

# Systems-Level Implementation of Screening, Brief Intervention, and Referral to Treatment

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# Contents

<b>Chapter 1—Introduction</b> .....	<b>1</b>
Purpose and Audiences .....	1
Background .....	1
SAMHSA’s SBIRT Initiative .....	2
Colleges and Universities .....	2
Medical Residency Programs .....	3
State Cooperative Agreements .....	3
Cohort 1 Cross-Site Evaluation .....	3
Terminology .....	5
Organization of the TAP .....	5
<b>Chapter 2—SBIRT Overview</b> .....	<b>7</b>
Defining Screening, Brief Intervention, Brief Treatment, and Referral to Treatment .....	7
Screening .....	8
Brief Intervention .....	8
Brief Treatment .....	9
Referral to Treatment .....	9
The SBIRT Process .....	10
Why SBIRT? The Problem .....	11
Why SBIRT? Benefits and Efficacy .....	12
Alcohol Misuse, Abuse, and Prevention .....	12
Illicit Drugs .....	14
SAMHSA SBIRT Grantees .....	15

Why SBIRT? Cost-Effectiveness/Benefit Cost . . . . .	17
SBIRT for Other Behavioral Health Disorders . . . . .	18
Tobacco Use . . . . .	18
Depression . . . . .	19
Anxiety Disorders. . . . .	20
Psychological Trauma . . . . .	20
<b>Chapter 3—SBIRT Implementation . . . . .</b>	<b>21</b>
Model Framework . . . . .	21
Initiate the Planning Process and Develop Collaborations and Partnerships. . . . .	22
Assess Organizational Readiness for Change . . . . .	22
Involve as Many Staff Members as Possible . . . . .	22
Assess What Is Needed . . . . .	23
Set Clear Goals. . . . .	23
Assign Clear Roles and Responsibilities. . . . .	23
Develop Collaborations and Partnerships . . . . .	23
Identify the Settings for SBIRT Services . . . . .	23
Select a Staffing Model . . . . .	24
In-House Generalist. . . . .	24
In-House Specialist . . . . .	25
Contracted Specialist. . . . .	25
Staffing Models and SBIRT Grantees. . . . .	25
Develop a Staff Training and Supervision Plan. . . . .	26
Develop a Screening Procedure. . . . .	27
Develop BI and BT Procedures . . . . .	29
Develop Referral Procedures and Identify Referral Resources. . . . .	30
Develop a Recordkeeping Procedure and Evaluation Plan . . . . .	30
Develop a Funding and Reimbursement Strategy. . . . .	31

**Chapter 4—Implementation and Sustainability Issues . . . . . 33**

Barriers to and Facilitators of Successful SBIRT Implementation . . . . . 33

    Leadership and Positive Interagency Collaboration . . . . . 33

    Provider Buy-in . . . . . 33

    Contextual Factors. . . . . 34

Confidentiality . . . . . 34

Uniform Accident and Sickness Policy Provision Law . . . . . 34

Reimbursement for SBIRT . . . . . 35

    Commercial Insurance and Medicare . . . . . 35

    Medicaid and Working With State Medicaid Agencies . . . . . 36

Sustainability: Beyond Reimbursement. . . . . 37

**Chapter 5—Case Examples: The Substance Abuse and Mental Health  
Services Administration SBIRT Grantee Experience . . . . . 39**

Washington State Screening, Brief Intervention, Referral, and Treatment . . . . . 39

    Program Overview . . . . . 39

    The Process. . . . . 39

    Program Implementation . . . . . 40

    Implementation Challenges . . . . . 40

    Six-Month Followup Survey . . . . . 40

New Mexico Human Services Department, Behavioral Health Services Division . . . . . 41

    Program Overview . . . . . 41

    The Process. . . . . 41

    Program Implementation . . . . . 41

    Choosing and Cultivating Collaborators . . . . . 42

    Flexibility and Fidelity . . . . . 42

    Staff Training. . . . . 42

    Working With Native American Populations. . . . . 42

Contractual Relationships . . . . .	42
Six-Month Followup Survey . . . . .	43
<b>Appendix A—Bibliography . . . . .</b>	<b>45</b>
<b>Appendix B—Resources. . . . .</b>	<b>55</b>
<b>Appendix C—State Grantees by Cohort. . . . .</b>	<b>59</b>
<b>Appendix D—SBIRT Initiative Cohort 1 State Cooperative Agreement Grantees . . . . .</b>	<b>61</b>
<b>Appendix E—Selected Screening Instruments. . . . .</b>	<b>67</b>
<b>Appendix F—Acknowledgments . . . . .</b>	<b>69</b>

# Chapter 1—Introduction

## Purpose and Audiences

This Technical Assistance Publication (TAP) describes the core elements of screening, brief intervention, brief treatment, and referral to treatment (SBIRT) programs and provides general administrative and managerial information relevant to implementing SBIRT services, including:

- SBIRT effectiveness.
- Implementation models.
- Challenges and barriers to implementation.
- Issues of cost and sustainability.
- Real-life program anecdotes and case studies.

The TAP does not address clinical issues in implementation; Appendix B includes sources of information about clinical models.

Primary audiences for this TAP are healthcare providers and administrators (including those in educational institutions) and governmental and private entities interested in integrating SBIRT programs into systems of care (e.g., State prevention or treatment systems, hospital systems, community healthcare systems, primary care practices). Secondary audiences include Addiction Technology Transfer Centers, Single State Agencies, and State mental health and substance abuse program directors.

## Background

The SBIRT model represents a paradigm shift in substance use and abuse interventions. Traditionally, interventions have focused on individuals who have

severe substance use or those who meet the criteria for substance abuse or dependence as defined by the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition, Text Revision (DSM-IV-TR; American Psychiatric Association [APA], 2000). The SBIRT model provides for services on a full continuum of substance involvement. In addition to providing for specialty substance use disorder (SUD) treatment, SBIRT also targets people who do not yet meet criteria for an SUD and provides effective strategies for early intervention before the need develops for more extensive or specialized treatment. In fact, many such individuals may never meet the criteria for substance abuse or dependence, but they may still place themselves and others at risk for harm because of excessive substance use (e.g., binge drinking). The Centers for Disease Control and Prevention (CDC) estimates that in 2001, approximately 76,000 deaths in the United States were attributable to the excessive use of alcohol (CDC, 2004).

SBIRT is a comprehensive, integrated public health model designed to provide universal screening, secondary prevention (detecting risky or hazardous substance use before the onset of abuse or dependence), early intervention, and timely referral and treatment for people who have SUDs (Babor et al., 2007; Babor & Higgins-Biddle, 2001; Substance Abuse and Mental Health Services Administration [SAMHSA], 2011). One of the strengths of the SAMHSA SBIRT model is that it screens all patients regardless of an identified disorder, allowing healthcare professionals in a variety of settings to address the spectrum of such behavioral health problems even when the patient is not actively seeking an intervention or treatment for his or her problems.

SAMHSA supports a research-based comprehensive behavioral health SBIRT model that reflects the six following characteristics (SAMHSA, 2011):

- **It is brief.** The initial screening is accomplished quickly (modal time about 5–10 minutes), and the intervention and treatment components indicated by the screening results are completed in significantly less time than traditional substance abuse specialty care.
- **The screening is universal.** All patients, clients, students, or other target populations are screened as part of the standard intake process.
- **One or more specific behaviors are targeted.** The screening tool addresses specific problematic behaviors or behaviors that are preconditional to substance abuse or dependence.
- **The services occur in a public health, medical, or other non-SUD treatment setting.** The settings include, for example, emergency departments (EDs), primary care physicians' offices, and schools.
- **It is comprehensive.** The program includes a seamless transition between brief universal screening, a brief intervention (BI) and/or brief treatment (BT), and referral to specialty SUD care.
- **Strong research or substantial experiential evidence supports the model.** At a minimum, programmatic outcomes demonstrate a successful approach.

As a comprehensive or model approach, SBIRT has been demonstrated to be effective only for risky alcohol use. There is substantial evidence for the effectiveness of BIs for harmful drinking when delivered by a physician or other qualified health professional (Bien, Miller, & Tonigan, 1993; Kahan, Wilson, & Becker, 1995; Wilk, Jensen, & Havighurst, 1997). There is a growing body of literature showing the effectiveness of SBIRT for risky drug use, but the results vary by the characteristics

of the provider, the specific setting, and the patient population that is targeted for SBIRT implementation. Some studies have found SBIRT to be quite effective (Bernstein et al., 2005; Madras et al., 2009), while others have found mixed results (Humeniuk, Dennington, & Ali, 2008).

However, it should be noted that most of the SBIRT research addresses only the screening and BI components of the model. Research regarding the efficacy and cost effectiveness of the RT component of SBIRT is still lacking. When research cited in this TAP addresses only some of the components of the model, the components are specified in the text.

Although SBIRT interventions are increasingly recognized as a necessary approach to addressing public health, they are not yet fully integrated into healthcare systems. In October 2003, SAMHSA's Center for Substance Abuse Treatment (CSAT) began its SBIRT Initiative. This initiative promotes widespread adoption of SBIRT within systems of medical care as well as education about how SBIRT works in these settings.

## **SAMHSA's SBIRT Initiative**

The SAMHSA SBIRT Initiative provides grants and support through three basic avenues:

- Colleges and universities
- Medical residency programs
- State cooperative agreements

### *Colleges and Universities*

In 2005, SAMHSA's CSAT awarded Targeted Capacity Expansion Campus Screening and Brief Intervention Grants to 12 colleges and universities to combat underage drinking and substance use. The grants provided funds to colleges and universities to initiate or expand campus-based medical services and to include SBIRT services for students with hazardous drinking and other SUDs through student healthcare services.

### Medical Residency Programs

SAMHSA initiated the Medical Residency Program in 2008 to develop and implement SBIRT training programs for medical residents in diverse medical settings (e.g., hospitals, EDs, outpatient clinics, Federally Qualified Health Centers). Grantees are developing both online and live training curricula focusing on SUDs, medical issues related to those disorders, and principles and implementation of SBIRT. In addition to providing didactic training, grantees are implementing experiential approaches, including role-plays, supervised practice, and mentoring programs. A list and brief profiles of medical residency grantees are on the SAMHSA SBIRT Web site at <http://www.samhsa.gov/prevention/sbirt/grantees/medres.aspx>.

### State Cooperative Agreements

As of 2011, SAMHSA has funded 24 SBIRT State cooperative agreements in 4 groups (referred to as *cohorts*):

- Cohort 1 (6 State grantees and 1 tribal council grantee) in 2003
- Cohort 2 (4 State grantees) in 2006
- Cohort 3 (4 State grantees) in 2008
- Cohort 4 (8 State grantees and 1 territorial grantee [American Samoa]) in 2011

A list of State grantees (by cohort) is in Appendix C.

SAMHSA's cooperative agreements have demonstrated how SBIRT can be integrated effectively into a variety of systems. Some grantees (e.g., California, Illinois, Texas, Washington) focused on EDs and trauma settings. Other grantees (e.g., Pennsylvania) used funds to implement SBIRT in community health clinics and primary care offices. Others (e.g., Colorado, Massachusetts, New Mexico, Wisconsin) developed SBIRT programs in a range of settings and populations statewide. Several State grantees developed SBIRT programs for specific

target populations (e.g., adolescent, rural, and ethnic populations in New Mexico; rural and ethnic populations in Colorado; native populations in the Cook Inlet Tribe [Alaska]; elderly population in Florida).

Grantees implemented SAMHSA-funded SBIRT services in a range of healthcare settings, including inpatient, ED, ambulatory, primary, and specialty healthcare settings, as well as community health clinics. Diverse patient populations (e.g., Alaska Natives, American Indians, African Americans, Caucasians, Hispanics) have been and continue to be screened and offered risk-based levels of intervention (BI, BT, or RT). Grantee programs screen patients for both illegal drug use and problem alcohol consumption. Patients with a positive screening result are determined to need BI, BT, or RT.

As part of the SBIRT Initiative, SAMHSA conducted a cross-site evaluation of cohort 1's grantee programs. Brief profiles of cohort 1 programs are presented in Appendix D.

### Cohort 1 Cross-Site Evaluation

The cohort 1 cross-site (C1) evaluation, the most comprehensive assessment of SBIRT to date, has been completed. Cohort 1 grantees implemented SBIRT programs in 118 sites. Between October 2005 and February 2009, the programs screened more than 658,000 patients.

The C1 evaluation comprised four components:

- A process evaluation answered questions about the implementation of SBIRT across cohort 1 grantees—including models used, consistency with research literature, and barriers to and facilitators of implementation.
- An outcome evaluation provided information on the impact of SBIRT on substance use and other health-related outcomes.



- An economic evaluation provided cost and cost-benefit information on SBIRT interventions.
- A systemwide evaluation examined the impact, implementation, and sustainability of SBIRT across systems and settings.

In the outcome evaluation, 2,210 unique baseline interviews were completed with patients who received SBIRT services at 31 cohort 1 sites (an average of 71 patients per site). Of the total baseline sample, 865 patients (39 percent) screened positive for some level of problem alcohol or illegal substance use. Of these patients, 511 (59 percent) were categorized for BIs, 170 (20 percent) for BTs, and 184 (21 percent) for referral to more intensive specialty treatment. The evaluation used a multimethod approach to capture data (Exhibit 1-1).

Overall, the C1 evaluation team found that:

- SAMHSA SBIRT grantees implemented SBIRT using evidenced-based practices and maintained a high level of fidelity.
- SBIRT was associated with significant reductions in substance use (i.e., drugs and alcohol; as much as a 27-percent reduction for high-risk patients who received BI, BT, or RT) and a reduction in associated harms (e.g., driving under the influence of drugs or alcohol).
- SBIRT appears to be an economically viable strategy for reducing substance use (i.e., alcohol and drugs) and its associated harms.
- SBIRT is sustainable.

Final data from the evaluation, along with some preliminary findings from cohorts 2 and 3 and from the college and university grantees, inform this TAP. Unless otherwise indicated, SAMHSA SBIRT Initiative data are from as-yet-unpublished reports. These sources are not formally cited in the text.

**Exhibit 1-1. C1 Evaluation Data Collection Techniques**

Evaluation Component	Data Collection Techniques
Process	<ul style="list-style-type: none"> <li>• Document review (e.g., proposals, annual and quarterly reports, service delivery materials)</li> <li>• Services Accountability Improvement System (SAIS) Government Performance and Results Act (GPRA) data</li> <li>• In-person and telephone interviews with key stakeholders, program administrators, and direct-service practitioners</li> <li>• 2 onsite visits to 25 selected sites</li> <li>• 198 direct observations</li> </ul>
Outcome	<ul style="list-style-type: none"> <li>• Document compilation and review (e.g., followups to the patient survey by computer assisted telephone interviews)</li> <li>• SAIS/GPRA patient data—three types of patient-level data were entered into the database: baseline characteristics (assessed via a structured interview conducted by SBIRT program staff), discharge information regarding service utilization for patients who screened positive for alcohol or drugs, and 6-month followup status for a random subset of patients for whom BI, BT, or RT services were recommended</li> <li>• Surveys of 2,210 randomly selected patients using the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST)</li> <li>• Surveys of 88 practitioners</li> </ul>
Economic	<ul style="list-style-type: none"> <li>• 6 site visit interviews</li> <li>• 7 observational visits</li> <li>• Substance Abuse Services Cost Analysis Program (Zarkin, Dunlap, &amp; Homs, 2004)</li> </ul>

## Terminology

Several concepts and terms used in this TAP can have different meanings in different contexts. For clarity's sake, these concepts and terms, as used in this TAP to describe SBIRT interventions, are defined as follows:

*Binge drinking* means drinking so much within about 2 hours that the level of blood alcohol concentration increases to 0.08g/dL. This may occur after 4 drinks for women and after 5 drinks for men (National Institute on Alcohol Abuse and Alcoholism [NIAAA], n.d.).

*Excessive alcohol use* includes binge drinking (see definition above), heavy drinking (an average of more than one drink per day for women or more than two drinks for men), any alcohol use by pregnant women, and any alcohol use by people under the age of 21 (CDC, 2012).

*Generalist* refers to medical staff and can include doctors, nurses, and physician assistants.

*Harmful drinking* refers to a pattern of alcohol consumption that results in negative consequences (i.e., to the individual's physical and mental health or to society) (Babor, Higgins-Biddle, Saunders, & Monteiro, 2001).

*Hazardous drinking* means that a person drinks more than the recommended consumption limits. NIAAA (n.d.) defines these limits as 4 standard drinks on any single day AND no more than 14 standard drinks per week for men and 3 standard drinks on any single day AND no more than 7 drinks per week for women.

*Risky alcohol use* refers to any alcohol use that increases the probability of harm (e.g., physical, mental, social) occurring because of drinking.

*Specialist* refers to a substance abuse treatment provider, mental health professional, social worker, or someone specifically trained to provide SBIRT services.

*Substance dependence* (drugs and alcohol) is a pattern of substance use at any time within

a 12-month period that is characterized by three or more of the following symptoms (DSM-IV-TR, APA, 2000):

- Tolerance (i.e., a need for increased amounts of the substance to reach the desired effect OR experiencing less of an effect with the use of the same amount of the substance)
- Withdrawal
- More of the substance was used than intended
- A desire to cut down or control the substance use (without success)
- Spending a lot of time obtaining the substance, using the substance, or recovering from using the substance
- Life activities are reduced (or given up) because of substance use
- Substance use continues in spite of knowing that it is causing physical or psychological problems

*Provider* refers to any professional who treats, diagnoses, or assesses people to improve or promote their health. This includes both medical and nonmedical personnel.

