

Alcohol Screening and Brief Intervention in the Trauma Center Setting

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What is a Trauma Center?

- Trauma Center is a designation given by the American College of Surgeons (ACS)
- The designation represents a hospital's ability to deal with life-threatening injuries
- Level 1 Trauma Centers are required to have specialized surgeons, anesthesiologists, radiologists and operating rooms available 24 hours a day
- Level 1 Trauma Centers are also required to conduct prevention activities, community education and research

What is a Trauma Center?

- Level 2 Trauma Center status is also designated by the ACS
- Level 2 Trauma Centers are similar to Level 1 Centers in terms of general surgeon staffing, but they often have less access to surgical sub-specialties and they work in collaboration with Level 1 Trauma Centers to provide the highest quality patient care

Minnesota Trauma Centers

- Level 1 Trauma Centers
 - Hennepin County Medical Center, Minneapolis
 - Mayo Clinic, Rochester
 - North Memorial Medical Center, Robbinsdale
 - Regions Hospital, St. Paul
- Level 2 Trauma Centers
 - St. Cloud Hospital, St. Cloud
 - St. Luke's Hospital, Duluth
 - St. Mary's Hospital, Duluth

Why are Healthcare Providers Concerned About Alcohol Use?

- Excessive alcohol use leads to numerous health conditions including:
 - Hepatitis/cirrhosis of the liver
 - Gastritis, pancreatitis and gastrointestinal bleeding
 - Cancer, especially in the mouth and throat
 - Damage to the brain, including epilepsy and hemorrhagic stroke
 - Vitamin deficiency
 - Obesity
 - Hypertension and heart disease
 - Infertility
 - Major depression
 -and many more

Why are Healthcare Providers Concerned About Alcohol Use?

- Alcohol changes or conflicts with the way that many medications work in the body
 - Some of these interactions can be life-threatening
- Alcohol's concentration in the brain leads to poor decision making, which can lead to injuries and other negative health outcomes

Is this really that common?

- About 30% of U.S. adults drink at levels that elevate their risk for physical, mental and social problems.
- Of these heavy drinkers, about 25% routinely abuse alcohol or are alcohol dependent.

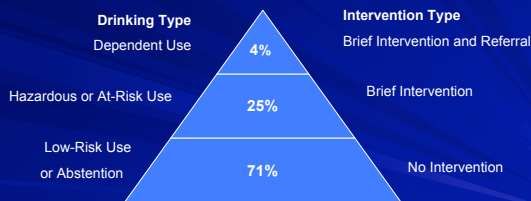
NIAAA data from the 2001-2002 National Epidemiologic Survey on Alcohol and Related Conditions, 2004.

Why is the healthcare setting an ideal location for screening patients for alcohol disorders?

- Heavy drinking often goes undetected
- Patients are likely to be more receptive, open and ready to change than most physicians assume
- Brief interventions have been shown to promote significant, lasting reductions in drinking levels in at-risk drinkers who are not alcohol dependent

NIAAA "Helping Patients Who Drink Too Much: A Clinician's Guide", 2005.

Pyramid of Alcohol Problems



Grant, Drug Alcohol Depend 2004; 74:223-234 and Dawson, Alcohol Clin Exp Res 2004; 28:1371-1378.

Screening Trauma Center Patients for At-Risk Drinking Behaviors

- Alcohol abuse and alcoholism are the underlying causes of nearly half of all traumas in the United States
- Alcoholism is the most common chronic disease in trauma patients, affecting 25 to 40% of patients, compared with a 2 to 5% incidence for other conditions which result in hospitalization

Gentilello, JAMA 1995;274:1043-1048

Screening Trauma Center Patients for At-Risk Drinking Behaviors

- Trauma Centers have been viewed as a perfect place to conduct alcohol screening and intervention programs for almost 20 years.
- In 1999, Gentilello et al. found that when trauma patients who screened positive for at-risk drinking behaviors received a brief intervention in the hospital, they showed a 47% reduction in repeat injuries and a 48% reduction in rehospitalizations

Gentilello, Ann Surg 1999;230:473-480.

