

Kentucky Substance Use Disorder (SUD)
Program Performance Indicators and Client
Barriers to SUD Program Engagement: **A Multi-
Perspective Study**

Acknowledgments

PREPARED BY

TK Logan, Jennifer Cole, Michele Staton,
& Allison Scrivner

University of Kentucky,
Center on Drug and Alcohol Research,
Department of Behavioral Science,
College of Medicine
333 Waller Avenue, Suite 480
Lexington, KY 40504
<http://cdar.uky.edu/bhos>

Corresponding Author:
TK Logan, Ph.D.
tklogan@uky.edu
(859) 257-8248

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Executive Summary

Background

Nationally, substance use has increased over time despite significant efforts targeting reduction of substance use. Similar to national rates, substance use disorders (SUD) have increased over time in Kentucky with significant consequences.

SUD program exposure can and does make a significant difference in helping people with recovery. Staying in a SUD program for at least three months is associated with better recovery outcomes. However, research estimates that about 80% of individuals drop out of SUD programs between the first call and 30 days completion of the program (Loveland & Driscoll, 2014).

Recovery outcomes include improved client quality of life as well as reductions in costs to society. Co-occurring vulnerabilities make SUD program engagement and the recovery journey more challenging for clients and for providers including: (1) co-occurring mental health problems; (2) involvement in the criminal justice system; (3) trauma and victimization; (4) loneliness and isolation; and (5) limited basic resources. These vulnerability factors often intersect.

Given the importance of both substance use treatment and mental health services for recovery outcomes, addressing the full scope and nature of barriers and facilitators to service access and utilization is crucial. An analysis of 122 studies on factors associated with drop-out from SUD programs found that 91% focused on individual client factors (e.g., age, education, substance use patterns) while only 4% examined risk factors associated with the program (e.g., duration, setting, approach) and only 5% examined factors beyond individual client factors collected at intake such as therapeutic alliance or program satisfaction (Brorson, Arnevik, Rand-Hendricksen, & Duckert, 2013).

Documenting programmatic and systemic barriers that could be addressed with policy changes and/or targeted funding may be an important interim step in helping more people engage in SUD programs. The overall goal of this study was to document barriers to SUD program engagement in Kentucky. There are three main objectives this study examined:

1. Identify key SUD performance indicators recommended by the literature and compare client-level performance indicators by specific program/region and statewide across three Kentucky SUD program outcome datasets (Performance Indicators Project; Project 1).
2. Describe SUD services program level performance indicators (including types of evidence-based practices used as well as barriers to using evidence-based practices), and barriers SUD program staff have in serving SUD clients (Provider Survey Project; Project 2).

3. Explore unmet treatment needs as well as personal, program, and systemic barriers to SUD treatment in Kentucky among adults who need, but who do not engage, with SUD treatment (have not entered a program or who have dropped out of a program in the past year) (Consumer Survey Project; Project 3 and Secret Shopper Project; Project 4)

Method

For the past two decades, the state of Kentucky has partnered with the University of Kentucky Center on Drug and Alcohol Research (UK CDAR) to provide outcome evaluations of SUD programs that focus on community treatment (Kentucky Treatment Outcome Study (KTOS)), criminal justice treatment (Criminal Justice Kentucky Treatment Outcome Study (CJKTOS)), and recovery programs (Recovery Center Outcome Study (RCOS)) as well as other targeted studies. These external performance reviews describe the state-funded programs and provide client level performance indicators (as indicated by relapse and recidivism and other targeted factors). Despite this growing evidence base, the existing evaluation infrastructure does not address program-level performance indicators or information about the unmet needs of individuals with SUDs in the state who may not be accessing or engaging in services. In addition, it is not clear what service gaps exist within the state treatment structure that could be leveraged to reach additional people.

Building on the existing evaluation infrastructure at UKCDAR, which includes ongoing evaluation of client-level performance indicators across a number of programs, this project examined program-level performance indicators, barriers to SUD program engagement, and staff barriers to working with SUD clients with four research projects.

