

Recovery Center Outcome Study

2024 Outcomes and Trends Findings at a Glance

Introduction

Recovery Kentucky is a social model, recovery-housing program created to help Kentuckians recover from substance use disorder, which often leads to chronic homelessness. Recovery Kentucky is a joint effort by the Kentucky Department for Local Government, the Department of Corrections, and Kentucky Housing Corporation. Local governments and communities at each Recovery Kentucky center location have also contributed greatly to making these centers a reality.¹

This document summarizes clients' perceptions of care and major outcomes from the Recovery Center Outcome Study (ROCS) 2024 Annual Report. The purpose of this document is to present client perceptions of care and targeted outcomes including: (1) substance use and severity of substance use, (2) subjective quality of life, and (3) multidimensional recovery, including specific components; suicidality, homelessness, and involvement in the criminal justice system.

RCOS Method

The Behavioral Health Outcome Studies (BHOS) team at the University of Kentucky Center on Drug & Alcohol Research (UK CDAR) independently conducts the RCOS, which is an annual outcome evaluation for the Recovery Kentucky centers. The RCOS evaluation uses a pre- and post-program research design; client-level data is collected at Phase 1 entry (i.e., intake) and compared to data collected 12 months later (i.e., follow-up).

Recovery center staff conduct an intake interview when clients enter Phase 1, after completing Safe, Off-the-Street (SOS) and Motivational Tracks (MT) 1 and 2, to assess behaviors and needs clients had prior to entering the program. Follow-up interviews are conducted over the telephone by an interviewer at UK CDAR with eligible, consenting RCOS clients about 12 months after they entered Phase 1. A random sample of eligible clients, stratified by target month (12 months after completing the intake interview), and gender is selected. Client responses are kept confidential

In 2021, an average of 10.8 outgoing calls were made and an average of 3.5 outgoing mail correspondence were sent for each completed follow-up survey.

to facilitate honest evaluation of client outcomes and program services. Details on how RCOS is conducted are presented in Appendix A of the RCOS 2024 Annual Report (https://cdar.uky.edu/RCOS).

Clients (n = 290) in the RCOS 2024 Annual Report completed intake assessments as they entered Phase 1 in FY 2022 (July 1, 2021 through June 30, 2022) and then completed follow-up surveys with target months between July 1, 2022 through June 30, 2023. Also included in the RCOS 2024 Annual Report are trend graphs in targeted factors at intake and follow-up from a decade of reports.

¹ For more information about Recovery Kentucky, please contact KHC's Mike Townsend at 1.800-633-8896 (toll-free) or at 502-564-7630 ext. 715, TTY711, or email MTownsend@kyhousing.org.

Targeted Outcomes

Substance Use, Past 6 Months²







CANNABIS USE***





94% 14% at intake at follow-up

ILLICIT DRUG USE***

89% 11%

56% 7%

44% 3%

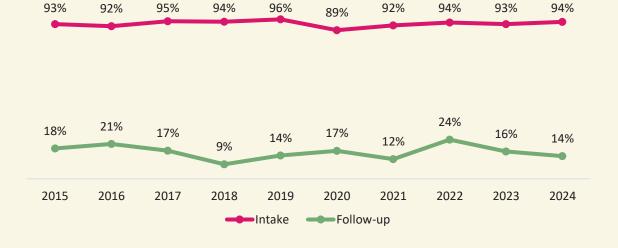
66% 4%

at intake at follow-up at intake at follow-up at intake at follow-up

Trends in Past-6-Month Alcohol and/or Illicit Drug Use

Among RCOS clients who were not incarcerated all 180 days before entering the program or the follow-up, the percent of RCOS clients reporting alcohol and/or illicit drugs in the 6 months before entering the program has been consistently high. At follow-up, the percent of clients reporting alcohol and/or illicit drug use has been between 9%-24%, significantly lower than at intake each report year.

FIGURE 1. TREND IN ANY ALCOHOL AND/OR ILLICIT DRUG USE AT INTAKE AND FOLLOW-UP, REPORTS 2015-2024



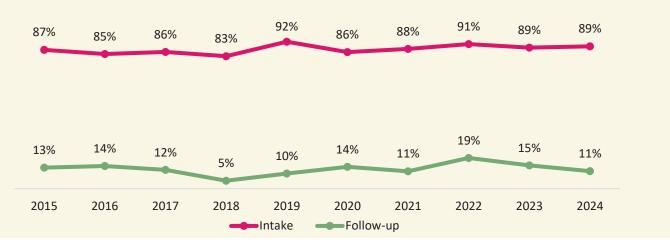
a Including illicit use of opioids other than heroin, including prescription opioids, methadone, and buprenorphine-naloxone (bup-nx). ***p < .001.

