

## SUPPORTING MEDICATION ASSISTED TREATMENT OUTCOMES RESEARCH: *An Overview of Kentucky's Opiate Replacement Treatment Outcome Study*

### WHAT WE KNOW ABOUT MEDICATION ASSISTED TREATMENT

Dole and Nyswander's research in the 1960's paved the way for the development of publicly accessible medication assisted narcotic addiction treatment<sup>2</sup>. Currently, an estimated 260,000 people in the United States and over 1 million worldwide are in methadone maintenance treatment. In addition, an estimated 140,000 people in the U.S. are currently taking buprenorphine to manage narcotic addictions.<sup>2</sup> Though myths and inaccuracies regarding medication assisted treatment persist,<sup>2,3,4</sup> research supports positive outcomes from long-term medication assisted treatment for both the individual and society<sup>3,4,6,7</sup>. The most prominent treatment outcomes include decreased illicit substance use, increased employment stability, and decreased legal problems<sup>4</sup>.

Medication assisted maintenance treatment (MAT) is common practice with other chronic behavioral health conditions such as bipolar disorder<sup>8,9</sup>. A fuller understanding of how opiate addiction alters brain functioning suggests that MAT may be critical in order for clients to live stable and productive lives. Both the treatment community and society need a more sympathetic understanding of MAT for addictive disease. Public policies on MAT may be supported by ongoing research on clinical characteristics of MAT patients and their treatment outcomes. Kentucky's Opiate Replacement Treatment Outcome Study (KORTOS) is key in this ongoing research process and puts Kentucky at the forefront of research on the long-term stabilizing effects of MAT for clients.

*Participants were asked to state the most helpful thing anyone said or did regarding treatment:*

"Everyone that knows me from before [treatment] sees that I live a productive and meaningful life now. They've all seen the turnaround."

"My family doctor treated me the same before and after he found out I was on methadone."

"Family and close friends have said since I've been in the treatment program things are more stable and predictable. They like me better and support my participation in treatment."

Suggested citation for this report: Stevenson, E., Walker, R., Logan, TK., Cole, J., , & Mateyoke-Scriver, A. (2009). Supporting medication assisted treatment outcomes research: An overview of Kentucky's Opiate Replacement Treatment Outcome Study. *KTOS In-Focus*, 2(2), 1-4. Center on Drug & Alcohol Research, University of Kentucky.

## KENTUCKY'S OPIATE REPLACEMENT TREATMENT OUTCOME STUDY (KORTOS)

KORTOS is a treatment outcome evaluation that examines the stabilizing properties of MAT for individuals in maintenance treatment (not detoxification). The study does not focus on abstinence, but rather examines how MAT is related to improved or maintained social functioning of clients. KORTOS is built on the premise that clients in MAT have a long term disease or condition that often involves major physical and mental health problems - all of which require sustained long term treatment. KORTOS helps create a comprehensive picture of the characteristics of opiate dependent clients and their many health and

*The KORTOS database provides a central registry allowing client current dosing to be accessed across the state so treatment can continue uninterrupted in the event of a natural disaster.*

mental health problems.

KORTOS examines all National Outcome Measures (NOMs) system criteria including: education, employment, living situation, legal involvement, physical/mental health, substance use history, abuse history, and social support. KORTOS consists of three data collection points:

1. **Intake Data:** Baseline clinical characteristics (ASI and other measures) as collected by treatment staff,
2. **Client Status Data:** Ongoing log of client dose levels, mental health status, drug screen results, phase, other prescribed medication regimens, and discharge data; and
3. **Follow-up Data:** Repeated 6-month follow-up interviews conducted by University of Kentucky research staff with ongoing maintenance clients to examine current status of symptoms and social functioning.

Intake and client status data are collected by staff at one of the 10 state licensed treatment clinics in Kentucky. Currently, there are over 2,000 clients in the database. Follow-up data are collected by staff at the University of Kentucky Center on Drug and Alcohol Research (UKCDAR).

