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Using Needs Assessment to Develop Curricula for Screening, Brief Intervention and Referral to Treatment (SBIRT) in Academic and Community Health Settings

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Abstract

This article describes the use of a brief needs assessment survey in the development of Screening, Brief Intervention and Referral to Treatment (SBIRT) curricula in two health care settings in the San Francisco Bay Area. The samples included university medical center faculty (n= 27) and non-physician community health and social service providers in a nearby suburban county (n= 21). Informed by curriculum development theory and motivational interviewing strategies, questions regarding clinical and educational priorities, perceived importance and confidence with screening and intervention techniques, and referral resource availability were included. Medical center faculty expressed greater concern about limited appointment time (p=.003), adequacy of training (p=.025) and provider confidence (p=.038) as implementation obstacles and had lower confidence in delivering SBIRT (p=.046) and providing treatment referrals (p=.054) than community providers. We describe our approach to integrating needs assessment results into subsequent curriculum development. Findings highlight potential differences between physician and non-physician training needs.

Keywords

Needs assessment; brief interventions; SBIRT; curriculum development

INTRODUCTION

Agencies have advocated Screening, Brief Intervention, and Referral to Treatment (SBIRT) as a public health approach to addressing problematic alcohol and drug use across multiple health and social service settings (1). Yet, studies of SBIRT efficacy do not address educational strategies for effective training of health care providers essential to SBIRT implementation. Needs assessment is a useful approach to accurately identifying knowledge and skill gaps among trainees (2), and can address this deficit in the literature.

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Given the limited time, resources, and disparate interests of busy providers, training must be efficient, effective, and high yield. This is especially the case given the potential utility of SBIRT for diverse health care providers, among whom alcohol and drug intervention experience is variable. We developed a needs assessment designed to identify baseline attitudes, knowledge and skills, and to serve as an initial intervention to prepare learners to accept a curriculum. Specifically, we used motivational interviewing principles in the survey to assess importance and self-confidence in delivering components of SBIRT (3), to help engage learners in the training process.

METHODS

Target population

The team identified two high-impact settings in which to disseminate SBIRT: an academic medical center and a community health organization in a suburban San Francisco Bay Area county. In the academic setting, we targeted primary care internal medicine faculty physicians who work as both clinicians and medical educators. In the community, we identified a heterogeneous provider group that included physicians, nurse practitioners, physician assistants, social workers, and mental health providers; who were primarily health providers rather than educators. Both groups mainly treat Medicare or Medicaid recipients. The community sample also included staff from a homeless health clinic providing care to uninsured individuals.

Instrument

We reviewed SBIRT teaching tools and best practices identified from the literature and websites to inform the survey (3, 4). Substance abuse epidemiology and public health literature similarly informed questionnaire design. Based on this process, a brief (16-item) needs assessment instrument was developed. Key questions included provider opinions regarding the importance of developing clinical skills for screening for substance use, brief intervention for alcohol and drug problems, confidence in current abilities in these areas, frequency of screening and methods used in current clinical work (e.g., validated instruments such as the Alcohol Use Disorders Identification Test, AUDIT); barriers to effective SBIRT training and implementation, and preferred approach by the educational team (e.g., lectures, workshops, individual observation, and online self-study). In addition, participants answered questions specific to their setting (e.g., would medical school faculty attend buprenorphine training needed to offer office-based treatment of opioid dependence?).

Procedures

The electronic questionnaire was emailed to 41 faculty physicians and 28 community providers. We sent up to three email reminders over 4 weeks. We analyzed responses by group using t-tests and Chi-square (Fisher’s exact test).

RESULTS

Survey responses were received from 27 (66%) medical school faculty and 21 (75%) community providers (Table 1). Medical school faculty respondents were internists. The community provider respondents and subsequent trainees included only non-physicians (6 nurse practitioners or physician assistants, 3 registered nurses, 2 psychologists, 1 social worker, 3 clinic managers, 1 substance use counselor, 1 case manager, 2 health advocates, 1 chaplain and 1 “other” health provider). See Table 1 for differences between community providers and medical school faculty regarding SBIRT importance and confidence, barriers to SBIRT implementation, and preferred training modalities. Results indicated that overall, community providers had greater confidence in their intervention and referral skill than did medical school faculty but were less likely to report use of standardized screening instruments. Questions on barriers to SBIRT training and implementation in the respondents’ current setting and questions on training preferences also revealed differences between the two groups of respondents.

