

The background of the cover is a vibrant, abstract painting. It features a diagonal band of deep purple that runs from the top left towards the bottom right. The rest of the image is filled with thick, expressive brushstrokes in a variety of colors including red, orange, yellow, green, blue, and white. The overall effect is one of dynamic energy and artistic complexity.

Adult Kentucky Treatment Outcome Study

2021 Findings at a Glance

Introduction

This Findings at a Glance summarizes results from the 2021 Adult Kentucky Treatment Outcome Study annual report. The Kentucky Treatment Outcome Study (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. The goal of the Kentucky Treatment Outcome Study (KTOS) is to examine client satisfaction and outcomes for several specific targeted factors including: (1) substance use and severity of substance use, (2) mental health, physical health, and victimization, (3) economic and living circumstances, (4) criminal justice system involvement, (5) quality of life, and (6) recovery supports. Report findings support continued funding of substance abuse treatment programs, which improve the lives of clients and greatly reduce the cost of untreated substance abuse to society.

Results for this study included analysis of self-report responses for 1,066 clients who participated in publicly-funded substance abuse treatment from July 2018 through June 2019 and then completed a follow-up interview about 12 months later (an average of 355 days). There was a low refusal rate for follow-up participation (3.0%) and a high follow-up rate (68.9%) for those clients who were eligible for follow-up and were randomly selected for the sample. For more information on KTOS or findings from the full report, visit cdar.uky.edu/ktos.

Characteristics of the Follow-up Sample

Of the 1,066 clients who completed a 12-month follow-up interview:

- Slightly more than half (54%) were female.
- The majority were White (92%). A minority were African American/Black (5%) and 3% were Hispanic, American Indian, or multiracial.
- They were an average of 35 years old at the time of the intake interview.
- About two in five (41%) were married or cohabiting at intake.
- Over half of clients (57%) reported they had at least one chronic health problem.
- Over three-quarters of clients (79%) had health insurance through Medicaid.

Factors Examined at Intake and Follow-up

Past-12-month Substance Use



**REPORTED ANY ILLEGAL
DRUG USE*****

89% at intake
33% at follow-up



**REPORTED OPIOID
MISUSE****¹**

44% at intake
10% at follow-up



**REPORTED
STIMULANT USE*****

56% at intake
12% at follow-up



**REPORTED ALCOHOL
USE*****

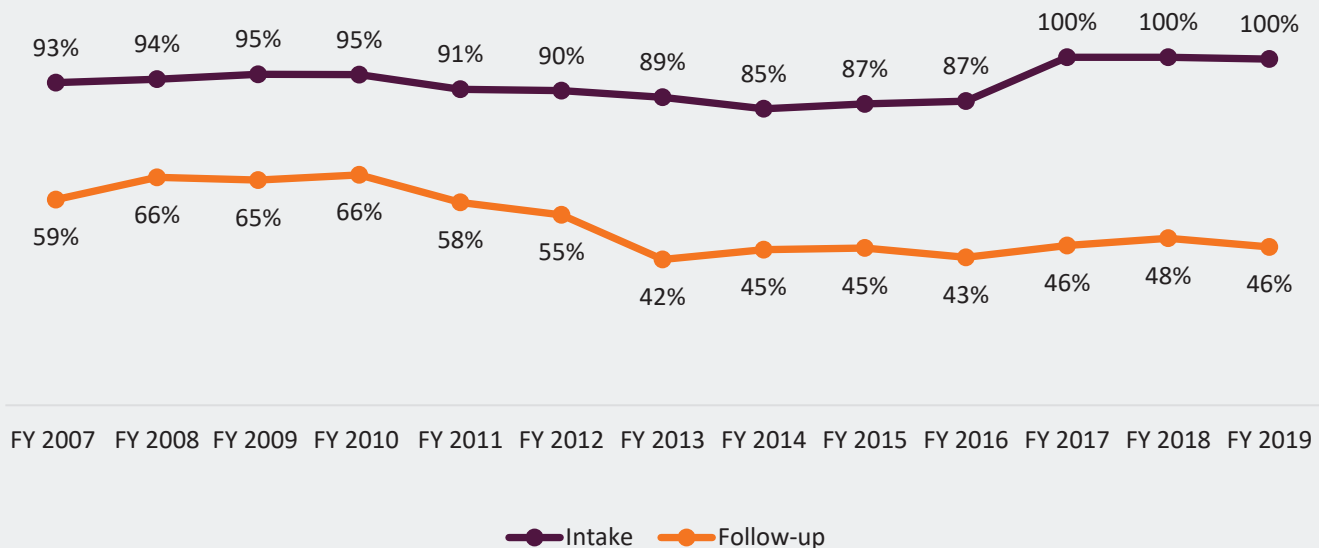
50% at intake
26% at follow-up

***p < .001.

¹ Including opioids other than heroin, including prescription opioids, methadone, and buprenorphine-naloxone (bup-nx).

