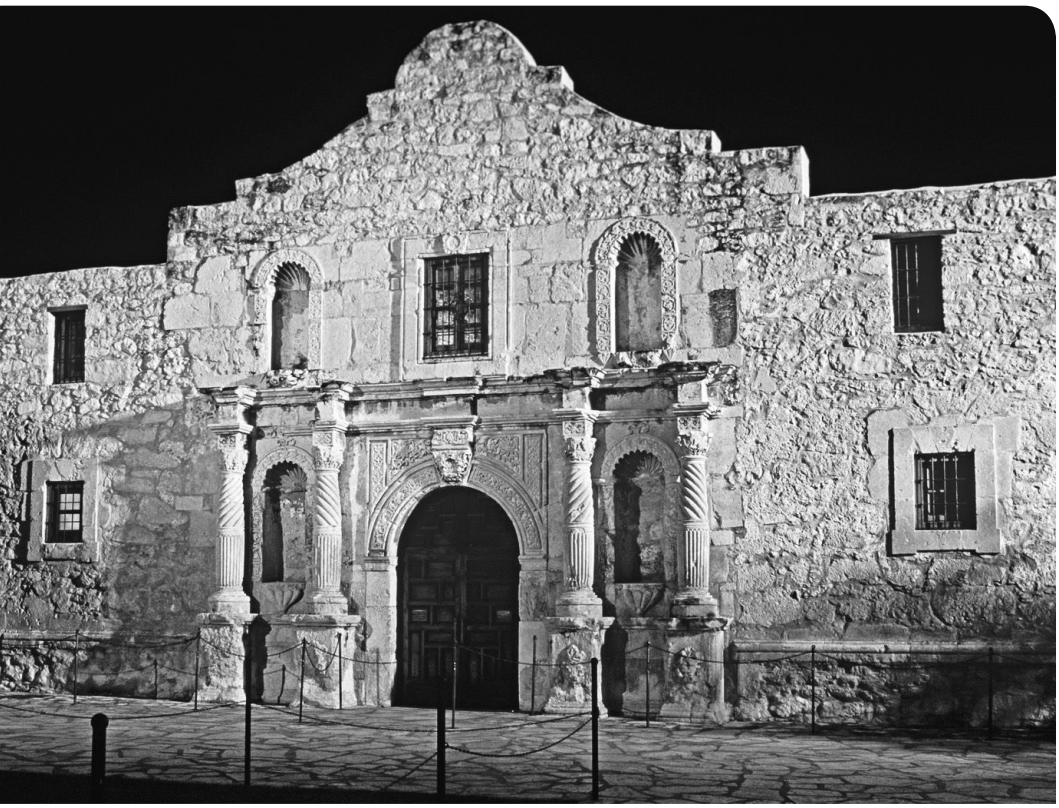

SBIRT

Service Design

Service Design Site Visit Report
Medical Residency: University of Texas Health Science Center at San Antonio

Service Design Site Visit Report
Medical Residency: University of Texas Health Science Center at San Antonio

Prepared by JBS International, Inc. and Alliances for Quality Education, Inc.
Prepared for the Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Substance Abuse Treatment

Substance Abuse and Mental Health Services Administration
SAMHSA
www.samhsa.gov • 1-877-SAMHSA-7 (1-877-726-4727)

SBIRT Service Design Site Visit Report Medical Residency: University of Texas Health Science Center at San Antonio

Grantee Name	The University of Texas Health Science Center at San Antonio (UTHSCSA) SBIRT–South Texas Area Residency Training (S-START)
Address	7703 Floyd Curl, San Antonio, Texas 78229
Grant TI Number	TI020249
Date of Site Visit	August 17–18, 2011
Grantee Contact Person	Janet F. Williams, M.D.
Government Project Officer	Reed Forman, M.S.W.
Site Visit Team Members	Kevin Hylton, Ph.D., Dhru Beeharilal, J.D., Marcus Hudson, M.S., Leslie McElligott, M.P.A.

Grantee Project Team Members Visited
UTHSCSA S-START MR Project Team ***Department of Family and Community Medicine*** ▪ Sandra Burge, Ph.D., Co-Project Director ▪ Sunand Kallumadanda, M.D., Trainer ▪ Manuel Oscos-Sanchez, M.D., Trainer ▪ Nida (Joy) Emko, M.D., Trainer ▪ Thea Lyssy, M.A., Online Curriculum Developer ▪ James Tysinger, Ph.D., Curriculum Developer
Department of General Surgery ▪ Shannon Diamond-Lopez, R.N., Trainer
Department of Internal Medicine ▪ Patricia Wathen, M.D., Trainer ▪ Michelle Conde, M.D., Trainer ▪ Rosita Frazier, M.D., Resident/Trainer

Grantee Project Team Members Visited
Department of Obstetrics and Gynecology ▪ Erin Nelson, M.D., Trainer ▪ Gabriel A. Medrano, M.D., Trainer
Department of Pediatrics ▪ Janet F. Williams, M.D., Project Director ▪ Noemi Adame, M.D., Trainer ▪ Nancy Amodei, Ph.D., Evaluator ▪ Suyen Schneegans, M.A., Project Coordinator ▪ Danielle Dunlap, M.S.., Evaluation Coordinator ▪ Kyle Kozlovsky, M.S.., Data Manager
Department of Psychiatry ▪ Michael Dawes, M.D., Trainer

Table of Contents

Overview and Summary of Findings

Purpose of the Visit

The goal of this service design site visit was to engage the grantee in a discussion of program performance and to continue improvement processes supported by technical assistance (TA), as approved by SAMHSA. This approach encourages the medical residency program to leverage strengths and maximize long-term success and sustainability.

