

# Screening, Brief Intervention, and Referral to Treatment for Older Adults With Substance Misuse

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Substance abuse among older adults is a rising public health concern. National household surveys indicate significant binge and heavy drinking<sup>1</sup> and increasing illicit drug use. From 1992 to 2009, treatment admissions for people aged 50 years and older increased and will double by 2020.<sup>2</sup> Despite these trends, the number of elder-specific treatment programs have decreased,<sup>2</sup> and older adults remain underserved. Health care, aging, and other services can play key roles in addressing the population's needs. We describe the evidence-based, national initiative Screening, Brief Intervention, and Referral to Treatment (SBIRT) applied to older adults.

SBIRT emphasizes universal screening in health care settings, followed by brief interventions for patients with substance use disorders, as well as those who are at risk for developing these disorders.<sup>3,4</sup> Since 2003, the Center for Substance Abuse Treatment (CSAT) of the Substance Abuse and Mental Health Services Administration (SAMHSA) has distributed 24 state SBIRT grants over 4 funding cohorts. SBIRT is typically conducted in a select few health care settings (emergency departments, trauma centers, or primary care). SBIRT begins with a prescreen that is embedded within intake assessment to identify potential substance misuse. In the first cohort of grantees, 77.3% of patients screened negative (no or low risk).<sup>3</sup> Following positive prescreens, health care professionals (e.g., physicians or nurses) or health educators (other professionals trained in SBIRT) administer a comprehensive screen to determine level of risk.<sup>4</sup> With moderate risk, brief intervention is offered, involving feedback about screening results and motivational interviewing for changing behavior.<sup>5</sup> Moderate to high risk indicates need for brief treatment, involving motivational strategies, in-depth assessment, education, problem solving, and coping skills. Highest risk (e.g., substance dependence) indicates need for referral

**Objectives.** We compared substance use and SBIRT (Screening, Brief Intervention, and Referral to Treatment) services received for older adults screened by the Florida BRITE (BRief Intervention and Treatment of Elders) Project, across 4 categories of service providers.

**Methods.** Staff from 29 agencies screened for substance use risk in 75 sites across 18 Florida counties. Clients at no or low risk received feedback about screening; moderate risk led to brief intervention, moderate or high risk led to brief treatment, and highest severity led to referral to treatment. Six-month follow-ups were conducted with a random sample of clients.

**Results.** Over 5 years (September 15, 2006–September 14, 2011), 85 001 client screenings were recorded. Of these, 8165 clients were at moderate or high risk. Most received brief intervention for alcohol or medication misuse. Differences were observed across 4 categories of agencies. Health educators screening solely within medical sites recorded fewer positive screens than those from mental health, substance abuse, or aging services that screened in a variety of community-based and health care sites. Six-month follow-ups revealed a significant decrease in substance use.

**Conclusions.** The Florida BRITE Project demonstrated that SBIRT can be extended to nonmedical services that serve older adults. (*Am J Public Health.* 2015;105:205–211. doi:10.2105/AJPH.2013.301859)

to treatment to substance abuse programs. SBIRT grantees are required to conduct 6-month telephone follow-ups of a 10% random sample of those receiving brief intervention, brief treatment, or referral to treatment. In the first cohort, 15.9% of people screened received brief intervention, 3.2% received brief treatment, and 3.7% received referral to treatment.<sup>3</sup>

## SBIRT WITH OLDER ADULTS

The benefits of screening and brief physician advice for older adults with risky use of alcohol has been well documented.<sup>6–10</sup> Other studies found that psychologists, social workers, nurses, and social service providers could also effectively implement brief interventions to help older adults reduce risky alcohol use and attain recommended drinking limits.<sup>11,12</sup> Although research supports the national SBIRT initiative's effectiveness with general populations,<sup>3,6,13</sup> no studies have specifically

implemented the national SBIRT initiative with older adults, especially adding reduction of medication misuse as an aim.

