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Increasing Access to Care for People with Substance Use Disorders

A. Introduction

The goal of the probationary faculty support grant is to advance my research agenda and start a drug addiction research program at CSUN. This grant will give me the time to develop and submit a National Institutes of Health (NIH) grant proposal in fall 2018. The NIH grant mechanism is the R34 planning grant that allows for \$450,000 in direct costs over three year as well as indirect costs for the university (Pilot and Feasibility Studies in Preparation for Drug and Alcohol Abuse Prevention Trials, R34). The proposal is to conduct a feasibility study of a public health intervention to link patients with substance use disorders (SUDs) to treatment programs in the community. The study targets emergency department (ED) patients at St. Francis Medical Center in South Los Angeles who are at high risk for SUDs.

Increasing access to SUD treatment is an **important public health priority** because substance abuse and dependence is associated with significant morbidity and mortality.¹⁻³ Heroin dependence in the United States has increased 150% since 2007 and is impacting populations not commonly associated with drug use disorders.⁴ While evidence-based treatments are available to care for people with alcohol and drug dependence, only 11% of individuals who need SUD treatment receive it.⁵ Moreover, Latinos and African Americans are less likely to access SUD treatment compared with other groups.⁶ Valid and reliable screening methods exist for identifying patients with SUDs in healthcare settings;⁷⁻⁹ however, there is currently no evidence-based practice for linking racially and ethnically diverse patients with SUD care.

The Screening, Brief Intervention, and Referral to Treatment (SBIRT) model is a comprehensive public health approach for reducing harmful substance use among individuals at risk for SUDs and linking individuals

at high risk for SUDs to specialty care.^{10,11} SBIRT includes a low intensity referral to treatment approach that includes educating an individual on their treatment options and making a referral to a specific treatment facility. SBIRT derives from a long line of research on screening and brief intervention for heavy drinkers. Randomized, clinical trials of brief alcohol interventions found favorable results among heavy drinkers intercepted in primary care,^{12,13} trauma centers¹⁴, and emergency departments.^{12,15} However, research suggests that individuals at high risk for dependence do not benefit from SBIRT as currently designed.¹⁶ The Academic Emergency Department SBIRT program¹⁵ studied the effects of SBIRT on a sample of 1,132 patients found no differences in treatment engagement for alcohol between intervention and control groups. The rate of enrollment in a treatment program at the 3-month follow up was a mere 20% for the treatment group.¹⁵ Research suggests that a more intensive referral to treatment procedure may be required to facilitate transitions between primary care and specialty treatment for patients with SUDs.¹⁷⁻¹⁹

B. Purpose of the Project

For the purposes of the Probationary Faculty Support Project, the “project” of the grant is the submission of an NIH R34 proposal. The main aim of my grant proposal is to test the feasibility of the RT model in order to plan for a larger randomized controlled trial. Feasibility studies establish the foundation for a randomized controlled trial and assess important factors related to the research process (e.g., recruitment rates, number of eligible patients, patients’ adherence to study procedures, and patient satisfaction), resources (e.g., adequate space at the hospital to conduct the study and organizational capacity to carry out procedures), and science (e.g., expected degree of change in patients and clinical significance of results). The anticipated outcomes for the R34 proposal are 1) funding to conduct the feasibility study, 2) preliminary data to support a larger R01 study to test the intervention with a larger sample of patients, and 3) opportunities to publish in peer review journals in my field.

To strengthen my R34 proposal, I will add [REDACTED] as a consultant.

[REDACTED] is a senior addiction health services researcher, adds significant expertise to my research team. [REDACTED]

[REDACTED] is a national expert in the area of SBIRT and will mentor me on the development of the R34 proposal.

C. Methodology

The proposed study will use a two-group randomized design to test whether an enhanced referral to treatment approach (RT+) for alcohol and illicit drug use, e.g., cannabis, stimulants, opiates, and non-medical prescription use, has a higher rate treatment admissions compared with standard RT procedures. The study will randomize approximately 30 patients into one of two conditions (15/condition). Patients at risk for substance dependence will be recruited from the St. Francis Medical Center ED in Lynwood, CA, a predominately Latino and African American community of South Los Angeles. The main outcome is admissions to SUD treatment within 30 days of referral. Treatment admission will be measured by self-reports from patients at the follow up interview and confirmed by treatment admissions records via an information sharing agreement.

