SCREENING, BRIEF INTERVENTION, AND REFERRAL TO TREATMENT:
Addressing Substance Abuse in HIV Care Settings

JUNE 2014
AUTHORS:
Megan Marx, MPA
Sustainability Coordinator, SBIRT Colorado
Peer Assistance Services, Inc.
Denver, CO

Marla A. Corwin, LCSW, CAC III
Clinical Education Coordinator, Mountain Plains AETC
University of Colorado, Anschutz Medical Campus
Aurora, CO

REVIEWERS:
Leigh Fischer, MPH
Director, SBIRT Colorado
Peer Assistance Services, Inc.
Denver, CO

Lisa Lawrence, MSW
Program Director, Colorado AETC
University of Colorado, Anschutz Medical Campus
Aurora, CO

Paul Cook, PhD
Evaluator, Mountain Plains AETC
Co-Investigator, Nurses Helping Colorado SBIRT Training Program
University of Colorado, Anschutz Medical Campus
Aurora, CO

EDITOR:
Lucy Bradley-Springer, PhD, RN, ACRN, FAAN
Principal Investigator and Director, Mountain Plains AETC
University of Colorado Anschutz Medical Campus
Aurora, CO
Substance use disorders are the number one preventable health issue in the United States (Schneider Institute for Health Policy, 2001), and people living with HIV (PLWH) have higher rates of substance use than the general population (Galvan et al., 2002). Injection drug use has been a known risk factor for HIV since the beginning of the epidemic, but other forms of substance use are also a strong predictor of risky sexual behavior, especially in men who have sex with men (MSM), who make up more than half of HIV-infected individuals living in the United States (Purcell et al., 2001). In fact, the use of any substance that impairs judgment and decision making is correlated with high-risk sexual and substance-using behaviors and, as such, presents a major risk for transmission and acquisition of HIV and other blood-borne and sexually-transmitted diseases (Christopoulos & Colfax, 2011; Friedman et al., 2009; National Institute on Drug Abuse, 2006; Pandrea et al., 2010; Purcell et al., 2001; Shuper et al., 2009; Tanney et al., 2010). It is also important to remember that substance use is related to accidents, trauma, fatal injuries (Bogstrand et al., 2012; Schneider Institute for Health Policy, 2001; Smith et al., 1999), violence (Caetano et al., 2001; Leadley et al., 2000), and criminal activity (Schneider Institute for Health Policy, 2001).

According to the Substance Abuse Mental Health Services Administration (SAMHSA) (2006), approximately 420,000 people ages 12 or older (0.17%) are diagnosed with HIV per year. Of those, about one quarter reported engaging in binge alcohol use in the previous month (27.90%), and nearly one third reported use of illicit drugs in the previous month (32.49%). About one in six individuals with HIV reported ever using an illicit drug intravenously (16.60%); nearly two thirds had ever used an illicit drug, but not intravenously (64.44%). Nearly one quarter of PLWH were identified in the survey as needing alcohol or illicit drug use treatment in the previous year (23.94%; SAMHSA, 2010). It is worth noting that 60% of youth living with HIV have screened positive for problem substance use (Tanney et al., 2010).
People who drink more than the recommended amounts of alcohol, use illicit substances, or use prescription medications in an unsafe manner may encounter increased risks for negative health consequences related to substance use. Substance use is associated with a number of adverse effects for PLWH, who are already subject to immune suppression and high levels of inflammation. PLWH who continue to use substances have been found to have:

• Increased viral replication,
• Reduced adherence to medication,
• More rapid disease progression, and
• Other related health complications (Giordano et al., 2007; Hendershot et al., 2009; Kalichman et al., 2013; Mayer, 2011; Mugavero et al., 2009; Pandrea et al., 2010; Volkow & Montenar, 2011).

Alcohol is the most commonly used addictive drug in the United States and excessive alcohol consumption is the third leading preventable cause of death in the United States (Centers for Disease Control and Prevention [CDC], 2012). Alcohol contributes to more than 54 different diseases and injuries, including cancer of the mouth, throat, esophagus, liver, colon, and breast; a variety of liver diseases; and other cardiovascular, neurological, psychiatric, and gastrointestinal health problems (CDC, 2012).
Compared to the general population, rates of heavy drinking are roughly twice as high in PLWH.

