



SBIRT
Service Design
Site Visit

**University of
Missouri–Columbia**

Service Design Site Visit Report: University of Missouri–Columbia



Prepared by JBS International, Inc. and Alliances for Quality Education, Inc.
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Service Design Medical Residency Site Visit Report: University of Missouri–Columbia

Grantee Name	University of Missouri–Columbia
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Grantee Project Team Members Visited

University of Missouri–Columbia SBIRT Medical Residency Project Team:

Daniel Vinson, M.D., Principle Investigator, Project Director

Bruce Horwitz, Ph.D., Principle Investigator, Project Director

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Overview and Summary of Findings

Purpose of the Visit

The purpose of the visit was to conduct an onsite assessment of program strengths and to engage the grantee in a continuing improvement process supported by technical assistance, as approved by SAMHSA. The assessment of the University of Missouri's SBIRT medical residency training program model, curriculum, training methods, implementation, and program evaluation was completed through the following tasks:

- Meeting on site with the principal investigators/project directors, project coordinator/evaluator, SBIRT department leaders (DSLs), program champions, clinical staff, and residents
- Reviewing curriculum components and materials (paper and electronic)
- Visiting the Russell D. and Mary B. Sheldon Clinical Simulation Center

The site visit team met with the University of Missouri–Columbia's SBIRT Project Principle Investigators/Project Directors and Project Coordinator/Evaluator on December 6–7, 2010, to gain a better understanding of the SBIRT medical residency training program model, curriculum, training methods, implementation, and program evaluation. The site visit team also met with the DSLs from the following specialty areas—Family and Community Medicine, Psychiatry, Internal Medicine, Child and Adolescent Health, Obstetrics and Gynecology (Ob-Gyn), Surgery, and Trauma as well as the Schools of Nursing and Social Work—to discuss their general impressions of SBIRT, plans for training residents, preparedness and receptivity of residents to trainings, instructional method and strategies for training, tracking resident progress, and challenges to implementing training.

Day 1: On December 6, the site visit team participated in four meetings with the SBIRT project team and department SBIRT leads and toured the School of Medicine's Russell D. and Mary B. Sheldon Clinical Simulation Center. The meetings took place at the University of Missouri Hospital. In the morning, the site visit team met with the Principle Investigators/Project Directors and Program Evaluator to discuss the SBIRT training program with a focus on understanding progress to date, status of plans, current implementation, barriers and facilitators to implementation, and lessons learned. Topics that were covered included the following: program background and context, program model, curriculum components, faculty training, residency implementation, dissemination model, and sustainability planning. The site visit team also met with the Surgery DSL to

discuss his impressions of SBIRT. The morning's activities also included a guided tour of the Clinical Simulation Center, where Drs. Vinson and Horwitz performed a mock SBIRT patient encounter.

In the afternoon, the site visit team met with the Project Directors/Principal Investigators and Project Coordinator/Evaluator to review of the curriculum components. An additional meeting took place with the Family Medicine DSLs to discuss the implementation of SBIRT in their department.

Day 2: On December 7, the site visit team met during the morning with the Project Coordinator/Evaluator and Principal Investigator to discuss the local program evaluation design and plans (process and outcome assessments), evaluation activities and progress to date, barriers and facilitators to evaluation, lessons learned, and to review any preliminary data. Topics that were covered included the following: monitoring residency performance, process assessment, and outcome assessment. Meetings took place separately with faculty and residents in Child and Adolescent Health and Family and Community Medicine. The site visit team also met with a group of DSLs from various specialties and the Schools of Nursing and Social Work. Meeting topics included general impressions of SBIRT, plans for training residents, preparedness and receptivity of residents to trainings, instructional method and strategies for training, tracking resident progress, and challenges to implementing training. Similarly, in the afternoon, meetings covering these topics took place with DSLs and in Ob-Gyn and Psychiatry.

Overview of Project

The University of Missouri–Columbia (UM) School of Medicine's SBIRT Medical Residency Training Program is currently in year 2 of its 5-year SAMHSA SBIRT grant. The project's goal is to deliver SBIRT training to residents across a total of seven primary care residency programs, including (1) Family Medicine, (2) Internal Medicine, (3) Adolescent and Child Health, (4) Psychiatry, (5) Medicine–Pediatrics, (6) Ob-Gyn, and (7) Surgery; as well as medical students and graduate nursing students. Social work students and faculty are also targeted for training.

The curriculum components include four online didactic modules with quizzes, which form the core of the training; a 1-hour lecture with discussion, role play and feedback; 2 hours of practice in the Clinical Simulation Center with actors who provide feedback; and clinical practice with feedback.

As of December 1, 2010, 258 individuals had received basic training in SBIRT using the online modules. The majority of the residents and medical students also received additional training on other components of the curriculum.