*Patient* refers to anyone who receives SBIRT services from a medical, specialty, or other type of provider.

*C1 evaluation* refers to the cohort 1 cross-site evaluation.

## Organization of the TAP

Chapter 2 provides an overview of SBIRT. It describes SBIRT components, briefly outlines the evidence that supports SBIRT's efficacy, and provides highlights of SAMHSA's SBIRT Initiative. Chapter 3 discusses options for implementing SBIRT, including settings and staffing models, and provides information on implementing SBIRT components. Chapter 4 describes key implementation and sustainability issues, and Chapter 5 provides case studies from SBIRT grantee programs.

# Chapter 2—SBIRT Overview

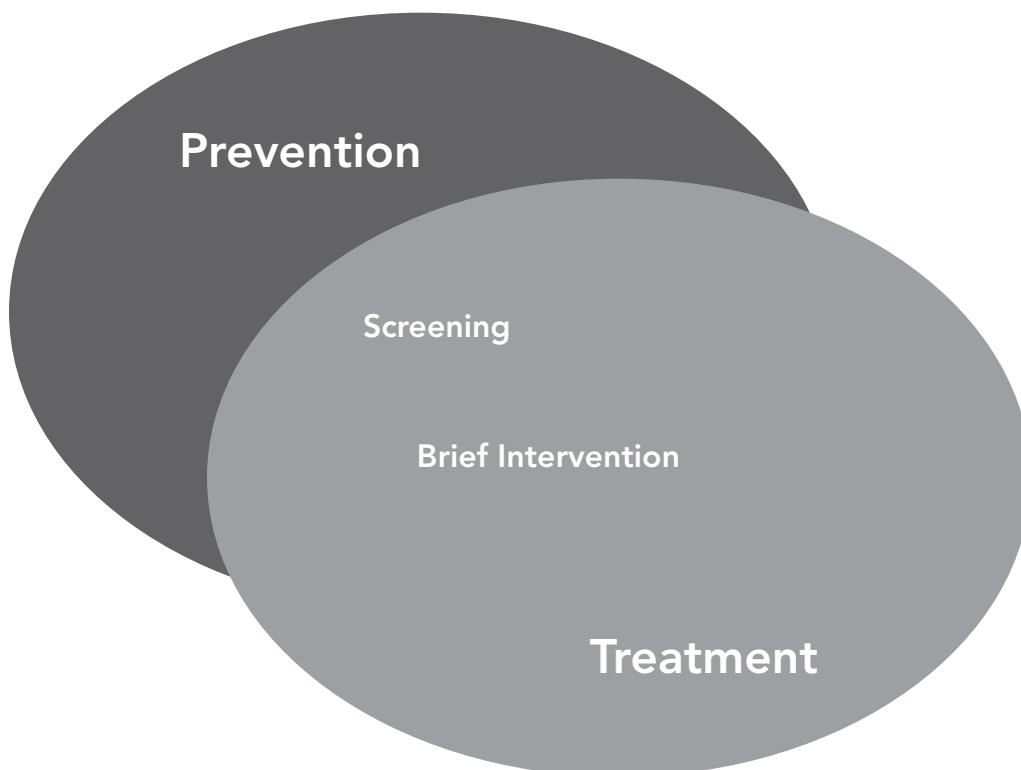
## Defining Screening, Brief Intervention, Brief Treatment, and Referral to Treatment

Over the past decade, substance abuse services policy has tended toward a more unified, integrated system that combines prevention and treatment. Providers and researchers increasingly recognize that prevention entails more than discouraging use—it can include any effort to prevent negative consequences (e.g., auto crashes, health problems, unemployment, homelessness) that result from harmful drug or alcohol use, as well as attempts to

prevent hazardous use from progressing to dependence. Effective intervention efforts need to be helpful to a wide spectrum of people, from those who occasionally misuse alcohol or drugs to those who are severely dependent.

A primary aspect of screening, brief intervention, brief treatment, and referral to treatment (SBIRT) is the integration and coordination of screening and treatment components into a system of services that provides a needed intersection between specialty treatment and prevention (Exhibit 2-1).

Exhibit 2-1. SBIRT at the Intersection of Prevention and Treatment



## Screening

Screening is a process of identifying patients with possible substance misuse or abuse problems and determining the appropriate course of future action for these individuals. The screening process does not exactly identify what kind of problem a person might have or how serious it might be; screening simply determines whether a problem exists or whether further assessment is needed. Screening should be conducted using a validated brief instrument to classify a patient's pattern of alcohol or drug use. In the past, screening instruments were used to identify active cases of alcohol and drug dependence, but in recent years, screening use has expanded to identify individuals across the full spectrum of use—from risky substance use to alcohol or drug dependence. Screening provides healthcare professionals the opportunity to initiate discussions with patients about their alcohol and drug use and to provide intervention as needed.

Patients who indicate little or no risky behavior and have a low screening score may not need an intervention, but they may still benefit from primary or universal prevention activities for maintenance of nonrisky use. Those who have moderate risky behaviors and/or reach a moderate threshold on the screening instrument may be referred to brief intervention. Patients who score high may need either a brief treatment or further diagnostic assessment and more intensive, long-term specialty treatment.

Screening typically takes 5–10 minutes and can be repeated at various intervals as needed to determine changes in patients' progress over time, depending on the setting. Some commonly used screens for the implementation of SBIRT for alcohol and drug use are the Alcohol Use Disorders Identification Test (AUDIT; Babor, Higgins-Biddle, Saunders, & Monteiro, 2001), the Drug Abuse Screening Test (DAST; Skinner, 1982), the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST; Humeniuk, Henry-Edwards, Ali, Poznyak, & Monteiro, 2010), the Cut Down,

Annoyed, Guilty, Eye-Opener (CAGE; Ewing, 1984), and the National Institute on Drug Abuse (NIDA) Drug Use Screening Tool (see Appendix E). In addition, recent studies have found a single question related to alcohol or drug use to be effective in detecting alcohol use (Smith, Schmidt, Allensworth-Davies, & Saitz, 2009) or drug use (Smith, Schmidt, Allensworth-Davies, & Saitz, 2010) among primary care patients.

## Brief Intervention

Brief intervention (BI) is appropriate for patients identified through screening to be at moderate risk for substance use problems. BI can be provided through a single session or multiple sessions of motivational interventions (see Appendix B for more information on motivational interventions). These interventions focus on increasing a patient's insight into and awareness about substance use and behavioral change. BI can be tailored to a particular population or setting. It can be a stand-alone treatment for those at risk or a vehicle for engaging those in need of more intensive levels of care. BI typically is provided at the same site as screening.

The majority of patients report minimal or no problems with alcohol or drugs and as such may be candidates for primary or universal prevention activities for maintenance of nonrisky use or abstinence. With respect to alcohol use, in general only a small proportion (3 to 5 percent) of patients in primary care settings screen positive for alcohol dependence (Babor & Higgins-Biddle, 2001). However, levels for hazardous and harmful drinking range from 15 to 40 percent of the population (Babor & Higgins-Biddle, 2001). The goal of a BI (which usually involves one to five sessions lasting about 5 minutes to 1 hour) is to educate patients and increase their motivation to reduce risky behavior.

### Brief Treatment

Brief treatment (BT) (sometimes called brief intensive intervention) is a specialty outpatient treatment modality. BT is a systematic, focused process that relies on assessment, patient engagement, and implementation of change strategies. The goal of BT is to change not only the immediate behavior or thoughts about a risky behavior but also to address long standing problems with harmful drinking and drug misuse and help patients with higher levels of disorder obtain more intensive care. The treatment consists of assessment and a limited number (typically 6 to 20) of evidence-based, highly focused, and structured clinical sessions (e.g., solution-focused therapy, cognitive-behavioral therapy, motivational enhancement) to help patients address unhealthy cognitions and behaviors associated with current use patterns and adopt change strategies. Patients may receive BT onsite but more commonly are referred to an outside program or another component of a medical system. One potential challenge to implementation is that substance use disorder (SUD) clinicians trained in traditional long-term approaches are sometimes resistant to or not well trained in structured brief approaches.

Although the time required to execute either BI or BT is generally considered brief, they are often considered too lengthy for primary care providers to perform. Also, providers cite concerns about angering or insulting patients by bringing up sensitive issues such as alcohol and drug use. Although these concerns are understandable, when SBIRT is implemented properly, the time commitment is reasonable and acceptably low given the demonstrated success in identifying persons requiring referral to treatment. Similarly, concerns about patient reactions can be neutralized by proper training for the providers and ensuring that access to referral services is available. In addition, SBIRT is frequently implemented by allied health professionals such as nurses, social workers, or health educators, with results and actions

noted in the patient chart for primary care provider notification and oversight.

Patients referred to a BT often have higher risk factors than those referred to a BI. If patients report greater risk factors than BT can address, they are referred to specialty SUD care. In some cases, a patient may receive a BI first and then move on to a BT or longer-term care.

### Referral to Treatment

Patients identified as needing BT or more intensive treatment than BI are referred to specialty SUD treatment providers. The primary goals of referral to treatment (RT) are to identify an appropriate treatment program and to facilitate engagement of the patient in treatment. RT can be a complex process involving coordination across different types of services. It requires a proactive and collaborative effort between SBIRT providers and those providing specialty treatment to ensure that a patient, once referred, has access to and engages in the appropriate level of care. To facilitate patient engagement, SBIRT providers may use motivational enhancement techniques to help patients with any ambivalence toward treatment, provide transportation to intake appointments, follow up with patients after an appointment, and maintain contact with the specialty treatment provider.

The absence of linkages to treatment referrals can be a significant barrier to the adoption of SBIRT. Referral is recommended when patients meet the diagnostic criteria for substance abuse or dependence (or SUD) or other mental illnesses, as defined by the *Diagnostic and Statistical Manual of Mental Disorders*, Fourth Edition, Text Revision (DSM-IV-TR). For patients in primary care settings, the lack of a proper treatment referral will prevent access to appropriate and timely care that can affect other psychosocial and medical issues. Research findings suggest that motivational-based BIs can increase patient participation and retention in SUD treatment (Dunn & Ries, 1997).



Strong referral linkages are critical, as is tracking these patient referrals (Hillman, McCann, & Walker, 2001). The Substance Abuse and Mental Health Services Administration (SAMHSA) requires SBIRT grantees to have a comprehensive RT and followup system in place for the duration of the program. In the case where RT is incorporated into an integrated care model, this incorporation may require shifts in provider allocation and hiring.

### The SBIRT Process

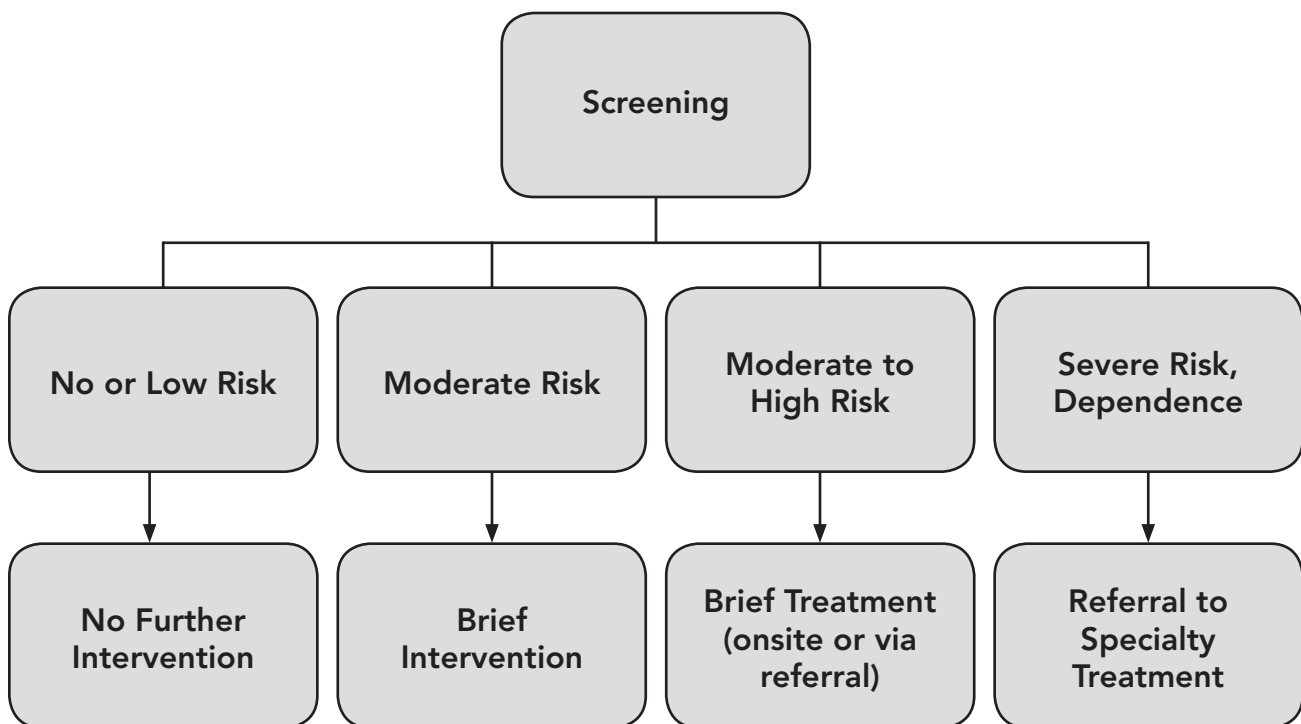
Exhibit 2-2 provides a chart of the SBIRT process.

The process can also include changes in level or intensity of care if a patient needs a different intervention. Screening can be repeated at intervals, as needed.

The following characteristics have formed the foundation for the SAMHSA SBIRT programs for identifying behavioral health problems:

- **SBIRT uses brief, validated, universal prescreening/screening tools.** These tools allow healthcare professionals to address the problem behavior even when the patient is not actively seeking treatment for the problem. Prescreening/screening tools accurately and quickly identify individuals with problematic conditions in as little time as 2–4 minutes. Because of its brevity and its universal application (i.e., it can be used with all patients), SBIRT may be more generally accepted by busy healthcare providers.
- **SBIRT is relatively easy for diverse providers to learn.** The SBIRT approach is easy to learn relative to other behavioral treatment techniques that may require lengthy specialized training. Therefore, it can be implemented by various healthcare providers such as physicians, nurses, social workers, health educators, and paraprofessionals who work in busy medical settings.

Exhibit 2-2. SBIRT Process



### Prescreening

Prescreening, which is not a core component of SBIRT but is frequently used, reduces the time needed by busy clinic staff to identify patients with risky behavior. Some grantee programs added a prescreening component to adapt SBIRT to accommodate their real-world circumstances. Prescreening using an abbreviated screening tool allows staff to triage patients quickly to additional screening or necessary treatment services, depending on responses. Babor et al. (2007) concluded that shortened screening approaches may facilitate healthcare providers' implementation of SBIRT services because they require less time to administer than do standard screening approaches. Shorter approaches eliminate a commonly cited time barrier to SBIRT implementation.

Few prescreening tools for alcohol and illicit drug use have been validated. One validated tool is the Alcohol Use Disorders Identification Test—Consumption (AUDIT-C), which uses the first three alcohol consumption questions of the full, 10-item AUDIT questionnaire (Bradley et al., 2007). Other useful tools include the National Institute on Alcohol Abuse and Alcoholism (NIAAA) prescreening question ("How many times in the past year have you had 5 drinks or more in a day [for men] OR 4 or more drinks in a day [for women]?" ; NIAAA, 2005), the one-question prescreening tool for illicit drug use ("How many times in the past year have you used an illegal drug or used a prescription medication for nonmedical reasons?" ; Smith et al., 2010, p. 1155), and the NIDA Drug Use Screening Tool (see Appendix E for more information about screening tools). If a patient scores high on any domain in the prescreen, a full screen is conducted.

- **SBIRT incorporates a strong referral component to link patients to specialty treatment.** Effective approaches integrate comprehensive strategies that include referral to specialty treatments (Babor et al., 2007). Although RT may be difficult in underserved areas, this should not deter programs from developing screening and BI (SBI) activities because they have beneficial effects separate from the referral (i.e., even short conversations with a healthcare professional can reduce a patient's substance use [Babor et al., 2007]). However, the goal of the RT component is to provide a quick handoff of patients to specialty SUD treatment if the screening site cannot provide more intensive SUD services. The availability of well-established referral linkages to specialty care is essential to the implementation and maintenance of SBIRT. In addition, monitoring patient compliance with SUD treatment is critical to good healthcare provision.

2012), more than 19 million people (7.5 percent of those ages 12 and older) were in need of but did not receive specialty treatment in the past year for illicit drug or alcohol use problems. The vast majority of these individuals (95 percent) believed they did not need treatment. Of those who believed they needed treatment, only 30.8 percent made an effort to obtain treatment.