Benefits of Routine Alcohol Screenings of Trauma Patients

- Captive audience
- Teachable moment
- Healthcare providers are seen as 'experts'
- Staff have often developed a good relationship with the patient prior to the screening
- Family members are often involved
- May be an opportunity for follow-up

Downsides of Routine Alcohol Screenings of Trauma Patients

- Other medical issues often need more immediate attention
- Injuries can be too severe to accommodate a screening or intervention
- Patients often discharge to facilities (rehab, long-term care) where alcohol treatment is not a priority or a possibility

Alcohol Screening and Brief Intervention in the Trauma Center

- Beginning in 2008, all Level 1 and 2 Trauma Centers must have an Alcohol Screening and Brief Intervention (ASBI) initiative as part of their program

North Memorial's ASBI Program

- In August of 2007, North Memorial's Trauma Department began screening all trauma patients for at-risk drinking
 - All trauma patients are screened by blood alcohol content (BAC) at admission
 - For ease of implementation, any trauma patient with alcohol in their blood at admission will be flagged to receive a formal screening and intervention before discharge

North Memorial's ASBI Program

- Program basics:
 - Once flagged, the patient is assigned a schedule for screening; usually a day or two before discharge if time allows
 - Screening is done by either the Trauma Nurse Clinicians, the Trauma Social Worker or a Trauma Surgeon

North Memorial's ASBI Program

- All ASBI program patients are screened using the BAC and the AUDIT (Alcohol-Use Disorders Identification Test)
 - BAC is part of the standard "Trauma Panel" blood draw that can be done at admission
 - AUDIT can be given both orally and written, and in English or Spanish.

North Memorial's ASBI Program

- Feedback using BAC
 - Range: "BAC can range from 0 (sober) to .4 (deadly)."
 - "Normal drinking is 0.03 to 0.05"
 - "Your BAC was ..."
 - Elicit reaction: "What do you make of that?"
 - "What role do you think alcohol played in your injury?"

North Memorial's ASBI Program

■ Scoring the AUDIT

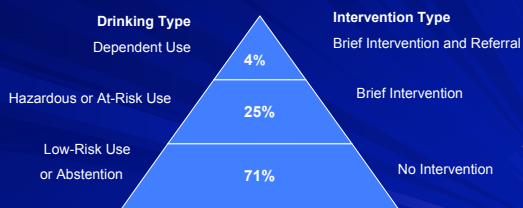
Score	Level of Intervention
1 – 7 (no risk)	Resources offered based on patient and staff intuition
8 – 18 (starting to experience health consequences from alcohol)	Brief intervention + appropriate handouts
19 – 40 (possible alcohol dependence)	Brief intervention + social service referral + treatment options + handouts + possible psych or chaplain referral
Refusal	"Harmful Interactions: Mixing Alcohol and Medicines" brochure, possible psych or chaplain referral

North Memorial's ASBI Program

■ Feedback using the AUDIT

- Range: "The AUDIT can range from 0 (non-drinkers) to 40 (possible chemical dependency)
- "The AUDIT has been given to thousands of patients in medical settings, so you can compare your drinking to others. A normal AUDIT score is 0 – 7, which is low-risk drinking."
- "Your AUDIT score is..."
- Elicit reaction: "What do you make of that?"

Pyramid of Alcohol Problems



Grant, Drug Alcohol Depend 2004; 74:223-234 and Dawson, Alcohol Clin Exp Res 2004; 28:1371-1378.

North Memorial's ASBI Program

■ Listen and Elicit Discussion

- Explore the pros and cons of drinking
 - Pay attention to concerns, problem recognition, downsides, etc.
- Summarize both sides (On the one hand... On the other hand...)
- Ask about the importance of alcohol use (Why not lower?)
- Ask about confidence of cutting back (Why not higher?)
- Ask about readiness

North Memorial's ASBI Program

■ Wrapping up the intervention

- Ask the key questions:
 - Where does this leave you?
 - Do you want to quit? Cut-down? Make no change?