Over the 5-year period, UM's SBIRT program expects to train 360 residents using the full curriculum as well as 1,500 nursing students, 200 nurses, 980 medical students, and 180 students in social work. Up to 300 practicing physicians and other healthcare professionals will receive training in regional and Statewide trainings.

The UM SBIRT program evaluator will use a series of tools to measure the impact of training on resident attitudes, knowledge, and practice skills related to SBIRT.

Administration of a pre/post attitudes, knowledge, and skills (AKS) survey will take place annually to measure changes in resident, attitudes, knowledge, and skills regarding SBIRT. Assessments of residents' skills delivering SBIRT in actual and mock clinical encounters are planned for all residents. The residents will receive feedback from three sources—faculty, patients, and actors with whom they have engaged in simulated encounters. In addition, the residents will submit self-reports on their SBIRT skills. The evaluator will also generate tracking and status reports for the SBIRT project staff, Department SBIRT Leads (DSLs), and SAMHSA.

Project Accomplishments to Date

The UM SBIRT medical residency program has completed several activities within their first year of funding. A summary of major accomplishments to date include the following:

- Development of a core training curriculum to be applied across residency program areas
- Commencement of training for the Family Medicine, Internal Medicine, and Psychiatry residency program area
- Adaptation of training for Surgery
- Commencement of training for nursing students and third-year medical students in the psychiatry block
- Commencement of training for non-resident faculty
- Development of evaluation instruments
- Finalization of a tool to measure change in resident attitude, knowledge, and skill

Program Strengths

Faculty and Organizational Experience

Principal Investigators/Program Directors, Drs. Dan Vinson and Bruce Horwitz, have significant past experience in research, education, and training involving substance abuse treatment in clinical practice. Daniel Vinson has a long-term commitment to integrating the identification and management of alcohol and drug problems into routine primary care. He led the team that developed and validated a single-question screen for alcohol problems, and was the Principle Investigator on an R01 from the National Institute on Alcohol Abuse and Alcoholism (NIAAA), studying acute alcohol exposure and injury risk. Dr. Vinson is now the Project Director for the SBIRT medical-residency grant at the University of Missouri–Columbia’s School of Medicine, where he is also a professor of Family and Community Medicine.

Dr. Bruce Horwitz is a Research Assistant Professor in the Department of Psychiatry, School of Medicine, University of Missouri–Columbia. Dr. Horwitz is currently working on several interrelated SBIRT projects including State implementation and residency training grants and a grant to develop a Web-based intervention that is integrated into routine care. Previously, Dr. Horwitz administered community mental health programs for the university and brings that perspective to his SBIRT work with a strong commitment to team approaches and access to a continuum of care.

Multi-Modal Curriculum

The SBIRT curriculum was designed to be delivered in various methods, including didactic training modules, didactic lectures, training videos, role-plays with feedback, clinical simulation, and monitored clinical practice with feedback. The project team is committed to providing a consistent core curriculum to a diverse group of residents. To achieve this goal, they work with Department SBIRT Leaders (DSLs) to develop methods for training that will be flexible and adaptive to unique residency program needs.

Continuing Medical Education (CME) Credits

The SBIRT project has obtained CME credits for the SBIRT training program.

Departmental Buy-In

Several medical specialty areas support SBIRT training for their residents, including Family Medicine, Internal Medicine, Adolescent and Child Health, Ob-Gyn, Surgery, and Psychiatry. Departmental champions have emerged who have been instrumental in advocating for SBIRT and finding ways to implement it in their departments. In addition, the nursing and social work departments are avid supporters who desire the training.

Collaborations

The UM SBIRT medical residency program has developed collaborations with State organizations to develop and disseminate the training program. The Missouri State SBIRT Program (MOSBIRT) assisted with the development of SBIRT training videos, and the Missouri Institute for Mental Health is providing technical assistance for Web accessibility of the training modules. Another collaborator, the Mid-America ATTC, will disseminate the SBIRT medical residency program training curriculum.

Program Challenges/Barriers

Discussions with the SBIRT project team, project evaluator, DSLs, champions, and residents indicated the following project challenges/barriers:

