

Service Design Site Visit Report

University of Colorado
Denver

Denver, Colorado



Dates of Site Visit: March 20–21, 2014

◆ SBIRT ◆

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University of Colorado, Denver

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Site Visit Dates	March 20–21, 2014
Program Name	FY 2013 Screening, Brief Intervention, and Referral to Treatment (SBIRT) Medical Professional Training Program
Grant TI Number	TI 025352-01
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Grantee Project Sites Visited

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Sheridan FQHC	4107 South Federal Boulevard Sheridan, CO 80110

Executive Summary

The University of Colorado, Denver (CU Denver), is 1 of 14 sites recently awarded a screening, brief intervention, and referral to treatment (SBIRT) training grant by the Substance Abuse and Mental Health Services Administration (SAMHSA). The purpose of the grant is to develop and implement a training program in both didactic and practice settings to teach health professionals—including medical residents and students of nursing, social work, and counseling—the skills necessary to provide SBIRT services. The intended outcome of the grant is to increase the adoption and practice of SBIRT throughout the health care delivery system.

The CU Denver SBIRT program Nurses Helping Colorado (NHC) aims to train bachelor of science in nursing (B.S.N.) students and master's-level Advanced Practice Registered Nurse (APRN) students in SBIRT skills so that upon graduation the new nurses can be part of a culturally competent workforce, helping to integrate behavioral health and primary care and implementing SBIRT as part of a multidisciplinary team. NHC will teach SBIRT knowledge, attitudes, and skills to 825 nursing program graduates during the 3-year funding period, leading to 675 new RN-level nurses and 150 APRN independent practitioners who are trained to implement SBIRT from the beginning of their professional practice. This represents a 27 percent increase in the total number of nurses in the State with SBIRT training and will help to integrate SBIRT into the diverse medical care systems where these students ultimately practice.

The SBIRT content is presented as just one aspect of a broader focus on integrated care and substance use screening and intervention for the purposes of prevention, early intervention, health promotion, and chronic disease management. SBIRT is woven into the B.S.N. curriculum. Because most B.S.N. students do not have a clinical background, SBIRT content is introduced slowly as a regular part of the nursing routine. B.S.N. students use online modules created by NHC's close partner SBIRT Colorado for didactic learning and role-plays for experiential learning. APRN students in contrast are already familiar with clinical practice. All APRN students start with a 3-hour introduction to SBIRT focused on motivational interviewing and role-plays in the advanced assessment course. Participants receive Web-based motivational interviewing training from the SBIRT Colorado program and in-person SBIRT training from expert clinicians. An additional 2–3 hours of SBIRT content are provided in selected courses (e.g., Diagnosis and Management 1 and 2, Advanced Gerontological Concepts, Chronic Illness of Children, Chronic illness of Women). This content is tailored to the different APRN specialties and the populations they serve.

Both B.S.N. and APRN students take advantage of simulations with volunteer patients in the Center for Advancing Professional Excellence. These volunteers from the University of Colorado College of Nurses (CU CON) receive a response guide created by NHC staff. They interact realistically with students in role-play situations related to assessing substance use and using brief negotiated interview skills and motivational interviewing to work toward changes in behavior. Student-to-student role-plays (groups of three) represent another way to practice the

more advanced SBIRT techniques. Finally, all students have the opportunity for experiential learning in clinical settings. NHC partners with several organizations to provide students with hands-on clinical experience; for example, at several federally qualified health centers (FQHCs), a Veterans Affairs site, University of Colorado Hospital, and various community clinics.

The site visit team conducted an implementation site visit at CU Denver on March 20–21, 2014, to assess the strengths of the SBIRT program and engage the grantee in a continuing quality improvement process supported by technical assistance as approved by SAMHSA. The team met with core program staff, professors, and trainers from CU CON; key community partners; and the program evaluator. The site visit team received an overview of the implementation plan and training approach, visited the CU CON simulation lab, toured two popular practicum sites, and discussed evaluation processes and plans for sustainability.

At the time of the site visit, NHC had trained one cohort of B.S.N. students in one class (assessment focused on screening). Of 68 B.S.N. students trained, with a lack of context for care, only 68 percent said they were satisfied with the training overall. Students' responses did, however, show intent to use SBIRT and a high likelihood that they would recommend the course to a friend. Six trainings have been provided for APRNs. Of the 70 APRNs trained, more than 90 percent were satisfied with the training; they found the content to be relevant to nursing and intended to use it on the job. APRN results were stronger than those for CU CON faculty.

The program team has made an impressive start. NHC staff believe nursing can play a major role in integrating behavior health in medical settings. The response from faculty has been overwhelmingly positive and collaborative. This has enabled the team to weave SBIRT content throughout the curriculum, as opposed to providing a 1- or 2-day SBIRT module. The program is situated in an extensive and well-connected health care system, with excellent opportunities for students to practice SBIRT in real-world settings. To this end, project leaders have developed an extensive preceptorship program. SBIRT is integrated into routine practice at partner settings such as Denver Health and Sheridan Health Services FQHC, providing the best opportunity for students to complete a continuum of learning from classroom to simulation to clinical practice.