- National surveys report that about 53% of patients in care for HIV consumed alcohol in the preceding month; 15% were classified as heavy drinkers (Galvan et al., 2002).
- In PLWH receiving primary care, 11% reported hazardous alcohol use in the previous month (Chander et al., 2008).
- 20% of HIV-infected veterans have been described as hazardous drinkers and 33% as binge drinkers (Conigliaro et al., 2003).

More people have risky substance use behaviors (a less severe level of use) than substance use disorders (clinically significant impairment that meets DSM-5 diagnostic criteria). Because there are so many more risky substance users, risky substance use results in more adverse consequences and costs to society than those derived from people who meet the clinical criteria for substance use disorders (Whitlock et al., 2004).

With almost one in four PLWHs reporting substance use at a level that warrants treatment and because participation in drug treatment has been shown to be effective in reducing the transmission of HIV, sustained efforts are needed to screen and assess PLWH for risky substance use or substance use disorders. Screening is a first, and necessary, step to linking patients with problems to brief interventions and to referrals for treatment (SAMHSA, 2010). Further, the National HIV/AIDS Strategy aims to decrease new cases of HIV infection by 25% by 2015 and to improve HIV prevention and care services for all Americans (Office of National AIDS Policy, 2010). In order to meet this goal, health care providers and clinics will need to adopt strategies that help PLWH reduce risky substance use. One such strategy, Screening, Brief Intervention, and Referral to Treatment (SBIRT) for substance use, has been successfully used in hospitals; emergency rooms; ambulatory, primary, and specialty health care settings; and community health clinics (Madras et al., 2008).
Universal screening can create better awareness about substance use. SBIRT teaches patients and health care providers alike to view risky substance use as a health concern that can be addressed by making behavior changes that can lead to improved care standards and healthier patients.

SBIRT is an evidence-based method that identifies and intervenes with patients who use alcohol and other drugs at risky levels. It is a comprehensive, integrated public health approach to the delivery of early intervention for individuals with risky substance use and to timely referral to intensive substance use disorder treatment for individuals found to need it. The goal is to reduce and prevent negative health consequences related to risky substance use including diseases, accidents, and injuries.

The primary goal of SBIRT is to reduce the harms and social costs associated with risky substance use. Risky substance users who do not meet criteria for a substance use disorder have a pattern of use that can, nevertheless, lead to a variety of negative health consequences. Screening and brief intervention provide an opportunity to intervene with this population to prevent serious consequences. When integrated into the standard delivery of health care services, each part of the screening, brief intervention, and referral to treatment process provides information and assistance tailored to the individual patient and his/her needs. Data from SAMHSA grant-funded programs have demonstrated the positive effects SBIRT has on patient health including:

- Reduced alcohol and drug use 6 months after receiving an intervention.
- Improved quality-of-life measures, including employment, education status, housing stability, and arrest rates.
- Reduced amount of risky behaviors, including unprotected sexual encounters (Executive Office of the President of the United States, 2013).
Similar to routine screenings for other chronic diseases such as cancer, diabetes, and hypertension, screening for risky substance use is an effective way to identify health problems and provide appropriate interventions. Early intervention with individuals at moderate risk is an effective way to reduce substance use, prevent health-related and social consequences, and save health care costs (Whitlock et al. 2004). In addition, identifying risky substance use early helps prevent the onset of the more costly and serious consequences of substance use disorders.

Nearly 30% of adults in America engage in unhealthy use of alcohol and/or other drugs, but few have been identified or have participated in conversations that could prevent injury, disease, or more severe substance use disorders. The National Institute on Alcohol Abuse and Alcoholism (2005) found that brief motivational conversations with patients could promote significant and lasting reductions in the risky use of alcohol and other drugs. Further:

- Screening and brief intervention was ranked by the National Commission on Prevention Priorities as one of the five most effective clinical prevention services based on the clinically preventable burden of disease and intervention cost effectiveness.
- Alcohol screening and brief intervention has been endorsed by national and international health organizations; the National Institute on Alcohol Abuse and Alcoholism, the World Health Organization, and the CDC have all published implementation guidelines.
- The Patient Protection and Affordable Care Act (ACA) requires that states with expanded Medicaid cover a set of prevention services, including alcohol screening and counseling (CDC, 2014).

