



KENTUCKY TREATMENT OUTCOME STUDY

2024 FINDINGS AT A GLANCE

Introduction

This Findings at a Glance summarizes results from the 2024 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 Substance Use Disorder’s performance-based measurement of treatment outcomes in Kentucky’s communities. The goal of the Kentucky Treatment Outcome Study (KTOS) is to examine client perceptions of care 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) subjective quality of life, and (6) recovery supports. Report findings support continued funding of substance use disorder treatment programs, which improve the lives of clients and reduce the cost of untreated substance use to society.

Results for this study included analysis of self-report responses for 554 clients who participated in publicly-funded substance use disorder treatment from July 2021 through June 2022 and then completed a follow-up interview about 12 months later (an average of 362 days). There was a low refusal rate for follow-up participation (1.5%) and a high follow-up rate (76.4%) 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.

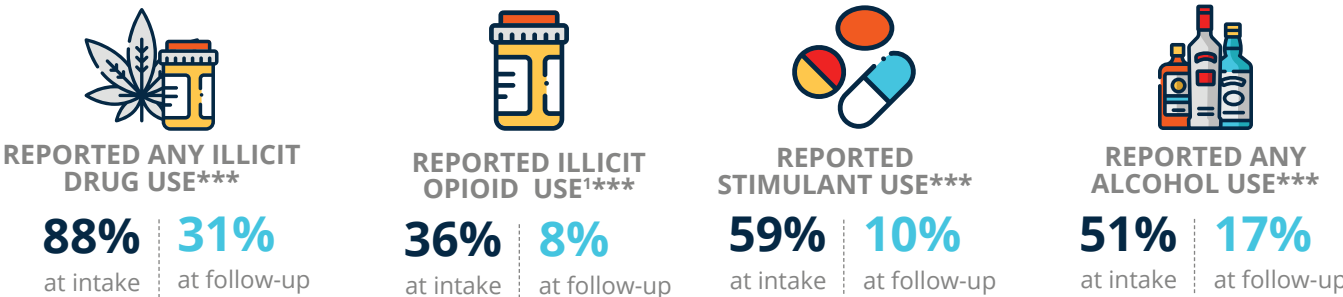
Characteristics of the Follow-up Sample

Of the 554 clients who completed a 12-month follow-up interview:

- Over half (53.8%) were female.
- The majority were White (91.2%). A minority were African American/Black (3.8%) and 5.1% were Hispanic, American Indian, or multiracial.
- They were an average of 37 years old at the time of the intake interview.
- About 46% were married or cohabiting at intake.
- The majority (63.2%) had completed at least a high school diploma or GED.