DISCUSSION

Curriculum development

Findings were very helpful in adapting our planned curricula to these two target audiences. Due to limited statistical power, responses were considered descriptively in addition to significant differences between the two groups. SBIRT curricula focused on the broad areas of screening and management of alcohol, illicit drugs, and prescription drug abuse in primary care (4). Participants’ numeric ratings for “importance” and “confidence” helped narrow curricular focus, e.g., lower importance ratings indicated a greater need to review morbidity and mortality related to substance abuse while lower confidence ratings triggered materials to build provider self-efficacy and hands-on skills practice. Interactive workshops and didactics became the core training modality in both cohorts, although we adapted training priorities for each group (Table 2).

Given the structural and time limitations of primary care clinics (5) and the areas of need highlighted in our survey results, we emphasized skills that would resonate with primary care providers including rapid screening, brief behavioral interventions, preparing patients for referrals, and accessing community resources. As in prior studies (5), intervention confidence may be low among physicians and referral options may not be perceived as readily available. In addition to these areas, we focused on time management and integrating SBIRT into routine medical appointments.

Trainings developed for the community setting included additional instruction on efficiently using validated instruments. The absence of physicians in the community sample triggered development of materials specific to working in health care teams, communication with primary care providers, and medical aspects of substance abuse (Table 2). The team found that in both settings providers appreciated our preliminary work to identify skill gaps and preferred training modalities.

We advise caution in the interpretation of survey results based on this small, heterogeneous sample. It is likely that the type of providers in each sample influenced survey responses, in addition to the different practice settings. We note that our findings regarding differences in screening and treatment referral confidence were consistent with studies showing that non-physician interventions had better implementation rates than physician-delivered SBIRT (6). Our results contribute to this literature on physician vs. non-physician training. In addition, the training team found the process of needs assessment useful in fine-tuning SBIRT curricula and adapting it to the specific needs of two diverse groups of providers. This process enabled the team to maximize training relevance and efficiency.

Acknowledgments

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Table 1

Responses to SBIRT curriculum needs assessment survey among medical school clinical faculty (N=27) and community health providers (N=21).

Questions	Faculty (n=27)	Community Providers (n=21)	X^2 or t
Importance and confidence (mean on 1–10 scale)[a]			
How important is it for you to develop your clinical skills regarding screening, brief interventions, and referrals to treatment (SBIRT)	7.3 (sd=1.5)	8.0 (2.1)	1.3
How confident are you in your current ability to competently screen patients for substance use disorders?	5.9 (sd=1.3)	6.5 (2.8)	0.8
How confident are you in your current ability to briefly intervene with patients about substance use and abuse disorders?	4.9 (sd=1.5)	6.1 (2.2)	2.1*
How confident are you in your current ability to make treatment referrals appropriately matched to level of need for patients with substance use disorders?	4.7 (sd=2.2)	6.2 (2.8)	2.0†
How confident are you in your current ability to effectively prescribe basic addiction pharmacotherapy?	3.0 (sd=2.2)	NA	
How important is it for you, a General Internist, to be trained in basic, non-nicotine related addiction pharmacotherapy	5.4 (sd=2.2)	NA	
Current Practice (%)			
In your current clinical practice, how often do you systematically use any validated substance abuse screener when indicated, e.g. CAGE, MAST, AUDIT, DAST? (Rarely or never vs. sometimes, often or always)	33.3	63.1	4.0*
Obstacles to SBIRT (% saying major or severe obstacle vs. moderate, minor or non-obstacle)			
Limited visit time for education/counseling	88.4	43.8	9.7**
Training to adequately address substance use problems in current setting	53.9	18.8	5.1*
Self-confidence in adequately addressing substance use problems	34.6	6.3	4.4*
Patient reluctance to accept substance use as problem	53.8	75.0	1.9
Addiction treatment resources too hard to access or not available	76.9	67.0	0.5
Training preferences (% saying somewhat or very effective vs. neutral or not effective)			
Didactics/lectures	61.5	73.3	0.6
Interactive workshops	80.7	81.3	0.0
Online self-study	65.4	50.0	1.0
Motivational interviewing supervision	73.1	50.0	0.5

Notes: NA=not asked.

[a]=Importance and confidence (mean on 1–10 scale), with 1 representing no confidence and 10 high confidence. Only non-physicians responded to the community provider survey.

†<p<.10,

*p<.05,

**p<.01.

Table 2

SBIRT curricula and training components provided to medical school clinical faculty and community health providers, based on needs assessment results.

Component/training emphasis	Faculty	Community Providers
Didactics and lectures on screening and brief interventions for alcohol and drug use	X	X
Interactive workshops including opportunities for skills practice	X	X
Expert consultations on SBIRT	X	X
Use of validated instruments such as the AUDIT and CAGE		X
Optional pharmacotherapy instruction	X	
Substance abuse treatment referral resources	X	
Time management for SBIRT in primary care	X	
Working in health care teams, communication with primary care providers		X
Medical signs, symptoms, and consequences of substance abuse		X

Note: Table indicates relative areas of emphasis in the context of the overall curriculum.