



Adult **Kentucky Treatment Outcome Study**

2019 FINDINGS AT A GLANCE

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Introduction

This Findings at a Glance summarizes results from the 2019 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. Results for this study included analysis of self-report responses for 1,279 clients who participated in publicly-funded substance abuse treatment from July 2016 through June 2017 and then completed a follow-up interview about 12 months later (an average of 323 days). There was a low refusal rate for follow-up participation (0.8%) and a high follow-up rate (75.6%) 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.

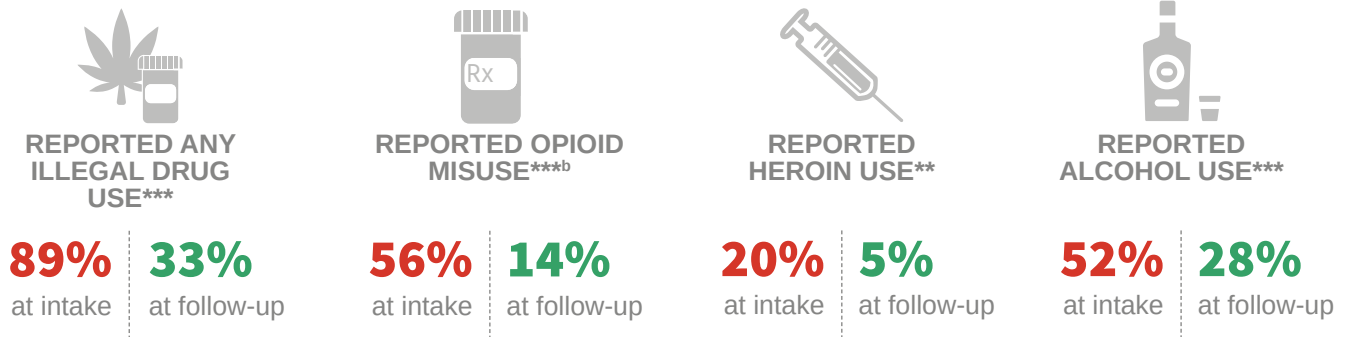
Characteristics of KTOS Clients Included in the Follow-up Sample

Of the 1,279 clients who completed a 12-month follow-up interview:

- About half (52%) were female.
- The majority were White (92%). A minority were African American/Black (6%) and 2% were Hispanic, American Indian, or multiracial.
- They were an average of 35 years old at the time of the intake interview.
- Not quite half (44%) were married or cohabiting at intake.
- Over half of clients (56%) reported they had at least one chronic health problem.
- Chronic pain was reported by 39% of clients.
- Three-quarters of clients had health insurance through Medicaid.

Past-12-month Substance Use^a

The number of clients who reported substance use decreased significantly from intake to follow-up.



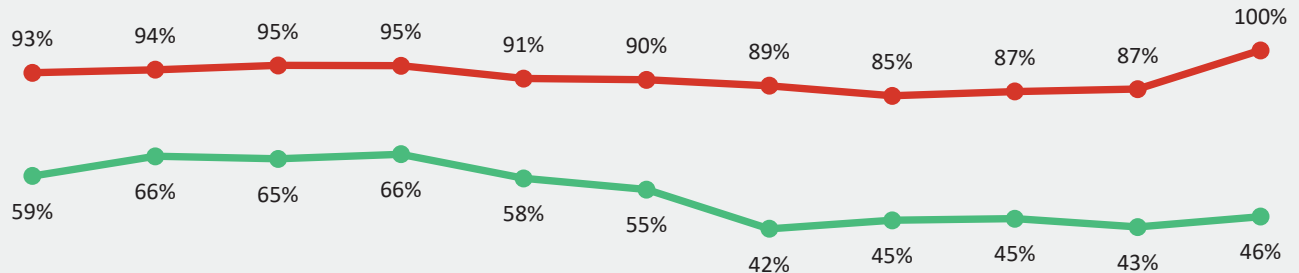
*** $p < .001$; statistically significant difference from intake to follow-up.

