

Physical and Behavioral Health Integration Design Committee

February 10, 2016; 1:30 – 4:00 PM
Navos-Revelle Hall,
1210 SW 136th St, Burien, WA 98166

Goals for Meeting:

- Learn about some of the key elements to provide behavioral health care services in a primary care setting;
 - Discuss common themes and identify components the committee thinks are important in designing a model for our community
-

Agenda

- | | |
|---|----------------|
| 1. Welcome & Introductions
<i>Susan McLaughlin, King County Department of Community and Human Services</i> | 1:30 – 1:35 pm |
| 2. Updates
<i>All</i> | 1:35 – 1:45 pm |
| 3. Primary Care Settings & Integrating Behavioral Health Care
<i>Stacy Fennell, Child and Family Medical Services Director, Sea Mar
Evan Oakes, Medical Director & Cara Dalbey, Lead Behavioral Health Consultant, HealthPoint
Laura Collins, Psychiatry Administrator, Harborview Medical Center</i> | 1:45 – 2:30 pm |
| 4. Facilitated Discussion
<i>Anne Shields, University of Washington AIMS Center; Group</i> | 2:30 – 3:45 pm |
| 5. Wrap Up & Next Steps
<i>Susan McLaughlin, King County Department of Community and Human Services</i> | 3:45 – 4:00 pm |
| 6. Adjourn | 4:00 pm |

Next Meeting: March 9th; 1:30 PM - 4 PM
Navos-Revelle Hall
1210 SW 136th St.
Burien, WA 98166

Integrating Behavioral Health into Primary Care

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Abstract

Depression is one of the more common diagnoses encountered in primary care, and primary care in turn provides the majority of care for patients with depression. Many approaches have been tried in efforts to improve the outcomes of depression management. This article outlines the partnership between the University of Washington (UW) Neighborhood Clinics and the UW Department of Psychiatry in implementing a collaborative care approach to integrating the management of anxiety and depression in the ambulatory primary care setting. This program was built on the chronic care model, which utilizes a team approach to caring for the patient. In addition to the patient and the primary care provider (PCP), the team included a medical social worker (MSW) as care manager and a psychiatrist as team consultant. The MSW would manage a registry of patients with depression at a clinic with several PCPs, contacting the patients on a regular basis to assess their status, and consulting with the psychiatrist on a weekly basis to discuss patients who were not achieving the goals of care. Any recommendation (eg, a change in medication dose or class) made by the psychiatrist was communicated to the PCP, who in turn would work with the patient on the new recommendation. This collaborative care approach resulted in a significant improvement in the number of patients who achieved care plan goals. The authors believe this is an effective method for health systems to integrate mental health services into primary care. (*Population Health Management* 2015;xx:xxx-xxx)

Introduction

DEPRESSION REMAINS ONE OF the most common mental health conditions in the United States, with between 13.1 and 14.2 million patients experiencing an episode of major depression each year.¹ The overall disease burden from major depression has increased 43% between 1990 and 2010, such that it is now the second leading cause of disability and the fifth leading cause of overall disease burden in the United States.² Fewer than 20% of depressed patients are seen by a psychiatrist or psychologist; the majority of these patients are seen in primary care settings.³ Despite attempts at medication treatment and occasional referral for specialty consultation, only about 25% of patients improve.⁴ Although many of these nonresponders may be thought to have treatment-resistant depression, it is likely that the legacy approach to the management of these patients is a significant part of the problem.⁵ The Triple Aim proposed for accountable care (better outcomes,

better patient experience, and lower cost) is a stimulus for examining new approaches to the management of chronic health conditions including models of collaborative care.