The health and economic costs of substance abuse are considerable—not only for the individuals involved but also for the healthcare system. A study on the costs of excessive alcohol consumption estimated that the total cost of excessive drinking in the United States was \$223.5 billion in 2006 (Bouchery, Harwood, Sacks, Simon, & Brewer, 2011), a 21-percent increase from the \$184.6 billion in 1992 (Harwood, 2000). The National Drug Intelligence Center (2011) estimated that the cost of illicit drug use (in the United States) was \$193 billion.

Medical conditions are more common among patients with SUDs than among those without those disorders (Mertens, Lu, Parthasarathy, Moore, & Weisner, 2003). Substance abuse has been associated with higher levels of numerous medical conditions,

## Why SBIRT? The Problem

According to the 2011 National Survey on Drug Use and Health (NSDUH; SAMHSA,

including cancer, cardiovascular disease, gastrointestinal disorders, infectious diseases, and hepatic disorders. A disproportionate percentage of the burden for treating substance abuse and its consequences increasingly falls on public institutions.

## **Why SBIRT? Benefits and Efficacy**

If only people with the most extreme alcohol and drug use problems are recognized as being in need of treatment, people who misuse substances but do not meet the criteria for an SUD are not identified. SBIRT provides a systematic means of identifying and providing appropriate services to people who clearly need but are not receiving treatment and those who use substances but do not meet SUD criteria. Equally important, SBIRT may prevent problems. The model applies an “upstream” approach; it attempts to identify and intervene in substance misuse before an SUD develops. The Office of National Drug Control Policy (ONDCP) (2011) stated that:

It is critical for medical professionals to be able to identify the early signs of substance abuse in their patients and to intervene early. These early interventions can result in savings to the healthcare system and, most important, saves lives. SBIRT is a tool that enables healthcare professionals to ask patients about substance use during routine medical visits. SBIRT helps healthcare providers identify individuals with problems related to substance use, provide medical advice to help patients who have been identified as having risky substance use to understand the related health risks and consequences, and refer patients with more severe substance use-related problems to treatment. (p. 27)

The evidence supporting the effectiveness of BI suggests that even short conversations with a healthcare professional (e.g., nurse, physician assistant, physician) can reduce a patient’s substance use (Babor et al., 2007). For example, BIs are effective in reducing

risky and harmful alcohol use by adult primary care patients (men and women) (Whitlock, Polen, Green, Orlean, & Klein, 2004). Svikis and Jones (2005) found that screening pregnant women for smoking was a useful way to identify women who were at risk for alcohol and drug use. BIs for patients screening positive for cocaine, heroin, and amphetamine are also showing promising results in various settings (Cunningham et al., 2009). With prescription drugs being the second most prevalent category of illicit drug use (second only to marijuana) (SAMHSA, 2012), many are advocating for SBIRT (for prescription drug abuse) to be taught to healthcare providers as part of their education, either in medical school (Brown, Swiggart, Dewey, & Ghulyan, 2012; Rasyidi, Wilkins, & Danovitch, 2012) or through continuing education courses (Swiggart, Ghulyan, & Dewey, 2012).

### *Alcohol Misuse, Abuse, and Prevention*

Several studies have found SBIRT to be effective for those who misuse alcohol. Based on a review of the literature, the U.S. Preventive Services Task Force (USPSTF) found “good evidence that screening in primary care settings can accurately identify patients [including pregnant women] whose levels or patterns of alcohol consumption do not meet criteria for alcohol dependence, but place them at risk for increased morbidity and mortality” (USPSTF, 2004, p. 1).

The USPSTF review also noted that:

- Brief behavioral counseling interventions (with followup) can lead to small to moderate reductions in alcohol consumption.
- These reductions are sustained for 1 year or longer.
- If screened for alcohol abuse using a validated instrument, between 8 and 18 percent of general primary care patients screen positive for abuse.



Combined study results in the USPSTF (2004) review suggest mean reductions in alcohol consumption that ranged from 3 to 9 drinks per week (13- to 34-percent net reduction in drinking) in the intervention groups compared with the control groups at 6- and 12-month followups. Of the participants who received interventions in primary care, between 10 and 19 percent more participants stopped drinking at harmful or risky levels than did the individuals who did not receive interventions.

Research also indicates that, despite the robustness of the evidence for SBIRT's effectiveness for unhealthy alcohol use, other factors can influence its effects. For example, studies have shown that multiple contacts or sessions (in contrast to a single contact) with a provider can increase the impact of SBIRT in reducing risky alcohol consumption (Brown, Saunders, Bobula, Mundt, & Koch, 2007; Longabaugh et al., 2001). Moreover, demographic factors and psychosocial conditions (e.g., medical illness or hospitalization) also have been shown to influence SBIRT's effects on alcohol misuse (Saitz, Svikis, D'Onofrio, Kraemer, & Perl, 2006).

The conduct of SBIRT for alcohol use disorders has been found to be effective in various healthcare settings for diverse patient populations including primary care (Babor et al., 2007), emergency departments (EDs), (Gentilello et al., 1999), and schools and colleges (Baer, Kivlahan, Blume, McKnight, & Marlatt, 2001; Dimeff, Baer, Kivlahan, & Marlatt, 1999). Data are currently being collected that suggest that SBIRT may also be effective in addressing alcohol problems in employee assistance programs (Goplerud & McPherson, 2010; McPherson et al., 2009). Research also has demonstrated the efficacy of conducting SBIs using innovative strategies, such as the use of personalized feedback via the Internet (Cunningham et al., 2009) and the use of Web-based programs to monitor patient outcomes and to assist with making treatment decisions (Roy-Byrne et al., 2010). Gentilello et al. (1999) found that brief interventions at a regional trauma center

resulted in reduced alcohol consumption. Patients in the intervention group with intermediate Michigan Alcohol Screening Test (MAST; Selzer, 1971) scores experienced an alcohol consumption reduction of 21.6 percent from baseline to 12 months. This group of patients also had a 47-percent reduction in new injuries requiring ED treatment and a 48-percent reduction in new injuries that required hospital readmission.

Research on the efficacy of SBIRT for patients admitted to medical facilities is limited, and the results are mixed (Emmen, Schippers, Bleijenberg, & Wollersheim, 2004). Saitz et al. (2007) found that BIs with hospital patients were not sufficient for linking medical inpatients who had alcohol dependence with appropriate treatment and that BI had no effect on patients' level of alcohol consumption. They concluded that these patients needed more extensive and tailored interventions.

The use of computerized interventions has been shown to be effective in augmenting and complementing the gains made through the initial face-to-face brief interventions. The Department of Veterans Affairs, for example, examined the use of electronic reminders placed in patients' electronic medical records to encourage providers to offer brief alcohol counseling to patients who screened positive for unhealthy alcohol use on the AUDIT-C. These reminders were associated with moderate drinking reductions at followup (Williams et al., 2010). Other research reviews indicate that electronic methods can improve the effectiveness and accessibility of SUD treatment by offering online assessment and feedback tools for patients, providing tools for providers to monitor patients' treatment progress, and providing educational opportunities for clinicians (Cucciare, Weingardt, & Humphreys, 2009). Electronic intervention can also help bridge the treatment capacity gap by providing another source of assistance for women who do not complete traditional substance abuse treatment (VanDeMark et al., 2010).

The Community Preventive Services Task Force (CPSTF), an independent, volunteer body appointed by the Director of the Centers for Disease Control and Prevention (CDC), reviewed 31 studies involving electronic screenings and brief interventions (e-SBIs; e.g., telephones and other mobile devices, computers) to reduce alcohol consumption. The CPSTF concluded that e-SBI is applicable to various settings (e.g., healthcare, universities) and had positive effects across various outcomes related to alcohol consumption (e.g., binge drinking, overall consumption) (CPSTF, 2012). Based on this review, the CPSTF recently recommended e-SBI as an effective tool for reducing alcohol consumption.

The cost savings offered by the implementation of the SBI components alone are significant. One study (Gentilello, Ebel, Wickizer, Salkever, & Rivara, 2005) showed that for every \$1.00 spent on providing SBI approximately \$3.81 is saved. The Washington State SBIRT program cost study also reflects similar savings. Notwithstanding the potential effectiveness and cost savings, many opportunities to intervene in patients' risky alcohol use are lost. A 2003 study found that although 70 percent of people who smoke nicotine were advised to quit smoking by a healthcare provider, only 23 percent of binge drinkers were asked by a provider to discuss their alcohol use (Denny, Serdula, Holtzman, & Nelson, 2003).

The concept of SBIRT can be applied across the continuum of care for alcohol problems. Based on the severity of the problem indicated by the screening results, interventions ranging from universal prevention to BIs to traditional specialty treatment can be provided to healthcare patients. For individuals who are abstinent, universal prevention practices can be implemented to sustain alcohol abstinence. For moderate risky drinking, the first two components of SBIRT—SBI—may be implemented and can address inappropriate expectancies (beliefs about substance use effects and social norms of acceptable

behavior) and lack of motivation to change risk factors that contribute to substance abuse (Dimeff et al., 1999). Therefore, SBIs incorporate motivational interviewing components (Miller & Rollnick, 2002) that are also integrated in BT for higher-risk patients.

SBIs have proven effective in decreasing overall consumption binge drinking (Babor et al., 2007; Heather, Dallolio, Hutchings, Kaner, & White, 2004; Kunz, French, & Bazargan-Hejazi, 2004; Martens et al., 2007; Murphy et al., 2001; Toumbourou et al., 2007) and increasing productivity (Osilla et al., 2010). Evidence further demonstrates that strengthening resiliency, competencies, and social connectedness supports recovery for those individuals who show early symptoms of alcohol misuse.

Extensive reviews of the effectiveness of SBI (Babor, 2008; Babor et al., 2007) have found that SBI can lead to both short-term and long-term health benefits. However, to achieve long-term effects, SBI must be implemented with fidelity through targeted training for providers (Babor, Higgins-Biddle, Higgins, Gassman, & Gould, 2004; Bray et al., 2009; Cameron, Lee, & Harney, 2010; Christensen, Boisse, Sanchez, & Friedmann, 2004; Heather et al., 2004; Seale, Shellenberger, Boltri, Okosun, & Barton, 2005; Tollison et al., 2008). In many instances providers implementing SBI may not necessarily be physicians but may be allied health professionals such as nurses, counselors, health educators, and peers (Blume & Marlatt, 2004; Mastroleo, 2009), who may experience fewer barriers in service provision than physicians do (Babor et al., 2004). Some studies have found even telephone interventions to be efficacious (Brown et al., 2007; Oslin et al., 2003).

### *Illicit Drugs*

Based on the scant availability of published research on SBIRT for drug use, USPSTF (2008) concluded that the evidence regarding screening for illicit drug use was inadequate to evaluate the balance of benefits and

harms of screening adolescents, adults, and pregnant women. Some researchers have cited the relative scarcity of validated brief drug screening tools (Smith et al., 2010) and the low prevalence rates of drug use in primary care settings as two reasons for the comparatively small number of studies showing SBIRT's effects with drug use (Saitz, 2010). Nevertheless, since 1995, investigator-initiated SBIRT research has grown, and findings from SAMHSA-funded SBIRT projects have emerged. As a whole, the work shows promising results for the use of the comprehensive SBIRT approach (and the selected use of individual components) in reducing risky drug use (Copeland, Swift, Roffman, & Stephens, 2001; Madras et al., 2009). For instance, a randomized controlled trial indicated that BIs can reduce cocaine and heroin use (Bernstein et al., 2005). Motivational interviewing coupled with a self-help booklet given to people who use amphetamine regularly also resulted in reduced levels of drug use (Baker et al., 2005). SBIs have been linked with reductions in the use of marijuana, amphetamine-type stimulants, cocaine, and heroin (Madras et al., 2009; see the next section, SAMHSA SBIRT Grantees, for more information). In a study sponsored by the World Health Organization, Humeniuk et al. (2008) found that SBIs resulted in short-term reductions in the use of a wide variety of illicit drugs, including marijuana, cocaine, amphetamine-type stimulants, and opioids. SBIRT is also a key component of the 2011 and 2012 National Drug Control Strategy (ONDCP, 2011, 2012a).

Universal and selective prevention efforts may be targeted to those with minimal or mild drug misuse—just as they are with those who abuse alcohol—and identified abstainers can benefit from supportive and normative information to maintain healthy lifestyles. For individuals at risk for drug problems, early identification and BIs that address false expectancies and skill acquisition can prevent progression to more severe drug problems. In addition, tools that can be used for universal screening of drug use in health

settings—such as the DAST and the ASSIST as well as online tools such as eCHECK UP TO GO (eCHUG), the electronic THC Online Knowledge Experience (e-TOKE; San Diego State University Research Foundation, 2009–2012), and the NIDA Drug Use Screening Tool (see Appendix E)—are prevention-ready applications designed to detect the presence of drug use.

### *SAMHSA SBIRT Grantees*

SAMHSA grantees provide additional evidence of SBIRT's effectiveness with both alcohol and illegal drug use. For example, Madras et al. (2009) performed a secondary analysis of initial SAMHSA SBIRT Initiative data from the program sites of six State grantees. Of 459,599 patients screened at the time of the analysis, 22.7 percent screened positive for use defined as “risky/problematic” or “abuse/addiction.” Of the patients who screened positive:

- 15.9 percent were recommended for BI.
- 3.2 percent were recommended for BT.
- 3.7 percent were recommended for RT.

A comparison of the rates at the start of the study (baseline) with rates at 6-month followup shows that in the majority of cases self-reported alcohol and drug use rates diminished from baseline to followup for those patients reporting heavy alcohol use and illicit drug use.

Among patients reporting illegal drug use at baseline, rates of use at the 6-month followup were 67.7 percent lower than at baseline, and heavy alcohol use was 38.6 percent lower than at baseline. Among persons recommended for BT or RT, patients not only reported reductions in criminal behavior, but also reported significant improvements in general health, mental health, and employment and housing status.

Madras et al. (2009) noted some possible limitations to the study, particularly the absence of control groups. Without control groups, it is possible that the improvements

noted were unrelated to the interventions. However, the authors concluded that SBIRT was feasible to implement, and that the patients' self-reported status at the 6-month followup indicated significant improvements in alcohol or drug use and functional domains over baseline. They also stated that the findings were comparable across sites and gender, racial/ethnic, and age subgroups.

The final cohort 1 cross-site (C1) evaluation team found significant decreases in alcohol and drug use after the intervention. Overall, an association was found between SBIRT participation and reduced substance use as exhibited by declines in ASSIST substance use risk scores. Responses to questions on the ASSIST have a numerical score; added together they produce an ASSIST score. A number of different scores can be calculated for the ASSIST, including:

- The Total Substance Involvement (TSI) score, which measures global risk for SUDs across all substances.
- The Specific Substance Involvement score, which measures risk within particular drug classes.

The C1 evaluation team found that total substance use risk for all patients who had positive screening results decreased from an ASSIST TSI score of about 33 to 29, but this decrease was not statistically significant. However, when patients who were screened for BI but classified as low risk<sup>1</sup> were removed from the analysis, the remaining SBIRT patients who screened positive had a statistically significant average decrease in TSI scores, from approximately 52 to 38 (a 27-percent decrease).

Both the BT and RT groups had more significant declines in average TSI scores than either of the BI groups. The TSI score

for patients receiving BTs fell from 50.2 to 34.4, a significant decrease of about 31 percent. The RT group experienced an even larger decrease in TSI score, falling from 64.3 to 34.5, a significant decrease of 46 percent.

The C1 evaluation team also looked at changes in use of specific substances, as measured by the percentage of patients at 6-month followup who reported having used the substance within the past 3 months (Exhibit 2-3).

The C1 evaluation team found that SBIRT's impact on opioid use was not as strong as its impact on other substance use. In fact, the percentage of patients reporting any opioid use actually increased at followup, although the increase was not statistically significant. The RT group showed no change. The BT group was the only group that showed decreased opioid use (a statistically significant decrease of 24 percent).

In addition to measuring changes in substance use, the C1 evaluation team found the following improvements in other health-related functional domains among patients with positive screening results:

- The percentage of patients receiving routine preventive care (e.g., physical examination; routine blood tests; screening for hypertension, cancer, cardiac abnormalities) increased overall. Those in the low-risk BI group had the biggest increase (34 percent to 73 percent).
- The percentage of patients receiving outpatient medical treatment (e.g., treatment in an office or clinic for a physical health problem) generally increased. The RT group had the largest increase in percentage of patients receiving outpatient medical treatment (49 percent to 63 percent).

<sup>1</sup>Patients who screened positive but with low TSI scores presented a potential for skewing overall results. A low score left little room for score improvement at followup and could not be distinguished clearly from the score of those who screened negative. Patients who screened positive but had a low score also were less likely to perceive a need for significant behavior change. To ensure more meaningful results, the C1 evaluation team split the BI group into two subgroups: low risk and higher risk. This separation was accomplished by determining whether a patient's baseline TSI was below or above the median TSI score among all individuals screened for BI.



