

Treatment Research Institute

Annual Progress Report: 2008 Formula Grant

Reporting Period

July 1, 2009 – June 30, 2010

Formula Grant Overview

The Treatment Research Institute received \$158,950 in formula funds for the grant award period January 1, 2009 through December 31, 2010. Accomplishments for the reporting period are described below.

Research Project 1: Project Title and Purpose

Program Quality Measures for a Consumer Guide to Adolescent Addiction Treatment - Parents of adolescents needing treatment for substance abuse have few resources to describe available options. A Consumer Guide could educate parents about evidence-based clinical practices available in treatment programs. In turn, educated parents could demand better care and improve overall quality. Toward this end, the purpose of this project is the development of three measures to collect and report on quality features (evidence-based practices) within adolescent programs. This project will create and test a written questionnaire and follow-up interview survey with program directors (Drug Strategies Interview-Directors; DSI-D) regarding available evidence based practices. A parallel adolescent patient survey (Drug Strategies Interview-Patient; DSI-P) will measure the evidence based practices actually received during treatment. Next we will adapt the existing Treatment Services Review (TSR) for use with adolescents. This second adolescent patient interview will be used to provide concurrent validity data for the first interview. Finally, parents will be interviewed regarding their experiences and needs in seeking treatment for their adolescent.

Anticipated Duration of Project

1/1/2009 - 12/31/2010

Project Overview

The project goal is to develop a standardized data collection protocol, using the instruments developed and tested within this project, to ultimately guide production of an updatable Consumer Guide for parents of adolescents needing addiction treatment. An original guide was developed over 10 years ago and remains popular, but it is in need of updated methods and content. Accordingly, this proposal is designed to collect preliminary reliability and validity data on three standardized measures of empirically-based practices (EBPs) within programs serving adolescents. The principles and practices measured for the original guide will be the starting point for this project.

The specific aims of this project are to use current best practices research to create and test: a) an updated interview with treatment program directors (DSI-D) tapping the number and type of services available within their programs; and b) a parallel adolescent interview for patients (DSI-P), measuring the number and types of quality features actually received by adolescent patients. A third measure, the Treatment Services Review (TSR), will be adapted for use with adolescents to measure care received to inform the validity of the new measures (DSIs). Finally, parents of adolescents are invited to participate in a brief interview to learn more about their experience seeking treatment and what they believe would be important and helpful in a Consumer Guide.

This project will be accomplished in three stages. Stage 1 adapts the original DSI-D. First, new EBPs will be incorporated into the existing structure of the DSI-D. Next, an expert panel will review the edited DSI-D and identify additional items aimed at providing more information about the integrity and fidelity of any EBPs offered. Finally, the updated DSI-D will be tested for item stability. Stage 2 will create and test the parallel, DSI-P. First we will conduct an adolescent patient focus group to determine best ways of phrasing questions. Next, we will perform cognitive testing procedures with two waves of adolescent patients to assure common understanding of the intent of the questions. Finally, the DSI-P will be tested for item stability. In Stage 3, the TSR, widely used with adults to measure the number and nature of services received during addiction treatment, will be adapted for use with adolescents using parallel procedures, as described in developing the DSI-P.

Principal Investigator

John S. Cacciola, PhD
Director, Center on the Continuum of Care
Treatment Research Institute
600 Public Ledger Building
150 S. Independence Mall West
Philadelphia, PA 19106

Other Participating Researchers

None. Nonetheless, this project is leveraged by funds from the Center for Substance Abuse Treatment (CSAT) of the Substance Abuse and Mental Health Services Administration (SAMHSA). As such consultation to this Formula Grant project have been provided by Dr. Michael J. Mason, an adolescent specialist, and Mathea Falco, Esq., Executive Director of Drug Strategies which developed the original “Treating Teens: Guide to Adolescent Drug Programs” (2003). CSAT has additionally funded expert review of materials developed for the Consumer Guide using a Scientific Advisory Group including: Amelia Arria, PhD, Doreen A. Cavanaugh, PhD, Gayle Dakof, PhD, Michael L. Dennis, PhD, Nancy Jainchill, PhD, Kathleen Meyers, PhD and Ken C. Winters, PhD. These additional experts have enhanced the quality of the literature review and provided valuable feedback on the measures as they have been developed.

Expected Research Outcomes and Benefits

The measures developed in this project are designed as part of a larger plan to develop an

internet-based, Consumer Guide to Adolescent Addiction Treatment programs. The Guide will provide parents and caring others a comparison of the types of evidence-based practices available in community outpatient treatment programs. This research will test the reliability and validity of the procedures used to record those practices in treatment programs. Stage 1 will result in an interview for treatment program directors updated to reflect new best practices and able to assess each program's provision of those practices and the adequacy with which they are implemented (DSI-D), and will assure that the new director interview produces reliable and consistent information. Stage 2 will create and test a second, corroborating measure of treatment services actually received during treatment, from direct interviews with samples of adolescent patients in treatment. This adolescent patient survey (DSI-P) will parallel the director survey in covering the same Key Elements of quality care. Stage 3 will adapt and test the Treatment Services Review (TSR), a widely used measure of adult services received during addiction treatment. The TSR will be edited for use with adolescent patients and tested for clarity and item stability (TSR-A). Finally, parents of adolescents entering treatment will be interviewed on their process of accessing care and their preferences regarding content and format of an internet-based guide. The DSIs and TSR-A will provide complementary and corroborating perspectives on the services provided at treatment centers while the parent interviews will provide valuable information regarding the format for the proposed Consumer Guide.