As older adults are a priority population for Florida's substance abuse system, the Florida BRITE (BRief Intervention and Treatment of Elders) Project was developed as a 3-year (2004–2007) pilot funded through Florida's general revenue allocated by the legislature.<sup>14</sup> The pilot differed from the national SBIRT initiative in several ways:

1. BRITE was conducted by 4 non–health care agencies (1 substance abuse treatment, 2 behavioral health, and 1 behavioral health and aging services),
2. elders were screened where they lived (e.g., senior housing) or received aging services,
3. screening included depression and suicide risk,
4. screening included prescription and over-the-counter medication misuse as well as alcohol,

5. participants could receive several sessions based on need,
6. health educators implemented a standardized intervention using a modified Health Promotion Workbook,<sup>8,15</sup> and
7. all participants were eligible for follow-up at 3 and 6 months.

The pilot resulted in 3497 screenings, with 10% receiving brief intervention. Significant declines in substance use and depression occurred over time.<sup>14</sup> The pilot provided support for Florida's successful CSAT SBIRT 5-year grant (mid-September 2006 to mid-September 2011; grant TI-18306).

We describe adaptation of the Florida BRITE Project to meet the SBIRT national initiative's requirements and the unique challenges encountered for an elder-specific project. Specific aims were to describe the screening processes, the characteristics of substances misused, and the differences in outcomes observed among 4 categories of provider agencies: health care, aging services, mental health, and substance abuse treatment.

## METHODS

The Substance Abuse Program Office of the Florida Department of Children and Families (DCF) managed the grant and selected provider agencies to receive contracts to implement SBIRT. On the basis of estimates projected from the pilot study, CSAT set Florida's goal of 66 074 screenings of adults aged 55 years and older over the 5 years.

The DCF began by shifting the 4 pilot BRITE agencies to the required SBIRT assessments and services, maintaining their original state funding while enhancing services with SBIRT dollars. BRITE was expanded to other providers through 2 rounds of open solicitations for competitive applications, followed by targeted solicitations to specialty hospitals, aging services, behavioral health programs, health clinics, and a veterans' hospital. Selection factors included geographic region, density of older adult population, and experience working with older adults. Over 5 years, 29 agencies in 18 counties received contracts, with screening conducted within 75 different sites. The costs of all services provided were covered by the grant.

We classified BRITE agencies into 4 primary service categories: (1) health care organizations ( $n = 12$ ) where screening was conducted only within their respective sites (e.g., hospital emergency department, urgent care clinic, trauma hospital, Department of Veterans Affairs [VA] hospital, or primary care), (2) lead (county-level) aging services providers ( $n = 5$ ) of in-home or supportive services, (3) mental health providers ( $n = 7$ ; e.g., community mental health centers), and (4) substance abuse treatment provider agencies ( $n = 5$ ). Although the latter 3 categories employed staff to screen at community-based events (e.g., health fairs) and at locations where elders lived, congregated, or received social services, each was also required to obtain a memorandum of understanding with local hospitals, primary care practices, or other medical sites permitting them to approach patients and conduct SBIRT within those sites.

### Staff Training

The DCF training manager provided 2 full days of initial on-site training at each agency, covering the following SBIRT competencies: prescreening; screening instruments for determining risk levels; motivational interviewing; provision of brief intervention, brief treatment, and referral to treatment; and data entry. To promote fidelity, the training manager distributed English and Spanish versions of training manuals and clinical tools at initial trainings and posted them on BRITE's Web site.<sup>16</sup> A supervisor at each agency oversaw and rated BRITE health educators' knowledge, skills, and attitudes. The DCF training manager conducted site visits to monitor progress, assess quality of services, provide site supervision, and review follow-ups to assist agencies in attaining goals stated in their respective contracts. The DCF also assisted agencies in overcoming challenges such as obtaining memorandums of understanding from medical facilities that permitted BRITE health educators to access patients.