While nursing faculty are involved, and many act as SBIRT champions, the site visit team shared the following recommendations based on challenges observed:

- ▶ Develop additional partnerships outside of nursing in both academic and clinical settings, such as faculty in the School of Medicine, medical directors in key clinical venues, system leadership, physicians, and behavioral health professionals. This is a unique opportunity for nursing to lead system change. Including other stakeholders as champions and in the council of directors could substantially increase the initiative's effectiveness.
- ▶ Preceptorships are also a challenge; while several practice sites offer opportunities for students to witness and participate in SBIRT activities, many practice sites do not

implement SBIRT or they implement it perfunctorily. Lack of universal and consistent buy-in from preceptors has been and will be a major hindrance to student experiential learning.

- ▶ The evaluation plan concept is evolving. The grantee may consider a more robust evaluation plan that includes specific assessment tied to students' knowledge, skills, and attitudes related to SBIRT to enhance the efficacy of the training plan and support continuing quality improvement.

Grantee Overview and Environmental Context

The University of Colorado, Denver (CU Denver), is 1 of 14 sites recently awarded a screening, brief intervention, and referral to treatment (SBIRT) training grant by the Substance Abuse and Mental Health Services Administration (SAMHSA). The purpose of the grant is to develop and implement a training program in both didactic and practice settings to teach health professionals—including medical residents and students of nursing, social work, and counseling—the skills necessary to provide SBIRT services. The intended outcome of the grant is to increase the adoption and practice of SBIRT throughout the health care delivery system. The grantee is located on [the Anschutz Medical Campus](#).

The Denver area faces public health challenges similar to those in other densely packed urban areas. However, Colorado is a State of extremes, with many parts considered “frontier,” defined as less than one person per 5 square miles. As a result, Colorado has challenges related to providing services to people in rural areas, including a shortage of qualified health care providers. Oil and gas booms, while providing jobs and State revenue, have created numerous towns with large transient populations, little infrastructure, and substance use and other public health issues that come with rapid, unplanned expansion. Among the States, Colorado has the sixth highest rate of people aged 12 and older with unmet alcohol treatment needs. Colorado also ranks 10th highest in the Nation for the percentage of people aged 12 and older with unmet substance abuse treatment needs.¹ Despite its challenging landscape, Colorado has some of the lowest levels of funding for education, mental health services, and substance abuse treatment in the Nation.

The Anschutz Medical Campus is a sprawling network of buildings that house the University of Colorado's medical programs and the University of Colorado Hospital. Most of the buildings on campus are modern and constructed of brick, steel, and glass. The wide pedestrian walkways, abundant trees, and modern artwork create a pleasant atmosphere.

The CU Denver SBIRT program—Nurses Helping Colorado (NHC)—aims to train bachelor of science in nursing (B.S.N.) students and master’s-level Advanced Practice Registered Nurse (APRN) students in SBIRT skills so that upon graduation the new nurses can be part of a culturally competent workforce, helping to integrate behavioral health and primary care and implementing SBIRT as part of a multidisciplinary team.

¹ Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. (2013). *The NSDUH Report: 2010–2011 National Survey on Drug Use and Health Model-Based Estimates (50 States and the District of Columbia)*. Rockville, MD.

Nurses are the largest group of health care professionals, poised to play a leading role in the redesign of integrated behavioral and medical care. Nurses are ideally positioned to provide SBIRT services because they—

- ▶ Are already integrated into most health care settings, with significant contact with patients
- ▶ Are trained to work in multidisciplinary teams
- ▶ Bring skills in coaching and health promotion compatible with the SBIRT approach (e.g., patient-centered, holistic, personal responsibility)
- ▶ Can cost-effectively provide SBIRT services in coordination with physicians and within their own scope of practice
- ▶ Are local champions who often lead quality improvement and evidence-based practice initiatives within health care systems
- ▶ Are highly regarded by the general public as ethical, trustworthy, and reliable sources of health information

1. Site Visit Overview

The JBS International, Inc., SBIRT program area site visit team conducted an implementation site visit at CU Denver on March 20–21, 2014, to assess the strengths of the SBIRT program and engage the grantee in a continuing improvement process supported by technical assistance (TA), as approved by SAMHSA. The site visit included the following components:

- ▶ Met with core project staff, professors, and trainers from the University of Colorado College of Nurses (CU CON), key community partners, and the project evaluator
- ▶ Reviewed the implementation plan and training approach
- ▶ Visited the CU CON simulation lab
- ▶ Visited two popular practicum sites
- ▶ Discussed the monitoring and evaluation system
- ▶ Identified successes, challenges, and TA needs
- ▶ Discussed plans for sustainability after SAMHSA funding ends

On March 20, the site visit began with a project overview presented by grantee staff, focusing on project background, targeted goals, and project implementation. The team then toured the simulation lab where students practice techniques with interactive mannequins and discussed program implementation in the B.S.N. program. The first day finished with two site visits: (1)

the University of Colorado Hospital (UCH) located on the Anschutz Medical Campus and (2) the Sheridan federally qualified health center (FQHC) west of Denver.

On March 21, after a debriefing of the previous day, the NHC staff presented their monitoring and evaluation plan and the data they had collected on student demographics, student satisfaction surveys, and student and preceptor attitudes toward SBIRT. The team then met with faculty from the APRN program and discussed challenges related to integrating SBIRT into the graduate nursing programs. After lunch the team focused on identifying program strengths and challenges and identifying TA needs. The visit ended with a debriefing call with Kellie Cosby, the Government Project Officer.

