Promoting Substance Use Education Among Generalist Physicians: An Evaluation of the Chief Resident Immersion Training (CRIT) Program

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BACKGROUND: Education about substance use (SU) disorders remains inadequate in medical training.

OBJECTIVE: To describe the Chief Resident Immersion Training (CRIT) program in addiction medicine and to evaluate its impact on chief resident (CR) physicians' substance use knowledge, skills, clinical practice, and teaching.

DESIGN: A controlled educational study of CRIT programs (2003, 2004, and 2005) for incoming CRs in generalist disciplines. Intervention CRs were trained to diagnose, manage, and teach about SU. The control CRs sought but did not receive the intervention.

PARTICIPANTS: Eighty-six CR applicants to the CRIT program.

MEASUREMENTS: Baseline and 6-month questionnaires assessing substance use knowledge, skills, clinical practice, and teaching. Outcomes were compared within groups from baseline to follow-up and between groups at follow-up.

RESULTS: The intervention (n=64) and control (n=22) CRs were similar demographically. At 6-month follow-up, the intervention CRs reported a significant increase in SU knowledge, confidence, and preparedness to diagnose, manage, and teach and an increase in SU clinical and teaching practices compared to their baseline and control CRs.

CONCLUSIONS: This intensive training for chief residents (CRs) improved knowledge, confidence, and preparedness to diagnose, manage, and teach about substance use (SU), affecting both the CRs' SU clinical and teaching practices. The CRIT program was an effective model for dissemination of SU knowledge and skills to educators in a key position to share this training with a broader audience of medical trainees. This model holds potential to address other high priority medical, yet under-addressed, content areas as well.

KEY WORDS: medical education; addiction; chief resident training; substance-related disorders.
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INTRODUCTION

Education about substance use (SU) disorders remains inadequate in medical training.[1] This deficiency persists despite the contribution of SU to disability and premature death,[2] and its prevalence and societal costs.[3–5] Screening and management of SU merit a position in medical curricula that reflects the importance as a mainstream medical problem.[6–10] Many physicians fail to address SU disorders because of discomfort with SU-related patient discussions,[11] deficient knowledge and clinical skills,[12,13] and negative attitudes,[14,15] all resulting in barriers to providing optimal medical care for this population.[16]

Medical educators are starting to address this need for physician training in SU screening, assessment, and management.[17–22] Formal curricula on these subjects have been developed[23,24] and evaluated,[25,26] and recommendations for the medical care of addicted patients have been published.[6,27,28] Nevertheless, dissemination of up-to-date addiction research into generalist practice and into residency curricula remains a significant challenge.[16,29,30]

Substance use education aimed at improving physician trainees' attitudes and clinical practice has been effective.[31,32] Confidence in ability to screen and refer patients is positively associated with perceived responsibility and clinical practice.[33] Wider dissemination of these practices requires creative strategies to develop a workforce that is knowledgeable about state-of-the-art approaches to patient management and motivated to implement such practices in a range of settings.[1,26,34,35] As noted in the Institute of Medicine Report *Improving the Quality of Health Care for Mental and Substance-Use Conditions*,[16] medical educators have not adequately addressed past recom-

mendations to update training of medical professionals, leaving trainees ill equipped in their ability to care for patients with SU disorders.

Chief residents (CRs) play a key role in training future physicians.[36] Not only is their teaching central to medical education,[37,38] but CRs often become change agents in future leadership roles.[39] Despite these pivotal roles, published efforts to advance medical training by capitalizing on the CRs role are rare. A training effort in SU that has influential medical educators and leaders, such as CRs, as its target audience has enormous potential to integrate SU clinical training into medical curricula and practice.[36,40]

The Chief Resident Immersion Training (CRIT) program sought to provide incoming generalist CRs with the scientific foundation of addiction medicine and state-of-the-art substance use (SU) diagnosis and management skills, in order to facilitate integration of SU content into residency program curricula and CR teaching.