The site visit occurred on August 17–18, 2011. The team was charged with observing the UTHSCSA SBIRT medical residency (MR) program model (S-START) and its curriculum, training methodology, implementation protocol, and evaluation strategies. The visit consisted of (1) meeting with key project staff, (2) observing training sessions, and (3) reviewing curriculum components and materials.

Day 1: On August 17, 2011, the site visit team met with the S-START project director, co-project director, project coordinator, evaluation team members and various S-START faculty to review key program components, including activities around curriculum development, training, dissemination, and sustainability. The team also observed a standardized patient training session to showcase the SBIRT training methodology used primarily in the Internal Medicine project component. In the afternoon, the Council of Residency SBIRT Trainers showcased their department's work with a product demonstration and poster session. The day ended with a meeting of residents from the departments of Family and Community Medicine (FCM), Obstetrics and Gynecology (OB/GYN), and Pediatrics (Pedi).

Day 2: On August 18, 2011, the site visit team reviewed the online S-START Website and the Bexar County substance abuse resources directory, and toured downtown clinics at the University Health System and the CHRISTUS Santa Rosa campuses. In the afternoon, the program evaluation team provided an overview of evaluation processes. The site visit ended with a debrief session with key program staff and telephone conferencing with Reed Forman and Kellie Cosby who are the SAMHSA SBIRT Project officers (lead and new, respectively).

Project Overview

The University of Texas Health Science Center at San Antonio (UTHSCSA) serves San Antonio and a 50,000 square-mile area of South Texas in the Rio Grande Valley area. S-START has partnered with several community and military sites, including the McAllen Family Medicine Residency Program (McAllen, Texas), the Family Medicine program at CHRISTUS Santa Rosa Health System in San Antonio, the Family Medicine program at the Fort Hood Army Base in Killeen, the Adolescent Medicine program at Brooke Army Medical Center (BAMC) in San Antonio, and the Internal Medicine program at the Regional Academic Health Center (RAHC) in Edinburg, Texas.

The primary population served by S-START is Hispanic (75–95 percent), of which a large percentage speaks Spanish only. Alcohol, (tobacco), marijuana, cocaine, and heroin comprise the most prevalent substances addressed in clinical settings.

UTHSCSA is currently in the third year of a 5-year SAMHSA SBIRT grant for medical residency programs. Its curriculum is designed to provide UTHSCSA medical residents and residents from other participating South Texas programs with the necessary training to use evidence-based screening, brief intervention, and referral protocol for patients (adolescents, adults, and families) identified with risky substance use behavior.

The UTHSCSA core curriculum includes eight program specific training modules that have been adapted to both the unique patient population as well as the training capacity within FCM, Pedi, Internal Medicine, Surgery, OB/GYN, and adult and child Psychiatry.

The S-START evaluation program includes both process and outcome related components that access residents' (1) knowledge of the SBIRT model and practices, (2) readiness to implement SBIRT practices, and (3) perceived confidence in implementing these practices at baseline, 30 days following the completion of training, and yearly for up to 3 years thereafter. The evaluation sample consists of current and graduated residents from each of the participating UTHSCSA residency programs and the external family medicine programs.

Project Accomplishments to Date

The UTHSCSA SBIRT MR program has completed a number of activities over the course of their grant. A summary of major accomplishments to date includes the following:

- S-START has received the support of key ‘change’ leaders, such as the UTHSCSA President, and multiple champions within residency departments. The SBIRT Project Director and Co-Project Director continue to identify leaders and promote SBIRT integration system-wide.
- S-START has built a strong technology base around SBIRT. The program created a comprehensive Web presence (described below), for use by the public, residents, and faculty, that includes modules, announcements, and general information (with approximately 28,510 hits). Additionally, Pediatrics is launching an iPad project for its residents. The device will be preloaded with SBIRT references, including the resource directory.
- SBIRT screening questions have been embedded into the FCM electronic medical record system. Departments that have not yet migrated to electronic systems, like Pediatrics, have changed their paper-based outpatient medical record forms to incorporate SBIRT screening questions and cueing for BI/RT.
- S-START has developed pocket cards to remind residents to use SBIRT at each patient encounter and to assess fidelity of SBIRT protocol.

Program Strengths

Buy-In

S-START has successfully diffused itself across multiple UTHSCSA departments and settings. Residents, faculty, and nonmedical support staff have endorsed the program. Multiple champions within departments assist in normalizing SBIRT in their respective curricula and increase the likelihood of continuing SBIRT as a sustainable practice once the grant ends.

Web Presence

The S-START Web site (http://familymed.uthscsa.edu/sstart/) serves as a comprehensive training resource for faculty and residents. It contains the program’s eight core curriculum training modules as well as resources that address drug, alcohol, tobacco, and opioid abuse. Viewers can find out about billing and reimbursement protocol and learn motivational interviewing strategies.

S-START has also developed the Bexar County Substance Abuse Resources Directory (http://bexarlist.com/), a free, searchable online directory of local and major national resources. The directory not only provides contact information, but a description of program philosophy, services, target populations, and fee structures.

