Short and Simple: Substance Use Screening and Brief Intervention in HIV Care Settings

Trainer Guide
### Short and Simple: Substance Use Screening and Brief Intervention in HIV Care Settings

**Table of Contents**

- Background Information .................................................................................................................................. 3
- What Does the Training Package Contain? ..................................................................................................... 4
- What Does This Trainer’s Manual Contain? .................................................................................................... 4
- How is This Trainer’s Guide Organized? ........................................................................................................ 4
- General Information about Conducting the Training ...................................................................................... 4
- Materials Needed to Conduct the Training .................................................................................................... 5
- Overall Trainer Notes ..................................................................................................................................... 5
- Icon Key .......................................................................................................................................................... 5
- Slide-By-Slide Trainer Notes .......................................................................................................................... 6
  - Title Slide and Training Collaborators (Slides 1-2) ...................................................................................... 7-8
  - Test Your Knowledge Questions, Educational Objectives, and Introduction (Slides 3-41) .................... 8-37
  - Rationale for Conducting SBIRT in and HIV Care Setting (Slides 42-54) .................................................. 37-48
  - Screening to Identify Patients At-Risk for Substance Use Problems (Slides 55-97) ................................. 49-69
  - Brief Interventions for People At-Risk for Substance Use Problems (Slides 98-127) ......................... 69-94
  - Conducting a Brief Intervention: FLO (Slides 128-160) ........................................................................... 94-108
  - Referral to Treatment for Patients At-Risk for Substance Use Dependence (Slides 161-166) ......... 108-111
  - SBIRT Implementation Issues and Questions (Slides 167-171) ............................................................... 111-113
  - What Did You Learn Questions, Take Home Points, and Key SBIRT Resources (Slides 172-182) ....... 113-116
- Acknowledgements ........................................................................................................................................ 116
- Participant Handouts (Blank and Scored AUDIT Screener and Blank DAST Screener) .................................. 117
Short and Simple: Substance Use Screening and Brief Intervention in HIV Care Settings

Background Information

The purpose of this full-day, interactive, practice-based training is to provide HIV clinicians (including, but not limited to physicians, dentists, nurses, and other allied medical staff, therapists and social workers, and counselors, specialists, and case managers) with a detailed overview of screening patients for at-risk alcohol and other drug use and conducting a brief intervention with patients to reduce their at-risk substance use. The daylong training includes an 182-slide PowerPoint presentation, Trainer Guide, and a companion 2-page fact sheet. The duration of the training is 6 hours.

The goal of this course is to develop skills to deliver screening and brief intervention in an HIV care setting, to begin a conversation around the implementation of SBIRT in standard practice. The learning activities that will be utilized include didactic teaching, role plays, group discussions, and peer evaluation. The PSATTC developed a self-paced, online course entitled “Foundations of SBIRT.” The course is free-of-charge (a small fee is assessed for continuing education for folks based outside of CA) and can be accessed through the ATTC Network’s online learning portal (http://www.healtheknowledge.org).

“Test Your Knowledge” questions have been inserted at the beginning and end of the presentation to assess a change in the audience’s level knowledge after the key content has been presented. An answer key is provided in the Trainer’s notes for slides 4-7 and slides 173-176. Audience Response System can be utilized, if available, when facilitating the Test Your Knowledge question sessions.

In addition, a series of group activities/role plays (slides 10, 54, 75-85, 91-97, 101, 124, 140, 149, 157-158, 165, and 166) have been inserted throughout the presentation to encourage audience interaction, dialogue, and skills practice among the training participants, and to illustrate how the information presented can be used clinically.
What Does the Training Package Contain?

- PowerPoint Training Slides (with notes)
- Trainer’s Guide with detailed instructions for how to convey the information and conduct the interactive exercises

What Does This Trainer’s Manual Contain?

- Slide-by-slide notes designed to help the trainer effectively convey the content of the slides themselves
- Supplemental information for select content to enhance the quality of instruction
- Suggestions for facilitating the “Test Your Knowledge” questions and group activities/role plays
- Copies of the AUDIT (blank and scored) and DAST (blank) screening tools

How is This Trainer’s Guide Organized?

For this manual, text that is shown in bold italics is a “Note to the Trainer.” Text that is shown in normal font relates to the “Trainer’s Script” for the slide.

It is important to note that some slides in the PowerPoint presentation contain animation. Animations are used to call attention to particular aspects of the information or to present the information in a stepwise fashion to facilitate both the presentation of information and participant understanding. Getting acquainted with the slides, and practicing delivering the content of the presentation are essential steps for ensuring a successful, live training experience.

General Information about Conducting the Training

The training is designed to be conducted in medium-sized groups (30-50 people). It is possible to use these materials with larger groups, but the trainer may have to adapt the small group exercises to ensure that there is adequate time to cover all of the content.
Materials Needed to Conduct the Training

- Computer with PowerPoint software installed (2003 or higher version) and LCD projector to show the PowerPoint training slides.

- When making photocopies of the PowerPoint presentation to provide as a handout to training participants, it is recommended that you print the slides three slides per page with lines for notes. Select “pure black and white” as the color option. This will ensure that all text, graphs, tables, and images print clearly.

- Flip chart paper and easel/white board, and markers/pens to write down relevant information, including key case study discussion points.

Overall Trainer Notes

It is critical that, prior to conducting the actual training, the trainer practice using this guide while showing the slide presentation in Slideshow Mode in order to be prepared to use the slides in the most effective manner.

Icon Key

- Note to Trainer
- Activity
- References
- Audience Response System (ARS)-Compatible Slide
Short and Simple: Substance Use Screening and Brief Intervention in HIV Care Settings

Slide-By-Slide Trainer Notes

The notes below contain information that can be presented with each slide. This information is designed as a guidepost and can be adapted to meet the needs of the local training situation. Information can be added or deleted at the discretion of the trainer(s).
Welcome participants and take care of housekeeping announcements, such as location of restrooms, turning off cell phones, participating actively, etc.

The purpose of this full-day, interactive, practice-based training is to provide HIV clinicians (including, but not limited to physicians, dentists, nurses, and other allied medical staff, therapists and social workers, and counselors, specialists, and case managers) with a detailed overview of screening patients for at-risk alcohol and other drug use and conducting a brief intervention with patients to reduce their at-risk substance use. The daylong training includes a 182-slide PowerPoint presentation, Trainer Guide, and a companion 2-page fact sheet. The duration of the training is 6 hours.

The goal of this course is to develop skills to deliver screening and brief intervention in an HIV care setting, to begin a conversation around the implementation of SBIRT in standard practice. The learning activities that will be utilized include didactic teaching, role plays, group discussions, and peer evaluation. The PSATT developed a self-paced, online course entitled “Foundations of SBIRT.” The course is free-of-charge (a small fee is assessed for continuing education for folks based outside of CA) and can be accessed through the ATTC Network’s online learning portal (http://www.healtheknowledge.org).

“Test Your Knowledge” questions have been inserted at the beginning and end of the presentation to assess a change in the audience’s level knowledge after the key content has been presented. An answer key is provided in the Trainer’s notes for slides 4-7 and slides 173-176. Audience Response System can be utilized, if available, when facilitating the Test Your Knowledge question sessions.

In addition, a series of group activities/role plays (slides 10, 54, 75-85, 91-97, 101, 124, 140, 149, 157-189, and 166) have been inserted throughout the presentation to encourage audience interaction, dialogue, and skills practice among the training participants, and to illustrate how the information presented can be used clinically.
Slide 2: Training Collaborators

This PowerPoint presentation, Trainer Guide, and companion fact sheet were developed by Beth Rutkowski, M.P.H. (Associate Director of Training of UCLA ISAP) and Thomas Freese, Ph.D. (Director of Training of UCLA ISAP and Principal Investigator/Director of the Pacific Southwest ATTC) through supplemental funding provided by the Pacific AIDS Education and Training Center, based at Charles R. Drew University of Medicine and Science. We wish to acknowledge Phil Meyer, LCSW, Maya Talisa Gil-Cantu, MPH, and Tom Donohoe, MBA, from the PAETC.

Slide 3 [Transition Slide]: Test Your Knowledge Questions

The purpose of the following four questions is to test the current level of screening and brief intervention knowledge amongst training participants. The questions are formatted as either multiple choice or true/false questions. Read each question and the possible responses aloud, and give training participants time to jot down their response before moving on to the next question.

Do not reveal the answers to the questions until the end of the training session (when you re-administer the questions that appear on slides 174-177).

Slide 4: Test Your Knowledge Question #1

Read the question and choices, and review audience responses out loud.

**Audience Response System (ARS)-compatible slide**
Slide 5: Test Your Knowledge Question #2

Read the question and choices, and review audience responses out loud.

**Audience Response System (ARS)-compatible slide**

Slide 6: Test Your Knowledge Question #3

Read the question and choices, and review audience responses out loud.

**Audience Response System (ARS)-compatible slide**

Slide 7: Test Your Knowledge Question #4

Read the question and choices, and review audience responses out loud.

**Audience Response System (ARS)-compatible slide**
In an effort to break the ice and encourage group interaction, take a few minutes to ask training participants to briefly share the answers to these four questions. You can ask for several volunteers to share their responses, if the size of your audience prevents all participants from sharing. Group introductions work best for groups of 15 or fewer training participants.

If the group is too large for formal introductions, the trainer can quickly ask participants the following two questions to gauge their work setting and professional training:

1. How many [case managers, MFTs or LCSWs, counselors, administrators, physicians, PAs, nurse practitioners, nurses, medical assistants, dentists, etc.] are in the room? Did I miss anyone? {elicit responses}

Briefly review each of the educational objectives with the audience.

At the end of this brief training, participants will be able to:

1. Describe the background and rationale for conducting screening and brief intervention activities in HIV care settings.
2. Explain at least three screening procedures for identifying patients engaged in at-risk substance use behaviors.
3. Utilize brief intervention strategies and motivational interviewing techniques to motivate patients to change their at-risk behavior and/or seek more formalized substance use treatment.
**Allow 5-7 minutes for this activity**

Ask participants to join you in a quick exercise to reflect on a difficult change that they have made in their lives. Ensure participants that they will not be asked to share the details of this change with anyone. Prompts you might use include, “What is something you really struggled with?” Ask them to take 1 minute to think about this time and to think about how this change came about and how long it took them to take action.

Any change takes time to commit to it. Even though a person may be thinking about changing, actually doing something about it or making an effort to change is really hard. Ask a few participants to share how long it took from the point of considering a change to the point of taking action towards change. Allow 2-3 minutes for discussion.

It is not uncommon for people to ponder change for a very long time before taking action—often years. Screening, brief intervention, and referral to treatment provides a way to speed this process up and help someone see the need for change and begin to do something about it.
Most Medical Providers Don’t Talk with Patients about Alcohol Use

The majority of adults have not talked with a doctor, nurse, or other health professional about how much alcohol they consume. Excess drinking is dangerous and can lead to heart disease, breast cancer, sexually transmitted diseases, unintended pregnancy, fetal alcohol spectrum disorders, sudden infant death syndrome, motor-vehicle crashes, and violence. Public health experts recommend alcohol screening and counseling should happen more often than it does. Yet, people report a doctor, nurse, or other health professional has rarely talked with them about alcohol, the important first step for addressing problems with drinking too much: Only 1 in 6 adults have discussed their drinking. Few binge drinkers (1 in 4) have talked about alcohol use. Binge drinking is defined as men drinking 5 or more alcoholic drinks or women drinking 4 or more, in about 2-3 hours. Even among adults who binge drink 10 times or more a month, only 1 in 3 have discussed drinking. Only 17% of pregnant women have talked about drinking.

REFERENCE:

Prevalence of Ever Talking about Alcohol Use with Health Professional (2011 BRFSS Results)

According to data from the 2011 Behavioral Risk Factor Surveillance System (administered by the CDC), most states reported less than 1 in 4 adults who discussed their drinking with a health care provider. The state average was 15.8%; California’s average was just a bit lower than the national average at 15.4%. Washington, D.C. had the highest percentage with 25%.
Slide 13: We Don’t Ask and We Don’t Know What to Do

Lack of training on how to screen and give advice to patients is one of main reasons clinicians do not routinely screen for substance use. Some other reasons include: (1) not knowing how to detect signs of substance abuse; (2) embarrassment about asking questions; and (3) not knowing what to do if a problem is uncovered. This slide features two studies done with different populations of physicians (trauma surgeons and primary care physicians) to assess the level of routine screening for alcohol or drug use.

REFERENCES:

Slide 14: Medical Consequences of Substance Abuse

Substance abuse is associated with many health and social problems, including (but not limited to): (1) heart disease; (2) breast cancer; (3) fetal alcohol spectrum disorders; (4) sudden infant death syndrome; motor vehicle crashes; and violence. More than 88,000 deaths each year are associated with alcohol and/or drug use, and substance abuse is the fourth leading preventable cause of death; Each year, alcohol alone is associated with $223.5 billion in economic costs, which is equivalent to approximately $1.90/alcoholic drink.
Slide 15: Top 10 Risk Factors for Disease Globally

The World Health Report identified 10 leading risk factors globally. Together, these account for more than one third of all deaths worldwide. Two substance use-related risk factors, tobacco use and alcohol use, are included in 4th and 5th place, respectively.

REFERENCE:


Slide 16: Injection Drug Use and HIV

Injection drug use (IDU) is a significant factor in the spread of HIV, hepatitis C, and hepatitis B. All of the paraphernalia linked to injecting use has the potential to transmit blood-borne infectious agents. Even if the sharing of equipment does not occur, poor cleaning of personal equipment and contaminated drug supplies can expose the individual user to these infections.

REFERENCE:


Slide 17: Substance Abuse Challenges – 22.5 Million Americans are Current* Users of Illicit Drugs

This slide pertains to the prevalence of past month (current) illicit drug use. In 2011, more than 21 million people reported past-month use of an illicit drug. Marijuana ranked first in past-month use (18.1 million users); non-medical use of prescription drugs ranked second (6.1 million users). For the past two years, similar numbers of people reported current use of marijuana and non-medical use of prescription medications. If you add alcohol to the mix, more than 133 million people reported past month alcohol consumption (51.8% of U.S. population aged 12 and older).
Slide 18: American College of Surgeons – Committee on Trauma

In its publication *Resources for Optimal Care of the Injured Patient: 2006*, the American College of Surgeons Committee on Trauma (COT) includes the following essential criteria for trauma centers. “Trauma centers can use the teachable moment generated by the injury to implement an effective prevention strategy, for example, alcohol counseling for problem drinking. Alcohol is such a significant associated factor and contributor to injury that it is vital that trauma centers have a mechanism to identify patients who are problem drinkers. Such mechanisms are essential in Level I and II trauma centers. In addition, Level I centers must have the capability to provide an intervention for patients identified as problem drinkers. These have been shown to reduce trauma recidivism by 50%.”

**REFERENCE:**
American College of Surgeons Committee on Trauma. (n.d.). *Alcohol Screening and Brief Intervention (SBI) for Trauma Patients: COT Quick Guide*. Chicago, IL: Author.

---

Slide 19: SBIRT – Review of Key Terms

**Screening** is a brief method of identifying individuals at risk for potential substance use related problems by asking them a few validated questions. Screening is a population-based approach to increase safety of individuals and populations.

**Brief interventions** consist of short-term, low-intensity counseling. Most brief interventions are 1 or 2 sessions that may last 10-20 minutes. The goal of a brief intervention is to raise awareness of substance use risks and to move people to a place where they can draw a connection between their substance use and the concerns that they come to us with.