Factors Examined at Intake and Follow-up

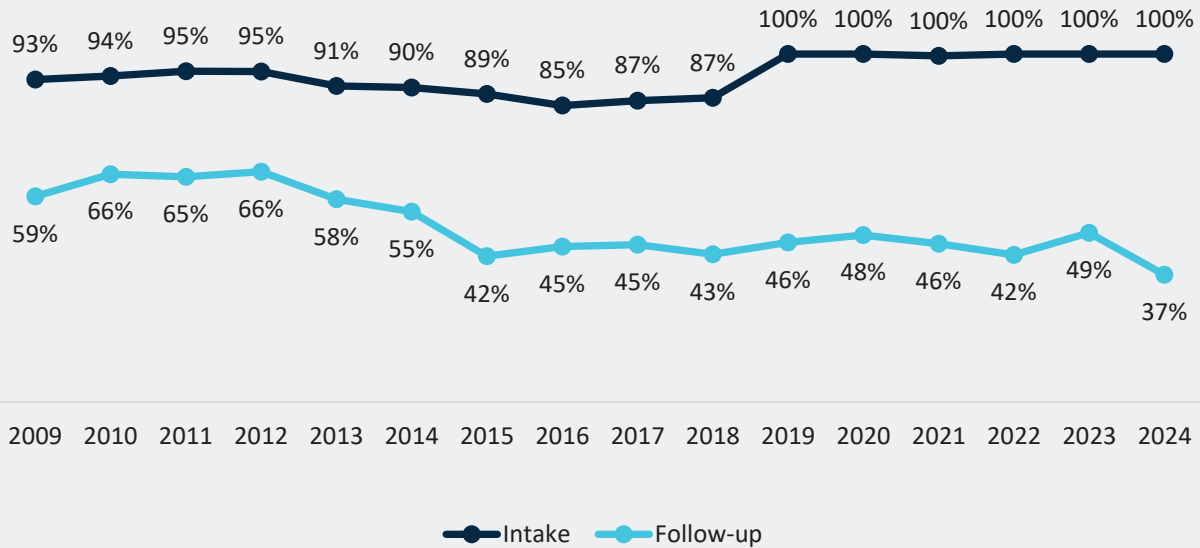
Past-12-month Substance Use



¹ Including illicit use of opioids other than heroin, including prescription opioids, methadone, and buprenorphine-naloxone (bup-nx).
 ***p < .001.

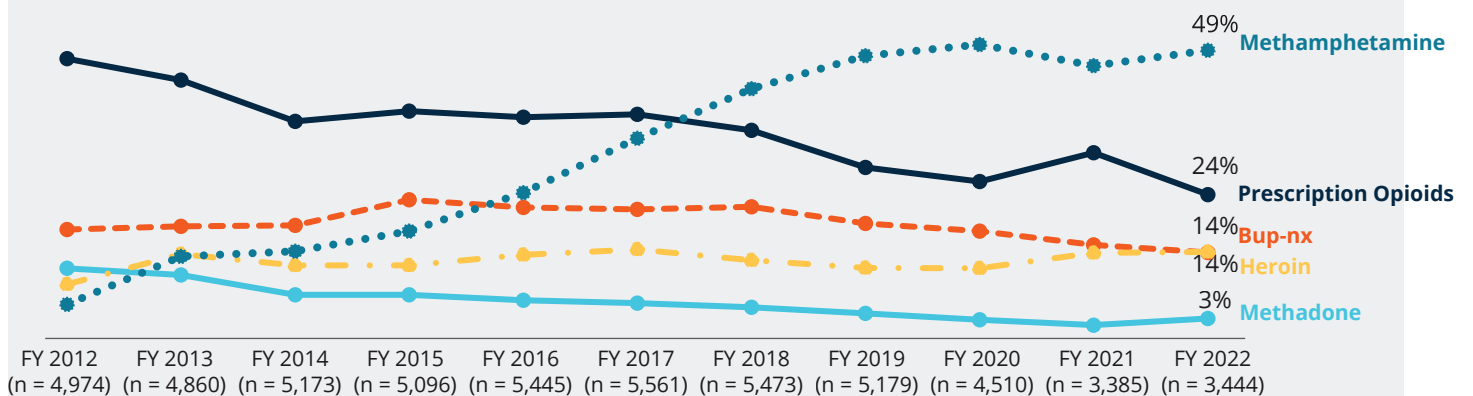
Trends in Any Alcohol and/or Illicit Drug Use

The number of KTOS clients reporting alcohol and/or illicit 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 illicit drug use has decreased over the years.



How Much Has Use of Specific Illicit 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 illicit use of 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 2022.



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 use 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.

Addiction Severity Index Substance Use Disorder

At intake, the majority of clients met criteria for severe SUD per DSM-5 symptom criteria, while at follow-up, only 12% of clients met criteria for severe SUD.