METHODS

Study Design and Subjects

This study is a controlled educational evaluation of applicants to the 4-day annual CRIT program in Addiction Medicine from 2003–2005. The programs were advertised at http://www.bumc.bu.edu/CARE and by mailings to generalist residency training program directors and professional organizations. All applicants had accepted CR positions for the following academic year in internal medicine, family medicine, or emergency medicine, with priority given to outstanding candidates who (1) demonstrated the presence of a supportive faculty member to assist in promoting the teaching of substance use (SU) and (2) would have dedicated time for teaching during their CR year. Due to resource limitations, enrollment was limited to no more than 22 attendees per year based on their application, which included a curriculum vitae, personal statement, and letter of recommendation. The intervention group consisted of CRIT program attendees, while the control group consisted of applicants who were either not accepted or accepted but unable to attend. This study was approved by the Boston Medical Center Institutional Review Board.

CRIT Program Description

The CRIT program curriculum was developed by national experts in physician SU education. After the first year in 2002, the curriculum was modified based on attendees' evaluations and an independent evaluator-led attendee focus group. Subsequent program evaluations gave feedback to faculty, resulting in minor teaching and programmatic modifications. The CRIT program was held at a conference center in Cape Cod, Massachusetts.

Curriculum and Faculty. The CRIT curriculum (see Appendix A) utilized principles of adult and experiential learning and provided an in-depth evidence-based synthesis of major advances in the field of addiction medicine. The curriculum included a keynote address on the science of addiction, by a National Institute on Drug Abuse senior scientist. CRIT faculty, all with addiction and medical education expertise, role modeled teaching methods, including didactic case-based presentations, small group discussions, journal clubs, role plays, visits to Alcoholics Anonymous (AA) meetings, and small group conversations with individuals in recovery. Both the AA meeting visits and session with individuals in recovery were preceded by an orientation describing the learning objectives and followed by a debriefing session emphasizing the use of these curricular elements in teaching physician trainees. The use of experiential learning and specifically AA meeting visits[41,42] are curricular elements that have been used successfully in physician training. Attendees received SU resources and teaching tools, including slide presentations, case studies for small group work, instructions and role descriptions for skill practice exercises, up-to-date medical literature, and important SU websites. The program also included instruction on teaching skills, including small group instruction, giving feedback, teaching reluctant learners, and ways to integrate SU issues into teaching.

Substance Use Teaching Project. The CRIT curriculum included the development of a SU teaching project to enhance transfer of learning from the CRIT setting to the CRs' work setting. Prior to arrival, CR attendees were asked to discuss possible SU teaching projects with their residency program director and a faculty mentor, giving consideration to residency program needs and CRs' interests. The CRs explicitly stated project goals, objectives, implementation methods, potential resources and barriers, a timeline, and outcomes using a worksheet (see Appendix B). CRs met with CRIT faculty to further develop an achievable project. To encourage institutional support, a copy of the teaching project was sent to the CR's mentor and residency program director.

Assessments

The outcome evaluation comparing the intervention and control CRs consisted of self-assessment questionnaires completed at the time of the CRIT application (baseline) and 6-months after the CRIT program (follow-up). The majority of questions used five-point Likert-type scales based on work by D'Onofrio et al.[43] CRs were asked to rate their knowledge, skills, and confidence ("not at all" to "very") and specific clinical and teaching practices ("never" to "always"). In addition, the intervention CRs completed a pre- and post-CRIT multiple-choice knowledge exam at the training based on didactic session content and an 11-month questionnaire about SU teaching project implementation and impact. The baseline, 6-, and 11-month follow-up questionnaires were administered via e-mail, and the pre- and post-CRIT knowledge exams were completed at the CRIT course. All were returned to the CRIT independent evaluator. Intervention CRs received a gift worth approximately $10, and control CRs received a $50 honorarium after completing the follow-up questionnaires. CRs used unique IDs for assessments to assure confidentiality.

Outcomes

Substance Use Clinical Knowledge, Skills, and Practice. Multiple outcomes measured CRs knowledge, confidence, and self-reported SU clinical practices. The baseline and 6-month questionnaires assessed self-reported clinical knowledge and

skills (SU neurobiology, screening, readiness to change assessment, referral options, pharmacotherapy, and relapse) and self-reported clinical confidence and practice (confidence in diagnosing SU problems and frequency of using screening tools with new patients, counseling drug and alcohol using patients, and referring drug- and alcohol-dependent patients for specialty treatment). A multiple-choice knowledge exam was administered to attendees immediately before and after the program.