**Brief treatments** include more in-depth counseling, typically cognitive behavioral therapy for people who are experiencing substance use related problems and would like help managing, reducing, or stopping their substance use.

Lastly, **referrals** are a set of procedures that we use to help patients access and receive services through a specialized care provider such as an addiction treatment program.
Slide 20: What is SBIRT?

Screening, Brief Intervention, and Referral to Treatment (SBIRT) is an evidence-based practice used to identify, reduce, and prevent problematic use, abuse, and dependence on alcohol and illicit drugs.

Slide 21: SBIRT Goals

The goals of SBIRT are three-fold: (1) to encourage health care providers to screen and provide advice or counseling to their patients who misuse alcohol or other drugs; (2) to influence risky behavior patterns and reduce exposure to the negative consequences of misuse; and (3) to improve linkages between general community health care and specialized substance abuse providers to facilitate access to care when needed.
Slide 22: Goal of Brief Interventions

**ANIMATIONS**

With this slide, you will use animation to highlight one idea at a time, starting first with the end goal of behavior change, back tracking to awareness, and moving on to motivation.

*(Click to animate in “Behavior change” box on far right)*

We know the overall goal of brief interventions is to promote positive behavior change, such as reduced consumption and reduced harm.

To reach this goal, brief interventions work to

*(Click to animate in “Awareness of problem” box on far left)*

raise individuals’ awareness of their substance use and how it impacts their lives.

*(Click to animate in “Motivation” box in the middle)*

We then work to enhance individuals’ motivation to make changes regarding substance use.

*(Click to animate in “Presenting Problem.”)*

An individual’s presenting problem can be used to raise awareness if there is a possible connection with substance use.

*(Click to animate in “Screening Results.”)*

Likewise, the screening results can also raise awareness. To achieve our objectives in the brief intervention, it is necessary to use a motivational interviewing style. We will learn how to use this style later in this training.
Slide 23: Substance Use Problems among the General Population

The triangle on the slide shows that there are different levels of substance users, and how you intervene with folks at each level differs. According to national estimates from the National Survey on Drug Use and Health, about 71% of individuals are categorized as non-users or low risk users (the base of the triangle). The middle level corresponds to hazardous or risky users; this comprises about 25% of individuals. These individuals are not dependent on alcohol or other drugs, but have experienced problems or have significant risks related to their substance use. The use substances at levels that put them at elevated risk for substance-related problems. These individuals are best suited for screening and brief intervention-type activities. The top of the triangle (4% of all individuals) corresponds to severe/dependent substance users. These individuals are best suited for referral to specialty care programs that are equipped to treat substance use disorders.

Slide 24: Benefits of SBIRT for Practice

SBIRT has several benefits for clinicians. For one, the process of learning about SBIRT increases clinicians’ awareness of substance use issues in various populations. In addition, the use of screening as a source of objective information can help some clinicians approach the subject of substance use in a more systematic way, without having to make judgment calls or rely on hunches.

Slide 25: The Key to Successful Interventions

The goal of the brief intervention is to help the patient or client to see a connection between their use and their health and well-being.
<table>
<thead>
<tr>
<th>Slide 26: Benefits of Screening and Brief Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall, the literature for alcohol-specific screening and brief intervention is more robust than it is for drug-related SBI, but studies have shown that screening and brief intervention can reduce alcohol and other drug use (illicit and prescription medications). More information on the studies that were conducted appears on slides 30-33.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Slide 27: Benefits of Screening and Brief Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screening and brief intervention has also been shown to reduce motor vehicle accidents, decrease ER admissions (or re-admissions), and reduce substance-related injuries and co-occurring mental health issues. More information on the studies that were conducted appears on slides 30-33.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Slide 28: Benefits of Screening and Brief Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Screening and brief intervention is also associated with costs savings. In fact, according to the studies that have been conducted, for every dollar that is invested in screening and brief intervention-related activities, organizations save, on average two to four dollars. These cost findings fit nicely with two of the three platforms of the Affordable Care and Patient Protection Act (ACA) – to save money and improve health care. More information on the studies that were conducted appears on slides 30-33.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Slide 29: Benefits of Screening and Brief Intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lastly, studies have also shown that screening and brief intervention improves work performance and neonatal outcomes. More information on the studies that were conducted appears on slides 30-33.</td>
</tr>
</tbody>
</table>
Slide 30: SBIRT for Alcohol – Major Impact of SBI on Morbidity and Mortality

Slide 30 features several studies that have been done on alcohol-related SBIRT. The references are hyper-linked in the far right column of the table, should training participants wish to access the source article. In addition, the abstract for each article appears below.

Gentilello et al., 1999:

**Objective:** Alcoholism is the leading risk factor for injury. The authors hypothesized that providing brief alcohol interventions as a routine component of trauma care would significantly reduce alcohol consumption and would decrease the rate of trauma recidivism. **Methods:** This study was a randomized, prospective controlled trial in a level 1 trauma center. Patients were screened using a blood alcohol concentration, gamma glutamyl transpeptidase level, and short Michigan Alcoholism Screening Test (SMAST). Those with positive results were randomized to a brief intervention or control group. Re-injury was detected by a computerized search of emergency department and statewide hospital discharge records, and 6- and 12-month interviews were conducted to assess alcohol use. **Results:** A total of 2524 patients were screened; 1153 screened positive (46%). Three hundred sixty-six were randomized to the intervention group, and 396 to controls. At 12 months, the intervention group decreased alcohol consumption by 21.8 +/- 3.7 drinks per week; in the control group, the decrease was 6.7 +/- 5.8 (p = 0.03). The reduction was most apparent in patients with mild to moderate alcohol problems (SMAST score 3 to 8); they had 21.6 +/- 4.2 fewer drinks per week, compared to an increase of 2.3 +/- 8.3 drinks per week in controls (p < 0.01). There was a 47% reduction in injuries requiring either emergency department or trauma center admission (hazard ratio 0.53, 95% confidence interval 0.26 to 1.07, p = 0.07) and a 48% reduction in injuries requiring hospital admission (3 years follow-up). **Conclusion:** Alcohol interventions are associated with a reduction in alcohol intake and a reduced risk of trauma recidivism. Given the prevalence of alcohol problems in trauma centers, screening, intervention, and counseling for alcohol problems should be routine.
Slide 30 features several studies that have been done on alcohol-related SBIRT. The references are hyper-linked in the far right column of the table, should training participants wish to access the source article. In addition, the abstract for each article appears below.

Schermer et al., 2006:

**Background:** A substantial number of trauma center admissions are related to driving under the influence (DUI); however, there has been no prior report of brief intervention (BI) after injury reducing subsequent DUI arrests. The hypothesis of this study was that injured patients receiving BI would have a lower risk of DUI arrest within 3 years of discharge than those receiving standard care (SC). **Methods:** This prospective, randomized clinical trial randomly allocated patients involved in motor vehicle collisions to receive SC or a BI regarding alcohol use. The primary outcome measure was DUI arrest within 3 years of hospital discharge. DUI arrests were documented by matching demographic information to state traffic safety data. **Results:** After randomization (N = 126), BI and SC groups were similar in age, prior DUI arrests, and alcohol screening score. BI sessions lasted an average of 30 minutes and were performed by either a social worker or a trauma surgeon. Approximately one in six participants (n = 21, 16.7%) had a DUI arrest within 3 years of hospital discharge. Within 3 years of hospital discharge, 14 of 64 patients (21.9%) in the SC group had an arrest for DUI compared with only 7 of 62 patients (11.3%) who received the BI. Multivariate analysis demonstrated that BI was the strongest protective factor against DUI arrest (odds ratio [OR], 0.32; 95% confidence interval ≤CI], 0.11–0.96). Prior number of DUlS (OR, 1.43; 95% CI, 1.03–2.01) and age (OR, 0.94; 95% CI, 0.88–0.99) were also associated with DUI arrest posthospitalization, but alcohol screening score (OR, 1.06; 95% CI, 0.99–1.13) was not. The absolute risk reduction implies that only nine patients would need to receive a BI to prevent one DUI arrest. **Conclusion:** Patients who receive BI during a trauma center admission are less likely to be arrested for DUI within 3 years of discharge. BI represents a viable intervention to reduce DUI after trauma center admission.
(Notes for Slide 30, continued)

Slide 30: SBIRT for Alcohol – Major Impact of SBI on Morbidity and Mortality

Slide 30 features several studies that have been done on alcohol-related SBIRT. The references are hyper-linked in the far right column of the table, should training participants wish to access the source article. In addition, the abstract for each article appears below.

Fleming et al., 2002:

This report describes the 48-month efficacy and benefit-cost analysis of Project TrEAT (Trial for Early Alcohol Treatment), a randomized controlled trial of brief physician advice for the treatment of problem drinking. Subjects in the treatment group exhibited significant reductions (p < 0.01) in 7-day alcohol use, number of binge drinking episodes, and frequency of excessive drinking as compared with the control group. The effect occurred within 6 months of the intervention and was maintained over the 48-month follow-up period. The treatment sample also experienced fewer days of hospitalization (p = 0.05) and fewer emergency department visits (p = 0.08). Seven deaths occurred in the control group and three in the treatment group. The benefit-cost analysis suggests a $43,000 reduction in future health care costs for every $10,000 invested in early intervention. The benefit-cost ratio increases when including the societal benefits of fewer motor vehicle events and crimes.

Cuijpers et al., 2004:

**Aims:** Brief interventions for problem drinking may result in decreased mortality rates. Long-term follow-up studies of brief interventions do not produce a clear answer to the question as to whether these interventions reduce mortality or not.

**Methods:** We conducted a meta-analysis of randomized studies comparing brief interventions with a control group, using the fixed-effects model. A systematic literature search produced four studies in which the mortality status of subjects was verified at follow-up. Six more studies reported some deaths at follow-up but did not verify mortality in death registers, and 22 further studies did not report the mortality status of the included subjects. **Findings:** The pooled relative risk (RR) of dying was 0.47 for the four studies with verified mortality rates (95% CI: 0.25, 0.89). The pooled RR of all 32 studies was comparable (RR=0.57: 95% CI: 0.38, 0.84), as were the RRs of several other subsamples of studies. The prevented fraction was 0.33 in the studies with verified mortality rates. **Conclusions:** Although the overall death rate was low in the population of problem drinkers, brief interventions do appear to reduce mortality.
Slide 30: SBIRT for Alcohol – Major Impact of SBI on Morbidity and Mortality

Slide 30 features several studies that have been done on alcohol-related SBIRT. The references are hyper-linked in the far right column of the table, should training participants wish to access the source article. In addition, the abstract for each article appears below.

Burke et al., 2003:
A meta-analysis was conducted on controlled clinical trials investigating adaptations of motivational interviewing (AMIs), a promising approach to treating problem behaviors. AMIs were equivalent to other active treatments and yielded moderate effects (from .25 to .57) compared with no treatment and/or placebo for problems involving alcohol, drugs, and diet and exercise. Results did not support the efficacy of AMIs for smoking or HIV-risk behaviors. AMIs showed clinical impact, with 51% improvement rates, a 56% reduction in client drinking, and moderate effect sizes on social impact measures (d=0.47). Potential moderators (comparative dose, AMI format, and problem area) were identified using both homogeneity analyses and exploratory multiple regression. Results are compared with other review results and suggestions for future research are offered.

Whitlock et al., 2004:
**Background:** Primary health care visits offer opportunities to identify and intervene with risky or harmful drinkers to reduce alcohol consumption. **Purpose:** To systematically review evidence for the efficacy of brief behavioral counseling interventions in primary care settings to reduce risky and harmful alcohol consumption. **Data Sources:** Cochrane Database of Systematic Reviews, Database of Research Effectiveness (DARE), MEDLINE, Cochrane Controlled Clinical Trials, PsycINFO, HealthSTAR, CINAHL databases, bibliographies of reviews and included trials from 1994 through April 2002; update search through February 2003. **Study Selection:** An inclusive search strategy (*alcohol* or *drink*) identified English-language systematic reviews or trials of primary care interventions to reduce risky/harmful alcohol use. Twelve controlled trials with general adult patients met our quality and relevance inclusion criteria. **Data Extraction:** Investigators abstracted study design and setting, participant characteristics, screening and assessment procedures, intervention components, alcohol consumption and other outcomes, and quality-related study details.
Slide 30: SBIRT for Alcohol – Major Impact of SBI on Morbidity and Mortality

Slide 30 features several studies that have been done on alcohol-related SBIRT. The references are hyper-linked in the far right column of the table, should training participants wish to access the source article. In addition, the abstract for each article appears below.

Whitlock et al., 2004, continued:

**Data Synthesis:** Six to 12 months after good-quality, brief, multicontact behavioral counseling interventions (those with up to 15 minutes of initial contact and at least 1 follow-up), participants reduced the average number of drinks per week by 13% to 34% more than controls did, and the proportion of participants drinking at moderate or safe levels was 10% to 19% greater compared with controls. One study reported maintenance of improved drinking patterns for 48 months. **Conclusions:** Behavioral counseling interventions for risky/harmful alcohol use among adult primary care patients could provide an effective component of a public health approach to reducing risky/harmful alcohol use. Future research should focus on implementation strategies to facilitate adoption of these practices into routine health care.

**REFERENCES:**


Slide 30: SBIRT for Alcohol – Major Impact of SBI on Morbidity and Mortality

(Notes for Slide 30, continued)

REFERENCES, continued:

Slide 31: SBIRT for Drugs – Major Impact of SBI on Morbidity and Mortality

Slide 31 features several studies that have been done on drug-related SBIRT. The references are hyper-linked in the far right column of the table, should training participants wish to access the source article. In addition, the abstract for each article appears below.

**World Health Organization, 2008:**

The primary aim of the ASSIST Phase III Project was to conduct an international randomized controlled trial (RCT) evaluating the effectiveness of a Brief Intervention (BI) for illicit drugs (cannabis, cocaine, ATS & opioids) as linked to the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST). Participants were recruited from PHC settings in four countries (Australia, Brazil, India, the United States of America) and were randomly allocated to an intervention or waitlist control group at baseline and followed up three months later. Both groups were administered the ASSIST and a demographic profile questionnaire at baseline. Intervention participants received a brief intervention for the drug for which they scored the highest on the ASSIST (cannabis, cocaine, ATS or opioids). They also received self-help materials relating to that drug. After being administered the ASSIST at the 3-month WHO ASSIST Phase III Technical Report 6 follow-up, the brief intervention participants were administered a semi-structured interview (Brief Intervention Process Rating Form) which asked for their views on the information and feedback they had received at the last interview three months ago. For ethical reasons, control participants were given a brief intervention at the follow-up stage (after they had been administered the ASSIST).

**Madras et al., 2009:**

**Objectives**—Alcohol screening and brief interventions in medical settings can significantly reduce alcohol use. Corresponding data for illicit drug use is sparse. A Federally funded Screening, Brief Intervention, Referral to Treatment (SBIRT) service program, the largest of its kind to date, was initiated by the Substance Abuse and Mental Health Services Administration (SAMHSA) in a wide variety of medical settings. We compared illicit drug use at intake and six months after drug screening and interventions were administered. **Design**—SBIRT services were implemented in a range of medical settings across six states. A diverse patient population (Alaska Natives, American Indians, African-Americans, Caucasians, Hispanics), was screened and offered score-based progressive levels of intervention (brief intervention, brief treatment, referral to specialty treatment). In this secondary analysis of the SBIRT service program, drug use data was compared at intake and at a six month follow-up, in a sample of a randomly selected population (10%) that screened positive at baseline.
Slide 31: SBIRT for Drugs – Major Impact of SBI on Morbidity and Mortality

Slide 31 features several studies that have been done on drug-related SBIRT. The references are hyper-linked in the far right column of the table, should training participants wish to access the source article. In addition, the abstract for each article appears below.