Two case studies of individuals with SUDs from the Consumer Survey are presented as illustrative examples of the barriers to engagement in SUD programs before describing the results for this report.

Results

This report summarizes the objectives, method, key results, key recommendations, and where to find each of the four specific reports. The four reports include: Performance Indicators Project (Project 1); Provider Survey Project (Project 2); Consumer Survey Project (Project 3); and the Secret Shopper Project (Project 4).

The Project 1 report provides performance indicator profiles for each CMHC region as well as examples of profiles of performance indicators for Recovery Kentucky, CMHC, and Department of Corrections Substance Abuse Program (DOC SAP) in this current report.

Project 2 surveyed 833 providers in SUD programs to examine personal, program, and systemic barriers to client engagement in SUD programs as well as organizational barriers that make it more difficult to effectively work with SUD clients.

Project 3 conducted interviews with 62 consumers with SUDs to understand the restrictions and barriers at the program level that discourage treatment entry and/or

engagement from the perspectives of individuals with SUD; and to explore personal level barriers to treatment related to SUD program entry or dropout.

The Project 4 report provides results of the Secret Shopper Project for each CMHC region, four prenatal programs, and for two referral lines. This integrated report shows the outcomes of the Secret Shopper project for all of the CMHC regions and also for the four prenatal programs as an example of what can be seen for individual results.

The next section of the report uses the results and recommendations from each of the four projects to provide integrated recommendations and next steps.

Conclusions and Recommendations

Identifying, documenting, and targeting key program policies and procedures that work as barriers to SUD program engagement is needed. Understanding barriers to SUD program engagement is an ongoing process and is part of the process of measuring program quality indicators. Additionally, targeted funding may be needed to reduce barriers and increase client engagement in SUD programs in general and specifically for those with unmet treatment needs.

This overall report summarized results of four separate studies that serve as an important interim step in identifying barriers to SUD program engagement and making recommendations to reducing some of those barriers as well as other steps that need to be taken to fully identify and document barriers to SUD program engagement. The integrated conclusions and recommendations for the four research projects are organized in response to five main questions.

(1) Why does the first phone call for an appointment for a SUD program matter?

The first phone call may be one of the most important steps in engaging clients in the SUD program given almost half (45%) of consumers disengage from initiating an appointment to showing up to the first appointment for a SUD program (Loveland & Driscoll, 2014).

- Even if clients drop out of the process after that first call, the tone of the interaction as well as the referrals and information provided during that interaction may increase the likelihood that consumers will engage in SUD programs or seek needed resources to be better prepared to engage in SUD programs later. Findings from both the provider and consumer surveys found that embarrassment, stigma, fear of judgement, fear of the unknown, and fear of change are all sources of anxiety when clients ask for help with their addiction. The secret shopper project results confirm that negative, blaming, and stigmatizing interactions can and do occur even during the first phone call. Even perceived negative responses may reduce client motivation for seeking SUD treatment particularly given they may already have high levels of anxiety and fear before they even make that first call. Thus, the consumer's first impression during the phone call is important in influencing their continued engagement with SUD programs.