MET DSM-5 CRITERIA FOR SEVERE SUD***
63% | **12%**
 at intake | at follow-up

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



MET STUDY CRITERIA FOR DEPRESSION***

54% | **29%**
 at intake | at follow-up



MET STUDY CRITERIA FOR ANXIETY***

57% | **30%**
 at intake | at follow-up



MET STUDY CRITERIA FOR DEPRESSION AND ANXIETY***

45% | **20%**
 at intake | at follow-up

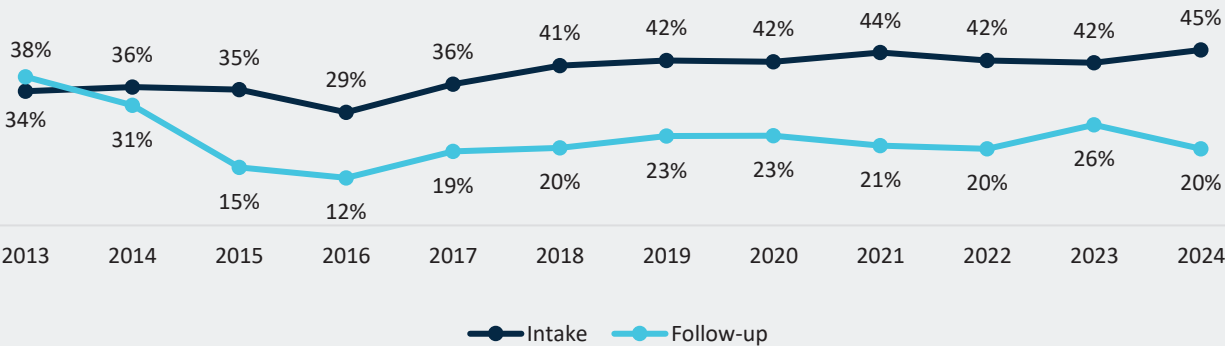


REPORTED SUICIDAL THOUGHTS AND/OR ATTEMPTS***

19% | **7%**
 at intake | at follow-up

Trends in Comorbid Depression and Anxiety

Past-12-year trends for comorbid depression and anxiety show that, in general, more clients met study criteria for comorbid depression and anxiety at intake in report year 2024 (45%) than in 2013. At follow-up, however, the percent of clients meeting criteria for comorbid depression and anxiety was relatively stable from report year 2017 to 2022. In 2023, there was an increase to 26%.



AVERAGE NUMBER OF DAYS PHYSICAL HEALTH WAS NOT GOOD³***

6.7 | **3.1**
 at intake | at follow-up



AVERAGE NUMBER OF DAYS MENTAL HEALTH WAS NOT GOOD³***

13.1 | **3.7**
 at intake | at follow-up



REPORTED CHRONIC PAIN***

29% | **19%**
 at intake | at follow-up



REPORTED INTERPERSONAL VICTIMIZATION***

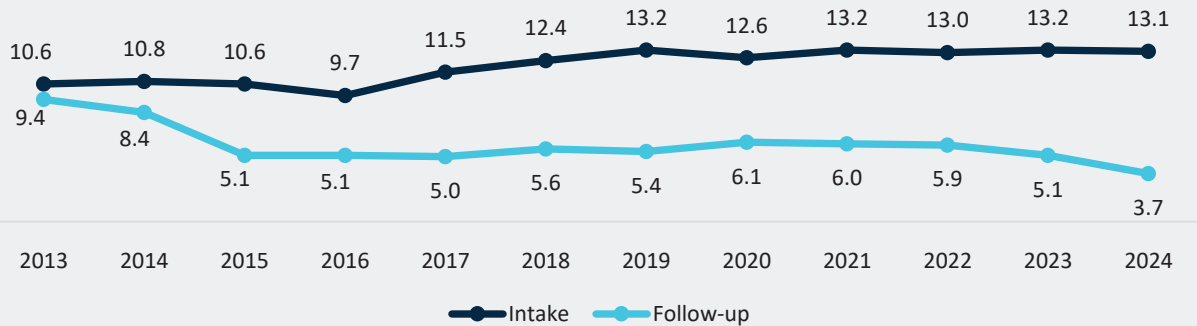
34% | **13%**
 at intake | at follow-up

³ Past 30 days.

***p < .001.

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 the 2019, 2021, and 2023 reports. 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 the 2013 report to a low of 3.7 in this year's report. The average number of days clients' mental health was not good was 3.5 times higher at intake than at follow-up in the 2024 report.



Past-12-month Economic Indicators



CURRENTLY EMPLOYED FULL-TIME***

28% at intake | **43%** at follow-up



CURRENTLY HOMELESS***

27% at intake | **7%** at follow-up



REPORTED DIFFICULTY MEETING BASIC LIVING NEEDS***

44% at intake | **35%** at follow-up



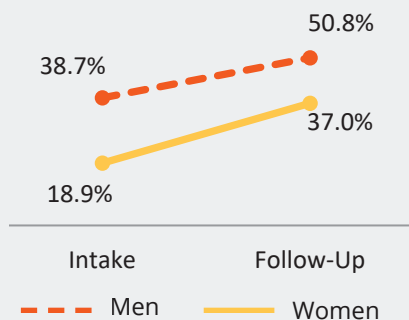
REPORTED DIFFICULTY MEETING HEALTH CARE NEEDS

25% at intake | **24%** 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.

