



Kentucky Treatment Outcome Study

2023 FINDINGS AT A GLANCE



Introduction

This Findings at a Glance summarizes results from the 2023 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 reduce the cost of untreated substance abuse to society.

Results for this study included analysis of self-report responses for 569 clients who participated in publicly-funded substance abuse treatment from July 2020 through June 2021 and then completed a follow-up interview about 12 months later (an average of 351 days). There was a low refusal rate for follow-up participation (4.6%) and a high follow-up rate (71.9%) 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 569 clients who completed a 12-month follow-up interview:

- Close to half (50.4%) were male.
- The majority were White (89.1%). A minority were African American/Black (6.9%) and 4.0% were Hispanic, American Indian, or multiracial.
- They were an average of 36 years old at the time of the intake interview.
- About 43% were married or cohabiting at intake.
- Over three-quarters of clients (77.3%) had completed at least a high school diploma or GED.

Factors Examined at Intake and Follow-up

Past-12-month Substance Use



REPORTED ANY ILLEGAL
DRUG USE***

87% | **37%**
at intake | at follow-up



REPORTED OPIOID
MISUSE¹***

36% | **9%**
at intake | at follow-up



REPORTED
STIMULANT USE***

53% | **15%**
at intake | at follow-up



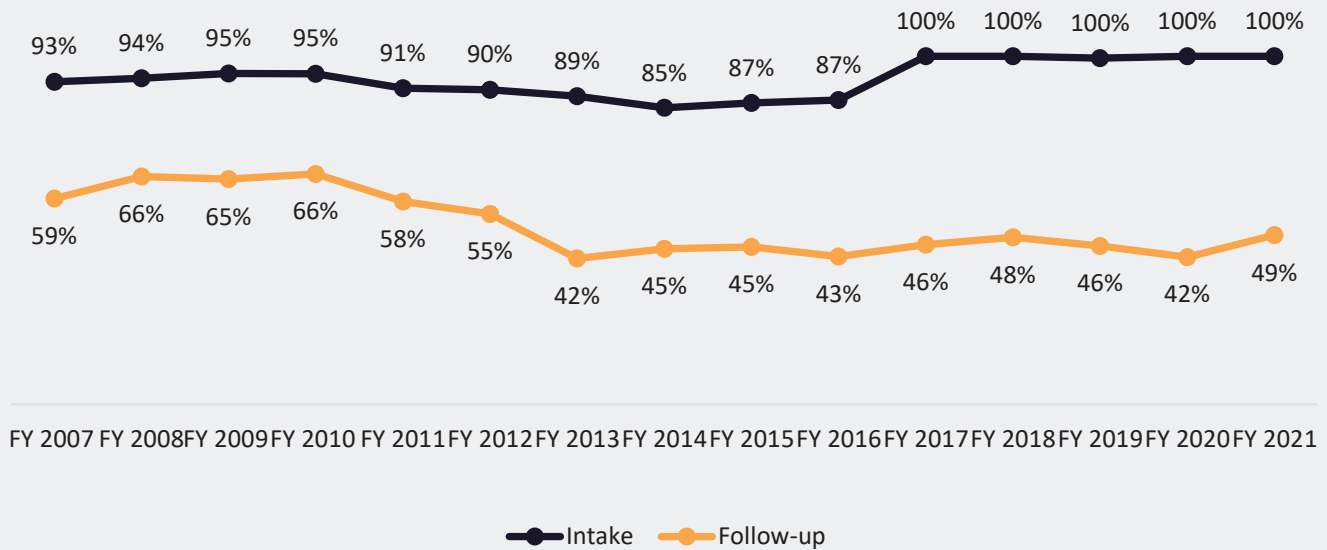
REPORTED ANY
ALCOHOL USE***

52% | **26%**
at intake | at follow-up

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

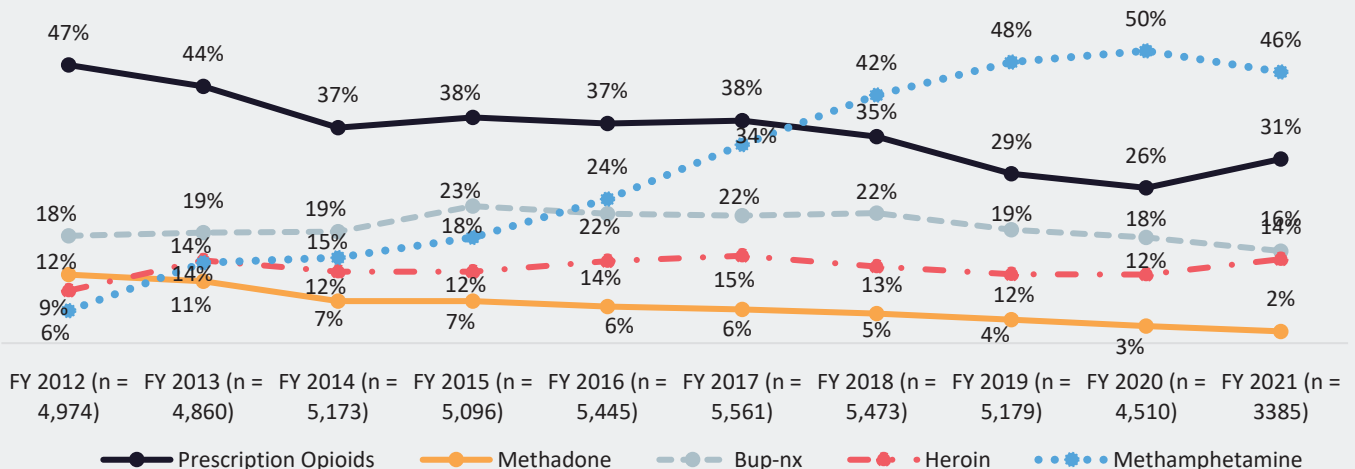
Trends in Any Alcohol and/or Drug Use

The number of KTOS clients reporting alcohol and/or drug use in the 12 months before treatment has been 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 2021.



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***

55% | **38%**
at intake | at follow-up



MET STUDY CRITERIA FOR ANXIETY***

53% | **36%**
at intake | at follow-up



MET STUDY CRITERIA FOR DEPRESSION AND ANXIETY***

42% | **26%**
at intake | at follow-up

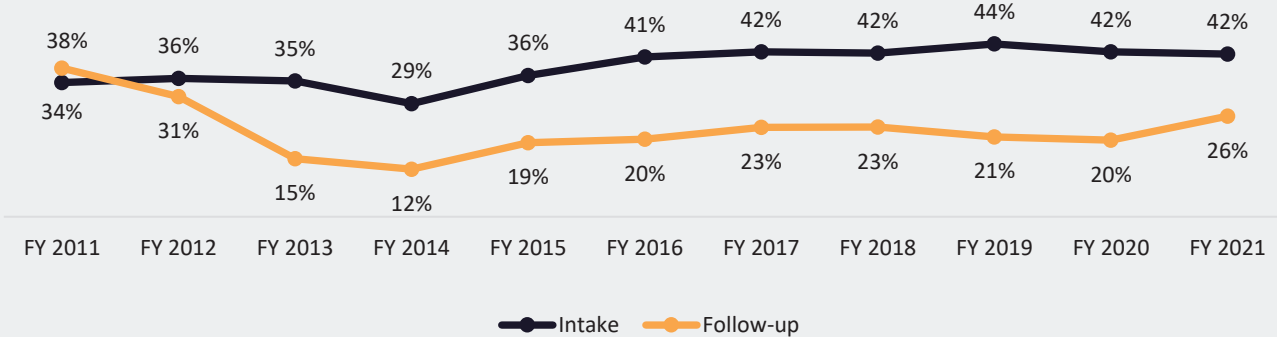


REPORTED SUICIDAL THOUGHTS AND/OR ATTEMPTS ***

22% | **10%**
at intake | at follow-up

Trends in Comorbid Depression and Anxiety

Past-11-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 was relatively stable from FY 2015 to FY 2020. In FY 2021, there was an increase to 26%.



