

# Treatment Research Institute

## Annual Progress Report: 2010 Formula Grant

### Reporting Period

January 1, 2011 – June 30, 2011

### Formula Grant Overview

The Treatment Research Institute received \$139,351 in formula funds for the grant award period January 1, 2011 through December 31, 2012. Accomplishments for the reporting period are described below.

### Research Project 1: Project Title and Purpose

*Medication Assisted Treatment for Opioid, Alcohol Dependence: Improving Knowledge, Attitudes & Referrals* - There is strong evidence supporting the effectiveness of medication assisted treatment (MAT) at reducing substance use, criminal behaviors, and fatal overdose among people with substance dependence. However, the widespread utilization of MAT has been impeded by misperceptions, negative attitudes, and a general lack of awareness of MAT. The purpose of this project is to reduce these barriers among critical stakeholders by developing a brief training, delivering it to treatment referrers and policymakers situated in the criminal justice system, and assessing its effect on knowledge, attitudes, and willingness to refer to MAT. The training aims to improve the health and safety of all Pennsylvanians by promoting the utilization of treatment that reduces the negative consequences associated with substance use among a subpopulation where this problem is rampant.

### Anticipated Duration of Project

01/01/2011 - 12/31/2012

### Project Overview

In *Phase I* we will identify existing training programs developed by the Substance Abuse & Mental Health Services Administration (SAMHSA), National Institute on Drug Abuse (NIDA), Addiction Technology Transfer Center (ATTC) and other treatment specialists relating to medication assisted treatment of chemical dependence (MAT). We will conduct an in-house review of these products with training, treatment and criminal justice (CJ) experts at the Treatment Research Institute (TRI) to identify relevant components as well as material that will need to be developed in order to provide complete coverage of medications used to treat addiction as well as issues that pertain specifically to medication assisted treatment (MAT) with individuals involved in the CJ system. The goal of this review is to identify training matter that can serve as the basis for an intervention that will convey accurate and useful information about MAT in a way that is most acceptable and useful to CJ addiction treatment referrers and

policymakers. Furthering progress towards this goal in *Phase II*, we will convene an expert panel of academic researchers, correctional-based treatment providers and referrers, and addictions policymakers to conduct an external evaluation of the material gathered in Phase I. This expert panel will meet in person at TRI in Philadelphia with the aim of gathering these stakeholders' suggestions for improvement and consolidation of the training material. During *Phase III*, with careful coordination between TRI's investigators and data programmer, we will develop a beta version of an online training curriculum that incorporates the feedback from the internal and external consultants just identified. This pre-release version of the training will be distributed to consultants and will allow them the opportunity to comment on the product's content and usability. The training will be finalized once feedback has been received and appropriately incorporated into the training. *Phase IV* of the project consists of testing whether, and to what extent, the training impacts treatment referrers' and policymakers' knowledge, attitudes, and (as appropriate) willingness to refer to MAT. This will involve a randomized control trial comparing the outcomes of the MAT training to those of an attention control training with 50 treatment referrers (n = 25 for each training) serving a correctional population in Philadelphia county. We will also employ a pre-post design to assess the impact of the training with 25 decision-makers within the CJ system. Finally, in *Phase V*, based upon the training's effectiveness and trainee feedback, adjustments to improve the training may be made. The instrument and study results will then be used to develop funding proposals to support research and dissemination of the training outside the CJ system.

### **Principal Investigator**

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### **Other Participating Researchers**

David S. Festinger, PhD, Karen Dugosh, PhD – employed by Treatment Research Institute

### **Expected Research Outcomes and Benefits**

Drug and alcohol dependence has a substantial and negative impact on the health of Pennsylvanians and their communities. Dependence can often lead to criminal justice (CJ) involvement, physical morbidity, and death. Medication assisted treatment (MAT) for addiction has been shown to result in substantial improvements in the lives of individuals and community health. A critical challenge for our field is to promote the uptake of these under-utilized treatments. A promising approach to doing so involves raising awareness and addressing misperceptions about MAT. This project will develop and evaluate a brief training designed to increase participants' knowledge, attitudes, and (as appropriate) willingness to refer to medication assisted treatment. Expert consultants will generate specific recommendations for a training curriculum that will convey accurate and useful information about MAT to treatment

referrers and policymakers within the CJ system. Although the current project may not be directly assessing CJ referrals to and initiation of MAT, the training to be developed addresses *a necessary first step* in promoting these behaviors by imparting the appropriate knowledge and positive perceptions warranted for these evidence-based treatments. As a result, this training will have significant benefits for the Commonwealth by addressing both issues of public health and public safety via an increase in the likelihood that referrals are provided, that MAT is initiated, and that clients' substance use is reduced. Indeed, the information obtained from this investigation will serve as preliminary data to develop a NIDA research grant to assess whether the increased knowledge and positive attitudes imparted by the training will lead to increased referral to MAT and improvements in the health status of drug abusers. In addition, findings will result in presentations at treatment programs, professional conferences, as well as scholarly publications in peer-reviewed journals.

