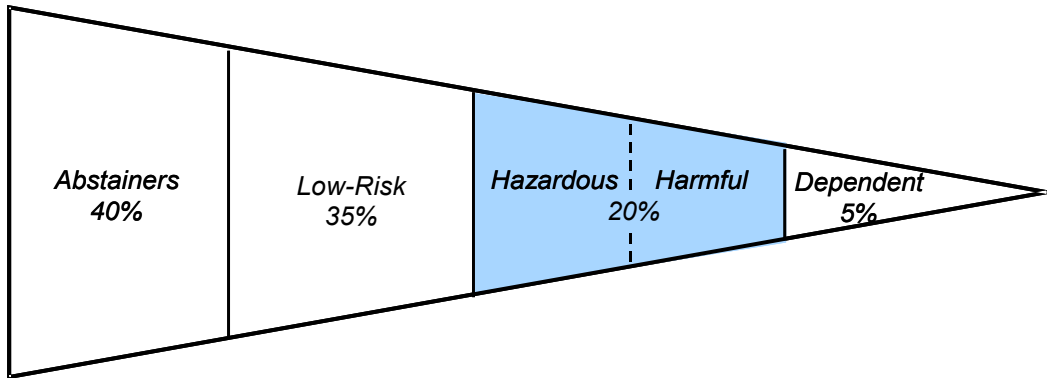
Don't force the patient to make the connection, but be sure that he/she hears that in your medical opinion there is a connection. However, this connection may not be the thing that ultimately motivates the patient to change. If this happens try to find some other negative consequence of drinking that the patient can agree is related to alcohol and bothersome enough to consider drinking less.

### ➤ Not Ready To Change Drinking Patterns Into Safe Limits

Tell the patient that the best 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.



**FIGURE 1: THE SPECTRUM OF ALCOHOL USE** <sup>21</sup>



**TYPES OF DRINKERS:**

Abstainers	Drink no alcohol.
Low-risk	Drink within NIAAA guidelines. 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.
Dependent	Physically dependent on alcohol (experience withdrawal symptoms); meet criteria for dependence based upon assessment criteria such as DSM-IV.

**TABLE 1: CLINICAL STUDIES OF SBI** <sup>17</sup>

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 <ul style="list-style-type: none"> <li>Breath BAC ≥ 0.03 mg/dL or</li> <li>Report of alcohol use 6 hours prior to injury or</li> <li>AUDIT score ≥ 8</li> </ul>	<ul style="list-style-type: none"> <li>Standard care</li> <li>One 40- to 60-minute BI</li> <li>One 40- to 60-minute BI followed by scheduled return visit (booster) 7–10 days later (BIB)</li> </ul> <p>Interventions performed by 8 clinically experienced research assistants (Ph.D., master's or bachelor's level)</p>	1 year (phone, mail, in person): 83%	<ul style="list-style-type: none"> <li>Greater reduction in alcohol-related injuries during the followup period in the BIB group</li> <li>Decreases in alcohol consumption in all groups</li> <li>Greater reduction in alcohol-related negative consequences in the BIB group</li> </ul>	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 <ul style="list-style-type: none"> <li>Positive for alcohol in breath, saliva, or blood or</li> <li>Self-reported alcohol use 6 hours prior to injury</li> </ul> <p>Note: 47% of adolescents asked to participate refused</p>	<ul style="list-style-type: none"> <li>Standard care (5 minutes)</li> <li>One 35- to 45-minute BI (motivational interview)</li> </ul> <p>Interventions performed by 12 clinically experienced research assistants (bachelor's and master's level)</p> <p>No followup sessions</p>	<ul style="list-style-type: none"> <li>3 months (phone): 93.4%</li> <li>6 months (in person): 89.5%</li> <li>12 months (in person): 89.5%</li> </ul>	<ul style="list-style-type: none"> <li>Greater reduction in frequency of drinking and binge drinking for patients with pre-existing problematic alcohol use in the BI group</li> </ul>	Positive effect with the BI for problem drinkers

## TABLE 2: GUIDELINES

(Referred to in Step 2)

### NIAAA GUIDELINES FOR LOW-RISK DRINKING:

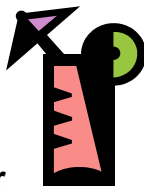
# Standard Drinks for Low-Risk Drinking		
	Per Week	Per Occasion
Men	14	4
Women	7	3
All age >65	7	3

### WHAT IS A STANDARD DRINK?

1 Standard Drink equals:



or



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



12 oz. Beer



5 oz. wine

### **TABLE 3: NATIONAL NORMS**

(Referred to in Step 2)

#### **Alcohol Consumption Norms for U.S. Adults**

<u>Drinks per week</u>	<u>Total %</u>	<u>% Men</u>	<u>% Women</u>
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

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

**TABLE 4: READINESS RULER**

(Referred to in Step 3)

<b><u>READINESS RULER</u></b>										
<b>Not ready</b>									<b>Very ready</b>	
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>	

## **TABLE 5: PROS AND CONS**

(Referred to in Step 3)

### **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  
To make me feel better  
Other reasons: \_\_\_\_\_

## **TABLE 6: DRINKING AGREEMENT**

(Referred to in Step 4)

<u><b>DRINKING AGREEMENT</b></u>	
Date:	_____
I, _____,	agree to the following drinking limit:
Number of drinks per week:	_____
Number of drinks per occasion:	_____
Patient signature:	_____
<b>Remember: It is never a good idea to drink and drive and it's Illegal to drink if you're under the age of 21.</b>	



## TABLE 7: HEALTH INFORMATION HANDOUT

(Referred to in Step 4)

(FRONT)

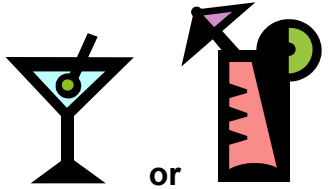
Please read the following important information, about reducing risky health behaviors, which may apply to you.