^a Because being in a controlled environment inhibits opportunities for alcohol and drug use, 14 cases were excluded from this analysis because they were incarcerated all 365 days before entering treatment, 1 case was excluded because the individual was incarcerated all 365 days before follow-up, and 14 cases were excluded because either the interviewer skipped the question ($n = 2$) or the client declined to answer ($n = 12$).

^b Misuse of opioids other than heroin, including prescription opiates, methadone, and buprenorphine-naloxone.

Trends in Any Alcohol and/or Drug Use in the Past-12-Month for Clients in the Follow-up Sample

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

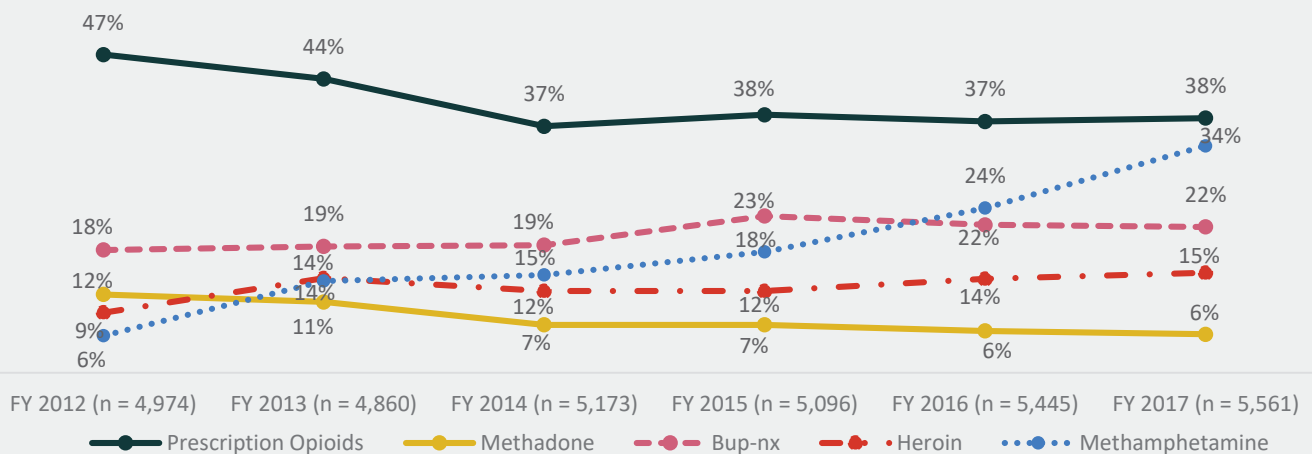


FY 2007 (n = 1,074) FY 2008 (n = 1,172) FY 2009 (n = 1,171) FY 2010 (n = 1,212) FY 2011 (n = 1,265) FY 2012 (n = 1,255) FY 2013 (n = 1,277) FY 2014 (n = 1,267) FY 2015 (n = 1,255) FY 2016 (n = 1,194) FY 2017 (n = 1,250)

—●— Intake —●— Follow-up

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 2017.



FY 2012 (n = 4,974) FY 2013 (n = 4,860) FY 2014 (n = 5,173) FY 2015 (n = 5,096) FY 2016 (n = 5,445) FY 2017 (n = 5,561)

—●— Prescription Opioids —●— Methadone - - - ● - - - Bup-nx ···●··· Heroin ···●··· Methamphetamine

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

Clients' mental health symptoms improved significantly from intake to follow-up.



