Training and Education in Professional Psychology

© 2020 American Psychological Association
ISSN: 1931-3918

2020, Vol. 14, No. 1, 78–85
http://dx.doi.org/10.1037/tep0000286

Training the Addiction Treatment Workforce in HIV Endemic Regions: An Overview of the South Africa HIV Addiction Technology Transfer Center Initiative

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The South Africa HIV Addiction Technology Transfer Center (ATTC) was formed in 2017 to train health professionals and nonprofessional lay workers in evidence-based addiction interventions as a strategy for addressing the country's HIV epidemic. This article describes the Year 1 activities of the South Africa HIV ATTC including an initial needs assessment with high-level stakeholders, an advisory board meeting with South African government and nongovernment agencies, a learning exchange with other interna-

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tional ATTCs, and the identification of Screening, Brief Intervention, and Referral to Treatment (SBIRT) as a focal intervention for widespread training. The article details the culmination of Year 1 activities via a national forum on SBIRT and presents posttraining satisfaction data across SBIRT events. Lessons learned during the first year include the importance of building strong partnerships with high-level stakeholders, conducting a targeted needs assessment, and identifying a focal intervention for widespread dissemination. Trainees reported high satisfaction and intention to use the knowledge and skills gained. Overall, the methods used by the South Africa HIV ATTC demonstrate a novel approach to training health professionals and lay health workers in evidence-based addiction services as a means of improving HIV outcomes.

Public Significance Statement

This article details the development and launch of the South Africa HIV Addiction Technology Transfer Center, an international center focused on providing training in addiction treatment in an HIV endemic country. The methods used by the South Africa HIV Addiction Technology Transfer Center demonstrate a novel approach to training psychologists, registered psychological counselors, and other nonspecialists in evidence-based addiction services.

Keywords: screening, brief intervention, referral to treatment, training, South Africa

Supplemental materials: http://dx.doi.org/10.1037/tep0000286.supp

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The Addiction Technology Transfer Center (ATTC) Network is an international and multidisciplinary network that provides training and technical assistance to health professionals in evidence-based addiction treatment and recovery services (Addiction Technology Transfer Center, 2018). The ATTC Network was established in 1993 with funding by the Substance Abuse and Mental Health Services Administration (SAMHSA). It has been continuously operating in the United States for more than 25 years and currently consists of 10 regional centers, two special topic centers, and one national coordinating office. The ATTC Network has three core objectives: (a) to accelerate the adoption and implementation of evidence-based addiction treatment and recovery oriented practices and services; (b) to heighten the awareness, knowledge, and skills of the workforce that addresses the needs of individuals struggling with addiction; and (c) to foster regional, national, and international alliances among culturally diverse researchers, practitioners, policymakers, funders, and the recovery community.

In 2005, SAMHSA received funding from the United States President's Emergency Plan for AIDS Relief (PEPFAR) to expand the ATTC network into countries with high rates of HIV, a retrovirus that reduces immune system functioning and can progress to AIDS (World Health Organization, 2017). This expansion was made in recognition of the well-established link between substance misuse and increased risk of HIV (Myers, Carney, & Wechsberg, 2016; Scott-Sheldon et al., 2016). Individuals who misuse alcohol and other drugs (AOD) are more likely to engage in high-risk behaviors such as unprotected sex and injection drug use, thereby increasing risk of infection (Myers et al., 2016; Scott-Sheldon et al., 2016). Individuals with HIV who misuse AODs also have increased risk of disease progression because of diminished immune function and poorer adherence to antiviral regimens (Azar, Springer, Meyer, & Altice, 2010). As of 2019, the ATTC network has expanded to include the following HIV endemic regions: Vietnam, Southeast Asia, Ukraine, and South Africa (Addiction Technology Transfer Center, 2018; see online supplemental material, Figure 1).

South Africa serves as a particularly important site for international ATTC support because it is at the epicenter of the global HIV crisis (Avert, 2017). South Africa has the highest number of new HIV infections in the world, accounting for 16% of new infections globally (UNAIDS, 2014) as well as a staggering HIV prevalence of 19% (UNAIDS, 2016). HIV prevention, treatment, and care are complicated by widespread co-occurring AOD use throughout the country (Rehm et al., 2003). Alcohol use disorders are among the most prevalent disorders in South Africa (Herman et al., 2009), and the harm (i.e., injury and death) associated with each liter of alcohol consumed by adults is higher than that of other countries (Rehm et al., 2003). Illicit drug use is also a growing problem in South Africa, with about 4% of the population reporting use of illicit drugs within the past 90 days (Peltzer & Phaswana-Mafuya, 2018).