Health Risk	What we know...	What you can do...
<b>Smoking</b>	<ul style="list-style-type: none"><li>∞ It's not healthy to smoke.</li><li>∞ There are many options available to help you stop.</li></ul>	We recommend that you speak with your primary care physician for his or her advice.
<b>Exercise</b>	<ul style="list-style-type: none"><li>∞ It's healthy to exercise on a regular basis.</li><li>∞ The amount of exercise recommended on a daily basis is 30 minutes.</li></ul>	We recommend that you speak with your primary care physician for his or her advice.
<b>Alcohol Use</b>	<ul style="list-style-type: none"><li>∞ Drinking above low risk limits will increase your risk for illness and/or injury.</li><li>∞ Please see the drinking information for your sex and age, on the back of this paper.</li><li>∞ It's never good to drink and drive.</li></ul>	We recommend that you speak with your primary care physician for his or her advice.
<b>Safety Issues</b>	<ul style="list-style-type: none"><li>∞ It is always healthy to take safety precautions.</li><li>∞ Always use a seatbelt when in a car.</li><li>∞ Always wear a helmet while biking, riding a motorcycle or rollerblading.</li></ul>	We recommend that you speak with your primary care physician for his or her advice.

(BACK)

## WHAT IS A STANDARD DRINK?

1 Standard Drink equals:



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	
	<u>Week</u>	<u>Occasion</u>
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

**TABLE 8: CASE EXAMPLE OF BNI DIALOGUE**

SPEAKER	DIALOGUE	PROCEDURE
Physician	Hello, I am Dr. Jones. Would you mind spending a few minutes talking about your use of alcohol?	<b>RAISE THE SUBJECT</b>
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?	<b>PROVIDE FEEDBACK</b>  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.	

<b>SPEAKER</b>	<b>IALOGUE</b>	<b>PROCEDURE</b>
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?	<b>ENHANCE MOTIVATION</b> 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 muscle 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?	<b>NEGOTIATE &amp; ADVISE</b>  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

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*Appendix B*  
**SCREENING TOOLS**

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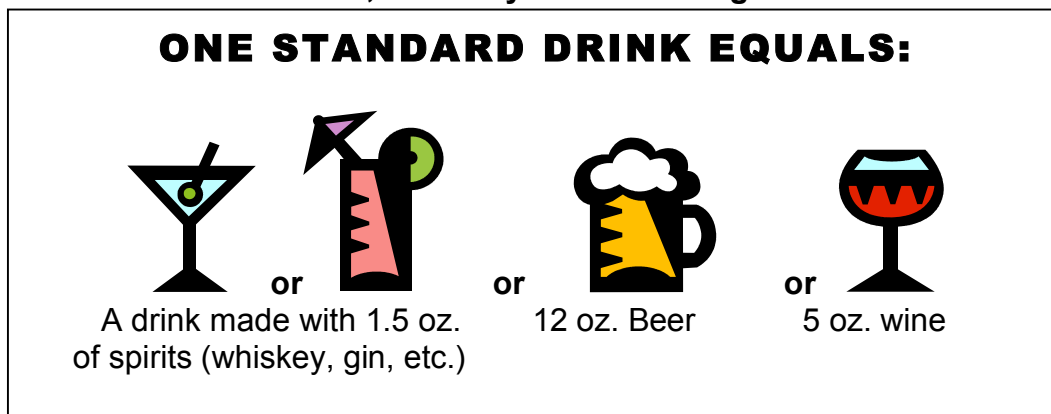


## APPENDIX B: ALCOHOL SCREENING TOOLS

### The Standard Drink.

Before beginning screening, the health care provider and the patient must both speak the same language regarding alcohol. When referring to “a drink” it is important to clarify what quantity of alcohol one means. In the United States, for the purposes of the screening tools described below, one drink refers to the equivalent of 14 grams of pure alcohol or about 0.6 fluid ounces of pure alcohol. Thus one standard drink is usually one 12 oz beer, one 5 oz glass of table wine, or one mixed drink made with 1.5ozs of spirits.<sup>1</sup>

Figure 1: Standard Drink Sizes, Courtesy Yale Brief Negotiated Interview Manual<sup>2</sup>



### The AUDIT-C, the Screening Tool for the IHS-Tribal ASBI Program.

The AUDIT-C is the *highly* preferred instrument for the IHS-Tribal ASBI Program. It is a brief, three question screening tool that has been demonstrated to have high specificity and sensitivity in identifying patients with hazardous or harmful drinking patterns.<sup>3,4</sup> In comparison with longer screening tools or with patient self-report of risky drinking, this method has been shown to effectively recognize most people who misuse alcohol.

The AUDIT-C was derived by taking the first three questions from AUDIT, *The Alcohol Use Disorders Identification Test*<sup>5</sup> that was developed for the World Health Organization. These items query patients regarding their alcohol consumption patterns and are specifically designed to evaluate hazardous alcohol use. As a result, the AUDIT-C is a quick tool for use in an Alcohol Screening and Brief Intervention Program; especially as such programs do not focus on the dependent drinker. The AUDIT-C neither specifically identifies nor excludes the dependent drinker.

Scoring of the AUDIT-C: The AUDIT-C is scored on a scale of zero to twelve; a score of zero reflects abstinence from alcohol.

- ∞ In women, a score of four or higher is considered positive.
- ∞ In men, a score of five or more is considered positive.

- ∞ Patients with these scores should be offered a brief intervention.
- ∞ Patients with scores below these limits should be offered preventive advice to remain within the low-risk drinking guidelines.
- ∞ For patients who have never been in alcohol treatment, scores of higher than seven are associated with alcohol dependence. These patients should have additional assessment and may need referral to treatment.