Madras et al., 2009, continued:

Results—Of 459,599 patients screened, 22.7% screened positive for a spectrum of use (risky/problematic, abuse/addiction). The majority were recommended for a brief intervention (15.9%), with a smaller percentage recommended for brief treatment (3.2%) or referral to specialty treatment (3.7%). Among those reporting baseline illicit drug use, rates of drug use at 6 month follow-up (4 of 6 sites), were 67.7% lower (p < 0.001) and heavy alcohol use was 38.6% lower (p < 0.001), with comparable findings across sites, gender, race/ethnic, age subgroups. Among persons recommended for brief treatment or referral to specialty treatment, self-reported improvements in general health (p < 0.001), mental health (p < 0.001), employment (p < 0.001), housing status (p < 0.001), and criminal behavior (p < 0.001) were found. Conclusions—SBIRT was feasible to implement and the self-reported patient status at six months indicated significant improvements over baseline, for illicit drug use and heavy alcohol use, with functional domains improved, across a range of health care settings and a range of patients.

Estee et al., 2010:

Background: Substance abuse is a major determinant of morbidity, mortality, and health care resource consumption. We evaluated a screening, brief intervention, and referral to treatment (SBIRT) program, implemented in 9 hospital emergency departments (ED) in Washington State. Methods: Working-age, disabled Medicaid patients who were screened and received a brief intervention (BI) from April 12, 2004 through September 30, 2006 were included in the study’s intervention group (N = 1557). The comparison group (N = 1557), constructed using (one-to-one) propensity score matching, consisted of Medicaid patients who received care in one of the counties in which an intervention hospital ED was located but who did not receive a BI. We estimated difference-in-difference (DiD) regression models to assess the effects of the SBIRT program for different patient groups.
Slide 31: SBIRT for Drugs – Major Impact of SBI on Morbidity and Mortality

(Notes for Slide 31, continued)

Slide 31 features several studies that have been done on drug-related SBIRT. The references are hyper-linked in the far right column of the table, should training participants wish to access the source article. In addition, the abstract for each article appears below.

Estee et al., 2010, continued:

Results: The SBIRT program was associated with an estimated reduction in Medicaid costs per member per month of $366 (P = 0.05) for all patients, including patients who received a referral for chemical dependency (CD) treatment. For patients who received a BI only and had no CD treatment in the year before or the year after the ED visit, the estimated reduction in Medicaid per member per month costs was $542 (P = 0.06). The SBIRT program was also associated with decreased inpatient utilization (P = 0.04). Conclusions: SBIRT programs have potential to limit resource consumption among working-age, disabled Medicaid patients. The hospital ED seems especially well suited for SBIRT programs given the large number of injured patients treated in the ED and the fact that many conditions treated are related to substance abuse.

Omni Institute, 2012:

Screening, Brief Intervention and Referral to Treatment (SBIRT) is an evidence-based approach to identifying patients who use alcohol and other drugs at risky levels, with the goal of reducing and preventing related health consequences, disease, accidents and injuries. SBIRT is unique in that it screens for all types of substance use, not just dependencies. Each part of the SBIRT process provides information and assistance tailored to the individual patient and his or her needs. The primary goal of SBIRT is not to identify alcohol- or other drug-dependent individuals. SBIRT is intended to meet the public health goal of reducing the harms and societal costs associated with risky use. The goal of SBIRT Colorado is to improve the lives and health of Coloradans by integrating SBIRT into the standard delivery of healthcare. Patients are assessed for levels of substance use risk using standardized screening tools. Those with risky substance use levels receive a brief intervention—a short conversation incorporating feedback, advice and goal-setting with a healthcare professional. Patients whose level of risk indicates a need for further assessment and additional services are provided with referrals to brief therapy or treatment. This document shares key lessons learned from the evaluation of the implementation, integration and sustainability of SBIRT Colorado as routine healthcare practice in Colorado over the last four years. It also provides information about what is being learned about integrating and sustaining SBIRT as routine healthcare practice in Colorado.
Slide 31: SBIRT for Drugs – Major Impact of SBI on Morbidity and Mortality

REFERENCES:


Slide 32: SBIRT for Alcohol – Saves Healthcare Costs

Slide 32 features studies that have been done on cost savings of alcohol-related SBIRT. The references are hyper-linked in the far right column of the table, should training participants wish to access the source articles. In addition, the abstracts for the articles appear below.

**Hall, 2005:**

This brief paper summarizes two other studies that show that two relatively brief psychosocial interventions—motivational enhancement treatment and social network therapy—are effective and cost effective in treating alcohol dependence, when delivered under routine clinical conditions in the NHS. The UK government could realize its stated aim of increasing access to effective treatments for alcohol dependence by investing in these interventions.
### Slide 32: SBIRT for Alcohol – Saves Healthcare Costs

Slide 32 features studies that have been done on cost savings of alcohol-related SBIRT. The references are hyper-linked in the far right column of the table, should training participants wish to access the source articles. In addition, the abstracts for the articles appear below.

**Fleming et al., 2002:**

**Background:** This report describes the 48-month efficacy and benefit-cost analysis of Project TrEAT (Trial for Early Alcohol Treatment), a randomized controlled trial of brief physician advice for the treatment of problem drinking. **Methods:** Four hundred eighty-two men and 292 women, ages 18-65, were randomly assigned to a control (n = 382) or intervention (n = 392) group. The intervention consisted of two physician visits and two nurse follow-up phone calls. Intervention components included a review of normative drinking, patient-specific alcohol effects, a worksheet on drinking cues, drinking diary cards, and a drinking agreement in the form of a prescription. **Results:** Subjects in the treatment group exhibited significant reductions (p < 0.01) in 7-day alcohol use, number of binge drinking episodes, and frequency of excessive drinking as compared with the control group. The effect occurred within 6 months of the intervention and was maintained over the 48-month follow-up period. The treatment sample also experienced fewer days of hospitalization (p = 0.05) and fewer emergency department visits (p = 0.08). Seven deaths occurred in the control group and three in the treatment group. The benefit-cost analysis suggests a 43,000 dollars reduction in future health care costs for every 10,000 dollars invested in early intervention. The benefit-cost ratio increases when including the societal benefits of fewer motor vehicle events and crimes. **Conclusions:** The long-term follow-up of Project TrEAT provides the first direct evidence that brief physician advice is associated with sustained reductions in alcohol use, health care utilization, motor vehicle events, and associated costs. The report suggests that a patient's personal physician can successfully treat alcohol problems and endorses the implementation of alcohol screening and brief intervention in the US health care system.

**Gentilello et al., 2005:**

**Objective:** To determine if brief alcohol interventions in trauma centers reduce health care costs. **Summary Background Data:** Alcohol-use disorders are the leading cause of injury. Brief interventions in trauma patients reduce subsequent alcohol intake and injury recidivism but have not yet been widely implemented.

(Notes for Slide 32, continued)
Slide 32: SBIRT for Alcohol – Saves Healthcare Costs

Slide 32 features studies that have been done on cost savings of alcohol-related SBIRT. The references are hyper-linked in the far right column of the table, should training participants wish to access the source articles. In addition, the abstracts for the articles appear below.

Gentilello et al., 2005, continued:

Methods: This was a cost-benefit analysis. The study population consisted of injured patients treated in an emergency department or admitted to a hospital. The analysis was restricted to direct injury-related medical costs only so that it would be most meaningful to hospitals, insurers, and government agencies responsible for health care costs. Underlying assumptions used to arrive at future benefits, including costs, injury rates, and intervention effectiveness, were derived from published nationwide databases, epidemiologic, and clinical trial data. Model parameters were examined with 1-way sensitivity analyses, and the cost-benefit ratio was calculated. Monte Carlo analysis was used to determine the strategy-selection confidence intervals. Results: An estimated 27% of all injured adult patients are candidates for a brief alcohol intervention. The net cost savings of the intervention was $89 per patient screened, or $330 for each patient offered an intervention. The benefit in reduced health expenditures resulted in savings of $3.81 for every $1.00 spent on screening and intervention. This finding was robust to various assumptions regarding probability of accepting an intervention, cost of screening and intervention, and risk of injury recidivism. Monte Carlo simulations found that offering a brief intervention would save health care costs in 91.5% of simulated runs. If interventions were routinely offered to eligible injured adult patients nationwide, the potential net savings could approach $1.82 billion annually. Conclusions: Screening and brief intervention for alcohol problems in trauma patients is cost-effective and should be routinely implemented. Alcohol intoxication is the leading risk factor for injury. As a result, it offers the most promising and obvious target for injury-prevention programs. Brief alcohol interventions in trauma patients have been shown to reduce subsequent alcohol intake and injury recidivism. Given accumulating evidence to support their use, a variety of expert and consensus group panels have concluded that the scientific basis for their routine provision in hospitals and emergency departments has been established, and it is time to move towards national implementation. New medical procedures, once confirmed as “best practice,” often become virtually mandatory for delivery and insurance coverage. However, this has not been the case for alcohol interventions. Instead, clinicians, hospital administrators, and insurance plans are more likely to require information about cost and benefits before making decisions on implementation or coverage.
Slide 32: SBIRT for Drugs – Major Impact of SBI on Morbidity and Mortality

Slide 32 features studies that have been done on cost savings of alcohol-related SBIRT. The references are hyper-linked in the far right column of the table, should training participants wish to access the source articles. In addition, the abstracts for the articles appear below.

Gentilello et al., 2005, continued:
Alcohol interventions in trauma patients have not yet been analyzed for cost-benefit. Prior studies have not measured financial outcomes directly because it has been difficult to obtain claims data from this patient population with multiple potential sources of insurance coverage or with no coverage. However, the assignment of dollar values can enable clinicians to make informed choices about competing available treatment options. This study estimates the cost savings associated with routine provision of brief alcohol interventions to trauma patients treated in hospitals and emergency departments. We chose to restrict this analysis to direct medical costs so that it would be most meaningful to hospitals, insurers, and government agencies responsible for health care costs.

REFERENCES:
Slide 33: SBIRT for Drugs – Saves Healthcare Costs

Slide 33 features one study that has been done on cost savings of drug-related SBIRT. The reference is hyper-linked in the far right column of the table, should training participants wish to access the source article. In addition, the abstract for the article appears below:

Estee et al., 2010:

**BACKGROUND:** Substance abuse is a major determinant of morbidity, mortality, and health care resource consumption. We evaluated a screening, brief intervention, and referral to treatment (SBIRT) program, implemented in 9 hospital emergency departments (ED) in Washington State. **METHODS:** Working-age, disabled Medicaid patients who were screened and received a brief intervention (BI) from April 12, 2004 through September 30, 2006 were included in the study’s intervention group (N = 1557). The comparison group (N = 1557), constructed using (one-to-one) propensity score matching, consisted of Medicaid patients who received care in one of the counties in which an intervention hospital ED was located but who did not receive a BI. We estimated difference-in-difference (DiD) regression models to assess the effects of the SBIRT program for different patient groups. **RESULTS:** The SBIRT program was associated with an estimated reduction in Medicaid costs per member per month of $366 (P = 0.05) for all patients, including patients who received a referral for chemical dependency (CD) treatment. For patients who received a BI only and had no CD treatment in the year before or the year after the ED visit, the estimated reduction in Medicaid per member per month costs was $542 (P = 0.06). The SBIRT program was also associated with decreased inpatient utilization (P = 0.04). **CONCLUSION:** SBIRT programs have potential to limit resource consumption among working-age, disabled Medicaid patients. The hospital ED seems especially well suited for SBIRT programs given the large number of injured patients treated in the ED and the fact that many conditions treated are related to substance abuse.

**REFERENCES:**

Slide 34: Coding for SBI Reimbursement

Reimbursement for screening and brief intervention is available through commercial insurance Current Procedural Technology (CPT), Medicare G codes, and Medicaid Healthcare Common Procedure Coding System (HCPCS). Information regarding these codes can be found in the table featured on slides 34-35. SAMHSA is working with the Centers for Medicare and Medicaid Services to educate practitioners about the importance of SBIRT coverage and the Medicare billing rules around these services. SBIRT services are defined as alcohol and/or substance (other than tobacco) abuse structured assessment (for example, ASSIST, DAST, etc.) and brief intervention. Medicare may not pay for screening services unless specifically required by statute. More information can be found at the Medicare Learning Network (http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNGenInfo/index.html?redirect=/MLNgeninfo/).

Slide 35: Coding for SBI Reimbursement

Reimbursement for screening and brief intervention is available through commercial insurance Current Procedural Technology (CPT), Medicare G codes, and Medicaid Healthcare Common Procedure Coding System (HCPCS). Information regarding these codes can be found in the table featured on slides 34-35. SAMHSA is working with the Centers for Medicare and Medicaid Services to educate practitioners about the importance of SBIRT coverage and the Medicare billing rules around these services. SBIRT services are defined as alcohol and/or substance (other than tobacco) abuse structured assessment (for example, ASSIST, DAST, etc.) and brief intervention. Medicare may not pay for screening services unless specifically required by statute. More information can be found at the Medicare Learning Network (http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNGenInfo/index.html?redirect=/MLNgeninfo/).

Slide 36: [No Title]

In July 2013, the estimated U.S. population was 316,148,990. According to the National Survey on Drug Use and Health, in 2012, 2.5 million persons aged 12 or older (1% of persons aged 12 or older) received treatment for a problem related to the use of alcohol or illicit drugs, 20.6 million persons aged 12 or older needed treatment for an illicit drug or alcohol use problem (7.9% of persons aged 12 or older), and approximately 60-80 million people were using alcohol or drugs at risky levels (~20-25%). Let’s look at each of those population subgroups in more detail.
Slide 37: In treatment (4 Million)

Starting with the 2.5 million people who received treatment for alcohol or drugs and using LA County-based referral source data, if you look at why individuals entered treatment for alcohol or drugs, slightly more than one-third were self-referred or referred by a family member, and 1 in 4 were referred by the criminal justice system. Another 1 in 5 were referred by an LA County Community Assessment Service Center (CASC), and just as an aside, many folks who go through the CASC system are criminal justice-involved, as well, so a more accurate figure of those referred by the local criminal justice system is about 45%. The troubling statistic relates to the percentage of clients referred by the health care system (only 3%).

Slide 38: In need of treatment (23 Million)

What about the individuals who were in need of treatment, but were not currently engaged in the SUD specialty care system? According to the 2012 NSDUH survey, of the 20.6 million persons aged 12 or older who were classified as needing substance use treatment but not receiving treatment at a specialty facility in the past year, 1.7% reported that they made an effort to get treatment, and 3.7% felt they needed treatment, but made no effort to get it. The overwhelming majority of individuals (94.6%) did not feel they needed treatment. The conclusion that one could draw from this data is that the vast majority of people with a diagnosable illicit drug or alcohol disorder are unaware of their problem, or do not feel they need any specialized help.
Slide 39: Using at risky levels (60-80 Million)

Lastly, if you focus on the large piece of the triangle that corresponds to the 60-80 million Americans who are using substances at risky levels, they do not meet criteria to be diagnosed with an SUD, but their level of use indicates at least some risk of development a problem. This slide features a few pertinent examples.

Read each example and pause for a minute to gauge audience response.

1. The man who drinks 3-4 glasses of wine a few times a week.
2. The pregnant woman who occasionally has a shot of vodka to relieve stress.
3. The adolescent (football captain, gets good grades) who smokes marijuana with his friends on weekends.
4. The woman who occasionally takes 1 or 2 extra pain pills to help with her lower back pain.

