

SBIRT
Service Design

Service Design Site Visit Report Medical Residency: Indiana University

# **Service Design Site Visit Report Medical Residency: Indiana University**



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



# Service Design Site Visit Report Medical Residency: Indiana University

Grantee Name	Indiana University
Address	545 Bamhill Drive, Emerson Hall 317 Indianapolis, IN 46202
Grant TI Number	TI-020281
Date of Site Visit	August 31-September 1, 2011
Grantee Contact Person	Joseph Bartholomew, M.S.W.
Government Project Officer	Erich Kleinschmidt, M.S.W., L.C.S.W.
Site Visit Team Members	Karl D. White, Ed.D., Technical Expert Lead, SBIRT; Leslie McElligott, M.P.A., Technical Assistance Manager, SBIRT; Dhru Beeharilal, J.D., Project Manager, VLC

#### **Grantee Project Team Members Visited**

#### **Indiana University SBIRT Medical Residency Project Team**

David Crabb, M.D., Indiana University School of Medicine, Principal Investigator

Joe Bartholomew, M.S.W., Midtown Community Mental Health Center, Project Coordinator

Julie Vannerson, M.D., Indiana University School of Medicine, Education Coordinator

Ruth Gassman, Ph.D., Indiana Prevention Resource Center, Project Evaluator

Rick Goldsworthy, Ph.D., Academic Edge, Inc.

Meg Kovaks, M.S.W., Midtown Community Mental Health Center, Motivational Interviewing Trainer

Cindy Wilson, C.N.S., Midtown Community Mental Health Center, Clinical Nurse Manager

Jon Agley, Ph.D., Indiana Prevention Resource Center, Assistant to the Project Evaluator

Dean Babcock, M.S.W., Midtown Community Mental Health Center, Associate Vice President

ī

# **Table of Contents**

Overview and Summary of Findings	
Purpose of the Visit	1
Project Overview	2
Program Strengths	3
Program Challenges/Barriers	4
Curriculum	5
Approach/Implementation	7
Data Collection and Evaluation	9
Summary of Onsite Observations	10

# **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 (MR) program to leverage strengths and maximize long-term success and sustainability.

The site visit team met with the principal investigators/project directors, project coordinator, program champions, clinical staff, evaluation team, medical residents, and other appropriate project team members on August 31 and September 1 to gain a better understanding of the Indiana University (IU) SBIRT medical residency training program model, curriculum, training methods, implementation, and program evaluation. Over the course of the visit, the SBIRT team also was able to observe a training session as well as review the curriculum components and materials (paper and electronic).

**Day 1:** On August 31, the site visit team attended a series of meetings with the project director, project coordinator, faculty, evaluator, and other key staff members. Topics covered included the following:

- Background and context of the SBIRT program at Indiana University School of Medicine (IUSM)
- Overview of the program model, including a discussion of the collaboration among IUSM, Midtown Community Mental Health Center (MCMHC), and Wishard Health Services (WHS)
- Overview of the curriculum components
- Faculty training and residency implementation
- Discussion of the dissemination model and sustainability planning at IUSM

The team then toured the primary care center clinic, and met with three medical residents who had taken part in the program to obtain their feedback. The day concluded with a final review of the SBIRT curriculum.

**Day 2:** On September 1, the site visit team attended a series of meetings with the project director, project coordinator, and evaluators. The meetings primarily focused on

the evaluation of the medical residency program at IUSM. The site visit team also attended a motivational interviewing (MI) training session conducted by Meg Kovacs.

# **Project Overview**

IUSM is nearing the end of its second year of a 5-year SAMHSA SBIRT grant. The program is a collaborative effort between IUSM, WHS, MCMHC, the Indiana Prevention Resource Center (IPRC), and Academic Edge, Inc., an outside educational consulting organization.

IUSM is the only medical school in Indiana, and more than half of Indiana physicians have IUSM training. IUSM provides a rich clinical training landscape. Its network of hospitals consists of University Hospital, Methodist Hospital, and Riley Hospital for Children as well as suburban-based hospitals, IU Hospital West and IU Hospital North. Several other hospitals are in the IU health network statewide.

The curriculum components for IUSM were developed as Web-based modules instead of face-to-face training. This approach was adopted due to the limited time that residents are given for training and to enable the residents to complete the training when feasible. The training is broken down into several modules, with face-to-face MI training as part of the process. The training modules vary in focus depending on the year of the residents, and include standardized patient component training (as discussed in the Curriculum section).