This project does not provide services or involve new or different treatments. However, adolescents and parents may experience satisfaction in having their experiences heard and knowing that their information may help others in their situation. A longer term benefit for program directors may be better understanding about new evidence-based practices that treatment programs may include or parents may request. A second longer term benefit will be input from a large, diverse parent and patient population about treatment needs. This information will help shape the format and content of the Guide. An updatable web-based Guide will offer parents and other referral sources (e.g., counselors, health care professionals, social workers) information about the quality features available within community treatment programs. Ultimately, providing parent consumers with this information may help to create an important market force demanding more quality features in community addiction treatment programs.

Summary of Research Completed

Research activities conducted this year have included: 1) TRI and Philadelphia Health Department Institutional Review Board (IRB) approvals of the protocol and all consent materials for parents and adolescents aged 18 years, assents for adolescents ages 12-17, and collateral recruitment materials; 2) extension and completion of a systematic literature review focused on empirically supported treatment practices for adolescent addiction treatment published since 2002; 3) the drafting of Key Elements (KEs), Components of Quality Care, and their related measures with additional consultation with original *Treating Teens: Guide to Adolescent Drug Programs* researchers as well as adolescent addiction treatment experts; 4) the convening of a Scientific Advisory Panel Meeting on 11/11/09, which provided feedback on the draft KEs, Components, measures, and format of the ultimate web-based Consumer Guide; 5) completion of *final* Drug Strategies Interview-Director (DSI-D) and KE/Components drafts using further expert consultation on 4/23/10 and 5/13/10; 6) identification of adolescent outpatient drug and alcohol treatment programs in Philadelphia and surrounding counties and gathering of relevant

program information; 7) random selection of adolescent treatment programs for the project; 8) Stage 1 initial stability testing of the DSI-D; 9) creation of a complete draft version of the Stage 2, Drug Strategies Interview-Patient (DSI-P); 10) initial development of adolescent Treatment Services Review (TSR-A) items; and 11) the securing of site commitment to hold Stage 2 / 3 adolescent focus group and survey testing.

1. IRB Approvals: A total of thirteen consent/assent documents, related HIPAA and recruitment materials for all phases of the project, as well as a draft Parent Needs Interview were amended and have now been approved by both the TRI and Philadelphia's Health Department IRBs.

2. Extension and Completion of Literature Review: In order to identify additional empirically-based practices (EBPs) recommended in the literature since the original *Treating Teens* Guide (between the year 2002 and June 2009), we had previously searched PsycINFO using four exploded terms: treatment, substance abuse, empirically-based, and review, in combination with adolescent as an age category. References were then coded independently by two doctoral level staff for relevance to the project with high reliability. All of the selected 46 references have been read and coded using a qualitative narrative that determined both support for the original 9 KEs of effective care (e.g., Assessment and Treatment Matching, Efforts at Engagement, Gender and Cultural Competence, etc.) and identified new or updated KEs and their Components. Special attention was given to the abundant literature on the prevalence, assessment and integrated treatment of co-occurring disorders. Analysis of these peer-reviewed review journal articles as well as book chapters was completed by contracted consultants, Michael Mason, Ph.D., of Villanova University and Mathea Falco, J.D., President of Drug Strategies, and PI John Cacciola, Ph.D. with his TRI team, Beth Rosenwasser, Ph.D., and Suzanne Bates, B.A.

The literature review was enhanced with other sources such as state-determined evidence-based treatments, National Registry of Evidence-based Programs and Practices (NREPP), Principles of Drug Addiction Treatment (PODAT), PODAT: Criminal Justice, and National Quality Forum (NQF). Additional searches using similar search terms were conducted using PubMed Plus and Embase and turned up no new relevant citations. In order to clarify intervention principles and practices discussed in 11 large empirically-based *review* articles (of the 46 systematically selected references), we also reviewed an additional 42 key *primary* articles. Furthermore, some KEs and their Components (e.g., trauma assessment and treatment, developmentally and culturally-informed treatment) warranted review of the more general adolescent treatment literature as there were few studies and no reviews conducted in these areas with adolescent substance-abusing populations.

3. Drafting of KEs, Components, the DSI-D, and the DSI-P: Drs. John Cacciola and Beth Rosenwasser completed a draft revision of the KEs and their corresponding Components using the work from the literature review and additional guidance from two meetings with local scientists, including Drs. Michael Mason of Villanova University, TRI's Executive Director, Constance Pechura and TRI Senior Scientist Amelia Arria, and an initial Expert meeting held on 10/15/09 which also included Dr. Ken Winters and Dr. Arthur Alterman. Feedback from these meetings also informed preparation of the DSI-D and DSI-P, and both drafts were presented to the expert panel on 11/11/09.

