Evidence-Based Screening and Brief Motivational Interviewing to Reduce High-Risk Drinking and Related Behaviors: Building Bridges in Clinical Visits

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ACHA Annual Meeting
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Objectives

• Describe applying motivational interviewing principles to decrease high-risk drinking, unsafe sexual behaviors, and unhealthy eating behaviors and their related harms in college students.

• Describe incorporating cultural competency and racial/ethnic differences in college students’ alcohol use within clinical visits in order to reduce behavioral risks.

• Discuss common health and behavioral consequences associated with high-risk drinking.

• Describe how the patient’s presentation may facilitate brief motivational interviewing to promote behavioral risk reduction across multiple clinical areas.
Alcohol and Interconnected Clinical Issues

- Sexually Transmitted Diseases
- Sexual Assault
- Weight and Eating Disorders
- Depression and Anxiety
- Health and Academic Performance
- Insomnia, sleep problems, fatigue
- Addictions:
  - recreational drugs, Rx drug abuse, gambling
Evidence-Based Screening and Brief Motivational Interviewing to Reduce High-Risk Drinking and Related Behaviors: Building Bridges in Clinical Visits

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Assistant Director of Health & Wellness for Alcohol and Other Drug Education
Office of Vice Provost for Student Life
and
Acting Assistant Professor
Psychiatry and Behavioral Sciences
Points for Consideration

- **MI Basic Principles**
- **MI Strategies: OARS**
- Identifying Consequences and Considering Alcohol’s Effects
- Exploring and Resolving Ambivalence
- Extensions and Applications in Primary Health Care Setting
Spectrum of Intervention Response

- None
- Mild
- Moderate
- Severe

Thresholds for Action

- Brief Intervention
- Specialized Treatment

Primary Prevention
Spectrum of Intervention Response

Thresholds for Action

Primary Prevention

Brief Intervention

Specialized Treatment

None

Mild

Moderate

Severe
The Stages of Change Model

- Precontemplation
- Contemplation
- Preparation/Determination
- Action
- Maintenance
Stages of Change in Substance Abuse and Dependence: Intervention Strategies

- Precontemplation Stage
- Contemplation Stage
- Action Stage
- Maintenance of Recovery Stage
- Relapse Stage

- MOTIVATIONAL ENHANCEMENT STRATEGIES
- ASSESSMENT AND TREATMENT MATCHING
- RELAPSE PREVENTION & MANAGEMENT
Motivational Interviewing

Basic Principles

(Miller and Rollnick, 1991, 2002)

1. Express Empathy
2. Develop Discrepancy
3. Roll with Resistance
4. Support Self-Efficacy
Points for Consideration

- MI Basic Principles
- *MI Strategies: OARS*
- Identifying Consequences and Considering Alcohol’s Effects
- Exploring and Resolving Ambivalence
- Extensions and applications in primary health care setting
OARS: Building Blocks for a Foundation

- **Ask Open-Ended Questions**
  - Cannot be answered with yes or no
  - Provider does not know where answer will lead
    - “What do you make of this?”
    - “Where do you want to go with this now?”
    - “What thoughts do you have about what you might want to do about this?”
    - “What ideas do you have about things that might work?”
    - “How are you feeling about everything?”
    - “How’s the quarter going for you?”
OARS: Building Blocks for a Foundation

- **Affirm**
  - Takes skill to find positives
  - Should be offered only when sincere
  - Has to do with characteristics/strengths
    - “It is important for you to be a good student”
    - “You’re the kind of person that sticks to your word”
Listen Reflectively

- Effortful process: Involves Hypothesis Testing
  - A reflection is our “hypothesis” of what the other person means or is feeling

- Reflections are statements
  - Student: “I’ve got so much to do and I don’t know where to start.”
  - Provider: “You’ve got a lot on your plate.”
  - Student: “Yes, I really wish things weren’t this way” or… “No, I’m just not really motivated to get things started.”

- “Either way, you get more information, and either way you’re receiving feedback about the accuracy of your reflection.” (p. 179, Rollnick, Miller, & Butler, 2008)
OARS:
Building Blocks for a Foundation

- Summarize
  - Periodically through visit
  - Demonstrates you are listening
  - Provides opportunity for shifting
Building Blocks for a Foundation

Strategic goal:

- Elicit Self-Motivational Statements
  - “Change talk”
  - Self motivational statements indicate client/patient concern or recognition of need for change
  - Arrange the conversation so that the individual makes arguments for change
“Know It When You Hear It: Types of Self-Motivational Statements

- **Problem Recognition**
  - “I guess there’s more going on here than I thought”
  - “This is serious”

- **Concern**
  - “I’m really worried about what’s going on”
  - “I’m feeling hopeless about this”

- **Intent to Change**
  - “I don’t know how it’s going to work, but I’m going to do something different”

- **Optimism**
  - “This is going to work out”
Points for Consideration

- MI Basic Principles
- MI Strategies: OARS
- *Identifying Consequences and Considering Alcohol’s Effects*
- Exploring and Resolving Ambivalence
- Extensions and applications in primary health care setting
Areas In Which College Students May Experience Consequences

- Academic Failure
- Blackouts
- Hangovers
- Weight Gain
- Tolerance
- Decision making
- Impaired sleep
- Physical Health
Areas In Which College Students May Experience Consequences (continued)

- Sexual Assault
- Finances
- Family History
- Alcohol-Related Accidents
- Time Spent Intoxicated
- Relationships
- Legal Problems
- Work-Related Problems
<table>
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</table>
Points for Consideration

- MI Basic Principles
- MI Strategies: OARS
- Identifying Consequences and Considering Alcohol’s Effects
- *Exploring and Resolving Ambivalence*
- Extensions and applications in primary health care setting
Provider Strategies for Eliciting Self-Motivational Statements

- Decisional Balance Exercise
  
  Continuing to Use  Making a Change
  + - + -

- Using Extremes
  - “What concerns you the most?”
  - “What are your worst fears about what might happen if you don’t change (or keep going the way you’re going)?”

Miller & Rollnick (1991)
Provider Strategies for Eliciting Self-Motivational Statements

- Strategies to Elicit Them
  - Looking Back
    - “Think back to before this issue came up for you. What has changed since then?”
  - Looking Forward
    - “How would you like things to turn out for you?”
    - “How would you like things to be different?”
    - “What are the best results you can imagine if you make a change?”
  - Exploring Goals
  - Asking Provocative Questions

Miller & Rollnick (1991)
Listen for Change Talk: Themes

**D: Desire**
- “I wish I could lose some weight”
- “I like the idea of getting more exercise”

**A: Ability**
- “I might be able to cut down a bit”
- “I could probably try to drink less”

**R: Reasons**
- “Cutting down would be good for my health”
- “I’d sure have more money if I cut down”

**N: Need**
- “I must get some sleep”
- “I really need to get more exercise”

Examples from and/or adapted from: Rollnick, Miller, & Butler (2008)
Listen for Change Talk: Themes

- Commitment is a form of change talk
  - “I will…”
  - “I intend to…”

- Taking steps is also a form of change talk
  - “I tried a couple of days without drinking this week”
  - “I walked up the stairs today instead of taking the escalator.”

Examples from: Rollnick, Miller, & Butler (2008)
Ask Questions to Elicit Change Talk

- **Desire:** “What do you want, like, wish, hope, etc.?”
  - “Why might you want to make this change?”

- **Ability:** “What is possible? What can or could you do? What are you able to do?”
  - “If you did decide to make this change, how would you do it?”

Examples from: Rollnick, Miller, & Butler (2008)
Ask Questions to Elicit Change Talk

- **Reasons:** “Why would you make this change? What would be some specific benefits? What risks would you like to decrease?”
  - “What are the most important benefits that you see in making this change?”

- **Need:** “How important is this change? How much do you need to do it?”
  - “How important is it to you to make this change?”

Examples from: Rollnick, Miller, & Butler (2008)
Points for Consideration

- MI Basic Principles
- MI Strategies: OARS
- Identifying Consequences and Considering Alcohol’s Effects
- Exploring and Resolving Ambivalence
- Extensions and applications in primary health care setting
65% of counseling centers have no relationship with the college health center (Schuchman, 2007)

Only 32.5% of Health Centers routinely screen for alcohol problems

- Of these, only 17% use standardized instruments as part of screening (Foote, et al., 2004)

Early identification of students and coordination of care
Application to Primary Care in College Setting

- Routine screening for alcohol problems
  - Example: Use of AUDIT and referral to BASICS (Martens, et al., 2007)
    - Decreased alcohol use, correction of norm misperception, increased use of protective behaviors
Mean score for 5+ drinks in a row in past two weeks by frequent heavy drinking trajectory group

Source: Schulenberg & Maggs (2002), Journal of Studies on Alcohol
College Student Drinking
Academic Year Drinking Pattern

DelBoca et al., 2004
Consider what “hooks” you might encounter depending on the context and the visit…

- Depression
- Anxiety
- Weight Issues
- Overall Health
- Academics
- Athletics
- Sleep
If discrepancies are present...

- Reflect student reactions
- Ask student what he or she wants to do
Thank You!

- For more information:
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James F. Schaus, M.D.

- Routine Screening for High-Risk Drinking
- UCFHS Study Testing Efficacy of BI
- Ethnic Differences in High-Risk Drinking
NIAAA’s Rapid Response to College Drinking Problems Initiative: Reinforcing the Use of Evidence-Based Approaches in College Alcohol Prevention

Journal of Studies on Alcohol and Drugs, Supplement No. 16, June 2009
Screening for High-Risk Drinking in a College Student Health Center: Characterizing Students Based on Quantity, Frequency, and Harms

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JANANI SIVASITHAMPARAM, B.H.Sc.
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Journal of Studies on Alcohol and Drugs, Supplement No. 16, June 2009
Why Screen for High-risk Drinking?