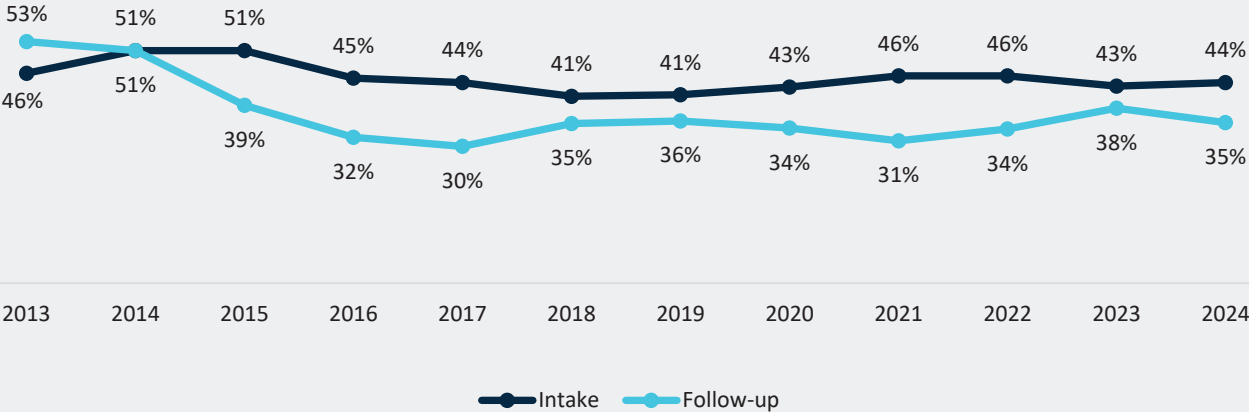
Therefore, the gender wage gap for employed clients was **\$0.23**



***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 the 2013 report until the 2017 report, when it began increasing again to 36% in 2019, but not to the level it was in 2013 (53%).



Past-12-month Criminal Justice Involvement



REPORTED ANY ARREST***

57% | **24%**
at intake | at follow-up



REPORTED BEING INCARCERATED***

57% | **27%**
at intake | at follow-up

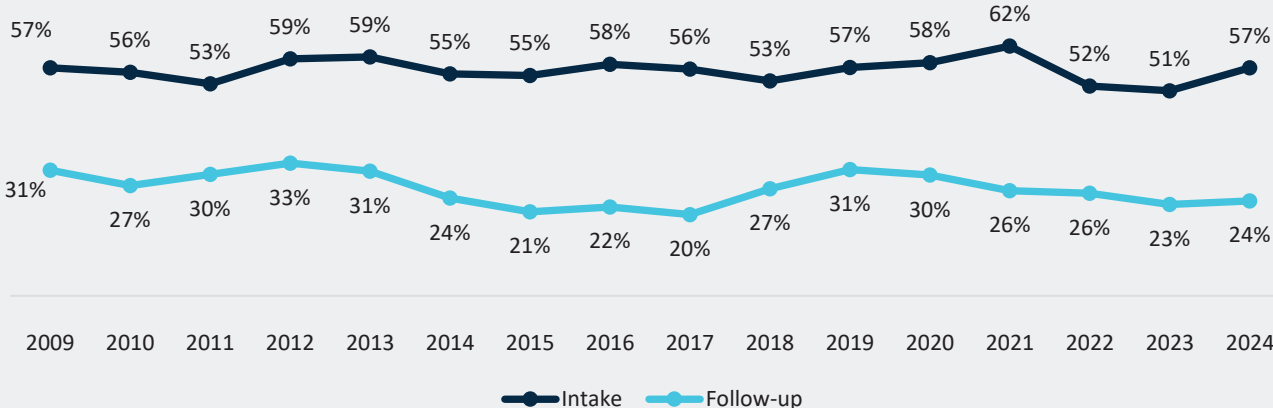


REPORTED BEING UNDER CRIMINAL JUSTICE SUPERVISION**

46% | **39%**
at intake | at follow-up

Trends in Past-12-month Arrests

Over the past 16 years the percent of clients reporting an arrest in the past 12 months at intake has ranged from a low of 51% in the 2023 report to a high of 62% in the 2021 report. At follow-up, since the 2009 report, between one-fifth to nearly one-third of clients reported an arrest, which were significant decreases from intake each year.



p < .01, *p < .001.