### Prescreening

Health educators approached older adults in various settings, inviting them to participate in a brief, evidence-based, 7-item prescreening interview. The first 3 items were from the National Institute on Alcohol Abuse and

Alcoholism's (NIAAA's) clinician's guide<sup>17</sup> to assess alcohol problems: (1) On average, how many days a week do you drink alcohol? (2) On a typical day when you drink, how many drinks do you have? (3) What is the maximum number of drinks you had on any given day in the past month? In accordance with NIAAA scoring criteria, responses to the first 2 questions are multiplied (days/week  $\times$  drinks/day). A score of 7 or more indicated a positive alcohol screen. A positive screen was also indicated if the maximum number of drinks per day exceeded 3.

Two prescreen items addressed other substances: (1) In the last year, have you tried to cut down on the drugs (including tobacco) or medication that you use? (2) In the last year, have you used prescription or other drugs more than you meant to? A response of yes to either question indicated a positive screen for other substances.

The remaining 2 prescreen items consisted of the 2-item Patient Health Questionnaire (PHQ2),<sup>18</sup> a validated screening tool for major depression. The items were as follows: (1) During the past month, have you often been bothered by feeling down, depressed, or hopeless? (2) During the past month, have you often been bothered by little interest or pleasure in doing things? A yes response to either question indicated a positive prescreen for depression.

### Screening

Following positive prescreens for substance use, health educators administered the Alcohol, Smoking and Substance Involvement Screening Test V3.0 (ASSIST)<sup>19</sup> to determine level of substance use risk, as required of all SBIRT grantees. For alcohol, ASSIST risk scores are low risk (score of 0–10), moderate risk (11–19), moderate to high risk (20–26), and high risk ( $\geq 27$ ); for other substances they are low risk (0–3), moderate risk (4–19), moderate to high risk (20–26), and high risk ( $\geq 27$ ). In addition, health educators are required to record Government Performance and Results Act (GPRA) measures of demographics (date of birth, gender, race, Hispanic origin), recommended SBIRT services, and categories of substances used and days used out of past 30 days.

A positive prescreen for depression (PHQ2) triggered administration of the 15-item

Geriatric Depression Scale Short Form (GDS-SF),<sup>20</sup> with depression scored as none to mild (0–4), moderate (5–9), or severe (10–15). A positive GDS-SF (moderate or serious level) in the absence of substance misuse led to referral to a mental health service provider.

### Services Provided

ASSIST scores determined level of services to be offered by health educators, who provided screening and feedback for low risk, brief intervention for moderate risk, and brief treatment for moderate to high risk. For highest risk, agencies were required to have memorandums of understanding with local treatment providers to provide referral to treatment.

### Follow-Up

CSAT requires 6-month telephone follow-ups to be conducted on a random sample of individuals who received brief intervention, brief treatment, or referral to treatment. CSAT assigns each state a range of clients' last 2 social security number digits (e.g., 90–99) for selecting the random sample. Follow-up appointment dates were scheduled at screening.

GPRA follow-up questions required for SBIRT grantees address past-30-day use of the following: any alcohol, alcohol to intoxication ( $\geq 5$  drinks in 1 sitting), alcohol to intoxication ( $\leq 4$  drinks in 1 sitting and felt high), illegal drugs, and both alcohol and drugs (on the same day). Clients completing follow-up received a \$20 gift certificate for local retailers.

### Data Collection

Using an Excel 2003 version 11 (Microsoft Corporation, Redmond, WA) database originally developed by one of the authors for Pennsylvania's SBIRT project and installed on tablet personal computers, health educators read screening questions, recorded responses, retrieved ASSIST levels of risk, and recorded services provided. Each month, BRITE agencies electronically transmitted data to the DCF, which in turn transmitted the required data elements to the CSAT's Services Accountability Improvement System (SAIS). Required elements included baseline GPRA demographic and substance use measures for all screenings, ASSIST scores, and follow-up data. SAIS neither required rescreen and depression scale data nor recorded them.