It is possible that a person drinking within low-risk limits will screen positive on the AUDIT-C, resulting in a false positive. This most frequently occurs when all of a patient's points come from the first question alone. In this situation, it is advised that the provider review that patient's drinking history over the past several months to review the accuracy of the test. In addition, the screener may wish to proceed to the full AUDIT tool.

### The **AUDIT-C** Tool

1. How often do you have a drink containing alcohol?
  - Never (0 pts)
  - Monthly or less (1 pt)
  - Two to four times a month (2 pts)
  - Two to three times a week (3 pts)
  - Four or more times a week (4 pts)
  
2. How many drinks do you have on a typical day when you are drinking?
  - One or Two (0 pts)
  - Three or Four (1 pt)
  - Five or Six (2 pts)
  - Seven to Nine (3 pts)
  - Ten or More (4 pts)
  
3. How often do you have five or more drinks on one occasion?
  - Never (0 pts)
  - Less than monthly (1 pt)
  - Monthly (2 pts)
  - Weekly (3 pts)
  - Daily or almost daily (4 pts)

The full AUDIT is a ten question instrument that not only evaluates issues of hazardous alcohol consumption but also symptoms of alcohol dependence and alcohol-related

problems. The tool was developed based on data collected from a large multinational study and focuses on recent symptoms rather than lifetime experiences. The full AUDIT does not take long to administer and can be provided either as a verbal interview or a written questionnaire. It is scored on a scale of zero to forty. If a person scores eight or more, it is an indicator of hazardous or harmful alcohol use and potential alcohol dependence. The World Health Organization has divided AUDIT scores into four risk levels, each with a designated intervention level ranging from alcohol intervention to simple advice to adding a brief intervention to immediate referral to a specialist.<sup>4</sup> Other researchers have decided that all patients with an AUDIT score over eight merits a brief intervention and patients with a score over 16 require referral for treatment.<sup>4</sup>

### **Screening Adolescents: The CRAFFT Test<sup>6</sup>**

Because adolescents have unique social situations and are in different developmental stages, alcohol and drug misuse patterns may not be as easy to identify in this population. The CRAFFT is an alternative tool which screens for alcohol and drug problems by utilizing questions regarding behaviors that are reliable indicators for consumption and risk rather than inquiring directly. It is verbally administered and simple to score. Each yes answer receives one point; a score of two or more indicates a potential problem and the need to proceed to a brief intervention or additional evaluation for treatment.

## **The CRAFFT Tool**

- 1. Have you ever ridden in a **C**ar driven by someone (including yourself) who was high or had been using alcohol or drugs?**
- 2. Do you ever use alcohol or drugs to **R**elax, feel better about yourself, or fit in?**
- 3. Do you ever use alcohol or drugs while you are by yourself, **A**lone?**
- 4. Do you ever **F**orget things you did while using alcohol or drugs?**
- 5. Do your **F**amily or **F**riends ever tell you that you should cut down on your drinking or drug use?**
- 6. Have you ever gotten into **T**rouble while you were using alcohol or drugs?**

**Source: Knight JR, Sherrit L, Shrier LS, Harris SK, Chang G. "Validity of the CRAFFT Substance Abuse Screening Test Among Adolescent Clinic Patients." *Archives of Pediatrics and Adolescent Medicine*. 2002; 156(6): 607-614.**

### **The CAGE: Commonly Used, but Correctly?**

The CAGE<sup>7</sup> may be the most commonly used alcohol screening tool. It asks four questions to identify patients with alcohol dependence syndrome and is positive when the answer to two or more questions is "yes." The disadvantage of this tool is that it misses at-risk alcohol and drug use behaviors. In addition, the CAGE questions refer to the patient's lifetime drinking experience and may not capture current behavior.

## The **CAGE** Tool

1. Have you ever felt you should **Cut** down on your drinking?
2. Have people **Annoyed** you by criticizing your drinking?
3. Have you ever felt bad or **Guilty** about your drinking?
4. Have you had an **Eye opener** first thing in the morning to steady nerves or get rid of a hangover?

Source: Ewing JA. "Detecting Alcoholism: The CAGE Questionnaire." *JAMA* 1984; 252(14): 1905 -1907.

To improve identification of patients who are at-risk for hazardous and harmful drinking or drug use, many practitioners add three questions regarding consumption to the CAGE tool. These are similar to the questions asked by the AUDIT-C. If the product of the responses to questions one and two produces a total number of drinks per week exceeding the recommended weekly guidelines (seven for women and 14 for men) or if the response to question 3 is more than zero, the patient is considered positive.

## Consumption Questions to Accompany the **CAGE** Tool

1. On average, how many days per week do you have a drink containing alcohol?
2. On a typical day when you drink, how many drinks do you have?
3. How many times in the past year have you had **X** or more drinks in a day?  
(**X=5** for men; **X=4** for women)

## Document All Screening

In any program, the purpose of screening is to identify patients with alcohol and drug misuse behaviors so that they may receive additional treatment, whether that is a brief intervention or more intensive care. Consequentially, the results of such screening must be clearly indicated so whoever is to provide the subsequent treatment can locate the patients and offer care. Moreover, scores on tests may then be tracked over time to monitor for changes. For IHS-Tribal ASBI Program, documentation instructions are provided in the Appendix E, which also includes information regarding CPT/HCPCS and GPRA codes.

## References

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7. Ewing JA. "Detecting Alcoholism: The CAGE Questionnaire." *JAMA* 1984; 252(14): 1905-1907.

