INTRODUCTION

The Kentucky Treatment Outcome Study (KTOS) includes a face-to-face interview with program staff at treatment intake to assess targeted factors such as substance use, mental health symptoms, education, employment status, living situation, and criminal justice involvement prior to entering treatment. KTOS is an important part of the Department for Behavioral Health, Developmental, and Intellectual Disabilities, Division of Behavioral Health’s performance-based measurement of treatment outcomes in Kentucky’s communities. Then, a follow-up interview is conducted with a selected sample of clients by a member of the University of Kentucky Center on Drug and Alcohol Research about 12 months after the intake interview is completed.

This Findings at a Glance report summarizes results from the 2015 annual outcome evaluation for the Adult Kentucky Treatment Outcome Study program. Results for this study included analysis of self-report responses for 1,286 clients who participated in publicly-funded substance abuse treatment from July 2012 through June 2013 and then completed a follow-up interview about 12 months later (an average of 350 days). There was a low refusal rate for follow-up participation (0.9%) and a high follow-up rate (76%) out of those clients who were eligible for follow-up and were randomly selected for the sample.

Of the 1,286 clients who completed a 12-month follow-up interview:
- Half (51%) were male.
- The majority of follow-up clients were White (93%). A minority were African American/Black (5%) and 2% were Hispanic, American Indian, or multiracial.
- They were an average of 34 years old at the time of the intake interview. The majority of individuals (58%) were 30 years old or older at intake.

FACTORS EXAMINED AT INTAKE AND FOLLOW-UP

PAST-12-MONTH SUBSTANCE USE

- **Past 12-month substance use**
  - **73%** of clients reported illegal drug use at intake, with a 67% decrease to 25% reported illegal drug use at follow-up.
  - **14%** of clients reported heroin use at intake, with a 63% decrease to 5% reported heroin use at follow-up.
  - **48%** of clients reported opioid* misuse at intake, with a 77% decrease to 11% reported opioid* misuse at follow-up.
  - **58%** of clients reported alcohol use at intake, with a 47% decrease to 31% reported alcohol use at follow-up.

* Misuse of opioids other than heroin, including prescription opiates, methadone, and buprenorphine
MENTAL HEALTH AND STRESS

**DEPRESSION**
- 49% of clients met criteria for depression at intake
- 54% decrease
- 23% of clients met criteria for depression at follow-up

**GENERALIZED ANXIETY**
- 43% of clients met criteria for anxiety at intake
- 47% decrease
- 22% of clients met criteria for anxiety at follow-up

**STRESS-RELATED HEALTH CONSEQUENCES**
- The highest possible score is 75 and the lowest possible score is 0.
- 23 average score on stress-related health consequences scale at intake
- 22% decrease
- 10 average score on stress-related health consequences scale at follow-up
- 58% decrease

ECONOMIC INDICATORS

**CURRENT EMPLOYMENT STATUS**
- 62% increase
- 20% of clients employed full-time at intake
- 33% of clients employed full-time at follow-up

**AVERAGE NUMBER OF MONTHS EMPLOYED**
- 37% increase
- 4 average months clients were employed at intake
- 6 average months clients were employed at follow-up

**DIFFICULTY MEETING BASIC LIVING NEEDS FOR FINANCIAL REASONS**
- 51% of clients had trouble meeting basic living needs for financial reasons at intake
- 23% decrease
- 39% of clients had trouble meeting basic living needs for financial reasons at follow-up

PAST-12-MONTH CRIMINAL JUSTICE SYSTEM INVOLVEMENT

**ARREST**
- 55% of clients reported an arrest at intake
- 62% decrease
- 21% of clients reported an arrest at follow-up

**INCARCERATION**
- 58% of clients reported incarceration at intake
- 64% decrease
- 21% of clients reported incarceration at follow-up
RECOVERY SUPPORTS

- 29% of clients attended mutual help group meetings at intake
- 44% of clients attended mutual help group meetings at follow-up (54% increase)
- Average number of people client could count on for support at intake: 8
- Average number of people client could count on for support at follow-up: 12

SOCIAL STANDING AND RATING OF PROGRAM EXPERIENCES

PERCEPTIONS OF SOCIAL STANDING

- Intake: Rating = 4.7
- Follow-up: Rating = 6.9

Ratings were from 1 ("people who are the worst off, those who have the least money, least education, and worst jobs or no jobs") to 10 ("people who are the best off, those who have the most money, most education, and best jobs.")

SATISFACTION WITH TREATMENT

- You were treated with respect: 97.9%
- Staff explained your rights as a client: 97.3%
- You understood your treatment plan: 95.9%
- You received the services you needed to help you get better: 92.2%
- You feel better about yourself as a result of treatment: 91.1%

COST SAVINGS OF SUBSTANCE ABUSE TREATMENT

- Estimates of the cost per drug user and alcohol user were applied to the follow-up sample to examine the total costs of drug and alcohol abuse to society in relation to expenditures before and after program participation.
- The cost savings analysis suggests that for every dollar spent on providing publicly-funded treatment services there was a $4.60 return in avoided costs (i.e., costs to society that would have been expected given the costs associated with drug and alcohol use).

CONCLUSION

The KTOS 2015 report provides a valuable look at the client outcomes of publicly funded substance abuse treatment in Kentucky. Overall, clients of publicly-funded substance abuse treatment made significant strides in all of the targeted outcomes. Specifically, there were significant decreases in use of alcohol and all drugs (except tobacco), a significant increase in full-time employment, decrease in depression and generalized anxiety, decrease in stress-related health consequences, decrease in arrests and incarceration, and increased recovery supports. Moreover, an estimate of the cost to society for alcohol and drug dependence in the year before treatment compared to the cost to society for alcohol and drug dependence in the year after treatment intake, while taking into account the cost of publicly-funded treatment, showed a significant cost savings.