The traditional approach taken by most primary care providers (PCPs) in diagnosing and managing anxiety and depression has been visit based and problem centered. Most often, the diagnosis has been considered when a patient raised the concern (“I think I may be depressed”) or occasionally when a patient with another chronic condition (eg, diabetes, heart failure) was not responding to or complying with treatment recommendations. Efforts to screen the broader population have been uncommon, in part because the US Preventive Services Task Force recommends screening only if there is a system of care in place for managing depression.⁶ Trials of treatment with medication were often limited in time and scope, with sporadic contact with the patient and high patient drop-out rates being the rule. There was not wide acceptance of quantitative, evidence-based tools (eg, the Patient

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Health Questionnaire-9 [PHQ-9]) in managing depressed patients to assess response to treatment, instead relying on more subjective and global assessments of patient status. This is akin to physicians attempting to manage patients with hypertension without routinely checking blood pressure. Finally, there was rarely an attempt to “treat to goal,” with most patients and physicians accepting subtherapeutic regimens as “good enough,” which has been described as clinical inertia.⁵

Over time, many PCPs developed relationships with mental health specialists in their community and would refer patients who they felt were challenging or doing poorly. These referrals were often sporadic and poorly coordinated because the PCP and mental health providers utilized different health records and approaches to care. This was further complicated by challenges of limited access to scarce mental health consultants.⁷ In this confusing maze, many patients simply “fell through the cracks.” The net result of inadequacies in depression care is that few patients improve: fewer than 20% of patients started on antidepressant medications in usual primary care show substantial clinical improvements,^{8,9} and patients referred to psychotherapy often receive inadequate trials of such treatments and/or ineffective forms of psychotherapy, so that treatment response for this type of treatment is also as low as 20% under usual care.¹⁰

One approach to addressing these shortcomings involved “colocating” mental health specialists in primary care settings. Even with this improved access and decreased fragmentation, there were still the problems of nonsystematic referrals, often with high no-show rates. Despite the intuitive attraction of colocation, there is a lack of evidence to support this approach to improving outcomes for depressed patients.¹¹

Over the past 2 decades, many health plans and self-insured businesses have taken the approach of “carving out” mental health services with the goal of limiting access to a small number of providers who follow agreed-upon treatment protocols. This form of utilization management created further fragmentation of mental from physical health care, often to the detriment of both. Although there may have been some reduction of direct mental health costs, this approach did not address the wider costs and impacts of mental health issues on patients and the community, as will be outlined.

Despite improved awareness of common mental disorders such as anxiety and depression among PCPs, these conditions remain underdiagnosed and undertreated with substantial repercussions for patients and society. Depression starts earlier in life and has a greater impact on quality of life and functioning than many chronic medical conditions. Depression also is associated with

- Health risk behaviors such as smoking, inactivity, obesity, and substance use;
- Increased risk for chronic diseases and their complications;
- Poorer adherence to medical management;
- Worse medical outcome;
- Increased health care costs largely attributable to use of acute medical services and early mortality.¹²

In addition to increased cost burden to the medical system and society, patients with depression and other mental health conditions may be considered to be “difficult” by PCPs. The collaborative care model, which will be described,

exemplifies how such a clinical care model can contribute to health systems’ efforts to achieve the Triple Aim.¹³

The chronic care model was developed by Wagner and colleagues nearly 2 decades ago to guide the reorganization of health services for more effective management of chronic diseases.¹⁴ The model proposes that improved patient outcomes result from the interactions between an activated patient and a proactive health care team, with a number of factors facilitating patient activation and preparation of the health care team. For patients, these factors include support for disease self-management and enabling community resources. For health care providers, these factors include adequate information systems, decision support, and delivery system design to support longitudinal care as opposed to episodic care.

Collaborative care is a model of care that applies the chronic disease model to the treatment of common mental disorders, notably depressive and anxiety disorders. Evidence for the collaborative care model is robust, with support for its effectiveness from more than 80 randomized trials over the last 2 decades.^{15,16} Data come from diverse settings across patient age ranges, socioeconomic and racial/ethnic groups, and a variety of mental health conditions and medical comorbidities (eg, diabetes, cardiac disease, cancer).¹⁷ The scalability of the practice model is supported by several large programs including Washington State’s Mental Health Integration Program, the DIAMOND program in Minnesota, and in the Department of Defense.¹⁰ Cost savings also have been realized in real-world models that integrate behavioral health and primary care.¹⁸

With decades of research evidence and more than 80 randomized trials supporting the effectiveness of collaborative care for management of a variety of common mental disorders in primary care, attention has shifted toward the need to promote implementation of this evidence-based model of care.^{13,19} To address the knowledge gap related to successful implementation of collaborative care, this article describes the implementation and evaluation of a collaborative care program in an academic-affiliated primary care system, including key barriers and facilitators, program outcomes, lessons learned, and recommendations for other systems that are considering implementing collaborative care.