55% at intake | **32%** at follow-up



52% at intake | **31%** at follow-up



42% at intake | **23%** at follow-up

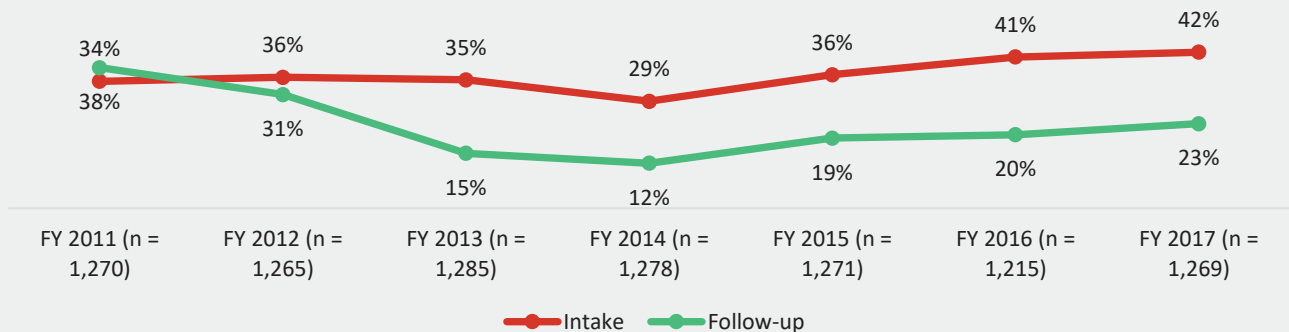


19% at intake | **8%** at follow-up

^{***} p < .001; statistically significant difference from intake to follow-up.

Trends in Comorbid Depression and Anxiety in the Follow-up Sample

Past-7-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 2017 than in FY 2011. At follow-up, however, fewer clients met study criteria for comorbid depression and anxiety in FY 2016 compared to FY 2011.



6.9 at intake | **3.6** at follow-up



13.2 at intake | **5.4** at follow-up



39% at intake | **24%** at follow-up



46% at intake | **24%** at follow-up

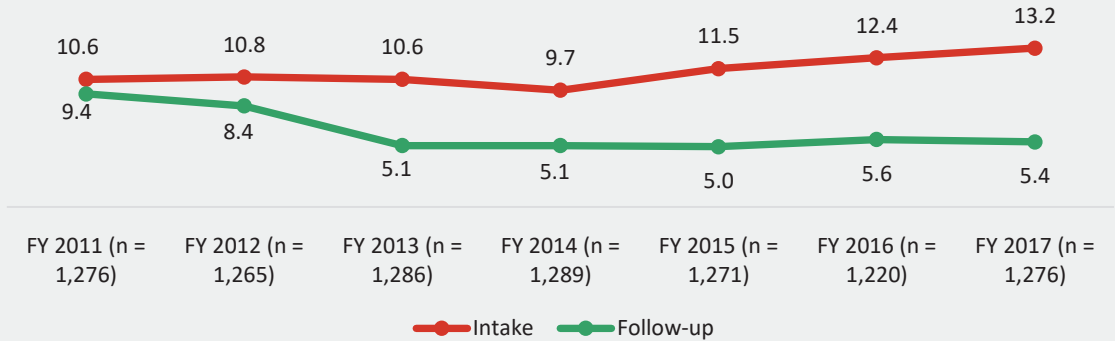
^{***} p < .001; statistically significant difference from intake to follow-up.

^c Past 30 days.

^d Measure of symptoms in the past 7 days.

Trends in Past-30-day Perceptions of Poor Mental Health for Clients in the Follow-up Sample

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. The average number of days clients reported their mental health was poor in the past 30 days at follow-up has decreased from 9.4 days in FY 2011 to 5.4 days in FY 2017.



Past-12-month Economic Indicators

KTOS clients showed improvements in economic and living circumstances from intake to follow-up.



CURRENTLY EMPLOYED FULL-TIME***

20% at intake | **35%** at follow-up



CURRENTLY HOMELESS**

26% at intake | **7%** at follow-up



REPORTED DIFFICULTY MEETING BASIC LIVING NEEDS**

41% at intake | **36%** at follow-up



REPORTED DIFFICULTY MEETING HEALTH CARE NEEDS***

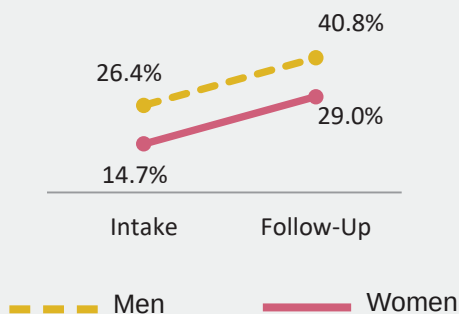
28% at intake | **16%** at follow-up

p < .01, * p < .001; statistically significant difference from intake to follow-up.