### Data Analyses

Analyses involved descriptive statistics and group differences based on BRITE's unique focus on screening older adults through varied service agencies: health care, aging services, mental health, and substance abuse treatment providers. Baseline analyses focused on group differences in screening outcomes (risk levels) and services received (screening and feedback, brief intervention, brief treatment, referral to treatment) using the  $\chi^2$  test and independent-samples *t* test. We compared baseline and follow-up data with the  $\chi^2$  test and paired *t* test as appropriate.

## RESULTS

The annual volume of screenings began slowly. By the end of the first full year of implementation, 8 non-health care agencies received contracts and recorded a total of 784 screenings into the SAMHSA SAIS data system, with most conducted by 1 agency that had participated in the pilot. Of these, only 94 (12%) were recorded as screening and feedback (negative screens). Among those who received positive screens, most ( $n=570$ ; 72.7%) received brief intervention, followed by brief treatment ( $n=86$ ; 11.0%) and referral to treatment ( $n=30$ ; 3.8%), with 4 missing a classification. While investigating why screening and feedback did not constitute a much higher proportion of screens as seen in other states, we discovered in year 2 that negative screens were often discarded and not recorded, resulting in lower totals. However, the exact number is unknown.

Concerned over the slow start and the loss of negative screens in the data system, the DCF implemented a plan to improve implementations by increasing the number of contracted sites, awarding more contracts to providers with access to large populations of older adults, and ensuring that both negative and positive screens resulted in the recording of GPRA demographic data into the SAIS system. As a result, compared with year 1, the percentage of individuals receiving screening and feedback was higher in years 2 through 5 (82.6%, 92.4%, 93.1%, and 91.7%, respectively) and lower for brief intervention (17.1%, 5.7%, 5.5%, and 6.7%) and brief treatment (1.3%, 0.8%, 0.5%, and 0.7%). Referral to treatment

remained low (2.3%, 1.0%, 0.9%, and 0.9%). Over the 5 years, 85 001 unduplicated cases were entered into the BRITE data system. A small number received multiple services, such as those clients who received screening and feedback initially but rescreened positive at a later date and required service. As a result, 86 141 services were delivered.

### Screening Outcomes

*Substance use.* Of 85 001 cases in the data system, 8165 (9.6%) screened positive for moderate or higher risk based on the ASSIST. Table 1 compares demographics for those who screened positive at moderate- or high-risk substance use levels with those screening negative. Those screening positive were more often younger, male, and White. Hispanic heritage was similar for both groups.

Table 2 displays past 30-day substance use at baseline for the 8165 clients with positive screens. More than half (58.7%) consumed alcohol and 31.1% reported intoxication. Other substance use was less frequent (13.1%) than alcohol, with benzodiazepines ( $n=236$ ; 2.9%), marijuana ( $n=232$ ; 2.8%), and crack or cocaine ( $n=205$ ; 2.5%) most frequently reported. However, the GPRA requires that prescription medications misuse be recorded as "illegal drug use"; in that way, the problem is entered into the SAIS system so that health educators can offer SBIRT services.

*Depression.* Table 2 also displays GDS-SF results. Irrespective of substance use, only those individuals with a positive PHQ2 pre-screen for depression ( $n=6641$ ) received the GDS-SF. Of these, 87% scored at moderate or severe levels, suggesting that the PHQ2 pre-screen effectively eliminated clients lacking clinically significant depression while identifying those warranting further screening and referral for mental health care.