Methods

The Behavioral Health Integration Program (BHIP) model of care

Collaborative care is provided by a primary care-based team that includes the PCP, a care manager (a role that can be filled by a clinical social worker, registered nurse [RN], or psychologist, among others), and a psychiatric consultant. PCPs serve as the initial point of contact for patients, diagnose patients with mental health conditions such as depression or anxiety, and retain a key role and responsibility in overseeing the coordinated care provided by the team. Care managers work closely with the PCPs and perform a number of functions, including:

- A structured comprehensive mental health assessment;
- Patient engagement and education;
- Delivery of brief evidence-based behavioral interventions (problem-solving therapy, motivational inter-

viewing, behavioral activation, cognitive and dialectical behavioral therapy);

- Proactive follow-up to monitor treatment response using standardized instruments with specific goals;
- Weekly caseload review, with a psychiatric consultant, of patients who are not improving as expected;
- Care coordination and facilitation of communication between members of the treatment team; and
- Facilitation of referrals to and coordination with community-based agencies, outside mental health or medical specialty care, substance abuse services, and social services.

A typical full-time care manager carries an active caseload of 50–100 patients and will treat about 150 patients during a year. Most patients treated in collaborative care do not require or receive direct services from the psychiatric consultant. However, for selected patients who do not respond to treatment or are diagnostically complex, the psychiatric consultant may provide a direct patient consultation. This method of psychiatric caseload review supported by direct service provision on a stepped care basis provides an efficient means of leveraging limited specialist resources across a larger patient population. Within the stepped care approach, patient outcomes are systematically monitored using standardized tools (eg, PHQ-9, Generalized Anxiety Disorder scale [GAD-7])²⁰ and treatments are adjusted until the patient achieves the targeted clinical outcome. This treatment-to-target approach is a major reason that collaborative care results in improved patient outcomes. Its implementation is facilitated by the use of a patient registry to track progress and outcomes for all patients initiating care so that no one “falls through the cracks.”

Setting

The UW Neighborhood Clinic (UWNC) network is in the process of achieving Level 3 patient-centered medical home certification. A key requirement of Level 3 certification is having an effective patient care management and coordination infrastructure as well as effectively integrating behavioral health into primary care. UWNC’s earliest efforts in care management focused on diabetes and engaging RNs and certified dietitians in working with the clinic’s PCPs and patients with diabetes.

Target population

Primary care patients with depressive or anxiety disorders who are not receiving specialty mental health services are the target population for the BHIP, although there are not rigid criteria for enrollment. Patients are referred to BHIP by PCPs based on the PCP’s assessment that the patient has a mental health need that can be served by the program. Consequently, many patients served by BHIP have comorbid medical conditions.

Program implementation

A pilot program was created at one of the organization’s clinics with known high mental health needs. An experienced social worker with master’s level training (MSW) who had previously worked at the safety net hospital in the emergency department was recruited. One of the first things the MSW was able to validate was that the patients seen at the pilot clinic site

TABLE 1. CASELOAD STATISTICS SUMMARY BY CLINIC

Site: UW Neighborhood Clinics (Aggregated by Report Created on: Wednesday, June 4, 2014, 1:51PM)