2. Program Vision and Design

NHC will teach SBIRT knowledge, attitudes, and skills to 825 nursing program graduates during the 3-year funding period, leading to 675 new RN-level nurses and 150 APRN independent practitioners trained to implement SBIRT from the beginning of their professional practices.² This represents a 27 percent increase in the total number of nurses in the State with SBIRT training and will help to integrate SBIRT into the diverse medical care systems where these students ultimately practice. Upon graduation each year, the new nurses will be part of what the grantee describes as “a culturally competent workforce,” helping to integrate behavioral health and primary care and implementing SBIRT as part of a multidisciplinary team.

The larger cohort of B.S.N. and APRN professionals with this training will increase availability of SBIRT and substance treatment services for patients in Colorado and the surrounding States and promote effective prevention and early intervention and treatment for substance misuse. As nursing students graduate, practice, and become local champions for SBIRT, they will advance the long-term goal of integrating behavioral health services into all health care to reduce the stigma and consequences of substance misuse.

The focus on nursing has the potential to dramatically increase the reach of SBIRT by developing “SBIRT-ready” RNs able to support systemic implementation when and where that happens and APRNs destined for a larger role as primary care providers and agents of change in their clinical venues.

The grantee has identified the following four objectives:

1. CU CON curriculum review
2. SBIRT training
3. Supervised practice

² See *Implementation Plan* section for explanation regarding lower enrollment configuration

4. Sustainability of efforts

The elements of SBIRT are integrated into the full spectrum of courses throughout the B.S.N. curriculum and in key coursework in the APRN curriculum.

CU CON is using the following resources:

- ▶ Books and other print resources
- ▶ SAMHSA Ideas Exchange and core curriculum slides
- ▶ Complete online SBIRT course created by SBIRT Colorado
- ▶ University of Missouri training Web site
- ▶ Adapted MI slides and videos from CON motivational interviewing curriculum
- ▶ Various SBIRT videos posted to YouTube

3. Grantee Leadership

NHC leadership is provided by Dr. Mary Weber, who has an extensive background in psychiatric mental health advanced-practice nursing. Dr. Paul Cook, a CU CON associate professor and clinical psychologist, has taught in nursing doctoral programs for the past 8 years. He provides monitoring and evaluation support to the program. Ms. Laurra Aagaard brings her mix of skills as a mental health expert and an experienced motivational interviewing trainer to help build CU CON's students' ability to move their patients toward behavioral change. Dr. Michael Galbraith is a faculty champion in both the B.S.N. and APRN programs. He has experience revising nursing curricula at CU CON and other universities, which has enabled him to guide the NHC project staff through institutional barriers and facilitate adoption of SBIRT content in existing programs. Ms. Fara Bowler, an experienced nurse educator who has directed CU CON's simulation lab since 2008, serves as the B.S.N. faculty champion. Ms. Lisa Krug-Avery acts as the coordinator of the program. Ms. Leigh Fisher and Ms. Brie Reimann are representatives of NHC's key partner SBIRT Colorado. They have contributed their extensive knowledge of SBIRT training to help CU CON successfully integrate the SBIRT curriculum into their training program and gain buy-in from critical stakeholders.

The grantee has formed a council of directors (COD) that has met December 13, 2013, and March 12, 2014. Members have reviewed current data on SBIRT trainings and feedback from faculty and trainees and discussed how level 1 and level 2 trauma centers are required to have SBIRT training. One council member spoke to staff from the trauma and burn unit interested in the training. The site visit team suggested identifying one staff member as a champion to serve as a leader for change in the unit and for CU CON students. It was suggested training start with the new graduate program at UCH because staff there have been successful at changing practices. Most COD members work either at CU CON or UCH. It is recommended NHC diversify the COD with members who work at other clinical sites and in fields other than nursing.

4. Implementation Plan

There are three B.S.N. programs:

1. The University of Colorado Accelerated Nursing Program (UCAN), which lasts 12 months and requires a previous 4-year degree in any subject
2. The accelerated program, which lasts 12 months and requires completion of general education courses
3. The traditional program, which takes 24 months and requires completion of general education courses

Because UCAN students start in January, they are the only students trained thus far (68 students). The traditional students start in the fall (186 enrolled). Most B.S.N. students do not have a clinical background, so SBIRT content is introduced slowly as a regular part of the nursing routine. The subject is first broached by encouraging students in their first B.S.N. course to use “simulated patients” to collect substance use data when doing patient medical histories (in the first test of B.S.N. students, 86 percent asked about substance use when collecting medical histories). Additional SBIRT content is added as it relates to each course, such as opiate use, chronic disease, older adults, and organ damage. B.S.N. students use online modules created by NHC’s close partner SBIRT Colorado for didactic learning and role-plays for experiential learning. They also practice assessing physiological signs and symptoms of substance use disorders using a state-of-the-art multidisciplinary patient simulation laboratory with electronic mannequin “patients” who interact realistically with students.