**Exhibit 2-3. C1 Evaluation Results of Patients Reporting Any Substance Use in Past 3 Months at 6-Month Followup**

Substance	All Groups (BI, BT, RT)	Low-Risk BI Group	High-Risk BI Group	BT Group	RT Group
Alcohol	Statistically significant decrease in reported use: from 81 to 69 percent	No change	Significant decrease in reported use: from 84 to 72 percent	Significant decrease in reported use: from 91 to 69 percent	Significant decrease in reported use: from 91 to 64 percent
Marijuana	Statistically significant decrease in reported use: from 40 to 33 percent	No change	Small but not significant decrease	Significant decrease in reported use: from 53 to 40 percent	Significant decrease in reported use: from 47.5 to 21 percent
Cocaine	No significant change	No significant change	No significant change	Significant decrease in reported use: from 24 to 13 percent	Significant decrease in reported use: from 47 to 20 percent

The probability of ED use generally decreased among patients, especially for those in the BT group and low-risk BI group. Emergency treatment for these two groups had statistically significant decreases of 20 percent and 24 percent, respectively. However, among patients who used ED services, the number of ED visits increased significantly for all those who screened positive and increased substantially for those in the RT group.

Those in the BT and RT groups decreased their probability of any drinking and driving. Approximately 36 percent of individuals in both groups reported driving while under the influence at baseline. Rates of driving under the influence decreased substantially to 18 percent in the BT group (a 50-percent decrease) and 14 percent in the RT group (a 60-percent decrease).

### Why SBIRT? Cost-Effectiveness/ Benefit Cost

The cost savings of SBIRT vary by screening instrument, staffing model, and setting. Cost-benefit analyses suggest that screening and brief counseling of risky alcohol use provide a cost savings of \$43,000 in future healthcare costs for every \$10,000 invested in early intervention (Fleming et al., 2002). Patients receiving BIs had fewer hospital days and fewer ED visits. The BI cost \$205 per unit—\$166 in costs to the clinic and \$39 to the patient—and saved \$712 in healthcare costs.

A meta-analysis of 15 studies analyzing cost benefit, cost-effectiveness, and cost utility of SBIs for unhealthy alcohol use found cost-saving benefits when performed in medical settings that met or exceeded standardized preventive care, such as influenza immunization or colorectal screening (Kraemer, 2007). The analysis demonstrated a strong economic benefit of alcohol SBI when compared with usual care. Maciosek et al. (2006) identified the most

valuable clinical preventive services that can be offered in medical settings. Screening for problem drinking and brief counseling ranked high among effective preventive services, based on a combined score of two measures—*clinically preventable burden* and *cost-effectiveness* (Exhibit 2-4).

**Exhibit 2-4. Priorities Among Effective Clinical Preventive Services**

Preventive Service	Combined Score*
Discussion of daily use of aspirin	10
Childhood immunization series	10
Tobacco use screening and BI	10
Colorectal cancer screening	8
Hypertension screening	8
Influenza immunization	8
Pneumococcal immunization	8
<b>Problem drinking screening and brief counseling</b>	8
Vision screening—adults	8
Cervical cancer screening	7

\*Possible scores ranged from 2 to 10.

Adapted from Maciosek et al. (2006).

## SBIRT for Other Behavioral Health Disorders

The prevalence of issues such as depression, anxiety, and emotional trauma among primary care patients calls for further exploration to determine whether SBIRT can be adapted and implemented to address mental disorders among patients in primary care.

Although the comprehensive SBIRT model has been demonstrated to be effective for risky alcohol use, it has not been consistently demonstrated to be effective in addressing depression, trauma, or anxiety symptoms or diagnoses. Programmatic data from the SAMHSA State SBIRT programs show promising results for identifying and providing interventions targeting depression among

primary care patients (Wisconsin Initiative to Promote Healthy Lifestyles [WIPHL], n.d.). Public health approaches that are consistent with the SBIRT model have also been recommended for tobacco use and are recognized to be cost effective (Exhibit 2-4).

### Tobacco Use

Cigarette smoking continues to be the leading cause of preventable disease and death in the United States (U.S. Department of Health and Human Services, 2004) and contributes to approximately 443,000 deaths per year (CDC, 2008) from lung cancer, ischemic heart disease, chronic obstructive pulmonary disease, strokes, and other diagnoses. In spite of the well-documented risks of smoking and the potential health benefits of quitting, approximately 1.4 million people younger than age 18 became regular smokers in 2010, and more than 27 percent of individuals ages 12 or older in the United States continue to smoke (SAMHSA, 2012). Smoking also affects health outcomes of people other than the smokers, with smoking during pregnancy resulting in premature births, intrauterine growth retardation, fetal respiratory distress, and low infant birth weight (CDC, 2008; USPSTF, 2009a). Secondhand smoke contributes to the deaths of an estimated 38,000 people every year (USPSTF, 2009a).

Research has also shown that mental disorders and cigarette smoking are frequently co-occurring conditions (Degenhardt & Hall, 2001; Dome, Lazary, Kalapos, & Rihmer, 2010; Grant, Hasin, Chou, Stinson, & Dawson, 2004; Ziedonis et al., 2008). A study using data from the 2005–2006 NSDUH reported that adults with lifetime depression, anxiety, anxiety with depression, or major depressive episodes were “more likely to be current smokers, smoke with higher intensity and frequency, have more dependence, and have lower success at quitting” when compared to individuals without these disorders (Trosclair & Dube, 2010, p. 438). Individuals with serious mental illness (SMI; e.g., schizophrenia) are also more likely to smoke than are

individuals without mental illness (Epstein, Barker, Vorburger, & Murtha, 2004; Kelly & McCreddie, 2000), but Banham and Gilbody (2010) found that treatment for tobacco dependence can be effective for individuals with SMI and, if their mental disorders are stable, treatment for tobacco dependency does not worsen their symptoms. Because 70 percent of smokers see a primary care provider each year (Fiore et al., 2008), clinicians have a unique opportunity to intervene and implement tobacco SBIRT in primary care settings and EDs.

Consequently, USPSTF (2009a) recommends that clinicians screen all adults for tobacco use and provide interventions for smoking cessation. USPSTF issued a separate recommendation that clinicians screen all pregnant women for tobacco use and provide counseling specifically designed for pregnant women who use tobacco products.

USPSTF (2009a) recommends that the clinical interventions for tobacco cessation that are cited in the 2008 U.S. Public Health Service Clinical Practice Guideline, *Treating Tobacco Use and Dependence* (Fiore et al., 2008), become integrated in standard clinical practice. The Guideline recommends that clinicians use the screening instrument known as the 5A's of tobacco use intervention, which provides a useful strategy for engaging all medical patients in smoking cessation discussions. The 5A's are consistent with the SBIRT approach and parallel the screening and brief intervention or counseling components of the SBIRT model:

1. *Ask* about tobacco use.
2. *Advise* to quit through clear personalized messages.
3. *Assess* willingness to quit.
4. *Assist* to quit.
5. *Arrange* followup and support.

The guideline's behavioral treatments include counseling, social support, problem solving, and cessation skills training offered in face-to-face individual or group formats or via

telephone "quit lines." Medication-assisted treatments for tobacco use/dependence have also been suggested and include several Food and Drug Administration-approved medications (Fiore et al., 2008).

### *Depression*

USPSTF (2009c) supports depression screening for adults only when accurate diagnosis services, effective treatment, and followup are available. USPSTF also recommends screening adolescents (12 to 18 years of age) for major depressive disorder, again when accurate diagnosis, psychotherapy (cognitive-behavioral or interpersonal), and followup are available (USPSTF, 2009b). There are many commonly used screening tools for depressive symptoms that have established validity and reliability data, such as the Patient Health Questionnaire 9 (PHQ-9; Kroenke, Spitzer, & Williams, 2001) and the Patient Health Questionnaire 2 (PHQ-2; Kroenke, Spitzer, & Williams, 2003).

Primary care physicians are the providers most likely to see patients when they first become depressed, and these providers are most capable of initiating and monitoring treatments with pharmacologic agents (McNaughton, 2009). Previous studies, however, have shown that at least half of patients with active depression seen by primary care physicians remain undiagnosed (Ormel, Koeter, van den Brink, & van de Willige, 1991; Schulberg & Burns, 1988). Depression is particularly prevalent among "high utilizers" of medical care, of whom as many as 40 percent have been found to have a current depressive illness (Katon et al., 1990).

Promising but preliminary data are available from SBIRT grantees funded by SAMHSA that indicate that the SBIRT approach may be adapted for depression treatment. For example, the State of Wisconsin incorporated depression screening into the WIPHL pilot program. Patients with mild or moderate depression were provided behavioral activation by health educators

using specific protocols developed by the program (WIPHL, n.d.).

Behavioral activation offers promise as a strategy for BI, and there is some evidence that it would fit an SBIRT-like approach. Behavioral activation assists individuals to identify and engage in daily activities and situations they find positively reinforcing and consistent with their long-term goals (Dimidjian et al., 2006). Behavioral activation as a BI has been demonstrated in three meta-analyses, one randomized controlled trial, and one followup study of a previous randomized controlled trial to be an effective intervention for the treatment of depression (Sturme, 2009).

### *Anxiety Disorders*

The National Comorbidity Survey Replication (Kessler et al., 2005) found anxiety disorders to have the highest percentage of lifetime prevalence of all the mental disorders in the United States (28.8 percent), so it is not surprising that anxiety disorders are among the most common mental disorders seen in primary care settings. One study showed that 19.5 percent of primary care patients participating in the study had a current anxiety disorder, and approximately 33 percent of those patients had more than one anxiety disorder, with levels of impairment and healthcare utilization increasing with the number of disorders (Kroenke, Spitzer, Williams, Monahan, & Löwe, 2007). However, screening tools are available. The Brief Symptom Checklist-18 (Derogatis, 2001) is a screening tool for both anxiety and depression, and My Mood Monitor (M-3; Gaynes et al., 2010) is a valid and efficient

one-page tool for screening multiple common psychiatric illnesses in primary care and other settings. The M-3 can function both as a screen for specific anxiety and mood disorder diagnoses and as a general screen for the presence of any mood or anxiety disorder.

Interventions such as passive psychoeducation, including bibliotherapy, have been shown to reduce symptoms of anxiety, psychological distress, and depression (Donker, Griffiths, Cuijpers, & Christensen, 2009). These approaches may be offered as a BI to patients who screen positive for mild or moderate levels of anxiety. Passive psychoeducational interventions are cost effective, can be easily put into practice by nonmedical professionals, and may have a less prejudicial impact on consumers, especially when delivered through a Web site, email, or brochure (Donker et al., 2009).

### *Psychological Trauma*

Evidence of emotional trauma is also common in primary care. Walker, Torkelson, Katon, and Koss (1993) report that rates as high as 37 percent for childhood sexual abuse and 29 percent for adult sexual assault are evident in primary care settings. Walker et al. found that 61 percent of women reported that they believed that it was appropriate for their primary care physician to ask about previous victimization, but only 4 percent had been asked. Tools for screening trauma and anxiety include the Trauma Symptom Inventory (Briere, 1995) and the PTSD-8 (Hansen et al., 2010) and Primary Care PTSD Screen (PC-PTSD; Prins et al., 2003) for posttraumatic stress disorder (PTSD).



# Chapter 3—SBIRT Implementation

## A Model Framework

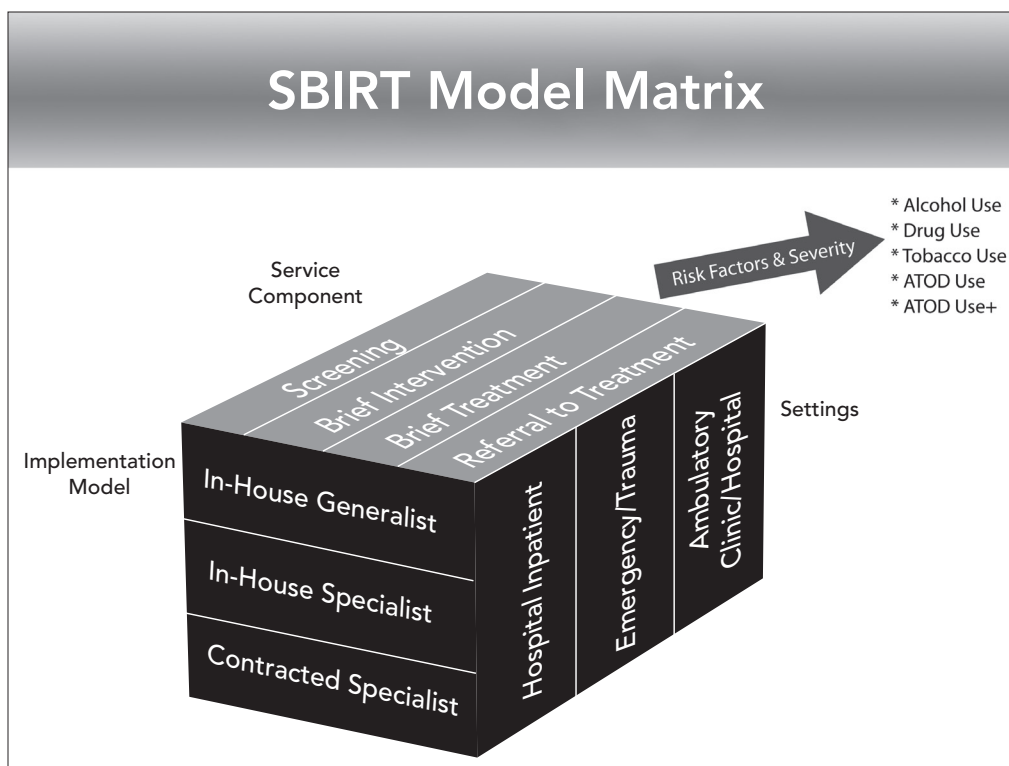
Program implementation of screening, brief intervention, brief treatment, and referral to treatment (SBIRT) services depends on a variety of factors, including the treatment program setting, available system resources, State and other service systems requirements, and organizational structure. Exhibit 3-1 provides a framework for SBIRT and illustrates the multidimensional nature of SBIRT implementation.

The model provides a pictorial reminder of the overarching *who*, *what*, and *where* questions that must be considered during SBIRT implementation planning:

- **Service delivery**—What SBIRT services will be delivered? What risk factors will be assessed?
- **Implementation model**—How will services be provided? Who will provide what services? How will staff be paid?
- **Settings**—What are the unique characteristics (and challenges) of the program? Who are the target populations? Where and how can they best be reached?

This chapter offers general steps to implementing SBIRT and discusses a range of considerations, options, and questions for each step. The steps were derived and adapted from several sources: the American Public Health Association and

Exhibit 3-1. SBIRT Model Matrix



Education Development Center, Inc. (2008); Henry-Edwards, Humeniuk, Ali, Poznyak, and Monteiro (2003); and Kleinschmidt and Forman (2009). See Technical Assistance Publication 31, *Implementing Change in Substance Abuse Treatment Programs* (Center for Substance Abuse Treatment, 2009), for general information on implementing change at the program level.

## Initiate the Planning Process and Develop Collaborations and Partnerships

### *Assess Organizational Readiness for Change*

Organizations differ in their capacity to implement new practices. Several factors—staff workload, organizational structure and culture, financial considerations—help or hinder successful implementation of SBIRT programs within a system of care. As does any evidence-based practice, implementation requires careful planning, flexibility to adapt to new programs, and the structure necessary to ensure fidelity with SBIRT.

Bohman et al. (2008) evaluated a new measure to gauge organizational readiness for change during the implementation of an SBIRT program at a trauma hospital emergency department (ED) and three community health program sites. The new measure, the Medical Organizational Readiness for Change (MORC) scale, was adapted from the instrument, Organizational Readiness for Change (ORC; Lehman, Greener, & Simpson, 2002). The new measure includes multiple scales, comprising 18 content domains in four key areas:

- Motivation for change (e.g., perceptions of current functioning, needs for improvement)
- Institutional resources (e.g., adequacy of office space, staffing)
- Attributes of staff members (e.g., confidence in counseling abilities, adaptability)
- Organizational climate (e.g., clarity of mission, staff cohesiveness)

The evaluation found differences in readiness to change between clinical staff and administrative staff and between EDs and community healthcare clinics. The MORC scale helps an organization understand its operations, focus on its strengths when implementing strategies, tailor strategies to different settings, and guide the implementation process.

### *Involve as Many Staff Members as Possible*

The support of management and stakeholders is important to implementing SBIRT, regardless of setting. In addition, staff members are more likely to invest in SBIRT implementation if they are involved in planning from the start. In a small system (e.g., a primary care practice), it may be best to involve *all* staff members in the process. In a large system (e.g., a hospital system), an important first step is identifying appropriate planning participants from among service components. *Who are the primary stakeholders? Who has useful skills and experience?* Involving staff members from a range of disciplines and experiential backgrounds facilitates effective planning.

#### **Washington State SBIRT**

##### **Cohort 1 State Grantee**

The Washington State Division of Alcohol and Substance Abuse joined forces with a number of partners, including the Governor's Office, the Department of Social and Health Services Medical Assistance Administration, the Department of Health, participating counties and hospitals, chemical dependence treatment providers, and a broad range of policymakers who are represented on the Washington State SBIRT Policy Steering Committee.

### Assess What Is Needed

A careful assessment of current system resources (both physical and personnel) can save time and money. *Is it possible to use existing staff members to provide at least some SBIRT services? If so, what training will they need? If not, for what SBIRT services must new staff members be hired? What qualifications must they have? Is existing space adequate, or can space be reconfigured for more privacy?*

### Set Clear Goals

It is important to know exactly what is to be accomplished and within what timeframe. *What is realistic given the resources available or that can be obtained?*

### Assign Clear Roles and Responsibilities

Appointing one staff member as the SBIRT coordinator may be helpful. This person can ensure that all staff members understand their roles and responsibilities and that all necessary planning tasks are completed.