*Appendix C*  
**CUE CARDS AND PATIENT HANDOUTS**

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**APPENDIX C: CUE CARDS AND PATIENT HANDOUTS**

**The AUDIT-C Tool**

4. How often do you have a drink containing alcohol?
  - Never (0 pts)
  - Monthly or less (1 pt)
  - Two to four times a month (2 pts)
  - Two to three times a week (3 pts)
  - Four or more times a week (4 pts)
  
5. How many drinks do you have on a typical day when you are drinking?
  - One or Two (0 pts)
  - Three or Four (1 pt)
  - Five or Six (2 pts)
  - Seven to Nine (3 pts)
  - Ten or More (4 pts)
  
6. How often do you have five or more drinks on one occasion?
  - Never (0 pts)
  - Less than monthly (1 pt)
  - Monthly (2 pts)
  - Weekly (3 pts)
  - Daily or almost daily (4 pts)

Score: Women  $\geq$  **3** or Men  $\geq$  **4** is positive

## NIAAA AT-RISK DRINKING

	PER WEEK	PER OCCASION
MEN	> 14 DRINKS	> 4 DRINKS
WOMEN	> 7 DRINKS	> 3 DRINKS
AGE > 65	> 7 DRINKS	> 3 DRINKS

**Standard Drink = 14g of pure alcohol**

**or ONE**

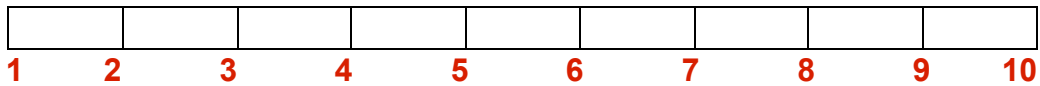
1.5 oz of liquor

5 oz glass of wine

12 oz of beer



## READINESS TO CHANGE RULER



## BRIEF NEGOTIATED INTERVIEW (BNI) STEPS

<p><b>1. Raise subject</b></p>	<p>➤ Hello, I am _____. Would you mind taking a few minutes to talk with me about your alcohol use?          &lt;&lt;PAUSE&gt;&gt;</p>
<p><b>2. Provide feedback</b></p> <p style="padding-left: 40px;"><b>Review screen</b></p> <p style="padding-left: 40px;"><b>Make connection</b></p> <p style="padding-left: 40px;"><b>Show NIAAA guidelines &amp; norms</b></p>	<p>➤ From what I understand you are drinking [insert screening data]... We know that drinking above certain levels can cause problems, such as [insert facts]...I am concerned about your drinking.</p> <p>➤ What connection (if any) do you see between your drinking and this ED visit?  <b>If patient sees connection:</b>              reiterate what patient has said  <b>If patient does not see connection:</b>              make one using facts</p> <p>➤ These are what we consider the upper limits of low risk drinking for your age and sex. By low risk we mean that you would be less likely to experience illness or injury if you stayed within these guidelines.</p>
<p><b>3. Enhance motivation</b></p> <p style="padding-left: 40px;"><b>Readiness to change</b></p> <p style="padding-left: 40px;"><b>Develop discrepancy</b></p>	<p>➤ <b>[Show readiness ruler]</b> On a scale from 1-10, how ready are you to change any aspect of your drinking?</p> <p>➤ <b>If patient says:</b>              <b>≥2 ask</b> Why did you choose that number and not a lower one?;              <b>≤1 or unwilling, ask</b> What would make this a problem for you?...How important would it be for you to prevent that from happening?... Have you ever done anything you wish you hadn't while drinking? Discuss pros &amp; cons.</p>
<p><b>4. Negotiate &amp; advise</b></p> <p style="padding-left: 40px;"><b>Negotiate goal</b></p> <p style="padding-left: 40px;"><b>Give advice</b></p> <p style="padding-left: 40px;"><b>Summarize</b></p> <p style="padding-left: 40px;"><b>Provide handouts</b></p> <p style="padding-left: 40px;"><b>Suggest f/u</b></p> <p style="padding-left: 40px;"><b>Thank patient</b></p>	<p>➤ Reiterate what patient says in Step 3 and say, What's the next step?</p> <p>➤ If you can stay within these limits you will be less likely to experience [further] illness or injury related to alcohol use.</p> <p>➤ This is what I've 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.</p> <p>➤ <b>Provide:</b>              - Drinking agreement [patient keeps 1 copy]              - Patient general health information handout</p> <p>➤ <b>Suggest f/u to discuss drinking level/pattern</b></p> <p>➤ <b>Thank patient for his/her time</b></p>

*Project ED Health, D'Onofrio, Pantalon, et al. (NIAAA)*

Drinking Agreement:

**Date** \_\_\_\_\_

**I, \_\_\_\_\_, agree to the following drinking limit:**

**Number of drinks per week:** \_\_\_\_\_

**Number of drinks per occasion:** \_\_\_\_\_

**Patient**

**Signature:** \_\_\_\_\_

**Remember: It is never a good idea to drink and drive  
It is illegal to drink alcohol if you are under the age of 21.**

## **What to do with Patients whose Screening Test Results are Negative**

### **Provide Feedback about the Results of the Screening Test**

#### *Example*

*"I have looked over the results of the questionnaire you completed a few minutes ago. If you remember, the questions asked about how much alcohol you consume, and whether you have experienced any problems in connection with your drinking. From your answers it appears that you are at low risk of experiencing alcohol-related problems if you continue to drink moderately (abstain)."*