Substance Use Teaching Skills and Practice. Teaching outcomes included self-reported responsibility for, confidence in, and frequency of teaching about SU. Additionally, CRs were asked how prepared they felt to teach about SU compared to other chronic medical conditions (i.e., congestive heart failure and dementia). For the intervention CRs' SU teaching project, outcomes included type of teaching activity, impact on residency program curriculum, and implementation facilitators and barriers.

Statistical Analysis

Baseline comparison of the intervention and control groups was performed using chi-square and t-tests, as appropriate, for analysis of the demographic variables (Table 1). The differences in self-reported knowledge, skills, and practice from baseline to 6-month follow-up were compared within each group using the paired t-test procedure (Table 2). Differences between group medians for outcomes at 6 months were examined using the Wilcoxon signed rank test. A two-sided p-value of 0.05 was considered statistically significant. Mean scores of the intervention group multiple-choice knowledge exams for attendees were compared.

Table 1 . Baseline characteristics of applicants (n=86) to the Chief Resident Immersion Training (CRIT) program in addiction medicine 2003–2005, stratified by group

Characteristic	Intervention n=64 (%)	Control n=22 (%)	p-value
Gender			
Female	30 (47)	11 (50)	0.81
Race			0.58
White	40 (63)	15 (68)	
Black	6 (9)	2 (9)	
Asian	14 (22)	2 (9)	
Hispanic	2 (3)	1 (5)	
Other	2 (3)	2 (9)	
Age in years, mean [SD]	30.3 [2.4]	30.8 [4.4]	0.61
Specialty			0.60
Emergency medicine	4 (6)	1 (5)	
Family medicine	4 (6)	2 (9)	
Internal medicine	56 (88)	19 (86)	
Fellowship plans	38 (59)	12 (55)	0.69
Foreign medical graduate	16 (25)	6 (27)	0.83
Alpha Omega Alpha member	5 (8)	2 (9)	0.85
Mentor support named in application	48 (75)	12 (55)	0.19
Substance use (SU) usually/always a topic in residency program	32 (50)	10 (45)	0.71
Training in SU treatment is encouraged in residency program	50 (78)	15 (68)	0.35
Has informed, competent faculty member source of SU information	54 (86)*	21 (100)†	0.07

*(n=63)
†(n=21)

RESULTS

Eighty-six chief resident (CR) applicants to the CRIT program (2003–2005) were assessed; 64 attended CRIT (intervention group), and 22 did not (control group). Of the control group, six had been accepted to the program. The baseline characteristics of the intervention and control groups were similar (Table 1). Applicants represented 56 different residency programs (87% internal medicine, 7% family medicine, and 6% emergency medicine) from 23 states. All intervention and control CRs completed the baseline assessment; 6-month follow-up was 100% (64/64) and 86% (19/22) for the intervention and control groups, respectively. All of the intervention CRs completed the pre- and post-CRIT multiple-choice knowledge exams. All intervention CRs developed a SU teaching project, and 98% (63/64) completed the 11-month follow-up questionnaire.

Substance Use Clinical Knowledge, Skills, and Practice (Table 2)

The intervention CRs showed significant improvement ($p < 0.001$) at 6-month follow-up compared to baseline assessment in self-reported knowledge on SU neurobiology, screening, readiness to change assessment, referral options, pharmacotherapy, and relapse. Similarly, they had increased confidence ($p<0.05$) in diagnosing SU problems and more frequently used a SU screening tool with new patients, counseled drug and alcohol using patients, and referred drug-dependent patients to treatment. The control CRs improved in some outcomes from baseline to follow-up. When comparing the intervention group and the control group medians at 6-month follow-up, the intervention group displayed statistically significant ($p < 0.05$) improvement in self-reported knowledge of SU neurobiology, screening, referral options, pharmacotherapy, and relapse, as well as confidence in diagnosing SU problems and frequency of using a SU screening tool with new patients. The mean pre- and post-CRIT multiple-choice knowledge exam scores for the intervention CRs were 67% and 78% answers correct, respectively ($p<0.001$).