### Develop Collaborations and Partnerships

Collaboration is critical, no matter the size of a system. System (or program) leaders should identify potential public and private collaborators and partners early on and begin developing relationships.

For example, the SBIRT team at the University of Hawaii at Manoa developed collaborations with the following university departments and organizations:

- Clinical and Health Promotion Services
- Student Housing
- Judicial Affairs
- Counseling and Student Development Center
- Athletics Advisors
- Sexual Assault Task Force

## Identify the Settings for SBIRT Services

Hospitals, EDs, trauma centers, primary care offices, and community health centers are obvious settings in which to initiate SBIRT. The American College of Surgeons (2007) now requires Level I and Level II trauma centers to establish mechanisms to identify patients who have drinking problems. However, SBIRT services are provided in a much wider range of settings. Exhibit 3-2 provides examples of other settings in which Substance Abuse and Mental Health Services Administration (SAMHSA) grantees have implemented SBIRT services.

Questions to be answered when choosing a setting include:

- Who is the target population?
- What is the patient flow?
- In what type of setting are patients most likely to be reached?
- Is the setting/facility accessible to the target population?
- What resources are available?
- Can partnerships expand screening options?
- Does the potential facility allow for privacy and secure record storage?

#### Exhibit 3-2. Selected SAMHSA SBIRT Grantee Service Settings

Federally Qualified Health Center  
Public health department office  
High school-based clinic  
Planned Parenthood office  
Specialty health clinic (e.g., women, adolescents)  
Senior nutrition program  
Senior center  
HIV and sexually transmitted diseases clinic  
Tribal clinic  
College/university student union kiosk  
College/university athletic department, counseling center, health clinic

### **Bristol Community College (Fall River, MA), CORE**

#### **College and University Grantee**

One of Campus Outreach and Resource Enhancement's (CORE's) challenges was that student participation in CORE was 100-percent voluntary. In addition, available campus health services were limited at the start of the project. With no mandate to participate and the majority of students not identifying drug or alcohol use as a problem, project staff had to effectively motivate students to participate. Providers had to find students willing to participate and a location where feedback could be provided confidentially. A particularly successful situation was to offer screening and brief intervention (BI) to new students who were on campus for placement testing and meetings with academic advisors before the start of the semester. Because testing took place in a group format as well as in one-on-one encounters, students had a considerable amount of free time and could meet with CORE staff members outside of classes.

Outreach was accomplished through classroom presentations, health and wellness events in the student center, and special events during which CORE had a strong presence. The activities provided a social marketing function with a strong prevention message and were successful in opening a dialog on campus about the use of drugs and alcohol by students and in the broader community.

## **Select a Staffing Model**

Studies of SBIRT programs have shown good results with a variety of staffing models. Cost-benefit analyses suggest that some functions may be performed as equally well (and at lower costs) by midlevel or support staff as by senior staff.

Where understaffing is a problem, community workers or others not on staff may administer some or all parts of an SBIRT program. For example, a trauma center may contract with a nearby substance abuse treatment provider to conduct screening and intervention. Alternatively, a designated staff person may be hired and trained to conduct screening.

The cohort 1 cross-site (C1) evaluation team identified three basic implementation (or staffing) models appropriate for SBIRT services delivery: in-house generalist (IHG), in-house specialist (IHS), and contracted specialist (CS).

### *In-House Generalist*

An IHG is a staff member who is trained to perform SBIRT functions in addition to his or her regular job functions (e.g., a triage nurse in an ED, a health educator in a community health clinic). Such a person is not a substance abuse treatment professional.

Using an IHG to perform screening and BI can be effective and can offer important benefits. Patients may already have a relationship with or be familiar with the IHG. Moreover, when a medical staff member addresses substance abuse, behavioral recommendations can be tied to the patient's health or medical problem. This specificity may help the patient feel less shameful or uncomfortable talking about substance abuse.

The generalist model poses certain limitations, however. For example, generalists often do not have the time to perform SBIRT. Even very brief encounters can impinge on other crucial functions. However, screening does not necessarily take a lot of time. Results from the C1 evaluation indicate that, regardless of the staff position of the person performing SBIRT services (e.g., physician, nurse, counselor), the duration of initial screening ranged from 2 to 5 minutes.

Other limitations might include staff members who are uncomfortable with people who misuse substances or who lack confidence in their ability to perform SBIRT functions. In training hospitals, high physician turnover results in the need for constant retraining of residents or interns in performing SBIRT.

Lessons learned from SAMHSA SBIRT grantees provide insights into effective ways to overcome the challenges of an IHG model:

- Implement SBIRT in ways that minimize the time burden for staff.
- Develop strong “champions” of SBIRT.
- Provide time for staff to “buy into” activities.
- Provide adequate training, ongoing direct supervision and monitoring, and regular feedback.
- Institute SBIRT training as a regular part of employee orientation.
- Collect and share aggregate and patient-level outcomes data so that staff members can see the help they provide to patients.
- Combine SBIRT with other behavioral interventions (e.g., smoking cessation).

### *In-House Specialist*

An IHS provides only SBIRT services, freeing regular staff members from having to conduct SBIRT activities. A program may hire someone who is already trained in SBIRT or may train a person already on staff. This model can be efficient because few people need to be trained (or none, if an already-trained specialist is hired specifically for SBIRT), and it provides consistency because only a specific person or people perform SBIRT activities.

SAMHSA grantees using this model encountered several challenges. EDs or trauma centers can be difficult work environments for nonmedical staff, occasionally leading to turf wars between medical and nonmedical staff. In-house supervision and management issues can arise regarding ED staff supervising a person without ED skills. SBIRT specialists reported the expectation from ED staff that they conduct non-SBIRT activities. Very clear organizational structures need to be in place to prevent these types of problems.

Finally, the SBIRT model is not accepted by all substance abuse treatment specialists. Careful hiring practices ensure that specialist staff members are trained in SBIRT and will provide services with fidelity.

### *Contracted Specialist*

A third model for SBIRT is an outside provider who conducts SBIRT services. This model has the advantage of providing specialized, informed professionals dedicated to conducting SBIRT, relieving regular staff members of the additional time burden and providing a seamless integration of different SBIRT components.

There also are challenges to implementing this model. A CS may not be fully integrated into the team and may need time to become familiar with the organizational culture, the setting, and other staff members. This situation can be particularly challenging for a CS working in a hospital or trauma center for the first time. A CS may find working in EDs difficult; these settings differ greatly from substance abuse treatment facilities. Finally, insurance reimbursement for SBIRT in a medical setting can be a problem. Insurance companies may be reluctant to pay for services not directly related to a hospital stay or for services provided by nonmedical staff.

### *Staffing Models and SBIRT Grantees*

SBIRT grantees often used blended models for multiple service components (e.g., IHG for prescreening or screening, CS for BI or brief treatment [BT]). All SBIRT grantees migrated toward CS models for most components of treatment delivery, both to increase the number of patients screened and to reduce the burden on medical staff. The CS model was successful across settings.

An advantage of the CS model is that staff members were less likely to stop SBIRT services when the broader organization got very busy. A potential disadvantage is that, although the CS model is a viable approach in high-volume settings, it may not be ideal



in settings with a small number of patients because there may be insufficient patient flow to justify having a dedicated SBIRT specialist.

Regardless of which staffing model grantees implemented, they used a wide variety of professionals and paraprofessionals to provide SBIRT services: nurses, physicians, nurse practitioners, physician assistants, social workers, psychologists, certified or licensed addiction professionals, health educators, hospital interns and residents, school counselors, and others.

## Develop a Staff Training and Supervision Plan

Because SBIRT occurs outside traditional substance abuse provider systems, training for all staff members is critical. Effective training includes the following topics:

- Importance of the SBIRT program
- Efficacy of SBIRT as demonstrated in clinical trials
- Implementation procedures to be used
- Staff roles and functions

- Administration of screening tests and calculating scores (including role-playing and supervised practice)
- Providing screening feedback to patients
- Referral collaborations and procedures
- BI and BT techniques if staff members will be providing these services

Staff members providing BIs and BTs must be thoroughly trained in the evidence-based clinical model employed and have access to onsite or contracted supervision. All training should include role-playing and supervised practice so staff members are comfortable performing BI and BT and perform them with fidelity. The staff training plan should institutionalize ongoing training for all staff members and tie the training to staff supervision and individual needs.

SBIRT programs can obtain training for staff members through a number of combinations. For medical professionals, continuing education units and continuing medical education units are available through organizations such as the American Medical Association; some units are available online. SAMHSA and its partners host trainings at national and regional professional events. (See Appendix B for training resources.)

### InSight, Harris County Hospital System (Houston, TX)

#### Cohort 1 State Grantee

InSight used a brief motivational intervention (BMI) approach for screening, intervention, and followup. BMI specialists received thorough training in motivational interviewing (MI). Training included a 2-day workshop on the principles and techniques of MI followed by standardized patient training (SPT). SPT enables trainees to practice skills using scripted mock sessions with trained actors as “clients.” An expert coach observed these sessions, then provided immediate feedback. Trainees practiced targeted skills in subsequent mock sessions.

Expert coaches also provided BMI specialists with ongoing supervision and review of audiotaped sessions with real patients. Review of taped sessions included standardized MI behavior coding\* and monthly feedback to specialists. This monitoring and feedback process helped ensure continued growth of specialists and fidelity to the MI model. For more information on the MI coding system, see Miller, Moyers, Ernst, and Amrhein, 2008.

\* Behavior coding is an objective and detailed method of providing skills feedback. The reviewer codes instances of specific behavior, such as “affirming” or “supporting autonomy.”

Source: InSight Project Research Group (2009).

Training can be arranged through organizational collaborations. For example, the Washington Division of Alcohol and Substance Abuse contracted with nationally recognized trainers from the University of Washington’s Harborview Medical Center and the Northwest Frontier Addiction Technology Transfer Center to provide training on BI and MI counseling. Other grantees, such as the New Mexico Department of Health, found creative solutions to providing ongoing training and monitoring through partnerships with local universities and teletraining to multiple sites.

All grantees contracted clinical training and monitoring services through expert trainers. Contracted trainers typically conducted initial training that lasted from several days to 1 week, depending on the model and expertise of staff, and often provided followup training or consultation. Some grantees used trainers for several weeks during a year, whereas others employed them full time. Grantees with many rural sites used more contracted trainers than did those concentrated in one or two large EDs. Grantees also used onsite clinical supervisors

to reinforce training and to monitor daily performance of SBIRT staff.

## Develop a Screening Procedure

The screening procedure needs to ensure that screening is timely, systematic, and efficient but also provides enough flexibility to allow staff members to make the most of unexpected opportunities for screening. A first step in developing a screening protocol is to decide *who* will be screened. *Will screening be universal? Will prescreening be used? Will only a subset of the population be screened? If so, how will these patients be identified? Do screening priority guidelines need to be set? What is realistic given the program’s resources?*

Once the population for screening has been identified, the frequency of each person’s screening must be considered: *Will patients be screened at every visit or at regular intervals? When during a patient’s visit will screening occur?*

SBIRT programs also need to decide for *what* they will screen. *Risky/harmful alcohol use? Illegal drug use? Prescription medication*

### New Mexico Department of Health SBIRT: Sangre de Cristo Site

#### Cohort 1 State Grantee

A project goal was to create, in conjunction with the Governor’s Commission on Telehealth, a statewide telehealth system to support SBIRT, particularly in rural areas. The initial phase of the project was to use telehealth technology to:

- Provide clinical supervision of the SBIRT behavioral health counselors (BHCs).
- Conduct clinical staffing discussions and consultations regarding patient care.
- Provide continuing professional clinical education to the New Mexico SBIRT BHCs and the New Mexico SBIRT partner site clinical providers and staff members.

### Massachusetts: Heywood Hospital SBIRT Site

#### Cohort 2 State Grantee

This site implemented a protocol that allows ED triage nurses to ask prescreening questions and refer patients to the health-promotion advocate (HPA), the staff member who provides SBIRT. When patients’ answers to prescreening questions indicate a potential for alcohol and/or drug abuse or high-risk/dependent behavior, the patients’ names are sent to the HPA. Although universal screening remains the norm at this site, prescreening by the triage nurse identifies patients who most need to be seen during their ED visits.

*misuse and abuse? Tobacco use?* Patients in the SAMHSA SBIRT study abused a wide range of prescription medications and illicit substances. Many individuals who reported consuming large quantities of alcohol also used illicit drugs. The C1 evaluation team found that screening for drug use can be combined with screening for tobacco and at-risk use of alcohol in a broad range of general medical settings. Because multiple drug use is common, screening for multiple substances improved efficiency, resource allocation, and clinical intervention/treatment.

In addition to screening for alcohol and drugs, SBIRT programs can include other health issues (e.g., eating disorders, depression) in the screening or combine screening for alcohol and drug use into existing screening protocols for health issues.

*How* patients will be screened is an important consideration. Several self-report screening instruments are available. Self-report instruments that measure substance use are generally reliable, but present some problems. Accuracy depends on the patient's perceptions of potential negative consequences for truthful responses (e.g., criminal sanctions, physician disapproval, implications for insurance, child welfare involvement). Patients may intentionally misrepresent their drinking and drug use if they fear consequences. Memory,

cognition, and motivation also play roles in a patient's ability to understand and participate in screening.

Despite these limitations, self-report instruments have many benefits. Compared with biological tests, they generally take less time and training to administer. Screening tests range from brief, straightforward questions that can be administered in 1 or 2 minutes to those requiring more time and training and/or professional licensure. One screening tool is a single question, "How many times in the past year have you used an illegal drug or used a prescription medication for nonmedical reasons?" (Smith et al., 2009; Smith et al., 2010). This question is also included in the NIDA Quick Screen, the first question of the NIDA Drug Use Screening Tool. Exhibit 3-3 is an alphabetical list of commonly used screening instruments. These instruments can be used as pen-and-paper or electronic self-report tests or as clinician-administered questions.

Some evidence suggests that the mode of administration affects the accuracy of results. For example, Graham, Goss, Xu, Magid, and Diguseppi (2007) found that administering the AUDIT-C electronically was more likely to identify hazardous drinking than assessment via the paper version.

### Exhibit 3-3. Selected Screening Service Instruments

- Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST)
- Alcohol Use Disorders Identification Test (AUDIT)
- AUDIT-C
- CAGE (**C**ut down, **A**nnoyed, **G**uilty, **E**ye-opener)
- CRAFFT (**C**ar, **R**elax, **A**lone, **F**orget, **F**amily or Friends, **T**rouble)
- Drug Abuse Screening Test (DAST)
- DAST-A
- Fagerstrom Test for Nicotine Dependence
- Michigan Alcohol Screening Test (MAST)
- NIDA Drug Use Screening Tool
- Problem-Oriented Screening Instrument for Teenagers (POSIT)
- TWEAK (**T**olerance, **W**orried, **E**ye-openers, **A**mnesia, [**K**] Cut down)

Note: For more information about these instruments and how to obtain them, see Appendix E.



SBIRT program administrators can maximize cost savings and effectiveness of screening components through careful selection of screening instruments. Short, simple screens can identify hazardous use or dependence as accurately as longer, more complex screening tools and at a lower cost. More than 25 validated self-report screening tools are now available (Babor et al., 2007). These tools, alone or in combination, identify risk level of use and guide followup decisions.

When selecting a screening instrument, some important questions are:

- What are the key characteristics of the target population (e.g., age, level of literacy, cognitive functioning)?
- What is the percentage of patients who cannot self-administer the tool?
- What languages do patients understand?
- How much time is available for administering and scoring the instrument?
- Should a staff person administer the instrument, or should patients self-complete it?

Test administrators must consider the number of questions in a screening instrument. Long, time-consuming questionnaires may be unrealistic to use. Instruments that have just one or two questions may not provide enough information.

SBIRT programs also need to determine screening followup procedures. *Who will interpret the results and provide the patient with feedback? How will a patient be referred*

*to BI, BT, or more intensive specialty treatment if screening is positive?*

## Develop BI and BT Procedures

Questions to consider regarding BI and BT include:

- Where and when will BI and BT occur, onsite or by referral to specialty substance use disorder (SUD) treatment programs?
- If BI or BT will be provided onsite, who will provide these services?
- What educational materials will be used?
- What community resources need to be tapped?
- What training will staff members need?

SBIRT programs also need to decide on what clinical models (or combination of models) and BI and BT techniques are most appropriate and feasible. Traditionally, BIs have been provided as a stand-alone treatment to patients with less severe SUDs. Recent evidence suggests, however, that BIs can be effective with a range of patients.

Models for BI include:

- Brief Negotiated Interview (see Appendix B) and simple advice.
- Brief counseling.
- FRAMES (Feedback, Responsibility, Advice, Menus of options, Empathy, Self-efficacy).
- MI techniques.

### **State University of New York, University at Albany College and University Grantee**

The university's SBIRT initiative targets first-year students, student athletes, and students who seek health-related services at the University Health Center. Students are asked to log into a secure Web site to enroll in the SBIRT project and complete questionnaires. Data from the questionnaires are downloaded to a spreadsheet and used to create a personalized feedback sheet. Students who screen positive and receive BI, BT, or intensive specialty treatment receive an email with a Web link to followup questionnaires at discharge and at 6 weeks and 6 months after the intervention.