Screen for a condition that is
• Prevalent
• Harmful
• Treatable
• Evidence-based screening instruments
Prevalence of High-Risk Drinking

• “5/4” definition
  - 44% (CAS, 2001)
  - 42% (NCHA, 2002)
  - 40% (Review of multiple surveys, 2002)*

• 84% within the previous 90 days
  (Vik, 2000)

• “Frequent Binge Drinking”
  - 23% (CAS, 2001)
  - 20% (NCHA, 2002)

Alcohol Related Harms

- **Death** - 1,700 college students ages 18-24
- **Injury** - 500,000 unintentionally injured
  - 600,000 hit or assaulted by another drinking student
- **Driving** - 2 million DUI of 8 million students
- **Sexual violence** - 70,000 victims alcohol related sexual assault or date rape
  - 20% college women experience sexual assault and most incapacitated

Recommendations for SBI

- U.S. Preventive Services Task Force 2006
- NIAAA
- Institute of Medicine
- WHO
- American Society of Addiction Medicine
- American Academy of Pediatrics
- American College of Surgeons
- Canadian Task Force on Preventive Care
The U.S. Preventive Services Task Force (USPSTF) recommends screening and behavioral counseling interventions to reduce alcohol misuse by adults, including pregnant women, in primary care settings.

**Rating: B Recommendation.**

**Rationale:** The USPSTF found good evidence that screening in primary care settings can accurately identify patients whose levels or patterns of alcohol consumption do not meet criteria for alcohol dependence, but place them at risk for increased morbidity and mortality, and good evidence that brief behavioral counseling interventions with followup produce small to moderate reductions in alcohol consumption that are sustained over 6- to 12-month periods or longer. The USPSTF found some evidence that interventions lead to positive health outcomes 4 or more years post-intervention, but found limited evidence that screening and behavioral counseling reduce alcohol-related morbidity. The evidence on the effectiveness of counseling to reduce alcohol consumption during pregnancy is limited; however, studies in the general adult population show that behavioral counseling interventions are effective among women of childbearing age. The USPSTF concluded that the benefits of behavioral counseling interventions to reduce alcohol misuse by adults outweigh any potential harms.
Are We Doing It?

- 249 college health centers responded to the survey
- 32% routinely screen
- Only 12% use a standardized instrument, predominantly CAGE
- Only 28% offered access to campus programs

“What We See Depends Mainly on What We Look For” — John Lubbock

- Screen: High-risk drinking often undetected
- Patients more receptive than you expect
- You are in position to make a difference
  - Brief interventions can promote lasting reduction
  - Most patients show some readiness to change
  - Highest risk patients are often the most ready to change
Screening Options

- **Episodic** screening, “red flag”
- Ask in context of other medical problems or health behaviors
- **Routine** use of evidence-based screens
  - AUDIT, AUDIT-3, AUDIT-C
  - Single question: 5/4, non-gender 5
  - Not CAGE

Standard Drink - 14g of alcohol

12 ounces Beer
5 ounces wine
1.5 ounces spirits
Alcohol Use Disorders Identification Test (AUDIT)

Please circle the answer that is correct for you.

1. How often do you have a drink containing alcohol?
   - Never
   - Monthly or Less
   - Two to four times a month
   - Two to three times per week
   - Four or more times a week

2. How many drinks containing alcohol do you have on a typical day when you are drinking?
   - 1 or 2
   - 3 or 4
   - 5 or 6
   - 7 to 9
   - 10 or more

3. How often do you have six or more drinks on one occasion?
   - Never
   - Less than monthly
   - Monthly
   - Two to three times per week
   - Four or more times a week

4. How often during the last year have you found that you were not able to stop drinking once you had started?
   - Never
   - Less than monthly
   - Monthly
   - Two to three times per week
   - Four or more times a week

5. How often during the last year have you failed to do what was normally expected from you because of drinking?
   - Never
   - Less than monthly
   - Monthly
   - Two to three times per week
   - Four or more times a week

6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?
   - Never
   - Less than monthly
   - Monthly
   - Two to three times per week
   - Four or more times a week

7. How often during the last year have you had a feeling of guilt or remorse after drinking?
   - Never
   - Less than monthly
   - Monthly
   - Two to three times per week
   - Four or more times a week

8. How often during the last year have you been unable to remember what happened the night before because you had been drinking?
   - Never
   - Less than monthly
   - Monthly
   - Two to three times per week
   - Four or more times a week

9. Have you or someone else been injured as a result of your drinking?
   - No
   - Yes, but not in the last year
   - Yes, during the last year

10. Has a relative or friend, or a doctor or other health worker, been concerned about your drinking or suggested you cut down?
    - No
    - Yes, but not in the last year
    - Yes, during the last year
AUDIT-C

1. How often did you have a drink containing alcohol in the past year?
   never (0); monthly or less (1); 2 to 4 times a month (2); 2 to 3 times a week (3);
   4 to 5 times a week or 6 or more times a week (4).

2. How many drinks did you have on a typical day when you were drinking in the past year?
   0 drinks or 1 to 2 drinks (0); 3 to 4 drinks (1); 5 to 6 drinks (2); 7 to 9 drinks (3);
   or 10 or more drinks (4).

3. How often did you have 6 or more drinks on one occasion in the past year?
   never (0); less than monthly (1); monthly (2); weekly (3); or daily or almost daily (4).

Score: 4+ for Men, 3+ for Women considered positive.

Fiellin, D. Screening for Alcohol Problems in Primary Care, Arch Int Med, July 2000; 160: 1977-89
3. How often did you have 6 or more drinks on one occasion in the past year?
never (0)
less than monthly (1)
monthly (2)
weekly (3)
daily or almost daily (4)

Score: 1 or more 89% sensitivity, 65% specificity
2 or more 73% sensitivity, 90% specificity

Have you ever felt you should cut down on your drinking?

Have people annoyed you by criticizing your drinking?

Have you ever felt bad or guilty about your drinking?

Eye opener: Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover?

Two positive responses considered positive

CAGE performed better in identifying patients with alcohol abuse and dependence

One study showed CAGE failed to identify 69% of problem drinkers

Fiellin, D. Screening for Alcohol Problems in Primary Care, Arch Int Med, July 2000; 160: 1977-89
Single Screening Questions

• “When was the last time you had more than 5/4 in a day” (Williams and Vinson 2001)
• “On any single occasion during the past 3 months have you had more than 5 drinks?” (Taj 1998)
• “How many times in the past year have you had 5/4?” (NIAAA 2005)
• “5/4” definition of high-risk drinking
• “5/4” plus drinking 3 or more times per week = “Heavy and Frequent” (Presley 2006)
Patient Information Form

Please answer or check the appropriate answers to the following questions:

1. Do you have any chronic medical conditions?  
   [ ] YES  [ ] NO
   If yes please describe:

2. Does anyone in your family have a chronic medical condition?  
   [ ] YES  [ ] NO
   If yes please describe:

3. Have you been hospitalized or have you had surgeries in the past?  
   [ ] YES  [ ] NO
   If yes please describe:

4. Are you currently taking any medications?  
   [ ] YES  [ ] NO
   If yes please list:

5. Do you have any known allergies?  
   [ ] YES  [ ] NO
   If yes please list:

6. Do you smoke?  
   [ ] YES  [ ] NO
   If yes to above, are you interested in quitting?  
   [ ] YES  [ ] NO

7. During the past month:
   Have you been bothered by being down, depressed or hopeless?  
   [ ] YES  [ ] NO
   Have you often been bothered by little interest or pleasure in doing things?  
   [ ] YES  [ ] NO

8. For men: During the past two weeks have you had 5 or more drinks containing alcohol (beer, wine or liquor) in a row, on at least one occasion?  
   [ ] YES  [ ] NO

9. For women: During the past two weeks have you had 4 or more drinks containing alcohol (beer, wine or liquor) in a row, on at least one occasion?  
   [ ] YES  [ ] NO
PIF Data

• 8,753 PIF’s completed
• 28% meet 5/4 definition (n=2484)
• 9% are smokers
  – 40% desire to quit
  – 56% also meet “5/4”
• Depression question
  – 12% positive response to at least one question
  – 7% positive response to both questions
  – 33% also meet “5/4”
## 30 day Drinking Data

<table>
<thead>
<tr>
<th></th>
<th>Control Mean</th>
<th>Treat Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Typical BAC</td>
<td>.08</td>
<td>.08</td>
</tr>
<tr>
<td>Peak BAC</td>
<td>.16</td>
<td>.15</td>
</tr>
<tr>
<td>Most # drinks consumed in a day</td>
<td>8.17</td>
<td>7.56</td>
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<tr>
<td>Ave. drinks per sitting</td>
<td>4.9</td>
<td>4.7</td>
</tr>
<tr>
<td># Times 5/4</td>
<td>5.96</td>
<td>5.33</td>
</tr>
<tr>
<td># Days drinking</td>
<td>9.1</td>
<td>8.2</td>
</tr>
<tr>
<td>Days drunk in typical week</td>
<td>1.12</td>
<td>1.14</td>
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</tbody>
</table>
Alcohol Risk Categories

- **Non Heavy - Low Risk**
  - Did not drink 5 or more drinks at a sitting

- **Heavy – Moderate Risk**
  - Drank 5 or more drinks at a sitting over the last two weeks one time or more and
  - Drank 1 or 2 times per week (average frequency).

- **Heavy and Frequent – High Risk**
  - Drank 5 or more drinks at a sitting over the last two weeks one time or more and
  - Drank 3 or more times per week (average frequency).