Subjective Quality of Life



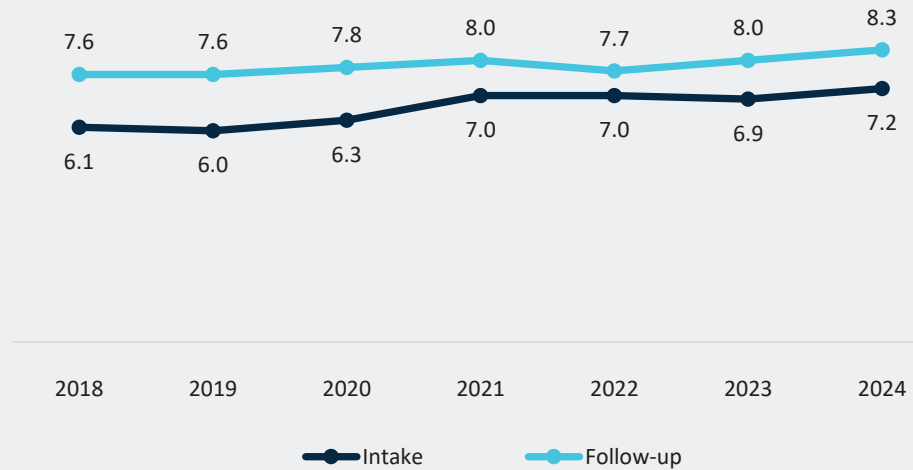
AVERAGE QUALITY OF LIFE RATING***

(1 = 'Worst imaginable' to 10 = 'Best imaginable')

7.2 | **8.3**
at intake | at follow-up

Trends in Subjective Quality of Life

KTOS clients rated their quality of life between 6.0 and 7.2, on average, at intake. The average quality of life rating at follow-up ranged from 7.6 to 8.3. Over the past 7 years, at both intake and follow-up, clients rated their quality of life as the highest in 2024.



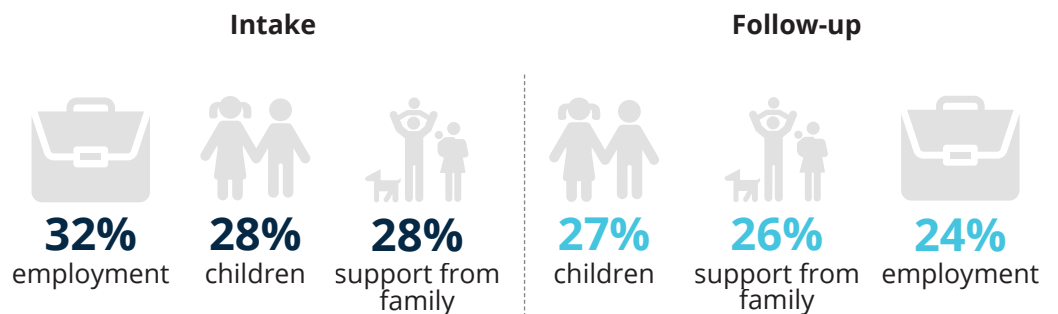
Recovery Supports



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

28% | **53%**
at intake | at follow-up

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



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.



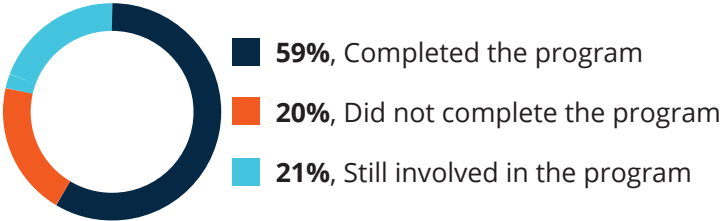
HAVING ALL POSITIVE RECOVERY DIMENSIONS***

5% | **47%**
at intake | at follow-up

***p < .001.

Client Perception of the Treatment Program

Client Involvement in the Program



Client Perception of Care

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"



Satisfaction with Aspect of the Treatment Program



Cost Savings of Substance Use Disorder Treatment

Using national estimates of the cost of substance use disorder and applying them to clients' substance use before and after program participation, there was an estimated \$4.88 return in cost savings for every dollar spent on providing treatment services.



Conclusion

The 2024 KTOS evaluation indicates that publicly-funded substance use 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.

“
I really needed the help and I did not want to ask for the help but it was pushed upon me - but realized I needed the help.
- KTOS FOLLOW-UP CLIENT