BT is frequently a stand-alone first treatment but also can be useful for patients who have undergone traditional treatment but relapsed, as an alternative to longer-term treatment when patients cannot afford treatment, or while patients wait for specialized SUD treatment.

Commonly used models for BT include:

- Cognitive-behavioral therapy.
- Motivational enhancement therapy.
- Community reinforcement approach.
- Solution-focused therapy.

Appendix B identifies resources for more information about clinical models.

## Develop Referral Procedures and Identify Referral Resources

Research suggests that BI or BT alone will not suffice for people who are severely dependent on alcohol or drugs (Babor et al., 2007) or who have co-occurring disorders (e.g., depression, conduct disorders) (Fleming & Graham, 2001). Some patients who meet criteria for substance abuse/dependence need referrals to more intensive specialty treatment and mutual-help groups, such as Alcoholics Anonymous, Narcotics Anonymous, Women for Sobriety, or SMART (Self-Management and Recovery Training).

SBIRT programs should develop referral procedures that both motivate patients to

enter treatment and connect them with convenient, accessible specialty treatment programs. SAMHSA grantees found many innovative ways to facilitate treatment entry:

- Initiation of onsite treatment (at the screening facility)
- Provider-initiated appointments
- Peer/mentor health educator support
- Case management services
- Transportation to treatment facilities
- Negotiation for dedicated treatment slots for SBIRT patients

Most SBIRT grantees contracted with community specialty providers to facilitate referral processes. Prearranged referral relationships ensure smooth transitions for patients at the appropriate level of care and facilitate followup. Cultivating collaboration across systems—such as medical, SUD treatment, mental health service centers, and criminal justice—is important for successful implementation. Most grantees developed referral relationships with a range of community treatment resources to ensure that referrals were appropriate to patients' needs and cultural backgrounds.

## Develop a Recordkeeping Procedure and Evaluation Plan

Patients' participation in SBIRT should be indicated in their records; some programs

### Massachusetts: Mercy Hospital SBIRT Site

#### Cohort 2 State Grantee

SBIRT patients have priority for service at Mercy Hospital. The hospital SBIRT program has working relationships with social workers from other area hospitals and ongoing relationships with SUD treatment providers from western to central Massachusetts. The program is a member of the Western Massachusetts Substance Abuse Providers Association and the Massachusetts Organization for Addiction Recovery. SBIRT staff members have toured many sites to which they refer patients and have met with nearly every admissions director and coordinator for those programs. Referral relationships include local counseling agencies, transitional programs, the Department of Public Health regional office, Healthcare for the Homeless and other nonprofit healthcare sites, detoxification hospitals, and residential substance abuse treatment programs.

attach a colored sticker to the paper record. Patient-level information essential to effective patient care and program evaluation includes:

- Initial screening scores.
- Interventions undertaken.
- Progress notes.
- Referrals made.
- Followup screening scores/outcomes and treatment utilization.
- Physical and mental health symptoms or diagnoses.
- Next scheduled screening.

Evaluation is critical to SBIRT sustainability. Process and outcome evaluations can guide change, encourage staff members, and provide justification to funders. SBIRT program personnel should begin to research evaluation strategies early in the SBIRT implementation process, including considering possible State, regional, and local partners, such as universities. The following organizations or associations provide information about evaluation (see Appendix B):

- American Evaluation Association
- Centers for Disease Control and Prevention
- Innovation Network
- Network for the Improvement of Addiction Treatment

- University of Wisconsin Cooperative Extension course: Enhancing Program Performance with Logic Models
- W. K. Kellogg Foundation

Providing regular feedback of evaluation results to all participating staff members is essential for ongoing improvement of the program and for maintaining staff motivation and commitment to the program. Ongoing feedback *from* staff is also important; it provides information about how the implementation processes are working, identifies problems early in the process, and generates ideas for improvements.

SBIRT grantees typically contracted with external evaluators for monitoring and assessing performance indicators.

## Develop a Funding and Reimbursement Strategy

Funding and reimbursement are critical to SBIRT program success and sustainability. SBIRT program leaders should begin early in the implementation process to identify potential Federal, State, and private funding resources and fully understand public and private insurance reimbursement procedures and issues. Program costs, reimbursement, and sustainability are discussed in Chapter 4.

# Chapter 4—Implementation and Sustainability Issues

## Barriers to and Facilitators of Successful SBIRT Implementation

The cohort 1 cross-site (C1) evaluation team noted three common themes associated with successful screening, brief intervention, brief treatment, and referral to treatment (SBIRT) systems-level program implementation:

- Leadership and positive interagency collaboration
- Provider buy-in
- Favorable setting and contextual factors

### *Leadership and Positive Interagency Collaboration*

Grantees reported that competing missions, values, procedures, and policies in each referral agency led to communication challenges and hindered successful implementation. Grantees noted the following helpful factors to overcome these challenges:

- Positive interagency relationships, including cooperation before and after the implementation, collaboration, communication, and leadership at all levels
- Strong leaders who delivered clear, consistent messages about program goals and values and encouraged communication among key stakeholders
- At least one person at each level who championed SBIRT

### *Provider Buy-in*

Staff resistance to a new program is common. Grantees reported that some generalist providers in medical settings had difficulty shifting their attention from patients'

physical conditions to also focusing on patients' nondependent, risky substance use. Generalists may also be inexperienced in using motivational interviewing techniques and incorporating behavioral health practices in medical care settings. Further, grantees reported that generalist providers were reluctant to add procedures to their already busy schedules.

Grantees indicated the following helpful factors:

- A planning and development phase that is long enough for program directors to elicit and secure the support and cooperation of personnel at all organizational levels
- Staff members at all levels of planning who help obtain support for the program (In particular, grantees noted that support from senior leaders, such as onsite physicians and nurses, was a critical element for success.)
- Standardized staff training

Grantees' experiences provided additional ideas for overcoming staff resistance:

- Teach staff members about alcohol and other substance use disorders (SUDs) and the cost effectiveness and health benefits of SBIRT.
- Provide specific and ongoing training.
- Design programs that minimize the time burden for onsite staff.
- Elicit support from opinion leaders.
- Establish program goals and provide ongoing feedback and incentives to staff members.

- Create in-house, interdisciplinary teams to formulate policies and procedures.
- Use alternative screening procedures, such as electronic screening instruments, that are effective with some populations and save staff time.

### *Contextual Factors*

Grantees noted a number of contextual factors that facilitated SBIRT implementation, including:

- Useful available technology (e.g., video or telephone intervention and treatment services).
- Screening and other data collection tools to supplement existing assessment and/or enhance electronic health records.
- Short screening or prescreening tools.

However, grantees noted a lack of physical space for the delivery of SBIRT services as a barrier to implementation, leading to lack of privacy (e.g., administering the screening in the patient waiting room, hallway, or other public area), particularly in high-volume settings (e.g., emergency departments [EDs], trauma centers). This lack of privacy led to concerns about confidentiality and patients' rights (see Confidentiality, below).

## **Confidentiality**

Privacy can be difficult to maintain in busy healthcare settings, especially in a busy ED with only a curtain separating patients. However, care needs to be taken to provide privacy during screening.

The Federal Health Insurance Portability and Accountability Act (HIPAA) contains strict provisions for guarding patient records, regardless of setting. Another regulation, 42 Code of Federal Regulations (CFR) Part 2, specifically protects the privacy of people seeking treatment for substance abuse. This regulation applies to organizations that provide any type of substance abuse

treatment services in any component of the organization and receive direct or indirect Federal monies (including Medicare or Medicaid). For resources providing more information about 42 CFR Part 2 and HIPAA, see Appendix B.

## **Uniform Accident and Sickness Policy Provision Law**

The Uniform Accident and Sickness Policy Provision Law (UPPL) poses a significant barrier to SBIRT in many States. First enacted in 1947, the law allows insurance companies to deny payments to individuals injured while under the influence of alcohol. To deny reimbursement, the insurer must demonstrate that alcohol to some degree caused the insured person's injury or other medical problem. Recently, several States have moved to repeal these laws, and some States have regulations explicitly prohibiting insurers from denying payment for medical costs resulting from the intoxication of the insured. Some States do not have UPPLs but implicitly allow insurers to use alcohol exclusions by ruling that, in the absence of explicit laws, insurance companies may include alcohol exclusions in policies to limit liability (Fornili & Goplerud, 2006).

Some healthcare providers are reluctant to screen patients for SUDs because they are concerned that the patient's health insurance carrier may deny reimbursement for the visit if an alcohol problem is identified. This may be especially common in EDs because of the risk that insurers will not reimburse for the treatment if the patient was under the influence of alcohol or drugs (Gentilello, Donato, et al., 2005; Rivara, Tollefson, Tesh, & Gentilello, 2000). Gentilello, Donato, et al. (2005) reported that 24 percent of trauma surgeons had encountered an insurance reimbursement denial in the past 6 months because of a patient's alcohol or drug use. Bloss, Chen, and Yi (2008) assessed the frequency of substance abuse identification in EDs and trauma centers in Maryland before and after the State UPPL was repealed.



They found a 20- to 34-percent increase in the frequency of alcohol-related conditions identified after the law was repealed.

UPPL presents a barrier to SBIRT because patients and/or providers may have to absorb the cost of the treatment if substance abuse is identified. At this time, there is no solution to this problem other than working toward repeal in States that have UPPLs. The National Institute on Alcohol Abuse and Alcoholism's Alcohol Policy Information System provides information on States with and without UPPLs (see Appendix B). Anderson, Aromaa, Rosenbloom, and Enos (2008) suggest that when hospital, ED, or trauma center staff dedicated to providing SBIRT services collect information about a patient's substance use (such as during SBIRT screening), the specific information gathered may be protected under 42 CFR Part 2 and may not need to be reported to insurers. If, however, information is collected through medical tests (such as blood alcohol levels or toxicology) to treat the patient, such information is *not* protected from disclosure to insurers. SBIRT providers should obtain legal counsel before establishing policies on UPPL provisions and confidentiality. In any case, patients need to be informed of SBIRT screening and provide their consent to be screened.

## Reimbursement for SBIRT

SBIRT costs vary greatly according to setting, staffing model, and services offered. Looking at staffing models, for example, the C1 evaluation team found that:

- The in-house generalist (IHG) model had the lowest annual operating costs and could most likely be supported by revenues from insurance reimbursement.
- The in-house specialist model could be supported by service-reimbursement revenues if the specialist engages in other (non-SBIRT) revenue-generating activities and if training and administrative management costs are contained.
- The contracted specialist (CS) model is likely to require State or local funds in addition to service reimbursement revenues to be financially viable. The extent to which the CS can engage in non-SBIRT revenue-generating activities greatly influences the model's financial viability.

Reimbursement is available through commercial insurance Current Procedural Terminology (CPT) codes, Medicare G codes, and Medicaid Healthcare Common Procedure Code System (HCPCS) codes.

### *Commercial Insurance and Medicare*

CPT is a numeric coding system maintained by the American Medical Association (AMA). Recognizing the potential health and cost benefits of SBIRT, AMA instituted new healthcare codes specifically for substance abuse screening and brief intervention. Four codes can be used—two are for privately insured patients (99408 and 99409), and two are for Medicare patients (G0396 and G0397). Fees are determined by the duration of the screening and/or brief intervention. A description of the four codes is as follows:

- CPT 99408: Alcohol and/or substance (other than tobacco) abuse structured screening and brief intervention services, 15–30 minutes
- CPT 99409: Alcohol and/or substance (other than tobacco) abuse structured screening and brief intervention services, greater than 30 minutes
- G0396: Alcohol and/or substance (other than tobacco) abuse structured assessment (e.g., Alcohol Use Disorders Identification Test [AUDIT], Drug Abuse Screening Test [DAST]) and brief intervention, 15–30 minutes
- G0397: Alcohol and/or substance (other than tobacco) abuse structured assessment (e.g., AUDIT, DAST) and intervention, greater than 30 minutes

Medicare will instruct its carriers to pay for G0396 and G0397 “only when considered reasonable and necessary.”

Other codes *may* be used for SBIRT reimbursement, such as some codes for:

- Alcohol and drug testing (biologic assays).
- Psychotherapy.
- Health and behavior assessment/intervention.

Additional information regarding Medicare reimbursement is available in the fact sheet, *Substance (Other Than Tobacco) Abuse Structured Assessment and Brief Intervention (SBIRT) Services*. (See Appendix B.)

### *Medicaid and Working With State Medicaid Agencies*

The Centers for Medicare and Medicaid Services Medicaid HCPCS billing codes for screening and brief intervention are:

- H0049: Alcohol and/or drug screening.
- H0050: Alcohol and/or drug services, brief intervention, per 15 minutes.

However, each State must activate or unlock the HCPCS codes. In other words, the State Medicaid agency must *agree* to reimburse for

the services. This process of unlocking codes varies by State. State Medicaid systems are complex, and sustained effort is required to effect change in these systems. The C1 evaluation team found that many grantees underestimated the difficulties of working with their State Medicaid agencies.

Historically, Medicaid did not consider substance abuse a medical issue, and providers may have been resistant to unlocking SBIRT reimbursement codes. However, the Affordable Care Act (ACA; P.L. 111-148, as amended by the Health Care and Education Reconciliation Act of 2010; P.L. 111-152) includes substance use disorders as “one of the ten elements of essential health benefits.” Beginning in 2014, all health insurance sold on Health Insurance Exchanges or provided by Medicaid (to newly eligible adults) will be required to include substance use disorder treatment (Office of National Drug Control Policy, 2012b). These factors require State substance abuse treatment agencies to use strategies that stress the cost benefit of SBIRT and consider political realities. The ACA has created new opportunities for SBIRT across a wide range of healthcare settings, but implementation challenges still exist.

#### **Medicaid Strategies: Washington State SBIRT Program**

##### ***Cohort 1 State Grantee***

Lessons learned from the Washington State SBIRT program suggest several strategies for working with the State Medicaid agency to unlock HCPCS codes for SBIRT (Gelber & O’Neil, 2007):

- Understand how the State Medicaid agency works before attempting to influence it.
- Develop talking points that explain SBIRT as a medically necessary activity.
- Outline practice standards, provider types, and work units.
- Frame arguments in terms of cost benefit or political expediency.
- Do the homework, gather supporting data, and be prepared to perform followup analysis as needed.
- Think broadly—focus on systems change.
- Be prepared to drive the process.
- Have a clear sense of mission.
- Engage those with experience in implementing SBIRT.
- Seek advocates at State and local levels.

## Sustainability: Beyond Reimbursement

The level of insurance reimbursement may not cover all SBIRT costs. More important, not all patients are eligible for reimbursement: the C1 evaluation team found that all sites had a high proportion of SBIRT patients who were uninsured and ineligible for Medicaid. Grantees' financial sustainability efforts include several strategies:

- Accessing State or local funding, including convincing local hospital or treatment agencies to support some services
- Obtaining research and other grant funding for ongoing support
- Changing from a CS model to an IHG model
- Screening for substance use within the context of a broad behavioral health screening protocol
- Placing continuation funding in pending State legislation

The Florida grantee (cohort 2) developed a sustainability guide for its partner agencies that offers the following suggestions for achieving financial sustainability (Florida Brief Intervention and Treatment for Elders [BRITE], 2009):

- Check Substance Abuse and Mental Health Services Administration and Department of Health and Human Services funding announcements.
- Explore State substance abuse program funding (both prevention and treatment).
- Be aware of funding available through local departments of health, education, justice, and corrections.
- Check the Foundation Directory on the Foundation Center Web site (see Appendix B).
- Ask stakeholders for donations and annuities.
- Obtain external fundraising expertise.
- Start a related for-profit or not-for-profit business entity or product line that contributes to programming.

Sustainability entails more than financing. Maintaining staff motivation and program support at the organizational, local, and State levels is crucial. Also critical are effective management, quality assurance, ongoing training, program evaluation, and communication among all involved. Exhibit 4-1 provides a list of eight key elements of sustainability.

**Exhibit 4-1. Key Elements of Sustainability**

Element	Tasks
Vision	<ul style="list-style-type: none"> <li>• Know what is to be sustained: scope of activities, scale of operation, and timeline.</li> <li>• Know how the initiative fits within the larger community.</li> </ul>
Results Orientation	<ul style="list-style-type: none"> <li>• Adopt a results framework.</li> <li>• Clearly state the results to be achieved for the target population.</li> <li>• Use indicators and performance measures to track progress and improve services.</li> </ul>
Strategic Financing Orientation	<ul style="list-style-type: none"> <li>• Determine expected fiscal needs.</li> <li>• Make the best use of existing resources (fiscal and in-kind).</li> <li>• Maximize available sources of revenue.</li> <li>• Create greater flexibility in categorical funding.</li> <li>• Create public-private partnerships.</li> <li>• Monitor announced opportunities for funding.</li> <li>• Explore State and local revenue sources.</li> </ul>



**Exhibit 4-1. Key Elements of Sustainability, continued**

Element	Tasks
Adaptability to Changing Conditions	<ul style="list-style-type: none"> <li>• Consider new ways to frame the work to interest different funders.</li> <li>• Identify opportunities to improve the policy climate.</li> <li>• Participate in collaborative advocacy to encourage change.</li> <li>• Work to improve the organization’s ability to participate in these efforts.</li> </ul>
Broad Base of Community Support	<ul style="list-style-type: none"> <li>• Develop a plan to create a desired identity.</li> <li>• Nurture a community presence and support.</li> <li>• Encourage involvement of clients and recipients of services.</li> <li>• Support public education and engagement.</li> <li>• Build partnerships that foster collaboration rather than competition.</li> </ul>
Key Champions	<ul style="list-style-type: none"> <li>• Identify decisionmakers and opinion leaders.</li> <li>• Develop an effective outreach plan.</li> <li>• Cultivate a broad base of champions: elected officials, business professionals, peers, patients and their families, community leaders, philanthropists.</li> </ul>
Strong Internal Systems	<ul style="list-style-type: none"> <li>• Know and involve the people who carry out the organization’s mission: staff members, board members, volunteers, other interested parties.</li> <li>• Develop strong fiscal management, accounting, information, and personnel procedures.</li> <li>• Use those systems to review strategies and make changes as needed.</li> </ul>
Sustainability Plan	<ul style="list-style-type: none"> <li>• Develop a comprehensive plan that takes into account short- and long-term needs.</li> <li>• Identify challenges and barriers and address them.</li> <li>• Identify strategies to obtain needed resources.</li> <li>• Identify and communicate with key partners.</li> </ul>

Adapted from Florida BRITE (2009).