Substance Use Teaching Skills and Practice (Table 2)

The intervention CRs showed significant improvement ($p < 0.001$) at 6-month follow-up compared to baseline in confidence in incorporating SU into teaching, making presentations on SU issues, and incorporating SU information into residents' curriculum. The frequency of covering alcohol and drug abuse in teaching similarly improved. Differences between the intervention group and the control group medians at 6-month follow-up were also significant ($p<0.05$) for those outcomes, with the exception of frequency of covering drug abuse. At baseline, both groups reported high levels of feeling responsible for teaching about SU. While the intervention CRs had no

Table 2 . Chief residents' clinical knowledge, skills and practice and teaching skills and practice related to substance use (SU), at baseline and 6-month follow-up

	Intervention mean (SD)		Control mean (SD)		Difference between group follow-up medians[b] (range)
Characteristic (on a scale of 1–5)	Baseline n=64	Follow-up[a] n=64	Baseline n=22	Follow-up[a] n=19	
Clinical knowledge, skills, and practice					
How knowledgeable are you about:					
Neurobiology of addiction?	2.2 (0.8)	3.3 (0.7)***	2.0 (0.6)	2.4 (0.7)*	1 (−2,4)*
Screening for substance use?	3.1 (0.8) †	4.2 (0.7)***	2.9 (0.8)	3.2 (0.9)	1 (−2,3)**
Readiness to change assessment?	2.9 (1.0) †	4.2 (0.9)***	2.5 (0.7)	3.4 (0.9)**	1 (−2,4)
Available referral options?	2.7 (0.9)	3.8 (0.8)***	2.6 (0.7)	3.1 (0.8)	1 (−2,4)*
Pharmacotherapy for addiction?	2.9 (1.0)	4.0 (0.8)***	2.7 (0.7)	3.0 (0.7)	1 (−2,3)**
Relapse?	2.1 (0.8)	3.4 (0.9)***	2.0 (0.7)	2.5 (0.9)*	1 (−1,4)*
How confident are you in diagnosing SU problems?	3.1 (0.8)	4.0 (0.8)***	3.3 (1.0)	3.4 (0.8)	1 (−2,3)**
How often do you:					
Use a SU screening tool with new patients?	3.3 (0.9)	4.0 (0.9)***	3.0 (1.1)	3.1 (0.9)	1 (−1,3)**
Counsel drug abusing patients about drug problems?	3.9 (0.8)	4.2 (0.7)**	3.7 (0.8)	4.0 (0.7)	0 (−2,3)
Counsel drinkers about alcohol problems?	3.9 (0.7)	4.2 (0.7)**	3.9 (0.7)	4.0 (0.7)	0 (−2,2)
Refer drug-dependent patients to treatment?	3.8 (0.9)	4.0 (0.9)*	3.6 (0.8)	3.8 (0.9)	0 (−2,2)
Refer alcohol-dependent patients to treatment?	3.8 (0.8)	4.1 (0.8)	3.7 (0.9)	3.9 (0.8)	0 (−2,2)
Teaching skills and practice					
How responsible do you feel for teaching about SU?	4.2 (0.9)	4.4 (0.7)	4.3 (0.9)	3.6 (1.0)*	0 (−4,4)*
How confident are you in:					
Incorporating SU into your teaching?	2.9 (1.0)	4.0 (0.8)***	3.1 (1.2)	3.1 (0.9)	1 (−2,4)**
Making presentations on SU issues?	2.7 (1.0)	4.0 (0.8)***	2.7 (1.3)	2.6 (0.8)	1 (−3,4)**
Incorporating SU information into resident's curriculum?	3.1 (1.1)	4.1 (0.8)***	3.1 (1.2)	3.0 (1.0)	1 (−2,4)**
How often do you:					
Cover alcohol abuse?	2.5 (0.8)	3.2 (0.7)***	2.1 (0.6)	2.3 (0.9)	0 (−3,3)*
Cover drug abuse?	2.4 (0.8)	3.0 (0.7)***	2.0 (0.6)	2.3 (1.0)	0 (−3,1)