The challenge in effectively addressing AOD misuse in South Africa is compounded by a severe shortage of skilled behavioral health workers and the absence of evidence-based interventions for substance use (Bhana, Petersen, Baillie, & Flisher, & the Mhapp Research Programme Consortium 2010). There are only 0.32 psychologists, 0.28 psychiatrists, and 0.4 social workers for every 100,000 individuals in the country (World Health Organization, 2007). Given the paucity of trained psychologists and other behavioral health professionals, the World Health Organization has recommended taking a task-sharing approach to increase treatment access (World Health Organization, 2010b). Task sharing involves redistribution of treatment tasks to individuals with less knowledge of and experience with substance misuse or other behavioral health issues, who in turn receive training and supervision from specialists. The ultimate goal is to increase the reach of health services and improve treatment access among those in need (Kakuma et al., 2011). This approach is especially pertinent in countries where health professionals are limited in number and nonprofessional lay workers (i.e., members of the community who either work for pay

or as volunteers in association with the local health care system to extend the reach of services) are more prevalent (Nkonki, Cliff, & Sanders, 2011). Encouragingly, study outcomes suggest that health professionals and lay workers without specialized training can be trained to deliver effective addiction and behavioral health interventions in South Africa and other low- and middle-income countries (Fulton et al., 2011; Spedding, Stein, & Sorsdahl, 2014).

Development of the South Africa HIV ATTC

The South Africa HIV ATTC represents a strategic partnership between the New England ATTC, one of the longest operating United States-based ATTCs, and the University of Cape Town, the longest operating University in South Africa. Training resources developed by the South Africa HIV ATTC aim to serve a range of health professionals including registered psychological counselors, psychologists, social workers, nurses, and medical doctors, many of whom lack formal training in addiction interventions. To support task sharing throughout the country, the South Africa HIV ATTC also designs resources to be accessible for lay community health workers. Over the 5-year grant cycle (October 2017 through September 2022), the South Africa HIV ATTC aims to train 5,000 health professionals and lay workers.

The overarching goal of the South Africa HIV ATTC is to develop and bring to scale training curricula to meet the needs of the addiction and behavioral health workforce throughout South Africa, particularly in HIV-endemic regions prioritized by PEPFAR. This article will describe the Year 1 activities of this new center targeting substance misuse specifically. We will highlight five key strategies used to launch the center: (a) needs assessment to evaluate current substance misuse service offerings; (b) national advisory board meeting to engage high-level stakeholders; (c) international learning exchange to learn best practices from other ATTCs; (d) development of an interactive training curriculum; and (e) national scale-up of training in Screening, Brief Intervention, and Referral to Treatment (SBIRT). After highlighting these strategies, we analyze training activities and trainee satisfaction from Year 1 and reflect upon lessons learned in the launch of the new South Africa HIV ATTC.

Strategies to Launch the Center

Step 1: Needs assessment. The South Africa HIV ATTC engaged in a strategic needs assessment with high-level stakeholders to best serve the needs of health workers providing addiction services in an HIV endemic country. Sixty stakeholders completed the assessment, including representatives of national and provincial government; leaders of nongovernmental organizations addressing substance misuse in PEPFAR priority districts; and contacts at institutions of higher learning in South Africa. The needs assessment captured data on the primary services offered by each government department or organization; the types of staff employed; and specific PEPFAR high-priority populations and districts served. Stakeholders also prioritized their most urgent training needs in terms of interventions, populations of interest, and number of staff needing training.

Table 1 presents the baseline needs assessment results. Of the 60 respondents, 26.7% worked at organizations that employed licensed psychologists. An additional 18.3% employed registered psychological counselors, a designation for individuals with bachelor's-level training in psychology who have completed a 720-hr psychological practicum, passed the National Examination of the Professional Board for Psychology, and are registered with the Health Professions Council of South Africa. The majority of respondents (70%) worked at organizations that employed lay community health workers. Forty-five percent of respondents came from nongovernment organizations, whereas 28% worked for the South African Government. Respondent organizations provided a mix of HIV, substance misuse, and mental health services.