Slide 40: Implications

The major implication of the previous set of slides is that as long as specialty care substance use disorder treatment programs are the only places that address alcohol and drug use, most of the people with severe substance-related problems will not receive needed treatment, and virtually all people with risky use will not receive any professional attention. Health reform and integrated treatment efforts, coupled with more routine screening and brief intervention, can go a long way to provide people at moderate to high risk with the help they need to mitigate their substance use problems.
Deciding who to screen depends on your specific care setting and clinic goals. This slide features a partial list of candidates for routine screening: college students who go to campus health centers, primary care patients, mental health clients, patients treated in infectious disease clinics, as well as people with DUls or other alcohol- or drug-related offenses.

Once reviewing the list on the slide, ask the audience if they can think of other appropriate care settings where screening and brief intervention services could be warranted.

The next portion of the training focuses on the rationale for conducting screening and brief intervention activities in an HIV care setting. Included in this section are a couple of examples of past efforts to infuse screening and brief intervention in HIV clinics in California and Colorado, as well as a sample schematic of how SBIRT impacts patient flow in an HIV care setting.
Slide 43: HIV in 2014

HIV is now considered a manageable, chronic illness rather than a terminal disease. Health care providers are serving large numbers of patients who are living longer and facing multiple problems in addition to the management of their HIV status. Problems such as homelessness, disease progression, mental illness, and drug abuse are common among HIV patients. Engagement, retention, and adherence among your HIV care patients continue to be a challenge complicated by the presence of these additional conditions and problems.

REFERENCE:

The information on this slide was extracted from an SBIRT Colorado Literature Review prepared by the Omni Institute in 2012 that focused on SBI for HIV-positive populations (1). Individuals living with HIV/AIDS have higher rates of substance use than the general population (2). In HIV-positive populations, substance use is associated with multiple adverse effects, including reduced adherence to medication, disease progression, health complications and increased risky sexual behavior, which can lead to further transmission of the disease (3). Compared to the general population, rates of heavy drinking are roughly twice as high among HIV-positive individuals (2). Nationwide surveys report alcohol consumption in the preceding month for approximately 53% of persons in care for HIV; 15% of those drinkers were classified as heavy drinkers (Galvan et al., 2002). Another study of HIV patients receiving primary care found that 11% reported hazardous alcohol use in the prior month (4) and a study with HIV-positive veterans found that 20% were hazardous drinkers and 33% were binge drinkers (5). Moreover, in a nationally representative sample of individuals receiving HIV care in the US, approximately half reported illicit drug use in the past year, with 12% marijuana only, 12% drug dependence and 25% non-marijuana, non-dependent illicit drug use (6). In one study, 60% of youth living with HIV screened positive for problem substance use (7).

REFERENCES:


REFERENCES, continued:


While the exact rates of multiple diagnoses among people living with HIV and AIDS is unknown, it is well documented that the rates of mental health and substance use problems are substantially higher than in the general population. In reality, providers are often faced with patients who are multiply diagnosed – meeting criteria for two or more diagnoses — and who, in addition, are burdened by multiple social, physical, and environmental health problems. The co-occurrence of mental health and substance use disorders poses a major barrier to HIV care. Even for patients engaged in services, mental health and substance use problems can impact treatment adherence (e.g., session attendance, consistency of taking medications) and health-related outcomes if these problems are not properly understood, identified, and managed.

REFERENCE:

Evidence demonstrates that SBIRT in primary care settings is effective in changing behavior and preventing adverse outcomes attributable to alcohol and other drugs. Studies also show people living with HIV are more likely to experience substance abuse problems than the general population, and early detection offsets the negative ramifications, including poor treatment adherence. Despite the linkage between substance use and HIV, screening and brief intervention protocols have not been readily adopted in HIV/AIDS services in the United States.

REFERENCE:
Despite concern over the adverse outcomes related to substance use in HIV-positive individuals, SBIRT is not a standard practice in HIV care settings. Moreover, a number of barriers to successfully implementing these strategies have been identified. In one study of patients from 10 HIV-care clinics in three large U.S. cities, 35% of participants reported discussion of alcohol use with their primary care providers in the past year, with only 52% of “problem drinkers” reporting such a discussion (1). HIV healthcare providers were more likely to miss detection of alcohol problems when the disease was less severe and in the absence of obvious evidence of alcohol abuse such as signs of liver disease (2).

REFERENCES:


Slide 48: Barriers to Implementing Alcohol SBI in HIV Primary Care Settings

Strauss and colleagues identified several barriers to implementing alcohol SBI in HIV primary care settings, including limited time for alcohol screening; patients’ incomplete disclosure of alcohol use; providers’ perceptions that alcohol use is not a major problem for their patients; and provider specialization that assigns patients with problematic alcohol use to specifically designated providers.

REFERENCE:


---

Slide 49: SBIRT in HIV Settings

The model depicted on this slide demonstrates a typical patient flow at HIV care services agencies. This intake and assessment process tends to be linear and similar for all patients entering treatment—they enter through various outreach doors, have an initial intake, receive case management for HIV care coordination, and then begin engaging in medical visits with HIV care providers. Sometimes, if providers detect a need for mental health or substance abuse treatment, patients may be referred to these programs. The yellow text highlights the multiple points during patient intake during which patient-centered, tailored SBIRT options could be implemented for earlier intervention and improved linkages to integrated care.

REFERENCE:

While limited, there have been a few studies that have validated screening tools for detecting substance use in HIV-positive populations. In one study, the AUDIT was found to effectively detect substance dependence/abuse in a study of individuals enrolled into HIV care and treatment services near Cape Town, South Africa (1). A validation study of the Substance Abuse/Mental Illness Symptoms Screener (SAMISS), a screening tool developed from existing scales for an HIV-positive patient population, found that it showed 86% sensitivity and 75% specificity in detecting substance abuse when used in infectious disease clinics with HIV-positive individuals (2). And a third study found that the AUDIT-C (3-items) is as effective as the full AUDIT (10 items) in detecting at-risk alcohol use when used in high volume HIV-care centers (3).

REFERENCES:


Slide 51: HIV Care Providers’ Implementation of Routine Alcohol SBI among Patients

This slide corresponds to a study conducted in a NY metropolitan area in 2007 concerning HIV providers’ routine use of 11 alcohol SBI components with their patients. Providers routinely implemented five or more of these alcohol SBI components if they had:
1. A specific caseload (and were therefore responsible for a smaller number of patients),
2. Greater exposure to information about alcohol’s effect on HIV,
3. Been in present position for at least 1 year,
4. Greater self-efficacy to support patients’ alcohol reduction efforts.

Findings suggest the importance of educating all HIV care providers about both the negative impact of excessive alcohol use on patients with HIV and the importance and value of alcohol SBIs. Findings also suggest the value of promoting increased self-efficacy for at least some providers in implementing alcohol SBI components, especially through targeted alcohol SBI training.

REFERENCE:

Drug and alcohol use is not always addressed with patients in medical care settings, including HIV primary care settings. SBIRT strategies have demonstrated an effective model to introduce screening for substance use, and standardized guidelines in a number of clinical populations, but SBIRT for drug and alcohol use has not been tested in an HIV primary care setting. This is remarkable because several studies suggest that HIV+ and at-risk individuals have high rates of substance use. Therefore, the goal of this project was to assess the impact of SBIRT for harmful alcohol use, illicit drug use, and opioid analgesic use in an HIV primary care setting at San Francisco General Hospital’s Positive Health Program (PHP).

Specifically, the project aims to examine and compare the feasibility, acceptability and impact of introducing SBIRT into this clinic population. The study found that large numbers of patients living with HIV report unhealthy substance use. Screening and brief interventions (SBI) for unhealthy substance use were acceptable by patients in HIV primary care settings, 95% eligible participants enrolled in study. Compared to baseline, the researchers observed at 6 months: significant decreases in TSIS and SSIS for amphetamines and sedatives; significant decreases in risk severity for alcohol, amphetamines, and sedatives; and a significant increase in the number of patients with HIV viral suppression.

REFERENCE:

Colorado implemented a collaboration between the state’s SBIRT initiative and its Ryan White Part B HIV treatment and care program. Of 2,500 patients screened, 31% received a brief intervention for risky alcohol, tobacco, or drug use, and 23% were referred for therapy or specialized treatment. Program evaluation findings gathered from focus groups and patient and provider surveys indicate that SBIRT can be successfully integrated into HIV treatment and care to address risky substance use. We explore the barriers to implementing SBIRT in HIV care and identify the administrative and policy considerations necessary for effective implementation. Recommendations are made for standardizing SBIRT in HIV care (applying a systematic approach to screening; training providers to conduct brief interventions; establishing a referral network; and integrating SBIRT with adherence and retention efforts).

REFERENCE:

**Slide 54: Activity – Adoption of SBIRT**

**Allow 5-7 minutes for this activity**

This next exercise is meant for training participants to identify the barriers and facilitators they may anticipate if and when the decision is made to implement SBIRT in their care setting. Depending on the size of the audience, participants can be broken into pairs or small groups. Ask the participants to try to identify 1 or 2 barriers and 1 or 2 facilitators (e.g., resources or aspects of their practice that would support the use of SBIRT). After about 3 minutes, bring the group back together and engage in a group discussion, starting first with barriers, and then moving on to facilitators.
Slide 55 [Transition Slide]: Screening to Identify Patients At Risk for Substance Use Problems

The next portion of the training focuses on available alcohol and drug screening tools. Time will be devoted to practice with two brief screening tools – the AUDIT for alcohol use, and the DAST for drug use.

Slide 56: What is a Standard Drink?

This slide is meant to serve two purposes: to set the stage for a discussion of what is meant by the term “standard drink,” and to provide a bit of comic relief.
The first piece of content that appears on the slide is the images of various standard drinks. Once you have reviewed each image, advance the slide one time to reveal the definitions of non-risky drinking for men, women, and individuals older than 65.

People have different personal definitions of what exactly constitutes an alcoholic “drink.” The National Institute on Alcohol Abuse and Alcoholism (NIAAA) has developed a definition of a “standard drink.” A standard drink can be a 12 ounce beer, 8-9 ounces of malt liquor, 5 ounces of wine, 3-4 ounces of fortified wine, 2-3 ounces of cordial, 1.5 ounces of brandy, or 1.5 ounces of spirits such as vodka, gin, or scotch. So, a drink for one person may be a “40-ouncer” of beer, which, if you use NIAAA’s definition of a standard drink, would equal 3 1/3 standard drinks. It is very important for alcohol dependent clients to understand what is meant by “a drink” when you are assessing the extent of their alcohol problem.

REFERENCES:

Slide 58: What’s going on in these pictures?

**ANIMATIONS**

Click to animate in first picture

What’s going on in this picture?

Allow audience to make comments.

Click to animate the word “screening”

Like screening at the airport, our goal with substance use screening is safety. To make a difference at a population level, substance use screening needs to be universal or given to everyone.

Click to animate in second picture

So, why do we have to pat down this guy?

Allow audience to make comments.

Click to animate the word “assessment”

One reason could be that an alarm went off. When screening indicates the possibility of a problem, a provider must follow up by assessing for a potential threat to safety. In the airport, we want to know if he has a bomb; in our program, we want to know if his substance use is risky or if he could have severe problems.
Slide 59: Types of Screening Tools

Most of the alcohol and drug screening that is conducted in primary care or mental health settings utilize short questionnaires with a maximum of 10 questions. These questionnaires are self-report tools, because they are based on what patients tell the clinician (in an interview) or write down on a self-administered screener.

Ask the audience if they recall filling out a few questions about alcohol and drug use the last time they saw their primary care physician. Also ask if anyone uses alcohol and/or drug (or other) screening questionnaires in their clinical practice. Allow a few responses.

Biological markers are breathalyzers, blood alcohol concentration tests, or urine tests, for example. Blood alcohol concentration tests are the most common biological marker used in medical settings. For example, in the UCLA Trauma Department, every patient who comes in gets a BAC test. The department also later does a self-report questionnaire after patients are stabilized. Collecting biological information can be very useful, but it only captures very recent use. In addition, biological information does not indicate how problematic an individual’s substance use may be.

Additional Information for the Trainer(s)

Biological markers can detect recent use of drugs such as cocaine, opioids, cannabis, benzodiazepines, and barbiturates. Common tests for substance use are blood, urine, and hair tests. With regards to alcohol metabolism, one standard drink is metabolized per hour. Drugs such as cocaine and heroin are often out of the user’s system within 72 hours. Fat soluble drugs such as marijuana can remain in the user’s system and be detected as far out as one month following ingestion.
Slide 60: Characteristics of a Good Screening Tool

The best screening tools are those that are very brief, easy to use, address alcohol, illicit drugs, and prescription medications, tell us whether further assessment is needed, and have good sensitivity and specificity. Sensitivity refers to the ability of a test to correctly identify those people who actually have a problem, in other words, “true positives.” Specificity is a test’s ability to identify people who do not have a problem—“true negatives.” Good screening tools maximize sensitivity and reduce “false positives.” Self-report screens allow for more contextual information about the frequency and quantity of use. They are inexpensive, non-invasive, and highly sensitive for detecting substance use related problems.

Slide 61: Benefits of Self-Report Tools

Self-report screens allow for more contextual information about the frequency and quantity of use. They are inexpensive, non-invasive, and highly sensitive for detecting substance use related problems.

Slide 62: Enhancing Accuracy of Self-Report

It is very important to establish a non-judgmental atmosphere for screening, and the following are additional tips clinicians can use to ensure accuracy of self-report responses:

1. Practice administering the screening questions to get comfortable with the content and tone of the questions.
2. If possible, interview patients when they are sober.
3. Tell patients that the information collected on the screening instrument is confidential.
4. Ask clearly worded, objective questions that are free from judgment.
5. Provide memory aids such as calendars, if needed. Patients can also be given a blank copy of the screener so they can refer to the response options to make it easier to use the appropriate response categories.
The references are hyper-linked in the far right column of the table, should training participants wish to access the screening instruments directly from the URLs provided.

This chart provides information on six (6) different validated screening tools. Some of the screening tools are very broad in scope like the ASSIST, which queries an individual’s alcohol, tobacco, and illicit drug use. Others are very specific like the TWEAK, which was developed for use with pregnant women and only assesses alcohol use. Today’s training focuses specifically on the AUDIT (the Alcohol Use Disorders Identification Test). The AUDIT was selected for this training because it is the most common screening tool used in SBIRT programs in the U.S. It is straightforward, quick, and can be administered as an interview or by questionnaire. The AUDIT only covers alcohol. A commonly used screen for illicit drugs is the Drug Abuse Screening Test or the DAST. A web-link to each screening tool is included in the far right column of the table.

Slide 64: Pre-Screening

At times, it is important or necessary to very quickly screen patients to identify who may benefit from more in-depth screening. For example, it is similar to going through the initial screening at the airport security check point. If the metal detector alarm beeps, the TSA agent may then do a more thorough assessment (by searching your bags or doing a “pat down”). The idea with pre-screening for at-risk alcohol and/or drug use is the same. Pre-screens identify people who are potentially at-risk and help save time by not requiring a more thorough screening of someone who is using at non-risky levels. Typically, pre-screens are self-report and consist of 1 to 4 questions.
NIAAA developed a single-item pre-screener for alcohol use that has since been validated. "How many times in the past year have you had X or more drinks in a day?" For men, “X” equals 5, and for women, “X” equals 4. This pre-screen has been shown to identify unhealthy alcohol use. A positive screen is any response of 1 or more, and should be followed by further screening or, in some cases, a brief intervention.