Clinic	# of Pt.	Mean PHQ	Mean GAD	# of Pt.	Follow Up		Last Available		Decreased 5+ Points		Psychiatry Consultation # on Meds	50% Improved or <10 after >10 wks				
					Mean # Clinic	Mean # Phone	Mean PHQ	Mean GAD	PHQ	GAD		# W/P/N	PHQ	GAD		
All	351	13.8	12.1	315 (90%)	8.0	6.1 (77%)	1.0 (12%)	7.9	7.4	165 (48%)	137 (43%)	211 (67%)	283 (81%)	149 (72%)	135 (65%)	(n = 208)
Belltown	55	13.2	12.6	51 (93%)	6.8	3.5 (52%)	2.1 (31%)	5.7	6.5	30 (56%)	32 (60%)	39 (76%)	52 (95%)	26 (79%)	26 (79%)	(n = 33)
Federal Way	52	15.9	14.2	46 (88%)	6.8	6.7 (98%)	0.1 (2%)	10.8	10.1	23 (45%)	15 (33%)	39 (85%)	51 (98%)	15 (50%)	13 (43%)	(n = 30)
Kent/Des Moines	55	15.4	11.9	47 (87%)	5.8	5.4 (93%)	0.4 (7%)	7.4	4.1	25 (50%)	12 (31%)	37 (79%)	52 (95%)	15 (54%)	14 (50%)	(n = 28)
Northgate	52	13.5	11.6	49 (94%)	15.6	7.8 (50%)	3.3 (21%)	5.9	6.6	31 (60%)	23 (52%)	33 (67%)	48 (92%)	41 (91%)	32 (71%)	(n = 45)
Ravenna	73	12.7	11.8	66 (90%)	8.0	7.8 (98%)	0.1 (1%)	7.9	7.9	30 (41%)	32 (45%)	24 (36%)	69 (95%)	30 (70%)	29 (67%)	(n = 43)
Shoreline	64	12.8	11.1	56 (88%)	5.4	5.3 (98%)	0.1 (2%)	7.9	7.2	26 (41%)	23 (36%)	39 (70%)	11 (17%)	22 (76%)	21 (72%)	(n = 29)

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GAD, Generalized Anxiety Disorder scale; PHQ, Patient Health Questionnaire; PT, patient.