- **University Blackboard System:** The didactic training modules reside on the university's Blackboard system, which has limitations. Blackboard (Bb) is not useful for public dissemination of the training modules beyond the university setting. In addition, Blackboard's tracking capability is limited. For example, SBIRT project evaluation staff must continually monitor the Bb Grade Center, open individual trainee records which indicate with an icon an "attempt" on the built-in baseline GPRA survey that concludes the Bb training package, then "grade" each open-ended question there to register the GPRA - and therefore the SBIRT training - "complete" before manually transferring the GPRA responses in order to enter into the SAIS. This burdensome process has been necessary to determine if a training module was completed by a resident or not, making it difficult to track the status of specific departments'/groups' training progress and hindering the development of reports for the DSLs. This challenge should be resolved when the modules go online in February 2011.
- **GPRA Survey Administration:** GPRA data are collected using two different methods of survey administration, which may contribute to lower GPRA follow-up rates. The GPRA Baseline Training Satisfaction Survey is administered via the Blackboard online training package as mentioned above. Once baseline data is manually transferred to hard copy, completion status for online training and Baseline GPRA survey is entered into the Evaluator's MS Access project tracking database, along with other relevant trainee data (department, residency year, pre-AKS completion date, etc.) and a GPRA ID is established and used for entering baseline and follow-up into SAIS. This unique identification number is coded to easily identify grant year, department, and educational status at advent of SBIRT training. The GPRA 30-day follow-up survey is administered via Survey Monkey. Residents are instructed to enter their university unique ID known as their "pawprint", generally their last name and first initial. Since this is the unique

ID necessarily entered (by university IT/Blackboard team) for each resident, this is the theoretical link between GPRA baseline and follow-up surveys. The project team has learned by experience that residents may not know their “pawprint” when asked to enter it to begin the follow-up survey in Survey Monkey. Consequently, a few residents have completed the follow-up survey, possibly more than one time on the email request of the evaluator, with no way for the evaluator to link it to resident. The SBIRT program is preparing to move their online training from Bb to the web, and to collect both baseline and follow-up GPRA via their new website. Once the online application becomes active, unique identifiers will be automatically assigned to each record and the retrieval of the follow-up GPRA survey will be automated.

Team Roles and Responsibilities

- **Project Directors:** Daniel Vinson, M.D. is the Project Director for the University of Missouri–Columbia’s SBIRT medical residency program. Dr. Vinson serves as the primary contact person with SAMHSA and oversees all reporting to SAMHSA. He provides leadership for curriculum development and training and serves as liaison to key decision makers in the School of Medicine and externally. Project Co-Director, Bruce Horwitz, Ph.D., provides project coordination, curriculum development, and training to the medical residency program. He also serves as liaison to external partners and collaborating organizations.
- **Program Coordinator/Evaluator:** Debra Sprague, M.S. coordinates all aspects of the training/scheduling, format/instructional design in Bb, and project evaluation, and supervises program staff. Ms. Sprague collaborates with Dr. Vinson and Dr. Horwitz in the overall project evaluation. She is responsible for the development and implementation of the evaluation protocol and oversees the revision of extant measures and the development of new measures as necessary. Ms. Sprague also provides data analysis and report writing.

Administrative Observations

- Blackboard lacks the tracking and reporting functions required to monitor the daily status of residents’ progress effectively.
- The planned Web-based system will greatly facilitate the monitoring of training.

Curriculum

The UM SBIRT program initiated the development of the resident training program curriculum in October 2009; and the didactic modules that are the foundation of the curriculum were uploaded to Blackboard for use by May 2010. UM's SBIRT program benefited from a review of curricula content produced by first year cohort of SBIRT medical residency grantees and was able to adapt appropriate content for its curriculum. At this time, Internal Medicine, Family Medicine, and Psychiatry faculty provide most of the training. However, the goal is for faculty in each department to become proficient trainers so that they can train their own residents. The program also encourages faculty to train residents in other specialties. For example, faculty in Pediatrics and Adolescent Medicine will be encouraged to train residents in other departments to familiarize them with the characteristics and issues of teen and young adult alcohol and drug use.

Curriculum Components: The UM SBIRT program's curriculum consists of the following four components: (1) four didactic training modules; (2) a 1-hour lecture with discussion and role-play; (3) 2 hours of practice in the Clinical Simulation Center with actors; and (4) clinical practice with feedback.

The didactic modules form the core of the training program, which trainees must complete before they advance to the three successive training components. The residents must complete the SBIRT curriculum within 1 year. The curriculum, which is being modified to facilitate its implementation by the various specialty areas, will be available on the Internet by February 2011.

The trainings and clinical practice have been accredited for CMEs for faculty and community physicians.

Didactic Training Modules

Four didactic training modules form the core of UM's SBIRT medical residency training program. The modules, accessed through the university's electronic Blackboard, are based on a programmed learning model and provide foundational information on SBIRT. They include the following:

- Module 1: What SBIRT is; evidence for its efficacy; epidemiology of substance use disorders; and burden on society and healthcare.
- Module 2: Screening, assessment, MU health care screen for substance use, and brief clinical assessment for severity of at-risk alcohol use.

- Module 3: Stages of change and motivational interviewing;
- Module 4: Brief intervention

Each training module concludes with a quiz requiring that the trainee demonstrate mastery of the content before advancing to the next module. The modules were designed to be completed in 2 hours. However, some residents report that the online module can take up to 3 hours to complete. A trainee who does not successfully complete a quiz must return to the module to review the information that was incorrect. A lecture presentation of the modules is optional; the Surgery Department has opted for this training method.