- Asking consumers about scheduling preferences (e.g., time and date) may facilitate people showing up for the first appointment. It is also important, given client anxiety and fears described in both the provider and consumer surveys, to let clients know what to bring and what to expect during the appointment (particularly if there will be out-of-pocket costs as was noted by some of the consumers who were interviewed). Additionally, ensuring clients know where to go for the appointment and asking about transportation may also help increase attendance for the first appointment. Less than five percent of consumers (4.7%) who called a CMHC and two-thirds (66.7%) of consumers who called prenatal programs during business hours to make an appointment were asked about travel distance or transportation.
- The first phone call could also be used to educate consumers about the program approach and program options. This information is helpful for consumers in managing their expectations and may also show that program staff care about them. Only 16.3% of consumers who called CMHCs and 41.7% of consumers who called prenatal programs during business hours were asked about their preferred program approach. Providing information about the program approach may help clients better understand what to expect and also give consumers information so they can better choose a program they believe would best fit their needs. Having choices can increase motivation and commitment. Even if the consumer does not follow through at that point with the program, the first phone call to a SUD program can lay the groundwork for future program engagement.
- Additionally, using the first phone call to assess key risk factors like recent incarceration, overdose history, suicidality, personal safety, and pregnancy may be important for prioritizing an appointment but also for educating and making key referrals for at-risk consumers. Over half of providers overall (58.0%) believed that clients are offered interim services while waiting for an appointment. However, the secret shopper results found that only 23.3% of consumers who spoke with CMHC program staff and 33.3% of consumers who spoke with prenatal program staff during business hours were offered any information or services to support recovery while waiting for an appointment, and most of the information provided, in the minority of cases it was provided, centered on informing consumers of the agency or program crisis line.
- Standardized training for key elements of fielding phone calls from clients/potential clients may be helpful, if not already implemented. Additionally, the importance of beginning the process of establishing rapport from the first call cannot be overemphasized; friendly, professional, and caring interactions may encourage more consumers to show up to their appointment. Front-desk staff may come to expect a higher number of no-show clients, which may influence their interactions with potential clients during the enrollment process. This expectation of a negative outcome may subtly or not so subtly be communicated to potential clients and may be perceived by clients as less than welcoming and friendly, reinforcing any reticence they may have about showing up to the appointment. The challenge of training front-desk staff to adopt a positive and supportive customer service approach in all their interactions with potential and established clients is amplified within the current labor

market and the persistent problem of staff shortages in SUD programs. Findings from the provider surveys underscore the pervasive challenge of staff shortages and high caseloads in SUD programs.

- In addition to understanding barriers when consumers call for the first appointment, identifying the full extent of the systemic and program-level barriers to SUD programs is necessary to inform program quality, accountability, barriers to SUD program engagement, and client outcomes. One option, to more fully document barriers, might be to use key informants as mock consumers to “walk-through” and map entry into the program to identify barriers at each step in the process (Quanbeck et al., 2011). Information for Network for the Improvement of Addiction treatment (NIATx) members about important elements to include in a walk-through during the first contact include: whether a live person answered the call, whether an appointment was offered on the first call, how long the client had to wait for the first appointment, would the client have difficulty reaching the site without access to a car, and whether the agency offered transportation to clients who didn't have their own transportation (Center for Health Enhancement Systems Studies, 2023). Additionally, identifying barriers during the intake and assessment as well as with scheduling and implementation of program components and other program paperwork and requirements could be documented in the walk-through process. These walk-throughs are similar to what is called a safety audit in business. Interviewing staff individually or as a group to obtain and/or contextualize staff perceptions about client barriers as well as staff challenges to working with SUD clients could also be an important component of fully documenting SUD program engagement barriers.

(2) How can SUD programs make the recovery journey more successful for clients?

Three main themes emerged about what may increase the likelihood of recovery success including: (1) creating community, increasing clients' social support, and reducing loneliness and isolation; (2) providing clients with opportunities to make choices; and (3) identifying and monitoring staff barriers so staff have the tools, support, and time to effectively support SUD clients.

- ***Creating community and support for recovery*** can help clients with their resource needs, care for children, and with their sense of belonging. Having support for recovery is crucial for clients to be able to engage in SUD programs. SUD programs can facilitate supportive relationships with clients' family and other people, if clients wish, through education to family members of how to best support individuals in SUD programs and in recovery as well as providing support for the friends and family members themselves. SUD programs have long faced the challenge of building services that support family/partner involvement in treatment programs. Moreover, the relationships that clients form with one another are potent in supporting their behavior change and recovery.
- In addition, one of the most valuable assets in SUD programs are peers including other clients in the program and peer support workers. Consumers in this study had very positive things to say about working with peer support workers and

recognized that they provide a unique understanding of the experience of addiction and pathways toward recovery. Program staff also talked about the significant benefit of having peer support workers as part of the program. Having caring staff and peer support workers can provide the support needed to stay engaged in SUD programs as noted in the staff and consumer surveys. Yet, there were several concerns with peer support workers identified in the provider survey. In particular, boundary issues, lack of training and skills, and concern for peer support workers themselves being overwhelmed or even relapsing in the context of their employment were all mentioned as concerns. Considerable investments need to be put into training, education, supervision, and support for peer support persons, as well as with clinical staff about the role of peer support so that peer support workers are not overburdened, overwhelmed, or put into situations that are outside of their appropriate role.