Instructor Sarah Bowler demonstrates how CU CON B.S.N. students use electronic patients in the simulation lab

APRN students are already familiar with clinical practice. The six APRN specialties are Family Nurse Practitioner, Pediatric Nurse Practitioner, Adult Geriatric Nurse Practitioner, Women’s Health Nurse Practitioner, Nurse Midwives, and Clinical Nurse Specialists. All APRN students start with a 3-hour introduction to SBIRT focused on motivational interviewing and role-plays in the advanced assessment course. They receive Web-based motivational interviewing training from the SBIRT Colorado program and in-person SBIRT training from expert clinicians. An additional 2–3 hours of SBIRT content are provided in selected courses (e.g., Diagnosis and

Management 1 and 2, Advanced Gerontological Concepts, Chronic Illness of Children, Chronic Illness of Women). This content is tailored to the different APRN specialties and populations they serve.

Both B.S.N. and APRN students take advantage of simulations with volunteer patients in the Center for Advancing Professional Excellence. These individuals are volunteers from CU CON who use a response guide created by NHC staff. They interact realistically with students in role-play situations related to assessing substance use and use brief negotiated interview skills and motivational interviewing to work toward changes in behavior.

Student-to-student role-plays (groups of three) represent another way to practice the more advanced SBIRT techniques. Finally, all students have the opportunity for experiential learning in clinical settings. NHC partners with several organizations to provide students with hands-on clinical experience, such as several federally qualified health centers (FQHCs), a Veterans Affairs site, UCH, and various community clinics. The APRN chronic disease course instructor commented that she would like to see more motivational interviewing training carry over into the practice settings.

While an integrated approach can help ensure nurses see SBIRT activities as part of their routine practice, it can also interfere with a holistic understanding of SBIRT, creating a fragmented and overly complex perspective that contradicts SBIRT's elegant simplicity and efficiency. To combat this, a comprehensive SBIRT training will be completed in the Public Health courses of all three B.S.N. programs. This comprehensive training will take place later in the program for B.S.N. students, as they must first develop a solid understanding of the clinical environment. As APRN students already have a strong clinical background, this comprehensive training will take place at the beginning of their program with additional SBIRT content being integrated into their specialty courses.

Because the SBIRT core curriculum was developed for medical students, NHC has modified the curriculum to apply more directly to nurses. Adaptations have included leveling to match difficulty/complexity of content with students' knowledge and backgrounds, creating scenarios and role-plays, and integrating content that fits best with nursing courses.

Modification of the B.S.N. and graduate curricula are expected to increase students' ability to use SBIRT in practice. Learning objectives for CU CON faculty and APRN students follow:

- ▶ Explain the association of medical and social/behavioral conditions with substance abuse.
- ▶ Apply screening tools that identify the full spectrum of risky, problematic substance use, abuse, and addiction.
- ▶ Implement brief intervention procedures and describe evidence of their effectiveness.
- ▶ Provide hands-on patient care that includes screening, identification, brief intervention, and referral to treatment for alcohol, illicit drugs, and prescription drug misuse.
- ▶ Understand detoxification procedures for alcohol and other drugs.
- ▶ Prescribe effective medications to treat craving and prevent relapse.
- ▶ Follow appropriate prescribing practices for opioids, pain medications, and medication-assisted treatment methodology.
- ▶ Provide ongoing medical management and care coordination in an integrated model of care for outpatients and other recipients of SBIRT services.
- ▶ Foster integration of SBIRT into the full continuum of primary care.
- ▶ Train other health care professionals on communicating and linking with specialty care.
- ▶ Contribute to behavioral health workforce development and training of care systems.
- ▶ Understand and work with screening and assessment systems based on electronic health records (EHRs).
- ▶ Champion or advocate for institutional and/or administrative changes that benefit the implementation of SBIRT services and sustainability of the program, including strategies for reimbursement for SBIRT services as part of a sustainability plan.

5. Community Linkages, Partners, and Participation

CU CON is within a Research-1 university that is co-located with two hospitals accredited by the American Nurses Credentialing Center's Magnet Recognition Program—UCH and Children's Hospital of Colorado. Denver Veterans Administration Hospital will join soon, along with numerous outpatient clinics, a dental clinic, and a center for Native American health research. CU CON also operates several offsite nurse-managed primary care clinics, including the Sheridan FQHC. Another key affiliate is Denver Health, a model-patient safety-net system where students and graduates work with high-risk and vulnerable populations.

Interdisciplinary partnerships are important to the success of the grant. NHC's interdisciplinary work started at Sheridan FQHC where staff began training and working with medical doctors, behavioral health specialists, physician assistants, and nurse practitioners. As these Sheridan employees work as preceptors for CU CON students, Sheridan will likely be a leading practice site where SBIRT is integrated into medical care. Mary Weber, the NHC project director, works at the Haven (the substance treatment arm of the Department of Psychiatry), which is planning to partner on SBIRT activities with leaders in the School of Medicine. NHC has also started to discuss its SBIRT work with administrators at UCH. The plan is to work with staff on the Medical Intensive Care Unit. Once nurse champions are identified on each unit, NHC plans to work with the medical and nursing leadership on that unit to facilitate implementation. These are goals for years 2 and 3, but work on these partnerships has begun.