The first set of training modules that were developed focused heavily on the epidemiology of SBIRT. Feedback on the modules indicated that the trainees would prefer more training on SBIRT skills. As a result, the training modules are being rebalanced to focus more on skills and less on epidemiology.

Didactic Lecture, Discussion, and Role Play

Following the completion of the didactic training modules, the trainees receive a 1-hour lecture and participate in a discussion on the information presented in the modules. This time is also devoted to the development of residents' motivational interviewing skills through role-plays and feedback from trained faculty.

Clinical Simulation

Trainees receive 2-hours of SBIRT clinical skills practice in the Clinical Simulation Center.

The Clinical Simulation Center occupies a floor of a new building on the university's medical center campus. The center offers a realistic setting in which the trainees can practice their screening and motivational interviewing skills with a live actor. The rooms are accurate recreations of clinic exam rooms, complete with working faucets and computers. Two cameras are located within the simulation room, one behind the learner, and the other behind the actor, to record both the resident and the actor's facial and physical cues and reactions.

Following the session, the actor provides feedback on the trainee's skills. Peers and faculty who are able to watch the interaction on television monitors in the nearby control room also provide feedback.

An actor portrays the patient, while the learner takes the role of the physician. Before conducting the simulation, both the actor and the learner receive sheet information on the patient's condition. Actors are encouraged to portray the patient's reactions as

realistically as possible. The simulation typically lasts 10 minutes. When the simulation is over, the actors give direct feedback to the learners.

Outside of the simulation rooms, there is a control room where monitors project the events in each simulation room. Trainers and learners sit here to observe and comment on the simulations being conducted. The observers also rate the trainee's motivational interviewing skills using a rating form. The observers are able to electronically bookmark sections the video in order to give precise feedback to the learners and actors. The actors may provide feedback to the group as a whole within the control room.

Feedback from the residents on their experience in the Clinical Simulation Center has been positive. Although some residents have found the experience to be intimidating, they indicated that having a script helps. The DSLs commented that one of the greatest challenges to training in the Clinical Simulation Center has been time management. Scheduling the residents for training can be difficult given the residents' full schedules.

Monitored Clinical Practice with Feedback

The UM SBIRT trainers will also provide residents with monitored clinical practice and feedback to assure that SBIRT is integrated into routine clinical practice. Each resident will receive monitored practice and with feedback each year from the DSLs. Feedback will also be provided by patients, using patient exit questionnaires, and by the residents, themselves, using self-report cards.

Plans for Future Curriculum Development

The curriculum will evolve as more specialty areas are trained. The SBIRT program directors plan to meet with the DSLs in the spring to discuss adaptations to the curriculum for their respective specialty areas. The curriculum will be customized to accommodate the unique requirements of each specialty area related to scheduling, patient characteristics, practice setting, workflow, etc. For example, smoking is an important issue for the Surgery Department; therefore, an appropriate module will be added for this department.

Each residency program will use the curriculum, materials, and training exercise concepts as a foundation for "customizing" the SBIRT training program that meets their specific scheduling and practice needs. Cross-specialty training will also be explored.

The UM SBIRT program is also developing 30- to 60-second video clips showing good and bad examples of motivational interviewing micro skills as well as several 4- to 5-minute examples. The training videos will be linked to the corresponding parts of the module content. The curriculum will be uploaded to the Web in early 2011. The project staff is considering compiling the video clips to produce material for SBIRT refresher training.

Curriculum Observations

- The curriculum is “evolving” and will continue to “evolve” as more specialty areas are trained.
- Productive collaborations have been developed with the Missouri State SBIRT Program, the Missouri Institute for Mental Health and the Mid-America ATTC to develop SBIRT Web-based training tools and disseminate training.

Approach/Implementation

Residency Training Implementation: The UM SBIRT medical residency program's curriculum was designed for use by all of the medical specialty areas. As of December 1, residents in three medical specialty areas as well as non-resident faculty and nursing and psychiatry students have received SBIRT training, as shown in the table below.

Feedback received from residents and faculty on the first generation modules have resulted in planned modifications, including greater focus on skills and less on epidemiology, video clips demonstrating SBIRT micro-skills, and adaptations to maximize relevance to specialties. The modules will be transferred from Blackboard to a Web-based system to improve data collection, analysis, and reporting, and to extend access to the community.