- Allowing **opportunities for client choices** may help increase personal motivation. Consumers in the SUD program discussed feeling that the rules and regulations made them feel overwhelmed and constrained. Having program flexibility to meet client needs (e.g., harm reduction strategies, having input and support to taper off of MOUD/MAT, flexibility of program hours, smoking cessation, program approach [i.e., MOUD/MAT, abstinence based]) can help clients feel more in control of their own well-being. Also, having flexibility with regard to scheduling throughout the program so that clients' can navigate their recovery and their personal life (and so their resources are not threatened) may be important (e.g., having more evening and weekend hours or increasing telehealth options for clients with transportation and childcare difficulties; Priester et al., 2016). Additionally, educating clients about different SUD program components and allowing them to have an ongoing consent to treatment prioritizes clients' autonomy (Walker, Logan, Clark & Leukefeld, 2005).
- One of the most valuable assets in SUD programs is the staff, underscoring the importance of identifying and targeting **staff barriers** to working with SUD clients. Identifying, addressing, and monitoring staff barriers is crucial to maximizing staff tools, support, and time to support their clients. As noted previously, high quality staff are key considerations for consumers' engagement with SUD programs.

(3) Who is at risk of having unmet SUD treatment needs?

Although some barriers to SUD program engagement likely exist for all clients, certain groups may have increased barriers due to their unique vulnerabilities or because they are part of a marginalized population with unique needs and preferences.

- Both providers and consumers were asked about individuals who have the most difficulty engaging with SUD programs and providers were also asked about individuals they thought could be better served by them or their organization. Across these questions, the most frequently mentioned individuals with unmet treatment needs include (not necessarily in this order): (a) individuals with co-occurring mental health problems; (b) youth including adolescents (11-17) and young adults (18-24 years old); (c) women and particularly pregnant and post-partum women;

(d) individuals who are homeless; (e) marginalized individuals (e.g., racial/ethnic minorities, LGBTQ+, non-English speaking); (f) individuals with limited personal resources; (g) individuals with co-occurring vulnerabilities other than mental health (e.g., physical, mental, developmental, or learning disabilities, chronic pain); (h) seniors/older adults (55+), and (i) veterans, persons on active duty in the military and their families.

- It may be important to track demographic information associated with who is, and who is not, being served. Tracking program engagement among vulnerable groups of individuals may need deliberate attention and sharing the information with program staff so that progress and setbacks can be monitored by the organization. As an example, data from Project 1 shows (based on data from KTOS, RCOS, and CJKTOS) that only 15%-19% of clients who come into those programs are 18-25 years old and only 7.0%-11.4% are ages 50 and older, meaning a significant portion of consumers in the younger and older age groups of adulthood may be struggling with addiction on their own. As another example (as noted in Project 1), racial diversity was lower in the KTOS and RCOS samples than in the general population of Kentucky (US Census Bureau, 2023). However, it is important to note that the proportion of clients who are racial/ethnic minorities varies significantly by CMHC region and the counties in which the Recovery Kentucky programs are located. CMHC regions with the highest percentage of clients reporting at intake their race was other than White include: Four Rivers Behavioral Health (14.0%), Seven Counties, Inc. (14.6%), LifeSkills, Inc. (12.6%), Communicare, Inc. (12.4%), and New Vista (11.8%). Given the variability of racial diversity in different regions of the state, close attention to the racial make-up of clients in regions should be monitored at the regional level to determine if there are racial disparities in entering and staying in SUD programs.
- Increased difficulty engaging in SUD programs is often related to adaptability barriers. Adaptability barriers exist because SUD programs have not made the necessary changes to address the unique needs or vulnerabilities of clients. Having services co-located or integrated to meet multiple needs may be helpful (Priester et al., 2016). Additionally, increased communication and collaboration among medical, mental health and SUD service providers may increase identification, inter-professional knowledge, and treatment referrals (Priester et al., 2016). These are persistent recommendations for SUD programs and mental health care treatment that are challenging to achieve, even in the best of circumstances.
- One option to adapting to needs is to provide opportunities for clients and consumers from the target population to have input into acceptable ways to address their unique needs. Further, when SUD programs adopt innovative and novel strategies, it is important to obtain timely, consistent, and anonymous feedback from clients along the way to ensure the approaches are working and to make adjustments as needed during the implementation process. Innovations and meeting client needs may need to be reassessed regularly, as context of drug use and clients' needs change.