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

Gender Differences in Full-time Employment

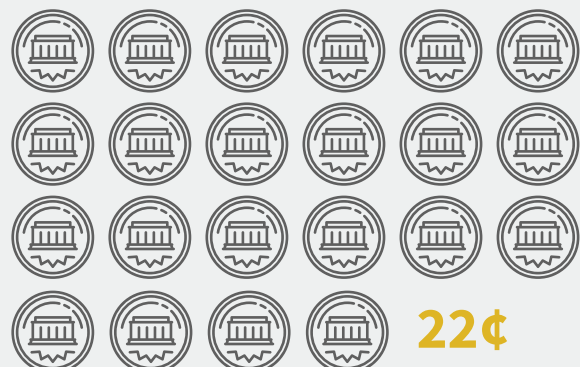
The number of men who reported they were employed full-time was 1.8 times higher than the number of women at intake and 1.5 times higher at follow-up.



Gender Wage Gap

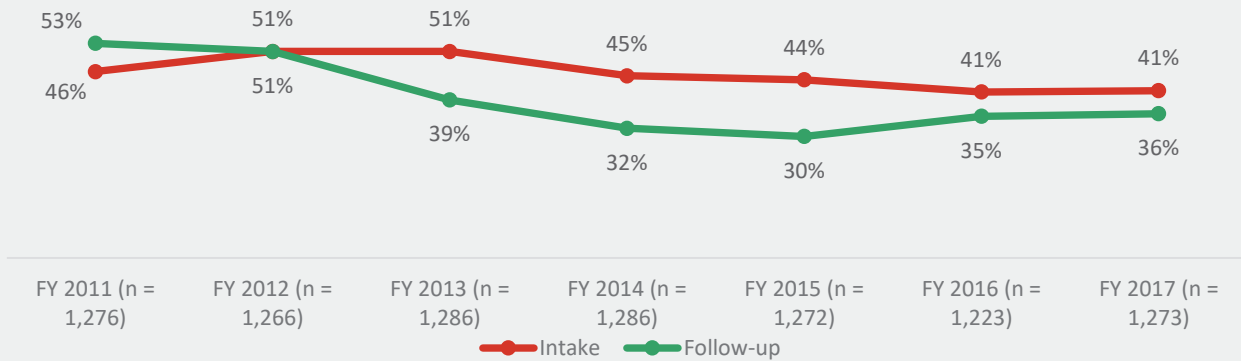
At follow-up, employed women made only \$0.78 for every dollar employed men made.

Therefore, the gender wage gap for employed clients was



Trends in Difficulty Meeting Basic Living in the Past 12 Months

The percent of KTOS clients who have reported difficulty meeting basic living needs at follow-up has decreased over time from 53% in the KTOS FY 2011 report to 30% in the KTOS FY 2015. The percent of clients reporting difficulty meeting basic living needs at follow-up increased to 36% in FY 2017.



Past-12-month Criminal Justice System Involvement

Involvement in the criminal justice system, in terms of being arrested, incarcerated, or under the supervision of the criminal justice system decreased significantly from intake to follow-up.