**University of Missouri Medical Residency Training Program
Status of Training, December 1, 2010**

Department/ Specialty Area	Online Modules	Didactic Lecture/ Role Play	Clinical Simulation Center	Clinical Practice Monitored
Residents				
Family Medicine	21	21	21	0
Internal Medicine	22	22	22	0
Adolescent & Child Health	0	0	0	0
Psychiatry	17	17	0	0
Med Peds	0	0	0	0
Ob-Gyn	0	0	0	0
Surgery	0	0	0	0
Total Residents Trained	60	60	43	0
Students				
Nursing	156	71	0	0
M3s—Psychiatry	36	36	31	0
Social Work	0	0	0	0
Total Students Trained	192	107	31	0
Faculty				
Non-Resident Faculty	6	1	1	0
Total Trained	258	168	75	0

Adaptations: A three-question prescreening instrument was derived from other screening tools. The pre-screening tool includes an alcohol question and two drug questions. For men: In the past year, have you had five or more standard drinks. A brief assessment is made on the quantity and frequency of use, and questions are asked on functional impairment, i.e., “In the past 12 months, how often have you had a lot more to drink than you intended to have?” The empirically validated questions were designed to be more conversational than the AUDIT and other screening tools.

Adaptations will be made to the curriculum to facilitate its implementation in the various specialty areas. For example, the online didactic modules will be presented to the surgery residents in face-to-face didactic lectures. The surgery residents reported that online training requirements have become so numerous that they have become tedious and boring. The residents argued for this adaptation in exchange for their buy-in.

UM Program Implementation: An abbreviated timeline listing major, overall, and program implementation activities over the 5-year duration of the grant follows on page 13.

Approach/Implementation Observations

- The screening instrument developed by UM's SBIRT medical residency program consists of three items—one related to alcohol use and two related to substance use.
- There is flexibility with regard to the screening tools and approaches to screening that are used. For example, the Psychiatry Department uses the CAGE to screen patients, while it is likely that Social Workers will screen Surgery and Trauma patients because of the Uniform Policy Provisions Law (UPPL). The UPPL allows insurers to deny insurance coverage for injuries sustained while a patient was intoxicated or under the influence of another drug.

University of Missouri SBIRT Medical Education
Abbreviated 5-year Implementation Plan
Grant# TI020288

	Infrastructure Development	Curriculum Development	Evaluation
Grant Year 1	Recruit participating residency and School of Nursing (SON) programs; Recruit faculty champions in each residency program and in the SON; Meet with faculty leaders from 6 residencies and SON; Engage School of Medicine (SOM) and healthcare system leadership to support SBIRT education; Recruit Evaluation Director and arrange for appropriate training; Engage SOM, SON and residency curriculum directors to integrate SBIRT into educational framework; Obtain buy-in from leaders and staff in clinical venues (ER, inpatient wards, clinics) across all disciplines; Establish mechanisms for monitoring residency program performance in meeting curricular objectives; Create, implement, and continually refine measures of resident and student performance with patients.	Integrate pre-screening questions into the electronic medical record; compile and review available curricula; Develop general and specialized curricula; Prepare initial computerized training documents/tools; Pilot didactic and clinical simulation training with residents; Create education and training schedule for SOM, GME and SON; Complete initial computerized training documents/tools; Begin didactic training; Design supervised clinical experiences in SBIRT; Begin clinical simulation training; Implement supervised clinical experiences in SBIRT.	Recruit Evaluation Director and arrange for appropriate training; Develop optional/additional process and outcome evaluation measures; Operationalize evaluation plans based on curricula across six residency programs and SON; Implement program evaluation instruments and processes.
Grant Year 2	Begin supervised inpatient/outpatient clinical training; Train residents as trainers; Residents begin training medical students; Develop materials to disseminate to other external sites; Develop strategic plan for external dissemination; Develop linkages to external partners and solicit early adopter partners.		
Grant Year 3	Begin training in community sites and other residencies; Provide implementation consultation to community sites; Begin evaluation of community training and implementation.		
Grant Year 4	Continue and expand community dissemination with regional trainings; Begin transfer of training responsibilities to Residency Programs; Standardize SBIRT training policies/procedures/support.		
Grant Year 5	Phase out support for education and training; Monitor independent sustained efforts across departments; Comprehensive program evaluation; Consolidate and perfect materials and processes.		

Data Collection and Evaluation

The UM SBIRT medical residency training program is conducting the local program evaluation. The evaluation will assess the extent to which the UM SBIRT medical residency training program produces change in resident attitudes, knowledge, and skills regarding SBIRT with patients in medical settings. The evaluation also seeks to assess residents' skills in applying SBIRT in their clinical practices.

Consent for Participation: Residents' consent for participation in the training program is not required. The training program has been deemed exempt by the university's health sciences Institutional Review Board. However, patients must provide oral informed consent for audio recording patient visits.