AVERAGE NUMBER OF DAYS PHYSICAL HEALTH WAS NOT GOOD^{3}**

6.1 | **4.7**
at intake | at follow-up



AVERAGE NUMBER OF DAYS MENTAL HEALTH WAS NOT GOOD^{3*}**

13.2 | **5.1**
at intake | at follow-up



REPORTED CHRONIC PAIN*

31% | **26%**
at intake | at follow-up



REPORTED INTERPERSONAL VICTIMIZATION***

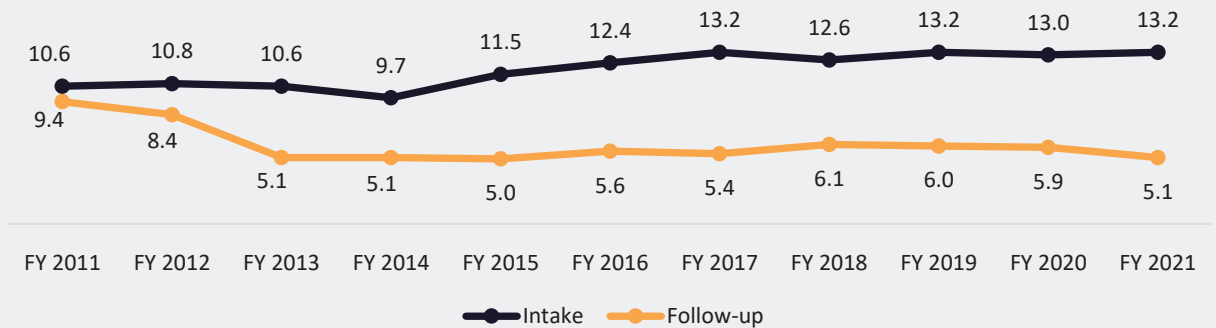
33% | **18%**
at intake | at follow-up

*p < .05, ***p < .01, ****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. In FY 2021, individuals reported an average 5.1 days their mental health was not good in the 30 days before follow-up.



Past-12-month Economic Indicators



CURRENTLY EMPLOYED FULL-TIME***

26% at intake | **43%** at follow-up



CURRENTLY HOMELESS***

32% at intake | **9%** at follow-up



REPORTED DIFFICULTY MEETING BASIC LIVING NEEDS

43% at intake | **38%** at follow-up



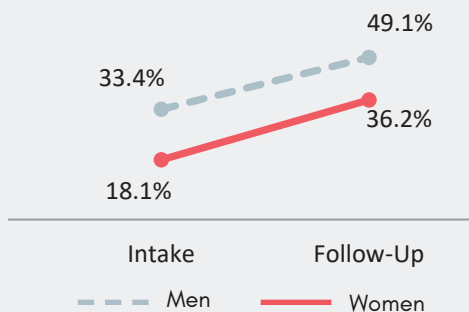
REPORTED DIFFICULTY MEETING HEALTH CARE NEEDS

26% at intake | **23%** at follow-up

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

Gender Differences in Full-time Employment

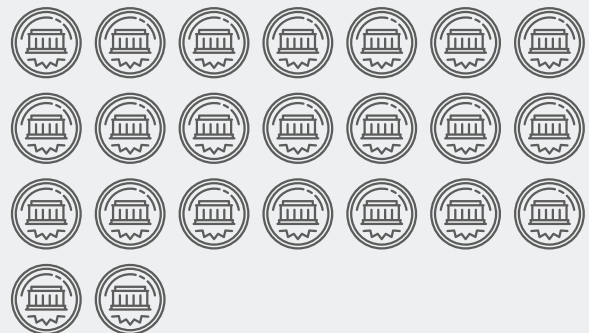
The percent of men who reported they were employed full-time was significantly greater than the percent of women who were employed full-time at intake (33.4% vs. 18.1%) and at follow-up (49.1% vs. 36.2%).



Gender Wage Gap

At follow-up, employed women made only \$0.77 for every dollar employed men made.

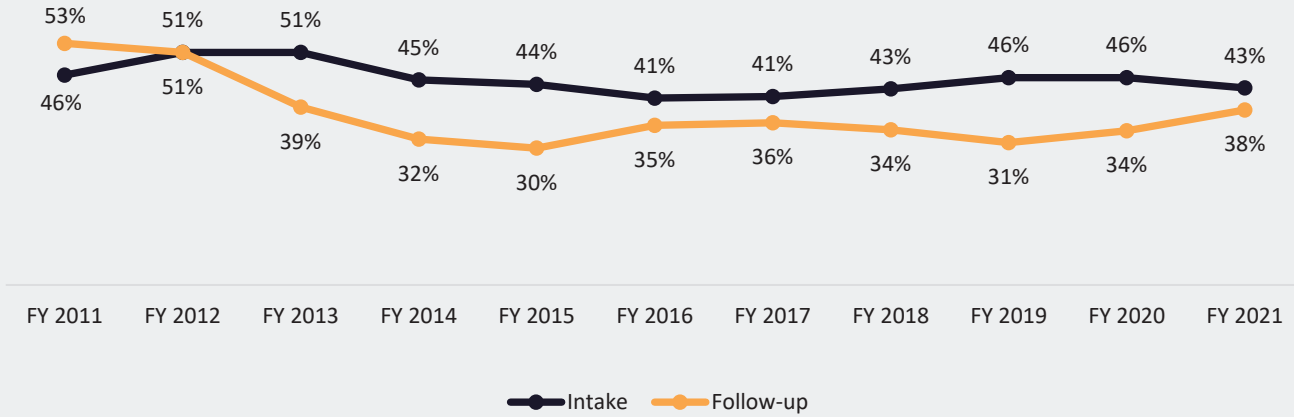
Therefore, the gender wage gap for employed clients was **\$0.23**



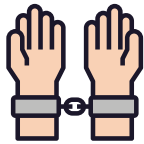
***p < .001.