² Analysis of change in substance use from intake to follow-up was restricted to individuals who had at least one day on the street in the 6 months before each assessment. In other words, individuals who were incarcerated all 6 months before intake and/or follow-up were excluded from the analysis because incarceration inhibits opportunities for substance use.

Trend in Past-6-Month Illicit Drug Use

The percent of RCOS clients reporting illicit drug use in the 6 months before intake has been consistently high—between 83% to 92%. Each year, the percent of clients reporting illicit drug use has been significantly lower at follow-up than at intake—between 5% to 19%.

FIGURE 2. TREND IN ILLICIT DRUG USE AT INTAKE AND FOLLOW-UP, REPORTS 2015-2024







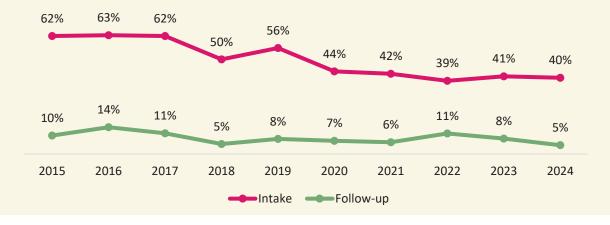
36% 2% at intake at follow-up

A significantly smaller percent of individuals reported alcohol and problem alcohol use at follow-up than at intake.

Trend in Past-6-Month Alcohol Use

The percent of RCOS clients reporting alcohol use in the 6 months before intake was a high of 63% in the 2016 report but has decreased over time, with the lowest percentage in the 2022 report (39%). Each year, the percent of clients reporting alcohol use has decreased significantly from intake to follow-up. In this year's report, only 5% of individuals reported past-6-month alcohol use at follow-up.

FIGURE 3. TREND IN ALCOHOL USE AT INTAKE AND FOLLOW-UP, REPORTS 2015-2024



Severity of Substance Use Disorder

At intake, around three-fourths of clients met criteria for severe SUD per DSM-5 symptom criteria, while at follow-up only 4.2% met criteria for severe SUD.



MET DSM-5 CRITERIA FOR SEVERE SUD***

at intake at follow-up

Nicotine Use



at intake

67% at follow-up

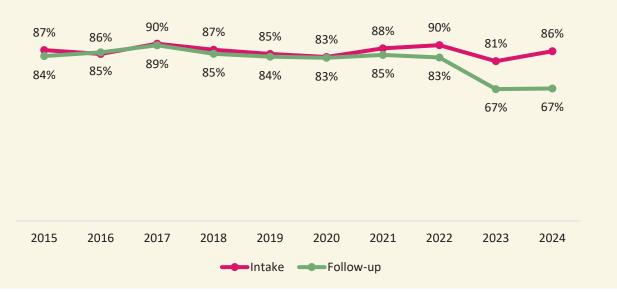


54% at intake at follow-up The percent of clients who reported smoking tobacco decreased from intake to followup, but there was no significant change in vaping e-cigarettes.

Trend in Smoking Tobacco Use

Smoking rates for RCOS remained unchanged from intake to follow-up until the 2021 report. In the past two reports, the decrease in percent of clients reporting smoking tobacco at follow-up has been even greater.

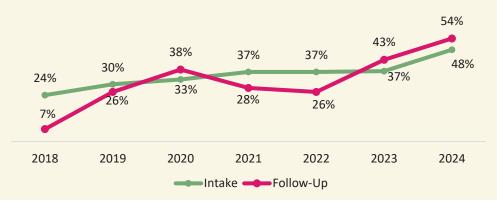
FIGURE 4. TREND IN SMOKING TOBACCO USE AT INTAKE AND FOLLOW-UP, REPORTS 2015-2024



Trend in Past-6-Month Vaporized Nicotine Use

Use of vaporized nicotine in the 6 months before entering the recovery center has doubled from the 2018 (24%) report to the 2024 report (48%). In the 2018 and 2022 reports, the decrease in vaporized nicotine use from intake to follow-up was statistically significant. However, in the 2019-2021 and in the 2023 and 2024 reports, there was no significant change from intake to follow-up in the percent of individuals reporting use of vaporized nicotine products.