It is recommended that the grantee develop additional partnerships outside of nursing in both academic and clinical settings, such as faculty in the School of Medicine, medical directors in key clinical venues, system leadership, physicians, and behavioral health professionals. It is important that these partnerships are developed early on in the grant to reduce barriers and facilitate successful implementation. This is a unique opportunity for nursing to lead system change. Including other stakeholders as champions and on the COD could substantially increase the effectiveness of the initiative.³

NHC is also part of an independent group that includes SBIRT Colorado and Dr. Paul Seale. This group is attempting to build a community of practice around SBIRT and nursing. The aim is to identify nurses' SBIRT knowledge, skills, and attitudes. Because the evidence base for SBIRT is in primary care and emergency settings, the group is advocating staying within that evidence base and building consistency.

6. Experiential Learning

CU CON has integrated SBIRT into its regular curricula and will train every matriculated B.S.N. and graduate student on these skills during the 3-year funding period. NHC has created strong buy-in from faculty in the school of nursing, enabling NHC to weave SBIRT through the B.S.N. curriculum and make it a core component of the APRN curriculum. The program is situated in an extensive and well-connected health care system, with excellent opportunities for students to practice SBIRT in real-world settings. To this end, program leaders have developed an extensive practicum program.

NHC trains faculty and preceptors but not members of the community. Forty-six CU CON faculty have been trained and the followup satisfaction data were positive. Close to 90 percent of respondents to the GPRSA satisfaction survey would recommend the training, found the training relevant to nursing, and intended to use SBIRT skills in their work. Fewer faculty, approximately

³ See recommendation below in the corresponding *Strengths and Considerations for Action* section.

65 percent, are currently using SBIRT. SBIRT Colorado has taken on that responsibility. Preceptors are approximately 50 percent RNs, 25 percent APRNs, and 25 percent “other” (e.g., physician assistants). A survey of 15 leading CU CON preceptors confirmed low rates of SBIRT buy-in:

- ▶ Only 17 percent felt substance use intervention was their job.
- ▶ Only 36 percent felt screening was their job.
- ▶ Only 43 percent screen routinely.
- ▶ Only 57 percent screen at all.

Although preceptors do not have high rates of implementation and do not seem to think screening is their job, they do seem satisfied with the trainings; 80 percent report they will use it on the job, which may indicate a willingness to change. It was suggested NHC create free motivational interviewing and SBIRT trainings for preceptors that include continuing education units as a gesture of gratitude for their work.

There are at least two clinical settings—the Sheridan FQHC and several venues within Denver Health—where SBIRT has been integrated into routine practice. These settings, in conjunction with the CU CON training initiative, provide a complete continuum of learning from classroom to simulation to clinical practice. UCH, while not currently implementing SBIRT on a large scale, has great potential to influence CU CON students because this is the most common practicum site. NHC is focusing effort on increasing SBIRT implementation at UCH.

The program team sees the need for clinical practice opportunities and has already taken steps to develop them in the practicums, yet opportunities seem fragmented and highly variable. Clinical practice also presents unique professional challenges if, as in most cases, the clinical venues have not integrated SBIRT into routine practice. It is recommended that NHC consider strategies that will ensure consistent opportunities for clinical experience in a smaller number of selected venues where SBIRT has been or can be integrated into routine care and preceptors buy into learning SBIRT and training students. Denver Health and the Sheridan FQHC provide prototypes for implementation. Expanded project leadership can help set the stage for this.⁴

Practicums can be challenging for CU CON students. CU CON trains on many evidence-based practices (e.g., SBIRT) that are not necessarily practiced as the standard of care in the field. Nurses often comment that they are instructed to do things in a certain way, but the practice setting does not support their efforts. NHC sees these young nurses as change agents who have the opportunity to teach. NHC staff asked the question: How can these students get their voice heard without being confrontational or threatening? The answer seems to be to find an RN champion, and he or she can work to integrate SBIRT into the hospital routine.

⁴ See recommendation below in the corresponding *Strengths and Considerations for Action* section.

CU CON APRN students are required to complete a change project, so possibly a few of these projects could involve integrating SBIRT into different practice settings. Another good avenue for finding champions in a clinical setting is through the UCH nursing residency program, which gets many participants from CU CON. Each residency cohort includes 80 placements, and there are three cohorts per year. Each month the residents participate in a 4-hour training. It was suggested that SBIRT be a topic in one of those trainings. Young nurses, while integral to successful patient care, can be somewhat disempowered in certain medical environments. Finding champions in hospital leadership and getting buy-in from physicians are important components for change.

7. Affordable Care Act Readiness

NHC's preparation for the Affordable Care Act focuses on EHRs. UCH uses EPIC software for EHRs, and SBIRT screening questions are included in the initial assessment. However, providers can skip the substance use screening questions, so in most practice sites the screening is not carried out routinely. NHC would like UCH to use the EPIC system to make the SBIRT implementation more uniform throughout the hospital because this is the clinical practice site that takes most of their students. Suggestions included making the SBIRT questions mandatory (i.e., no option to skip), making providers accountable for asking those questions (e.g., tying to their performance reviews), and creating a mock EPIC site for classroom use by CU CON students.⁵ This level of systems change requires strong partnerships with hospital leaders and information technology (IT) professionals.

NHC and UCH staff raised many issues with the use of SBIRT billing codes. Even nurses performing SBIRT services use wraparound codes to bill because they are more lucrative and less cumbersome to document and cover several activities. Another issue is that many nurses do not want to bill for SBIRT services because this relates the patient with substance use diagnosis. At several locations, including Denver Health, self-paying patients are unhappy they are being billed for SBIRT services they did not request. At these locations, providers are now asking each patient for permission to provide screening and brief intervention. This is a barrier to the spirit of SBIRT and universal screening.