Training and Dissemination

UTHSCSA has adapted the SBIRT curriculum across departments (e.g., Pedi, FCM, OB/GYN, Internal Medicine, Adult and Child Psychiatry, and Trauma Surgery) and around the State in diverse settings, including military installations at Fort Hood and BAMC. To date, S-START has surpassed original resident training goals (n = 539) and revised their 5-year goal to extend its reach (n = 679).

S-START has introduced SBIRT to both residents *and* medical students. Dissemination of SBIRT in the medical school setting has helped to normalize SBIRT within the resident programs and improve the capacity to address substance use during patient encounters.

Program Challenges/Barriers

Follow-up Reporting and Incentives

It has been challenging to get residents to complete GPRA follow-up and other local evaluation reports. Follow-up rates at 12 and 24 months continue to be relatively low. Various program specific follow-up strategies have been used to improve response rates (i.e., SurveyMonkey, hardcopies, enlisting faculty to track individuals, phone calls, and text messages). Tracking residents from other program areas and those who may have already left UTHSCSA continues to pose a challenge. Residents are incentivized to complete follow-up reports with vouchers or gift cards, among other strategies. Program staff have opted to draft a residency newsletter and to launch a Project S-START Facebook page to keep SBIRT on residents' radar.

Time

Resident work-hour restrictions make it challenging to integrate SBIRT into resident training curricula. Faculty and staff have to be mindful of such restrictions and flexible in terms of what can and cannot be adapted within departmental curricula.

Diverse Settings

Geographical diversity is both a success and a challenge. As previously mentioned, SBIRT's presence is far reaching; however, sites are spread over great distances across the State and not all programs are familiar with the other's activities. A strong Web

presence and quarterly communications (e.g., in person meetings and newsletters) to department leadership assist in bridging gaps in awareness.

Training Mechanisms

Although parts of SBIRT training are online and accessible to residents, utilizing Blackboard was recognized as an area in which future adjustments are needed. Pediatrics is implementing an iPad pilot project in which all pediatric residents will receive an iPad that is preloaded with reminders, algorithms, and forms for easy access to SBIRT information among other Pediatric training materials and resources.

Program Evaluation

Evaluators noted that it is challenging to evaluate SBIRT across specialties, especially when various departments adapted the core curriculum to fit their specialty areas and have incorporated SBIRT into their curricula in differing ways (e.g., Web-based, lectures, and inpatient/outpatient rotations).

Program Support

There is some resistance from the UTHSCSA Psychiatry residency program to participate in SBIRT, although integration of SBIRT into the curriculum is occurring. Leadership has made inroads in this department, but not to the extent of other programs. The Project Director hopes to identify a new champion from the psychiatry department to be involved in SBIRT training and implementation.

State Funding

The Texas State Legislature approved significant budget cuts to Medicaid funding that will affect access to health services, particularly the number of resources available to patients who are referred to treatment. Budget cuts of 26 percent occurred in the past year.

Team Roles and Responsibilities

- **Project Director:** Janet F. Williams, M.D., is responsible for the overall operation of the project, ensuring accountability and coordination among the participating departments. Dr. Williams is responsible for day-to-day planning and project implementation and for disseminating project findings. She ensures accountability and proper coordination of the S-START Curriculum Development Committee and S-START trainers. Dr. Williams provides leadership and guidance for sustainability efforts. She is responsible for the preparation and submission of reports as well as the oversight of quality assurance procedures regarding curriculum implementation.

- **Co-Project Director:** Sandra Burge, Ph.D., works with the Project Director in convening the S-START Curriculum Development Committee and S-START Trainers. Dr. Burge assists in providing guidance for and seeking dissemination opportunities.

- **Project Coordinator:** Suyen Schneegans, M.A., assumes primary responsibility for managing the recruitment, tracking/retention, and intervention procedures for the project. She assists the Project Director in the preparation of reports to the funding agency and in preparation of reports designed to disseminate study findings. Ms. Schneegans manages the budget and administrative duties associated with the project.

- **Curriculum Developers:** Thea Lyssy, M.A., James Tysinger, Ph.D., and Anthony Scott, Ph.D. are responsible for developing a comprehensive, culturally competent, SBIRT curriculum centered upon evidence-based SBIRT modeling for alcohol, illicit drugs, and misuse of prescription drugs as well as supplementary topics, including the use of the electronic health record in screening and assessments and coverage of institutional and administrative issues that impact the implementation of SBIRT services.

- **Trainers:** Noemi Adame, M.D., Lizette Gomez, M.D., Sylvia Leal-Castenon, M.D., Juan Parra, M.D., Joy Emko, M.D., Sasha Loffredo, M.D., Sunand Kallumadanda, M.D., Doug Maurer, D.O., Drew Baird, M.D., Zaal Paymaster, M.D., Dena George, M.D., Patricia Wathen, M.D., Sean Garcia, M.D., Rosita Frazier, M.D., Erin Nelson, M.D., Gabriel Medrano, M.D., Elly Xenakis, M.D., Michael Dawes, M.D. implement and deliver the comprehensive, culturally competent SBIRT curriculum to residents in the following departments: Pediatrics, Family and Community Medicine, Family Medicine in McAllen and Fort Hood, Internal Medicine at UTHSCSA and the RAHC, Obstetrics and Gynecology, and Psychiatry.

- **Evaluator:** Nancy Amodei, Ph.D., developed the evaluation instruments and analyzes project data. She provides the Project Director with the results of local data analyses that are presented at Curriculum Developer and Trainer meetings or furnished in reports to the funding agency or to community stakeholders.