76% Participate in Drinking Games

Percentage of Drinking Game Participants

- Non-Heavy: 57%
- Heavy: 78%
- Heavy & Frequent: 88%

Drinker Categorization

- Yellow bar: yes
- Black bar: no
“Heavy and Frequent” was 20% of sample but experienced 31% of harms.
Conclusions

• 5/4 screen accurately identified students already experiencing significant alcohol-related harms

• The addition of a frequency question identified students at highest risk and in greatest need of intervention

• Add to 5/4 question: “In a typical week, do you drink on 3 or more occasions?”
ALCOHOL SCREENING AND INTERVENTION IN A COLLEGE CLINIC

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Thomas P. McCoy, M.S., Wake Forest University
Mary Claire O’Brien, M.D., Wake Forest University
NIAAA Grant Number: 1 U18 AA015673-01
NIAAA Tier 1 Strategies: Evidence of Effectiveness Among College Students

- Combining cognitive–behavioral skills with norms clarification and motivational enhancement interventions
- Offering brief motivational enhancement interventions
- Challenging alcohol expectancies

From “A Call to Action: Changing the Culture of Drinking at U.S. Colleges,” NIAAA Task Force, 2002
Brief Interventions in Medical Settings

Community based primary care
- Wallace (1988)
- Israel (1996)
- Fleming (1997, 1999)
- Ockene (1999)
- Senft (1997)
- Curry (2003)

Meta-analyses
- Bien (1983)
- Kahan (1996)
- Wilk (1997)
- Whitlock (2004)
Brief Interventions with College Students

- Marlatt et al. (1998 – BASICS 2 yr f/u)
- Baer et al. (2001 – BASICS 4 yr f/u)
- Borsari and Carey (2000)
- Murphy et al. (2001, 2004)
- Larimer et al. (2001)

Personalized feedback and MI
Outcomes - decreased consumption and alcohol-related harms
Alcohol Screening and Brief Intervention in a College Student Health Center: A Randomized Controlled Trial

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THOMAS P. MCCOY, M.S.
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Journal of Studies on Alcohol and Drugs, Supplement No. 16, June 2009
Assessed for eligibility ($n = 8,753$)

Enrolled ($n = 363$)

Excluded ($n = 8,390$)
Did not meet 5/4 screen ($n = 6,269$)
Did not agree to be contacted ($n = 1,482$)
Unable to contact ($n = 552$)
Exclusion criteria ($n = 87$)

Randomized

Control Group ($n = 182$)
   Male ($n = 88$)
   Female ($n = 94$)

Intervention Group ($n = 181$)
   Male ($n = 86$)
   Female ($n = 95$)
   Completed intervention ($n = 174$)

Follow-Up and Analysis
3 months: $n = 147$ (80.8%)
6 months: $n = 114$ (62.6%)
9 months: $n = 115$ (63.2%)
12 months: $n = 125$ (68.7%)

Follow-Up and Analysis
3 months: $n = 128$ (70.7%)
6 months: $n = 95$ (52.5%)
9 months: $n = 98$ (54.1%)
12 months: $n = 111$ (61.3%)

30-day Alcohol Recall Diary (Timeline Follow Back-TLFB)
RAPI (harms assessment)
Healthy Lifestyle Questionnaire
2 Brief Interventions

- 4 P.C. providers (ARNP, PA, MD x 2)
- “Gateway” HL issues (BMI, nutrition, sleep, stress, depression, smoking, other drug use)
- MI framework
  - Student-centered imperative
  - The “Connect Imperative”
- Focus on harm reduction, protective factors
- “Contract” for health behavior change
- “Participant Feedback” document
Personalized Feedback - BASICS

- BAC card, gender and weight specific
- BAC – typical and peak BAC
- Norms clarification
- Biphasic response, “More is better?”
- Word associations
- Expectancies to harms = discrepancy
- Alcohol myopia
- Gender differences in metabolism and risk
- Tolerance
- Calories
- Financial costs
Baseline Drinking Data

<table>
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<th>Control Mean (S.D.) N=181</th>
<th>Treat Mean (S.D.) N=182</th>
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<tbody>
<tr>
<td>No differences between the Intervention and Control groups at baseline</td>
<td></td>
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<tr>
<td>Typical BAC</td>
<td>.08 (.05)</td>
<td>.08 (.05)</td>
</tr>
<tr>
<td>Peak BAC</td>
<td>.16 (.09)</td>
<td>.15 (.08)</td>
</tr>
<tr>
<td>Ave Drinks Sitting</td>
<td>4.9 (2.4)</td>
<td>4.7 (2.3)</td>
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<tr>
<td># Days Drinking</td>
<td>9.1 (6.1)</td>
<td>8.2 (5.5)</td>
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</table>
# Follow Up Data

HLQ and 30-day recall diaries via Zoomerang

<table>
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<tr>
<th>Time Period</th>
<th># Completed</th>
<th>Control/Treat</th>
<th>Total</th>
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<tr>
<td>Baseline</td>
<td>363</td>
<td>182/181</td>
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<tr>
<td>3 Month</td>
<td>275 (76%)</td>
<td>147/128</td>
<td></td>
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<tr>
<td>6 Month</td>
<td>209 (58%)</td>
<td>114/95</td>
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<tr>
<td>9 Month</td>
<td>213 (59%)</td>
<td>115/98</td>
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</tr>
<tr>
<td>12 Month</td>
<td>236 (65%)</td>
<td>125/111</td>
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## Outcomes

Reductions in treatment compared to control group \((p < .05)\) by repeated measures analysis

<table>
<thead>
<tr>
<th>• Typical BAC</th>
<th>• RAPI 23-item harm score</th>
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</thead>
<tbody>
<tr>
<td>• Peak BAC</td>
<td>• Times drunk in typical week</td>
</tr>
<tr>
<td>• Peak # drinks / sitting</td>
<td>• Times taking foolish risks when drinking</td>
</tr>
<tr>
<td>• Average # drinks/week</td>
<td>• Times driven in motor vehicle after 3 or more drinks</td>
</tr>
</tbody>
</table>
ALCOHOL USE DISORDERS

Free Clinician’s Guide
www.niaaa.nih.gov/guide

• ASK
• ASSESS
• ADVISE
• ASSIST

www.collegedrinkingprevention.gov
Genetic and Ethno-Cultural Factors

Genetic and Ethno-cultural

Social

Psychological
<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>UCF Study n</th>
<th>(%)</th>
<th>UCF overall (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>281</td>
<td>(77.8)</td>
<td>(70.7)</td>
</tr>
<tr>
<td>Hispanic</td>
<td>41</td>
<td>(11.4)</td>
<td>(12.0)</td>
</tr>
<tr>
<td>Black</td>
<td>17</td>
<td>(4.7)</td>
<td>(8.4)</td>
</tr>
<tr>
<td>Asian</td>
<td>8</td>
<td>(2.2)</td>
<td>(5.0)</td>
</tr>
<tr>
<td>Other</td>
<td>14</td>
<td>(3.9)</td>
<td>(3.6)</td>
</tr>
</tbody>
</table>
### Binge Drinking - Ethnic Prevalence

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>College binge drinking (%)</th>
<th>Adult binge drinking (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>44%</td>
<td>17.5%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>31%</td>
<td>14.4%</td>
</tr>
<tr>
<td>Black</td>
<td>23%</td>
<td>10.9%</td>
</tr>
<tr>
<td>Asian</td>
<td>23%</td>
<td>No data</td>
</tr>
</tbody>
</table>

**Reference**

Presley et al, Southern Illinois University, Multi-campus survey 1995

Binge Drinking Among Adults, MMWR, April 3, 2009
Alcohol Metabolism

- Alcohol Dehydrogenase (ADH1, ADH2, and ADH3)
  \[\text{C}_2\text{H}_6\text{O} \rightarrow \text{C}_2\text{H}_4\text{O}\]
  - 3 ADH2 alleles, 2 ADH3 alleles differ widely in activity
  - Age, gender, ethnic/racial differences

- Aldehyde Dehydrogenase (ALDH2)
  \[\text{C}_2\text{H}_4\text{O} \rightarrow \text{C}_2\text{H}_4\text{O}_2\]
  - Flushing, nausea, headache, dizziness, “Asian Flush”
  - Allele ALDH2*2 codes for inactive ALDH2
  - Asians high prevalence for heterozygous ALDH2*2
  - ALDH2*2 very rare in other ethnic groups
  - ALDH2*2 protective and diversity in Asian subgroups
<table>
<thead>
<tr>
<th></th>
<th>ALDH2*2 allele</th>
<th>5/4 in past 2 weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>0%</td>
<td>46%</td>
</tr>
<tr>
<td>Korean</td>
<td>35%</td>
<td>30%</td>
</tr>
<tr>
<td>Chinese</td>
<td>48%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Figure odds ratios of ethnic subgroup ALDH2 status for binge drinking in the past 2 weeks.
Flushin Questionnaire

1. Do you have a tendency to develop facial flushing immediately after drinking a glass of beer? **OR...**

2. Did you have a tendency to develop facial flushing immediately after drinking a glass of beer in the first one or two years after you started drinking?

- 90% sens/spec identifying ALDH2-deficient individuals
- Protects against heavy drinking and alcohol dependence
- 8% world population is ALDH2-deficient
- Tolerance to acetaldehydeemia
- 25% heavy drinking Japanese men are ALDH2-deficient
- Elevated risk esophageal cancer if they drink.