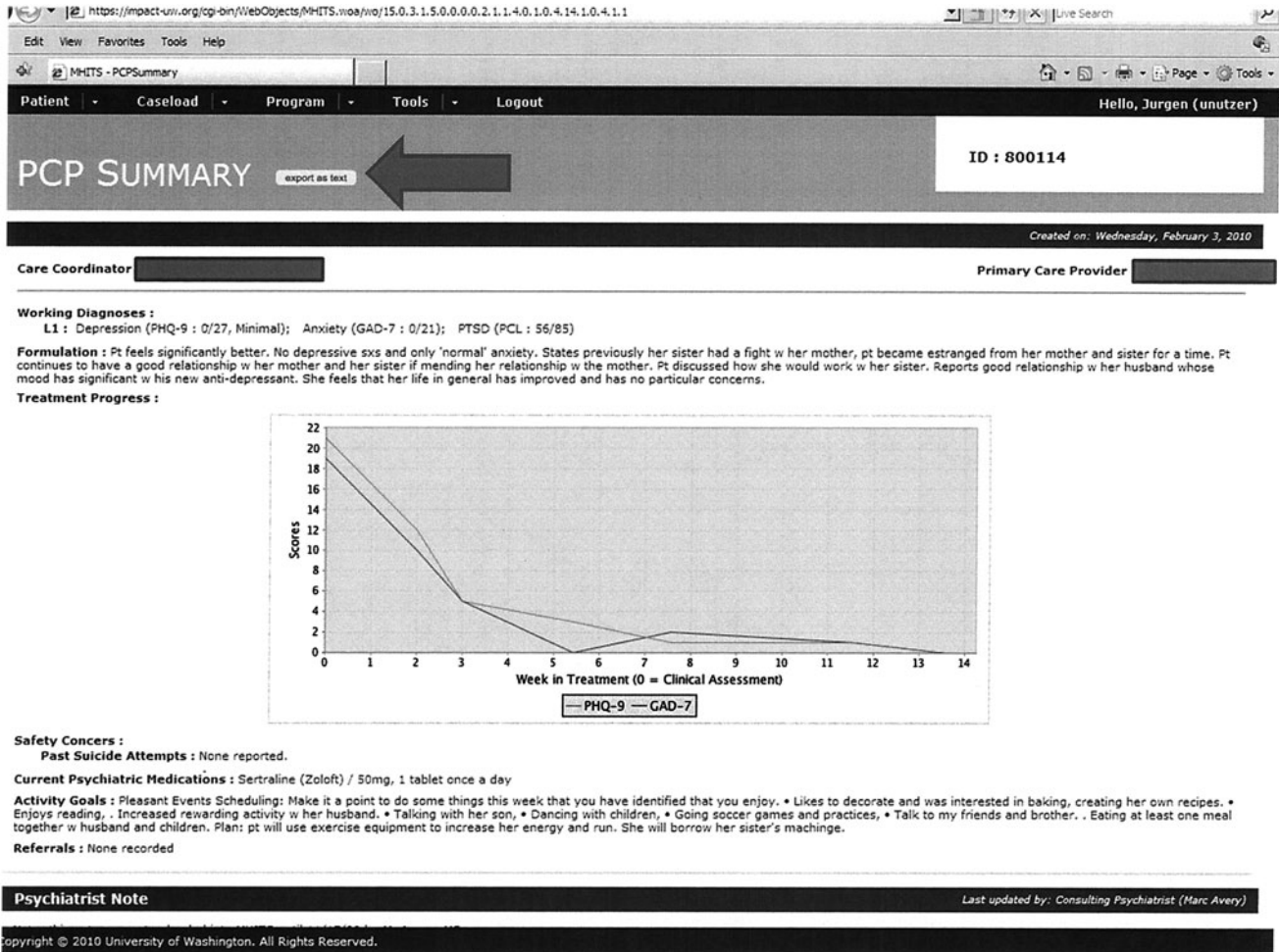


FIG. 1. Summary for the primary care physician (PCP) with graphed depression and anxiety scores.

were not the “worried well” but rather a cohort of patients with moderate to serious mental health diagnoses and needs. After selected staff received training in the BHIP model, a patient registry was developed that included patients with poorly controlled anxiety and depression who were then enrolled in the care management program. Based on initial positive patient outcomes and reviews from both patients and PCPs, the program was expanded beyond the pilot clinic; a care manager and

consulting psychiatrist were placed in 6 of the 9 clinics over a period of 1 year, and has since expanded to all 9 clinics in the network during the second year.

Data

The program uses a Web-based registry, named the Care Manager Tracking System (CMTS, Table 1), to provide a

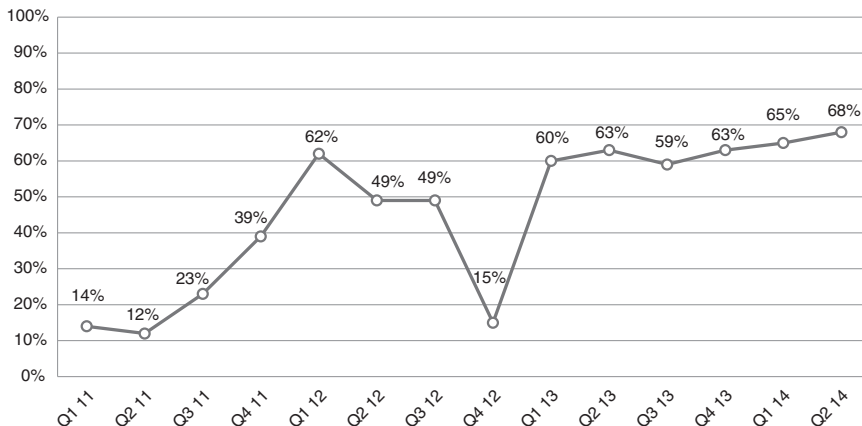


FIG. 2. Percent of active Behavioral Health Integration Program (BHIP) patients with ≥2 monthly contacts per quarter.

summary of how many patients are meeting quality indicators including: PHQ-9 and GAD-7^{20,21} score improvement (target is a 5-point improvement for at least 45% of the caseload), psychiatry consultation for patients who are not improving (target is 80%), and documentation of psychiatric medications in the registry. The registry also tracks the number of in-clinic and phone follow-up visits and the percentage of the caseload that has demonstrated at least a 50% improvement in depression or anxiety scores. The care manager or PCP also can also visualize each patient’s progress with symptoms, as shown in Figure 1. This allows a consulting psychiatrist to conduct a systematic review of patient participation in the program as well as clinical improvements of patients who are not achieving their treatment goals. This article reports descriptive data obtained from the patient registry for the period from January 2011 to August 2014.

Results

The overall patient population at the 9 UWNCs is primarily commercially funded (70% commercial insurance, 12% Medicaid, and 12% Medicare). The average age of the clinic patients is 41, ranging from newborns to 103 years old. Males comprise 44% of the patients. The BHIP population (n=1256 patients as of August 2014) in these clinics primarily presents with depression (n=955 [76%]) and anxiety (n=528 [42%]), posttraumatic stress disorder (n=188 [15%]), with some bipolar disorder (n=201 [16%]), and alcohol/substance abuse (n=151 [12%]) (diagnosis categories are not mutually exclusive). Forty percent of the population (n=502) reported thoughts of suicide based on their responses to questions on the PHQ-9.