8. Sustainability Planning

The training model is based on integrating SBIRT elements into the existing curriculum, which should make it sustainable after the grant ends. The program team has chosen wisely to develop specific course content in collaboration with course instructors to promote buy-in, ownership, and sustainability. It is hoped that over the life of the grant, champions will emerge

⁵ Data show that currently the SBIRT screening questions are asked approximately 40 percent of the time at UCH.

within the faculty to coordinate SBIRT efforts after grant funding ends, and champions will also emerge in the various clinical settings to promote SBIRT implementation. In this way, CU CON students will have access to experiential learning opportunities.

Upon graduation 100 percent of these students are expected to work in medical settings, with a particular emphasis on primary care and hospital-based care and on providing care in settings such as FQHCs that serve rural, medically underserved, minority, veteran, and/or medically indigent populations. Because CU CON's B.S.N. and graduate programs are integrated with doctoral-level nursing education at both the D.N.P. (practice doctorate) and Ph.D. (academic research) levels, they expect some students trained in SBIRT will become nurse leaders as university faculty or administrators within systems of care. They would then have the opportunity to shape policy and train the next generation of health care providers. Training nursing students on SBIRT now can thus have strong downstream effects later for dissemination of SBIRT to medical care systems in Colorado and other areas where CU CON graduates practice.

The question was raised as to how to sustain SBIRT in the curriculum if there is much staff turnover. It was suggested that NHC use Panopto or Adobe Connect to record didactic pieces so that even if faculty leave, SBIRT content will remain. Another option would be to develop a workbook with guidance on how to deliver content. The workbook would include role-play activities and simulations.

It was also suggested that NHC put SBIRT on "autopilot" to the extent possible within CU CON and its associated clinical sites. While a coordinator will still be needed, it may be possible for a champion to coordinate all SBIRT efforts with little or no funding. SBIRT could also be worked into the new faculty orientation as a regular part of the CU CON program. As mentioned above, strong partnerships with a diverse group of stakeholders in the community and at clinical sites will also aid sustainability efforts.

NHC was interested in the technical assistance available through JBS. Staff felt this would help implementation and sustainability efforts. The following TA needs related to sustainability were discussed:

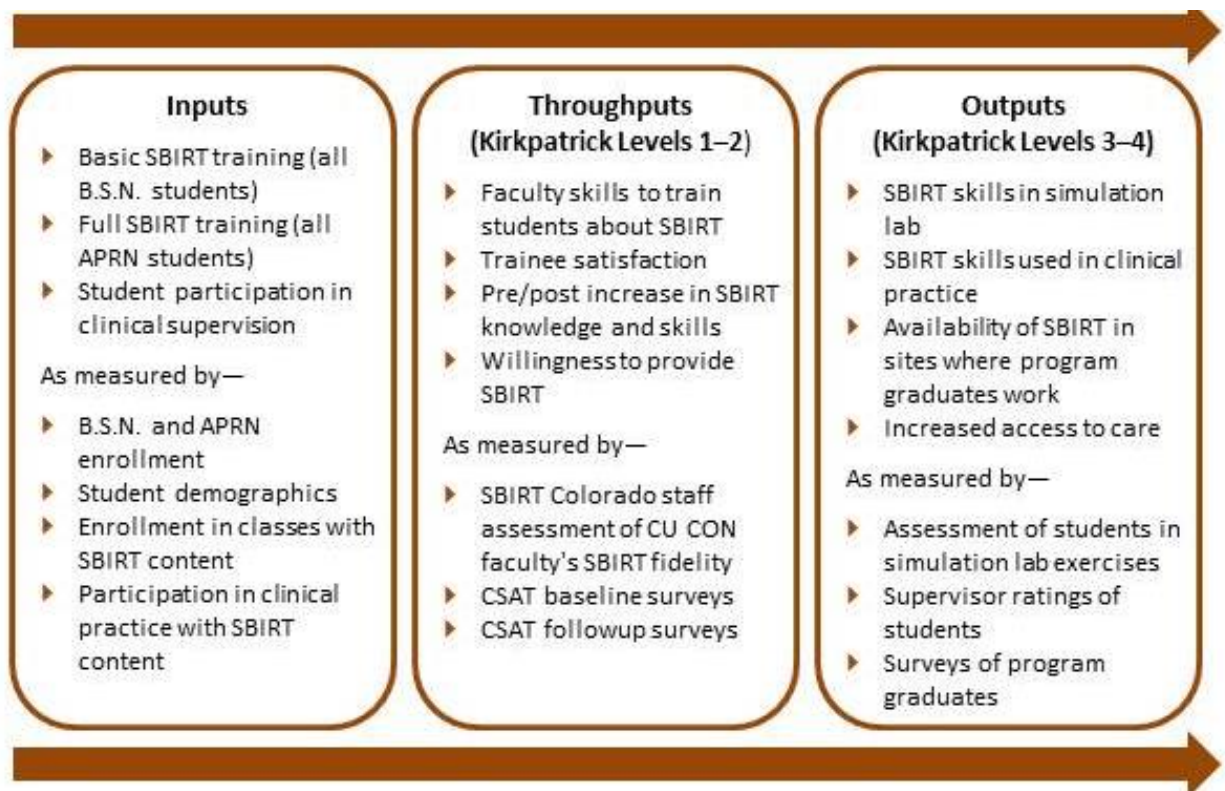
- ▶ NHC has experienced challenges with the modules created by Colorado SBIRT:
 - First, the content is focused on physicians and could be more relevant to nurses.
 - The second challenge is technical: The modules often freeze or do not run at all. NHC would like to create nursing-specific modules that include videos and interactive elements. They are considering Cognito to create "conversations" with nurses and an avatar-type platform such as Second Life to conduct virtual simulations. At the least, NHC would like to create instructional SBIRT videos for CU CON students.
- ▶ NHC is interested in creating a mock version of the EPIC EHR platform for use in simulations.