### Differences Among Provider Categories

We categorized provider agencies under contract from the DCF into 4 groups based on primary service offered: health care, aging services, mental health services, and substance abuse treatment. However, the DCF mandated that the latter 3 categories have formal agreements to conduct screening within health care settings as well as screening in community settings. Table 3 shows a significant

**TABLE 1—Demographics for Total Sample by Substance Use Screening Outcome (n = 85 001): Florida BRITE Project, 2006–2011**

Characteristic	Screened Negative (n = 76 765), No. (%) or Mean ±SD	Screened Positive (n = 8 165), No. (%) or Mean ±SD
Mean age, <sup>a</sup> y	69.2 ±9.8	66.5 ±8.9
Gender <sup>b</sup>		
Male	33 312 (43.4)	4 891 (61.1)
Female	43 386 (56.6)	3 163 (38.8)
Transgender	8 (0.0)	2 (0.0)
Ethnicity		
Non-Hispanic	59 974 (79.5)	6 322 (78.7)
Hispanic	15 453 (20.5)	1 711 (21.3)
Race <sup>c</sup>		
White	49 485 (65.0)	5 550 (68.9)
African American	20 881 (27.4)	2 077 (25.8)
Asian	1 200 (1.6)	24 (0.3)
Native American	390 (0.5)	25 (0.3)
Native Hawaiian	254 (0.3)	5 (0.1)
Alaska Native	118 (0.2)	3 (0.0)

Note. BRITE = BRief Intervention and Treatment of Elders.

<sup>a</sup>t = 24.41; df = 84 928; P < .001; 95% confidence interval = 2.53, 2.98.

<sup>b</sup>Chi-square = 953.61; df = 2; P < .001.

<sup>c</sup>Comparison of White and non-White ( $\chi^2_1 = 47.80$ ; P < .001).

relationship between provider category and positive versus negative screenings ( $\chi^2_3 = 123.16$ ; P = .038) and, among positive screens, services received versus not treated ( $\chi^2_3 = 432.67$ ;

P < .001). Health care agencies had the lowest rate (8.4%) of positive screenings compared with the other 3 categories (10% or higher). Combined across all categories, most of those

screening positively for alcohol or other substances were at moderate risk and received brief intervention, whereas others (n = 1565; 19.2%) at moderate risk did not receive services. Reasons for nontreatment were not recorded, although BRITE providers reported anecdotally that refusal was the most common reason. Aging services (14.1%) and health care services (12.6%) had proportionally fewer nontreated individuals, whereas the percentages of nontreated individuals for mental health (34.9%) and substance abuse (24.1%) settings were much greater.

Analyses revealed differences in GDS-SF scores ( $\chi^2_8 = 91.4$ ; P < .001). Health care providers recorded the highest combined proportion of clients with moderate risk (74.3%) and serious risk (15.2%), which indicate a need for mental health services. Mental health (70.5% + 15.5%) and substance abuse (71.8% + 16.1%) agencies had similar percentages of clients with moderate and serious risk. Aging services had slightly lower combined percentages (74.1% + 7.9%). Depression was not assessed at 6-month follow-up because of the substance abuse focus of the SBIRT grant.

### Six-Month Follow-Up

Table 3 shows that 516 individuals were eligible for follow-up on the basis of social security numbers and SBIRT services received. Of these, one third (n = 171) completed follow-up interviews, of whom 134 (78.4%) had received brief intervention, 22 (12.9%) brief treatment, and 15 (8.8%) referral to treatment. There was a significant relationship between follow-up participation and provider category ( $\chi^2_3 = 78.46$ ; P = .001). Aging services achieved the highest completion rate (57.4%); health care providers' completion rate was lowest (13.5%).

Table 4 shows comparison of baseline and 6-month follow-up data. Of 171 participants, 130 had complete data at both times. The comparisons for any alcohol use or any use of illegal drugs had the most responses, whereas there were fewer paired comparisons for responses about intoxication and use of alcohol and drugs on the same day. The latter reflects the smaller percentage of individuals who had endorsed those symptoms at baseline and were also eligible to participate in follow-up. As shown in Table 4, the paired t test revealed

**TABLE 2—Characteristics of Those With Positive Screens for Substance Use and for Depressive Symptoms at Baseline: Florida BRITE Project, 2006–2011**