Unique Study ID: Currently, unique identifiers are manually assigned for GPRA. The university's blackboard system does not assign unique identifiers other than the trainee's "pawprint". This "pawprint" is not always entered as requested in the follow-up GPRA survey that currently occurs in Survey Monkey online. The assignment of unique identifiers and tracking will be improved when the online curriculum is transferred to the project web-based system.

Data Collection: The UM SBIRT project will use several instruments to collect data throughout the grant period of performance, as indicated below.

Evaluation Components

Instrument	Frequency
Pre-test of attitudes knowledge and skills	Once, prior to training
Post-test of attitudes knowledge and skills	Annually
GPRA baseline training satisfaction survey	Once, following modules
GPRA 30-Day Follow-up Training Satisfaction Survey	30 days post GPRA baseline
GPRA baseline meeting satisfaction survey	Annually
GPRA follow-up meeting satisfaction survey	Annually
Clinical Simulation Center satisfaction survey	Could vary, following each simulation
SBI competency rating: simulated SBI rubric	Currently once, during sim; will increase, TBD
SBI competency rating: faculty observation (in process)	Quarterly
Patient exit survey (in process)	Semiannually/annually
Resident self-report card in process (in process)	TBD

Attitudes Knowledge, & Skills (AKS) Survey: The AKS survey is a 13-item instrument that collects data on trainees' attitudes/beliefs, knowledge, and skills regarding SBIRT. Residents, students, faculty/attendings will complete the AKS pre-test and post-test. The pre-test is administered to each trainee just prior to, actually in conjunction with, the online training modules; to access the first training module and subsequent modules and quizzes, the trainee must first complete the AKS pre-test. AKS post-test is scheduled to be administered online annually near the end of each training/academic year, for residents and other trainees. Subsequent assessments of AKS will be obtained through residents' self-assessments of several encounters and patient exit questionnaires as well as an expert review of their audio recordings of SBIRT with their own patients. In addition,

CSAT GPRA Data Collection: All trainees are required to complete the CSAT Baseline Training Satisfaction Survey immediately following the completion of the online module and quizzes. The residents receive a six-digit ID, which incorporates the department and other information after the baseline forms have been manually transferred from Bb. Only the medical residents are required to complete the 30-day follow-up survey, which is completed via Survey Monkey. The DSLs also completed the GPRA Baseline and Follow-up Meeting Surveys after the end of the first grant year. GPRA Baseline Training Satisfaction Surveys are also being collected for all non-resident trainees, via the Bb online module. This data is entered separately from SAIS in a project tracking database.

Clinical Simulation Center Satisfaction Survey: Trainees are asked to provide anonymous feedback on their training in the Clinical Simulation Center. Feedback

received between September 17, 2011, and November 17, 2011, indicate overall satisfaction with the training by a score of 4.3 on a 5-point scale, with 5 representing the highest level of satisfaction.

SBI Competency Rating: Simulated SBI Rubric: Residents, faculty and students will have the opportunity to rate their colleagues' demonstration of their newly acquired motivational interviewing skills with an actor in the simulation center. The SBIRT Clinical Simulation Rating Form lists 12 skills and techniques that should be evident when the trainee engages in motivational interviewing with the actor. The rater is asked to indicate if the skill/technique was present and/or well done.

Analysis: Statistical analyses will be conducted to assess the following outputs:

1. Number of faculty trained to do and teach SBIRT
2. Number of residents trained to do and teach SBIRT
3. Number of medical students and nursing students trained to do and teach SBIRT
4. Number of community health care providers trained in SBIRT
5. Number of SBIRT trainees with simulated clinical experience via sessions with standardized patients
6. Number of trainees with supervised SBIRT experience
7. Number of screenings, interventions, and referrals made

Reporting: Results of the local evaluation will be reported to SAMHSA through the Services Accountability Improvement System (SAIS). The data will also be used to develop training status reports for the SBIRT program staff, the DSLs, Department Chairs, Clerkship Director, CME Office, and SAMHSA. Local evaluation data will also be incorporated into sustainability planning and other activities.

Data Collection and Evaluation Observations

- The UM SBIRT evaluation currently focuses on training process and outcomes. Measures of SBIRT proficiency are forth-coming.
- The university's Blackboard system has many limitations, which impedes the tracking of resident and departmental training progress. This issue will be alleviated with the planned Web-based system.
- Currently, GPRA data collection/entry into SAIS is a tedious manual process. This process will be improved with the planned Web-based system.

Program Area Summaries

In an effort to understand perspectives on SBIRT training at the program area level, the site visit team met with lead faculty/staff members from six program areas that are delivering SBIRT training (i.e., Surgery, Family Medicine, Adolescent and Child Health, Internal Medicine, Ob-Gyn, and Psychiatry). The purpose of these meetings was for the site visit team to develop an understanding of the training approach, status of implementation to date, and barriers and facilitators to implementation for each program area from the perspective of faculty and staff integrating the trainings into their program and, in some cases, delivering the trainings to residents. The meetings lasted for approximately 45 minutes.