I have a patient who didn't know about the harmful effects of alcohol and other drugs although he had experienced the negative consequences many times. He put it all together sitting in my office during an appointment and he was shocked and dismayed at his discovery. Along with making sense of the ways in which drinking and drugs have affected his health, job, mind, and relationships, we figured he spent $16,000 in 1 year on alcohol and drugs. Over the course of 20 years he spent about $320,000. The news was upsetting to him because he lives in a compromised financial state, even though he holds a decent job. I tried to focus on what he'll have when he makes changes, not on what he's lost. He thanked me repeatedly for taking the time to talk with him. We worked out a change plan he was determined to keep.

Health Educator for SBIRT Colorado
Providers sometimes feel nervous broaching the topic of substance use because they are unsure how patients will react. But when providers open conversations in a positive way, focused on health and not on assigning diagnostic labels, patients often appreciate the chance to discuss issues related to substance use. Just as checking a patient’s blood pressure can reveal potential health problems and guide recommendations for a healthier lifestyle, universal screening for substance use provides early insight into potential health problems and a chance to address problems before they worsen. Evidence-based brief interventions focused on health give providers the tools they need to promote awareness about risky substance use (SBIRT Colorado, 2011).

THE SBIRT PROCESS

SCREENING

The purpose of screening for alcohol and drug use is to identify a potential risk that might not otherwise be detected. Universal screening, particularly in a health care setting, allows providers to reach a broad audience and can help them detect hazardous or harmful levels of use before more significant problems develop. Because people without a substance use disorder can still experience negative social, legal, financial, and physical consequences of alcohol and other drugs, providing an intervention before a substance use disorder develops can reduce these negative effects and reduce the burden on health care and other systems. Thus, routine, universal screening for substance use is recommended at least annually. For all at-risk patients it is important to discuss:

- Chronic disease, alcohol, and substance use precautions.
- Any alcohol, substance, and medication interactions.
- The role of substance use in depression and other mental health conditions.
- Potential for alcohol-exposed pregnancy in women of childbearing age; assess for effective contraception.

Screening is frequently completed in two phases.

- Ask an initial question or two of all patients to quickly assess for potential risk (see box on pg. 7 for recommended single-item alcohol and drug screening questions).
Screening for alcohol use: Ask validated questions such as, “How many times in the past year have you had X or more drinks in a day?” or “When was the last time in the past year you had X or more drinks in a day?”

- X = 5 for men
- X = 4 for women
- A response of once or more is considered positive.
- Any alcohol use is considered positive for patients under the age of 21.
- Any alcohol use is considered positive for pregnant women.

Screening for drug use: Ask, “In the past year, have you used an illegal drug or used a prescription medication for non-medical reasons?” A response of “yes” is considered positive.

- For those with a positive initial screen, administer a validated screening instrument to further assess for substance use risks and to identify the appropriate level of intervention. Assessment tools include the Alcohol Use Disorders Identification Test (AUDIT; Saunders et al., 1993); Drug Abuse Screening Test (DAST; Skinner, 1982); Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST; Humeniuk et al., 2008) for adults; and the CRAFFT (Knight et al., 2002) for adolescents. All of these tools can be accessed at www.improvinghealthcolorado.org and http://www.integration.samhsa.gov/clinical-practice/screening-tools#drugs.

Results from these screening instruments will help determine if a patient is at low, moderate, or high risk, and will help determine steps the provider should take next.

- For patients who score low risk on the screening, positive reinforcement should be offered and the door left open for further discussion: “Do you have any questions for me about alcohol or other substance use?” or “If you ever have questions about alcohol or other substance use, I will be happy to help you find the answers you need.”
- For those who score moderate risk, a brief intervention should be provided, using the guidance on pg. 8.
- Finally, for those who score higher risk, referral for brief therapy or substance use disorder treatment is recommended.
Brief intervention is an evidence-based approach to address substance use problems with patients who are at moderate risk for developing health-related and other consequences of risky substance use, including risk of developing substance use disorders. When screening indicates moderate risk, the health care provider should interpret the results of the screening instrument and provide feedback to the patient. This feedback is referred to as a brief intervention. Brief interventions can focus on:

- Raising the patient’s awareness of his/her substance use.
- Informing the patient about the health consequences of substance use, especially how substance use can affect HIV disease and treatment.
- Helping the patient understand the negative social, legal, financial, and physical consequences of her/his use.
- Motivating the patient to consider positive behavior change(s).