### **Summary of Research Completed**

We are nearing completion of Phase I of this project. In Phase I of the project, our group at TRI conducted a review of treatment-specialists' (e.g., SAMHSA, NIDA, ATTCS) web sites to identify existing trainings related to medication assisted treatment of chemical dependence (MAT). We also reviewed the literature on research and evaluations of MAT training programs in order to identify components of these training programs that have evidence of raising awareness, reducing misperceptions and increasing willingness to refer appropriate persons to MAT. We are conducting an in-house assessment of the products from this review with experts at TRI to identify their relevant components as well as material that will need to be developed for the training.

#### Identification of Existing Trainings

Online searches for relevant trainings have been conducted using the most popular and far-reaching search engines on the web (i.e., Google, Bing, Yahoo, Ask) as well as focused searches of treatment specialists' own web sites. An exhaustive list of logically derived search terms was entered into each search engine. These included search terms such as "Naltrexone" and "Methadone," alone and in combination with terms such as "training," and "education." In addition, a systematic literature search using the same search terms was conducted of published studies on relevant electronic databases, including PubMed, Medline and PsycINFO. The training descriptions and abstracts of all citations returned from searches were reviewed by the investigators to determine whether, at face value, they are aimed at improving knowledge and perceptions of MAT.

This information has been compiled into a PowerPoint presentation and annotated with text that will serve as the audio commentary for the presentation material as part of the final online training curriculum. The curriculum has been structured as follows:

1. Welcome to the online training
2. Purpose of the training and collection of informed consent to participate
3. Questionnaires: demographics, baseline measures assessing attitudes toward MAT, willingness to refer a client or support policies that increase accessibility to MAT, resistance to change

#### 4. Randomization of treatment referrers to MAT training or attention control

#### MAT Training

5. Orientation to online training (e.g., periodic quizzes, hyperlinks to online supplemental information)
6. Focus on alcohol and opioid dependence
  - 6.1. What is dependence?
  - 6.2. Medical model of addiction
  - 6.3. Prevalence of alcohol and opioid dependence
  - 6.4. Quiz and corrective feedback
7. Methods of treating dependence
  - 7.1. Non-pharmacological
    - 7.1.1. Psychotherapy, Cognitive-Behavioral Therapy, 12-step, Relapse Prevention and Aftercare, Family and Couples Therapy
  - 7.2. Pharmacological
    - 7.2.1. Agonists, antagonists, partial antagonists, others
    - 7.2.2. Medications to treat alcohol dependence
      - 7.2.2.1. Naltrexone (Revia, Depade, Vivitrol); Disulfiram (Antabuse); Acamprosatate (Campral)
    - 7.2.3. Medications to treat opioid dependence
      - 7.2.3.1. Methadone; Buprenorphine (Subutex); Naltrexone. (ReVia, Depade, Vivitrol).
  - 7.3. Quiz and corrective feedback
8. Evidence of MAT's effectiveness at reducing drug use and its negative consequences
9. Myths about medications
  - 9.1. Quiz and corrective feedback
10. Information on the availability and accessibility of MAT
  - 10.1. Regulations associated with some MATs
  - 10.2. Local resources
11. Post-training measures (Knowledge, Attitudes, Willingness)

This annotated PowerPoint presentation (containing over 100 slides) serves as the basis for the online training curriculum. This presentation is what is currently being presented to experts as part of the In-House Review and, following incorporation of feedback from experts in Phases I and II of the project, it is what will be animated in Phase III of the project using Adobe System's Captivate software.

#### In-House Review

We are currently seeking input from training, treatment and criminal justice (CJ) experts at TRI. These experts are informed of the proposed training's aims, presented with the gathered material and asked to provide their opinions on the existing material as well as suggestions for the development of additional material that will allow the training to provide comprehensive coverage of issues pertaining to MAT and its use with individuals involved in the CJ system. TRI has at its disposal experts in translating research into usable information for practitioners, policymakers and consumers of addiction treatment services. TRI scientists have worked extensively within and across the substance abuse and criminal justice systems and have developed evidence-based tools and trainings for stakeholders within these systems in order to

promote public health and safety. These experts are providing invaluable feedback that will be incorporated into the development of the proposed training.

We have received expert feedback from Dr. David Metzger on the material compiled to this point. Dr. Metzger is a Research Associate Professor at the University of Pennsylvania and Co-Principal Investigator for the Delaware Valley Node of the Clinical Trials Network. His work involves testing the safety and efficacy of agonist treatment strategies.

#### Development of Online Training Curriculum

We are currently preparing for Phase III of this project. The Training Coordinator has extensive knowledge of Adobe Captivate 5. During this reporting period he completed hands-on practice with the program that will be helpful as he develops and builds software demonstrations and interactive eLearning simulations during Phase III of the study. Our Coordinator has learned how to record a demonstration, edit a demonstration, work with objects in the timeline, work with images, publish a project, add audio, record a simulation, add animation, add question slides, and send results to a Learning Management System. These skills will be invaluable in creating the final online training curriculum. In addition, Adobe Captivate software has been purchased to allow creation of the training curriculum.