Program: Surgery

Participants: Dr. Arthur Rawlings (Surgery DSL), Dr. Bruce Horwitz (Principal Investigator), Dr. David Vinson (Principal Investigator), Debra Sprague (Lead Evaluator)

Observations: Major topics of discussion included: (1) SBIRT training in surgery and (2) challenges.

Implementation of SBIRT: Dr. Rawlings, a champion of SBIRT, discussed his early involvement with gaining buy-in and approval for the training program from the Surgery Department's administrative and educational departments. The American College of Surgeons' requirement for trauma centers was foundational to this effort. The training modules will require adaptation for the Surgery residents. The residents initially resisted the trainings because they are inundated with online training requirements. In order to obtain the residents' buy-in, the modules will be presented in face-to-face lecture(s). A training module on tobacco use and narcotic pain will also be developed for Surgery. Given the types of cases the surgery residents see in the clinic, tobacco ranks highest followed by alcohol and recreational drug use. The residents will also be given a pocket card containing information on tobacco, drinking, and recreational drug use.

Challenges: A recurring challenge for the Surgery Department is the lack of time, not only with residents, but also with patients. In addition, UPPL was frequently cited as a major problem.

Program: Family Medicine

Participants: Dr. Nikole Cronk (Family Medicine DSLs), Dr. Kristen Deane (Department SBIRT Leader), Dr. Daniel Vinson (Principal Investigator), Dr. Bruce Horwitz (Principal Investigator), Debra Sprague (Lead Evaluator)

Observations: Major topics of discussion included: (1) implementation of SBIRT, (2) adaptations, (3) challenges, and (4) recommendations.

Implementation of SBIRT: The DSLs indicated that SBIRT was a natural fit their department, as they often see patients who have substance use issues. So far, 21 residents have completed the modules. The residents complete the modules independently in approximately 3 hours. Screening questions are in the electronic medical record (EMR), but are not used consistently for outpatients, just inpatients.

Adaptations: Consideration is being given to (1) having the medical assistant or nurse screen the patients before they are seen by the physician and (2) pairing first year residents with third-year residents, where third years will model the first years' behavior.

Challenges: Scheduling is a formidable challenge for family medicine because of residents' time constraints. For example, the small window of time allotted to residents to see patients can be a disincentive for them to practice screening and brief intervention. The 30-day GPRA follow-up was also very challenging.

Recommendations: The family medicine DSL s indicated that is important to sustain SBIRT, continue the live simulation exercises, and shorten the didactic training modules.

Program: Adolescent Medicine

Participants: Dr. Aneesh Tosh (Adolescent Medicine DSL), Dr. David Vinson (Principal Investigator), Dr. Bruce Horwitz (Principal Investigator), Debra Sprague (Lead Evaluator)

Observations: Major topics of discussion included the following: (1) existing clinical screening practices, (2) implementation of SBIRT, and (3) recommendations.

Existing clinical screening practices: Alcohol and substance use screening was an established practice in Adolescent Medicine when SBIRT training was introduced. Physicians routinely screen for alcohol and substances when collecting information on the patient's social history. If the adolescent is 14 years of age, the parent is asked to leave the room. For many patients, this is the first time that they will see a doctor without the presence of a parent and may be more inclined to discuss alcohol and drug use. As an entrée into the discussion, the physicians find it helpful to ask adolescents about their friends' alcohol and drug use. This technique initially deflects the discussion about this behavior away from the patient and eases the transition to a discussion regarding the patient's own alcohol and substance use. The most common substances used by

adolescent patients at UM are alcohol and marijuana. Adderall and Ritalin are commonly misused prescription drugs among the UM patients who are college, high and junior high school students. Between 10 percent and 15 percent of the patients seen by the adolescent medicine physicians have been involved in accidents because of binge drinking.

Implementation of SBIRT: SBIRT training is scheduled for Adolescent Medicine in February 2011. All medical residents go through an adolescent medicine rotation in their second and third year.

Recommendations: Consider (1) pairing residents from other specialties with adolescent medicine residents to observe their screening techniques; (2) training for neonatologists, who can follow up with the mother if an infant has positive results; and (3) having adolescent actors perform as patients in the Clinical Simulation Center.

Program: Psychiatry

Participants: Dr. Jessica Nettler and Dr. Andrew Resnik (Psychiatry DSLs), Dr. Daniel Vinson (Principal Investigator), Dr. Bruce Horwitz (Principal Investigator), Debra Sprague (Lead Evaluator)

Observations: Major topics of discussion included the following: (1) screening practices, (2) screening tools, and (3) recommendations.