(4) What is the state of measuring SUD program quality in Kentucky and why does it matter?

Improvements to program quality are often informed by program performance indicators as discussed in the Performance Indicator Project Report. Performance indicators provide two main kinds of information: **feedback** to providers to improve care and assess progress toward organizational goals and **information** on how providers are delivering services to client populations and communities (i.e., program accountability). The following information pertains to Kentucky CMHCs, Recovery Kentucky programs, and DOC-SAP programs.

- Kentucky currently collects several key indicators for SUD programs within CMHCs including indicators of access, treatment engagement, treatment retention, client outcomes, and client perceptions of care. The first three performance indicators are used within the contracting process between DBHDID and the CMHCs, and they apply only to outpatient SUD services (Kentucky Department of Behavioral Health, Developmental and Intellectual Disabilities, 2023).
- The client-level outcomes and clients' perceptions of care collected in the three outcome evaluations (KTOS, RCOS, CJKTOS) map well onto the outcomes considered important in the performance measurement literature as outlined in the Performance Indicators Project Report: return to substance use, symptoms, functioning, recovery supports, well-being, and client perceptions of care. These studies also provide feedback regarding specific aspects of the SUD program that worked or did not work well for clients. The findings from the outcome evaluations are shared with the provider organizations and DBHDID, as well as posted on UKCDAR's website, which can be accessed by the public. Nonetheless, many of the surveyed CMHC providers in this study had not seen the statewide reports, regional reports, or the research translational documents (Fact Sheets and Findings at a Glance).¹
- Consumers face a potentially overwhelming decision when trying to find and choose an SUD program that fits their needs. In the provider survey, providers were asked what they thought consumers looked for when selecting a program. The most frequently mentioned group of factors was program or service preference (60.5%), then program quality (41.5%) and program accessibility (40.1%). When looking at specific themes, providers more frequently mentioned program approach (31.0%), high quality staff (28.2%), program location (20.6%), and ease of getting into the program (17.9%).
- Along the same lines, one of the findings from the provider survey is that although the majority of providers indicate their organizations are tracking a lot of information about program performance, the information is not transparent or shared widely in a way that staff or consumers can use. Transparency in performance is crucial to educating consumers about SUD programs as well as others who are investing in these programs. The infrastructure and quality control that are required to accurately measure, analyze, and validate the data for performance indicators is challenging

¹ KTOS and RCOS Annual Reports, Fact Sheets, and Findings at a Glance are available at <https://cdar.uky.edu/bhos/>

for SUD programs that struggle to fund their standard operating costs. Nonetheless, additional efforts by Kentucky DBHDID to broaden the utility and implementation of performance indicators for SUD treatment are recommended. Furthermore, increasing knowledge of barriers to implementation of performance indicators will allow for more effective solutions and strategies to improve performance measurement efforts.