- **Evaluation Coordinator:** Danielle Dunlap, M.S.., conducts data entry and quality assurance checks on the data. She assumes primary responsibility for data entry, database management, refinement, and manipulation of working data files, and implementation of data-quality assurance procedures. Ms. Dunlap reviews assessments for respondent errors and performs quality assurance checks on completed assessments. She also enters data according to SAMHSA's GPRA Data Entry and Reporting System.

- **Data Manager:** Kyle Kozlovsky, M.S.., is responsible for administering and collecting the evaluation instruments to the residents. Survey administration takes place at baseline, post-training, 30 days post training, and 12 months post baseline. Mr. Kozlovsky also updates tracking data and enters it into the appropriate database.

Curricula

The S-START curriculum includes eight training modules that have been tailored to the respective residency programs and the populations they serve. When S-START was first implemented, program leaders quickly learned that a core set of modules across residency disciplines was not practical because each department has such unique requirements. Instead, the S-START core curriculum refers to SBIRT principles and topics that can be addressed across residency programs and external settings. All training modules have defined learner objectives. Training materials are of good quality and appear to be highly interactive.

1. Culturally competent approaches for SBIRT services
2. Medical conditions linked to substance abuse
3. Use of pre-assessment and screening tools
4. Brief intervention and referral to treatment procedures
5. Pharmacotherapy for relapse, maintenance, and other prescribing practices
6. Outpatient medical management and integrated provider system of primary and specialty care
7. Electronic medical records
8. Administrative issues and considerations

S-START employs a range of training strategies including live and online presentations, video demonstrations, case studies, and pre/post tests. Residents have access to the UTHSCSA online Blackboard Learning System for SBIRT as well as the Johns Hopkins Harriet Lane Continuity Clinic Internet Learning Center curriculum and related information. SBIRT training is enhanced through resident participation in small group discussions with role-play activities and rotations in inpatient and outpatient settings.

Screening materials are available in both English and Spanish. House staff trainees working with adult patients are trained to begin each patient encounter by asking the following prescreen questions:

Alcohol

- (Men) How many times in the past year have you had more than 5 drinks in a day?
- (Women or Seniors) How many times in the past year have you had more than 4 drinks in a day?

Drugs

- How many times in the past year have you used drugs (other than for medical reasons)?

Tobacco

- Do you smoke cigarettes or use tobacco?

To date, S-START has not developed a specific module around referral to treatment. Residents learn about referral to treatment options through a variety of experiential avenues. For example, FCM residents and medical students have the opportunity to meet with members of Alpha Home, a residential treatment center, to discuss participants' life experiences and spend time in the free clinic. They also conduct work in a transitional homeless shelter, a juvenile detention center, and other local settings with indigent populations. As mentioned, faculty and residents can access the Bexar County Substance Abuse Resources Directory to link to local public resources treatment resources.

Pediatrics Department (Pedi)

Residents in the Pedi rotation (45 in total) are introduced to S-START during their new resident orientation session.

The objectives of the SBIRT Pedi curriculum are to:

1. Develop and incorporate sustainable evidence-based SBIRT curriculum into Pediatrics training
2. Improve and increase Pediatric trainees' SBIRT knowledge, attitudes, and practices
3. Ingrain SBIRT training to use in post-training practice settings

The pediatric curriculum consists of both outpatient and inpatient modules (all of which are available online). The curriculum includes, but is not limited to, independent study modules, reflective practice exercises, and case examples. Core SBIRT delivery is conducted through reading assignments linked to small group discussions and role-play. Topics include the following:

Out-patient Curriculum:

  - — Teens and Tweens
  - — Mental Health
  - — Substance Abuse
  - — SBIRT: role play, motivational interviewing, change talk exercises, pocket cards, and online referral directory

- In-patient Curriculum: utilizes Blackboard for reading and reflective exercises
  - — Medical conditions
  - — Pre-assessment and screening tools
  - — Brief intervention and referral to treatment

S-START pediatric residents utilize a pocket card constructed based on an SBIRT algorithm developed in conjunction with Children's Hospital Boston faculty and the American Academy of Pediatrics Committee on Substance Abuse in order to guide residents through the patient encounter.

S-START pediatric residents are taught to prescreen each patient over the age of 10 by asking the following questions:

During the past 12 months, did you:

1. Drink any alcohol (> a few sips)?
2. Smoke any marijuana or hashish?
3. Use anything else to get high (i.e., illegal drugs, over the counter drugs, prescription drugs, things you sniff or "huff")?

Patients are also asked the first question of the CRAFFT screening tool (i.e., CAR questions: "Have you ever ridden in a CAR driven by someone (including yourself) who was 'high' or had been using alcohol or drugs?")

Nurses are responsible for initially asking patients if anyone in the household uses tobacco or smokes.

Positive prescreen questions are followed by use of the CRAFFT as part of the SSHADESS psychosocial interview. The latter is a framework for gaining adolescents' input about their: **S**trengths/interests, **S**chool, **H**ome, **A**ctivities, **E**motions/depression, **S**exuality, and **S**afety. Parents are typically asked to leave the exam room to allow the patient and resident to speak with confidentiality.

If a patient has positives on the CRAFFT screen, residents are taught to engage in a brief intervention utilizing motivational interviewing/enhancement principles. Patients

who do not screen positive are provided with brief education and encouraged to continue making smart decisions and remain abstinent.