### **Educate Patients about Low-Risk Levels and the Hazards of Exceeding them**

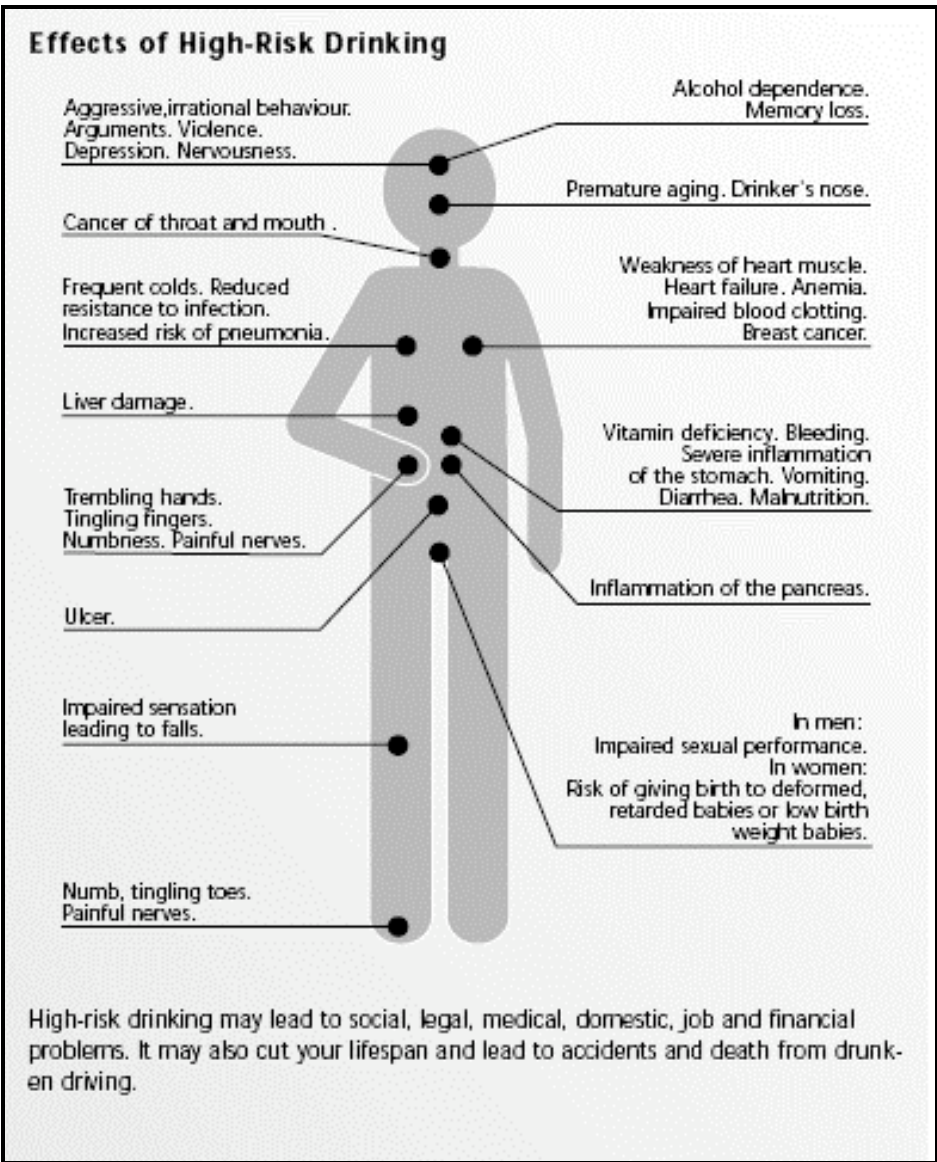
#### *Example*

*"If you do drink, please do not consume more than two drinks per day, and always make sure that you avoid drinking at least two days of the week, even in small amounts. It is often useful to pay attention to the number of 'standard drinks' you consume, keeping in mind that one bottle of beer, one glass of wine, and one drink of spirits generally contain about the same amounts of alcohol. People who exceed these levels increase their chances of alcohol-related health problems like accidents, injuries, high blood pressure, liver disease, cancer, and heart disease."*

### **Congratulate Patients for their Adherence to the Guidelines**

#### *Example*

*"So keep up the good work and always try to keep your alcohol consumption below or within the low-risk guidelines."*



Good handout for effects of drinking.

Box 5

**The Stages of Change and Associated Brief Intervention Elements<sup>20</sup>**

Stage	Definition	Brief Intervention Elements to be Emphasized
Precontemplation	The hazardous or harmful drinker is not considering change in the near future, and may not be aware of the actual or potential health consequences of continued drinking at this level	<b>Feedback</b> about the results of the screening, and <b>Information</b> about the hazards of drinking
Contemplation	The drinker may be aware of alcohol-related consequences but is ambivalent about changing	Emphasize the benefits of changing, give <b>Information</b> about alcohol problems, the risks of delaying, and discuss how to choose a <b>Goal</b>
Preparation	The drinker has already decided to change and plans to take action	Discuss how to choose a <b>Goal</b> , and give <b>Advice</b> and <b>Encouragement</b>
Action	The drinker has begun to cut down or stop drinking, but change has not become a permanent feature	Review <b>Advice</b> , give <b>Encouragement</b>
Maintenance	The drinker has achieved moderate drinking or abstinence on a relatively permanent basis	Give <b>Encouragement</b>

---

## Creating Your Habit-Breaking Plan

Reasons for cutting down or stopping drinking

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Dangerous Situation 1

---

Ways of coping:

1. \_\_\_\_\_
2. \_\_\_\_\_

Dangerous Situation 2

---

Ways of coping:

1. \_\_\_\_\_
2. \_\_\_\_\_

Dangerous Situation 3

---

Ways of coping:

1. \_\_\_\_\_
2. \_\_\_\_\_

Dangerous Situation 4

---

Ways of coping:

1. \_\_\_\_\_
2. \_\_\_\_\_

Ways of meeting others who don't drink or do so within low-risk limits

1. \_\_\_\_\_
2. \_\_\_\_\_

Ways of avoiding boredom to try

1. \_\_\_\_\_
2. \_\_\_\_\_

How to remember your plan

1. \_\_\_\_\_
2. \_\_\_\_\_



*Appendix D*  
**RESOURCES AND LINKS**

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## APPENDIX D: RESOURCES AND LINKS

**Below is an annotated list of websites for additional information regarding Trauma Treatment of Alcohol-Related Injuries, Alcohol Screening, and Brief Motivational Interviewing.**

1. [http://whqlibdoc.who.int/hq/2001/WHO\\_MS\\_D\\_MSB\\_01.6a.pdf](http://whqlibdoc.who.int/hq/2001/WHO_MS_D_MSB_01.6a.pdf)

*The Alcohol Use Disorders Identification Test: Guidelines for Use in Primary Care (Second Edition)* by Thomas F. Babor, John C. Higgins-Biddle, John B. Saunders and Maristela G. Monteiro, published by the Department of Mental Health and Substance Dependence of the World Health Organization in 2001. This is the original manual produced by the World Health Organization that introduces the AUDIT, the Alcohol Use Disorders Identification Test, to identify persons with hazardous and harmful patterns of alcohol consumption. In an easy to read format it provides information ranging from why to screen for alcohol use to how to administer and score the full AUDIT to how to help patients. Their tool is available to download. There is NOT a discussion regarding the usage of just the first three questions as the AUDIT-C.