**Additional Information for the Trainer(s)**

Since people often have their own definition of what constitutes a standard drink, remember to establish a clear definition with patients before launching into the 1-item pre-screen for alcohol. It might even be a good idea to print out slide #32 to have as a desktop reference.

**REFERENCE:**

Pre-Screening Example

A parallel, validated pre-screening question for drug use: "How many times in the past year have you used an illegal drug or used a prescription medication for non-medical reasons?" A score of 1 or more is considered a positive result, and should trigger more in-depth screening and possibly a brief intervention.

Pose the following question in neutral, matter-of-fact way; you want to get people thinking:

What is the safe limit for drugs, say, cocaine? How much crack is OK for people to use? Any illicit substance use is problematic because a person is putting him or herself at risk by using them. How easy or difficult do you think it is to identify overuse or misuse of prescription medications?

Allow a couple of responses from participants.

This can be complicated, because many people, including college students, view prescriptions as safe—and legal—because a doctor wrote a prescription to the medication for them or for someone they know.

REFERENCE:

Slide 67: Orange County SBIRT Pre-Screen

This slide features the pre-screener used by Orange County Health Care Agency in their SBIRT implementation efforts. Napa County Health and Human Services Agency adapted the OC Pre-Screen, by adding three questions and changing the domestic violence question slightly:

Additional questions: (1) Do you have a doctor who you see regularly (YES/NO); (2) In the past three months, have you been unable to perform your normal activities because of illness or pain? (YES/NO); and (3) Have you used any tobacco produces in the past three months? (YES/NO) If yes, please indicate type of tobacco and amount used per day.

The domestic violence question was changed to: Are you currently being harmed physically and/or emotionally? (YES/NO) If yes, are you willing to seek help/counseling?

Slide 68: SBI Decision Tree

This detailed flow chart depicts a screening and brief intervention decision tree. Imagine starting with a pre-screen. If a patient receives a positive score on the pre-screen for alcohol and/or drugs, you would typically proceed to a full screen such as the AUDIT (for alcohol) and/or the DAST (for drugs). It is important to note that a pre-screen is not required, nor is it reimbursed by most payers. Many operational SBIRT programs do not use a pre-screen, but rather routinely administer a full screening to all patients.

Slide 69: What is the AUDIT?

The Alcohol Use Disorders Identification Test or AUDIT was developed by the World Health Organization (WHO) in the 1980s to identify alcohol use, abuse, and possible dependence. The AUDIT contains 10 questions. It has been validated for use with diverse groups of people. It was originally designed for use in primary care settings, but can be used in mental health and college/university campus settings, as well.

REFERENCE:

Slide 70: Domains of the AUDIT

The AUDIT assesses alcohol across three domains. The first domain contains three questions that assess hazardous levels of use. The questions are related to quantity and frequency of use, including frequency of heavy or binge drinking.

Slide 71: Domains of the AUDIT, continued

The second domain assesses for symptoms of dependence, using diagnostic criteria such as impaired control over drinking, failure to meet expectations because of drinking, and needing to drink first thing in the morning.

Slide 72: Domains of the AUDIT, continued

The final four questions of the AUDIT assess for harmful consequences of alcohol use. Indicators include feeling guilty after drinking, having blackouts, causing injury to self or others, and having others express concern about one’s drinking.
Slide 73: AUDIT Zones and Scores

Like most screens, the AUDIT results in a single score. Scores correlate to risk levels (low, moderate, and high). For example, a score of 0 to 7 is considered low risk and the appropriate response from the provider is to tell the patient he/she is at low risk, which is great, and encourage them to continue these low-risk behaviors. Scores between 8 and 19 suggest a low to moderate risk. People in this risk range should receive a brief intervention focused on lowering their risk. People at the higher end of the moderate risk range—those who score 16 to 19—should be given a brief intervention and possibly the opportunity for brief treatment, which means additional cognitive behavioral-related counseling sessions. Again, the goal is to help them to identify strategies to lower their risk of developing serious drinking-related health and social problems. A person at the very high end, with a score of 20 or higher, may have alcohol dependence. This person needs a referral to specialized care. A brief intervention should be conducted, but now the focus should be on helping the person to choose to accept and follow through on a referral to more formalized treatment.

Slide 74: Introducing the AUDIT

With regards to introducing the AUDIT screening process to the patient, it is helpful to keep the following recommendations in mind:

1. It is critical to provide a gentle introduction to talking about substance use—which may be awkward or embarrassing for patients. It is important to tell the patient that some questions are personal.

2. And that the information is confidential.

3. Patients may be surprised by your desire to ask them questions about substance use, so your job is to normalize this procedure as much as you can. You can do this by being straightforward about the screening, e.g., “This is part of routine care that we provide.” You want to tell the patient that you are asking the questions in order to provide the best possible care.

4. Also, you want to tell the patient that he or she doesn’t have to answer a question if they are uncomfortable.

If a comfortable environment is created for patients, most will respond well to the screening and will provide honest answers. Even if patients underestimate their use, the provider will still have a very good chance of identifying their risk level.
Slide 75: Activity – AUDIT Practice

**Allow 10-15 minutes for this activity**

To get acquainted with the questions included on the AUDIT, the trainer will play the role of the clinician, and participants will be asked to respond to each question. Audience Response System (ARS) clickers can be used to record the responses to the anonymous group administration of the AUDIT screener, if such equipment is available to the trainer. Otherwise, participants can keep track of their responses and tally up their score at the end of the final (10th) question. The trainer (clinician) should introduce the AUDIT as described on the previous slide, and then run through the questions of the AUDIT. The trainer (clinician) should make sure he/she asks the questions exactly as they are written and read the response options to the audience. If ARS is used, the trainer can share the results of each question with the audience before moving on to the next question.

**Audience Response System (ARS)-compatible slide**

ALTERNATE ACTIVITY

Instead of using ARS clickers to have the audience answer each question in an anonymous group administration of the AUDIT screener, you could have training participants pair up to role play administering the AUDIT in a one-on-one interview. In that case, one person would play the role of the clinician, and the other person would play the role of the patient.

Slide 76: Activity – AUDIT Practice, Continued

**Allow 10-15 minutes for this activity**

**Audience Response System (ARS)-compatible slide**
Slide 77: Activity – AUDIT Practice, Continued

**Allow 10-15 minutes for this activity**

**Audience Response System (ARS)-compatible slide**

Slide 78: Activity – AUDIT Practice, Continued

**Allow 10-15 minutes for this activity**

**Audience Response System (ARS)-compatible slide**

Slide 79: Activity – AUDIT Practice, Continued

**Allow 10-15 minutes for this activity**

**Audience Response System (ARS)-compatible slide**
Slide 80: Activity – AUDIT Practice, Continued

**Allow 10-15 minutes for this activity**

**Audience Response System (ARS)-compatible slide**

---

Slide 81: Activity – AUDIT Practice, Continued

**Allow 10-15 minutes for this activity**

**Audience Response System (ARS)-compatible slide**

---

Slide 82: Activity – AUDIT Practice, Continued

**Allow 10-15 minutes for this activity**

**Audience Response System (ARS)-compatible slide**
**Allow 10-15 minutes for this activity**

**Audience Response System (ARS)-compatible slide**
Slide 85: Activity – AUDIT Practice De-Brief

**Allow 5 minutes for this portion of the AUDIT practice session**

*Bring the full group back together, and ask people for their feedback regarding specific items on the AUDIT. What are their initial reactions to the questions as they are written?*

**Additional Information for the Trainer(s)**

You may receive a comment about question 3 and the reference to “6 drinks or more.” This question has to do with binge drinking; in the U.S., the definition of binge drinking is 5 or more for men in a single setting/occasion and 4 or more drinks for women in a single setting/occasion. The reason the question reads “6 or more” is because in some countries, such as Australia, the standard drink size is smaller than in the U.S.

Some people may comment that a question is vague or poorly worded. In response, acknowledge their feedback and reassure them that no instrument is perfect, but the AUDIT has undergone a tremendous amount of research cross-nationally and, as a whole, has very good reliability and validity. This means that it works well to identify risky drinking, even if one or more questions seem to be poorly worded. In addition, no one question is critical on its own; the collection of questions is what tells the clinician if the patient is engaging in risky drinking.

---

Slide 86: Drug Abuse Screening Test – DAST

The Drug Abuse Screening Test (DAST) was originally developed in 1982 and is still an excellent screening tool. It was originally designed as a 28-item self-report scale that consists of items that parallel those of the Michigan Alcoholism Screening Test (MAST). The DAST has “exhibited valid psychometric properties” and has been found to be “a sensitive screening instrument for the abuse of drugs other than alcohol. The DAST-10 is a 10-item, yes/no self-report instrument that has been condensed from the 28-item DAST and takes less than 8 minutes to complete. The DAST-10 was designed to provide a brief instrument for clinical screening and treatment evaluation and can be used with adults and older youth. This slide features some of the many advantages of the DAST.
**Slide 87: Drug Abuse Screening Test – DAST**

This slide features a few limitations of the DAST. A low score does not necessarily mean that a patient is free of drug-related problems. One must take into consideration the length of time the patient has been using, level of consumption, and other data collected to assist in score interpretation. It is important to keep in mind that like the AUDIT, no single item of the DAST is that important; it’s more about the collection of items. The DAST was normed on thousands of people, and once you become comfortable with the wording of the questions, screening is more effective.

**Slide 88: Scoring the DAST**

Scoring of the DAST is very straightforward. Question 3 is an internal validity check, meaning it is reverse scored. In all other questions, a YES response receives a score of 1, but in question 3, a NO response receives the score of 1. This method helps to identify individuals who have literacy issues, as well as those who may not be telling the truth.

**Slide 89: DAST Zones and Scores**

Like most screens, the DAST results in a single score. Scores correlate to risk levels (low, moderate, and high). For example, a score of 0 is considered no risk and the appropriate response from the provider is to encourage the patient to continue these low-risk behaviors. A score of 1-2 suggest a low level of risk. People in this risk range should receive a brief intervention focused on lowering their risk. People at the higher end of the moderate risk range—those who score a 3 to 5—should be given an extended brief intervention and possibly the opportunity for brief treatment, which means additional cognitive behavioral-related counseling sessions. Again, the goal is to help them to identify strategies to lower their risk of developing serious drug-related health and social problems. A person at the very high end, with a score of 6-10, may have a substance use disorder. This person needs a referral to specialized care. An extended brief intervention should be conducted, but now the focus should be on helping the person to choose to accept and follow through on a referral to more formalized treatment.
Slide 90: Introducing the DAST

The DAST includes questions that focus on drug use in the past 12 months. Drug use is defined as the use of illicit drugs, as well as the misuse of prescribed or over-the-counter medications. Every question must be answered in order to determine a valid score.

Slide 91: Activity – DAST Practice

**Allow 10-15 minutes for this activity**

To get acquainted with the questions included on the DAST, the trainer will play the role of the clinician, and participants will be asked to respond to each question. Audience Response System clickers can be used to record the responses to the anonymous group administration of the DAST screener, if such equipment is available to the trainer. Otherwise, participants can keep track of their responses and tally up their score at the end of the final (10th) question. The trainer (clinician) should introduce the DAST as described above, and then run through the questions of the DAST. The trainer (clinician) should make sure he/she asks the questions exactly as they are written and read the response options to the audience. If ARS is used, the trainer can share the results of each question with the audience before moving on to the next question.

**Audience Response System (ARS)-compatible slide

ALTERNATE ACTIVITY

Instead of using ARS clickers to have the audience answer each question in an anonymous group administration of the DAST screener, you could have training participants pair up to role play administering the DAST in a one-on-one interview. In that case, one person would play the role of the clinician, and the other person would play the role of the patient.
Slide 92: Activity – DAST Practice, Continued

**Allow 10-15 minutes for this activity**

**Audience Response System (ARS)-compatible slide**

Slide 93: Activity – DAST Practice, Continued

**Allow 10-15 minutes for this activity**

**Audience Response System (ARS)-compatible slide**

Slide 94: Activity – DAST Practice, Continued

**Allow 10-15 minutes for this activity**

**Audience Response System (ARS)-compatible slide**
Slide 95: Activity – DAST Practice, Continued

**Allow 10-15 minutes for this activity**

**Audience Response System (ARS)-compatible slide**

Slide 96: Activity – DAST Practice, Continued

**Allow 10-15 minutes for this activity**

**Audience Response System (ARS)-compatible slide**

Activity: DAST Practice, Continued

Ke: Have you ever engaged in illegal activities in order to obtain drugs?
0 = No
1 = Yes

Ke: Have you ever experienced withdrawal symptoms (feel sick) when you stopped taking drugs?
0 = No
1 = Yes
**Allow 5 minutes for this portion of the DAST practice session**

*Bring the full group back together, and ask people for their feedback regarding specific items on the DAST. What are their initial reactions to the questions as they are written?*

**Additional Information for the Trainer(s)**

Some people may comment that a question is vague or poorly worded. In response, acknowledge their feedback and reassure them that no instrument is perfect, but like the AUDIT, the DAST has undergone a tremendous amount of research cross-nationally and, as a whole, has very good reliability and validity. This means that it works well to identify risky drinking, even if one or more questions seem to be poorly worded. In addition, no one question is critical on its own; the collection of questions is what tells the clinician if the patient is engaging in risky drug use.

*This next portion of the training discusses the use of a three-step brief intervention, known as “FLO” or Feedback, Listening, and Exploring Options. Following a review of key motivational interviewing strategies that should be utilized when conducting the FLO brief intervention, participants will be given several opportunities to practice their newly acquired skills.*
Brief interventions were defined earlier, and the following is a quote from Dr. Craig Field from the University of Texas:

"Brief interventions are short, face-to-face conversations regarding thinking, motivation to change, and options for change which are provided during a window of opportunity or potentially teachable moment occasioned by a medical event."

Read quote aloud. Ask participants what is meant by the term “teachable moment”? Encourage a little dialogue, and then summarize with the following: Teachable moments are when a patient comes in with problems and there is an opportunity to explore connections between the patient’s problems and his/her substance use. Think of a student coming into the campus health center with a head injury. The student fell at a party and reported drinking heavily. This can be a teachable moment because the provider can help the student make a connection between his drinking and his head injury.
Slide 100: Brief Intervention Effect

What is the behavior change we can expect from brief interventions? We can expect reductions in use and a reduction in negative consequences related to use.

**ANIMATIONS**

Click to animate in Bullet 1

BIs can trigger change. We can trigger change because we meet our patients in a teachable moment and motivate them to consider change.

Click to animate in Bullet 2

We know from research that brief interventions, as short as 5 minutes, can motivate people to make changes. This requires a laser focus, and it is critical to engage the patient to guide a very focused conversation around behavior change.

Click to animate in Bullet 3

There is more evidence for the impact of brief interventions on heavy drinking, but the research on illicit drugs is growing.

Click to animate in Bullet 4

For instance, a randomized study by Bernstein and colleagues found that when cocaine and heroin users seen in primary care received a brief intervention, the patients had a 50% higher odds of abstinence at follow up compared with patients who did not receive a brief intervention.

Photo credit: Centers for Disease Control and Prevention, 2014.
Slide 101: Activity – Video Example (“Bad SBIRT”)

**Allow 5-7 minutes for this activity**

Be sure to practice with the video ahead of time. If you have difficulty playing the video, refer to the instructions below or the trainer’s guide for alternate ways of accessing it.

Throughout the training, we will watch two videos of doctors talking to a patient in an emergency room setting. The patient is a young man who had been drinking heavily and was involved in a motor vehicle accident. These videos demonstrate different styles of talking to patients.