Characteristic	No. (%) <sup>a</sup>	Days Used, Mean ±SD <sup>b</sup>
<b>Substance use in past 30 d (n = 8165)</b>		
Used any alcohol	4797 (58.7)	18.2 ±10.4
Used alcohol to intoxication <sup>c</sup>	2543 (31.1)	2.1 ±0.8
Intoxication with ≥ 5 drinks in 1 sitting	1524 (18.7)	4.4 ±8.5
Intoxication with ≤ 4 drinks in 1 sitting and felt high	1789 (21.9)	9.7 ±8.4
Used illegal drugs	1071 (13.1)	3.5 ±8.7
Used both alcohol and drugs (on the same day)	428 (5.2)	6.0 ±9.4
<b>Geriatric Depression Scale-Short Form (n = 6641)<sup>d</sup></b>		
None to mild level	881 (13.3)	
Moderate level	4847 (73.0)	
Severe level	913 (13.7)	

Note. BRITE = BRief Intervention and Treatment of Elders.

<sup>a</sup>Substance use categories include only those cases reporting ≥ 1 days.

<sup>b</sup>Range for each substance use category was 1–30 days.

<sup>c</sup>Data based on unduplicated cases responding to 1 or both of the 2 questions.

<sup>d</sup>Data for Geriatric Depression Scale-Short Form include only those cases that prescreened positive on the 2-item Patient Health Questionnaire (PHQ2).



**TABLE 3—Screening, Services, and 6-Month Follow-Up Among Provider Agencies: Florida BRITE Project, 2006–2011**

Variable	Total	Category of Provider Agency					Provider Comparisons <sup>a</sup>	
		Aging Services	Mental Health	Health Care	Substance Abuse	Missing Category	$\chi^2$	P
Initial screenings, no.	85 001	21 866	18 372	37 924	6646	193	123.16	.038
Negative screening (screening and feedback)	76 836	19 583	16 514	34 744	5866	129		
Positive screenings	8165	2283	1858	3180	780	64		
Screening positive, %	9.6	10.4	10.1	8.4	11.7	33.2		
<b>Highest level of service received</b>								
Total services received, no.	6600	1962	1210	2778	592	58	421.79	< .001
Brief intervention	5436	1625	893	2533	335	50		
Brief treatment	387	78	186	34	84	5		
Referral to treatment	777	259	131	211	173	3		
Positive screen, nontreated, no.	1565	321	648	402	188	6		
Receiving services, %	80.8	85.9	65.1	87.4	75.9	90.6		
Eligible for follow-up, <sup>b</sup> no.	516	136	105	208	54		78.46	< .001
Completed follow-up	171	78	45	28	14			
Did not participate	345	58	60	180	40			
Completing, %	33.1	57.4	42.9	13.5	25.9			

Note. BRITE = BRief Intervention and Treatment of Elders.

<sup>a</sup>Chi-square test compared 4 provider categories, excluding missing categories.

<sup>b</sup>Follow-up eligibility based on last 2 digits of social security number and completion of brief intervention, brief treatment, or referral to treatment.

significant declines at follow-up for all categories of 30-day substance use.

## DISCUSSION

SBIRT is now an accepted and growing practice in the health care field. Examples can be found in policies set forth by the American Public Health Association’s *Guide for Public Health Practitioners*,<sup>21</sup> the American College of Surgeons Committee on Trauma,<sup>22</sup> and the American Psychiatric Nurses Association.<sup>23</sup>

The Florida BRITE Project represented 1 of 24 SBIRT state grants awarded since 2003. In

most states, SBIRT is conducted within a select few hospitals or clinics, typically with all adults. By contrast, the Florida BRITE Project was elder specific and implemented in 75 sites operated by a variety of health care and non-health care provider agencies in 18 counties. Results were similar to those of previous studies that demonstrated a reduction in older adults’ problem drinking<sup>9,10,12</sup> and an initiative involving health educators other than physicians.<sup>11</sup>

According to DCF reports, between 900 and 1400 older adults per year were served by substance abuse providers across Florida (all

67 counties) over the 5 years preceding the BRITE pilot. Many of those were in treatment, typically deep-end services (e.g., residential care), often because of driving-under-the-influence convictions. BRITE, which averaged 1915 positive screens over years 2 through 4 in just 18 counties, is an alternative approach for identifying larger numbers of vulnerable adults, although unlike the DCF’s previous annual reports, it included both risky and current substance misuse.