2. [http://libdoc.who.int/hq/2001/WHO\\_MS\\_D\\_MSB\\_01.6b.pdf](http://libdoc.who.int/hq/2001/WHO_MS_D_MSB_01.6b.pdf)

*Brief Intervention for Hazardous and Harmful Drinking: A Manual for Use in Primary Care* by Thomas F. Babor and John C. Higgins-Biddle, published by the Department of Mental Health and Substance Dependence of the World Health Organization in 2001. To be used in conjunction with the AUDIT manual (see #1 above), this manual was developed by the World Health Organization to instruct primary care workers how to conduct brief interventions. Although the IHS-Tribal ASBI Program uses the AUDIT-C for alcohol screening, many other program similarities will be evident. In addition, several patient handouts from this manual are highly recommended.

3. <http://www.niaaa.nih.gov/guide>

*Helping Patients Who Drink Too Much: A Clinicians Guide, Updated 2005 Edition* and an associated instructive power point with slides that can be downloaded and edited are available at this website. In addition, on-line training with free CME/CE credits is available. These basic guides are the foundations for the screening and brief intervention programs that have been developed. Also consider checking out the NIAAA's April 2005, Alcohol Alert #65 for a discussion of various alcohol screening tools, available at:

<http://pubs.niaaa.nih.gov/publications/aa65/AA65.htm>

4. [http://www.cdc.gov/ncipc/Spotlight/2003\\_Alcohol\\_Conference\\_Proceedings.htm](http://www.cdc.gov/ncipc/Spotlight/2003_Alcohol_Conference_Proceedings.htm)

The CDC sponsored conference, "Alcohol and Other Drug Problems Among Hospitalized Trauma Patients: Controlling Complications, Mortality, and Trauma Recidivism" earned a special issue of the *Journal of Trauma—Injury, Infection & Critical Care* in September 2005 and has been the essential knowledge base for many injury prevention programs. The proceedings of this conference, as published in the *Journal*, are summarized at this website and available by link.

5. <http://www.mayatech.com/cti/sbitrain07>

This is the information page for the American College of Surgeons, Committee on Trauma's Screening and Brief Intervention Trainings. The schedule for their workshops is available on this site. Towards the bottom of the page is the link to the *Committee on Trauma's Quick Guide to Alcohol Screening and Brief Intervention (SBI) for Trauma Patients*. It is also sponsored by NHTSA and SAMHSA.

6. <http://sbirt.samhsa.gov>

The Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment (SAMHSA/CSAT) website offers a detailed discussion regarding their version of screening and brief intervention which they call SBIRT: Screening, Brief Intervention, Referral, and Treatment. This webpage has links to a number of other research references. In addition, in the near future they plan to have a link to the CDC's online guide, *Implementing Screening and Brief Interventions (SBI) for Unhealthy Alcohol Use: A Step by Step Guide for Trauma Centers*, which is not yet available.

7. <http://www.nhtsa.dot.gov/people/injury/alcohol/EmergCare/toc.htm>

In June 2000, the National Highway Traffic Safety Administration, the American College of Emergency Physicians, and the Emergency Nurses Association sponsored a national conference in Washington, D.C. on *Developing Best Practices of Emergency Care for the Alcohol-Impaired Patient*. This website compiles the detailed recommendations, background research, and goals for future directions. Appendix D also offers sample alcohol screening tools.

8. <http://www.projectmainstream.net/projectmainstream.asp?cid=23>

Project Mainstream is administered by the Association for Medical Education and Research in Substance Abuse (AMERSA). The area of interest on this website is the 2005 Syllabus. It was developed by the HRSA-AMERSA-SAMHSA/CSAT Interdisciplinary Faculty Development Program in Substance Abuse Education to provide training materials for health professional faculty to train others to assist in achieving Healthy People 2010 goals regarding substance use and related disorders. From the home page, go to the "Resources Section," then click "Project Syllabus" and select from the Modules. Review both the power point presentation and the accompanying word document. The modules of relevance are Module 3: Screening and Assessment; Module 4: Intervention and Referral, and Module 5: Motivational Interviewing, all written by Richard L Brown, MD MPH. These are user-friendly, easy to digest presentations that walk through each topic and hit all the key points without becoming too dense to read. They include references should more information be desired. Overall they are nicely arranged and taught.

9. <http://www.motivationalinterviewing.org>

This website was developed by two of the key founders of the theory, William R Miller Ph.D. and Stephen Rollnick, Ph.D., in cooperation with Motivational Interviewing Network of Trainers and Motivational Interviewing Resources LLC. Under section, "Background," the website provides a nice discussion of what is "Motivational Interviewing," how it began and the philosophy behind it. Also gives instruction on key

techniques and how to avoid traps in performing the technique. In the “Library” section, there are a number of references and detailed how-to manuals. Of greater interest in the library section may be the links to brief transcripts of examples of motivational interviews that have been performed illustrating various common events. These transcripts give insight into the actual experience without having to actually purchase the videos. The “Training” section of the website offers both lists of upcoming training events as well as several worthwhile, detailed, downloadable exercises.