**How to Insert the Video: This slide will contain a short video clip that will play when the trainer clicks on the static image. In order for this to work, the video needs to be inserted into the presentation. You can access the video from the BNI-ART Institute Website (link included at the bottom of the slide). Alternately, the video will be included in the package of training materials that is posted to the PSATTC Products and Resources page (www.psattc.org). From the INSERT menu in PowerPoint, select “video (or movie).” Select the “Bad SBIRT” video file. When prompted, indicate that the movie should play automatically and full screen. Once the video is inserted into the PowerPoint presentation, you need to maintain a direct connection between the PowerPoint presentation and the video file. When moving the PowerPoint file to another location on your computer or to another computer, make sure to always move the “Bad SBIRT” video file along with it. If the link becomes broken, the video will need to be reinserted.

To play the video, hover over the video image to make the video controls appear. Click on the play button to show the “bad example” video. The video should display full screen.

Facilitate a 5-minute discussion with participants using the following questions:

What did you notice about the doctor’s approach? How did the patient react? Was it effective? Why or why not?

In the discussion, make sure that the following are covered: (1) Angry and judgmental tone; (2) Telling the patient what to do; (3) Specific judgmental statement (e.g., “I know when someone is an alcoholic and I think that you have a serious drinking problem.” “Have some common sense.”); (4) Finger-wagging; (5) Patient is frustrated, defensive, and just wants to get out of there.
Slide 102: Where Do I Start?

The first step in the brief intervention process is to assess the extent to which a patient is aware of his or her substance use and the consequences.

**ANIMATIONS**

Click to animate first sentence.

What you do depends on where the patient is in the process of changing. Most of the time, patients come to us for other concerns and have not thought about changing their substance use.

Click to animate second sentence.

The first step, then, is to identify from where our patients are coming. We want to know how substance use fits into people’s lives so we can understand their situation.
Slide 103: Stages of Change – Primary Tasks

The Stages of Change is a theoretical perspective introduced by Prochaska and DiClemente more than 20 years ago to help professionals understand their clients with addiction problems and motivate them to change. Their model is based not on abstract theories but on their personal observations of how people went about modifying problem behaviors such as smoking, overeating and problem drinking. The Stages of Change can help clinicians understand where a person is coming from in terms of their substance use. At the top in blue is the first stage called **precontemplation**. At this stage people do not see a problem with their use and are not considering change.

*Use a pointer so participants can follow along on screen.*

The stages that follow are contemplation, determination, action, maintenance, and recurrence.

**Contemplation** is a stage that we strive to move patients to if they are at risk for substance use related problems. Patients in the contemplation stage can see the possibility of change, but they are ambivalent about changing. The **determination** stage is where we begin to identify strategies for change. Action is where changes are taking place. **Maintenance** is where patients have achieved their goal and are working to maintain their new behaviors. **Recurrence** is when patients may relapse or go back to their old behaviors. Recurrence is part of the process of changing.
Slide 104: Stages of Change – Intervention Matching Guide

This chart shows what strategies we can employ with patients at the different stages of readiness to change. If we look at the first two stages—which are most relevant for people engaging in at-risk levels of substance use—we can see that our goals are just to offer information or feedback, explore the meaning of events, explore pros and cons of substance use, and build self-efficacy.

Patients may not be ready to make a change at the time of this brief intervention. However, they may be willing to explore the pros and cons of their use, or track levels of use to see if they may have a more significant problem than they realized. By linking the interventions to where they are in the stages of change, we can help to move them forward in the stages and increase the likelihood that they will take action.

If we get ahead of them (ask them to take action before they have identified that they even have a problem), we are likely to stimulate resistance.
**ANIMATIONS**

*This slide contains complex animation and it is important to practice with this slide ahead of time to ensure that you understand how the animation works.*

Here is a concrete example. Patients often present for treatment with a variety of issues across a number of domains. For example, a patient may be experiencing a variety of family, medical, mental health, and substance use issues.

**Click to start animation**

…but today when he comes in for service, she says, “I’m really hurting.”

**Click to advance animation**

You, the clinician, know that he is misusing opioids.

**Click to advance animation**

You say to your patient, “I want to talk about your use of opioids.”

**Click to advance animation**

The patient, however, doesn’t want to talk about opioids (unless perhaps to get more). The patient says, “I’m here because of my HIV-related neuropathy. I’m not a drug addict.”

**Click to advance animation**

Concerned about opioid hyperagesia, you state, “Part of the problem with your pain is that you take too many opioids.”

**Click to advance animation**

You and the patient continue this chase. This does not help you get to the substance use issue, nor does it help the patient deal with her pain. If, instead of pressing our issue (the opioid use), we listen for what patients see as their issue.
**ANIMATIONS**

*Click to advance animation*

We can find ways of connecting our goal with theirs. This allows us to build rapport. If the patient says, “I need help with my pain,” we can work with that by saying, “Ok, let’s find a way to help you deal with your pain.” Eventually, we want to bring the pain issue and the substance use issue together. If we focus on the patient’s pain, we can still ask how him medications are working out, and, once we gain access into his world, we can begin to provide information about the impacts of taking too much medication. We know the two issues are related, so if we focus on the patient’s concern first (the pain), we will undoubtedly be able to introduce our concern (the SUD issue) in a way that is respectful and natural.

**Slide 106: [No Title]**

This quote by Blaise Pascal sums up the motivational theory of change: “People are better persuaded by the reasons they themselves discovered than those that come into the minds of others.” The immediate goal with a brief intervention is to help patients or clients gain insight about their substance use and develop their own intrinsic motivation toward positive behavior change.

**Additional Information for the Trainer(s)**

Blaise Pascal was a 17th century French mathematician, physicist, inventor, writer, and philosopher.
**Slide 107: What is Motivational Interviewing?**

<table>
<thead>
<tr>
<th>What is Motivational Interviewing?</th>
</tr>
</thead>
<tbody>
<tr>
<td>A style of talking with clients constructively about reducing their health risks and changing their behavior.</td>
</tr>
</tbody>
</table>

**Draw from audience the kinds of changes that they would like to see individuals they know make. Inquire as to whether they have talked with them about making the changes and what the results were.**

The concept of motivational interviewing evolved from experience in the treatment of problem drinkers, and was first described by Miller (1983) in an article published in Behavioural Psychotherapy. These fundamental concepts and approaches were later elaborated by Miller and Rollnick (1991) in a more detailed description of clinical procedures. A noteworthy omission from both of these documents, however, was a clear definition of motivational interviewing. Motivational interviewing is defined by Miller and Rollnick as a *directive, client-centered counseling style for eliciting behavior change by helping clients to explore and resolve ambivalence*. Compared with nondirective counselling, it is more focused and goal-directed. The examination and resolution of ambivalence is its central purpose, and the counselor is intentionally directive in pursuing this goal.

**Slide 108: What is Motivational Interviewing?**

<table>
<thead>
<tr>
<th>What is Motivational Interviewing?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enhance the client’s own motivation to change using techniques that are empathic and non-confrontational</td>
</tr>
</tbody>
</table>

**You can ask participants to quickly engage in a one-on-one conversation with their neighbor. Each person chooses a behavior they think would be helpful for them to make a change, but they have not yet successfully changed. Have the partner take turns talking with the other person about making that change. Instruct the convincing partner to point out all the reasons the person should change, offer suggestions for them to change, warn them about what may happen if they don’t change, etc. Process with group how it felt to have someone interact with them in such a confrontational way. How did it make them feel about changing?**
The basic assumptions of MI differ from traditional or typical medical counseling, and this is what is meant by the term “spirit.” Motivational interviewing is a counseling style based on the following assumptions:

1. Ambivalence about substance use (and change) is normal and constitutes an important motivational obstacle in recovery.

2. Ambivalence can be resolved by working with your client’s intrinsic motivations and values.

3. The alliance between you and your client is a collaborative partnership to which you each bring important expertise.

4. An empathic and supportive, yet directive counseling style provides conditions under which change can occur. Direct argument and aggressive confrontations may tend to increase client defensiveness and reduce the likelihood of behavioral change.

Direct persuasion is not an effective method for resolving ambivalence. It is tempting to try to be "helpful" by persuading the client of the urgency of the problem about the benefits of change. It is fairly clear, however, that these tactics generally increase client resistance and diminish the probability of change. The MI counseling style is generally a quiet and eliciting one. Direct persuasion, aggressive confrontation, and argumentation are the conceptual opposite of motivational interviewing. With MI, the counselor is directive in helping the client to examine and resolve ambivalence. Lastly, the therapeutic relationship is more like a partnership or companionship than expert/recipient roles. The therapist respects the client's autonomy and freedom of choice (and consequences) regarding his or her own behavior.

REFERENCE:

Slide 110: MI – The Spirit: Consumer

Motivation to change is elicited from the client, and not imposed from without. Motivational interviewing relies upon identifying and mobilizing the client’s intrinsic values and goals to stimulate behavior change. The therapist’s role in MI is directive, with the goal of eliciting self-motivational statements and behavioral change from the client in addition to creating client discrepancy to enhance motivation for positive change.

Slide 111: Ambivalence

**ANIMATION**

This slide contains automatic animation. As you review the bullet points, the image of the woman should advance automatically to demonstrate a variety of different emotions. Participants may chuckle or become slightly distracted by the images. They are very effective in making the point about ambivalence.

The first thing to recognize with change is that we all have feelings of ambivalence. What is ambivalence? It’s when we feel two ways about something. We may like to drink, but we also don’t like having a hangover. Exploring a person’s ambivalence about change is one way of assessing where they are in the change process. An individual’s ambivalence about taking action is rich material that we can use as the basis for the brief intervention. If we can get an individual to talk about his or her ambivalence about making a change, we gain access into their world and can better understand their perspective.
Slide 112: How does MI differ from traditional or typical medical counseling?

Ambivalence is normal when people are confronted with the possibility of changing their behavior, even when the evidence in favor of change is very clear or even overwhelming. We know that people are more likely to change when they talk about it themselves. In MI, this is called “change talk,” and helping bring this about is a critical element. Individuals with substance use disorders are often unaware of the dangers of their substance-using behavior, but continue to use substances anyway. They may want to stop using substances, but at the same time they do not want to. These disparate feelings can be characterized as ambivalence, and they are natural, regardless of the client’s state of readiness. It is critical to understand and accept the patient’s ambivalence because ambivalence is often the central problem, and lack of motivation can be a manifestation of this ambivalence.

REFERENCE:

In moving toward any decision, most people weigh the costs and benefits of the action being contemplated. In behavioral change focused on alcohol and/or drug use, these considerations are known as decisional balancing, a process of cognitively appraising or evaluating the “good” aspects of substance use – the reasons not to change (what they get out of the targeted behavior and what the cost is of the targeted behavior), and the “not-so-good” aspects – the reasons to change. At some point in the decision-making process, the decisional balance is redistributed, and a decision is made. The objective in moving a client toward positive change, of course, is to help that person recognize and weigh negative aspects of substance use so that the scale tips toward beneficial behavior change. This tool is particularly helpful with difficult-to-engage clients, especially if you begin with the functional elements of their substance use (“the good things about...”).

Four overall objectives exist in using a decisional balance exercise with clients. The intent of such exercises, which weigh substance use and change separately, is to:

1. accentuate or in a subtle manner make salient from the client’s perspective the costs of the client’s substance use;
2. lessen, when possible, the perceived rewards of substance use;
3. make the benefits of change apparent; and
4. identify and accentuate, if possible, potential obstacles to change.

In summary, here is the order of the questions, as featured in the image on this slide (you go clockwise from top left corner):

1. What are the good things about...?
2. What are the not-so-good things about...?
3. What are the not-so-good things about changing...
4. What are the good things about changing...?
Slide 114: Motivational Interviewing Strategies

Motivational interviewing strategies help raise awareness and enhance motivation. Reflective listening, showing empathy, avoiding confrontation, exploring ambivalence, and eliciting change talk are core strategies. Clinicians may be occasionally tempted to argue with an adolescent client who is unsure about changing or is unwilling to change, especially if the adolescent is hostile, defiant, or provocative. Trying to convince an adolescent that a problem exists or that change is needed, however, could precipitate even more resistance. If you try to prove a point, the client might predictably take the opposite side. An argument with an adolescent client can rapidly degenerate into a power struggle (or tug-of-war) and do not enhance motivation to change. Arguments are counterproductive; defending br3eeds defensiveness; resistance is a signal to change strategies; and labeling is unnecessary. Any time you see a client start to push back, it is time to switch strategies to try and tip the scale in favor of making a change.

Miller and Rollnick state that, “[T]here is no particular reason why the therapist should badger clients to accept a label, or exert great persuasive effort in this direction. Accusing clients of being in denial or resistant or addicted is more likely to increase their resistance than to instill motivation for change. We advocate starting with clients wherever they are, and altering their self-perceptions, not by arguing about labels, but through substantially more effective means (Miller & Rollnick, 1991, p. 59).”

REFERENCE:

Asking **open-ended questions** helps you understand your patient’s point of view and elicits his/her feelings about a given topic or situation. Open-ended questions facilitate dialogue; they cannot be answered with a single word or phrase and do not require any particular response. They are a means to solicit additional information in a neutral way. Open-ended questions encourage the patient to do most of the talking, helping you avoid making premature judgments, and keep communication moving forward. When done sincerely, affirming your patient supports and promotes self-efficacy. More broadly, your affirmation acknowledges the difficulties the patient has experienced. **Affirming** helps patients feel confident about marshaling their inner resources to take action and change behavior. It’s all about “finding the win” where it exists and acknowledging any forward progress. Reflective listening is a fundamental component of MI, and is a challenging skill in which you demonstrate you have accurately heard and understand a client’s communication by restating its meaning. **Reflective listening** is a way to check rather than assume that you know what is meant. Reflective listening strengthens the empathic relationship between the clinician and the client and encourages further exploration of problems and feelings. Most clinicians find it helpful to periodically summarize what has occurred in a counseling session. **Summarizing** consists of distilling the essence of what a client has expressed and communicating it back. A summary that links the patient’s positive and negative feelings about substance use (or whatever behavior is in question) can facilitate an understanding of initial ambivalence and promote the perception of discrepancy.
Slide 116: Reflective Listening

Reflective listening is one of the most important motivational interviewing micro-skills and it is essential to ensuring a successful brief intervention.

**Bullet 1.** Reflective listening involves not only listening to what people say, but also to what they mean; it’s a means of gaining access into someone’s world. For example, if you have a patient who says he couldn’t remember what happened after leaving the bar, you can reflect back by stating, “So you’re having trouble remembering what happened last night. Sounds frightening.” By reflecting in this way, you confirm both the stated content and the unstated feeling (fear) that the patient experienced.

**Bullet 2.** You can show empathy by saying something such as, “I can understand that. You want to enjoy yourself with friends.” What you are trying to do is create an environment of non-judgment so that patient feels comfortable being honest with us.