### Kentucky MAT clinics include

Bluegrass East Narcotic Treatment Program, Lexington;  
Center for Behavioral Health, Louisville;  
Corbin Professional Associates;  
Lexington Professional Associates;  
MORE Center, Louisville;  
Paducah Professional Associates;  
Paintsville Professional Associates;  
Perry County Professional Associates;  
Pikeville Treatment Center, LLC;  
Ultimate Treatment Center, Ashland

### KORTOS PILOT FOLLOW-UP STUDY SUMMARY

Between February and April 2009, 32 client interviews were completed in a pilot version of the follow-up study. Follow-up interviews included open-ended questions to help guide future follow-up interview format, as well as questions to compare treatment outcomes from intake to follow-up. A brief initial report analyzing these results was presented at the National American Association for the Treatment of Opioid Dependence conference in April and the presentation is available online at <http://cdar.uky.edu/kortos>. The following summary describes initial information gleaned from the follow-up study pilot.

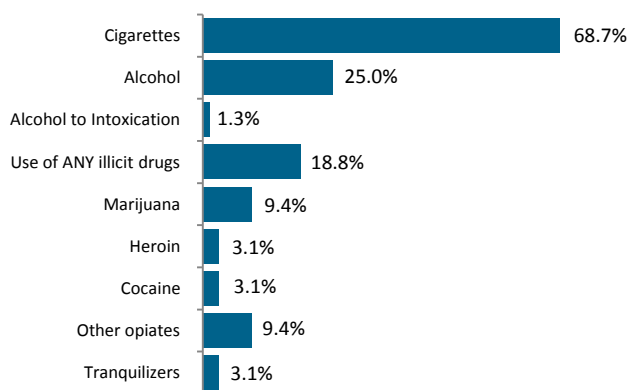
*Some limitations with the pilot data should be kept in mind. There were only 90 names included in the pilot sample in order to pilot the follow-up data collection instrument and to allow for feedback during this test phase. There is wide variance in treatment history with some clients having participated in maintenance treatment since 1968. The clients contacted represented a convenience sample.*

Clients who participated in the follow-up survey were on average 40 years old with client ages ranging from 24 years old to 59 years old. Two-thirds were female, and 44% were currently married. The majority of clients (72%) were employed, either part-time or full-time, at follow-up.

**Treatment History and Dosing.** Intake data are collected on all clients in treatment, including those clients stabilized on medication for many years. Due to this fact, the dates of entry into treatment varied from 1968 to 2008. This range of treatment experience is reflected in the average medication dose and number of required visits to at the treatment agency each week. The more stable the client, the higher number of take-home doses allowed and the fewer times per week the client is required to come to the clinic. On average, clients reported attending the clinic for services on a daily basis. Data on average medication doses and dosing patterns will be available once client status data is updated by treatment clinics on a regular basis.

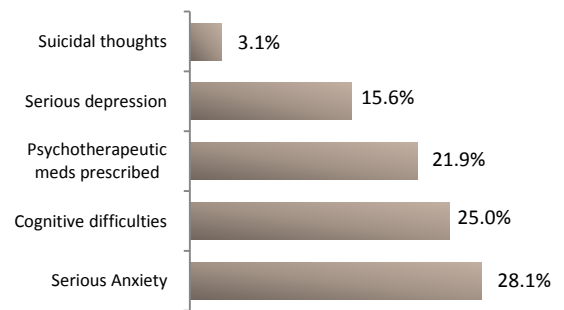
**Substance Use and Arrests.** Very few clients reported use of illegal substances in the past 6 months. Over two-thirds reported smoking cigarettes and one quarter of clients reported use of alcohol in the past six months. (See Figure 1). Only two clients had been arrested for any charge in the past 6 months and none were incarcerated at follow-up.

Figure 1. Percent Clients Reporting Past 6 Month Substance Use (n=32)



**Mental Health.** Clients reported both physical and mental health problems at follow-up. Mental health problems included serious anxiety (not related to substance use problems) reported by 28% of clients. One-fourth of clients reported trouble understanding or concentrating and 22% of clients were prescribed medication for mental health issues in the past 6 months. (See Figure 2).