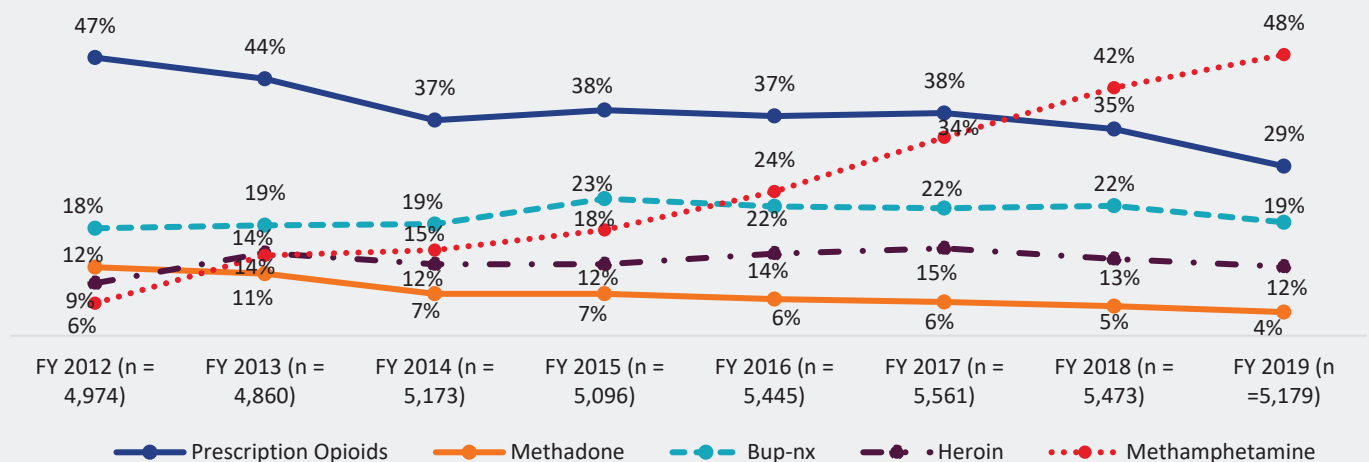
Trends in Any Alcohol and/or Drug Use

The number of KTOS clients reporting alcohol and/or drug use in the 12 months before treatment was consistently high.² Overall, at follow-up, the number of clients reporting alcohol and/or drug use has decreased over the years.



How Much Has Use of Specific Illegal Drugs at Intake Changed Over Time for All Clients?

This trend analysis examines trends over time for all clients with completed intake surveys. Specifically, the trends in this graph show the percent of clients who reported misusing prescription opiates/opioids, non-prescribed methadone, non-prescribed buprenorphine-naloxone (bup-nx), heroin, and methamphetamine in the 12 months before entering treatment from FY 2012 to FY 2019.



² In the several years preceding FY 2017, the research team noticed that an increasing proportion of clients with completed KTOS intake surveys reported no substance use. Because the focus of this report is on substance abuse treatment outcomes, to be included in the follow-up study individuals had to report past-12-month alcohol and/or drug use, if they were not incarcerated the entire 12 months before entering the program.