**Bullet 3.** It is important to be aware of intonation. When you reflect back what a person says and it sounds like a question, this can come off as judgmental. Try to make a statement as opposed to asking a question. For example, “You are having a lot of emotions.” Statements can be powerful, because they force people to look in the mirror and observe what is happening. Also, watch for nonverbal cues. Judgment can show on your face. If a patient says, “I didn’t feel well yesterday.” If I answer, [*say this with a suspicious tone and expression*] “You didn’t feel well yesterday,” my nonverbal expression of disbelief be heard much louder than the actual words that I say. We need to watch our tone and our facial expressions so we don’t let our own feelings and judgments show.
Reflective listening is the key to MI work. Listen carefully to your patients, and they will tell you what has worked and what hasn’t, or what moved them forward and shifted them backward. Whenever you are in doubt about what to do, just listen. But remember this is a directive approach where you need to actively guide the client towards certain topics. You will focus on their change talk and provide less attention to non-change talk. For example, "You are not quite sure you are ready to make a change, but you are quite aware that your drug use has caused concerns in your relationships, effected your work and that your doctor is worried about your health." You will also want to vary your level of reflection. Keeping reflections at the surface level (e.g., simply repeating what was said) may lead to that feeling that the interaction is moving in circles. Reflections of affect, especially those that are unstated but likely, can be powerful motivators. For example, "Your children aren’t living with you anymore; that seems painful for you." If you are right, the emotional intensity of the session deepens. If you are wrong or the client is unready to deal with this material, the client corrects you and the conversation moves forward.

The goal in MI is to create forward momentum and to then harness that momentum to create change. Reflective listening keeps that momentum moving forward. This is why Bill and Steve recommend a ratio of three reflections for every question asked. Questions tend to cause a shift in momentum and can stop it entirely. Although there are times you will want to create a shift or stop momentum, most times you will want to keep it flowing.
Types of Reflective Statements

1. Simple Reflection (repeat)
2. Amplified Reflection (summarize the consumer’s point)
3. Double-Sided Reflection (captures both sides of the communication)

Types of Reflective Statements

A few different ways exist of doing reflective listening. Repeating is the simplest form of a reflection, but not necessarily the most interesting. For example, if a person says, “I’m angry,” the clinician would say, “You’re angry.” Simple reflections are good for confirming understanding to content, but they do not convey understanding of deeper, more emotional meaning. Amplified reflections are designed to highlight the emotional content of the communication. In the previous example, the doctor responded to the patient’s statement that he could not remember his accident by stating, “That sounds scary.” Even though the patient never said it, the doctor introduced this emotional content using an amplified reflection and deepened his understanding of the patient. Finally, a double-sided reflection is designed to highlight the patient’s ambivalence. This helps the patient see both the positive and the negative from a more objective perspective. You can say, “On the one hand, drinking is a way for you to relax and enjoy your time with friends...On the other hand, it makes getting up in the morning difficult...” By seeing his or her own attitudes in a new way, the individual may become more motivated to reduce the negative consequences.

Avoid Confrontation

Confrontation is counterproductive to enhancing a person’s motivation to change. When we confront people about their substance use, we are arguing with them, or trying to convince them that they have a problem. Arguing with our patients is going to make them defensive, which is the opposite of what we want to accomplish during a brief intervention.

Bullet 1. When you confront people, you can challenge them, “What do you think you are doing?”

Bullet 2. Warn them, “You are going to damage your liver.”

Bullet 3. And tell them what to do, “If you want to be a good student, you must stop drinking on school nights.”

You can ask the audience what other types of confrontational statements could we make when talking to someone about their substance use? Elicit a few responses from participants. Note: Other ways of confronting someone include moralizing, giving unwanted advice, shaming, and being sarcastic.
Earlier, we discussed the fact that ambivalence is a central force in the change process. With a brief intervention, you want to explore a person’s ambivalence about making a change. The way you do this is to encourage the patient to weigh the costs and benefits of changing his or her substance use against the costs and benefits of continuing to use alcohol or other drugs. In other words, what are the pros and cons of using alcohol or drugs? Likewise, what are the pros and cons of reducing use of alcohol or drugs?

Slide 121: Elicit “Change Talk”

Another key strategy in motivational interviewing is eliciting change talk. Change talk consists of self-motivational statements that people make in relation to behavior change.

- **Bullet 1.** Patients may say things that suggest they recognize the problem,
- **Bullet 2.** Have concerns about not changing,
- **Bullet 3.** Have some intention to change, and
- **Bullet 4.** Feel optimistic about their ability to make change.

When patients make these statements, they are moving in the direction of being more willing or motivated to change.
Slide 122: Moving Toward “Change Talk”: The DARN Steps

Change talk is defined as statements by the patient revealing consideration of motivation for or commitment to change. In MI, the clinician seeks to guide the patient to expressions of change talk as the pathway to change. Research indicates a clear correlation between client statements about change and outcomes of client reported levels of success in changing a behavior. The more someone talks about change, the more likely they are to change. Different types of change talk can be described using the DARN-C mnemonic.

Preparatory Change Talk
- Desire (I want to change)
- Ability (I can change)
- Reason (It’s important to change)
- Need (I should change)
- And most predictive of positive outcome:

Implementing Change Talk
- Commitment (I will make changes)
**Allow 5 minutes for this activity**

Ask participants to pair up once again and talk to their partner about a change they made/want to make in their lives. This should be a personal change, but something that they are comfortable sharing. One person will talk first and the other person should use reflective listening. Remember you can repeat what your partner says or amplify it by rephrasing it in order to capture underlying feelings. You can reflect back to your partner the good and the not-so-good aspects of the situation that your partner wants to change by offering double-sided reflections. Avoid asking any questions.

After about 2 ½ minutes, notify participants to switch roles. Then ask the participants to share with the group what it was like to engage in reflective listening. Was there anything hard about doing reflective listening? When they were being listened to, what was good about the reflections?

Additional Information for the Trainer(s)

An HIV-related example of reflective listening is as follows: “On the one hand, drinking is a way for you to relax and enjoy time with your friends. One the other hand, sometimes being under the influence of alcohol causes you to forget to take your HIV meds.”
**Allow 5-7 minutes for this activity**

Be sure to practice with the video ahead of time. If you have difficulty playing the video, refer to the instructions below or the trainer’s guide for alternate ways of accessing it.

The second video involves the same patient (a standardized patient used in medical training is one who is taught a disease process and asked to interact with a medical provider) but a different doctor. Let’s look at how this doctor approaches the patient.

**How to Insert the Video:** This slide will contain a short video clip that will play when the trainer clicks on the static image. In order for this to work, the video needs to be inserted into the presentation. You can access the video from the BNI-ART Institute Website (link included at the bottom of the slide). Alternately, the video will be included in the package of training materials that is posted to the PSATTC Products and Resources page (www.psattc.org). From the INSERT menu in PowerPoint, select “video (or movie).” Select the “Good SBIRT” video file. When prompted, indicate that the movie should play automatically and full screen. Once the video is inserted into the PowerPoint presentation, you need to maintain a direct connection between the PowerPoint presentation and the video file. When moving the PowerPoint file to another location on your computer or to another computer, make sure to always move the “Good SBIRT” video file along with it. If the link becomes broken, the video will need to be reinserted.

To play the video, hover over the video image to make the video controls appear. Click on the play button to show the “bad example” video. The video should display full screen.

Facilitate a 5-minute discussion with participants using the following questions:

- What did you notice about the doctor’s approach? How did the patient react?
- Was it effective? Why or why not?
(Notes for Slide 124, continued)

<table>
<thead>
<tr>
<th>Slide 124: Activity – Video Example (“Good SBIRT”)</th>
</tr>
</thead>
</table>
| ![Image of two people talking]
| **In the discussion, make sure that the following are covered:**
| • The doctor style was respectful, nonjudgmental, and conversational
| • He explored the pros and cons of his drinking
| • Offered reflections of emotions and content
| • Involved the patient in the discussion and explored options
| • Offered options if his strategy to cut down did not work
| • Was encouraging about patient’s plan
| • Patient was willing to engage in discussion and generated solutions for behavior change |
Slide 125: What if...?

Questions to Elicit/Evoke Change Talk

- “What would you like to see different about your current situation?”
- “What makes you think you need to change?”
- “What will happen if you don’t change?”
- “What will be different if you complete your probation/referral to this program?”
- “What would be the good things about changing your [insert risky/problem behavior]?”
- “What will your life be like 3 years from now if you changed your [insert risky/problem behavior]?”
- “Why do you think others are concerned about your [insert risky/problem behavior]?”

Elicit/Evoke Change Talk For Clients Having Difficulty Changing: Focus is on being supportive as the client wants to change but is struggling.

- “How can I help you get past some of the difficulties you are experiencing?”
- “If you were to decide to change, what would you have to do to make this happen?”

Elicit/Evoke Change Talk by Provoking Extremes: For use when there is little expressed desire for change. Have the client describe a possible extreme consequence.

- “Suppose you don’t change, what is the WORST thing that might happen?”
- “What is the BEST thing you could imagine that could result from changing?”

Elicit/Evoke Change Talk by Looking Forward: These questions are also examples of how to deploy discrepancies, but by comparing the current situation with what it would be like to not have the problem in the future.

- “If you make changes, how would your life be different from what it is today?”
- “How would you like things to turn out for you in 2 years?”
What If, Continued

One more strategy for adapting to client resistance is to side with the negative, meaning to take the negative voice in the discussion. Typically, siding with the negative is stating what the patient has already said while arguing against change, perhaps as an amplified reflection. If your patient is ambivalent, you’re taking the negative side of the argument evokes a “Yes, but...” from the patient, who then expresses the other (positive) side. Be cautious, however, I using this strategy too early in the conversation.

What If, Continued

If, after a lengthy discussion, the patient is not using any change talk, it may be the case that you are talking about the wrong issue. Take the time to reassess what the patient is willing to discuss, even if it is not the issue you think is most important.

Conducting a Brief Intervention – FLO

It is now time to learn how to apply the key motivational interviewing concepts in a brief intervention.
Slide 129: FLO – The 3 tasks of a BI

The brief intervention model chosen for today’s training is called FLO, which stands for Feedback, Listen & Understand, and Options Explored.

Use a lighthearted tone to add the following line: We dropped the ‘W’ because we did away with using warnings like “just say no!”

Many brief intervention models exist; for instance, many SAMHSA-funded programs use the Alcohol, Smoking, and Substance Use (ASSIST) model, which was tested internationally by the World Health Organization and a team of researchers. We chose FLO because it condenses the main elements of brief interventions in three easy steps.

---

Slide 130: How Does It All Fit Together?

**ANIMATIONS**

This slide depicts an outline of the three steps of the FLO brief intervention and what happens at each step.

Click to animate in the first step

You start the conversation with Feedback, which involves giving patients their screening results and explaining what the results mean.

Click to animate in the second step

Listen and Understand is where you get into the motivational interviewing work of exploring the meaning of patients’ substance use, the pros and cons of using, and the important concern patients’ bring to the visit (which may or may not be substance use). During this step, you also assess what kinds of changes patients want to make and their level of readiness.

Click to animate in the third step

Lastly, Options Explored is where you discuss options that patients themselves identify to support change. You always want to encourage a follow up appointment so that we can check on the patients’ progress and provide support.
Slide 131: The 3 Tasks of a BI

We are going to walk through these steps one by one, starting with Feedback.

Slide 132: The 1st Task – Feedback

Before launching into providing the feedback, it is critical to ask for the patient’s permission. It is inherently respectful to ask permission and willingness of the individual to hear your feedback. Once you have permission, give the feedback as described below. After you have given the feedback, ask for response/reaction to your feedback. Does he/she agree or disagree? Was it useful or not?

Providers should be aware that engaging the individual in this way gives that patient control over whether or not to hear your feedback. While rare, a patient may say that they don’t want to hear it. In this case the provider can explore the reason(s) why, or simply tell the individual that they will ask again at a later appointment.
Slide 133: The 1ˢᵗ Task – Feedback

**ANIMATIONS**

Click to animate in Item 1

Once you have permission, you start by helping the patient understand the scoring for the instrument.

Click to animate in Item 2

At minimum, provide the range of scores and some context for understanding them.

Click to animate in Item 3

Then, give the score

Click to animate in Item 4

and explain what the score means in terms of their relative level of risk.

Click to animate in Item 5

Next, relate the patient’s substance use (drinking or drug use) to the norms in the larger population. Normative information can be powerful because many people, particularly college students, believe that everyone in college drinks a lot when in fact many students do not drink or use drugs. Sharing information about norms can help patients get an accurate picture of social norms and realize that their level of use may be above average.

Click to animate in Item 6

Finally, ask you patient for her reaction to the score and any feedback.

---

Slide 134: The 1ˢᵗ Task – Feedback

This slide includes an example of what you can say when giving feedback to a patient about their level of risky drinking. This example focuses on the AUDIT screen.

Read each bullet and provide an opportunity for discussion.
### Slide 135: Informational Brochures

When you share information about the score and health effects, you can offer the patient an informational brochure to take home with them. This is the first page of a brochure entitled “Rethinking Drinking,” which is available for download at:


### Slide 136: The 1st Task – Feedback

It is possible that you will encounter resistance after giving a patient some initial feedback. This is often the case when patients are using a good deal of alcohol and/or drugs and may feel a bit defensive about it. Here are some examples of what patients may say to you. For example, “I don’t have a drug program.” “This is college. This is our time to party.” With motivational interviewing, we want to reduce resistance and make the patient feel at ease. What would you say if a patient started getting defensive?

*Elicit a few examples from the audience and then move onto the next slide.*

### Slide 137: The 1st Task – Feedback

The goal is to avoid a tug of war with patients. Instead, remember that they are experts who know more about their situation than anyone else.
Slide 138: The 1st Task – Feedback

How do you let go? You can present the screening information as a means of providing the best care for our patients and let the patients decide what to do with the information. You can say, “I’d like to give you some information that concerns your health. What you do with this is entirely up to you.” If you stick to the objective information at hand—the screening results—you can keep your personal judgment out of the picture.

Slide 139: The 1st Task – Feedback

When you elicit feedback about the screening results, you want to listen intently for a hook or a piece of information that we can use to leverage “change talk.” Ways that you can find the hook include asking the patient about his or her concerns and watching for signs of discomfort with the status quo. For example, a college student may share that partying and drinking a lot is expected when you belong to a fraternity or sorority. The student may have some concerns about keeping up with his or her brothers or sisters because the partying can interfere with studying. If the patient is willing to discuss his/her substance use, always ask the question, “What role, if any, do you think alcohol or drugs played in the reason you came to see me today [getting injured or depressed or sanctioned, etc.]?” You can fill in the last part of the question with the specific situation of your patient.

Slide 140: Activity – Role Play

**Allow 5 minutes for this activity**

Participants should be broken into pairs. One person will role play a patient, and the other person will role play the clinician. All you want to do in this initial role play is practice giving feedback—just the Feedback portion of FLO using the sample AUDIT that is in your folder. The patient is named Chris and can be a man or a woman. The AUDIT has been filled out for you and you will see the score at the top. Refrain from moving on to the latter stages of the brief intervention.

Check to see that everyone has a copy of the scored AUDIT.

De-brief as a large group to ask participants what they thought of the exercise. Ask both those who role played patients, as well as those who role played clinicians.
Slide 141: The 3 Tasks of a BI

Now, it is time to move to the Listen and Understand step. This is the “meat” of the brief intervention, and is the step in which good MI skills are most critical.

Slide 142: The 2nd Task – Listen & Understand

As was discussed earlier with reflective listening, listening to and understanding the patient is the core of the brief intervention. The objective at this point is to identify and resolve any ambivalence the patient may have about his or her problematic substance use. Helping the patient move toward the side of the ambivalence that wants change is helping the person to increase motivation.

Slide 143: The 2nd Task – Listen & Understand

Two effective tools exist to help to get the conversation going: identifying pros and cons and using a readiness ruler.
Slide 144: The 2nd Task – Listen & Understand

**ANIMATIONS**

You want to listen for any connections patients make between their presenting problem and their substance use. Also, you want to listen for any reasons they may give for why they should cut down on their use, as well as any prior experiences with cutting down can be highlighted, particularly if they were successful. When you hear change talk, summarize for the patient what you are hearing because this will shine a mirror on the patient’s thought pattern and help to increase their awareness.