#### **Project Accomplishments to Date**

The UISM SBIRT MR program has completed a number of activities during the grantfunding period to date. A summary of major accomplishments includes the following:

- Development of Web modules that are utilized by social workers, nurses, and medical nutritionists
- Networking with other outside organizations that are interested in MI training
- Fostering a strong interest in SBIRT and MI in a majority of clinic staff, not just medical residents and program staff, including strong support among primary care center (PCC) staff of screening implementation
- Development and nurturing of a strong SBIRT dissemination model
- Inclusion of an external organization to develop curriculum materials
- Marketing materials and branding successes such as the "We Ask Everyone" posters that are strategically placed in every clinic

# **Program Strengths**

#### **Electronic Medical Record Integration**

IUSM is in early research stages of incorporating SBIRT screening into its electronic medical record (EMR). The Regenstrief Institute, an organization involved in medical informatics, is in the initial steps of researching the development of the EMR. The institute developed the Indiana Health Information Exchange to capture patient information for WHS, and bring together EMR information from across the state.

#### 'We Ask Everyone'

IUSM created a marketing campaign with posters that feature the "We Ask Everyone" tagline. The posters remind physicians to perform SBIRT and comfort patients who may be reticent about answering questions related to their substance use.

#### **Screening on Every Encounter**

IUSM has a policy of screening every patient at every IUSM or Wishard Health Network clinic appointment. This enables the tracking of patient success over time while enabling healthcare staff ensure patient fidelity.

#### Focus on Collaboration

IUSM has a strong focus on collaboration. It is allied with several organizations, including Wishard Health Services, MCMHC, Indiana Prevention Resource Center, and Academic Edge. In addition, Dr. Julie Vannerson, IUSM's education coordinator, is developing a collaboration plan to work with outside organizations to train them in SBIRT and MI.

#### **Adaptation to Other Specialty Areas**

IUSM is developing tailored versions of its current Internal Medicine (IM) SBIRT and MI training curriculum to be used with other specialty areas such as pediatrics, obstetrics/gynecology (OB/GYN), and family medicine (FM).

#### **Outside Educational Consultant**

IUSM employed Rick Goldsworthy of Academic Edge to customize its Web-based training modules. Currently, Dr. Goldsworthy is helping adapt the curriculum and Web modules to other specialty areas.

#### **Face-to-Face Motivational Interviewing Training**

Employing expert trainers from the MCMHC, IUSM has been able to create a customized and condensed MI training for its residents and faculty. Initially, the training lasted 2 days; however it has been condensed to 4 hours.

#### **Well-Connected Steering Committee Members/Strong Networking**

Dr. Crabb chairs several committees allowing him to promote SBIRT within and across IUSM and WHS.

# **Program Challenges/Barriers**

#### **Turnover of Staff from Steering Committee**

Several original SBIRT steering committee members have taken other appointments or positions. While this has been helpful in spreading SBIRT, it has been a challenge to maintain momentum within the program.

#### Time

The biggest challenge IUSM faces is time. Residents and staff feel they do not have enough time with patients to incorporate SBIRT into each patient encounter.

#### Underutilization of SBIRT Counselor

When speaking with residents, the SBIRT site visit team became aware that residents either did not refer patients to the SBIRT counselor, or rarely did so. The full benefit of this position is not being realized.

#### Lack of Sustainability Plan

Despite being well connected within the university, having strong networking practices, and successfully collaborating with the State of Indiana to obtain the State SBIRT implementation grant, IUSM lacks a formal sustainability plan.

#### **Team Roles and Responsibilities**

- Principal Investigator David Crabb, M.D., heads the steering committee and chairs the Department of Medicine at IUSM. Dr. Crabb is on several key committees and boards of directors both within and outside IUSM, including at the Regenstrief Institute and Wishard Health Services.
- Project Coordinator Joe Bartholomew, M.S.W., serves as the primary point of contact for SAMHSA and is responsible for overseeing the grant program. He also is an integral part of MCMHC.
- Julie Vannerson, M.D., serves as the education coordinator for the residency program at IUSM and is responsible for developing the SBIRT training modules.
- Ruth Gassman, Ph.D., serves as program evaluator for the IUSM grant. She, along with Jon Agley, Ph.D., is responsible for data collection and analysis for the grant program. Dr. Gassman is also part of the Indiana Prevention Resource Center.

#### Administrative Observations

- The IUSM MR program developed a strong SBIRT and MI training program for first year Internal Medicine residents in programs using Web modules and faceto-face MI training. It is in the process of developing its curriculum for expansion to second- and third-year residents, as well as for other specialty areas.
- IUSM has a strong marketing campaign with "We Ask Everyone" posters across its hospital and clinics
- IUSM has been able to network and collaborate within the university system,
   WHS, and across the State

### Curriculum

#### **Development**

In spring 2010, a multidisciplinary team, consisting of internal medicine (IM), pediatrics, emergency medicine (EM), and OB/GYN department members, developed a Web-based training and conducted a daylong MI training retreat for a group of educators and residents. Members of the assessment team analyzed feedback from this pilot group. In April 2010, IUSM launched the training for IM residents. In spring 2011, the steering committee, consisting primarily of those who met with the site visit team, finalized and launched the initial MI Web and live training for pediatrics, obstetrics, and family medicine. The committee anticipates modifications from feedback and evaluation to come in winter 2011.