A major challenge for BRITE was the age limitation of 55 years and older (constituting only 37% of adult Floridians). BRITE could not

**TABLE 4—Past 30-Day Substance Use for Service Recipients at Baseline and 6-Month Follow-Up: Florida BRITE Project, 2006–2011**

Category	No. of Responses	Baseline		Follow-Up		t (95% CI)	df	P
		Yes, %	Days, Mean ±SD	Yes, %	Days, Mean ±SD			
Any alcohol use	130	74.6	9.10 ±9.91	30.0	2.22 ±5.62	8.32 (5.31, 8.44)	128	< .001
Alcohol to intoxication (≥ 5 drinks in 1 sitting)	30	46.7	4.77 ±8.50	23.3	2.27 ±6.28	2.38 (0.36, 4.64)	28	.024
Alcohol to intoxication (≤ 4 drinks in 1 sitting and felt high)	31	74.2	4.97 ±5.30	64.5	2.94 ±3.97	2.27 (0.24, 3.86)	29	.031
Used illegal drugs	127	36.2	7.40 ±11.78	11.8	1.81 ±6.57	5.75 (3.70, 7.65)	125	< .001
Both alcohol and drugs on the same day	13	61.5	8.92 ±9.78	38.5	3.08 ±5.06	2.30 (0.39, 11.31)	11	.038

Note. BRITE = BRief Intervention and Treatment of Elders; CI = confidence interval.

have reached its required totals in a few facilities. The DCF maximized its potential by contracting with different categories of service providers with successful records of serving elders in Florida, resulting in 19 073 more screenings than the required CSAT target ( $n = 66\ 074$ ).

We identified important differences between health care and non-health care providers. Non-health care (aging, mental health, and substance abuse) agencies produced a higher percentage of positive screens and better follow-up rates than did health care agencies. Most who screened positive received services. We believe that these differences occurred because non-health care providers targeted or received referrals for high-risk elders in community programs, rather than universal screening of health care patients. Mental health and substance abuse agencies recorded greater percentages of nontreated individuals following a positive screen than did aging and health care agencies. Possible explanations are that behavioral health services are less likely to serve elders, whereas aging and health care services have greater access to elders. The finding by health care agencies of more frequently reported depression may be related to patients with serious, concomitant medical problems. However, a limitation for our study is that the data system lacked labeling for specific sites where screening took place for the non-health care providers, making it difficult to provide objective data for our speculations.

Six-month follow-ups revealed significant reductions in substance use. Results suggest that SBIRT is a low-cost, effective strategy for addressing older adults' risky use of substances, especially when coupled with outreach and screening methods used where elders reside or receive various services.

As expected, alcohol problems were more prominent than illegal drug use at baseline. However, a major concern in interpreting results was that misuse of prescription medications could be categorized only within the data system using the GPRC classification of "illegal drug use." This is a flaw in the screening required for SBIRT grantees because many elders misuse appropriately prescribed medications unintentionally through errors in managing difficult medication regimens, memory

impairment, cost, or multiple prescribing physicians.<sup>14</sup> Future research addressing intentional versus unintentional medication misuse is needed to help providers identify appropriate interventions.

BRITE included aging, mental health, or substance abuse agencies, each of which was required to have formal agreements with health care sites to conduct SBIRT. Thus, although aging services concentrated on screening in older adults' homes, senior centers, retirement communities, or senior health fairs, they also accessed medical patients. Mental health and substance abuse agencies also conducted screenings in both community and health care sites. In the early stages, non-health care agencies struggled to obtain agreements with hospital or clinic administrators, impeding access to patients. Follow-up discussions and surveys with hospital staff suggested that ultimately, physicians, nurses, and hospital staff came to appreciate BRITE health educators' involvement with their patients.