10. [Http://www1.alcoholcme.com/PageReq?id=1794:12875](http://www1.alcoholcme.com/PageReq?id=1794:12875)

Alcohol CME is funded by the National Institute on Alcohol Abuse and Alcoholism to offer educational programs for physicians and other health professionals about alcohol use disorders and treatment. Registration is free but is required to view the courses and obtain CMEs/CEUs. This particular course, *Motivational Interviewing for Primary Care* introduces the background and technique of motivational interviewing and how it applies not only to alcohol use but also tobacco and other substances. At the end of the course there is an optional section on more advanced techniques. It is approved for one hour of credit.

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*Appendix E*  
**DOCUMENTATION & CLINICAL  
QUALITY PERFORMANCE**

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## APPENDIX E: DOCUMENTATION & CLINICAL QUALITY PERFORMANCE

Documentation that Alcohol Screening and Brief Intervention have been received by a patient is of great importance not only to ensuring the provision of quality coordinated care and improved health outcomes, but also to the monitoring and evaluation of the ASBI model of care. Initial evaluation activities will focus on the early stages of implementation – primarily the delivery of ASBI services in the Emergency Room setting. Future activities may include the development of clinical performance indicators that measure the reduction in injuries and illnesses achieved as a result of wide deployment of the ASBI model of care. Accurate and consistent documentation of ASBI activities in the patient’s medical record is essential to ongoing performance monitoring and program evaluation.

The Resource and Patient Management System (RPMS) is the health information system for the Indian Health Service. It is in wide use at many tribal, urban and federal healthcare facilities. The RPMS Electronic Health System is a Windows-based graphical user interface to RPMS that assists the clinician in managing all aspects of the patient’s care. The Clinical Reporting System (CRS) is an RPMS application that is used for reporting of clinical quality measures. The next version of CRS, Version 8.0, will include a new set of measures in a topic entitled *Alcohol Screening and Brief Intervention in the ER*.

The following section provides an overview of the ASBI clinical quality performance measure logic and guidance for documenting ASBI activities in the RPMS EHR. A list of available codes to support billing for ASBI activities is also included.

### **1. There will be two main denominators (i.e. the set of visits being reviewed) for this set of measures:**

- ∞ Number of visits for Active Clinical patients age 15-34 seen in the emergency room (ER) for an injury.
- ∞ Number of visits for User Population patients age 15-34 seen in the emergency room (ER) for an injury.

In meeting the denominator definition, the patient must: A) meet the Active Clinical definition or User Population definition and B) must have a visit to the ER for an injury during the report period. The key difference between the two denominators is the Active Clinical definition requires the patient to have two visits to defined medical clinics (i.e. primary care clinics, which does not include the ER) during the past three years, whereas User Population requires only one visit to any clinic in the past three years (which includes ER visits).

### **2. The numerators (i.e. the criteria the visits in the denominator must meet) that will be included for each of these denominators are:**

- ∞ Number of visits for patients who were screened in the ER for hazardous alcohol use.
  - Number of visits where the patients screened positive.
- ∞ Number of visits for patients with a positive screen who were provided a brief negotiated interview (BNI) at or within 7 days of the ER visit.
  - Number of visits for patients who received a BNI at the ER.
  - Number of visits for patients who received a BNI within 7 days of the ER visit.

### 3. The definitions used in this set of measures are:

- ∞ Age of the patient will be calculated as of the beginning of the report period. The report period is any one year period defined by the user.
- ∞ Emergency room visit defined with clinic code of 30.
- ∞ Injury diagnosis defined with any of the following ICD-9 codes during the report period: primary or secondary purpose of visit (POV) 800.0–999.9 or E800.0-E989.
- ∞ Hazardous alcohol screening may be conducted by any provider using a standardized brief alcohol screening instrument, including but not limited to the AUDIT, AUDIT-C (first three questions of the 10-item AUDIT), CAGE, CRAFFT or SASQ (Single Alcohol Screening Question). The ASBI Program recommends the AUDIT, the AUDIT-C or the SASQ for adults and the CRAFFT for adolescents.
  - Screening with a standardized instrument other than CAGE: After the screening is conducted, the screening result is documented in RPMS by selecting the equivalent allowable result available with the generic RPMS Alcohol Screening Exam Code #35. Essentially this means mapping the screening score to positive/abnormal or negative/normal.

For example, a score of 8 or greater on the AUDIT is an indication of alcohol use in excess of low-risk guidelines and the equivalent RPMS screening exam code result would be positive/abnormal.

- PCC Data Entry: Providers should document the results of screening, the name of the screening instrument used, and a brief comment as needed on the PCC encounter form. Data entry staff can enter this information into RPMS using the “EX” mnemonic for exam code #35. The name of the instrument can be documented in the exam code comment field along with any other comment that the provider documented.

- Electronic Health Record: Providers can enter the results of screening directly into RPMS by selecting the Alcohol Screening Exam Code. Exam codes are often found on the Wellness Tab in the EHR. The name of the screening instrument and any other relevant brief comment can be captured in the comment field.

The AUDIT, AUDIT-C and CRAFFT will be included in the VMEASUREMENTS file with the next release of the RPMS Standard Table updates (anticipated April 2008). VMEASUREMENTS are measurements associated with a visit (V) such as height, weight, blood pressure, etc. This will preclude the need to map the results of screening using these tools to the allowable results in the generic alcohol screening exam code.

It is important to remember that the EHR can look different at each facility because of the ability to customize the user visual templates. However, each EHR will have all of the components needed for ASBI – exam codes, measurements, billing codes, etc. EHR Clinical Application Coordinators (CAC) are readily available to assist providers in finding things in the EHR, set up short cuts for documentation, etc.