Table 1
Baseline Needs Assessment Results (N = 60)

Needs assessment question	Percentage
Organization type	
Government	28.3%
Nongovernment	45.0%
Private	20.0%
Community	3.3%
Types of staff employed	
Psychologist	26.7%
Registered psychological counselor	18.3%
Medical doctor	41.7%
Nurse	46.7%
Social worker	78.3%
Lay counselor/community health worker	70.0%
Types of services rendered	
HIV/AIDS	38.3%
Substance use (alcohol and/or drug)	75.0%
Mental health (prescription treatment and/or behavioral treatment)	50.0%
Desire for special population training	
Injection drug users	41.7%
Female sex workers	28.3%
Men who have sex with men	26.7%
Girls and young women	43.3%
Children orphaned by AIDS	18.3%
Pregnant and postpartum women	36.7%
Desire for intervention training	
HIV prevention	35.0%
HIV linkage to care	31.7%
HIV retention in care	28.3%
HIV treatment	18.3%
Alcohol screening and prevention	60.0%
Alcohol treatment	55.0%
Drug screening/prevention	70.0%
Drug treatment	60.0%
Number of individuals needing training	M = 130, range = 1–3,000, median = 15

Regarding training needs, respondents were most interested in customized training for the following PEPFAR priority populations: adolescent girls and young women (43.3%), persons who inject drugs (41.7%), and pregnant and postpartum women (36.7%). When asked to prioritize among potential training topics encompassing substance misuse and HIV, the two most commonly selected training topics were: drug screening and prevention (70%); and alcohol screening and prevention (60%). Notably, the needs assessment highlighted substantial variability in number of health professionals and lay workers who would require training at each organization, with responses ranging from one to 3,000. Outcomes of the needs assessment pointed to the need for wide-

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spread training in screening and brief intervention as a means of addressing substance misuse in HIV endemic regions.

Step 2: National advisory board meeting. Following the needs assessment, the South Africa HIV ATTC convened a 2-day national advisory board meeting in January 2018. Thirty-two representatives from 20 different agencies and organizations attended including the South Africa Central Drug Authority, National and Provincial Departments of Health (which oversee national and provincial activities, respectively, focused on physical health, including HIV, tuberculosis, and mental health treatment), and Provincial Departments of Social Development (which oversee activities focused on substance misuse). It was critically important to engage both the Departments of Health and Social Development, given the South Africa HIV ATTC's goal to promote cross-training in substance misuse and HIV, which sit within different departments. National advisory board members represented multiple constituency groups including government, advocacy, HIV, substance misuse, mental health, social welfare, and education capacities. Attendees also included representatives from the ATTC National Coordinating Office, PEPFAR, and SAMHSA.

The objective of the first day was to orient the new advisory board members to PEPFAR, SAMSHA, and the mission of the newly funded South Africa HIV ATTC. First, the SAMHSA South Africa Technical Adviser presented on the history and work of PEPFAR in South Africa as a global priority site for the HIV epidemic (Granich, Williams, Montaner, & Zuniga, 2017). Next, representatives from SAMHSA headquarters in the United States, the New England ATTC, and the ATTC Network Office discussed the history, mission, and structure of the ATTC Network. A key point of discussion was the role that the New England ATTC team would play in serving as technical advisers throughout the implementation of trainings in Year 1. On Day 2, each advisory board member presented on their organization's goals and strategic initiatives, including plans to promote substance misuse treatment in PEPFAR priority districts, and ongoing initiatives promoting substance misuse harm reduction (e.g., drop-in centers, needle exchange programs, opioid substitution therapy). Advisory board members also shared their areas of greatest training need (e.g., specific patient populations, regions, and curricula content).