Screening practices: In psychiatry, where between 75 to 80 percent of patients have a dual diagnosis, screening for alcohol and drugs was already a routine practice. Prior to SBIRT, the focus of screening had been on identifying patients with substance dependence, not the identification of at-risk use. SBIRT training has enabled psychiatry residents to hone their screening, brief intervention, and brief therapy skills with the expanded focus of identifying at-risk users of alcohol and other substances. Social workers assist with providing referrals.

Screening tool: Psychiatry primarily uses the CAGE to screen patients and DSM-IV criteria to diagnose; however, other screening tools may be used.

Recommendations: Consider (1) using a brief intervention model for first- and second-year residents; (2) using a brief therapy model in the outpatient clinic the in the third and fourth years; (3) integrating psychiatry into the Clinical Simulation Center with other specialties; and (4) engaging psychiatry residents in teaching SBIRT to other specialties. It is a requirement for residents to teach an AGCME requirement.

Program: Obstetrics and Gynecology

Participants: Dr. John Casells (Ob-Gyn DSL), Dr. Daniel Vinson (Principal Investigator), Dr. Bruce Horwitz (Principal Investigator), Debra Sprague (Lead Evaluator)

Observations: Major topics of discussion included the following: (1) existing screening and referral practices and (2) challenges.

Dr. Cassels is a champion and early supporter of SBIRT. He was instrumental in obtaining buy-in for SBIRT from the administration. The education committee approved three 1-hour sessions for SBIRT training; and the OB-Gyn residency director, who prepares the schedule, built SBIRT training into the didactics.

Existing screening and referral practices: Medicaid stipulates that information on drug use and pregnancy be provided to OB-Gyn patients. In compliance with this requirement, a nurse educator, who screens for fetal anomalies, also provides 1-hour counseling sessions for patients. The session includes a discussion on substance use and questions regarding the patient's alcohol and drug use. A medical social worker provides referrals.

Challenges: There is insufficient time to accomplish all of the services that are required. Consideration should be given to incorporating the information that Medicaid requires. Ob-Gyn, located in a separate hospital, makes travel to the Clinical Simulation Center difficult.

Program: Internal Medicine

Participants: Dr. Emily Coberly (Department SBIRT Leader), Dr. Bruce Horwitz (Principal Investigator), Dr. Daniel Vinson (Principal Investigator), Debra Sprague (Lead Evaluator)

Observations: Major topics of discussion included the following: (1) challenges and (2) recommendations.

Challenges: Scheduling is a major challenge. The time allotted for clinical responsibilities is tight. The DSL indicated that the scheduling might be more of an issue because this is the program's first year.

Recommendations: Bring all of the other specialties together to work out the scheduling issue. Shorten the training modules. Engage the senior residents as trainers. The senior residents' assistance as trainers would help to lighten the workload so that the entire responsibility does not rest on only one faculty member in one department. It would also help to further the residents' learning experience and produce more faculty champions. "We learn what we teach faster than what we're taught."

Summary of Onsite Observations

The site visit team identified the following key topics during the meetings and discussions held during the 2-day site visit:

- **Web-based System Enhancement:** The UM SBIRT didactic training modules reside on the university's Blackboard system, which has limitations for training dissemination and tracking, as well as ongoing technical glitches. The 30-day follow-up GPRA is collected using Survey Monkey. Due to user error regarding entry of unique ID/pawprint, this system does not ensure the ability to link data via unique ID. Consequently, data processing, tracking, and analysis for the internal evaluation have been impeded by tedious manual data processing activities. The Web-based system enhancements that are planned by the UM SBIRT program will provide the capacity for easier access to the curriculum and produce efficiencies in data collection and analysis.
- **Residency Buy-In:** Facilitators for initiating buy-in from residency program areas to participate in SBIRT training included (1) having strong champions at the administrative- and residency director-levels (2) recognizing drug and alcohol abuse as a major issue that residents confront in treating patients in the Columbia, Missouri area.
- **Collaborations:** The UM SBIRT program has established collaborations with State-level organizations that will have a key role in disseminating the SBIRT training curriculum, and may have a role in contributing to the sustainability of SBIRT.
- **Standardization of Training across Residency Program Areas:** Variability across the targeted seven residency program areas (e.g., content area, patient characteristics, practice setting, and workflow) may act as a barrier to standardization. The core curriculum is intended to provide a basic knowledge and skill set across all program areas and the adaptation component is intended to provide the flexibility to target SBIRT training and education material to the unique needs and considerations of a given residency program. However, program area variability may result in significant differences in curriculum, training design and delivery that may cause challenges for the evaluation. For example, residents are taught about screening instruments but not all are using them as intended. The application of overall concepts in screening and brief interventions is encouraged, but residents are not necessarily taught to adhere to specific evidence-based protocols.