Past-12-month Mental Health, Physical Health, and Victimization



**MET STUDY
CRITERIA FOR
DEPRESSION*****

56%

at intake

33%

at follow-up



**MET STUDY
CRITERIA FOR
ANXIETY*****

54%

at intake

29%

at follow-up



**MET STUDY CRITERIA FOR
COMORBID DEPRESSION
AND ANXIETY*****

44%

at intake

21%

at follow-up



**REPORTED SUICIDAL
IDEATION AND/OR
ATTEMPTS*****

19%

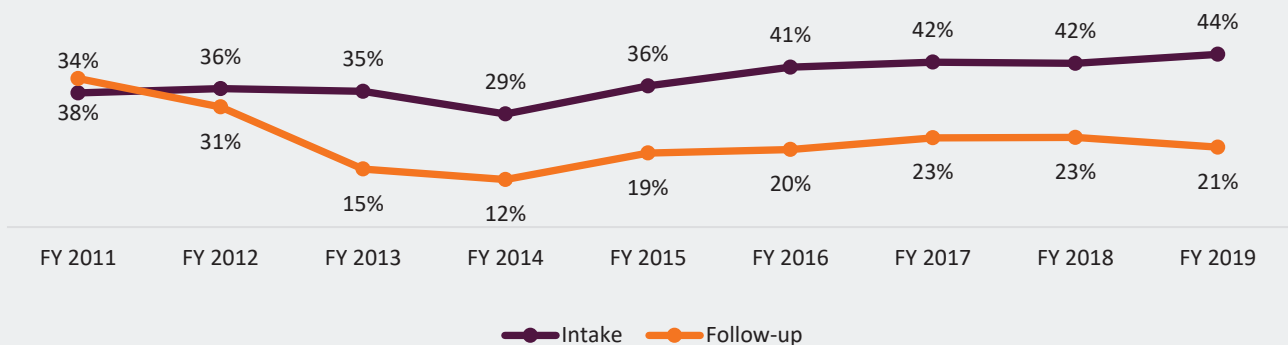
at intake

8%

at follow-up

Trends in Comorbid Depression and Anxiety

Past-9-year trends for comorbid depression and anxiety show that, in general, more clients met study criteria for comorbid depression and anxiety at intake in FY 2019 (44%) than in FY 2011. At follow-up, however, the percent of clients meeting criteria for comorbid depression and anxiety has remained stable for the past five years.



**AVERAGE NUMBER OF DAYS
PHYSICAL HEALTH WAS NOT
GOOD*****

6.7

at intake

4.1

at follow-up



**AVERAGE NUMBER OF
DAYS MENTAL HEALTH
WAS NOT GOOD*****

13.2

at intake

6.0

at follow-up



**REPORTED CHRONIC
PAIN*****

33%

at intake

27%

at follow-up



**REPORTED
INTERPERSONAL
VICTIMIZATION*****

33%

at intake

16%

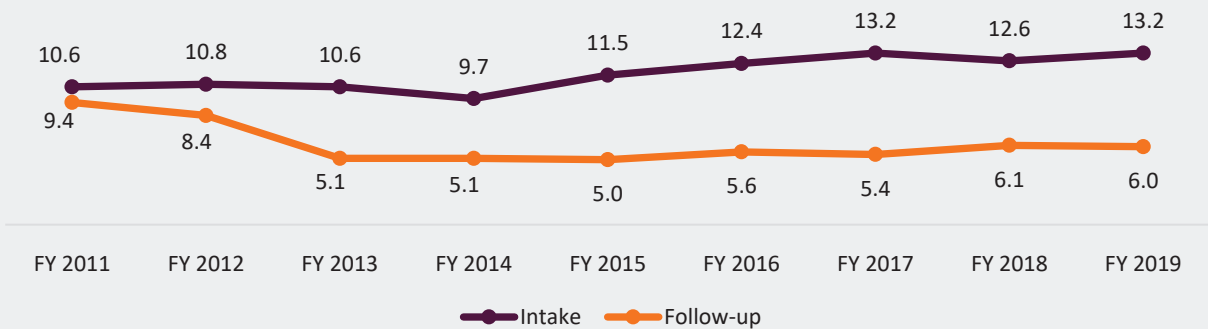
at follow-up

*** $p < .001$.

³Past 30 days.

Trends in Perceptions of Poor Mental Health

The average number of days clients reported their mental health was not good in the past 30 days has increased at intake in the past several years to a high of 13.2 in FY 2017 and FY 2019. At follow-up, the average number of days clients reported their mental health was not good in the past 30 days has decreased from a high of 9.4 days in FY 2011 to a low of 5.0 in FY 2015.