Socio-Cultural Factors

Group norms and attitudes

- Perceptions of peer behavior strong predictor in Whites: “party” means alcohol, “getting drunk” acceptable
- Blacks and Hispanics have more conservative alcohol norms/attitudes compared to Whites
- 17% stable gender difference in Hispanic alcohol use (persistent strong family and less peer influence for women)
- “Machismo” factor in men, irrespective of ethnic group

Galvin and Caetano, Alcohol Use and Related Problems Among Ethnic Minorities in US. NIAAA, Alcohol Research and Health, 2003
Acculturation

• Acculturation scale - adopting mainstream culture
  – Highly acculturated Asian and Hispanic students had higher rate of alcohol use and binge drinking

• Colleges with greater racial and ethnic diversity have lower 5/4 drinking among white students
“The UT Experience”

- 2,245 participants, 5 yr longitudinal study
- Academic motives/behaviors – less drinking and harms
- Social motives/behaviors – more drinking and harms
- White, Latino, Asian group comparisons
  - Latino women less likely to drink and family influence is particularly strong
  - Social motives much stronger predictor of alcohol use among White and Latino than Asian students
  - Academic motives protective against alcohol-related harms for White and Latino students

Alcohol and Interconnected Clinical Issues

• Sexually Transmitted Diseases
• Sexual Assault
• Weight and Eating Disorders
• Depression and Anxiety
• Health and Academic Performance
• Insomnia, sleep problems, fatigue
• Addictions:
  – recreational drugs, Rx drug abuse, gambling
Clinical Prevention in College Health

“If your time is limited, you are better off asking patients why they would want to make a change and how they might do it rather than telling them that they should. It is the patient rather than you who should be voicing the arguments for behavior change.”

The “Spirit” of Motivational Interviewing in health care

• Collaborative
  • active, cooperative conversation, partnership
  • joint decision-making process

• Evocative
  • evoke from students that which they already have
  • elicit student’s own good reasons to change

• Honors Person’s Autonomy
  • “there is something in human nature that resists being coerced and told what to do. Ironically, it is acknowledging the other’s right and freedom not to change that sometimes makes change possible.” (Rollnick, Miller, Butler, 2008)
Ten Things that Motivational Interviewing Is Not

William R. Miller

University of New Mexico, Albuquerque, USA

Stephen Rollnick

Cardiff University, School of Medicine, UK

Background: In the 26 years since it was first introduced in this journal, motivational interviewing (MI) has become confused with various other ideas and approaches, owing in part to its rapid international diffusion. Methods: Based on confusions that have arisen in publications and presentations regarding MI, the authors compiled a list of 10 concepts and
10 Things Motivational Interviewing is NOT

1. transtheoretical model of change
2. way of tricking people into doing what you want them to do
3. a technique
4. a decisional balance
5. assessment feedback

10 Things Motivational Interviewing is NOT (cont’d)

6. cognitive-behavior therapy (CBT)
7. client-centered therapy
8. easy to learn
9. practice as usual
10. a panacea

Giving Advice to others about Behavior Change

- It’s not very effective
- We do it anyway (we’ve been “trained” to)
- It lowers our anxiety

If we go into “giving advice mode”, we can re-connect with the person by saying something like:

“So, what do you make of that?”...
Case 1: Medication refill

John, 20 year-old junior, history major, new patient presents for med refill.

- **John:** I just need a refill of my tetracycline for acne. I’ve been on it for years, but I’d rather come to student health than wait to get an appointment with my dermatologist at home.
- **Clinician:** Sounds good. How’s it been working for you? [open]
- **John:** Fine.
- **Clinician:** Any problems or side effects? [closed question]
- **John:** No. But if I forget for a while, my acne breaks out, so I want to stay on it.
- **Clinician:** Shouldn’t be a problem. Since tetracycline goes through the liver, I usually check to be sure there are no liver problems if you’re going to be on it for a while. So I ask everyone about alcohol and other drug use. How is that for you? [informing; elicit; asking permission]
Case 1: Medication refill (continued)

- **John:** Actually, Doc, I’ve been cutting down on my drinking this year.
- **Clinician:** Great. About how much are you drinking now? [open]
- **John:** Lots less. My buddies and I drank way too much in our fraternity last year, and my grades showed it, so we’re good now.
- **Clinician:** I see. So in a typical week how many drinks do you have? [open]
- **John:** Oh, I don’t know…
- **Clinician:** …10, 20, 30, 40…?? [open; elicit information]
- **John:** Oh, man, let’s see…10 beers about 3 times a week..it’s no more than 30 now, sometimes 40 but usually around 30.
- **Clinician:** [suppressing shock] …And this is less than last year. What was last year like?
- **John:** Well, about 15 beers, 3 times a week, so about 45-50 or so…
- **Clinician:** So, you were concerned about your drinking and cut down.
  [reflective listening, and a guess]
- **John:** Well, I’m not sure I was concerned about it, but I did wonder if I was drinking too much…
Case 1: Medication refill (continued)

Clinician: Too much for…[open; continuing patient’s response]
John: For my own good, I guess… I mean, in the mornings it was really hard to get going and study, so I didn’t get a lot of work done.
Clinician: It messed up your thinking and concentration.
[reflection; listening]
John: Yeah, and I have trouble remembering stuff sometimes…even when I’m not drinking I sometimes mix things up, and I wonder about that…
Clinician: Wonder if… [open]
John: If alcohol’s killing my brain cells like my mom worries about…
Case 1: Medication refill (continued)

- **Clinician:** Sounds like both you and your mom care about your brain cells. And it’s good that you already made some decisions to cut down this year. What do you think about the amount you’re still drinking? [listening; guiding]

- **John:** Well, I guess it could be better than it is…

- **Clinician:** I agree. And with the tetracycline and your liver, there’s another good reason to be careful with alcohol. It might be good to get a blood test to check your liver function before we keep you on tetracycline for a long time. How does that sound? [affirming; asking]

- **John:** OK, no problem on the blood test, but how about my tetracycline?

- **Clinician:** I’ll write you a prescription for a few months, assuming the blood test is OK, and I’d like to see you for a follow-up in a month or so. One other question, John: Any other drugs: Weed, Speed, Coke, X, ‘shrooms, etc…” [“No”].

- **John:** Ever try cocaine? [“Twice”].

- **Clinician:** When was the last time? [“2 years ago”]
Clinician: What did you not like about it?

John: I felt really bad, kinda down, after that, and it's not worth it.

Clinician: I agree and I strongly support your decision to never use that again. So... what do you want to do about your drinking?

John: Well, I guess I can cut down some more..

Clinician: What's a realistic goal you can set for yourself to cut down? Number of drinks each time? How many days each week? What can you commit to?… I’ll write out the prescription for tetracycline… And here’s a blank one for you…How about writing your own prescription for your drinking?

John: OK, Doc, sounds like fun… …[7 beers, 2-3 x per week]

Dx: Acne, Alcohol abuse (possible dependence??)

Rx: TTC, labs, agreement to reduce, follow up visit.
<table>
<thead>
<tr>
<th>State</th>
<th>2005 Percentage</th>
<th>2006 Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wisconsin</td>
<td>22.1%</td>
<td>24.3%</td>
</tr>
</tbody>
</table>

Wisconsin Rank #1 Binge Drinking 2005: 22.1%
Wisconsin Rank #1 Binge Drinking 2006: 24.3%

Wisconsin Ranks #1 in Average Daily Drinking
Wisconsin Ranks #1 in Drinking and Driving
Project TrEAT*  
(Trial for Early Alcohol Treatment)

Project TrEAT  
17,695 patients  
ages 18 - 65  
Completed Health Screening Survey

4,861 patients (27%)  
ages 18 - 30

12,834 patients  
ages 31 - 65

850 (17%)  
At-Risk Drinking

226  
Inclusion Criteria

Men > 14 drinks/wk  
Women > 11 drinks/wk  
Binge drinking  
2 or more CAGE +

* Fleming et al, Brief Physician Advice for Problem Alcohol Drinkers: A Randomized Control Trial in Community-based Primary Care Practices. JAMA 1997; 277(13):1039-1045
Brief Intervention for High Risk Drinking in Young Adults

226 Young Adults
Met all inclusion criteria
Randomly assigned

Experimental Group
114 patients
Two 15-minute Counseling Visits with MD
1 month apart
Two follow up phone calls from Nurse

Control Group
112 patients
General Health Booklet
Usual Care

Telephone interviews at 6, 12, 24, 36 and 48 months
No. of Binge Drinking Episodes in Previous 30 Days

Overall p < .01

Control

Treatment

Baseline  6 mo  12 mo  24 mo  36 mo  48 mo

8

6

4

2

0
More Than 3 Drinks Per Day in Previous 7 Days (Percent)

Overall $p < .001$

Control

Treatment

Baseline

6 mo

12 mo

24 mo

36 mo

48 mo
Health Care Utilization*
48 months Post-Baseline

Days of Hospitalization
- Control
- Treatment

Emergency Department Visits**
- Control
- Treatment

** p < .01

*Self-report and health claims data
Motor Vehicle Events * 48 months Post-Baseline

- Total MVA Events *
- Other Moving Violations
- Operating While Intoxicated
- Crash with Property Damage Only
- Crash with Non-Fatal Injuries *
- Crash with Fatalities

*Wisconsin Department of Transportation Records

*p < .05
Significance of Brief Intervention RCT in Young Adults

- TrEAT found long term reductions in:
  - Alcohol use,
  - Emergency Department visits,
  - Alcohol harm
  - Alcohol costs

- Primary care physicians did the intervention
- Effects lasted up to 48 months after intervention
- Few minutes of clinician-patient discussions can have powerful impact on health care

College Health Intervention Projects (CHIPs)

- A 5-year study (2004-2009), 5 campuses in U.S./Canada
- Randomized Control Trial, n=986 high-risk drinkers
- Designed to test the efficacy of brief clinician intervention on reducing the frequency of high-risk drinking and alcohol-related harms in college students

Principal Investigator: Michael Fleming, MD, MPH
Co-Investigators: Paul Grossberg, MD, David Brown, PhD
Funding Source: National Institute on Alcohol Abuse and Alcoholism (NIAAA)
CHIPs Study Overview