*p<0.05, **p<0.01, ***p<0.001 †n=60

[a]The test of significance compared the baseline mean to the follow-up mean within each group

[b]The test of significance compared the intervention group follow-up median to the control group follow-up median

change in their reported levels of feeling responsible to teach about SU at follow-up, the control CRs had a significant decrease (p<0.05). Almost all (97%) of intervention CRs reported being "more" or "much more" likely to incorporate SU content into their teaching as a result of their CRIT training. When reporting their preparedness to teach about SU and other chronic conditions (i.e., congestive heart failure, dementia), the intervention group showed significant improvement (p<0.05) at follow-up in their preparedness to teach about alcohol abuse as compared to the control group (Fig. 1).

Substance Use Teaching Project

All intervention CRs developed a SU teaching project. At 11-month follow-up, 86% (56/64) reported that their teaching project had an impact on their residency program curriculum. Examples of the SU teaching projects included new or expanded SU curriculum (n=21), new SU lecture or teaching activity (n=33), and SU screening protocols (n=16). Two CRs published an assessment of the impact of their SU teaching project, one included taking residents and medical students to an Alcoholics Anonymous meeting [42] and the other the successful implementation of an "Educational Half Day" focusing on SU.[44] CRs identified cooperative residency program staff and support from a mentor as the top two facilitators in helping to achieve their SU teaching project, while the top two barriers were time constraints and competing priorities.

DISCUSSION

The Chief Resident Immersion Training (CRIT) program in addiction medicine effectively transferred evidence-based SU knowledge and practice to 64 CRs in generalist disciplines and more importantly, enhanced the SU curriculum in 47 residency programs. Training CRs, who have a primary responsibility for educating medical trainees, appears to be one important pragmatic strategy to address the compelling need for better physician training in the identification and management of patients with SU-related problems.

Educating trainees about SU poses extraordinary challenges. Until a few decades ago, there was little research to guide the practice of addiction medicine by generalists. Yet in 1990, the Institute of Medicine stated that most patients with SU issues should receive care in a primary care setting.[45] A decade later, Fiellin and colleagues described the basic core competencies in SU education for physicians and recommended increased efforts to provide physicians with a level of SU training commensurate with the economic and clinical

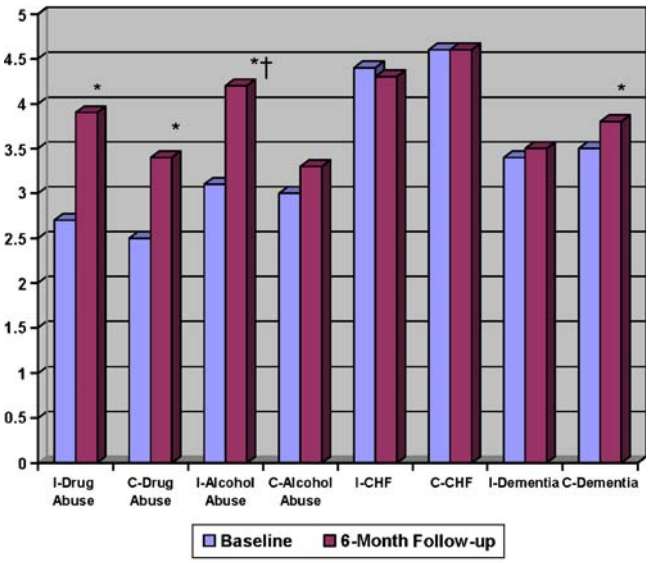

Figure 1. Changes in chief resident's preparedness to teach substance use compared to other chronic conditions at baseline and 6-month follow-up by group {n=86 (64 intervention (I), 22 control (C)) at baseline, and n=83 (64 intervention (I), 19 control (C)) at 6-month follow-up}. *p<0.05, comparing baseline to follow-up within group; †p<0.05, comparing intervention to control group at 6-month follow-up. I = Intervention, C = Control.