- The performance indicators must be feasible, reliably and systematically collected, and collected in a way that can be reported without burdensome digging through electronic health records. Key stakeholders in collaboration (including consumers, providers, and DBHDID) are in the best position to select program performance indicators based on their priorities. An important lesson from the literature on performance indicators in behavioral health care is that the use of performance indicators without an understanding of the community context can lead to misleading conclusions. There may be community issues that impact dimensions of clients' access, engagement, re-engagement with SUD programs that should be considered when reviewing program performance indicators. Deciding on a process for examining these contextual factors should be incorporated into the development of performance indicators for SUD treatment.
- Collaboration with academic and technical consultants, state partners, and providers are necessary to make performance measurement efforts successful (Garnick et al., 2011); yet, research networks to test the performance indicators are limited (ASAM, 2014). Increasing knowledge of barriers to implementation of performance indicators will allow for more effective solutions and strategies to improve performance measurement efforts.
- Many states' performance indicator efforts focus on access and process factors of SUD treatment, with less attention to client outcomes, because of the cost, lack of human resources, and difficulty of carrying out systematic evaluations (Harris et al., 2009). Thus, Kentucky's multi-year client-level outcome evaluations are a valuable resource for understanding and informing publicly funded SUD treatment in the state. Examining the association between access and process performance indicators and client-level outcomes would be a logical and informative next step for Kentucky's evaluation of the quality of SUD programs.
- Based on the research literature and the findings of the four projects, in addition to the performance indicators already collected, some recommended performance indicators for SUD programs in Kentucky are:
 1. structure indicators (such as information about staffing, number of peer support specialists, process for tracking referrals from the criminal justice system, limits on SUD services imposed by Medicaid MCOs and insurance carriers);
 2. access indicators (such as counts of number of individuals who received SUD treatment services by key demographic information including age, race/ethnicity, pregnant, non-English-speaking, veterans, etc.);

3. process indicators (such as proportion of potential clients who show up to first appointment, wait times, proportion of clients who receive transportation vouchers/assistance, proportion of clients who end treatment by completion or transfer);
4. client perceptions of care indicators in addition to the data already gathered in the outcome evaluations (collecting client feedback in a systematic and anonymous manner during treatment and at program exit); and
5. outcomes collected by SUD programs as clients exit (such as percent of clients with no arrests since admission, percent of clients who are abstinent at program exit, percent of clients who have stable housing at program exit, percent of clients who are employed at program exit).

It is recommended that DOC SAP also considering collecting similar process indicators to those currently collected by CMHCs.

- Data sources for performance indicators will need to include information compiled from walk-throughs, electronic health records, Medicaid claims data, client-level outcome evaluations, surveys with consumers about their perceptions of care, and periodic surveys with providers.
- An important question to answer is: how do consumers learn about the quality of SUD programs when selecting a program? Several recommendations discussed in response to the previous questions provide suggestions. First, taking time in the first phone call a consumer makes to a program to educate consumers about different program approaches may be one way to help them discover the program approach that best meets their needs. Second, disseminating information from client-level outcome evaluations and structure, access, and process performance indicators in user-friendly ways to the public could partially fill the information void that many consumers face when selecting SUD programs in which to enroll. Increasing the dissemination of the findings to the various stakeholder groups that would be interested in the findings but are not currently receiving them is a worthwhile effort to pursue in advancing the utility of Kentucky's performance measurement of SUD programs. One option might be to use profiles or report cards like the profiles for each CMHC region included in Appendix D of the Performance Indicator Project Report.

(5) Where can program policy or targeted funding changes make the most difference for SUD program client barriers?

The response to this question may vary depending on who is answering (i.e., consumers, current or former clients, staff); thus, it is important to include multiple perspectives when fully assessing barriers. Even so, several key barriers that were identified in both the staff and the consumer surveys will be discussed here: (1) client resource barriers, (2) program and staff quality barriers, and (3) policies regarding sanctions and termination due to relapse. Before discussing resource and program quality barriers, it is important to note

that client motivation was identified as a barrier by over half of staff for program entry and retention. It was also noted as a barrier to SUD program engagement by consumers.