4. Hosting of the 11/11/09 Scientific Advisory Panel Meeting: A Scientific Advisory Panel of six identified experts in adolescent drug and alcohol treatment participated in a full-day, face-to-face meeting on 11/11/09. The Scientific Advisory Panel included as planned, Drs. Doreen Cavanaugh, Gayle Dakof, Michael Dennis, and Ken Winters. Three of our expert panelists were unable to attend after initial confirmation (Drs. Richard Clayton, Michael Dennis, and Nancy Jainchill), thus we invited Kathleen Meyers, Ph.D., who developed the Comprehensive Addiction Severity Index-Adolescents (CASI-A), and Mathea Falco, J.D. In-house participants included Drs. Constance Pechura, John Cacciola, Amelia Arria, Beth Rosenwasser, and Suzanne Bates, TRI Research Assistant. Prior to the meeting, the expert panelists individually reviewed the updated KEs and Components of quality care as well as the draft measures and scoring schema. They then offered revisions, and crafted additional items aimed at providing more information about the integrity and fidelity of recommended practices. The group also discussed the details of a standardized quality treatment measurement protocol capable of national dissemination and associated web features.

5. Completion of the Stage 1 DSI-D: Using the feedback generated from the 11/11/09 meeting, new drafts of the KEs/Components and the Director Survey were written and presented via email to the expert panel attendees plus Dr. Michael Dennis on 4/23/10 and again on 5/13/10. Their feedback has been incorporated into updated drafts of the currently established 10 KEs and 59 Components. This version of self-report (i.e., questionnaire) portion of the DSI-D has been formatted for electronic or hard copy distribution and is currently being used during Stage 1 stability testing with program directors. The follow-up interview has also been formatted for use and the database has been constructed.

6. Adolescent Outpatient Drug & Alcohol Treatment Program Selection: We previously gained expressions of support and preliminary agreement for study participation from five programs that had been contacted from a convenience sample of 20 of 68 identified from the Substance Abuse and Mental Health Services Administration (SAMHSA) treatment facility locator. The procedures described below, including random selection of programs and formal consent, have resulted in a more extensive recruitment process. Using the SAMHSA and Pennsylvania Department of Health web-based locators, we initially identified 145 substance abuse programs in Philadelphia and its three contiguous counties (i.e., Montgomery, Delaware, and Bucks). These databases listed substance abuse treatment licensed programs but lacked consistent information necessary for each program (e.g., whether adolescents are treated at each program, patient age range, mental health licensing, credentials, adolescent program size, modalities offered, and contact information for current program directors and senior administrators). Programs were contacted, and if they treated adolescents for substance abuse, additional relevant information was gathered. This information gathering process took much longer than anticipated as the 145 programs required an average of approximately three calls each to gather the needed information. Of those 145 programs, we were unable to reach three, seven did not contact us back despite repeated efforts, and 80 did not treat adolescents. Of the remaining 55 agencies treating adolescents, we eliminated 15 that typically treat fewer than five adolescents per month (Philadelphia, n=4; Montgomery, n=5; Delaware, n=4; Bucks, n=2). Through this process, a total of 40 potentially eligible adolescent programs were identified (Philadelphia, n=17; Montgomery, n=10; Delaware, n=7; Bucks, n=6).

7. Recruiting of Programs and Directors: An alphabetical listing of the 17 programs in Philadelphia was placed in random order using *Statistical Analysis Software v. 9.2*. This process was repeated with the combined list of 23 programs in Montgomery, Delaware, and Bucks counties. Program directors and their senior directors/administrators were contacted in order beginning with the first 6 at the top of the list by phone, email, and/or United States Postal Service (as necessary and depending upon the contact information available) in order to explain the project and extend an invitation to participate. Thus far, a total of 12 programs have been invited and three program directors have consented to partake in Stage 1 activities. One program has also agreed to Stage 2 and/or 3 activities.

8. Stage 1 DSI-D Item Stability Testing: This stage involves program director completion of a written questionnaire followed by a telephone interview; both are repeated. Three program directors consented to participate, have been sent the initial questionnaire, and are in various stages of completing reliability testing.

9. Creation of DSI-P Draft Measure: Drs. John Cacciola and Beth Rosenwasser have completed an initial full draft of the DSI-P for use with adolescents during Stage 2.

10. TSR-A Development: After finalizing a draft version of the DSI-P we became aware that the items necessary for the assessment of the KEs and Components overlap with those necessary for the TSR-A. We have since identified the additional service items and are crafting questions for an interview format.

11. Site Commitment for Stages 2 and 3 Adolescent and Parent Surveys: One program director agreed to allow recruitment of adolescent patients from their treatment program in order to develop the DSI-P and TSR-A. Details for recruiting parents and their adolescents at this site have been planned and a focus group has been scheduled.