- PCC Data Entry: Providers should enter this information in the Health Factors section of the PCC encounter form. Data entry staff can then enter this information into RPMS with the “HF” mnemonic and select the appropriate CAGE Health Factor.
  - Electronic Health Record: Providers can enter CAGE results directly into RPMS by selecting the appropriate CAGE result. Health Factors are often found on the Wellness Tab in the EHR.
- ∞ Other Alcohol Screening Codes: The preferred method of documenting screening is with the use of the Alcohol Screening Exam Code or the CAGE Health Factor. These codes capture the fact that a screening was conducted as well as the result of the screening. However, the CRS logic for *patients who have been screened* also includes the following codes if they are present during the report period:
- ICD-9 code: V79.1 Screening for Alcoholism
  - CPT code: H0049 Alcohol and/or drug Screening

It is important to note that since the result of screening is not captured with these codes they are *not counted for the positive screen numerator*.

#### **4. Patients with a positive screen are required to have a brief intervention, which is defined as a:**

- ∞ Brief negotiated interview (BNI) conducted either at the ER injury visit or within seven (7) days of the ER visit. The BNI may be conducted by any provider at any face-to-face visit (excludes chart reviews and

telecommunication visits). However, the provider must be trained to provide appropriate alcohol intervention.

**A brief negotiated interview at a minimum includes the following activities:**

- Raise Subject – Establish rapport and directly, but non-judgmentally, raise the issue of the patient’s alcohol use.
  - Provide Feedback – Review the results of alcohol screening, comparing quantity and frequency to non-hazardous drinking. Discuss the connection between the use of alcohol and the injury or adverse health consequence(s) that resulted in the hospital or clinic visit.
  - Enhance Motivation – Assess the patient’s readiness to change using the Readiness to Change scale of 1 – 10 (1 = Ready; 10 = Not Ready). Explore pros and cons if the patient is not ready or is resisting change.
  - Negotiate and Advise – Summarize the patient’s readiness to change and identify next steps. Explore options and negotiate a feasible plan for treatment when indicated.
  - Schedule a follow-up appointment with the patient’s primary care or behavioral health provider.
- ∞ It is very important to clearly document the occurrence of a Brief Negotiated Interview in RPMS using either PCC Data Entry or the Electronic Health Record. This can be done by entering one, or both, of the following codes:
- CPT code H0050 (Alcohol and/or Drug Services, Brief Intervention, Per 15 Minutes) or
  - Patient Education code AOD-INJ (Alcohol and Other Drugs – Injury)\*
- \*This is a new RPMS Patient Education code that will be available in RPMS in April 2008.
- ∞ If a patient has multiple ER visits for injury during the Report Period, each visit will be counted in the denominator. For the screening numerator, each ER visit with injury at which the patient was screened for hazardous alcohol use will be counted. For the positive alcohol use screen numerator, each ER visit with injury at which the patient screened positive for hazardous alcohol use will be counted. For the BNI numerators, each visit where the patient was either provided a BNI at the ER or within 7 days of the ER visit will be counted. An example of this logic is shown in the table below.

Patient: John Doe			
Report Period: 01/01/08 – 12/31/08			
ER Visit with Injury	Screen Done	Positive Screen	BNI within 7 Days
07/17/08	Yes	Yes	Yes
09/01/08	Yes	Yes	No BNI
11/15/08	No	No Screen	No BNI
CRS Measure Results			
Denominator Count	Screening Number Count	Positive Screening Number Count	BNI Number Count
3	2	2	1

## 5. Inclusion in RPMS Clinical Reporting System (CRS) Reports

All of the measures for this new topic will be available in the CRS Selected Measures (Local) Report, and a subset of the measures will be included in the new CRS Other National Measures Report. CRS Version 8.0 is anticipated to be released in April 2008.

It is important to remember that the EHR can look different at each facility because of the ability to customize the user visual templates. However, each EHR will have all of the components needed for ASBI – exam codes, measurements, billing codes, etc. EHR Clinical Application Coordinators (CAC) are readily available to assist providers in finding things in the EHR, set up short cuts for documentation, etc.

Health care practitioners can bill for ASBI activities effective January 1, 2008. The CPT and HCPC codes needed to support documentation and billing for ASBI services are available in RPMS. The newest of these codes, two “G” Medicare codes, are expected to be available in RPMS in April 2008.

The information included in the table below is from The George Washington University Medical Center, Ensuring Solutions to Alcohol Problems website. Practical information for implementation of ASBI, including the “SBI Toolkit for Reimbursement” can be found on the Ensuring Solutions Screening and Brief Intervention webpage:

[http://www.ensuringsolutions.org/resources/resources\\_list.htm?cat\\_id=964](http://www.ensuringsolutions.org/resources/resources_list.htm?cat_id=964)

Payer	Code	Description
Commercial Insurance	CPT 99408	Alcohol and/or substance (other than tobacco) abuse structured screening (e.g. AUDIT, DAST), and brief intervention (SBI) services, 15 - 30 minutes
	CPT 99409	Alcohol and/or substance (other than tobacco) abuse structured screening (e.g. AUDIT, DAST), and brief intervention (SBI) services, greater than 30 minutes
Medicare	G0396	Alcohol and/or substance (other than tobacco) abuse structured assessment (eg, AUDIT, DAST) and brief intervention, 15-30 minutes
	G0397	Alcohol and/or substance (other than tobacco) abuse structured assessment (eg, AUDIT, DAST) and intervention, greater than 30 minutes
Medicaid	H0049	Alcohol and/or Drug Screening
	H0050	Alcohol and/or Drug Services, Brief Intervention, Per 15 Minutes

Note: It is important to remember that the EHR can look different at each facility because of the ability to customize the user visual templates. However, each EHR will have all of the components needed for ASBI – exam codes, measurements, billing codes, etc. EHR Clinical Application Coordinators (CAC) are readily available to assist providers in finding things in the EHR, set up short cuts for documentation, etc.