Residents learn to refer patients if their usage suggests acute danger or high risk for addiction. For inpatient settings, residents generally have access to an on-site licensed clinical dependence counselor or social worker. For outpatient settings, residents can access the on-line Bexar County Substance Abuse Resources Directory, which is available electronically and, in some facilities, can be accessed through an in-clinic desktop link.

Pedi piloted a Web-based supplemental SBIRT curriculum, which consisted of reflective journaling exercises (based on selected readings) and independent study activities. Residents are given 8 months to complete three modular assignments, estimated to take around 6 hours. S-START faculty noticed that participation in the pilot program waned over time. The team is currently working to restructure the curriculum in order to boost resident participation. They convened a focus group of resident leaders to brainstorm how the Web-based modules can be more feasible and engaging (i.e., made more media-rich). Future iterations of the module may include a pre and post-test and other competency evaluation components.

SBIRT has not yet been incorporated into pediatric electronic health records (EHR), since an EHR does not yet exist; however, paper-based charts have been adapted to include the appropriate screening tools as a reminder to perform and document SBIRT during the patient encounter.

Chart reviews are conducted to assess fidelity to the Pedi SBIRT training model (see description in Section IV).

Family and Community Medicine (FCM)

SBIRT has expanded to FCM departments in multiple settings including the UTHSCSA campus in San Antonio and programs in McAllen, Fort Hood, and Santa Rosa. The objectives of the FCM SBIRT curriculum are to:

- Develop an evidence-based SBIRT curriculum that will be sustained over many years at the Residency
- Positively impact an at risk population, before the negative consequences result
- Implement, develop, and promote SBIRT skills that residents will sustain beyond their training and into practice

FCM introduces SBIRT through a 2-hour session during new resident orientation. At this time, residents are taught about SBIRT principles including the use of appropriate

screening tools, how to engage in motivational interviewing with patients (with practice opportunities), and how to refer patients to treatment. The outpatient electronic medical record has been adapted to include SBIRT as a reminder to adhere to protocol during the patient encounter.

FCM includes several modules to reinforce SBIRT practice, including:

- Train-the-trainer teams for faculty and residents
- Grand Rounds
- Clinical inquiries: computer lab sessions dedicated to evidence-based literature searches
- Cultural competency workshop: residents create patient cases based on their own cultural backgrounds

The curriculum is delivered via multiple formats including small group discussions, peer-to-peer teaching, and independent study. Master lectures occur during Grand Rounds rotations, and Wednesday afternoons are blocked for classroom teaching. Residents participate in screening assignments and have regular supervision from faculty and support staff during inpatient and outpatient rotations. Residents can also access patient cases during their time in the computer lab. Such cases provide information on how to manage, treat, and work with specific health issues.

Residents are taught how to deliver the ASSIST when patients have a positive prescreen. All first-year residents are required to use the ASSIST on 12 patients during their inpatient rotation (four screens during three inpatient rotations). A substance abuse template has also been incorporated into the electronic medical record system and will be adapted to complement the ASSIST.

Residents can work with an in-house social worker to coordinate referrals to locally based treatment facilities.

Chart reviews are conducted to assess fidelity to the SBIRT model (see description in Section IV).

McAllen–Family Medicine

McAllen's Family Medicine program, located in McAllen, Texas, approximately 5 miles from the Mexican border, consists of 18 residents (6 each year). Residents are introduced to SBIRT through a 2-hour presentation during new resident orientation. Alcohol, marijuana, and cocaine are the predominant substance abuse issues affecting McAllen patient population, most of whom are self-insured. Now, Dr. Kallumadanda is the only faculty implementing SBIRT, but efforts are in place to integrate SBIRT among

the other practitioners. Screening (utilizing the ASSIST) is paper based. In outpatient settings, ASSIST screening cards are placed in all Ambulatory Clinic folders as a reminder to screen patients. Onsite social workers are available to coordinate referrals to treatment. Medical follow-up is challenging because patients often travel across the Mexican border to receive care.

Fort Hood–Family Medicine

Residents of Fort Hood's Family Medicine program are introduced to SBIRT during new resident orientation. During this time, residents learn to use the various SBIRT screening tools, including the CAGE, CAGE-AID, TACE, CRAFFT, and ASSIST. They also practice motivational interviewing skills and become familiar with referral resources. SBIRT strategies are reinforced by direct faculty supervision and completion of ASSIST pocket cards. Fidelity to SBIRT protocol is facilitated by using the electronic medical record, which includes SBIRT templates for outpatient visits.

Internal Medicine

The Internal Medicine department has approximately 87 residents. During development of the SBIRT program, it became clear that there was sufficient attention paid to substance abuse "consequences" such as cirrhosis and endocarditis but not on prevention/screening. The program has since developed the following objectives around its implementation of SBIRT in the residency curriculum:

- Develop an evidence-based SBIRT curriculum for a university-affiliated, community hospital-based Internal Medicine residency program.
- Increase awareness among trainees and faculty about SBIRT importance
- Teach and promote sustained SBIRT practices among residents and attending
- Involve faculty in SBIRT training, skills development, and curriculum evaluation

The SBIRT curriculum consists of a single, monthly session with four components: a pre-test, a Blackboard session, a classroom session, and a post-test. Residents are expected to demonstrate their skill base through a yearly case presentation in which they outline a clinical encounter that utilized SBIRT. They also participate in a continuity clinic.