PHASE I
Health Screening Survey (HSS)
12,900 College Students
5 Campuses

PHASE II
Baseline interview

PHASE III
Randomization
1000 students

Usual Care
500 students

Intervention
500 students

PHASE IV
Intervention Protocol

PHASE V
Follow-Up

PHASE VI
Outcomes

- University of Wisconsin-Madison
- University of Wisconsin-Stevens Point
- University of Wisconsin-Oshkosh
- University of Washington
- University of British Columbia

18 years old
< 200 drinks/28 days
50 drinks/28 days - men
40 drinks/28 days - women
8 binges/28 days

- 3 drinking days/week
- 15 drinks/week - men
- 12 drinks/week - women
- 5 binges/month
- 2 positive CAGE
College Health Intervention Projects (CHIPs)

*Intervention Workbook*
Review of Your Current Health Habits

Exercise
Days per week of vigorous exercise: 2
Number of minutes per day of vigorous exercise: 20-30

Nutrition
Weight: 142 lbs
Height: 5'3"
BMI: 25

Concerns about weight:
☑ Yes  ☐ No

Tobacco use
☑ Yes  ☐ No
Number of days you used any tobacco in the past 30 days: 10
Number of cigarettes smoked per day: 10

Alcohol use
Family history of drinking problems: ☑ Yes  ☐ No
Number of days in the past 30 you drank alcohol: 14
Number of standard drinks you had in the past 30 days: 76
Number of days you drank more than 5 drinks in one sitting in the past 30 days: 10

Other:
See clinician Information sheet

Are there any of these health issues we have touched on that you’d like to talk more about? Today we are going to focus on alcohol use and your health. For any other issues, let’s schedule a follow-up visit so you do there will be enough time to address that issue. You would not be paid for that visit however.
Levels of Alcohol Use in Young Adults*

- Ask students where they fit into the pie chart
- Ask how they feel about it or if they are surprised
- Highlight percent of those who drink less

*18-25 year olds, Wisconsin primary care patients, n=2,460
UW-Madison: Higher Binge Consequences

Past Month

- Did something they regretted
- Drove after drinking alcohol
- Memory Loss/Blackout
- Argued with friends
- Fell behind in courses
- Had unplanned sex
- Had unprotected sex
- Got hurt or injured

% of students

National, 2002

UW-Madison, 2003
Current Drinking and Consequences

We're going to spend a little time talking about blood alcohol levels, alcohol-related calories, and alcohol-related costs, based on the answers you provided in your initial interview. These estimates are based on your report of drinking and driving offenses in that month.

**Blood Alcohol Concentration (BAC): % Alcohol in your Blood stream**

<table>
<thead>
<tr>
<th>BAC</th>
<th>TYPICAL EFFECTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.02%</td>
<td>Relaxed, reaction time goes down, buzz diminishes</td>
</tr>
<tr>
<td>0.1%</td>
<td>Buzz and relaxation continue, reaction time slows further, clumsiness increases</td>
</tr>
<tr>
<td>0.15%</td>
<td>Cognitive judgment impaired, less able to process information</td>
</tr>
<tr>
<td>0.16%</td>
<td>Motor coordination decreases, exceeds legal drinking limit in most states</td>
</tr>
<tr>
<td>0.18%</td>
<td>Close predictions in judgment and coordination, visibly sloppy</td>
</tr>
<tr>
<td>0.19%</td>
<td>High risk of blackout and accidents</td>
</tr>
<tr>
<td>0.22%</td>
<td>Can pass out, loses balance, risk of death</td>
</tr>
<tr>
<td>0.4%</td>
<td>Lethal dose</td>
</tr>
</tbody>
</table>

**Alcohol Related Calories**

We estimate that you consumed 3448 calories in the past 28 days from drinking with alcohol. That would be the equivalent of eating 7-8 Ferrero Rocher (average 190 calories each).

**Alcohol Related Costs**

- $250 TOTAL (per month)
- $263 TOTAL (paid at once)
- $0 TOTAL (paid at once)
- $0 TOTAL (paid at once)
# Life Goals and Alcohol Use

Let's take a few minutes to think about your goals and what you want to accomplish in the next few months and over the next four years. We will then talk about how alcohol may affect these goals.

### Next Few Months

<table>
<thead>
<tr>
<th>Goal</th>
<th>Easier</th>
<th>No Effect</th>
<th>Harder</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Graduate</strong></td>
<td>+1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2. <strong>Get married</strong></td>
<td>+1</td>
<td>0</td>
<td>-1</td>
</tr>
<tr>
<td>3. <strong>Study abroad</strong></td>
<td>+1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4. <strong>Get a job</strong></td>
<td>+1</td>
<td>0</td>
<td>-1</td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Next Few Years

<table>
<thead>
<tr>
<th>Goal</th>
<th>Easier</th>
<th>No Effect</th>
<th>Harder</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. <strong>Graduate</strong></td>
<td>+1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2. <strong>Get a teaching job</strong></td>
<td>+1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3. <strong>Get a PhD</strong></td>
<td>+1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Reducing Your Alcohol Related Risks

We have talked about some of the risks of drinking and your goals. Knowing what you know now, how willing are you to consider changing your drinking to reduce your risks?

Definitely willing

Let's develop a plan on how you can accomplish this. It's best to commit to changes in your drinking that are realistic and reasonable for you to make.

Reducing Your Risk

Today's Date: 25 05

☐ Number of drinks per occasion (a good goal might be no more than 5 drinks per occasion) 6-7

☐ Number of days per month you plan to drink alcohol (a good goal might be fewer than 5 drinks per occasion and fewer than 4-10 days per month) 2-8

☐ Type of drinks (for instance switch from multiple-serve mixed drinks to beer or wine coolers)

☐ Other drinking changes: Claussen, H20

Signature:

As your health care provider, I am here to providing support and medical care to help you make these changes.

Health Care Provider Signature
## Keep a record of what you drink over the next 7 days

<table>
<thead>
<tr>
<th>Date</th>
<th>Beer/Ale Malt Liquor 12 oz.</th>
<th>Mixed Drinks (e.g. Vodka, Whiskey) 1.5 oz.</th>
<th>Wine 5 oz.</th>
<th>Wine Cooler 12 oz.</th>
<th>Liqueur (e.g. Amaretto, Kahlua) 4 oz.</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tuesday</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wednesday</td>
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<tr>
<td>Thursday</td>
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<td>Friday</td>
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<td></td>
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<tr>
<td>Saturday</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Sunday</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Week’s TOTAL: __________

### Approximate Drink Conversions

<table>
<thead>
<tr>
<th>Type of Alcohol</th>
<th>Volume</th>
<th>Ounces of Alcohol</th>
<th>Standard Drinks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beer/Ale Malt Liquor</td>
<td>One Pint</td>
<td>16.0</td>
<td>1.3</td>
</tr>
<tr>
<td>Beer/Ale Malt Liquor</td>
<td>1/2 Liter</td>
<td>33.0</td>
<td>2.8</td>
</tr>
<tr>
<td>Beer/Ale Malt Liquor</td>
<td>1 Liter “Boot”</td>
<td>66.0</td>
<td>5.5</td>
</tr>
<tr>
<td>Hard Liquor</td>
<td>Double (Alone or in a Mixed Drink)</td>
<td>3.0</td>
<td>2.0</td>
</tr>
<tr>
<td>Hard Liquor</td>
<td>750ml (0.750 Liters)</td>
<td>25.4</td>
<td>16.9</td>
</tr>
<tr>
<td>Hard Liquor</td>
<td>1 Liter</td>
<td>33.8</td>
<td>22.5</td>
</tr>
<tr>
<td>Hard Liquor</td>
<td>1.75 Liters</td>
<td>59.2</td>
<td>39.5</td>
</tr>
<tr>
<td>Liqueur (Amaretto, Kahlua, Etc.)</td>
<td>One Regular Bottle “Fifth”</td>
<td>24.0</td>
<td>6.0</td>
</tr>
<tr>
<td>Liqueur (Amaretto, Kahlua, Etc.)</td>
<td>One Pint</td>
<td>16.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Wine</td>
<td>1/4 Regular Bottle “Split”</td>
<td>6.0</td>
<td>1.2</td>
</tr>
<tr>
<td>Wine</td>
<td>1/2 Regular Bottle “Pint”</td>
<td>12.0</td>
<td>2.4</td>
</tr>
<tr>
<td>Wine</td>
<td>One Regular Bottle “Fifth” or “Quart”</td>
<td>25.0</td>
<td>5.0</td>
</tr>
<tr>
<td>Wine</td>
<td>One Large Size Bottle “Magnum”</td>
<td>50.0</td>
<td>10.0</td>
</tr>
<tr>
<td>Wine</td>
<td>1 Gallon</td>
<td>128.0</td>
<td>25.4</td>
</tr>
<tr>
<td>Wine</td>
<td>Box of Wine (2 Liters)</td>
<td>236.7</td>
<td>47.3</td>
</tr>
<tr>
<td>Hard Liquor/Liqueur (Ratio Varies)</td>
<td>Long Island Iced Tea</td>
<td>6.0</td>
<td>4.0</td>
</tr>
<tr>
<td>1.5oz Hard Liquor/0.5oz Liqueur</td>
<td>Cosmopolitan</td>
<td>2.0</td>
<td>1.1</td>
</tr>
<tr>
<td>0.5oz Hard Liquor/1oz Liqueur</td>
<td>Chocolate Martini</td>
<td>3.5</td>
<td>1.5</td>
</tr>
</tbody>
</table>

* Ounces and standard drinks have been rounded to the nearest tenth.
CHIPs Study: Follow-up