impact of SU disorders.[1] In 2008, medical education has yet to provide adequate training in SU, resulting in a dearth of generalist faculty with an interest and expertise in SU to serve as teachers, role models, or mentors. Recently, the National Institute on Drug Abuse has joined forces with the American Medical Association to improve SU training in medical education.[21]

Renner described three critical elements to successfully train physicians in addiction medicine: (1) an adequate knowledge base, (2) a positive attitude toward the patient and the benefits of treatment, and (3) a sense of responsibility for the clinical problem.[46] The CRIT program exposed CRs to up-to-date SU knowledge and evidence-based practices. The immersion experience allowed CRs to focus on the CRIT curriculum without the inevitable distractions of their jobs at home. The faculty modeled different teaching methodologies with an emphasis on interactive learning. Meeting with individuals in recovery demonstrated the reality of treatment, its successes, and challenges. In addition, the physician faculty, all generalists with special expertise in addiction and medical education, served as role models of physicians who had successfully integrated academic, clinical, and research careers in addictions and medical education. The SU teaching project helped foster the transfer of SU knowledge and skills to the CRs' home institutions. CRs were asked to identify a mentor at their institution as this support system was viewed as key to successful local implementation of teaching projects. The finding that intervention CRs had greater increases in self-perceived preparedness to teach about alcohol abuse compared to no changes in teaching about another chronic medical condition, such as dementia, which remained persistently low, highlights the fact that such improvements do not occur spontaneously.

Targeting CRs was a tactical decision in order to magnify the impact of the immersion program. Other successful interventions have increased the knowledge and skills of generalist residents,[26,32] but have not demonstrated the potential to shift the values and culture of a residency program to include more SU training. In addition to being pivotal educators in the clinical training of students and residents, CRs have additional strengths. They are chosen for the high quality of their medical knowledge, clinical skills, and organizational abilities. As role models, CRs have the opportunity to impact the knowledge, skills, and attitudes of trainees. Surprisingly, there have been relatively few efforts to advance medical training by capitalizing on the role of CRs as influential instructors, leaders, and role-models. One example is a CRIT program for the care of older adults to teach geriatric medicine skills to a single institution's chief residents.[47] Engaging these key young medical leaders early in their careers when they are open to new ideas is a strategy with enormous educational potential.

The CRIT program evaluation has several limitations worth considering. The control group was smaller than the intervention group, and neither group was randomly assigned. If the control group had been larger, it is possible that some of the outcomes that were significant in the intervention group would have also been significant in the control group; however, the absolute change between baseline and follow-up was almost always smaller in the control group. The non-randomized nature of the study could have led to confounding. For example, because enrollment in the intervention group was based on selection by the CRIT program directors and 73% of the control group was not accepted, intervention CRs might have been more qualified than the controls. However, both groups were similar in the baseline variables measured. Another limitation is the overall small sample size, which makes it difficult to identify differences between groups. Nevertheless, many results did reach statistical significance. Next, it is possible that due to the self-reported nature of the data, some of the findings may be attributed to social desirability bias. Social desirability may have been more of an issue for the intervention group. To mitigate this bias, CRs returned their questionnaires to an independent evaluator, and were told that faculty and staff would only see de-identified aggregate data. While we found improvements in clinical knowledge, skills, and practice among the CR attendees, we were unable, by study design, to detect if these improvements continued downstream to their trainees. However, in two cases we are aware of CRs conducting their own assessment of impact of their teaching project.[42,44] Future research on the CRIT model should consider a more in-depth investigation of impact on the CRs' trainees. Finally, the conclusions of this study may not be generalizable to all generalist CRs, as the CRIT program enrolled CRs who self-selected for interest in this training and had a disproportionately high representation from internal medicine.

In summary, immersion programs directed at CRs incorporating a variety of teaching modalities and the explicit development of a teaching project can help transmit substance use knowledge and teaching expertise to medical trainees. Chief Resident Immersion Training (CRIT) impacted physicians who play a critical role in medical trainee education but are not often trained in substance use themselves. CRs are an untapped resource for changing medical education and practice about substance use disorders, and this CRIT model holds

potential to address other high-priority medical content areas as well.