The brief intervention provides feedback to patients and encourages behavior change and goal setting that could improve health outcomes. Conversations can be delivered in 3-5 minutes or over longer periods depending on the setting, but have the greatest value when they are delivered immediately and in the same care setting where the substance use problem was identified (Hunter & Goodie, 2010). Brief interventions are delivered using an empathic style based on the patient’s self-efficacy and ability to establish behavior change goals. A variety of professionals with appropriate training in the method (including case managers, ...
health educators, nurses, physicians, social workers, substance use and mental health counselors, and system navigators) can provide brief interventions in diverse health care and community-based settings.

The brief negotiated interview approach is an evidence-based, 4-step process to deliver brief interventions (D’Onofrio et al., 2008). The goal is to encourage the patient to reduce substance use and the risk of related consequences through a process of negotiation, using Motivational Interviewing techniques. Motivational Interviewing is patient centered and focuses on raising awareness about the risks of substance use while enhancing the patient’s motivation and readiness to change. More than 24 studies of Motivational Interviewing have found beneficial outcomes in a variety of health behaviors including adherence to glucose monitoring, increases in exercise, increases in fruit and vegetable intake, reductions in stress, reductions in unprotected sex and needle sharing, improved medication adherence, decreases in alcohol and illicit drug use, and decreased injuries and hospitalizations due to substance use (Miller & Rose, 2009; Rollnick et al., 2008).

During a brief intervention, the provider uses a 4-step process:

- **Raise the subject:**
  - “Would you mind if we talked for a few minutes about your alcohol (or other substance) use?”

- **Provide feedback:**
  - ”We know that drinking above certain levels can cause problems such as . . .” or
  - “The drug you are using can cause . . .”
  - Follow with, ”What do you think about this information?"

- **Enhance patient motivation to change:**
  - “What do you like about drinking alcohol (or using another substance)?”
  - “What do you dislike about drinking (or using another substance)?”
  - “On a scale of 1-10 how important is it for you to decrease your level of drinking (or using another substance)?”

- **Negotiate a goal with the patient:**
  - “What is the next step for you?”
  - “What are the barriers you might experience in trying to reduce your drinking (or using another substance)?”
  - “What might help you feel more confident in making this change?”
Brief intervention is a conversation between the provider and the patient. Rather than giving the patient information and instructions, the provider responds to the patient's ideas using reflective listening and other strategies to draw out the patient's own motivation and ideas for change. The provider:

- emphasizes the patient's strengths;
- highlights talk about change, decisions, and goals; and
- arranges for follow-up as appropriate.

**REFERRAL TO TREATMENT**

**Brief treatment.** A screening result of moderate to high risk should initiate referral to a professional qualified to provide brief cognitive behavioral treatment (CBT). Brief treatment differs from brief interventions and traditional treatment.

- Brief interventions (as part of SBIRT) seek to build awareness and resolve ambivalence about substance use (see above).
- Brief CBT focuses on achieving specific, measurable, short-term goals directed at resolving problems, developing skills, and eliminating harmful behaviors. A counselor helps the patient identify and challenge potential errors in thinking, experiment with new behaviors, and plan for relapse prevention. Importance is placed on the work a patient does outside of the therapy room.

CBT consists of 1-12 sessions of short duration. It is a structured counseling method that helps patients identify personal beliefs about substance use and how these beliefs influence their feelings and behaviors. Timelines offer guidance to patients, therapists, and payers, but each session is structured in anticipation that it could be the last.

Brief treatment includes assessment, education, problem solving, determining coping mechanisms, and building a supportive social environment, all centered on patient goals. CBT may be combined with Motivational Interviewing to first help patients identify appropriate goals and commit to the process of treatment, but CBT is generally more structured and based on the idea that patients and providers have a common definition of the problem the patient wishes to solve. Brief intervention using Motivational Interviewing may, therefore, be an important first step even when a referral to CBT is recommended.
**Substance use disorder treatment.** For those who screen at the high-risk level, referral to a substance use disorder treatment specialist is advised. Research has shown that substance use disorder treatment is effective (National Institute on Drug Abuse, 2012). Individuals with substance use disorders who receive treatment:

- Engage in less substance use.
- Have fewer relapses.
- Suffer fewer health and social consequences of substance use.