Patient engagement and clinical outcomes

The UWNCs have demonstrated steady improvement in engaging patients in care, as indicated by monthly patient contacts. These may be in clinic or over the phone; approximately 76% of patient contacts take place in clinic. The quality aim for this indicator is defined as: ≥2 patient contacts per month with more than half of the caseload. The UWNC care managers have consistently exceeded this target with more than 60% of the caseload engaged in bi-weekly care since 2013 (Fig. 2). With regard to what appears to be a dip in Q4 2012, prior to that time, the program was essentially fully deployed in only 1 clinic. By Q4 of 2012, the BHIP expanded with most of the remaining

neighborhood clinics. In turn, the percentage of monthly contacts started low and went up from there.

The number of patients actively served at one time also increased to more than 900 across the entire UWNC during its first year. As of July 2014, on average, the BHIP patients are seen for 8.1 follow-up appointments with the care coordinators (CMTS database) over the course of their treatment in BHIP, reflecting a high level of patient engagement.

In the first year of full program implementation, more than 45% of the BHIP caseload demonstrated at least a 5-point drop in depression or anxiety scores (Table 2). This improvement has been maintained, with more than 60% of the overall caseload demonstrating significant improvement from 2013 to 2014. In addition, more than 70% (PHQ-9) and 65% (GAD-7) of the BHIP population has demonstrated a 50% improvement in symptoms (or scoring <10 – mild symptomology) after at least 10 weeks in treatment. These outcomes also have stayed consistent from 2014 to the date of this paper.

Patient access

Between January 2011 and August 2014 there were 1256 total patients enrolled in the BHIP at the UWNC sites. The program has discharged 788 of these patients after achieving treatment goals; 348 patients are currently enrolled. In 2010, only 1 of the UWNCs offered mental health care in its clinic, which was limited to only psychotherapy. With the BHIP implementation since November 2012, a secondary outcome of the BHIP was that improved care management of behavioral health patients allowed many PCPs to serve additional patients.

Program costs

This program leverages a scarce, expensive resource (the psychiatrist) with the use of a less expensive provider (care manager). This allows for better health outcomes and consistent care using a lower cost provider. This results in providing a higher value of care.

While the research team was not able to assess the total cost impact of the BHIP directly, they were able to estimate it by using data from the IMPACT Study, which looked at the difference in outpatient and inpatient costs (including hospital admissions and emergency department use) as a result of introducing a coordinated care approach to behavioral health.²² The team estimated that over a 4-year

TABLE 2. BEHAVIORAL HEALTH INTEGRATION PROGRAM OUTCOMES SUMMARY

<i>Indicator</i>	<i>Target</i>	<i>At 1 year (1/1/2014)</i>	<i>Current (August 14)</i>
Total # of patients enrolled over time	As of 1/1/13: 273	911	1256
Mean care manger caseload (0.5 FTE)	50	53	52
5 point improvement in either depression or anxiety	50%	44.5%	57.3%
50% improved with depression or score under 10 after 10+ weeks in treatment	50%	76%	70%
50% improved with anxiety or score under 10 after 10+ weeks in treatment	50%	69%	64%
Projected cost savings – based on Unutzer et al, Am J Managed Care 2008		~ \$750,000	2 year Projection: ~ \$1,500,000

FTE, full-time employee.

period there would be an overall savings of \$3363 per patient, yielding a return on investment of \$6.5 saved for each \$1 invested.²² As of August 14, 2014 more than 1200 patients had been enrolled in the program, yielding a 2-year projected cost savings of \$1,500,000. Although the latter was not realized as a financial gain to the clinics in the existing fee-for-service environment, the value of this was recognized within the accountable care environment, for which the organization is planning.

Discussion

Utilizing a collaborative care approach and a chronic disease model, the BHIP embedded within UWNC resulted in good outcomes of care for patients with anxiety and depression that are comparable to or exceed the rates of improvement realized in clinical trials.²³ Although there is value in better management of patients who have only anxiety and/or depression, the impact on the care of patients who have medical conditions and mental health comorbidities is also significant by creating more effective patient engagement and activation.