• Follow-up phone calls by researchers
• Detailed questions similar to baseline
  – 6 months
  – 12 months
  – 18 months
  – 24 months
CHIPs Study: Outcomes

- Outcomes of Interest
  - Alcohol use
  - Academic performance
  - Accidents, falls, injuries
  - Contact with authorities
    - Dean of students, campus police, city/county/state
  - Tobacco use
  - STI risk behaviors
  - Health care utilization
CHIPs: 6-month Outcomes

- **# Binges per 28 days**
  - Control: 5.92 (4.08 SD)
  - Treatment: 5.07 (4.06 SD)
  - p = .005

- **Neglected Responsibilities**
  - Control: 1.87 (0.99 SD)
  - Treatment: 1.68 (0.92 SD)
  - p = .007

- **Tolerance**
  - Control: 1.62 (1.01 SD)
  - Treatment: 1.43 (0.91 SD)
  - p = .011

n = 729
CHIPs Study - Number of Drinks in Past 28 Days

- **Baseline**: Control (n=493) - 69.2, Treatment (n=493) - 71.0
- **6 months**: Control (n=493) - 57.2, Treatment (n=493) - 52.9
- **12 months**: Control (n=493) - 54.7, Treatment (n=493) - 51.7

*Significance: p = 0.018*
CHIPs Study - Drinking Days Past 28 Days

<table>
<thead>
<tr>
<th></th>
<th>Control (n=493)</th>
<th>Treatment (n=493)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baseline</td>
<td>11.8</td>
<td>11.7</td>
</tr>
<tr>
<td>6 months</td>
<td>10.4</td>
<td>9.9</td>
</tr>
<tr>
<td>12 months</td>
<td>10.3</td>
<td>9.9 (p = .053)</td>
</tr>
</tbody>
</table>
Inside the Clinician’s Black Box: Top 10 “tools” used in Brief Interventions with College Students

- 1. Likes and Dislikes
- 2. Life Goals
- 3. Reducing Risk Agreement
- 4. Feedback on Binges per month
- 5. Readiness to Change Scale (1-10) [“why not lower #?”]
- 6. Tracking # of Drinks
- 7. Consequences- Overall [esp. Blackouts]
- 8. Consequences- Calories
- 9. Consequences- BAC
- 10. Alcohol Norms

NIAAA Study: College Health Intervention Projects (CHIPs). 2004-2009
Fleming, Grossberg, Mundt, Brown et al.
"So, given what we’ve talked about, how willing, on a scale of 1-10, would you be to make a change in your drinking?"

[“About a 5 or a 6, I guess.”]

“Good. Well, how come you’re not at a 1 or 2?”

[“Well, I really don’t like the hangovers or blackouts, and I need to improve my grades this semester…”]
#6: Tracking Drinking

MI Principle: Roll with Resistance and Support Self-Efficacy

“Sounds like you’re not really interested in changing your drinking at the moment.

Would you be willing to keep track of your alcohol drinks using these pocket-sized cards over the next month?”

[“Sure…that’s fine.”]
#8: Consequences: Calories

**MI Principle: Roll with Resistance and Develop Discrepancy**

“In a month, if you have 72 drinks, you are consuming about 10,000 calories, just from alcohol. That’s the equivalent of about 30 cheeseburgers, or one a day. What are your thoughts about that?”

[“Ugh. That’s gross. I knew some of my weight was from drinking, but not that much…I think I better cut down.”]
#9: Consequences: BAC

**MI Principle: Roll with Resistance and Develop Discrepancy**

- “You know, you told me you really like that ‘relaxed buzz’ you get from a few drinks, but then it seems you continue to drink until you not only lose that pleasant feeling, but pass out and “feel like crap” the next day. What do you make of that?”

  - [“Well, I don’t know...guess I’d rather not blow off the next day...”]

- “What could you do differently?”

  - [“I could stop at 8 beers and leave out the shots and I’d feel better the next day...”]
### BAC.ZONE™ Card

#### 170 Pounds

**Your B.A.C. Zone™ Effects**

<table>
<thead>
<tr>
<th># of Drinks</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
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</thead>
<tbody>
<tr>
<td>0:30</td>
<td>0.00</td>
<td>0.06</td>
<td>0.12</td>
<td>0.18</td>
<td>0.24</td>
<td>0.30</td>
<td>0.36</td>
<td>0.42</td>
<td>0.48</td>
<td>0.54</td>
<td>0.60</td>
<td>0.66</td>
</tr>
<tr>
<td>1:00</td>
<td>0.06</td>
<td>0.13</td>
<td>0.20</td>
<td>0.27</td>
<td>0.34</td>
<td>0.41</td>
<td>0.48</td>
<td>0.55</td>
<td>0.62</td>
<td>0.69</td>
<td>0.76</td>
<td>0.83</td>
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<td>0.24</td>
<td>0.36</td>
<td>0.48</td>
<td>0.60</td>
<td>0.72</td>
<td>0.84</td>
<td>0.96</td>
<td>1.08</td>
<td>1.20</td>
<td>1.32</td>
<td>1.44</td>
</tr>
<tr>
<td>2:00</td>
<td>0.18</td>
<td>0.36</td>
<td>0.54</td>
<td>0.72</td>
<td>0.90</td>
<td>1.08</td>
<td>1.26</td>
<td>1.44</td>
<td>1.62</td>
<td>1.80</td>
<td>2.08</td>
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<td>2:30</td>
<td>0.24</td>
<td>0.48</td>
<td>0.72</td>
<td>0.96</td>
<td>1.20</td>
<td>1.44</td>
<td>1.68</td>
<td>1.92</td>
<td>2.16</td>
<td>2.40</td>
<td>2.74</td>
<td>3.08</td>
</tr>
<tr>
<td>3:00</td>
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<td>0.60</td>
<td>0.90</td>
<td>1.20</td>
<td>1.50</td>
<td>1.80</td>
<td>2.10</td>
<td>2.40</td>
<td>2.70</td>
<td>3.00</td>
<td>3.30</td>
<td>3.60</td>
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</table>

#### 120 Pounds

**Your B.A.C. Zone™ Effects**

<table>
<thead>
<tr>
<th># of Drinks</th>
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<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>0:30</td>
<td>0.00</td>
<td>0.05</td>
<td>0.10</td>
<td>0.15</td>
<td>0.20</td>
<td>0.25</td>
<td>0.30</td>
<td>0.35</td>
<td>0.40</td>
<td>0.45</td>
<td>0.50</td>
<td>0.55</td>
</tr>
<tr>
<td>1:00</td>
<td>0.05</td>
<td>0.10</td>
<td>0.15</td>
<td>0.20</td>
<td>0.25</td>
<td>0.30</td>
<td>0.35</td>
<td>0.40</td>
<td>0.45</td>
<td>0.50</td>
<td>0.55</td>
<td>0.60</td>
</tr>
<tr>
<td>1:30</td>
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<td>0.20</td>
<td>0.30</td>
<td>0.40</td>
<td>0.50</td>
<td>0.60</td>
<td>0.70</td>
<td>0.80</td>
<td>0.90</td>
<td>1.00</td>
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</tr>
<tr>
<td>2:00</td>
<td>0.15</td>
<td>0.30</td>
<td>0.45</td>
<td>0.60</td>
<td>0.75</td>
<td>0.90</td>
<td>1.05</td>
<td>1.20</td>
<td>1.35</td>
<td>1.50</td>
<td>1.65</td>
<td>1.80</td>
</tr>
<tr>
<td>2:30</td>
<td>0.20</td>
<td>0.40</td>
<td>0.60</td>
<td>0.80</td>
<td>1.00</td>
<td>1.20</td>
<td>1.40</td>
<td>1.60</td>
<td>1.80</td>
<td>2.00</td>
<td>2.20</td>
<td>2.40</td>
</tr>
<tr>
<td>3:00</td>
<td>0.25</td>
<td>0.50</td>
<td>0.75</td>
<td>1.00</td>
<td>1.25</td>
<td>1.50</td>
<td>1.75</td>
<td>2.00</td>
<td>2.25</td>
<td>2.50</td>
<td>2.75</td>
<td>3.00</td>
</tr>
</tbody>
</table>

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**Warning:**

- **Blue Zone!**
  - 06-09 = Feel depressed, increased impairment of balance, speech, vision, reactions & hearing, reduced judgment and self-control
  - 10-15 = Significant impairment in motor control, vision & reasoning
  - 16-24 = Anxiety & restlessness dominate, impairment increases, very poor decision-making

- **Red Zone!**
  - 25+ = Need assistance walking, double-vision and legal blindness, complete mental confusion & loss of consciousness is likely...
  - SEEK MEDICAL ATTENTION!
Inside the Clinician’s Black Box:
Top 10 “tools” used in Brief Interventions with College Students

1. Likes and Dislikes
2. Life Goals
3. Reducing Risk Agreement
4. Feedback on Binges per month
5. Readiness to Change Scale (1-10) [“why not lower #?”]
6. Tracking # of Drinks
7. Consequences- Overall [esp. blackouts]
8. Consequences- Calories
9. Consequences- BAC
10. Alcohol Norms

NIAAA Study: College Health Intervention Projects (CHIPs). 2004-2009
Fleming, Grossberg, Mundt, Brown et al.
Binge Drinking by UW-Madison Students

In an average 2-week period, you binged more often than 87% of other UW-Madison students...

What are your thoughts about that?

“twice a week” (4x in 2 weeks)

Number of binges in past 2 weeks

<table>
<thead>
<tr>
<th>None</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8+</th>
</tr>
</thead>
<tbody>
<tr>
<td>53%</td>
<td>15%</td>
<td>12%</td>
<td>7%</td>
<td>6%</td>
<td>3%</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>

American College Health Association
National College Health Assessment (ACHA-NCHA)
UW-Madison Institutional Data Report, Spring 2006
N= 787, representative sample of all UW-Madison students
Binge Drinking by UW-Madison Students

- "In an average 2-week period, you binged more often than 90% of other US college students...
- What are your thoughts about that?"