Needs assessment results were shared following the presentations, leading to a facilitated discussion regarding priority training topics for the South Africa HIV ATTC. Based on the needs assessment results, board members made the strategic recommendation to prioritize training in SBIRT as the focal intervention to address substance misuse. SBIRT is an evidence-based, public health approach that aims to improve the detection and treatment of substance misuse in various health care settings. It involves universal screening to identify those clients at risk of AOD use disorders, provision of a brief intervention if an individual screens at risk for substance misuse problems, and initiation of referral to treatment (reaction time) as needed (Babor et al., 2007). Training in SBIRT was recommended because it has high rates of approval in health care settings but low rates of uptake because of barriers such as limited provider knowledge, confidence, and time (Vendetti et al., 2017). The advisory board also recommended that SBIRT training curricula include extensive training in motivational interviewing (MO; Rollnick & Miller, 1995) to enhance health professionals' skill in brief intervention.

Step 3: International ATTC learning exchange. Immediately after the national advisory board meeting, four members of the South Africa HIV ATTC team (two from South Africa, two from the United States) and the SAMHSA South Africa Technical Advisor traveled to Vietnam to engage in a learning exchange with representatives from the Vietnam, Southeast Asia, and Ukraine HIV ATTCs. The 4-day learning exchange consisted of structured meetings and interactive discussions to exchange best practices regarding international technology transfer and establishing an international HIV ATTC. Major topics discussed included staffing, responding to needs assessment results, development of training curricula, reporting requirements, and annual training targets. Delegates also visited community treatment facilities that had received intensive ATTC training to observe the potential influence of ATTC training on organizational capacity and the care quality.

Attendees at the International Learning Exchange affiliated with more established ATTCs provided two pieces of strategic advice to guide the South Africa HIV ATTC. The first was to invest substantial time engaging in intentional relationship building activities with high-level stakeholders from government as well as from national HIV organizations to obtain essential buy-in. The second was to prioritize one or two scalable interventions for training to increase widespread impact in the first year. This advice was consistent with National Advisory Board recommendations and affirmed the prioritization of training in SBIRT.

Step 4: Curriculum development. Over the subsequent 5 months, the South Africa HIV ATTC team engaged in intensive curriculum development. During this process, the local team held face to face meetings with 21 organizations to solicit input about preferred screening tools and training content. Partner organizations represented a range of entities including National and Provincial Departments of Health, National and Provincial Departments of Social Development, nongovernment organizations, universities, professional associations, research organizations, HIV treatment centers, and behavioral health organizations. In some cases, these entities overlapped with the advisory board, but in most cases new partnerships were recommended by advisory board members. Select PEPFAR-funded district support partners who shared the common goal of meeting national HIV targets were also key collaborators.

SBIRT screening tool selection. Based on input from the strategic partnership meetings, the South Africa HIV ATTC prioritized three well-established, publicly available World Health Organization screening tools for use with adults: the Alcohol Use Disorders Identification Test (AUDIT; Saunders, Aasland, Babor, de la Fuente, & Grant, 1993), the Drug Use Disorders Identification Test (DUDIT; Berman, Bergman, Palmstierna, & Schlyter, 2005), and the Alcohol, Smoking, and Substance Involvement Screening test (ASSIST; World Health Organization, 2010a). Training recipients could select the package of screening tools (i.e., either AUDIT/DUDIT or ASSIST) that would be the best fit for their client population and workflow.

The AUDIT (Saunders et al., 1993) is a reliable and valid 10-item alcohol self-report screening scale that assesses three domains: alcohol intake (three items), alcohol dependence (three items), and adverse consequences associated with alcohol use (four items). Responses to each item are on a 5-point Likert scale ranging from 0, *never*, to 4, daily or *almost daily*. The AUDIT is a publicly available, free measure with a manual for scoring and

interpretation (Babor, de la Fuente, Saunders, & Grant, 2001). Scores on the AUDIT range from 0 to 40, with scores above 8 indicating potential alcohol problems (Reinert & Allen, 2002). A key advantage of the AUDIT is that it has been well validated within the South African context and translated to local languages (Morojele et al., 2017). The AUDIT has demonstrated acceptable internal consistency (median Cronbach's alpha $>$ .80) and test-retest reliability (Pearson's r = .64–0.92) across studies (Peltzer et al., 2007; Reinert & Allen, 2002).