The program model developed by IUSM consists of a first course of introductory Web modules, followed by face-to-face MI training. Once residents complete MI training, they are introduced to the PCC screening instrument. They then are given course two and course three Web modules. Everyone must complete the course one Web module before going through MI training. MI training is a large part of the MCMHC focus and has been consolidated from 2 full days to approximately 4 hours in order to better accommodate residents' schedules.

PGY1 training varies depending on the specialty area of the residents, but Web-based education is the core teaching method across all areas. Three Web modules have been developed in collaboration with Dr. Goldsworthy and Academic Edge. The first year IM training is conducted during Immersion Week, a 1-week outpatient clinical immersion experience for residents. They are introduced to all clinic team members, including the SBIRT counselor. During a 2-hour session, residents get an overview of substance use and abuse prevalence; an introduction to SBIRT practice; and MI philosophy and brief practice. These IMPACT sessions occur once a week and are a shortened version of

Web-based and MI training. They set the tone for using SBIRT in practice and prepare residents for future discussions. So far, IUSM has completed two sessions on SBIRT, for the most recent occurred in September 2011.

First-year IM, pediatrics, FM, and OB/GYN residents are given Web-based modules that cover the prevalence and consequences of substance use and abuse; substance use screening tools; brief intervention procedures and evidence of their effectiveness; and indications for referral and resources for linking medical providers to addiction treatment services. All PGY1s, with the exception of those in pediatrics, are given a live training event on MI and SBIRT practice. Finally, first year IM residents are engaged in an Observed Structured Clinical Exam (OSCE) session during which SBIRT-trained residents are paired with non-SBIRT-trained residents, and MCMHC counselors act as standardized patients (SPs). The SPs use a validated behavioral counseling assessment form to provide feedback to each resident immediately following the interaction. The standardized patient OSCE is conducted in IUSM's simulation center, which replicates an outpatient practice. Each room has recording capacity that provides immediate feedback, but not playback review. There is also a virtual hospital with a simulated ambulance and helicopter for EM residents.

At the end of PGY1 training, residents are asked about their prior addiction knowledge. Dr. Vannerson is working to better assess what residents have been exposed to in medical school (many residents come from medical schools that do not provide MI training).

Second and third year trainings are both Web-based, though more in-depth training is being developed. Second year resident training covers substance use as a chronic disease requiring ongoing stage-specific management with a focus on prescription and illicit drug abuse, including medical complications, detox procedures, and clinical outpatient followup. Third-year resident training focuses more on clinical infrastructure and management. Specifically, it addresses how to link to specialty treatment service providers and facilities, workforce development and training of non-physicians to administer SBIRT services, development of electronic health record-based screening and assessment systems, and institutional and/or administrative issues affecting implementation of SBIRT services.

#### **Faculty Training**

The training for faculty is primarily Web-based, but also incorporated into IM Grand Rounds, and Faculty Enrichment and Educational Development sessions. Faculty training is a truncated version of first year resident training with a dual focus on mentorship/oversight and personal practice. Further, due to the reputation of IUSM's SBIRT and MI trainings and its partnership with area mental health services MHS,

several external organizations have approached IUSM to ask for assistance in MI training for their own staff. Dr. Vannerson is developing a dissemination model to work with these organizations.

#### **Curriculum Observations**

- The face-to-face MI training sessions appeared to be effective and helpful for residents, who prior to this training had little or no exposure to MI. Residents praised MI not only with regard to SBIRT implementation, but with general patient interaction.
- The varied foci of the training modules depending on resident year is an effective way to keep residents engaged and ensure they feel the training is worthwhile and relevant.

# Approach/Implementation

#### **Residency Adaptations**

Residents, along with other health professionals, provided feedback on the piloted projects prior to full implementation, while the assessment team provided feedback along the way to help support and strengthen the curriculum. In addition, the curriculum is being developed for the pediatrics, FM, EM, and OB/GYN departments.

#### **Screening Tools**

IUSM reviewed several instruments used at other training venues, including tobacco and illegal/prescription drug use. The program originally planned to use Alcohol, Smoking and Substance Involvement Screening Test (ASSIST), but instead opted to go with Alcohol Use Disorders Identification Test—Condensed (AUDIT-C), which is shorter and more consistent.