- Clients' motivation to work toward recovery and participate in SUD programs can be undermined by resource deprivation and struggling to meet basic needs for themselves and their families which undermines feelings of autonomy, competence and belonging which are hypothesized to be important for well-being and motivation (Ryan & Deci, 2000). Clients being isolated from social support while in SUD programs and/or clients experiencing social conflict within the program can undermine client's sense of connection and belonging. Additionally, program factors mentioned as barriers from the consumer and provider surveys suggest there are rigid program schedules and requirements, and those program requirements may undermine client autonomy by taking away choices or even making clients choose between engaging in the program or risk losing essential basic resources and/or care of children.
- Also, judgement and stigma from program staff may undermine feelings of competence and belonging. Staff members may not be aware that some of their responses and interactions with clients may be interpreted by clients as judgmental or negative. One of the particularly challenging aspects of working with individuals with SUD is that, particularly in the early stages of recovery from SUD, denial and minimizing the negative impacts of SUD on one's life are common. Staff in SUD treatment may be so accustomed to denial as an aspect of clients' substance use and avoidance of accountability that they could reflexively assume clients' resistance and ambivalence in treatment are part of the natural part of the recovery process. Yet, staff members taking the time to work with the client to address their concerns may uncover barriers that can be addressed with practice and policy changes, additional resources or adaptations.
- As noted in the background of this report, **client resource barriers** interfere with their ability to engage in SUD programs. Behavioral changes are difficult to take on for everyone, but people in recovery are often working on changing their behavior while also coping with mental health problems, trauma, and legal issues, all while balancing program appointments, requirements, and paperwork in the face of maintaining their "regular" life responsibilities (e.g., employment, housing, children, and other family responsibilities). Compounding these issues with negativity and stigma from others, clients can become overwhelmed and frustrated.
- Another barrier noted throughout the staff and consumer surveys was related to **program and staff quality**, although fewer program staff mentioned these barriers compared to consumers. Consumers mentioned experiences of being treated like a number, feeling that they were only there for program financial reasons, or being exploited in other ways. Favoritism or treating clients differently, particularly with regard to consequences of relapse while in the program was also mentioned as an issue by providers. Programs should consider confidential ways for clients to express meaningful feedback on program concerns related to exploitation or corruption in a way where they feel heard and validated. It is also important to review state-level auditing procedures to ensure staff also have viable outlets to discuss any concerns

related to exploitation, mistreatment, and misconduct.

- Additionally, over half of both staff and consumers indicated that clients who do not take the program seriously are a barrier for program engagement for other clients. Although this was a frequently mentioned barrier in both the staff and consumer surveys, this is one area that needs more research to better understand what exactly is meant by this statement. A better understanding of how some clients may act in ways that are disruptive to their peers is needed to target changes in program policies and strategies. Additionally, increasing education about program policies related to relapse, particularly reasons for those program policies and applying those policies to everyone, may help increase clients' understanding of why some clients may be allowed to stay in the program even though they seem to be disruptive.
- The evidence is clear that SUD is a chronic disorder and relapse is a common occurrence. However, when clients relapse while in the program, it can endanger the recovery of other clients and make other clients feel they are not taking the program seriously. For these reasons, some programs heavily **sanction or terminate** these clients when they relapse. In other cases, it is not due to the SUD program policies but rather the criminal justice system that has mandated the client's participation in SUD program with specific rules and procedures regarding relapses. Staff mentioned this as a significant barrier to client engagement in SUD programs. Alternative responses to relapse should be explored that can protect other clients from the harms of substance use in their proximity while allowing for clients to stay involved in the program, and working toward recovery, even when relapses occur.

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Background

Nationally, substance use has increased over time despite significant efforts targeting reduction of substance use. Despite significant efforts to address substance use disorder (SUD) in the United States, overall prevalence rates have remained largely stable or have increased in recent years. Specifically, in 2021 it was estimated 46.3 million individuals aged 12 or older (or 15.3% of the population 12 and older) met DSM-5 diagnostic criteria for a substance use disorder (SUD) in the past year (Substance Abuse & Mental Health Services Administration, 2022), which was higher than in the 2020 report with an estimated 40.3 million people who had a SUD in the past year (Substance Abuse & Mental Health Services Administration, 2021).