The DUDIT (Berman et al., 2005) is a reliable and valid 11-item self-report scale that is the drug-screening analogue of the AUDIT. Like the AUDIT, the DUDIT inquires about drug intake, drug dependence, and adverse consequences related to drugs. Nine of the questions are scored on a 5-point Likert scale and two questions on a 3-point Likert scale. Total scores range from 0 to 44, with higher scores indicating more severe drug use problems and a score of 8 serving as the cutoff for concerning problems. The DUDIT also enables risk triaging, with scores less than 2 indicating low risk, 2–24 indicating medium/high risk, and greater than 24 indicating very high risk. The DUDIT has good internal consistency across studies, has strong local evidence in South Africa, and has also been translated to local languages (Cronbach's alpha range = 0.80–0.94; Berman et al., 2005; Kader, Seedat, Koch, & Parry, 2012).

Finally, the ASSIST (World Health Organization, 2010a) is a reliable and psychometrically valid 12-item structured interview scale that assesses substance use across 10 categories: tobacco, alcohol, cannabis, cocaine, stimulants, inhalants, sedatives/hypnotics, hallucinogens, opioids, and an other category. The ASSIST assesses both lifetime and substance use in the past 3 months using a 5-point Likert scale with responses ranging from *never* to *daily*. If an individual endorses any substance use in the past 3 months, the interviewer asks follow-up questions regarding preoccupation with the substance; level of concern about substance use; problems with work, school, or family; inability to manage role obligations; guilt associated with drug use; use exceeding intended limits; lifetime and current problems related to drug use; and prior attempts at controlling use. The ASSIST has demonstrated good internal consistency in prior studies, including in the South African context where it has been validated and translated (Cronbach's alpha = 0.73–0.92 across subscales; van der Westhuizen, Wyatt, Williams, Stein, & Sorsdahl, 2016; World Health Organization, 2010b).

Training content. After selecting the screening tools, the South Africa HIV ATTC team developed a set of interactive didactic training materials beginning with a 6-hr SBIRT training. New training materials were developed for this project in consultation with the South African Medical Research Council, after confirming that there were not publicly available, locally relevant curricula. The same core curriculum was used for both health professionals and lay community workers, although trainers were encouraged to use simpler language and examples for lay workers. Training materials were designed for a ratio of two trainers per 20–25 attendees, although trainers accommodated groups of up to 50 attendees. Trainers were encouraged to have smaller group sizes when training lay workers. The curriculum development team consisted of three individuals from South Africa representing three of the most common population groups in the country (i.e., Black/African, White, Indian/Asian) to ensure cultural relevance of all materials. Descriptions of the curricula are posted on the South Africa HIV ATTC website (https://attcnetwork.org/centers/south-africa-hiv-attc/home) and briefly summarized here.

The 6-hr SBIRT training began with an hour-long introduction to the ATTC network mission and rationale for addressing substance use in HIV endemic regions. The next 30 min contained a detailed overview of SBIRT as an evidence-based approach to promote universal screening for substance misuse. This portion of the workshop highlighted the objectives of SBIRT to universally assess all clients for substance misuse, triage the client's risk level, and provide appropriate intervention and referral to individuals screening positive.

The next hour and a half focused on an overview of the SBIRT screening tools (i.e., AUDIT/DUDIT and ASSIST). To enhance widespread training material scalability, the team recorded exemplar case administration videos of the three screening tools to demonstrate effective screening procedures. These videos are also shared freely on the South Africa HIV ATTC website and with training recipients to increase the accessibility of training content. Trainees viewed the videos during training and engaged in group discussion about scoring each of the screening tools and making decisions about the patient's level of risk. The remaining 3 hours focused on effective principles of brief intervention and referral to treatment.

As a complement to the SBIRT didactic workshop, the South Africa HIV ATTC team developed an in-depth, 2-day curriculum (6 hr per day) focused specifically on MI (Rollnick & Miller, 1995) as the foundation of brief intervention delivery. This training is primarily targeted toward health professionals because it is expected that lay workers will refer out for the brief intervention. The MI training focuses on core principles and techniques such as reflections and open-ended questions (Rollnick & Miller, 1995). As with the SBIRT principles training, the brief intervention training curriculum is experiential, with substantial time devoted to review of video vignettes, interactive group discussion, live role plays, and provision of performance feedback from the trainer. These experiential activities are designed to enhance accessibility for nonspecialist health professionals (Beidas & Kendall, 2010).