REPORTED ANY ARREST***

57% at intake | **31%** at follow-up



REPORTED BEING INCARCERATED***

61% at intake | **36%** at follow-up



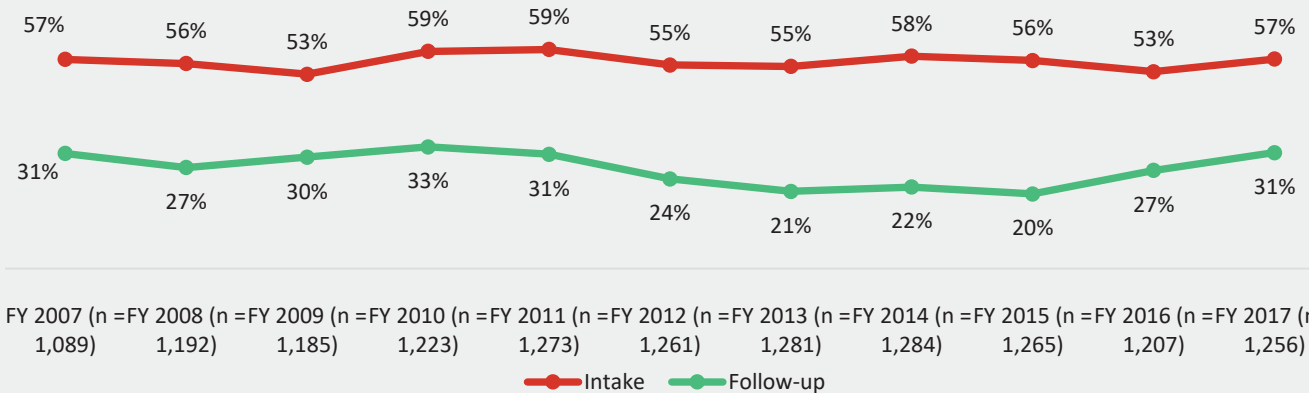
REPORTED CRIMINAL JUSTICE SUPERVISION

43% at intake | **40%** at follow-up

*** p < .001; statistically significant difference from intake to follow-up.

Trends in Any Arrest in the Past 12 Months for Clients in the Follow-up Sample

The number of clients reporting an arrest in the past 12 months at intake has remained stable over the past 11 years with over half of clients reporting an arrest. Between one-quarter and one-third of clients reported an arrest at follow-up since FY 2007.



Quality of and Satisfaction with 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***

6.0 | **7.6**

at intake | at follow-up



AVERAGE SATISFACTION WITH LIFE RATING***

12.4 | **17.3**

at intake | at follow-up

The lowest possible score is 5 and the highest possible score is 25. Lower scores indicate lower satisfaction and higher scores represent higher satisfaction.

*** p < .001; statistically significant difference from intake to follow-up.

Past-30-day Recovery Supports

Compared to intake, significantly more individuals reported they had attended mutual help recovery group meetings in the past 30 days at follow-up and had more people they could count on for support.



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

36% | **52%**
at intake | at follow-up

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

INTAKE

FOLLOW-UP



31%
employment



27%
children



26%
support from family



21%
mutual help recovery group



21%
support from family



18%
faith or religion

*** p < .001; statistically significant difference from intake to follow-up.

Past-6-month Global Functioning Index

The index of global functioning is based on individuals' reports of: moderate or severe SUD, no employment, homelessness, criminal justice system involvement, suicide ideation, poor overall health, lower quality of life, and no recovery supports as indicators of worse functioning.



REPORTED ANY OF THE FUNCTIONING DIFFICULTIES***

93% | **64%**
at intake | at follow-up

*** p < .001; statistically significant difference from intake to follow-up.

Program Satisfaction

KTOS clients were satisfied with the overall program service and agreed that:

At follow-up, clients were asked to rate their level of satisfaction with the treatment program on a scale from 1 (worst treatment imaginable) to 10 (best treatment).



Clients felt safe while in the program



Staff helped them obtain information so they could take charge of managing their drug/alcohol problems



The client was encouraged to talk about and decide their program goals



Even if they had other choices, they would go to the same treatment program again if they needed to



Clients felt better about themselves as a result of treatment



The client received all the services needed from involvement in the program

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 \$4.13 return in cost savings for every dollar spent on providing treatment services.

ESTIMATED
\$4.13
COST-SAVINGS
FOR TAXPAYERS

Conclusion

The 2019 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.