# Chapter 5—Case Examples: The Substance Abuse and Mental Health Services Administration SBIRT Grantee Experience

This chapter discusses the experiences of the cohort 1 grantees. The cohort 1 programs were both geographically and clinically diverse. Geographically, they spanned from the East Coast to the West Coast of the United States and represented a range of communities (e.g., rural, urban). Clinically, they differed in the types of screening instruments used, the types of professionals who performed screening and offered brief treatment (BT), and the number of BT sessions offered. Clinical settings differed as well, ranging from community health centers, Indian Health Service clinics, and primary care clinics, to hospital emergency departments (EDs) and ED trauma centers.

## Washington State Screening, Brief Intervention, Referral, and Treatment

### *Program Overview*

The Washington State Screening, Brief Intervention, Referral, and Treatment (WASBIRT) program was part of the Substance Abuse and Mental Health Services Administration's (SAMHSA's) cohort 1 cooperative agreement and was implemented in 2004. WASBIRT placed 27 substance use disorder (SUD) professionals in 9 of Washington State's busiest hospital EDs to provide frontline screening and early identification of substance abuse treatment needs. In the past, the State had difficulty identifying individuals with SUDs and providing them with access to prompt treatment. Furthermore, individuals seeking treatment encountered waiting lists.

This project was operated by the State's Department of Social and Health

Services' Health and Recovery Services Administration. The goals of the WASBIRT program were to:

- Improve identification of patients coming to the ED with SUDs.
- Conduct screening and brief interventions (BIs) in the ED.
- Deliver BT on an outpatient basis at certified treatment centers.
- Increase referrals of people needing specialty treatment.
- Reduce ED utilization, medical costs, criminal behavior, substance-related disability, and death of patients with alcohol or drug problems.
- Improve links between hospitals and treatment services and expand services to include early intervention.

### *The Process*

In the first 18 months, SUD treatment professionals used the Alcohol Use Disorders Identification Test (AUDIT) to screen more than 27,000 patients for substance use problems. Forty-six percent of patients had positive screening results for substance use problems. Patients with positive results received BIs or were referred for followup treatment. About one-third of patients approached declined to participate, were too ill, or did not meet the selected criteria (e.g., were too young, spoke a language for which the program did not have the capacity to translate, were in police custody). Five percent of patients had two screening sessions, and 1 percent had three or more sessions during the year. Depending on screening results, patients were screened out, provided BIs, referred for assessment and

brief therapy, or referred for assessment and possibly full substance abuse treatment.

### Program Implementation

Program leadership developed educational tools for State hospital trauma coordinators, enabling consistent training across the nine sites. Program staff conducted site visits and provided train-the-trainer sessions.

An in-house generalist, such as the trauma coordinator, led the program at each site. These generalists supervised the counselors who performed the screening. At each site, a BI group directed policy and procedure development and implementation. This group included:

- ED clinician
- ED case manager
- Hospital case manager/social worker
- Trauma coordinator
- Trauma medical director
- Trauma billing representative
- Chaplain services

### Implementation Challenges

WASBIRT encountered some implementation obstacles, such as limited resources for assistance, busy schedules, and pushback from some provider groups. To overcome these obstacles, the program identified and positioned regional program representatives who provided additional training to staff members. This training convinced ED staff of SBIRT's usefulness. Support from service directors and trauma medical directors was crucial in facilitating implementation.

### Six-Month Followup Survey

During the baseline screening survey at admission to the ED, patients who received a BI and/or a referral to further treatment were randomly selected for a followup survey even if they did not engage in further

treatment. The counselor obtained patient contact information; then interviewers used administrative records to update and supplement the information of patients who gave permission to use their personal records in the study. A staff member sent a reminder letter 1 week before the followup interview. An interviewer then attempted to contact the person over a 3-month period, using telephone calls and letters to the patient's alternate contacts as necessary.

Between April 2004 and March 2006, WASBIRT screened 34,762 patients. SBIRT professionals provided at least a BI to 52 percent of these patients based on their screening results. Of the more than 15,000 patients who received at least a BI, 2,648 were randomly selected for followup telephone interviews 6 months after the intervention. Of those, 78 percent completed the survey.

The effects of receiving BIs on subsequent substance use were positive. The average days of reported recent alcohol and drug use declined, and abstinence rates increased. Among patients who received *at least* a BI, substance use reported in the 6-month followup interview changed significantly compared with use reported at screening:

- Of 1,398 patients who drank alcohol, 80 percent reduced the number of drinking days (in the past 30 days), with the overall average declining from 10.4 to 5.3 days ( $p < 0.05$ ).
- The percentage of patients reporting abstinence from alcohol in the past 30 days increased from 28 percent to 47 percent ( $p < 0.05$ ).
- Of 857 patients who reported binge drinking (five or more drinks in one sitting in the last 30 days), 87 percent reduced the number of heavy drinking days, with the average declining from 10.1 to 2.9 days ( $p < 0.05$ ).
- Of 878 patients who reported drug use in the past 30 days, 84 percent reduced the number of days of use, with the overall

average declining from 13.7 to 6.5 days ( $p < 0.05$ ).

- The percentage of patients reporting abstinence from illicit drugs in the past 30 days increased from 55 percent to 71 percent ( $p < 0.05$ ).
- Among patients with a high risk for SUDs, declines in alcohol use and in illegal drug use were significantly greater for those who received BT or more intensive SUD treatment than for those who received only BI.
- Illegal drug use declined among high-risk patients who used marijuana, cocaine, methamphetamine, and heroin or other opioids ( $p < 0.05$ ).
- Among high-risk patients who used marijuana, cocaine, or methamphetamine, declines in overall drug use were greater for those who also received BT or substance abuse treatment than for those who received only BI ( $p < 0.05$ ).

## New Mexico Human Services Department, Behavioral Health Services Division

### Program Overview

In partnership with Sangre de Cristo Community Health Partnership (SDCCHP), the New Mexico Human Services Department, Behavioral Health Services Division, used SAMHSA funds to establish a statewide SBIRT program focusing on bringing integrated behavioral health and medical care services to minority populations in rural areas. Begun in 2004, the program in New Mexico gradually expanded the model to include school-based health centers, public health offices, Indian Health Service units, and 1 rural hospital, for a total of 34 sites.

### The Process

SBIRT activities were conducted by 24 master's-level behavioral health consultants (BHCs). A clinical director and four regional

supervisors provided supervision. Fidelity was established through regularly scheduled clinical supervision (both onsite and via teleconference) and continuous training of BHCs.

### Program Implementation

The program provided pre-implementation training in motivational interviewing (MI) and the community reinforcement approach (CRA) to BHCs. A basic training module for clinic providers was developed that explained the purpose of SBIRT, the work of the health consultants, and approaches to integrating SBIRT services into the primary care services.

The program emphasized early screening and intervention at rural community-level sites, such as community-based primary care clinics, which were trusted by the community. Program officials hoped that the use of established and trusted sites would increase the comfort level of individuals being screened.

BI was provided immediately to all patients who had a positive screening result. BHCs provided feedback to patients about their scores and engaged patients in conversations about their health. The BT consisted of 6 to 10 sessions of CRA. Those at very high risk were referred by BHCs for intensive treatment to specialized community agencies.

New Mexico's SBIRT program also implemented a statewide Telehealth Initiative that provides telecommunication equipment and connection to 20 rural partner sites. This infrastructure provides supervision, training, and consultant support to BHCs throughout the State. The New Mexico program faced numerous implementation challenges, including serving several diverse populations and meeting their needs in many large rural areas.

### *Choosing and Cultivating Collaborators*

Lessons learned from New Mexico's SBIRT program suggest that partnering organizations should be assessed for their readiness to change, most notably having the support of key managers within agencies and from staff members at all levels. New Mexico hosted an orientation meeting for potential partners to determine which organizations could participate. Each potential partner organization was asked to complete an Organizational Readiness Questionnaire developed by the Texas Christian University Institute of Behavioral Research.

New Mexico's recommendations for cultivating partnerships include the following:

- Use collaboration to select the appropriate screening tools. Consider differences in populations being served and staff and patient time constraints.
- Hold regularly scheduled meetings and training sessions.
- Develop memoranda of agreement between partner sites and SBIRT management that specify roles, responsibilities, program targets, and outcomes.
- Obtain support from clinic staff at all levels at each site. Seek staff input on organization and program changes.
- Use financial incentives—To improve cooperation, the New Mexico grantee offered \$20 to patients who completed the followup.

### *Flexibility and Fidelity*

Although New Mexico's SBIRT implementation team recognized the need to adapt to regional and cultural differences, staff members found working in a clinic environment challenging. They revised the implementation plan to better meet the needs of different settings, situations, tribal cultures, and staff backgrounds and attitudes.

The initial protocol also called for a 1- to 2-minute transfer in which the clinic's physician introduced the patient to the BHC. In busy clinics, however, this was not feasible, so a very brief introduction was substituted.

### *Staff Training*

New Mexico's SBIRT program hired master's-level mental health counselors and social workers as BHCs. Most BHCs did not have SUD treatment experience, requiring ongoing training and supervision by the SBIRT clinical director and regional clinical supervisors. New employees were trained in MI, CRA, or both. New Mexico's SBIRT program invested significantly in the training and clinical supervision of its clinical staff. Because acquiring new skills, such as MI, requires ongoing support and feedback, the training process allowed for practice, continual followup, and reinforcement. The program developed training tools that included tapes and checklists.

### *Working With Native American Populations*

New Mexico's SBIRT program worked with three clinics operated by the Taos Pueblo, Jicarilla Apache, and Zuni Tribes. Although the contractual relationship was the same across the three tribes, the level of staffing varied by site. Working at these sites required coordination with two additional organizations, each with its own culture and requirements—the Indian Health Service and the specific Native American tribal council.

### *Contractual Relationships*

In 2003, the New Mexico Governor's Office restructured the State's behavioral health services. Under the new system, ValueOptions New Mexico (VONM) serves as the funding passthrough entity for Federal behavioral health grant dollars. In July 2005, VONM assumed responsibility for contract oversight of the New Mexico SBIRT grant.



New Mexico’s decision to implement its project through a contractual agreement with an independent agency (i.e., SDCCHP) had significant advantages. The agreement:

- Allowed for rapid implementation; the project was running within 4 months.
- Eliminated the need to work through State bureaucratic systems, allowing for the quick hiring of staff.
- Offered the flexibility to implement SBIRT at different sites simultaneously.
- Freed program staff to develop and implement the Telehealth network and psychiatric consultation services through the University of New Mexico’s Office of Rural Psychiatry.
- Allowed for the centralization of project and patient data at the SDCCHP office, supporting easy and timely access to data.

Of the 1,817 individuals reporting some high-risk level of substance use, at 6-month followup:

- Forty-seven percent of the patients had decreased their alcohol use, and 29 percent reported a decrease in drug use.
- There was a 58-percent increase in patients reporting no alcohol or drug use.
- The number of days of drinking to intoxication significantly decreased from an average of 4.75 days at intake to 3.35 days at followup, a mean change of 1.4 days ( $p<0.01$ ).
- The number of days of drug use decreased from a mean of 5.11 days at intake to a mean of 2.62 days at followup, a mean change of 2.5 days ( $p<0.01$ ).

### *Six-Month Followup Survey*

Data compiled over 20 months indicate more than 19,000 patients in New Mexico were screened. Some 1,817 patients reported high-risk levels of substance use and received onsite BIs and BTs from SBIRT BHCs. Of these 1,817 individuals, 1,148 scored at “moderate risk” for alcohol- and drug-related problems, 576 patients scored at “high risk” for problems, and 93 scored at “very high risk” for problems.

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# Appendix B—Resources

## Documents About SBIRT

*Alcohol Screening and Brief Intervention: A Guide for Public Health Practitioners* (2008). American Public Health Association, Education Development Center, Inc., National Highway Traffic Safety Administration, U.S. Department of Transportation.

*Alcohol Screening and Brief Intervention (SBI) for Trauma Patients: Committee on Trauma Quick Guide* (2007). Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services.

Pennsylvania Screening, Brief Intervention, and Referral to Treatment Web site  
<http://www.ireta.org/sbirt>

*A Pocket Guide for Alcohol Screening and Brief Intervention* (2005). National Institute on Alcohol Abuse and Alcoholism, National Institutes of Health, U.S. Department of Health and Human Services.

*Screening & Brief Intervention: Making a Public Health Difference* (2008). Boston: Join Together.

*Screening and Brief Intervention (SBI) for Unhealthy Alcohol Use: A Step-by-Step Implementation Guide for Trauma Centers* (2009). John Higgins-Biddle, Dan Hungerford, and Kathryn Cates-Wessel, Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. Available at:  
<http://www.cdc.gov/InjuryResponse/alcohol-screening/pdf/SBI-Implementation-Guide-a.pdf>

*Screening for Drug Use in General Medical Settings: Quick Reference Guide* (2009). National Institute on Drug Abuse, National Institutes of Health, U.S. Department of Health and Human Services.

Substance Abuse and Mental Health Services Administration's Screening, Brief Intervention, and Referral to Treatment Web site  
<http://www.samhsa.gov/prevention/sbirt/>

## Reimbursement and Sustainability

*Coding, Billing and Reimbursement Manual* (2010). Wisconsin Initiative to Promote Healthy Lifestyles. Available at:  
[http://www.wiphl.com/uploads/media/SBIRT\\_Manual.pdf](http://www.wiphl.com/uploads/media/SBIRT_Manual.pdf)

The Foundation Center Web site  
<http://foundationcenter.org>

*Implementing Change in Substance Abuse Treatment Programs* (2009). Technical Assistance Publication 31. Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration. Available at: <http://store.samhsa.gov/product/TAP-31-Implementing-Change-in-Substance-Abuse-Treatment-Programs/SMA09-4377>

*Introduction to Sustainability of Screening, Brief Intervention, Referral and Treatment (SBIRT) Services* (2009). Florida Brief Intervention and Treatment for Elders. Available at: <http://brite.fmhi.usf.edu/BRITEIntrotoSustainability2009.pdf>

The Substance Use Disorder Calculator  
Ensuring Solutions to Alcohol Problems, George Washington University Medical Center  
<http://www.alcoholcostcalculator.org/sub/payment/>

*Substance (Other Than Tobacco) Abuse Structured Assessment and Brief Intervention (SBIRT) Services* [Fact Sheet]. Available at: [http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/SBIRT\\_Factsheet\\_ICN904084.pdf](http://www.cms.gov/Outreach-and-Education/Medicare-Learning-Network-MLN/MLNProducts/downloads/SBIRT_Factsheet_ICN904084.pdf)

## **Training**

Addiction Technology Transfer Center Network  
<http://www.attcnetwork.org/learn/topics/motivation/>

Alcohol Education: Clinical Skills Training for Health Professionals  
<http://www.larasig.com/alcohol>

Alcohol Screening and Brief Intervention Curriculum  
Alcohol Clinical Training, Boston Medical Center and Boston University Schools of Medicine and Public Health  
<http://www.bu.edu/act/mdalcoholtraining/index.html>

Motivational Interviewing Network of Trainers  
<http://www.motivationalinterviewing.org/>

SBIRT Training and Consulting  
The BNI ART Institute, Boston University School of Public Health.  
<http://www.ed.bmc.org/sbirt/services.php>

## **Program Evaluation Resources**

American Evaluation Association  
<http://www.eval.org>

Centers for Disease Control and Prevention  
<http://www.cdc.gov/eval>

Innovation Network  
[http://www.innonet.org/?section\\_id=4&content\\_id=16](http://www.innonet.org/?section_id=4&content_id=16)

Network for the Improvement of Addiction Treatment  
<https://www.niatx.net/Home/Home.aspx>

University of Wisconsin Cooperative Extension course: Enhancing Program Performance with Logic Models  
<http://www.uwex.edu/ces/lmcourse>

W. K. Kellogg Foundation  
<http://www.wkkf.org/knowledge-center/resources/2006/02/WK-Kellogg-Foundation-Logic-Model-Development-Guide.aspx>

## Brief Intervention/Brief Treatment

*Brief Intervention for Hazardous and Harmful Drinking: A Manual for Use in Primary Care* (2001). Thomas F. Babor and John C. Higgins-Biddle, World Health Organization. Available at: [http://whqlibdoc.who.int/hq/2001/WHO\\_MSD\\_MSB\\_01.6b.pdf](http://whqlibdoc.who.int/hq/2001/WHO_MSD_MSB_01.6b.pdf)  
In Spanish: [http://www.who.int/substance\\_abuse/activities/en/BImanualSpanish.pdf](http://www.who.int/substance_abuse/activities/en/BImanualSpanish.pdf)

*Brief Interventions and Brief Therapies for Substance Abuse* (1999).  
Treatment Improvement Protocol 34. Center for Substance Abuse Treatment, Substance Abuse and Mental Health Services Administration.