Step 5: National SBIRT forum and SBIRT ScaleUp: A framework for integration of SBIRT implementation and research. As a byproduct of the strategic relationship building described in the prior step, the South Africa HIV ATTC formed a high-level partnership with the National Department of Health around the common goal of SBIRT rollout. This partnership culminated in a 2-day (8 hr per day) national forum on SBIRT, jointly coordinated by the South Africa HIV ATTC and the National Department of Health. The forum was held August 2018 in Cape Town, South Africa. The primary objective was to promote the scale-up of SBIRT for substance misuse in HIV endemic regions. In addition to catalyzing policy development, this national event was designed to lay the groundwork for future training activities in PEPFAR priority settings.

Day 1 of the national event was a policy meeting titled, SBIRT ScaleUp: A Framework for Integration of SBIRT Implementation and Research. It was attended by 27 representatives from the South Africa National and Provincial Departments of Health (including Directorates of Mental Health and Substance Abuse, and Directorates of Drug-Resistant TB, Tuberculosis, and HIV), Provincial Local Training Centers, the South African Medical Research

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Council, and the South Africa HIV ATTC team. The goal of this meeting was to discuss the development of a national policy and standardized national training curricula for SBIRT for substance misuse. Meeting attendees also discussed how SBIRT for substance misuse could positively impact adherence support, retention, and viral suppression in people living with HIV.

The second day of the national event was titled Intensive SBIRT Training Workshop. All of the Day 1 meeting attendees were invited along with representatives from the South Africa Central Drug Authority, university researchers, and front-line health professionals from two national South Africa organizations (TB/HIV Care and Médecins Sans Frontières) providing HIV services in PEPFAR priority districts. A total of 75 individuals attended. Key topics covered during the workshop were how to screen adult patients for AOD misuse using AUDIT/DUDIT or ASSSIT, how to conduct a brief intervention, and how to promote linkage to further substance misuse services. The workshop used multiple behavioral strategies to promote skill acquisition including video vignettes of the screening tools, live role plays of screening and brief intervention by skilled MI trainers, and live demonstration of how to score the focal screening tools. In addition, Dr. Stephen Rollnick, one of the founders of MI, joined the meeting via video conference to lead a master training on key principles underlying the spirit of MI.

Analysis of Year 1 Impact

In total, 337 individuals received SBIRT training from the South Africa HIV ATTC trainings in Year 1. The majority of participants received training in the second half of the year (284 participants, 84.3%), reflecting the strategic decision to invest in upfront relationship building. The SBIRT training events were held predominantly across four priority districts: Cape Town Metropolitan Municipality (140 attendees), eThekwini Metropolitan Municipality (76 attendees), uMgungundlovu District Municipality (65 attendees), and City of Tshwane Metropolitan Municipality (24 attendees). Most of the training recipients were from national organizations that served multiple PEPFAR priority districts. Of the 337 SBIRT training recipients, 180 received training in the full SBIRT package, 129 individuals received training in the MI component only, and 28 individuals received training in the screening component only.

The 337 SBIRT training recipients completed Government Performance and Results Act forms evaluating their satisfaction with the training materials. These forms are standard measures required of all SAMHSA grant recipients and include a 24-item training satisfaction survey. The survey assesses attendee satisfaction with the overall training quality and satisfaction, information and instruction provided, and training materials, with scores ranging from 1, *very satisfied*, to 5, *very dissatisfied*. Attendees also reported their level of agreement (1, *strongly agree*, to 5, *strongly disagree*) with a series of statements indicating that the training was well organized, useful for dealing with substance misuse issues, led by an instructor who was knowledgeable prepared, and receptive to questions and comments. Finally, training attendees reported on their level of agreement regarding their effectiveness in providing addiction treatment, the degree to which training enhanced their skills, and the degree to which they expected to use the training to benefit their clients.

Table 2 presents the training satisfaction survey results. SBIRT training attendees were satisfied to very satisfied with the overall training and instruction quality (94.7% and 94.9%, respectively). Attendees also agreed or strongly agreed that the trainings would be useful in dealing with substance misuse (94.6%), enhanced their skills in substance misuse intervention (95.8%), and would be beneficial to their clients (98.0%). They also agreed or strongly agreed that they would use information presented in their practice (99.0%). The only satisfaction rating less than 90% was quality of training materials (86.6%): thus, Year 2 will focus on developing additional resources that attendees can access after training (e.g., worksheets, manuals).