The SBIRT curriculum is reinforced with activities such as skill-building workshops, reading assignments, and independent study modules on Blackboard. Core SBIRT delivery is accomplished with a combination of didactic sessions (for cohorts 1, 2, and 3) and standardized patient training (for cohorts 2 and 3). The program uses University of

California-San Francisco's prescription information sheets and the NIAAA curriculum for alcohol screening, to support learning.

Faculty engage in SBIRT training sessions as part of faculty development. They also supervise residents during the outpatient continuity clinic at Su Clinica Familiar.

A yearly chart review is conducted to ensure that SBIRT encounters have been sufficiently documented into their electronic record system.

Regional Academic Health Center (RAHC)– Internal Medicine

The RAHC internal medicine program, located in Edinburg, Texas, approximately 20 miles from the Mexican border, is comprised of 16 residents. The program is under the auspices of UTHSCSA, but separate from the San Antonio Internal Medicine training program. The RAHC program does use the university's online resources (i.e., BlackBoard). Alcohol, marijuana, and cocaine are the predominant substance abuse issues at this location. RAHC's chief resident, Rosita Frazier, participated in the national Chief Resident Immersion Training (CRIT) program, and through this spawned the adaptation of the mini-CEX, a widely used Internal Medicine training tool that measures resident competencies, to assist in measuring resident competency with SBIRT. With this tool, faculty members observe residents' delivery of screening and brief intervention skills and provide immediate feedback. RAHC has a core faculty-training program and has made SBIRT a competency component within Internal Medicine.

Obstetrics and Gynecology

The OB/GYN department has 24 residents in its rotation (six residents in each program year). The department serves a predominantly indigent population, and issues with heroin appear frequently.

The OB/GYN department has the following objectives around its implementation of SBIRT in the residency curriculum:

- Train OB/GYN residents how to use SBIRT
- Enhance resident readiness/confidence with SBIRT application
- Integrate SBIRT into ongoing clinical practice

The SBIRT curriculum is enforced through activities like role modeling, screening assignments, and independent study. Core SBIRT delivery is accomplished with a 1-hour large-group didactic session.

The expectation is that all patients are screened for tobacco, alcohol, and/or other substances.

Residents are trained to deliver the CAGE, T-ACE, or CRAFFT screening tool when their patients have a positive prescreen. Pocket cards have been developed to help remind residents how to deliver the appropriate screening tool. The screening questions have also been adapted into the electronic medical record system and are asked as part of a patient's general social history.

S-START OB-GYN residents utilize the Brief Negotiated Interview and Active Referral to Treatment (BNI-ART) Algorithm, a tool created by Boston University's School of Public Health and the Youth Alcohol Prevention Center in collaboration with the Boston Medical Center, when engaging with adolescent patients. The BNI-ART prompts residents to:

- Raise Subject and Ask Permission
- Provide Feedback (review the screening tool and discuss recommended guidelines)
- Enhance Motivation (utilize motivational interviewing principles to assess readiness to change)
- Negotiate and Advise (set goals and provide information)

There is an in-house substance abuse consultant on call to address patients' treatment related needs. Residents learn to identify those in need of specialty treatment and refer to the consultant when appropriate.

A retrospective chart review is being conducted before and after the rotation to evaluate outcomes factors such as SBIRT implementation, patient compliance, and referral to treatment.

Psychiatry

The Psychiatry department (housed at the VA) has 15 first-year residents and 5 forth-year residents in its rotation (which lasts 4 weeks). Patients present most frequently with issues around alcohol abuse.

Psychiatry has the following objectives around the implementation of SBIRT into their residency curriculum:

- Develop an evidence-based Psychiatry SBIRT curriculum that will be sustainable long-term
- Improve and enhance SBIRT practices of psychiatry residents

- Promote SBIRT skills that psychiatry residents will sustain beyond their training and into their psychiatry practice settings

The core SBIRT curriculum is supported through various strategies including large group didactic lectures and small group discussions. Future SBIRT expansion plans in Psychiatry include development of a train-the trainer program and delivery of Grand Rounds modules. The revised outpatient Child Psychiatry Initial Psychiatric Evaluation includes the CRAFFT screening tool. This serves to remind residents to both ask and document patient's responses around their substance use.

SBIRT will be incorporated into the electronic medical system (anticipated to launch in September 2011). The department also plans to hire an additional addiction specialist to assist with patient referrals. In general, SBIRT integration within Psychiatry has been a challenge. Residents have largely promoted/championed SBIRT within the department. This has prompted support from some faculty, although momentum is slower than other specialties.

Psychiatry residents also use the SBIRT pediatric pocket card as a reminder to practice SBIRT with their child/adolescent psychiatry patients.

Surgery

General Surgery is a recent addition to the SBIRT team. Its residents (n = 39) participate in a 14-month trauma rotation. Patients seen in this setting often present with substance issues involving alcohol, marijuana, cocaine, and/or methamphetamines.

Residents are exposed to SBIRT through large group didactics, individualized hands-on trainings with registered nurse case managers, and independent reading and online modules. Residents will be trained to screen patients at each encounter and will be supported by a licensed chemical dependency counselor, as needed.

A proposal has been submitted to revise the electronic health record system to include a SBIRT checklist. This effort is geared toward providing a brief intervention to patients who enter the trauma center with a blood alcohol level above .8.

To date, resident competency measures have not yet been developed.