Past-12-month Economic Indicators



**CURRENTLY EMPLOYED
FULL-TIME*****

23% at intake
39% at follow-up



**CURRENTLY
HOMELESS*****

29% at intake
7% at follow-up



**REPORTED DIFFICULTY
MEETING BASIC LIVING
NEEDS****

46% at intake
31% at follow-up



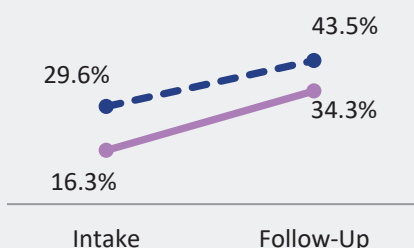
**REPORTED DIFFICULTY
MEETING HEALTH CARE
NEEDS*****

26% at intake
19% at follow-up

Gender Differences in Current Employment for Clients in the Follow-up Sample

Gender Differences in Full-time Employment

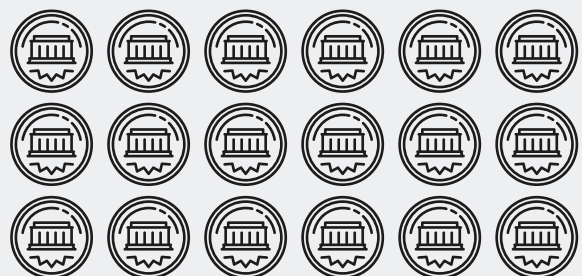
The number of men who reported they were employed full-time was almost 2 times higher than the number of women at intake and 1.5 times higher at follow-up.



Gender Wage Gap

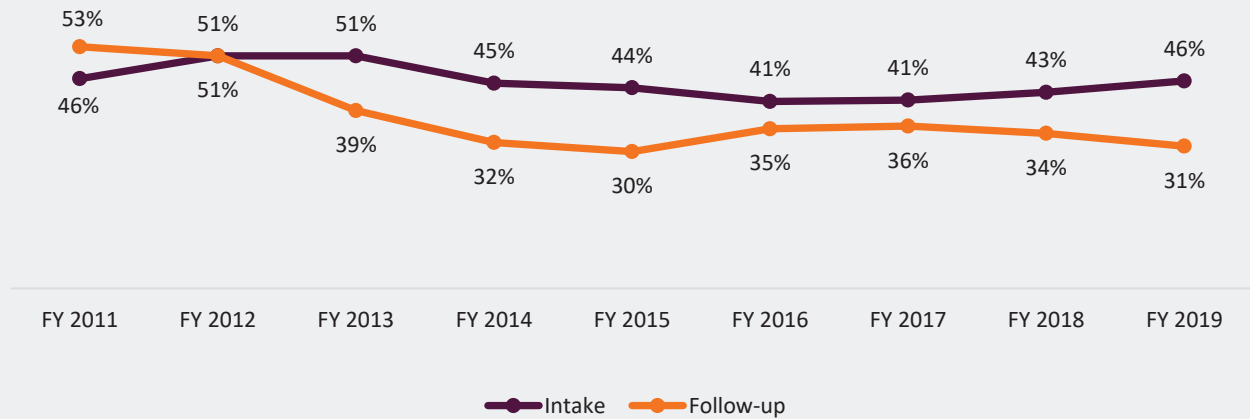
At follow-up, employed women made only \$0.82 for every dollar employed men made.

Therefore, the gender wage gap for employed clients was **18¢**

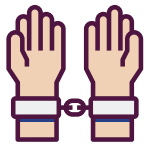


Trends in Difficulty Meeting Basic Living

The percent of KTOS clients who have reported difficulty meeting basic living needs at follow-up decreased from FY 2011 until FY 2015, when it began increasing again to 36% in FY 2017, but not to the level it was in FY 2011 (53%).