Several limitations of this program evaluation should be acknowledged. There were no data on patient outcomes prior to implementing the program; therefore, published rates of improvement from the literature were used as a comparator. Second, although the program met metrics for care processes and patient improvement, the evaluation was not designed to address the question of which specific care processes may have led to patient improvement. Finally, data on costs were estimated based on the literature.

Although this program was fortunate to have great results from the very beginning, there are some “lessons learned” that may help other health systems who seek to implement similar programs. First, it was critical to communicate a clear vision (the Why) to everyone involved. This is especially important for the PCPs who refer patients to the program. The research team found it effective to have a lead psychiatrist meet with the clinic PCPs as a group and explain the program in detail. This was not a program to “off-load” the most challenging patients, and not all patients were appropriate for the program (eg, those with complex mental health diagnoses or some personality disorders). It was critical to have PCP buy-in, and in turn to have them introduce the program to their patients in a positive way. They needed to be clear that they were not “sending them away,” but bringing in more resources in support of patient care.

Next, it was important to have an infrastructure that included information technology tools to support registries and tracking of patients and metrics. Because most information technology systems are constantly changing, making sure the necessary tools and reports are maintained is important.

Effective recruitment and training of care managers was essential. They needed to have strong communication skills, the ability to think on their feet, and to work effectively in a team environment. It also was critical to make sure the care managers and consulting psychiatrists were not overwhelmed with other more traditional tasks and consults, allowing them to focus on the care management program.

Operationally, it helped to have a strong pilot site. This allowed for recognition of early wins and developed strong

champions for the program as it spread. This made more widespread implementation of the program easier.

As a primary care network also affiliated with a large academic health system, the BHIP was used to train residents within interdisciplinary teams wherein all members work at the top of their scope of practice. This has been true for both primary care and specialty care trainees, and in the future the research team hopes to engage other trainees (eg, RN and MSW students, psychiatry residents and fellows) in team care.

Finally, it was very important to report the results of the program regularly, both to clinic providers and staff and to health system leadership. This helped reinforce support for the program and energized those involved in continuing the work. The research team believes that this new integrated approach to behavioral health will strengthen primary care as well.

Author Disclosure Statement

Drs. McGough, Bauer, Dugdale, and Ms. Collins declared no conflicts of interest with respect to the research, authorship, and/or publication of this article. The authors received no financial support for the research, authorship, and/or publication of this article.

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Chapter 2—SBIRT Overview

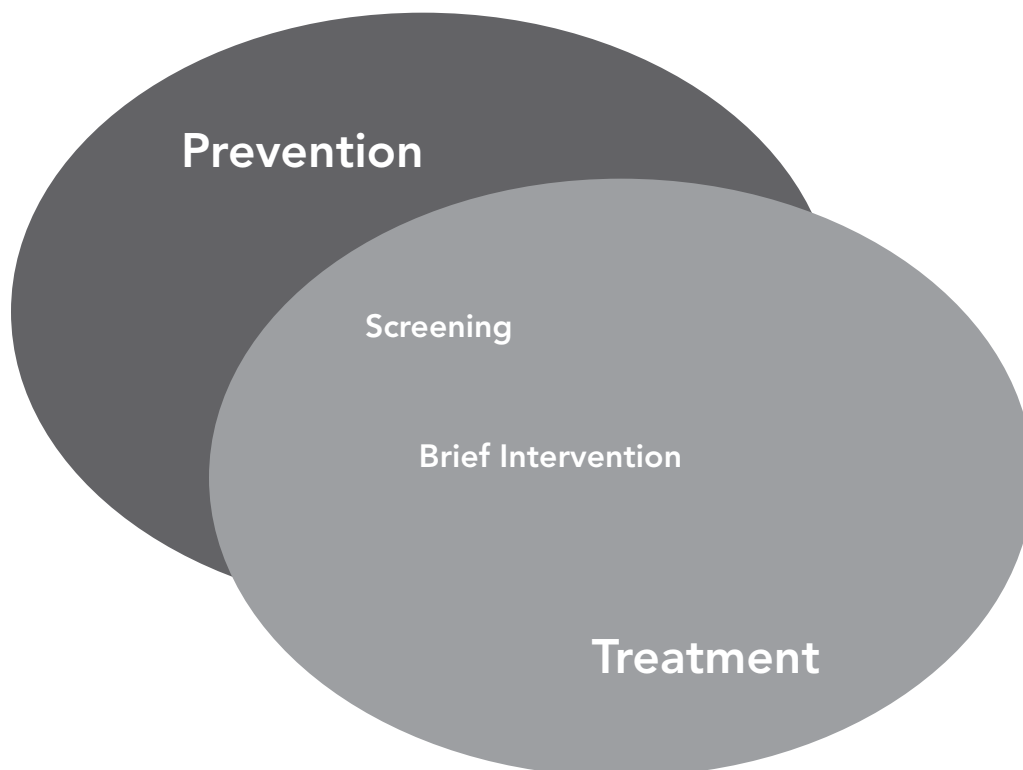
Defining Screening, Brief Intervention, Brief Treatment, and Referral to Treatment