- ▶ NHC would like help navigating the landscapes at their larger clinical sites (e.g., UCH) and with creating buy-in among nurse preceptors, physicians, and other providers.
- ▶ NHC would like IT support to have a Web site specialist link their site to the CU Web site.

9. Grantee Evaluation

The NHC approach to evaluation is based on Kirkpatrick’s typology of outcomes for professional education. This model incorporates Kirkpatrick’s four levels of training outcomes: (1) trainee satisfaction, (2) change in trainees’ knowledge about clinical care, (3) change in trainees’ clinical care behaviors, and (4) change in clinical outcomes including increased access to care as a result of training. See exhibit 1 for the program’s logic model.

Exhibit 1. University of Colorado, College of Nurses—Logic Model for Evaluating Educational Programs



The evaluation plan is evolving conceptually. As the first cohort of B.S.N. and APRN students are going through their initial introductions to SBIRT (it was referred to by NHC as a “pilot” cohort), NHC is still deciding how to evaluate students’ knowledge, skills, and attitudes related to SBIRT.

Because NHC is weaving SBIRT content throughout the B.S.N. curriculum and adding it to several APRN courses, 30-day followup is a challenge. NHC feels that students, particularly in the B.S.N. program, will not have received much SBIRT knowledge in the first 30 days of their

programs. NHC would like to collect followup Government Performance and Results Act (GPRA) data after students have followed the entire SBIRT curriculum. This would take 1 to 2 years, depending on the program. The site visit team suggested NHC could provide an intensive introduction to SBIRT in the first 30 days and build on that in the rest of the curriculum. This was suggested as a way to give students a holistic understanding of SBIRT and to minimize fragmentation, apart from any discussion of GPRA.

GPRA data collection is a grant requirement, but the site visit team felt that relying too heavily on GPRA as an evaluation tool would be problematic for two reasons: (1) GPRA data relate primarily to a satisfaction survey that was not designed to evaluate the efficacy of SBIRT training, and (2) grant requirements may interfere with strategically timed administration. Instruments designed to assess attitudes, knowledge, and skills will need to be developed or borrowed from other SBIRT projects. Dr. Cook would like to go beyond written tests and code role-play interactions as a means to evaluate SBIRT skills. It was suggested NHC might do both—a written test and coded role-play. The test could be more a reinforcement tool than an evaluation tool, as a check to make sure trainees completed it. It was noted the Colorado SBIRT module has built-in tests.⁶

The B.S.N. program is linear, with all students moving through classes together in a structured format, so it is easier to evaluate than the APRN program because APRN students have different specialties and a variety of course options. NHC plans to evaluate APRN students in the assessment course, which all must take and has the most focused and intensive SBIRT content load. APRNs are also required to record their clinical experience on a software program called TYPHON (where the student is working and on what). This could be a way to track SBIRT use.

Finally, it was noted that the B.S.N. curriculum emphasizes acute care where the evidence for the efficacy of SBIRT is not strong, as opposed to the scientific basis for implementation in primary and emergency care. Paradoxically, inpatient psychiatry is the first venue where the Centers for Medicare & Medicaid Services mandates screening, but this does not mitigate the challenge of incorporating SBIRT into acute care components of the curriculum without solid science behind it. This comment is not intended to discourage use of SBIRT in acute care settings. SBIRT in acute care settings is just as important as primary care, but the rationale for doing it there needs to be considered. Strong data from SBIRT implementation in acute care settings would be an important contribution to the SBIRT evidence base, and this research could be an opportunity to disseminate findings useful to the SBIRT community as a whole. This is a unique research opportunity and could be a way to engage faculty and facilitate implementation of SBIRT in inpatient settings. NHC staff commented that in acute care debriefings, instructors discuss how SBIRT techniques might be applied in other settings (e.g., primary care).

⁶ See recommendation in the corresponding Strengths and Considerations for Action section,

Strengths and Considerations for Action

Program Vision and Design

STRENGTHS

- The focus on nursing has the potential to dramatically increase the reach of SBIRT by developing “SBIRT-ready” B.S.N.s who will be able to support systemic implementation when and where that happens and APNs who are destined for larger roles as primary care providers and agents of change in their clinical venues.
- The elements of SBIRT are integrated into the full spectrum of courses throughout the B.S.N. curriculum and in key coursework in the APRN curriculum.

CHALLENGES

- While weaving SBIRT throughout the curriculum can be seen as a strength, it also may come with challenges, such as lack of a cohesive and holistic view of SBIRT.