American College Health Association
National College Health Assessment (ACHA-NCHA)
UW-Madison representative sample, Spring 2006, N=787
National Reference Group Data Report, N=93,727

"twice a week" (4x in 2 weeks)
"Partying" Perceptions at UW-Madison

American College Health Association
National College Health Assessment (ACHA-NCHA)
UW-Madison Institutional Data Report, Spring 2006
N = 787, representative sample of all UW-Madison students

Actual Self-report
Perceived “typical” student

Number of drinks at last “partying/socializing”
"Partying" Perceptions Nationally

American College Health Association
National College Health Assessment (ACHA-NCHA)
National Data Report, Spring 2006
N= 94,806, representative sample

<table>
<thead>
<tr>
<th>Number of drinks at last “partying/socializing”</th>
<th>Actual Self-report</th>
<th>Perceived “typical” student</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>22%</td>
<td>5%</td>
</tr>
<tr>
<td>1-2</td>
<td>19%</td>
<td>6%</td>
</tr>
<tr>
<td>3-4</td>
<td>21%</td>
<td>27%</td>
</tr>
<tr>
<td>5-6</td>
<td>36%</td>
<td></td>
</tr>
<tr>
<td>7-8</td>
<td>15%</td>
<td>9%</td>
</tr>
<tr>
<td>9-10</td>
<td>9%</td>
<td>6%</td>
</tr>
<tr>
<td>11-12</td>
<td>3%</td>
<td>2%</td>
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<tr>
<td>13-14</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>15-16</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>17+</td>
<td>1%</td>
<td>1%</td>
</tr>
</tbody>
</table>
# Marijuana Use by UW-Madison Students

American College Health Association  
National College Health Assessment (ACHA-NCHA)  
UW-Madison Institutional Data Report, Spring 2006  
N= 787, representative sample of all UW-Madison students

- “This month you smoked weed more often than 92% of other UW-Madison students...”  
- What are your thoughts about that?”

<table>
<thead>
<tr>
<th>Number of days in past month</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Never</td>
<td>56%</td>
</tr>
<tr>
<td>Not now</td>
<td>27%</td>
</tr>
<tr>
<td>1 - 2</td>
<td>7%</td>
</tr>
<tr>
<td>3 - 5</td>
<td>3%</td>
</tr>
<tr>
<td>6 - 9</td>
<td>2%</td>
</tr>
<tr>
<td>10 - 19</td>
<td>2%</td>
</tr>
<tr>
<td>20 - 29</td>
<td>2%</td>
</tr>
<tr>
<td>Daily</td>
<td>1%</td>
</tr>
</tbody>
</table>

“once a week”  
4x per month
Marijuana Use by UW-Madison Students

American College Health Association
National College Health Assessment (ACHA-NCHA)
UW-Madison representative sample, Spring 2006, N=787
National Reference Group Data Report, N=93,893

- “This month you smoked weed more often than 93% of other US college students...
- What are your thoughts about that?”

“once a week”
4x per month

Number of days in past month

Never | Not now | 1 - 2 | 3 - 5 | 6 - 9 | 10 - 19 | 20 - 29 | Daily
Alcohol and Interconnected Clinical Issues

- Sexually Transmitted Diseases
- Sexual Assault
- Weight and Eating Disorders
- Depression and Anxiety
- Health and Academic Performance
- Insomnia, sleep problems, fatigue
- Addictions:
  - recreational drugs, Rx drug abuse, gambling
Alcohol and Interconnected Clinical Issues

N = 5,446
Undergraduates
2 large public universities
• 20% experienced some type of completed sexual assault since entering college
• Most: voluntary alcohol
• Few: after drug/alcohol without consent

Sexual Assault Prevention:
• Integrate substance use
• Prevent victimization
Case 2: Annual Women’s Exam Visit

- Carmen, a 22 year old graduating senior in international studies presents for routine pelvic exam and STI check.
  - Asymptomatic, on OCP for 3 years, no problems
  - 8 lifetime male partners, 2 in the past 3 months, inconsistent condoms
  - Unprotected vaginal intercourse 1 month ago, worried about “risky” guy
  - New boyfriend, good relationship, wants to be tested
  - Positive routine alcohol screen (9 drinks twice a week; AUDIT=18)

- Clinician: Ever have any blackouts?
- Carmen: Yeah, lots of those.
- Clinician: What do you think about those?
- Carmen: I know it’s really bad. But it’s been like that since sophomore year. My whole family are alcoholics and I know I drink too much. That’s what happened that night a month ago... (tearful)
Case 2: Annual Women’s Exam Visit (cont’d)

- Empathic conversation about drinking, what happened, consensual v. nonconsensual, support, current boyfriend, readiness to change, patient plans for follow-up (“what do you want to do?”):
  - Reduce to 5 drinks max
  - Counseling Services for Alcohol assessment and relationship issues

- STI test results (negative) sent via email 1 week later:
  - Reminder about counseling/alcohol issues

- 1 month later: patient in clinic for unrelated visit (sinusitis)
  - Patient reports f/up with alcohol counselor for 2 visits
  - Plan to maintain reduced intake, positive support from boyfriend
  - Appears motivated to continue counseling
Alcohol and Interconnected Clinical Issues

N= 4,271, random sample
10 Universities
Past 30-day drinkers
39% restricted calories
2/3 wt. concerns
Greater odds:
Getting drunk per week
Negative alcohol consequences
Women:
• memory loss
• injuries
• taken advantage of sexually
• unsafe sexual activity
Men:
physical fight

Calorie Restriction on Drinking Days: An Examination of Drinking Consequences Among College Students

Steven M. Giles, PhD; Heather Champion, PhD; Erin L. Sutfin, MD;
Thomas P. McCoy, MS; Kim Wagoner, MS

Abstract Objective: This study examined the association between restricting calories on intended drinking days and drunkenness frequency and alcohol-related consequences among college students. Participants: Participants included a random sample of 4,271 undergraduate college students from 10 universities. Methods: Students completed a Web-based survey regarding their high-risk drinking behaviors and calorie restriction on intended drinking days. Results: Thirty-nine percent of past 30-day drinkers reported restricting calories on days they planned to drink alcohol, and those who did restrict calories reported lower consequences. Restricting calories was associated with decreased alcohol consumption across the week and increased calorie consumption. Conclusion: Restricting calories on intended drinking days may help offset the negative consequences of substance use. For example, dieting and purging food among female college students has been associated with greater negative consequences from alcohol use. Much of the research examining disordered eating and alcohol consumption among college students has focused on those who have been clinically diagnosed with an eating disorder. However, studying the relationship between calorie restriction on intended drinking days and alcohol consumption among college students may help to understand the complex interplay between these behaviors.
Alcohol and Interconnected Clinical Issues

Weight and Eating Disorders

• “Your weight is ___ and your BMI is ____
  What do you think about that?
  What’s going on with your...
  weight, exercise, nutrition...”

• “Your stomach aches and bloating may be related
to the way you are eating... What are your
thoughts about that?”
1. How many times in the past month did you drink more than 4-5 drinks on a single occasion? [“4/5”]

2. How many drinks do you have in an average week? [NIAAA]
Alcohol Use Disorders Identification Test

Developed by World Health Organization

Instructions: Please read each question carefully and answer all questions even if they do not apply to you. Compute your score by adding up the numbers beside each of your answers.

1. How often do you have a drink containing alcohol?  
   - Never (0)  
   - Monthly or less (1)  
   - 2 to 4 times a month (2)  
   - 2 to 3 times a week (3)  
   - 4 or more times a week (4)

2. How many drinks containing alcohol do you have on a typical day when you are drinking?  
   - Not applicable (0)  
   - 1 or 2 (0)  
   - 3 or 4 (1)  
   - 5 or 6 (2)  
   - 7 to 9 (3)  
   - 10 or more (4)

3. How often do you have six or more drinks on one occasion?  
   - Not applicable (0)  
   - Less than monthly (1)  
   - Monthly (2)  
   - Weekly (3)  
   - Daily or almost daily (4)

4. How often during the last year have you found that you were not able to stop drinking once you have started?  
   - Not applicable/ Never (0)  
   - Less than monthly (1)  
   - Monthly (2)  
   - Weekly (3)  
   - Daily or almost daily (4)

5. How often during the last year have you failed to do what was normally expected from you because of drinking?  
   - Not applicable/ Never (0)  
   - Less than monthly (1)  
   - Monthly (2)  
   - Weekly (3)  
   - Daily or almost daily (4)

6. How often during the last year have you needed a drink in the morning to get yourself going after a heavy drinking session?  
   - Not applicable/ Never (0)  
   - Less than monthly (1)  
   - Monthly (2)  
   - Weekly (3)  
   - Daily or almost daily (4)

7. How often during the last year have you had a feeling of guilt or remorse after drinking?  
   - Not applicable/ Never (0)  
   - Less than monthly (1)  
   - Monthly (2)  
   - Weekly (3)  
   - Daily or almost daily (4)

8. How often during the last year have you been unable to remember what happened the night before you had been drinking?  
   - Not applicable/ Never (0)  
   - Less than monthly (1)  
   - Monthly (2)  
   - Weekly (3)  
   - Daily or almost daily (4)

9. Have you or someone else been injured as a result of your drinking?  
   - No (0)  
   - Yes, but not during the last year (2)  
   - Yes, during the last year (4)

10. Has a relative, friend, doctor, or other health worker been concerned about drinking or suggested you cut down?  
    - No (0)  
    - Yes, but not during the last year (2)  
    - Yes, during the last year (4)

What Your Score Means:

- Below 8: You probably don’t have a diagnosable alcohol problem, but if you are concerned about how alcohol is affecting you, you should make changes.
- 8 to 11: You may very well have reasons to be concerned.
- 12 to 15: There are some serious indications that your drinking is a problem.
- Above 15: You most likely have a problem.