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

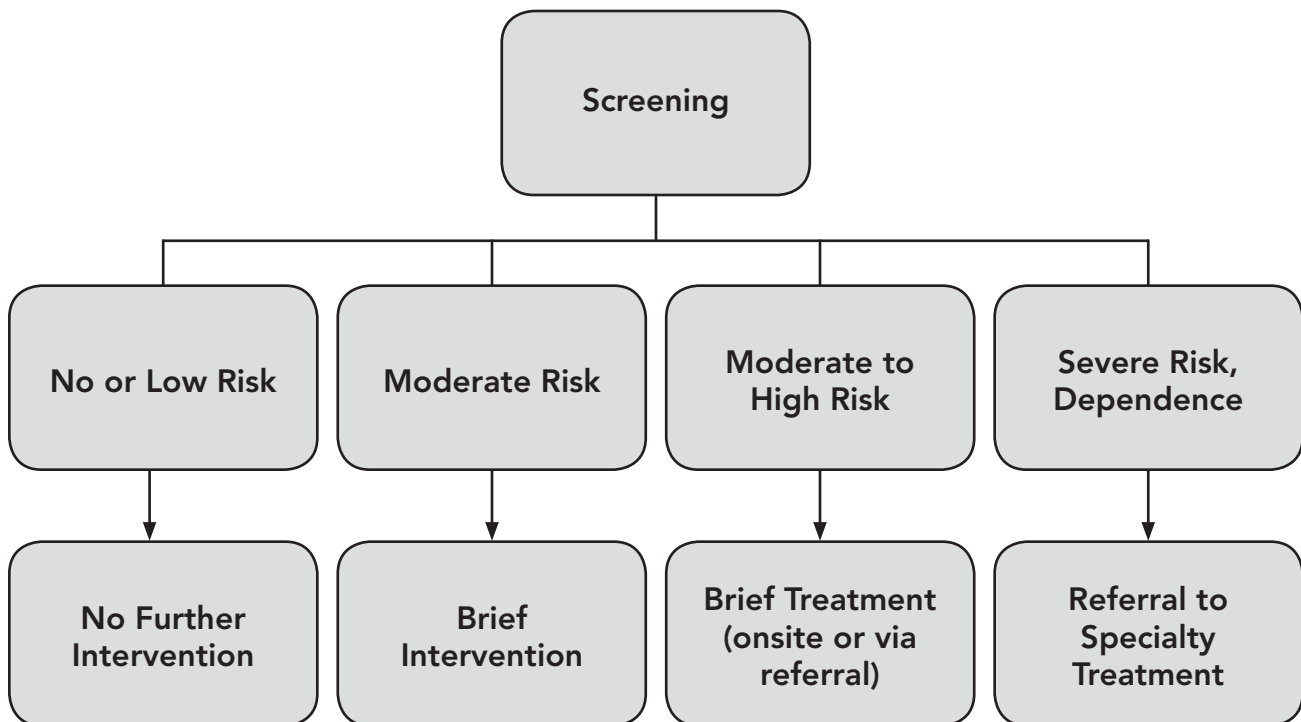
Exhibit 2-2 provides a chart of the SBIRT process.

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