Slide 145: Digging for Change – The Decisional Balance

The way we explore ambivalence in motivational interviewing is to ask open-ended questions.

Use pointer to direct attention to related boxes

Point to Upper Left: For example, “What are the good things about your substance use?”

Point to Upper Right: “What about the not-so-good things?”

Point to Lower Left: “What would be good about using less?”

Point to Lower Right: “What would be not so good about cutting back?”

Someone tell me if this is an open or a closed question, “Do you drink when you are alone?”

Elicit responses. Correct answer: This is a closed question.

How could you make it an open-ended question?

Suggestion: Who do you drink with on a typical day?
You want the patient to discuss the pros and cons of using alcohol and/or drugs. This is unusual for many of us because as health providers and educators, you tend to only talk about the negative aspects of alcohol and drugs. If you can appreciate the good things about using, you can understand the underlying need of using (feeling less depressed, increased social interactions). This can help point the way to solutions once we get to that point. Discussing the positive effects of use can also help to build rapport.

*Ask the participants:* Who here likes chocolate chip cookies? What do you like about them?

*Reflect their feelings in order to demonstrate understanding.*

What else is good?

*You want to push the limits of the conversation.*

Are there any downsides?

*When you hear ambivalence in their remarks, reflect it using a double sided-reflection.*

To do a double-sided reflection, use this formula. On the one hand you like...; on the other hand...You want to reflect both sides of the statement to highlight the patient’s ambivalence.
The 2nd Task – Listen & Understand

Another tool you can utilize is the confidence or readiness ruler. This is really just a number line from 1 to 10. You can pre-print one or simply draw one on a piece of paper. To use the ruler, you need to pick the issue about which the patient is most concerned. The ruler can be used to determine how ready the person is to make a change, how important making a change is to them or how confident they are that they will be able to make the change. In our example below we will use readiness.

**Bullets 1-3.** You show the patient the ruler and ask him or her, “On a scale of 1 to 10, with 1 being not at all ready and 10 very ready, how ready are you to...[change your drinking/work on your relationship/try another strategy for your pain], whatever you think the issue is they want to talk about. Only focus on one issue in the intervention.

More than likely, people will not choose 1, but will aim a little higher. If they chose 1, it is not an issue that they are willing to talk about at all which probably means that you are not focusing on the issue that is most important to them. Refocus and try another issue.

**Bullets 4-5.** After the patient responds, you counter by asking why they didn’t choose a lower number, e.g., “Why not 2?” You want them to defend the higher number. Their responses will be very informative and will likely contain some change talk.

You should never go more than two points below the number they originally select. This ensures that you do not minimize too dramatically the number they select, or make them feel as if they need to make huge changes to reach a new number. You can also ask them to explain why they have not chosen a number that is 2 above the number they selected, as this can provide relevant information, as well.
Slide 148: The Payoff for Asking the Questions...

As patients continue in treatment, you can use the ruler periodically to monitor how motivation changes as treatment progresses. Helping patients move forward, even if they never reach a decision-making or action stage, is an acceptable outcome. Most patients cycle through the stages of change more than once before the settle into treatment or stable recovery. The readiness to change scale allows patients to assess their own readiness by marking the ruler or voicing a number. This provides you, the clinician, with options for continued discussion around what the patient is willing to work on moving forward.

If time permits, the trainer may wish to role-play the readiness ruler with a training participant.

Slide 149: Activity – Role Play

**Allow 5 minutes for this activity**

It’s time now to get back into the same pairs and practice doing L, Listen and Understand. Let’s take 5 minutes to do the activities we’ve just gone over.

Each participant should be in the same pair and playing the same role (clinician/counselor or patient) as in the F role play. Walk around room to observe and assist. When finished, ask audience to report how the exercise went. Ask for feedback from the people playing the clinician and then the patients. Reflect back what the participants describe and affirm their reactions.

Slide 150: The 3 Tasks of a BI

Now, it is time to move to the Options Explored step.
Exploring options is the third and final task in the FLO brief intervention and this is where you talk about what happens next for your patients. You can ask questions like “What do you think you will do? What changes are you thinking about making?” With a brief intervention, the responsibility is on the patient to decide what to do. And again, what they choose to do with the information that you provide is completely up to them.

The goal is for the patient to generate acceptable options toward change and then to select one that they are willing to try. You can offer menu options if the patient has difficulty coming up with their own ideas. You should try to provide concrete examples of things the patient can do to reduce his/her risk of harm, e.g., not drinking and driving and cutting back on the number of drinks per day. For patients in the high-risk range, seeking professional help from a specialist is an option that should be discussed. Remember that patients have a choice. Of course, doing nothing is also an option. But in addition to doing nothing, you can suggest to the patient that you monitor how things are going. Are there any questions about this?

You can try asking the patient about previous successes they had with making a difficult change. How did they do it? You can use these questions to start the conversation. You want to highlight past successes with change, no matter how small, and suggest that the patient can try using those same strategies to reduce their substance use.

Strategies exist for giving advice without telling someone what to do. First, ask for permission by saying something like, “I have a recommendation for you. Would it be ok if I shared it with you?” Before giving specific recommendations, give the patient permission to disagree by saying, “This may or may not be helpful to you.” Then, if you ask the patient for their feedback, you allow the patient to feel in control and that he or she is smart enough to figure this out.
Slide 155: The 3rd Task – Options for Change

You can think of the “advice sandwich” approach: Ask permission first, then give your advice, and lastly ask for a response to the advice.

Slide 156: The 3rd Task – Options for Change

Now is the time to wrap up the brief intervention and close the conversation. You do this by summarizing the patient’s views, encouraging them to share any additional views, and repeating whatever agreement was reached during the discussion about options.

Slide 157: Activity – Role Play

**Allow 5 minutes for this activity**

Now it is time to role play O. You want to pick up where you left off with the listening step and start exploring options. Ask about next steps, offer advice if relevant, and summarize patient’s views. Finally, end by repeating what the patient agreed to do. Let’s take 5 minutes.

Walk around the room to observe and assist. Again, each participant should be in the same pair and playing the same role (clinician/counselor or patient) as before. Ask participants to report how the exercise went. Ask for feedback from the people playing the clinician and then the patients. Reflect back what the participants describe and provide encouragement.
Slide 158: Activity – Putting It All Together

**Allow 15 minutes for this activity**

Now, if time permits, you will role play the full FLO, but we are going to switch roles with our partners. The person playing the patient will now be the clinician or counselor. Start again with the AUDIT score and go through the feedback, listen and understand, and options explored. Let’s take 10 to 15 minutes to run through this.

Allow 10-15 minutes for the full role play. Walk around the room to see how people are doing how. Take another 5 minutes to debrief with the audience at the conclusion of the role play, asking for feedback from the people playing the clinician and then the patients. Reflect back what the participants describe and validate their experiences or concerns.

If time is running short, the trainer can do this as a demonstration (using a volunteer from the audience to play the role of the client), as opposed to having the participants do a role play.

Slide 159: Encourage Follow-up Visits

It is important to encourage a follow-up visit with the patient. This way you can monitor their substance use, review progress toward any goals the patient may have agreed upon during your initial brief intervention session, reinforce their movement toward change, and provide tips for making additional changes.
If you are interested in learning more about motivational interventions for substance use, you should download copies of TIP 35 and TAP 33, which are both available free of charge from SAMHSA-CSAT. (The images are hyperlinked when in slideshow view).

REFERENCES:


Referral to Treatment for Patients At-Risk for Substance Dependence

This section reviews strategies for referring patients at-risk for substance dependence to formal substance use disorder treatment (outpatient, residential, etc.).

Referral to Treatment

- Approximately 5% of patients screened will require referral to substance use evaluation and treatment.
- A patient may be appropriate for referral if: they have experienced serious medical, social, legal, or interpersonal problems associated with their substance use. Even though these patients have serious issues with substance use, it is still advisable to conduct a brief intervention with these patients before making a referral to specialty care. The reason for this is that the brief intervention can help the patient become more open to making a change.
In order to help patients initiate treatment for substance use disorders, clinicians need to take an active role in the referral process. By “warm hand-off” we mean that clinicians make the transition to the treatment facility as smooth as possible for the patient.

**Bullet 1.** When we discuss options for specialty care with patients, we need to describe what treatment entails and the types of available resources in the community.

**Bullet 2.** To be able to do this, we need to get to know some of the local treatment facilities in our area so that we can describe what treatment entails. We also need to have the treatment facilities’ contact information and address on hand when we make referrals.

**Bullet 3.** There are several things we can do to facilitate the hand-off:

**Bullet 4.** Call around to find a facility with availability, call to make the appointment for the patient before he or she leaves your office,

**Bullet 5.** Give the patient directions to the facility, and

**Bullet 6.** Help the patient with transportation if needed. Some treatment facilities offer transportation, so this is something to inquire about when meeting with treatment facility staff.

*Ask the audience if they know of other referral strategies that are helpful.*

---

**Homework:** Try this with your patients. Spend a few days providing feedback only. Then add the listening and understanding step.
**Allow 5-7 minutes for this activity**

Be sure to practice with the video ahead of time. If you have difficulty playing the video, refer to the instructions below or the trainer’s guide for alternate ways of accessing it.

The third video involves a brief intervention set in a pediatrician’s office and focused on a mother’s smoking.

**How to Insert the Video:** This slide will contain a short video clip that will play when the trainer clicks on the static image. In order for this to work, the video needs to be inserted into the presentation. You can access the video from the package of training materials that is posted to the PSATTC Products and Resources page (www.psattc.org). From the INSERT menu in PowerPoint, select “video (or movie).” Select the “Putting it all Together” video file. When prompted, indicate that the movie should play automatically and full screen. Once the video is inserted into the PowerPoint presentation, you need to maintain a direct connection between the PowerPoint presentation and the video file. When moving the PowerPoint file to another location on your computer or to another computer, make sure to always move the “Putting it all Together” video file along with it. If the link becomes broken, the video will need to be reinserted.

To play the video, hover over the video image to make the video controls appear. Click on the play button to show the smoking BI video. The video should display full screen.

Facilitate a 5-minute discussion with participants using the following questions:

What did you notice about the doctor’s approach? How did the patient react? Was it effective? Why or why not?
Slide 166: Activity – Wrap-Up

**Allow 5-7 minutes for this activity**

Before we end today’s training, I’d like to ask you all to take a couple minutes and think about what you would like to do with this SBIRT training. Write down one thing that you learned and one thing you’d like to work on as a next step. After you’ve written down a few ideas, discuss them with your partner.

Allow 5 minutes for writing and discussion. After the time is up, ask if anyone would like to share what they’d like to work on as a next step. Offer suggestions for finding additional resources from the ATTC and other websites.

Slide 167 [Transition Slide]: SBIRT Implementation Issues and Questions

This final section reviews information regarding next steps to work towards screening and brief intervention implementation and key resources for continued learning.
Slide 168: Strategies for Implementation

Program implementation of SBIRT depends on a variety of factors, including the treatment program setting, available system resources, State and other service systems requirements, and organizational structure. It is important to learn about the SBI process before considering how to apply it to your local setting. During the initial planning process, you are figuring out the who, what, and where questions. It is critical to assess organizational readiness to change; involve as many staff members as possible; assess what is needed; set clear goals; assign clear roles and responsibilities; and develop collaborative partnerships.

This slide and the next three slides present a few concrete recommendations for implementing routine screening for alcohol and drugs and brief interventions into your agency/organization. For more information regarding SBIRT implementation, download TAP 33: Systems-Level Implementation of Screening, Brief Intervention, and Referral to Treatment.

REFERENCE:

Slide 169: Strategies for Implementation

During the decision phase, you need to select a staffing model; develop a staff training and supervision plan; develop a screening procedure; develop brief intervention/brief treatment procedures; develop referral procedures and identify referral sources; develop a record-keeping procedure and evaluation plan; and develop a funding and reimbursement strategy.
### Slide 170: Strategies for Implementation

SBIRT Champions, or those staff members who believe in the process, are critical elements in an SBIRT implementation process. Training is essential, as is tracking your data of how many patients are screened, the outcomes of screening (number of positive screens), how many people receive a brief intervention, etc.

### Slide 171: Strategies for Implementation

Lastly, it is critical to reinforce the importance of conducting routine screening and brief intervention as it is warranted by the screening results. Remind staff regularly of their role in the process; collect success stories; and accept feedback from staff and patients to continually adapt and improve the process as you go.

### Slide 172 [Transition Slide]: What did you learn?

The purpose of the following four questions is to test the post-training level of alcohol and HIV knowledge amongst training participants. The four questions are formatted as either multiple choice or true/false questions. Read each question and the possible responses aloud, and give training participants time to jot down their response before moving on to the next question. Reveal the correct answer to each question.
Slide 173: What did you learn Question #1
Answer Key:
Correct response: D (No more than 4 drinks per occasion)

**Audience Response System (ARS)-compatible slide

Slide 174: What did you learn Question #2
Answer Key:
Correct response: B (Alcohol Use Disorders Identification Test)

**Audience Response System (ARS)-compatible slide

Slide 175: What did you learn Question #3
Answer Key:
Correct response: B (False)

**Audience Response System (ARS)-compatible slide

Slide 176: What did you learn Question #4
Answer Key:
Correct response: E (All of the above)

**Audience Response System (ARS)-compatible slide
Slide 177: Take Home Points for Clinicians
This slide includes salient points from throughout the daylong training session.

Slide 178: Key SBIRT Resources
This slide contains a series of web links to key SBIRT resources.

Slide 179: Key SBIRT Resources
This slide contains a series of web links to key SBIRT resources.

Slide 180: Key SBIRT Resources
This slide contains a series of web links to key SBIRT resources.
Slide 181: A New AETC Resource on SBI in HIV Settings!

This slide contains a new provider guide available through the Mountain Plains AETC. (The image is hyperlinked when in slideshow view).

REFERENCE:


Slide 182: Final Slide

This concludes the presentation. Thank the participants for their time and address any last-minute questions about the content. Encourage participants to reach out to the Pacific Southwest ATTC or Pacific AETC, should they have questions or concerns following the training session.

Acknowledgements

Prepared in 2014 by: Pacific Southwest Addiction Technology Transfer Center
11075 Santa Monica Boulevard, Suite 100
Los Angeles, California 90025
T: (310) 267-5408
F: (310) 312-0538
pacificsouthwestca@attcnetwork.org

At the time of writing, Thomas E. Freese, Ph.D. served as the Principal Investigator and Director of the HHS Region 9, Pacific Southwest Addiction Technology Transfer Center, based at UCLA Integrated Substance Abuse Program. Suzan Swanton, LCSW-C, Public Health Advisor, served the SAMHSA-CSAT Project Officer of the Addiction Technology Transfer Center Network. The opinions expressed herein are the views of the authors and do not reflect the official position of the PAETC/HRSA or the Pacific Southwest ATTC/SAMHSA-CSAT. No official support or endorsement of the PAETC/HRSA or the Pacific Southwest ATTC/SAMHSA-CSAT for the opinions described in this document is intended or should be inferred.
PARTICIPANT HANDOUT #1: BLANK AUDIT
(INSERT BLANK AUDIT)
PARTICIPANT HANDOUT #2: SCORED AUDIT
(INSERT SCORED AUDIT, PAGE 1)
(INSERT SCORED AUDIT, PAGE 2)
PARTICIPANT HANDBOOK #3: Blank DAST
(INSERT BLANK DAST, PAGE 2)