For help or further information:

- Go to e-CHUG (http://www.e-chug.com), or Health Point Online Resources.
- See your clinician for a follow-up appointment.
- Call Counseling and Consultation Services at 265-5600.

TOTAL SCORE

Oct 2007
Brief Intervention example without MI Principles

“Well, Tom, you drink too much. It’s bad for you and will affect your grades and ability to do well in school. You might get in a serious accident, forget to use a condom and get STIs or HIV. As your doctor, I recommend that you cut down to 3 or 4 drinks when you go out with your friends.”
Motivational Interviewing
Rolling with Resistance: example 1

- **Student:** I don’t think I have a problem or need to cut down
- **Clinician:** You enjoy drinking and don’t think that reducing it would work for you right now.

  [Reflective Listening; trying to be guiding]

- **Student:** I’m having too much fun with all my friends.
- **Clinician:** OK, so how would you know if you are having a problem with drinking?… [open]

  …What would have to happen for you to make a change? [open]

  How about your friends?… [open]
Motivational Interviewing
Rolling with Resistance: example 2

Student: “I don’t think I have a problem or need to cut down”

Clinician: “I see my job as not to lecture you about drinking, but more as a guide, using my experience with other students to help you make decisions that make sense to you. I’d like to start by understanding how you really feel about changing some of your drinking. Is that OK?”

[informing; guiding; asking]
Motivational Interviewing
Rolling with Resistance: example 3

Student: “I don’t think I have a problem or need to cut down”

Clinician: “Only you can decide to reduce your alcohol use. I’ll help you take care of these medical problems and hopefully help you prevent more troubles with drinking, but you are in charge of what you do. How about trying to cut down for a month or so and seeing how it goes?” [guiding; asking]
Student: “I don’t really have a problem or need to cut down”

Clinician: “Actually, Tom, I have to respectfully disagree. Considering your broken hand, the hole in the wall, and the fact that your girlfriend won’t talk to you, I think the alcohol has contributed quite a bit to this situation. What do you think?”

[summary; agenda setting; asking]
Case 3: STI screening

• Justin, a 20 year old junior, business major, presents in April 2009 for a routine STI screen.
  – 20 lifetime partners, mostly men, some women
  – current boyfriend for 3 months.
  – last HIV test (negative) was January 2007
  – unprotected anal intercourse December 2008 with “friend who was fine”
  – routine alcohol screen: 4-5 drinks 1-2x weekly, AUDIT=7 (low risk)

• Clinician: Good to see your alcohol screen is low risk. How are you doing with drinking?

• Justin: Fine. Really don’t get drunk very much.

• Clinician: Any other drugs: weed, speed, coke, X...?

• Justin: Not any more.

• Clinician: What do you mean?
Case 3: STI screening

• Justin: I used to do a lot of cocaine in high school when my older brother got me into the drug scene. It was a pretty messed up time, but I stopped all that. Except for some weed every week or two, I’m good now.

• Clinician: Ever inject any drugs?
• Justin: I did try heroine 3 times.
• Clinician: When?
• Justin: Over spring break when I was home with my brother. I had never tried that so I did it with him, with brand new needles each time, so you don’t have to worry ‘bout me. I got that out of my system and won’t be doing that again.

• Clinician: Why not?
• Justin: Well, it’s pretty stupid and I don’t want to end up like my brother.
Case 3: STI screening

• Clinician: Sounds like you’ve been thinking about that. [reflection]
• Justin: Yeah, I’ve got too much going for me to screw it all up.
• Clinician: What does your boyfriend think about the heroine? [support]
• Justin: He’d kill me. I haven’t told him. He would be all over me.
• Clinician: Sounds like he cares about you. [reflection]
• Justin: Yeah, it’s a good relationship, and he doesn’t really like my brother to begin with.
• Clinician: Sounds like you don’t like some things about your brother either...So what do you want to do about this situation? [reflection; open; guiding]
• Justin: I should probably be honest with my boyfriend, but I’ll really have to convince him that it was only a one-time thing...
Case 3: STI screening

- Clinician: Good for you for working on that together. We can talk about that some more at another visit, and you’re also welcome to talk with one of our counselors if you’d like to explore these issues further. In the meantime we should get back to the STI screen. We’ll do the urine test and cultures in a minute and then we’ll draw your blood for the HIV test. Seems like you’re interested in the rapid HIV test, and we’ll have the result back in a half-hour. While you’re waiting, how about thinking about the drug and relationship issues and coming up with a plan for how you’ll stay safe.

- Justin: OK. [returns for results]

- Clinician: Negative. So that’s good. How are you feeling about that? What are you planning to do to stay safe? [open; guiding]

Patient plan discussed, follow-up encouraged, support for patient’s commitment to no injecting drug use, honesty with boyfriend, condoms consistently.
Alcohol and Interconnected Clinical Issues

The Co-Occurrence of Alcohol Use and Gambling Activities in First-Year College Students

Matthew P. Martens, PhD; Tracey L. Rocha, BA; M. Dolores Cimini, PhD; Angelina Diaz-Myers, PhD; Estela M. Rivero, PhD; Edelgard Wulfert, PhD

ABSTRACT: Objective: Both alcohol use and gambling are behaviors that can be problematic for many college students; however, it is not clear whether the relationship between the 2 exists for students who have recently entered college. Participants: The sample included 908 first-year college students who were surveyed in fall 2005, approximately 1 month after entering college. Methods: Participants completed Web-based surveys on alcohol use and gambling behaviors. Results: Alcohol use and gambling are highly concurrently related. Furthermore, epidemiological studies documenting the overall public health problems caused by heavy drinking among college students estimate that each year 1,700 deaths, 500,000 unintentional injuries, and 600,000 assaults can be attributed to college student drinking. Heavy drinking is also associated with decrements in both personal and academic life, including missed classes, poor grades, relation- ships, and financial and legal difficulties.

N= 908 First-year students
Web-based survey

Alcohol use/risks: correlated with:
- gambling frequency
- peak gambling loss
Inside the Clinician’s Black Box: Top 10 “tools” used in Brief Interventions with College Students

- 1. Likes and Dislikes
- 2. Life Goals
- 3. Reducing Risk Agreement
- 4. Feedback on Binges per month
- 5. Readiness to Change Scale (1-10) [“why not lower #?”]
- 6. Tracking # of Drinks
- 7. Consequences- Overall [esp. blackouts]
- 8. Consequences- Calories
- 9. Consequences- BAC
- 10. Alcohol Norms

NIAAA Study: College Health Intervention Projects (CHIPs). 2004-2009
Fleming, Grossberg, Mundt, Brown et al.
Words and “Pearls” for Clinicians

Alcohol- quantity, frequency, heavy blackout concerned

Enjoy
Not enjoy
do-specific plan; readiness to change 1-10 support
Words and “Pearls” for Clinicians

- Individualize Motivators: Blackouts, Brain Cells, Fitness, Calories, $, Academics, Relationships, Family History
- “Go for the Buzz, not the Fuzz” or “Drink Smart” or other phrases
- “What do you like to do that’s fun that doesn’t involve alcohol?”
- “Compared with your friends who drink, are you light, medium, heavy?
- “How do you decide how much you will drink when you go out?” [open]
- “What questions do you have” [open] v. “Do you have any questions” [closed]
- “How would you know if you are having a problem?” [for those denying]
- [If you don’t occasionally have a patient get upset with you, you are probably not doing a thorough enough job of talking about alcohol…]
Clinical Prevention in College Health

• Tobacco “vital signs” example”: 30 seconds
  – It says here you smoke cigarettes [“yeah”]
  – What do you think about that? [“I should quit”]
  – Why?...[“this cough’s a drag...” “my girlfriend hates it” etc..]
  – Good for you. What would like to do? [varied responses]
  – What worked/didn’t work in the past? We’ll help you...

• Might lead into alcohol question: another 30 seconds
  – Do you smoke more when you’re drinking? [“yeah”]
  – What does your girlfriend think about that? [“She’s tried to get me to drink less”]
  – What did you do? [“I stopped going out on Thursdays”]
  – How did you feel [“better”]...
Clinical Prevention in College Health

• Every college health visit is an opportunity to elicit a clinical prevention “motivational moment”, however brief, but always patient-centered, relevant to the student’s health care, and designed to stimulate the student’s own efforts at behavioral risk reduction.

• Ideally, the patient will verbalize the need and the plan to start changing behavior.
“If you build it, they will come”
Brief Motivational Interventions and Building Bridges

• If you build an Alcohol Screening and Brief Intervention protocol, students will come and change...

• If you build on your skills, you will get better at brief motivational interventions for alcohol and multiple interconnected clinical problems

• If you build on your campus connections, colleagues, departments, and support, new opportunities for integrated clinical, counseling, and preventive services will come...
Clinical Prevention

An ounce of prevention…
is a ton of work!

Paul S. Frame, M.D.
Resource Texts

- BASICS: Brief Alcohol Screening Intervention for College Students: A Harm Reduction Approach

- Motivational Interviewing Second Edition: Preparing People for Change

- Talking with College Students About Alcohol: Motivational Strategies for Reducing Abuse
  Scott T. Walters and John S. Baer (2006 The Guilford Press, NY)

- Motivational Interviewing in Health Care: Helping Patients Change Behavior
Resources

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www.collegedrinkingprevention.gov