Conclusions: Lessons learned

In its first year, the goal of the South Africa HIV ATTC was to develop scalable, easy-to-disseminate training curricula that could facilitate training of psychologists, registered psychological counselors, and other health professionals with minimal addiction experience. In addition, the South Africa HIV ATTC needed to develop highly accessible training resources that could support nonprofessional community health workers. The ATTC's Year 1 activities included a needs assessment, national advisory board meeting, a learning exchange with other international ATTCs, development of training curriculum focused on SBIRT, and a national SBIRT forum. Year 1 activities revealed a strong interest across South African organizations in implementing SBIRT, culminating in collaboration with the South African government to establish a nationwide SBIRT forum and training curriculum.

Overall, several elements of the South Africa HIV ATTC's Year 1 training activities were particularly successful. First, learning from established training centers was vital in identifying effective approaches for selecting interventions for training and maximizing

Table 2
GPRA Training Satisfaction Survey Outcomes for SBIRT Training (N = 337)

Variables	*M* (*SD*)	Satisfied/very satisfied	Agree/strongly agree
Satisfaction			
Overall training quality	1.59 (.60)	94.7%	
Instruction quality	1.57 (.60)	94.9%	
Quality of materials	1.79 (.73)	86.6%	
Overall training experience	1.69 (.66)	91.7%	
Training organized	1.57 (.61)		94.9%
Materials will be useful	1.57 (.60)		94.6%
Instructor			
Knowledgeable	1.36 (.51)		98.3%
Well prepared	1.37 (.54)		97.9%
Comments/questions	1.40 (.57)		96.3%
Training impact			
Enhanced skills in topic	1.59 (.60)		95.8%
Was relevant to my career	1.48 (.61)		94.5%
Expect to use information	1.42 (.51)		99.0%
Expect to benefit clients	1.40 (.55)		98.0%
Training relevant	1.44 (.56)		97.2%
Would recommend	1.44 (.64)		95.5%
Usefulness of information	1.31 (.48)		99.3%
Level of effectiveness	1.96 (.70)		82.2%

Note. GPRA = Government Performance and Results Act form; SBIRT = Screening, Brief Intervention, and Referral to Treatment.

the establishment of partnerships with government and nongovernment organizations. Second, time spent establishing strategic relationships with PEPFAR district support partners and high-level stakeholders throughout South Africa was particularly effective for maximizing buy-in and building partnerships to facilitate the rollout of SBIRT training. Finally, leveraging stakeholder preferences was especially important to inform the selection of a focal intervention and maximize scalability of training efforts. These strategic activities—learning from established training entities, investing in strategic relationships, and selecting a focal evidence-based intervention—offer a valuable blueprint for other organizations and entities seeking to invest in the provision of training and education to professional psychologists and other health professionals with limited experience treating clients with substance-related problems.

Training materials in Year 1 were primarily didactic in nature with limited opportunities to provide training attendees with personalized feedback or to objectively rate attendee skill. A major Year 2 priority for the South Africa HIV ATTC is to monitor the fidelity of SBIRT implementation via ongoing supervision and performance feedback following initial training. The South Africa HIV ATTC team will develop a fidelity checklist to facilitate live SBIRT supervision of trainers that will include assessments of adherence (i.e., trainer delivery of all SBIRT training components) and competence (i.e., skill with which trainers delivered SBIRT training) evaluated by South Africa HIV ATTC team experts. Trainers and trainees will also have the opportunity to attend monthly remote consultation with the ATTC team to facilitate SBIRT implementation. In addition, the South Africa HIV ATTC is working with training recipients to develop and collect a set of key outcome indicators (e.g., proportion of eligible patients screened and eligible patients receiving a brief intervention, etc.) to determine the reach of SBIRT following training delivery. These activities will enable ongoing monitoring and evaluation of the downstream impact of the training offered by the South Africa HIV ATTC.

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Received December 28, 2018
Revision received July 3, 2019
Accepted July 9, 2019 ■

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