#### **Health Records**

The screening tool is currently in paper form. The program is in early stages of research to incorporate the screening tool into a paper scanning system. In the future, the goal is to incorporate the screening tool into electronic medical records so physicians can better keep track of patients. Wishard inpatient settings already have built this into their system using an internal program built by the Regenstrief Institute. Currently, the Veteran Affairs (VA) system is electronic. Wishard outpatient settings have not yet been able to go electronic.

#### **Clinic Integration**

The SBIRT counselor, Lisa Session, has been integrated into the clinic. She ensures that all staff and residents know who she is and how she can be accessed, and divides

her time between seeing patients, aggregating data, and providing feedback to staff. Ms. Session provides education and assesses patient readiness to receive treatment. She follows up with a phone call if patients are unable to remain at the clinic for questions following the screening. Ms. Session is aware of community resources and can follow through with arranging patient services. She consults three to four patients per day. Besides Ms. Session, there are two other mental health counselors on staff. The focus is on creating a standard and consistent level of care among all IU sites by integrating SBIRT into all clinics by following the same implementation model.

With a 1:3 faculty preceptor-to-resident ratio, 42 residents rotate through the clinic at any given time. The level of collaboration between a faculty preceptor and their residents varies depending on the preceptor. For reference, National Institute on Alcohol Abuse and Alcoholism education and reference materials are in every exam room, both for residents' and patients' benefit.

Patient screening is completed in the exam room, with residents scoring the tools and going over the results with the patients. Residents indicated that they are sometimes deterred from completing the SBIRT process because screening tools are often not placed in a consistent or visible location in their patient chart.

#### **Sustainability**

The award of the State SBIRT grant is one of the biggest factors to support the program's sustainability potential. IUSM plans to collaborate with the State on this grant and is relying on this primarily for its sustainability plan. The first years of the grant will consist of SBIRT projects at Wishard Community Health Centers and MCMHC. In years 4 through 5, the program plans to expand to other sites that have demonstrated a readiness to implement SBIRT. The program will build training capacity through train-the-trainer opportunities, activating Medicare codes, merging patient records, and improving patient outcomes. The plan is to create as much synergy as possible between the MR program and the State program to make SBIRT a standard level of practice.

#### **Approach/Implementation Observations**

- The clinical integration of SBIRT into PCC clinics has been a huge success for IUSM, particularly by creating champions for screening.
- While the collaboration with the State of Indiana on the State SBIRT grant is a significant stride in the sustainability of IUSM SBIRT implementation, it perhaps is being relied upon too greatly. IUSM lacks a formal sustainability plan aside from the State grant.
- The network that the steering IUSM steering committee has established between Dr. Crabb's network and chair activities and Dr. Vannerson's collaboration opportunities is impressive, and can be instrumental in the development of a sustainability plan.

### **Data Collection and Evaluation**

The program is exceeding its goals in terms of number of residents trained. While face-to-face Government Performance and Results Act (GPRA) data is completed via a pen/paper system, the program is utilizing various techniques to get residents to complete surveys, and response rates are high. For the Web modules, the program utilizes the SurveyMonkey system. Residents' GPRA responses have led to modifications in the training in order to better accommodate the residents' schedules, expectations, and learning styles. Evaluators have added a few non-GPRA questions to pre-baseline surveys to make the evaluation process more beneficial to the overall program.

OSCE training and assessment are conducted with resident pairs (one is trained in MI and SBIRT, while the other is not). The BECCI index is used with standardized patients to score the practitioner. Scores for residents who completed face-to-face training were compared to scores for those who did not go through the training. This yielded results that were statistically significant, though the sample size was considered low due to the difficulty with getting PGY1 residents into training with an SP.

When screening began in February 2011, medical assistants had patients complete the screens verbally. This changed, and patients now complete the screening tool while waiting in the exam room, and residents complete the bottom of the screening tool when they see the patient. Initially, patient screening rates were quite high (76 percent), but rates have dropped considerably (to 45 percent) since screening delivery changed. (There is debate as to why.) Also, the percentage of interventions for substance use positive screens is somewhat low.

# **Summary of Onsite Observations**

Overall, ISUM's greatest strength is its steering committee, its dedication to SBIRT and MI, and its networking and collaboration abilities. Dr. Crabb's myriad leadership roles on various committees, both within and outside the university, make him an asset to the program. Dr. Vannerson's networking with outside organizations regarding MI trainings and creating opportunities for collaboration also contributes to the quality of the program.

The integration of SBIRT into the clinic also is impressive. The most telling example of this integration was a note on the board in one of the report rooms that stated, "Please collect all alcohol/SBIRT papers from your patients."