Figure 2. Mental Health Issues in Past 6 Months (not related to substance use) (n=32)



**Perceptions of Treatment and Social Support.** Clients were asked to comment on negative and positive sides of treatment. Clients listed quite a few positive sides of treatment, one of the primary positives being regular counseling and not using opiates anymore. Clients stated: "It saved my life!" "I can get on with my life now, fulfill my goals, go back to school, take care of my kids, pursue a career, be a better person..." When asked to select which items are the most important in helping him/her to stay off illicit drugs/alcohol, over one-third of clients selected Medication Assisted Treatment (37.5%) and family or friends (34.4%). Some of the biggest problems clients mentioned were cost of treatment, the distance to clinics and time spent on travel, difficulty in access to a doctor (MD often shared between clinics), and the desire for more take homes to decrease travel and time spent getting to/from clinic.

## PORTRAIT OF A TYPICAL MAT CLIENT

Marie\* is a 29 year old female who has been in opiate replacement treatment for approximately 8 years. She attends the program once every two weeks, driving a two hour round trip. Over the past 6 months she has refrained from any use of illicit drugs and maintained a stable home life. Marie reports that her medication dose has been tapered over time to the point where she is on "the smallest dose there is" and hopes to come off completely in the future (though she admits to being "more than a little nervous" about it). She has been especially motivated to succeed by her understanding spouse and the need to be "together enough" to take care of her young child. Marie is very satisfied with her current treatment program citing the professionalism of the staff and their willingness to work with her to help her pursue/achieve her goals. She sees her involvement in opiate replacement treatment as directly responsible for enabling her to stay focused and

motivated enough to return to college, earn her degree and begin her professional career. Without the program Marie feels she never would have been able to achieve these goals. Her only regret is that she feels compelled to hide her involvement in the program from fellow students and co-workers because ... “they don’t understand the program and would probably judge me differently if they knew”.

## OVERALL GOALS FOR KORTOS

The overall goal of the KORTOS project is to examine the social functioning of clients who are participating in maintenance treatment. KORTOS also provides the state with information on changes in client education, employment, homemaker activity, and criminal justice involvement measured over time. The database provides a means to evaluate average maintenance dosage among clinics, controlling for demographics and baseline clinical characteristics.

Data and reports to help educate the public and policy makers about the outcomes of medication assisted therapies, including cost offsets from treatment provision are available online at <http://cdar.uky.edu/kortos> or by contacting the State Opioid Treatment Authority Program Administrator, Michele McCarthy. In addition to evaluative data, the regular collection of client dose and other status information will act as a clinical database on all persons in treatment in Kentucky for safety purposes in case of a natural disaster.

Future plans for the KORTOS project include profiling similarities and differences among buprenorphine and methadone maintenance clients by client profile, clinic, and treatment outcomes. In addition, the project will move to web-based data entry for all aspects of the intake instrument in July 2010.

For more information about Kentucky’s medication assisted treatment programs, contact:

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Kentucky Treatment Outcome Study In-Focus Report, Volume 2, Issue 1

## Following Substance Abuse Treatment Clients Over Time: Tips From the Front Lines

- Evaluation of substance abuse treatment outcomes is vital to continually improving and strengthening substance abuse treatment programs in Kentucky.
- Doing follow-up interviews with a large number of clients allows us to make reasonable and accurate conclusions about client outcomes after substance abuse treatment; however, it requires significant creativity, resources, and time.
- High quality contact information must be collected at the time clients enroll in the Kentucky Treatment Outcome Study to ensure high follow-up rates.
- The follow-up rate in this study is very good because clinicians are working as part of the research team by collecting intake data and accurate contact information.

Access the latest KTOS reports at:  
<http://cdar.uky.edu/ktos/KTOSFollow.html>

KTOS is funded and supported by the Kentucky Division of Mental Health and Substance Abuse  
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