Brief Negotiated Interview  
<http://www.bu.edu/bniart/sbirt-in-health-care/sbirt-brief-negotiated-interview-bni/>

Motivational Interviewing Web site  
<http://www.motivationalinterview.org>

## Referral to Treatment

National Tobacco Quitlines  
<http://www.smokefree.gov/expert.aspx>

SAMHSA Behavioral Health Treatment Services Locator  
<http://findtreatment.samhsa.gov>

State Substance Abuse Agencies  
<http://findtreatment.samhsa.gov/TreatmentLocator/faces/abuseAgencies.jspx>

## Confidentiality

*Applying the Substance Abuse Confidentiality Regulations 42 CFR Part 2 (Revised)*. Available at: [http://www.samhsa.gov/about/laws/SAMHSA\\_42CFRPART2FAQII\\_Revised.pdf](http://www.samhsa.gov/about/laws/SAMHSA_42CFRPART2FAQII_Revised.pdf)

*The Confidentiality of Alcohol and Drug Abuse Patient Records Regulation and the HIPAA Privacy Rule: Implications for Alcohol and Substance Abuse Program*. Available at: <http://www.samhsa.gov/HealthPrivacy/docs/SAMHSAPart2-HIPAAComparison2004.pdf>

*Frequently Asked Questions: Applying the Substance Abuse Confidentiality Regulations to Health Information Exchange (HIE)*. Available at: <http://www.samhsa.gov/healthprivacy/docs/ehr-faqs.pdf>

National Institute on Alcohol Abuse and Alcoholism's Alcohol Policy Information System  
<http://www.alcoholpolicy.niaaa.nih.gov>

# Appendix C—State Grantees by Cohort

## **Cohort 1 (2003–2008)**

California

Cook Inlet Tribal Council

Illinois

New Mexico

Pennsylvania

Texas

Washington

## **Cohort 2 (2006)**

Colorado

Florida

Massachusetts

Wisconsin

## **Cohort 3 (2008)**

Alaska (Tanana Chiefs Conference)

Georgia

Michigan

West Virginia

## **Cohort 4 (2011)**

American Samoa

Colorado

Connecticut

Illinois

Indiana

New York

North Carolina

Tennessee

Washington



# Appendix D—SBIRT Initiative Cohort 1 State Cooperative Agreement Grantees

## California Department of Alcohol and Drug Programs

Population and Settings	Screening	Brief Intervention	Brief Treatment	Program Features
<p><b>Who:</b> Adults</p> <p><b>Where:</b> Community health center and hospital emergency departments (EDs) (including burn and trauma units)</p> <p><b>SBIRT Web site:</b> <a href="http://www.ethicodewebdesign.com/examples/casbirt/">http://www.ethicodewebdesign.com/examples/casbirt/</a></p>	<p><b>Who:</b> <i>Prescreening</i> by hospital intake employees</p> <p><i>Screening</i> by peer health educators trained and monitored by the San Diego State University Center for Alcohol and Other Drug Studies and Services</p> <p><b>What:</b> Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST)</p>	<p><b>Who:</b> Peer health educators (bachelor's degree or higher)</p> <p><b>What:</b> Feedback, Responsibility, Advice, Menu, Empathy, Self-Efficacy (FRAMES) and motivational interviewing (MI)</p>	<p><b>Who:</b> SBIRT-trained certified counselors (master's or Ph.D. level)</p> <p><b>What:</b> 6 to 12 sessions, in person or by phone</p> <p>MI and cognitive-behavioral techniques</p>	<p>Bilingual health educators and alcohol/drug counselors</p> <p>English/Spanish interpretation for medical staff and patients</p> <p>Referrals/transport of intoxicated patients to sobering stations</p>

## Cook Inlet Tribal Council (CITC), Alaska, With the Southcentral Foundation

Population and Settings	Screening	Brief Intervention	Brief Treatment	Program Features
<p><b>Who:</b> Adults and adolescents (largely rural)</p> <p><b>Where:</b> Primary care family health clinics and generalist community settings</p> <p><b>SBIRT Web site:</b> None</p>	<p><b>Who:</b> Certified medical assistants or licensed practical nurses trained in SBIRT</p> <p><b>What:</b> Alcohol Use Disorders Identification Test (AUDIT) and one drug use question in conjunction with other health screening</p>	<p><b>Who:</b> Onsite SBIRT specialist</p> <p><b>What:</b> MI, FRAMES, and basic alcohol/drug education</p>	<p><b>Who:</b> SBIRT-trained counselors</p> <p><b>What:</b> 6 to 8 MI sessions and community reinforcement approach (CRA)</p>	<p>Pretreatment groups, one-on-one counseling, and case management for up to 6 months for patients on specialty substance use disorder treatment waiting lists</p> <p>An assessment instrument developed by CITC based on 9 years of working with the Alaska Native population; supplemental questions enhance cultural appropriateness and relevance</p> <p>SBIRT services marketed via press releases, newspaper ads, and radio broadcasts</p>

## Illinois Office of the Governor

Population and Settings	Screening	Brief Intervention	Brief Treatment	Program Features
<p><b>Who:</b> Adults</p> <p><b>Where:</b> County Bureau of Health Services hospitals (EDs, clinics), Federally Qualified Health Centers</p> <p><b>SBIRT Web site:</b>  <a href="http://www.dhs.state.il.us/page.aspx?item=47893">http://www.dhs.state.il.us/page.aspx?item=47893</a></p>	<p><b>Who:</b> Contracted health counselors (most certified alcohol and drug counselors)</p> <p><b>What:</b> A single question about alcohol use (recommended by the National Institute for Alcohol Abuse and Alcoholism [NIAAA]), a single question about illicit drug use, and a single question about tobacco use</p>	<p><b>Who:</b> Contracted health counselors (most certified alcohol and drug counselors)</p> <p><b>What:</b> Up to six 15–30-minute sessions; FRAMES</p>	<p><b>Who:</b> Participating Illinois-licensed substance use disorder treatment providers</p> <p><b>What:</b> Varies by provider</p>	<p>A centralized SBIRT treatment referral coordinator</p> <p>The Great Lakes Addiction Technology Transfer Center provides training and monitoring of screening and brief intervention (BI) clinicians</p> <p>Community peer mentors work with health counselors and generalist healthcare staff (Community peer mentors are volunteers who have successfully recovered from substance dependence and are recruited, trained, and supervised by professional staff)</p>

## New Mexico Department of Health

Population and Settings	Screening	Brief Intervention	Brief Treatment	Program Features
<p><b>Who:</b> Adults and adolescents</p> <p><b>Where:</b> Primary care clinics, Indian Health Service clinics, public health offices, and high school-based health centers</p> <p><b>SBIRT Web site:</b> None</p>	<p><b>Who:</b> Nurse or medical assistant</p> <p><b>What:</b>  <i>Adults:</i> Personal Health Profile, the Substance Abuse Subtle Screening Inventory, AUDIT-AID (AUDIT Adapted for Illicit Drug Use), and the Mental Health Screening Form III</p> <p><i>Adolescents:</i> Healthy Lifeways Questionnaire; Car, Relax, Alone, Forget, Family or Friends, Trouble (CRAFFT); and the Depression Identification and Treatment Protocol</p>	<p><b>Who:</b> Referrals to BI made by licensed behavioral health counselors, primary care providers, and promoters (community health workers/case managers)</p> <p><b>What:</b> Brief MI</p>	<p><b>Who:</b> Behavioral health counselors (master's-level and/or licensed alcohol and drug abuse counselors)</p> <p><b>What:</b>  <i>Adults:</i> Treatment protocols and modalities based on brief cognitive-behavioral therapy and brief strategic interactional therapies</p> <p><i>Adolescents:</i> CRA and the Alcohol Treatment Targeting Adolescents in Need model</p>	<p>Telehealth technology is used for conducting patient clinical interviews and counseling at more than 20 telehealth sites</p> <p>Regularly scheduled televideo psychiatric consultation support and training via contract with University of New Mexico Department of Psychiatry</p>

## Pennsylvania Department of Health

Population and Settings	Screening	Brief Intervention	Brief Treatment	Program Features
<p><b>Who:</b> Adults</p> <p><b>Where:</b> Community-based clinics and hospital outpatient clinics and ED trauma centers</p> <p><b>SBIRT Web site:</b> None</p>	<p><b>Who:</b> Paraprofessional healthcare professionals</p> <p><b>What:</b> Health Behavior Assessment and AUDIT (as indicated)</p>	<p><b>Who:</b> Licensed healthcare professionals</p> <p><b>What:</b> 3–5 minutes of brief advice to a 1-hour BI conducted in person or via the telephone, provided at one time or over several visits as the patient attends followup care</p> <p>Five essential components: assessment, goal-setting, behavior modification, self-help information, and followup</p>	<p><b>Who:</b> Licensed healthcare professionals</p> <p><b>What:</b> MI and cognitive-behavioral therapy provided at the generalist site or via an active and facilitated referral to a community treatment provider</p>	<p>Paraprofessional healthcare specialists employed by the Single County Authority for each of the four counties served, supervised by a county coordinator</p>



## Texas Department of State Health Services (InSight)

Population and Settings	Screening	Brief Intervention	Brief Treatment	Program Features
<p><b>Who:</b> Adults and adolescents</p> <p><b>Where:</b> Community health clinics, school-based clinics, and hospital settings</p> <p><b>SBIRT Web site:</b> None</p>	<p><b>Who:</b> Nurses, medical assistants, patient care technicians, or physicians (<i>prescreening</i>)</p> <p><b>What:</b> NIAAA quantity and frequency question, single substance use question related to drug use, the CAGE-AID (CAGE Questions Adapted to Include Drugs), and a tobacco use question</p>	<p><b>Who:</b> InSight specialists (vocational nurses, registered nurses, and counselors)</p> <p><b>What:</b> Further screening using AUDIT and the Drug Abuse Screening Test (DAST)</p> <p>BI using the FRAMES model</p>	<p><b>Who:</b> InSight specialists (vocational nurses, registered nurses, and counselors)</p> <p><b>What:</b> Up to 12 treatment sessions of motivational enhancement therapy</p>	<p>InSight specialists employed by the Harris County Hospital District, trained and supervised by collaborators within clinical departments at Baylor College of Medicine and research/technology centers in the University of Texas system</p>

## Washington Department of Social and Health Services

Population and Settings	Screening	Brief Intervention	Brief Treatment	Program Features
<p><b>Who:</b> Adults</p> <p><b>Where:</b> Hospital EDs</p> <p><b>SBIRT Web site:</b> <a href="http://www.kingcounty.gov/healthservices/SubstanceAbuse/Services/Intervention/WASBIRT.aspx">http://www.kingcounty.gov/healthservices/SubstanceAbuse/Services/Intervention/WASBIRT.aspx</a></p>	<p><b>Who:</b> Hospital-based chemical dependence professionals</p> <p><b>What:</b> AUDIT and DAST-10</p>	<p><b>Who:</b> Hospital-based chemical dependence professionals</p> <p><b>What:</b> MI</p>	<p><b>Who:</b> Chemical dependency professionals at local treatment agencies</p> <p><b>What:</b> 1 to 12 sessions</p>	<p>Involvement of chemical dependence professionals at every level of service provides for increased clinical expertise at each point of contact</p> <p>Linkages between screening sites and community provider agencies allow for seamless transition of patients from screening to BI, to brief treatment, to traditional chemical dependency services</p>

# Appendix E—Selected Screening Instruments

Instrument	Population(s)	Description	Access/More Information
Alcohol, Smoking, and Substance Involvement Screening Test (ASSIST)	Adults, Adolescents	An 8-item screening tool developed for the World Health Organization (WHO) by an international group of substance abuse researchers to detect and manage substance use and related problems in primary and general medical care settings. Includes a patient feedback report card. Available in several languages.	<a href="http://www.who.int/substance_abuse/activities/assist/en">http://www.who.int/substance_abuse/activities/assist/en</a>  <i>The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST): Manual for Use in Primary Care</i> (Humeniuk et al., 2010)
Alcohol Use Disorders Identification Test (AUDIT)	Adults, Adolescents	A 10-item screening tool developed by WHO to identify persons whose alcohol consumption has become hazardous or harmful to their health. Available in English-, Spanish-, and Slovenian-language versions.	<a href="http://www.who.int/substance_abuse/activities/sbi/en/index.html">http://www.who.int/substance_abuse/activities/sbi/en/index.html</a>  <i>AUDIT: The Alcohol Use Disorders Identification Test Guidelines for Use in Primary Care, Second Edition</i> <a href="http://whqlibdoc.who.int/hq/2001/WHO_MSD_MSB_01.6a.pdf">http://whqlibdoc.who.int/hq/2001/WHO_MSD_MSB_01.6a.pdf</a>
AUDIT-C	Adults	The first 3 questions of AUDIT (those that focus on alcohol consumption).	<a href="http://www.hepatitis.va.gov/provider/tools/audit-c.asp#S1X">http://www.hepatitis.va.gov/provider/tools/audit-c.asp#S1X</a>
CAGE (Cut down, Annoyed, Guilty, Eye-opener)	Adults (people older than age 16)	A 4-item, nonconfrontational questionnaire for detecting alcohol problems. Questions are usually phrased as “have you ever” but may also focus on present alcohol problems.	<a href="http://pubs.niaaa.nih.gov/publications/inscage.htm">http://pubs.niaaa.nih.gov/publications/inscage.htm</a>
CRAFFT (Car, Relax, Alone, Forget, Family or Friends, Trouble)	Adolescents	A 6-item screening instrument. Test covers alcohol and drugs and situations that are relevant to adolescents.	<a href="http://www.projectcork.org/clinical_tools/pdf/CRAFFT.pdf">http://www.projectcork.org/clinical_tools/pdf/CRAFFT.pdf</a>

## Appendix E—Selected Screening Instruments continued

Instrument	Population(s)	Description	Access/More Information
Drug Abuse Screening Test (DAST)	Adults	A 20- and 28-item adaptation of the Michigan Alcohol Screening Test (MAST) to detect consequences related to drug abuse without being specific about the drug, thus alleviating the necessity of using different instruments specific to each drug.	20-item instrument: <a href="http://adai.washington.edu/instruments/pdf/Drug_Abuse_Screening_Test_105.pdf">http://adai.washington.edu/instruments/pdf/Drug_Abuse_Screening_Test_105.pdf</a>  28-item instrument: <a href="http://www.projectcork.org/clinical_tools/html/DAST.html">http://www.projectcork.org/clinical_tools/html/DAST.html</a>
DAST-A	Adolescents	A 28-item DAST for adolescents	<a href="http://www.dbhds.virginia.gov/documents/scrn-adol-DAST-A-Instrument.pdf">http://www.dbhds.virginia.gov/documents/scrn-adol-DAST-A-Instrument.pdf</a>
Fagerstrom Test for Nicotine Dependence	Adults	A 6-item test evaluating cigarette consumption, the compulsion to use, and dependence. Screens for nicotine dependence. Severity rating can be used for treatment planning.	<a href="http://www.tobaccofree.org/facts_figures/documents/Fagerstrom-Nicotine-Dependence-Test.pdf">http://www.tobaccofree.org/facts_figures/documents/Fagerstrom-Nicotine-Dependence-Test.pdf</a>
Michigan Alcohol Screening Test (MAST)	Adults, Adolescents, Seniors	A 25-item instrument providing a general measure of lifetime alcohol problem severity that can be used for choosing treatment intensity and guiding inquiry into alcohol-related problems. A 13-item version (Short MAST) and geriatric version (MAST-G) are available.	Original MAST (Selzer, 1971)  13-item Short MAST: <a href="http://www.projectcork.org/clinical_tools/html/ShortMAST.html">http://www.projectcork.org/clinical_tools/html/ShortMAST.html</a>  MAST-G: <a href="http://www.ssc.wisc.edu/wlsresearch/pilot/P01-R01_info/aging_mind/Aging_AppB5_MAST-G.pdf">http://www.ssc.wisc.edu/wlsresearch/pilot/P01-R01_info/aging_mind/Aging_AppB5_MAST-G.pdf</a>
NIDA Drug Use Screening Tool	Adults	A 1- to 7-question screening tool adapted by the National Institute on Drug Abuse from the WHO's ASSIST.	<a href="http://www.drugabuse.gov/nidamed/nmassist">http://www.drugabuse.gov/nidamed/nmassist</a>
TWEAK (Tolerance, Worried, Eye-openers, Amnesia, [K] Cut down)	Adults, Pregnant women	A 5-item scale to screen for risky drinking.	<a href="http://adai.washington.edu/instruments/pdf/TWEAK_252.pdf">http://adai.washington.edu/instruments/pdf/TWEAK_252.pdf</a>