Past-12-month Criminal Justice System Involvement



REPORTED ANY ARREST***

62% at intake
26% at follow-up



REPORTED BEING INCARCERATED***

66% at intake
31% at follow-up

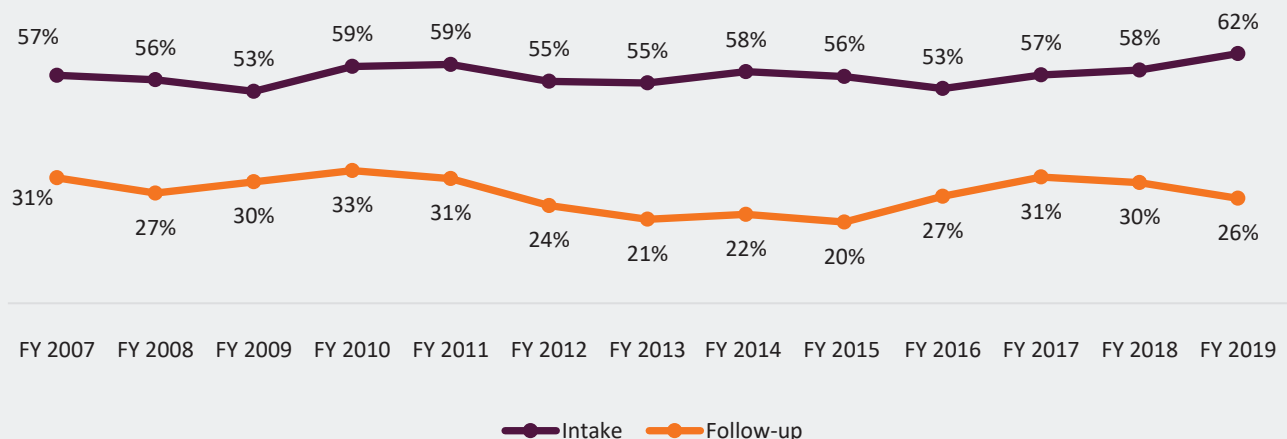


REPORTED BEING UNDER CRIMINAL JUSTICE SUPERVISION***

45% at intake
40% at follow-up

Trends in Past-12-month Arrests

Over the past 13 years the percent of clients reporting an arrest in the past 12 months at intake has ranged from 53% in FY 2009 and FY 2016 to a high of 62% in FY 2019. At follow-up, between one-fifth to nearly one-third of clients reported an arrest since FY 2007.



Quality of life and well-being

Quality of life

Ratings were from 1='Worst imaginable' to 5='Good and bad parts were about equal' to 10='Best imaginable'.



AVERAGE QUALITY OF LIFE RATINGS***

7.0 at intake | **8.0** at follow-up

Functioning and well-being

Ratings were from 0, "Not at all good" to 10, "Extremely good."



OVERALL WELL-BEING***

6.3 at intake | **8.1** at follow-up



PERSONAL WELL-BEING***

6.6 at intake | **8.3** at follow-up



INTERPERSONAL WELL-BEING***

6.6 at intake | **8.3** at follow-up



SOCIAL WELL-BEING***

6.0 at intake | **7.8** at follow-up

Recovery supports



REPORTED ATTENDING MUTUAL HELP RECOVERY MEETING IN THE PAST 30 DAYS***

34% at intake | **49%** at follow-up

WHAT WILL BE MOST USEFUL IN STAYING OFF DRUGS/ALCOHOL AT INTAKE AND FOLLOW-UP

INTAKE

FOLLOW-UP



34%

employment



27%

support from family



25%

children



32%

being a parent



26%

support from family



24%

self-talk/
determination/
willpower

Past-6-month Multidimensional Recovery

The multidimensional recovery status is based on individuals' reports of: no substance use disorder, employed at least part-time or in school, no reported homelessness, no arrest or incarceration, no suicide ideation (thoughts or attempts), fair to excellent overall health, had at least one person he/she could count on for recovery support, and mid to high-level of quality of life indicative of better status.



MULTIDIMENSIONAL RECOVERY INDICATING BETTER STATUS***

5% at intake | **38%** at follow-up

***p < .001.

Program Satisfaction

At follow-up, clients were asked to rate their experience with the treatment program on a scale of 0 = “worst experience” to 10 = “best experience”



83%
program staff believed in me and that treatment would work for me



80%
felt listened to and heard by counselor or program staff



78%
expectations and hopes for treatment were met



77%
had input into treatment goals, plans, and progress



73%
treatment approach was a good fit

Cost Savings of Substance Abuse Treatment

Using national estimates of the cost of substance abuse and applying them to clients' substance use before and after program participation, there was an estimated \$4.54 return in cost savings for every dollar spent on providing treatment services.



Estimated
cost-savings for
taxpayers
\$4.54

Conclusion

The 2021 KTOS evaluation indicates that publicly-funded substance abuse treatment programs in Kentucky have been successful in facilitating positive changes in clients' lives in a variety of ways, including decreased substance use, decreased mental health symptoms, decreased economic hardship, and decreased involvement with the criminal justice system. Results also show that clients have more support for recovery after participating in treatment. Overall, KTOS clients had significant improvements in key factors that have been associated with facilitating recovery.

They don't treat you like you're worthless. They actually help you. I've been clean for almost 2 years. Me and a couple of my buddies go here and might not be alive if we didn't.

- KTOS FOLLOW-UP CLIENT