FIGURE 5. TREND IN VAPORIZED NICOTINE USE AT INTAKE AND FOLLOW-UP, REPORTS 2015-2024



Subjective Quality of Life



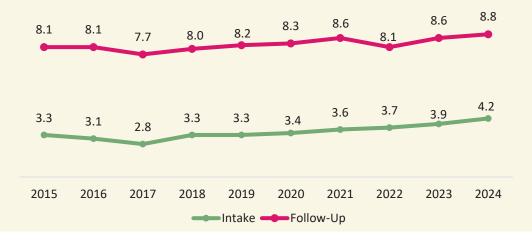
4.2 8.8 at follow-up

Individuals' average rating of their quality of life was significantly higher at followup than at intake.

Trend in Subjective Quality of Life

For the past decade of reports, RCOS clients have rated their quality of life, on average, between 2.8 through 4.2 at intake. The average quality of life rating has increased significantly from intake to follow-up each year. At both intake and follow-up, individuals gave the highest average rating of their quality of life in the 2024 report.

FIGURE 6. TREND IN SUBJECTIVE QUALITY OF LIFE AT INTAKE AND FOLLOW-UP, REPORTS 2015-2024



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, retired or a caregiver, 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 highlevel of quality of life indicative of recovery.



***p < .001.

Trend in Having All Positive Dimensions of Multidimensional Recovery

The percent of clients who had all positive dimensions of recovery at intake has been 0% to 2%. Each year, at follow-up the percent of clients who had all positive dimensions of recovery has been significantly higher compared to intake, and has been a low of 59% to a high of 68%.

FIGURE 7. TREND IN MULTIDIMENSIONAL RECOVERY STATUS AT INTAKE AND FOLLOW-UP, REPORTS 2015-2024



Suicidality



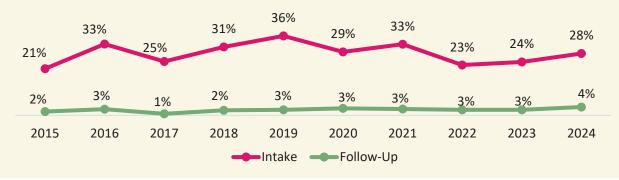
at intake at follow-up

A significantly lower percent of individuals reported suicidality at follow-up than at intake.

Trend in Suicide Ideation and/or Suicide Attempts

The percent of clients who reported suicidal ideation and/or suicide attempts at intake was a low of 21% in the 2015 report to a high of 36% in the 2019 report. Each year, the percent of clients reporting suicidality has decreased significantly from intake to follow-up. The percent of clients reporting suicidality at follow-up has been between 1% to 4% for the past decade of annual reports.

FIGURE 8. TREND IN SUICIDAL IDEATION AND/OR SUICIDE ATTEMPTS AT INTAKE AND FOLLOW-UP, REPORTS 2015-2024



Homelessness

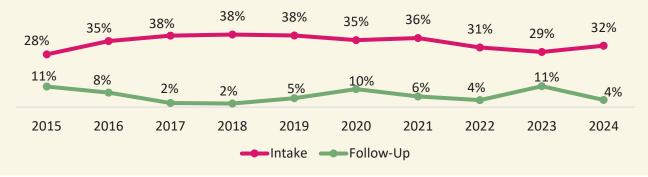


A significantly smaller percent of clients reported a period of homelessness at follow-up than at intake.

Trend in Homelessness

From the 2015 report to the 2017 report, the percent of individuals reporting homelessness at intake increased from 28% to 38% and then remained stable from the 2017 report to the 2021 report. Since the 2022 report, the percent of clients reporting homelessness at intake has hovered around 30%. Each year, the percent of individuals reporting homelessness decreased significantly from intake to follow-up.³

FIGURE 9. TREND IN HOMELESSNESS AT INTAKE AND FOLLOW-UP, REPORTS 2015-2024



³ Before October 2022, respondents who reported they were living in the recovery center at follow-up were not asked the question about homelessness, because the assumption was that they had been living in the recovery center during the follow-up period. After reviewing the data for a number of years, we added a question to clarify the living situation for individuals residing in a recovery center, and asked everyone the question about homelessness during the 6-month follow-up period.

Involvement in the Criminal Justice System

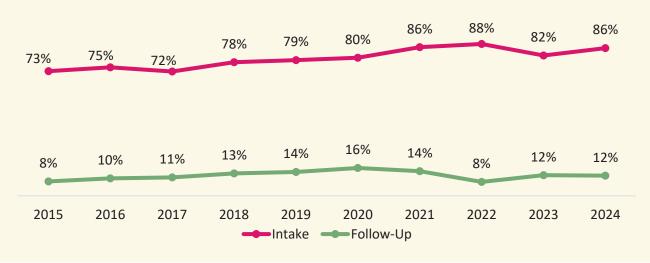


Significantly fewer individuals reported an arrest or incarceration in the 6 months before entering the program than in the 6 months before follow-up.