Results from SAMHSA’s analysis of SBIRT services implemented in a range of medical settings has indicated that people referred to substance use disorder treatment report improvements in general health, mental health, employment, housing, and criminal behavior (Madras et al., 2008).

The referral process is more often successful when it is a proactive and collaborative process involving the primary health care professional, the substance use disorder treatment provider, and the patient. Ultimately, the appropriate level of care may require medication-assisted treatment, withdrawal, or detoxification in an inpatient, outpatient, or residential care setting. For patients who score at the high level of risk on initial screening, the level, type, and site of care are best determined after an extensive assessment conducted by a provider experienced in treating substance use disorders.

**IMPLEMENTATION RECOMMENDATIONS**

Despite concern about adverse outcomes related to substance use in PLWH, screening and intervention for substance use has not yet become a standard of care in HIV care settings. In a study of patients from 10 HIV-care clinics in three large U.S. cities, only 35% of participants reported discussions about alcohol use with their primary care providers in the previous year, with only 52% of problem drinkers reporting such a discussion (Metsch et al., 2008). Another study found that HIV care 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 (Conigliaro et al., 2003). Finally, a study of seven hospital-based HIV-care centers in the New
York City metropolitan area found that, on average, providers implemented fewer than half of key screening and brief Intervention recommendations for alcohol reduction. For example, while more than three-quarters asked patients about alcohol use, fewer than 30% encouraged or arranged follow-up support, and only 11% reported creating an alcohol reduction plan with their patients (Straus & Rindskopf, 2009).

Several barriers to successful implementation of screening and brief intervention in HIV primary care settings have been identified:

- Limited time for providers to conduct screening.
- Incomplete disclosure of substance use by patients.
- Lack of access to substance use disorder treatment.
- Difficulty prioritizing SBIRT services in a busy setting when patients are in crisis.
- Provider resistance to address the culture of substance use (OMNI Institute, 2010; Strauss et al., 2012).

Clinicians can collaborate with community partners, HIV testing and prevention programs, pharmacists, and HIV case managers to gain a more complete understanding of substance use and to increase the likelihood of providing appropriate and timely services. A team approach that incorporates the skills of all staff should be used to ensure the successful use of screening, brief intervention, and referral to treatment services. Providers will also maximize the benefit of the process if they integrate SBIRT into care and link assessment findings to retention in care, medication adherence, and other health measures, such as depression, rates of sexually transmitted diseases, and reduced levels of alcohol/drug use. SBIRT services can build stronger relationships between patients and providers, which is an added benefit of the process.

Many opportunities occur during HIV treatment and care to offer information about to patients about risky substance use and to encourage important behavior changes. In order to assure better outcomes for PLWH, it is recommended that providers implement SBIRT as a routine part of health care services for all patients. This would:

- Ensure that all providers working with the patient are aware of the patient’s substance-use-related risks.
• Help providers intervene in an appropriate and timely manner for patients at risk.
• Improve providers’ comfort when discussing substance use through education and practice, as experience with SBIRT increases confidence to discuss substance use and to help patients make behavior change plans.

To effectively implement SBIRT, providers and managers in HIV clinical care settings can:

• Identify, train, and monitor key staff who will be responsible for conducting SBIRT services.
• Build SBIRT into existing processes, including documentation in health records.
• Use billing codes for SBIRT services when applicable.

**SUMMARY**

SBIRT is purposefully meant to occur in brief periods of time, making it ideally suited for busy clinics. The components of SBIRT can be streamed into the care setting by giving specific SBIRT assignments to a variety of care team members. Use of screening tools that are designed to elicit accurate information, either by self-report or through dialogue, increases the odds that a patient will disclose enough information for a provider to determine whether or not alcohol and/or drugs are being used at a risky level. If a provider determines that a patient meets criteria for moderate risk, s/he can initiate a conversation with the patient immediately, using a brief intervention approach. If s/he determines that a patient meets the criteria for a substance use disorder, the mechanism for referral to a substance use disorder treatment provider is built into the process. High-quality, evidence-based substance use prevention services can help lower ever-increasing costs to health care, criminal justice systems, workplaces, communities, and families. Offering screening, brief intervention, and referral for treatment as a universal standard of care is an effective way to insure the provision of optimal care for PLWH and to prevent adverse consequences and costs related to the use of alcohol and other drugs.
REFERENCES


Mountain Plains AIDS Education and Training Center • June 2014