Curriculum Observations

- S-START has allowed each of the specialty areas to adopt SBIRT in their own way, recognizing the necessity for flexibility around curriculum development within each setting).
- S-START emphasizes adolescent mental health in pediatric settings. It has developed a comprehensive set of materials to assess adolescent risk of substance use and abuse. The program uses the SHADESS psychosocial interview format which screens a broad range of psychosocial issues impacting youth, including depression, peer pressure, suicide, and home environment.

Approach/Implementation

Residency training implementation

SBIRT skills training is comprised of standard-of-care, evidence-based practices considered the most effective approach for addressing patients' substance use problems. Training has become an ongoing and integrated component of the residency curriculum. A variety of strategies are used to implement SBIRT into residency-specific curricula:

- For the Pedi residency program, the SBIRT curriculum is implemented into training via inpatient and outpatient rotations, online Blackboard Learning System modules, and small group discussions with role-play.
- For the FCM residency program, the SBIRT curriculum is implemented into training through interactive skills workshops during residency orientation, one-to-one teaching in clinic or hospital inpatient and outpatient settings (e.g., precepting, shadowing, mini-CEX, and discussions), and Blackboard Learning System portfolio assignments.

To date, 387 medical residents have received initial SBIRT training. Of those, 338 have received training beyond the initial training. Additionally, two internal medicine chief residents have participated in CRIT training.

S-START utilizes the "train-the-trainer" model to disseminate SBIRT curriculum to faculty, physicians, and other teaching professionals and practitioners in health-affiliated fields, regionally and across the State. To date, 31 faculty members have been trained using the train-the-train approach.

Staff developed a poster on SBIRT within S-START and the major issues affecting implementation. They determined that baseline attitude is a critical factor in facilitating or impeding future SBIRT adoption. Knowledge and practice vary by provider type; namely there are significant cohort and departmental differences. Leadership concluded that a one-size fits all approach is not a successful diffusion strategy.

Approach/Implementation Observations

- S-START has incorporated SBIRT into electronic medical records (where possible) and paper-based records otherwise. Residents indicated that SBIRT reminders on charts (whether electronic or paper-based) are very helpful.
- It was clear that residents were performing prescreens and screens, but less clear how well positive screens translated into BI and RT.
- Referral services in outpatient settings are less utilized namely because residents are not as familiar with referral options. Onsite referral support staff, such as licensed chemical dependency counselors and social workers, benefit inpatient settings. All sites are encouraged to use the on-line Bexar County Substance Abuse Resources Directory.
- Because SBIRT is implemented across several departments, it is challenging to quantify how the curriculum is delivered. Program evaluators hope to aggregate the first year's findings to inform processes better.

Data Collection and Evaluation

Nancy Amodei, Ph.D., leads evaluation of the UTHSCSA SBIRT program. The program has developed a qualitative process evaluation to monitor training fidelity, stakeholder involvement, and sustainability. They also created an outcome evaluation to assess S-START's effectiveness in (1) enhancing residents' knowledge of evidence-based practices; (2) enhancing residents' readiness and perceived confidence to implement SBIRT with their patients; (3) increasing residents' implementation of SBIRT practices with their patients; and (4) enhancing faculty participants' SBIRT knowledge and confidence to teach SBIRT practices to future physicians.

Pocket cards are used in FCM programs to document residents' implementation of SBIRT practices during their rotations and to capture any successes or challenges during their patient encounter; for example, whether residents screened patients for alcohol and substance use and, if appropriate, did residents conduct a brief intervention or referral to treatment. Participating departments are utilizing different pocket cards in different ways. In FCM, the pocket cards are used to monitor fidelity and require a faculty signature, while in Pedi and OB/GYN, the cards are used as a reminder tool for residents to practice their SBIRT skills.

Since SBIRT training occurs over time, the evaluation of curriculum effectiveness also occurs over time, extending through residency training and into the practice setting. Follow-up surveys are provided immediately following a training session, at 1 month, and annually (at 12, 24, and 36 months) in order to document any changes in resident knowledge, attitudes, and clinical practice skills. Residents receive a gift card, valued at $10 to $20, as an incentive to complete the survey. SurveyMonkey, an online survey tool, is used to obtain baseline and follow-up data. The overall baseline and follow-up questionnaire contains 93 questions and draws heavily from the Alcohol Education Survey and the Brief Substance Abuse Attitude Survey to measure residents' experience and education around alcohol and substance use. Residents are asked to answer both core common knowledge and module specific questions before and after receipt of SBIRT training. A tracking form was developed to gather information that will allow evaluation staff to remind residents of impending follow-up dates and is especially helpful in obtaining data before resident's graduate. Physicians and non-physician clinicians who receive SBIRT training through the train-the-trainer model are assessed using the same knowledge questions given to residents.

Pre-post survey results indicate that since SBIRT training began, all residents' knowledge of SBIRT practices has increased (i.e., there were no differences in knowledge among programs). Residents showed no significant change in their readiness to implement SBIRT because baseline measures were already high; however, they did report greater overall confidence in their ability to use SBIRT in practice. Finally, most programs demonstrated a general increase in SBIRT implementation with their patients, based on self-report.

A chart review form in Pedi and FCM was also developed to assess resident fidelity with screening questions and general SBIRT protocol. Eight hundred unduplicated charts are examined 60 days before SBIRT training began (baseline measure) and another 800 charts are reviewed after one year and three years of SBIRT training (follow-up measure). Approximately 800 chart reviews have been conducted to inform the data.