### Sustainability

SBIRT state grantees are required to develop postgrant sustainability plans. At the end of the SBIRT grant, we invited all 29 agencies to participate in an online sustainability survey and 19 responded (3 aging, 3 substance abuse, 4 mental health, and 4 health care agencies). All reported they would continue SBIRT pre-screening and screening, 17 planned to continue brief intervention, 17 would continue serving older adults, 8 extended BRITE to younger adults, and 7 indicated that SBIRT services could be maintained in primary care settings. Regarding funding, 9 anticipated that no funding would be available, 7 planned to use state or local prevention funding, and 3 urgent care sites began billing Medicare using SBIRT codes established in 2008.<sup>24</sup> Several benefits from BRITE were listed: the ability to screen individuals who would otherwise have remained unserved, improved networking with local service agencies, and enhanced networking within the state.

The Florida DCF continues to fund 3 original pilot sites using the continuing general revenue approved by the legislature. During the final 18 months, the DCF expanded BRITE to younger adults receiving care at federally qualified health care centers in 3 regions,

resulting in 6100 screenings of adults aged 18 to 54. To assist providers interested in continuing or adopting SBIRT, all materials remain on the BRITE Web site.<sup>16</sup> Additionally, recently established billing codes<sup>24,25</sup> provide incentives to sustain SBIRT services.

### Recommendations and Policy Implications

Through our experience with BRITE, we offer recommendations for replication in other states. First, implementing a simple, elder-friendly assessment similar to that in BRITE's pilot would be useful for non-health care services. Second, screening should differentiate between unintentional medication errors and illicit use to help educate consumers. Finally, states should examine how aging services can implement SBIRT services.

Our findings suggest that non-health care settings, especially aging service agencies, have an important role in extending SBIRT services for older adults in a variety of community settings, provided that adjustments in the screening process to accommodate prescription medications are implemented. Most SBIRT state grants were implemented solely in health care settings, limiting the relatively new Medicare SBIRT billing codes to physicians and other approved health care providers.

Recently, the Administration on Aging (AoA) listed the Florida BRITE Project in the tier of highest-level criteria for evidence-based disease prevention and health promotion programs to be implemented under Title III-D of the Older Americans Act,<sup>25</sup> an effort jointly supported by SAMHSA and the AoA.<sup>26</sup> Title III-D

provides grants to States and Territories based on their share of the population aged 60 and over for education and implementation activities that support healthy lifestyles and promote healthy behaviors.<sup>25</sup>

Area Agencies on Aging that include BRITE services may be reimbursed through their respective state units on aging that receive AoA funding. Although the Title III-D cost chart does not specify reimbursement rates, and it is not known whether any states have initiated this reimbursement process, inclusion of BRITE on the AoA list does increase the prospects for implementing and sustaining BRITE within aging services. ■

## About the Authors

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## Contributors

L. Schonfeld developed the pilot project, coauthored the SBIRT grant, served as lead evaluator for the Florida BRITE Project, and oversaw the data analyses. R. W. Hazlett, who was the Florida BRITE Project quality assurance/training manager of the Florida Department of Children and Families (DCF), was responsible for all staff training and creation of training materials. D. K. Hedgecock was responsible for data management, reports to DCF, and statistical analyses. D. M. Duchene was DCF director of substance abuse treatment services and BRITE Project director, and coauthor of the SBIRT grant. L. V. Burns was the DCF operations coordinator for BRITE. A. M. Gum was responsible for the depression measures, contributions to the policy implication, and data analyses.

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## Human Participant Protection

This study was approved by the University of South Florida institutional review board (IRB no. 102717) with a waiver of informed consent as all data analyzed were secondary, de-identified data.

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