Trend in Arrested and/or Incarcerated

The majority of RCOS clients have reported they were arrested and/or incarcerated in the 6 months before they entered the program, with a low of 72% in the 2017 report to a high of 88% in the 2022 report. The decrease from intake to follow-up in the percent of clients reporting an arrest and/or incarceration has been significant each year. At follow-up, between 8% to 16% have reported being arrested and/or incarcerated in the 6 months before follow-up.

FIGURE 10. TREND IN ARREST/INCARCERATION AT INTAKE AND FOLLOW-UP, REPORTS 2015-2024



Client Perception of the Recovery Center Program

Client Satisfaction

Client Satisfaction

At follow-up, clients were asked to rate their experience on a scale of 0 = "worst experience" to 10 = "best experience". On average, clients rated their experience as 8.5 with 76.6% rating their experience between 8 to 10



Satisfaction with Aspect of the Recovery Center Program



81%

expectations and hopes for program and recovery were met



80%

had a connection with a counselor/ staff person during the program



77%

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

Client Involvement in the Program

The majority of individuals (82.1%) reported they had completed Phase 1. Individuals who reported they completed Phase 1 of the recovery center program rated their experience in the program significantly higher than individuals who did not complete Phase 1 (8.8 vs. 7.3, p < .001).

Client perceptions of care includes clients' assessment of the overall quality of the program as well as specific aspects of care they received, such as access to care, shared decision making, communication, respect, willingness to recommend the program to others and overall satisfaction with services (IOM, 2015). Various items were included in the follow-up surveys asking clients about their perceptions of the recovery center programs in which they participated. Using the dimensions of client perceptions of care identified by the IOM (2015), the specific items included in the follow-up surveys were mapped onto the domains with face validity, but no other psychometrics were assessed (see Figure 11). For each of the domains, the group of individuals who had not completed Phase 1 gave significantly lower ratings than individuals who had completed Phase 1.

9.0 8.9 8.8 8.7 8.4 7.3 7.1 7.1 7.0 6.7 Respect*** Communication*** Shared decision Therapeutic alliance*** Perceived making*** effectiveness*** ■ Did not complete
■ Completed

FIGURE 11. AVERAGE RATINGS OF CARE IN RECOVERY CENTER PROGRAMS AT FOLLOW-UP BY PHASE 1
COMPLETION STATUS

***p < .001.

Conclusion

Kentucky's multi-year client-level outcome evaluation, RCOS, for adults participating in Recovery Kentucky programs is a valuable resource for understanding and informing this social model of housing and recovery services. The Commonwealth is in the fortunate position of having a data infrastructure to collect client-level outcome data for Recovery Kentucky clients.

Clients' satisfaction and perceptions of the program were positive for the most part. The majority of individuals who complete the follow-up surveys reported that they completed Phase 1 of the program. As expected, the majority of individuals who completed Phase 1 rated their overall experience as well as specific dimensions of care (such as shared decision-making, respect, communication, therapeutic alliance, and perceived effectiveness) in the recovery center program significantly higher than individuals who did not complete Phase 1.

Examination of changes from intake to follow-up over many years provides the opportunity to see

trends (including stability) over time. Kentuckians participating in this recovery-housing model benefit in numerous ways. Each year, clients have rated their quality of life at follow-up as significantly greater than their quality of life at intake. Having a question that integrates information from many aspects of a person's life can be powerful in understanding the full scope and nature of where individuals are holistically in their current situation.⁴

The percent of individuals who have reported having all positive dimensions of recovery (based on severity of substance use disorder, homelessness, employment, suicidality, overall health, having at least one person who provides recovery support, and subjective quality of life) has been significantly greater at follow-up than at intake for each report that has included this analysis. Further, the percent of individuals who have reported suicidality, homelessness, and being arrested and/or incarcerated has been significantly lower at follow-up compared to intake each report year for a decade.

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⁴ Logan, T. & Cole, J. (2024). Subjective quality-of-life rating at substance use disorder treatment entry: associated client recovery needs and outcomes. *Journal of Social Work Practice in the Addictions*, 24(2), 193-211. DOI: 10.1080/1533256X.2023.2164967.