Standard RT will entail an initial brief (10-15 min) counseling intervention to review the patient's score on the Alcohol, Smoking and Substance Involvement Test (ASSIST), educate the patient about the health risks associated with the particular drug(s) they report using, and assess the patient's readiness to change their substance use behavior. RT procedures include: 1) maintaining a list of facilities in the local area that have current openings for new patients, 2) educating patients about their treatment options, including outpatient counseling, medication-assisted treatment, and residential programs for people with unstable living situations, 3) making a phone call to the treatment facility to set up an appointment while the patient is present, and 4) providing transportation assistance in the way of van service or bus tokens as needed. Standard RT is brief (15-30 min.) depending on the time it takes to set up an initial appointment.

The experimental condition (RT+) will combine standard RT with strengths-based case management (SBCM). SBCM is an intervention in which case managers assist clients in the process of setting treatment goals and help manage client needs to achieve SUD treatment goals. The RT+ condition will use a brief SBCM approach of five sessions with patients. Two Masters of Social Work interns from CSUN will be hired to deliver the experimental and control interventions.

In addition to recording the rate of treatment admissions for patients in the study, I will collect and record data to assess the study process and available resources for a larger study. I will conduct qualitative

interviews with hospital staff and patients to assess satisfaction with the intervention, burdensomeness of the intervention, and suggestions for changes to the protocol.

D. Timeline

Grant writing will take place from July 1, 2018 through October 12, 2018. I will submit the grant on October 16, 2018. Working on average 8-10 hours a week, I will spread out the various tasks and section of the grant proposal including the writing of the study aims, research strategy (i.e., research design, eligibility criteria, data collection procedures, and sample size calculations), budget and budget justification, human subject’s protection, letters of support, and required NIH forms. It is estimated to take at least 120 hours to write an NIH research proposal. My timeline allows for 15 weeks of grant writing. The last two months of the fall 2018 semesters will be spent working on a manuscript using existing data on treatment utilization in LA County.

July-Aug ‘18	Sept ‘18	Oct ‘18	Nov – Dec ‘18	July ‘19
Prepare NIH proposal sections: specific aims, background & significance, study design, & methods	Edit research strategy, complete budget, complete supporting documents	Edit proposal, gather letters of support, & submit all documents to grants office Submit proposal by Oct. 16	Work on a manuscript on SUD treatment utilization in LA County Submit manuscript by Dec. 14 th to Journal of Substance Abuse Treatment	Anticipated start date for NIH study

E. Significance

Obtaining a grant from NIH will establish me as an independent researcher in health services research and allow me to publish my research and ultimately improve the quality of care for individuals with SUDs. Promotion to associate professor and tenure in the Department of Health Sciences requires evidence of a scholarly agenda and at least two peer-reviewed articles. Biomedical research requires funding to pay a team of individuals to collect primary data with patients, pay for clinicians or counselors who conduct the interventions, and partner with community organizations such as health clinics without whom we could not conduct our research.

Given the lack of success of standard SBIRT to link patients at high risk of alcohol and drug dependence to SUD treatment, the time is now to test more intensive referral procedures to facilitate transitions between healthcare settings and SUD treatment.¹⁷ My R34 grant will develop a new enhanced referral-to-treatment (RT) model that combines standard RT from SBIRT with strengths-based case management, an intensive form case management that has been shown to be effective in helping individuals with SUD access treatment.^{26,27} The study will be the first randomized trial of RT methods for linking patients from general medical settings to specialty SUD treatment. My study will apply a unique conceptual model for facilitating transitions from primary care to SUD care developed by Cucciare et al.¹⁷ that predicts better SUD care outcomes with increasing intensity of care transition practices (e.g., low intensity is counseling and referral and higher intensity is care management).

F. Impact on Instruction

If funded, the R34 grant will provide hands-on research experience for two students in health sciences (undergraduate or graduate) to work as research assistants. Students will be involved in the research process by preparing data forms, conducting interviews with patients, and entering, coding and analyzing data. Students will have the opportunity to present study findings at local and national conferences and co-author a manuscript. In addition to research assistants, two CSUN MSW students will be hired to work as interventionists on the study. The MSW students will participate in the study for their clinical internship.

In addition to engaging students in the research study, I will incorporate the study findings into class lectures in my health promotion program planning and evaluation course. Presenting and discussing “real world” research projects in class enriches the learning experience of students.

G. Dissemination

The main product for my probationary faculty support grant is the NIH grant proposal. If funded, my study will lead to at least two publications, a conference presentation, and submission of an R01 proposal to test the intervention in a full trial. One of my target journals is the Journal of Substance Abuse Treatment.

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