The evaluation team is exploring publication opportunities based on the data extracted from ASSIST screens in the first year, along with annual survey data.

Data Collection and Evaluation Observations

- S-START has a robust evaluation component that includes both process and long-term outcome level data (i.e., 36 months).
- Obtaining follow-up data from residents has been challenging for the evaluation team. They have utilized various strategies, including gift card incentives, Round-Up certificates (for faculty), and linking to social media outlets (MySpace and Facebook), to encourage residents to complete surveys.
- The project has done a good job disseminating lessons learned into presentation opportunities on a local and national level.
- Competency and proficiency are measured using the mini-CEX, and further development in this area is being explored.
- The evaluation team has exceeded evaluation requirements by embarking on a large-scale chart review effort to measure patient outcomes (in Pediatrics and Family and Community Medicine).

Council of Residency Directors

The Council of Residency Directors changed their title to the Council of Residency SBIRT Trainers as a means to make it a more inclusive leadership body. The Council meets approximately three times each year and receives updates via a newsletter (the CRSTy Times), Web site, and phone conferences. Such communications stress the importance of SBIRT and raise awareness about available support resources (e.g., program Web site, substance abuse directory, and presentation opportunities).

SBIRT leadership has identified the following as critical systems' change activities that can support SBIRT on a long-term basis:

1. Continuing to foster dialogue among the Council of Residency SBIRT trainers and building momentum from change leaders across departments and settings
2. Promoting SBIRT through technology such as the electronic medical record system, the S-START Web site, and other initiatives (i.e., the iPad project)
3. Encouraging fidelity to the SBIRT model through use of pocket cards, standardized patient training, and, when possible, direct observation of residents by faculty.

Council of Residency Directors Observations

- S-START has adapted different strategies to formulate a more effective and efficient leadership body. Council members are engaged and actively promoting SBIRT within their departments.

Summary of Onsite Observations

S-START provided a comprehensive review of their program over the course of the 2-day site visit. Observations from program presentations follow.

Standardized Patient Training

The site visit team participated in Standardized Patient (SP) training with third year medical students. Poor resident SBIRT skills prompted leadership to implement training at the medical school level. To date, 72 medical students and 6 residents have gone through the SP rotation.

UTHSCSA has an extensive SP training center in which faculty can observe a patient encounter through a one-way glass or videotape. Participants receive interviewing and SBIRT training materials in advance. During the training, participants are given a brief summary of the patient scenario and equipped with tools, such as a NIAAA pocket card, and a smoking-cessation education tool, that they can use as they rotate through five specific standardized patient scenarios that include cases on alcohol use, smoking cessation, and domestic violence. Trained and experienced actors as standardized patients provide immediate feedback to participating students/residents and complete a computerized evaluation survey. The Objective Structured Clinical Examination (OSCE) is also used on a yearly basis to measure residents' proficiency in providing substance abuse counseling during patient encounters. The results of previous OSCEs have emphasized the need for continual practice. Residents indicated that this developmental SP training is a helpful tool to practice and reinforce necessary skill sets. Future trainings may include scenarios around prescription drug use.

Department Poster Showcase

S-START invited department representatives to showcase their SBIRT curricula and training activities. Members from Pedi, FCM (UTHSCSA, McAllen, Ft. Hood, and CHRISTUS Santa Rosa), Internal Medicine (UTHSCSA, RAHC), OB/GYN, Psychiatry, and Trauma Surgery, and the Evaluation Team presented posters and brought examples of SBIRT trainings materials, such as pocket cards to the showcase. The session was highly informative and demonstrated the extent to which SBIRT has been disseminated across departments and is supported by multiple champions.

Clinic Tours

CHRISTUS Santa Rosa–Pediatrics Clinic

The CHRISTUS Santa Rosa Children's Health Center sees approximately 20,000 children (up to the age of 19) each year. The Center is utilized as a teaching facility and a continuity clinic. It contains 22 treatment rooms for acute care services and has access to the emergency department, if needed.

A large percentage of the patient population (approximately 80 percent) is enrolled in Medicaid or S-CHIP. Most patients are Hispanic and come from Spanish-speaking households. Patients present with a host of behavioral health issues, including ADHD, obesity, and substance use disorders.

University Health System: Family Health Center Downtown (FHCD)

The FHCD sees approximately 30,000 to 35,000 patients each year. It consists of four service pods, each of which has two faculty leaders. Substance abuse is addressed at each patient encounter. Faculty precepting consists of residents visiting with patients, presenting the patient case to faculty, and then consulting back with the patient. Patients are somewhat resistant to the screening process; however, faculty and residents noted that MI training has facilitated nonjudgmental questioning techniques to elicit information and promote conversation. Staff hope to use MI to address other patient health concerns, like obesity "just like we do for SBIRT."

Computers are available in every patient room and in hallway kiosks. SBIRT has been included in the center's electronic medical record system for about 2 years. Entry of screening information is not a required field in the system, meaning that it is not a hard stop within the template.

Summary of Onsite Observations

- S-START has been successfully diffused across several specialty areas and settings, including military installations (Fort Hood and BAMC). Residents, multiple faculty members, and nonmedical support staff have endorsed the program.
- Buy-in, particularly among faculty and medical school administrators, is strong. Multiple champions within each program increase the likelihood of sustainable SBIRT practices beyond the life of the grant.