Trends in Difficulty Meeting Basic Living Needs

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 Involvement



REPORTED ANY ARREST***

51% | **23%**
at intake | at follow-up



REPORTED BEING INCARCERATED***

56% | **24%**
at intake | at follow-up

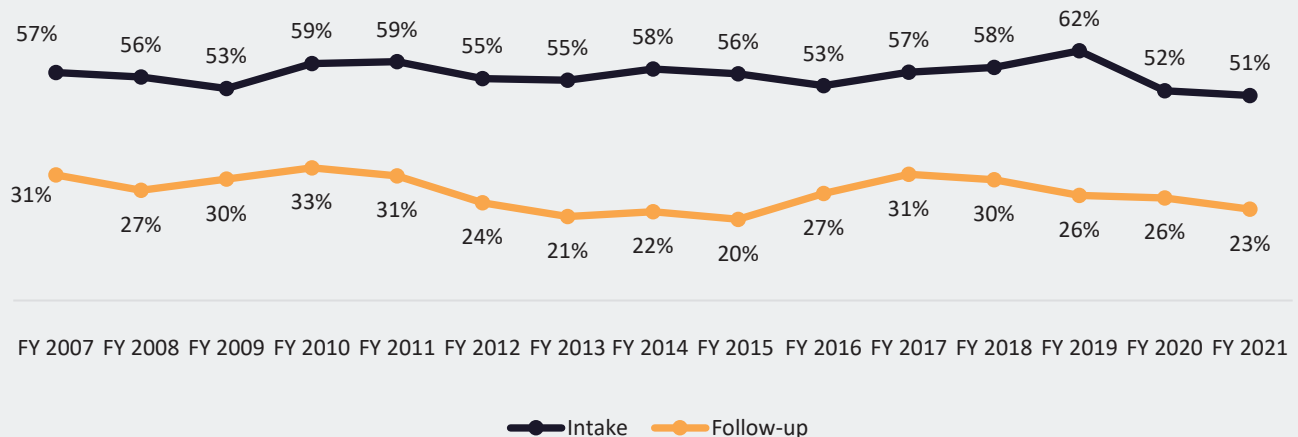


REPORTED BEING UNDER CRIMINAL JUSTICE SUPERVISION**

43% | **38%**
at intake | at follow-up

Trends in Past-12-month Arrests

Over the past 15 years the percent of clients reporting an arrest in the past 12 months at intake has ranged from a low of 52% in FY 2020 to a high of 62% in FY 2019. At follow-up, since FY 2007, between one-fifth to nearly one-third of clients reported an arrest, which were significant decreases from intake.



p < .01, *p < .001.

Recovery Supports



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

30% at intake | **50%** at follow-up

What Will Be Most Useful in Staying Off Drugs/Alcohol at Intake and Follow-up

Intake



31%
support from family



30%
employment



26%
children

Follow-up



32%
children



26%
support from family



24%
employment

Multidimensional Recovery Status

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 recovery.



HAVING ALL
POSITIVE RECOVERY
DIMENSIONS***

7% at intake | **41%** at follow-up

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"



8.2
average rating



81%

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



80%

felt listened to and heard by counselor or program staff



77%

had input into treatment goals, plans, and progress



76%

expectations and hopes for treatment were met



72%

treatment approach was a good fit

***p < .001.

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 \$4.11 return in cost savings for every dollar spent on providing treatment services.



Estimated
cost-savings for
taxpayers

\$4.11

Conclusion

The 2023 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, increased employment, decreased homelessness 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.



Helped me get off drugs and alcohol and taught me better financial ways to be on my own. I tell other people about this program because it helped me.

- KTOS FOLLOW-UP CLIENT

Suggested citation: Cole, J., Logan, T., White, A., & Scrivner, A. (2023). *Adult Kentucky Treatment Outcome Study 2023 Finding at a Glance*. Lexington, KY: University of Kentucky, Center on Drug & Alcohol Research.