	Potential Enhancements	Grantee Resources To Be Used	Will Request TA From CSAT	Information Requested
1	The grantee will incorporate a focused introduction to SBIRT in the B.S.N. program, building on it in subsequent courses. This introduction will take place in the middle or latter part of the curriculum once students have developed a solid understanding of the clinical environment.	X		

Grantee Leadership

STRENGTHS

- The grantee has a strong and motivated group of leaders and champions within CU CON.
- The inclusion of Brie Reimann and Leigh Fisher from SBIRT Colorado brings strong support.
- The COD has been formed and is already expanding SBIRT in UCH.

CHALLENGES

- Most of the COD members are part of CU CON or work at UCH.

	Potential Enhancements	Grantee Resources To Be Used	Will Request TA From CSAT	Information Requested
1	NHC should consider diversifying the COD with members from academic and clinical institutions that work in disciplines other than nursing.	X		

Implementation Plan

STRENGTHS

- NHC has worked hard to promote SBIRT and get buy-in from faculty and staff within CU CON and at practice sites.
- NHC has tailored the SBIRT core curriculum to be more relevant to nurses and has created nurse-focused role-play scenarios.

CHALLENGES

- NHC still finds students need more nurse-centered SBIRT materials.

	Potential Enhancements	Grantee Resources To Be Used	Will Request TA From CSAT	Information Requested
1	NHC would like to create a series of nurse-centered SBIRT modules and videos.		X	

Community Linkages, Partners, and Participation

STRENGTHS

- NHC has developed strong partnerships with most of the important service providers in the area.
- NHC is part of an independent group that includes, among others, SBIRT Colorado and Dr. Paul Seale. This group is attempting to build a community of practice around SBIRT and nursing.

CHALLENGES

- The program is, by nature, nurse-centric. While this is surely an innovative and important group of providers to train, NHC must continue to take steps to avoid becoming insular.

	Potential Enhancements	Grantee Resources To Be Used	Will Request TA From CSAT	Information Requested
1	The grantee should consider continuing to develop partnerships outside of nursing in both academic and clinical settings, such as faculty in the School of Medicine, medical directors in key clinical venues, system leadership, physicians, and behavioral health professionals.	X		

Experiential Learning

STRENGTHS

- Sheridan FQHC and Denver Health are models of experiential learning as they have made SBIRT part of their routine service provision.
- CU CON has created a strong practicum program.

CHALLENGES

- There is a lack of buy-in from preceptors.
- Most clinical practice sites where students do their practicums are not implementing SBIRT routinely.

	Potential Enhancements	Grantee Resources To Be Used	Will Request TA From CSAT	Information Requested
1	Offer SBIRT training to preceptors that offers continuing education units.	X		
2	Advocate for more SBIRT implementation at the most popular practicum site—UCH.	X		
3	Work with SBIRT Colorado and other practicum sites that routinely implement SBIRT to ensure SBIRT experiential opportunity and preceptor assessment.	X		

Affordable Care Act Readiness

STRENGTHS

- CU CON is preparing students to use EHRs.

CHALLENGES

- The EPIC EHR system at UCH includes SBIRT questions, but most providers are not asking them.

	Potential Enhancements	Grantee Resources To Be Used	Will Request TA From CSAT	Information Requested
1	Encourage UCH to make providers accountable for implementing SBIRT by making it mandatory in EPIC, the EHR system.	X		
2	Create a mockup of the EPIC interface to be used in CU CON courses.		X	

Sustainability Planning

STRENGTHS

- Embedding SBIRT content into all CU CON curricula should facilitate sustainability.
- NHC is creating scenarios for role-plays and would like to create a workbook.

CHALLENGES

- The NHC Web site is not linked to the broader CU Web site.

	Potential Enhancements	Grantee Resources To Be Used	Will Request TA From CSAT	Information Requested
1	NHC would like IT support to link its Web site to the broader CU Web site.		X	
2	NHC would like assistance in creating nursing-centered SBIRT materials, which will help sustain the program in the event of large staff turnover.		X	

Grantee Evaluation

STRENGTHS

- NHC has created a strong conceptual framework for evaluating the program.
- NHC is being thoughtful and deliberate in crafting their evaluation methodology.

CHALLENGES

- Knowledge, skills, and attitudes are not being captured.
- GPRA timeframes have presented a problem because the content is woven through the B.S.N. program and integrated into selected APRN courses.

	Potential Enhancements	Grantee Resources To Be Used	Will Request TA From CSAT	Information Requested
1	NHC will develop a method to evaluate student knowledge, skills, and attitudes. This may be a combination of tests and coding role-plays.	X		
2	NHC will either collect GPRA followup data at the conclusion of students' CU CON education or include a focused SBIRT introduction within the first month and collect GPRA followup at 30 days.	X		

Abbreviations and Acronyms

AUDIT	Alcohol Use Disorders Identification Test
COD	Council of directors
CU CON	University of Colorado, College of Nursing
CU Denver	University of Colorado, Denver
CSAT	Center for Substance Abuse Treatment
EHR	Electronic health record
GPRA	Government Performance and Results Act
IT	Information technology
NHC	Nurses Helping Colorado
SAMHSA	Substance Abuse and Mental Health Services Administration
SBIRT	Screening, brief intervention, and referral to treatment
TA	Technical assistance
UCAN	University of Colorado Accelerated Nursing Program
UCH	University of Colorado Hospital