North Memorial's ASBI Program

■ Provide **MENUS** options

- M**anage your drinking
- E**liminate drinking from your life
- N**ever drink and drive
- U**tterly nothing
- S**eek help

■ Ask about the plan

- How will you do that? Who will help you? What might get in the way?

North Memorial's ASBI Program

■ Our Experiences

- From mid-August 2007 through January 2008, we've had about 100 BAC-positive patients
- 58 of the 100 completed the AUDIT
- National statistics have shown about a 47% refusal rate...our refusal rate has been about 20%.
- 15 - 20% of our eligible patients are unable to participate in the ASBI due to severity of injuries

North Memorial's ASBI Program

■ Our Experiences

58 Total AUDITs completed

AUDIT Score	Number of patients
1 – 7	15 patients
8 – 18	32 patients
19 – 40	11 patients

29% of patients indicated they had received past treatment for alcohol or substance abuse

North Memorial's ASBI Program

■ Other details about our ASBI patients

- 40 males, 14 females (4 declined categorization)
- Age breakdown of ASBI patients (7 declined)

Age	# of patients
< 21	9
21-29	13
30-39	9
40-49	12
50-59	5
60-69	2
70-79	1

North Memorial's ASBI Program

■ Our Experiences

- Most patients are amenable to receiving the intervention
- Most patients realize that their drinking is the reason why they are injured
- A number of patients have accepted the offer for help and have worked with our social worker to get into alcohol assessment

North Memorial's ASBI Program

■ What has worked well

- Telling patients that we screen all patients with a positive BAC for alcohol-use problems
- Using the AUDIT tool as a guide for the interaction
- Having a dedicated Trauma Social Worker who has experience with alcohol assessment and treatment referrals

North Memorial's ASBI Program

■ What has worked well

- The nurse clinicians offering the screening
 - It is seen as part of the routine patient care
 - Nurse clinicians have more time to spend with the patient
 - Patients have an established a relationship with the nurse clinician during their stay
 - Nurse clinicians are often less threatening than the Trauma Surgeons
 - Nurse clinicians work collaboratively with the Trauma Social Worker on many issues, including following up on the results of the ASBI

North Memorial's ASBI Program

- What have we learned?
 - Patients may agree to the screening, but they won't necessarily tell the truth
 - The younger patients seem a little more receptive to the idea that their drinking is problematic
 - Patients occasionally need to be made aware of how their drinking relates to their injury
 - Many of the patients had received previous alcohol or substance abuse treatment

North Memorial's ASBI Program

- What have we learned?
 - Logistical issues can keep everyone from being screened:
 - Tough to get all the screenings done during the busy time of year (summer)
 - Many of our patients are injured so severely that they are not capable of participating in the screening
 - When patients move to other hospital units (rehab, psych) it may be assumed that the screening and intervention will happen on that floor

North Memorial's ASBI Program

- What have we learned?
 - Logistical issues:
 - It generally takes about 10 minutes to screen a patient. Referrals to social service, psych or chaplaincy adds additional time
 - Whether or not the AUDIT is given in writing, formally oral or informally oral is completely dependent on the nurse clinician, the patient and their relationship
 - How we track who has been screened has gone through multiple revisions in the first few months

North Memorial's ASBI Program

- Challenges on the horizon
 - Having the program fully implemented during the next "Trauma Season" (summer)
 - Possible requirement to screen all Trauma patients for alcohol use, regardless of BAC at admission
 - Possible requirement to screen all hospital patients who have a BAC at admission

North Memorial's ASBI Program

■ Our major success to date

No patient who has successfully completed the ASBI has been readmitted to the North Memorial Trauma Department since the initiative's inception

Silence is permission

Dr. Andrea Barthwell

Questions? Comments?

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