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APPENDIX A: EXAMPLE SCHEDULE

Clinical teaching in addiction medicine. A Chief Resident Immersion Training (CRIT) program

Day 1		
12:00–3:30	Arrival and hotel check-in	
3:30–5:00	Pre-CRIT multiple-choice knowledge exam	
5:00–6:30	Reception and dinner	
	Welcome, opening remarks	
6:15–7:00	Ice breaker	
	"What was your most memorable adult learning experience? Why?"	
	Review of adult learning principles	
7:00–7:15	Introduction to substance use teaching project	
7:15–8:15	Teaching project discussion: What is a doable chief resident project?	
Day 2		
7:40–8:45	Breakfast	
8:45–9:00	Introductions	
9:00–10:00	NIDA keynote address: The science of addiction	Dr. Condon/ Miner (NIDA)
10:15–10:35	Principles of addiction	Dr. Samet
10:35–11:05	Screening	Dr. Barnes
11:05–12:30	Assessment and brief intervention	Dr. Samet
12:30–3:00	Lunch and break	
3:00–3:30	Alcohol: Inpatient management	Dr. Saitz
3:30–4:00	Opioids: Inpatient management	Dr. Alford
4:00–4:30	Running small groups	Dr. Jackson
5:00–6:30	Skills practice session I (three groups)	All faculty
7:00–8:30	Dinner/social	
Day 3		
7:40–9:00	Breakfast (one on one: teaching project discussion)	All faculty
9:00–9:30	Alcohol: Outpatient management	Dr. Saitz
9:30–10:00	Opioids: Outpatient management	Dr. Alford
10:00–10:30	Prescription drug abuse	Dr. Alford
11:00–12:30	Skills practice session II (three groups)	All faculty
12:30–3:00	Lunch and break	
3:00–4:00	Giving feedback/reluctant learner	Dr. Jackson
4:10–5:10	Five concurrent workshops	
	HIV and substance use	Dr. Samet
	Clinical epidemiology rounds	Dr. Saitz
	Marijuana: Myths and realities	Dr. Barnes
	Tool kit for teachers	Dr. Jackson
	SU psychosocial services	Dr Amodeo
5:30–6:30	Dinner	
6:00–6:30	Orientation: 12-Step meetings	Dr. Amodeo
6:40–8:30	12-Step meetings	
6:30–7:30	One on one: Teaching project discussion	All faculty
Day 4		
6:15–8:30	12-Step meetings	
8:30–9:30	Breakfast (one on one: Teaching project discussion)	All faculty
9:40–10:00	Debrief: 12-Step meetings	Dr. Amodeo
10:00–10:30	Stimulants and sedatives	Dr. Alford
10:50–11:50	Skills practice session III (three groups)	All faculty
11:50–12:15	Orientation: Luncheon with guests in recovery	Dr. Amodeo
12:15–1:15	Luncheon with guests in recovery	
1:30–2:00	Debrief: Luncheon with guests in recovery	Dr. Amodeo
2:00–2:35	Medical complications of substance use	Dr. Samet
2:55–3:55	Four selected teaching project presentations	Four participants
3:55–4:20	Questions and answers	Faculty
4:20–5:00	Incorporating substance use into curriculum	Dr. Barnes
5:00–5:30	Post-CRIT multiple-choice knowledge exam	
5:45–7:00	Dinner: Certificates of completion	
7:00	Adjourn	

APPENDIX B: SU TEACHING PROJECT WORKSHEET

CRIT Program Substance Use Teaching Project Plan

Name_____Institution_____Date_____
Project Title _____
Goal_____

Objectives:	
Target Audience and Setting: • Who? • Where? • When?	
Resources: • Who, what is available to assist with your goal and objectives?	
Barriers: • Who, what may impede your goal and objectives?	
Time Period: • Target date for completion of goal and objectives?	
Action Steps: • What steps will enable you to achieve each objective?	