Similar to national rates, substance use disorders have increased over time in Kentucky with significant consequences. An estimated 589,306 individuals in Kentucky age 12 and older met DSM-5 criteria for a SUD in 2021 (using the 2020 census data updated to 2021, Substance Abuse and Mental Health Services Administration, 2022; Kentucky State Data Center, 2022). One report found that 2,251 Kentuckians died from drug overdoses in 2021, which was a 14.6% increase in drug overdose deaths in 2020 (Steel & Mirzaian, 2022a). Although overdose deaths appear to have decreased by 5% from 2021 to 2022, the deaths are still high (Kentucky Injury Prevention and Research Center, 2023). Kentucky ranked second in the U.S. for drug overdose deaths (unintentional, intentional, undetermined) in 2020 at 49.2 per 100,000 (age-adjusted) (Centers for Disease Control, 2022a) and fourth in the U.S. in 2021 at 55.6 (age-adjusted) drug overdose deaths per 100,000 (Centers for Disease Control, 2022b). In addition to increases in overdose deaths, emergency medical services (EMS) for suspected drug overdose-related encounters increased 60.2% from January 2017 through June 2021 (Kentucky Substance Use Research & Enforcement, 2021). In 2021, a total of 12,946 Kentucky residents visited an emergency department for a nonfatal drug overdose (Steel & Mirzaian, 2022b).

SUD program exposure can and does make a significant difference in helping people with recovery. Adults who had SUD program exposure were twice as likely to be in recovery compared to those with no SUD program exposure, suggesting SUD programs play a crucial role in addressing substance use. Using nationally representative data, one study found that of adults reporting ever having a problem with alcohol or drug use, the majority reported being in recovery (Jones, Noonan, & Compton, 2020). Three key findings from the study have significant implications for addressing SUDs. First, individuals who reported ever being in SUD treatment were twice as likely to also report being in recovery. Second, self-reported mental health problems were significantly associated with substance use problems while recovery from mental health problems was associated with substance use recovery. Third, given the importance of both substance use treatment and mental health services for recovery outcomes, addressing barriers to service access and utilization is crucial.

Staying in a SUD program for at least three months is associated with better recovery outcomes. Research has found that program completion and/or length of stay is associated with abstinence and overall better outcomes over time (Choi et al., 2015; Greenfield et al., 2003; Malivert et al., 2012; Simpson, Joe, & Rowan-Szal, 1997). One study

found that the minimal mean length of program stay that separated no improvement from reliable change was 37 days, but the most reliable change for well-being and recovery was more likely to occur at the 90-day threshold (Turner & Deane, 2016), which has been noted in other research (Nsimba, 2007). In Kentucky, over half to two-thirds of clients who complete intakes for KTOS (56.2%) and RCOS (67.7%) have been in SUD programs before (see Project 1 report). Among those with prior SUD program exposure, KTOS clients had been in an average of 2.7 programs and RCOS clients had been in an average of 3.6 programs.

Research estimates that around 80% of individuals drop out between calling to make a first appointment and completing 30 days in a SUD program. In general, SUD programs have three steps to enrolling including calling or initiating an appointment for services, an assessment, and the beginning of the treatment or program episode. One study found that people disengage at the following rates in each of the three steps: 45% disengaged from initiating to showing up to the first appointment, 32% disengaged between the assessment and enrollment in the program, and another 37% left or were removed from the program before completing 30 days in the program (Loveland & Driscoll, 2014). These rates are consistent with other studies (Loveland & Driscoll, 2014; White & Kelly, 2011).

Recovery outcomes include increased client quality of life as well as reductions in costs to society. Overall, the economic costs of substance misuse and disorders are exorbitant with one study estimating substance misuse costs 3.73 trillion dollars (Recovery Centers of America, 2020). Recovery is extended beyond abstinence from substances to include enhancements in physical health, mental well-being, employment, quality of life, and community reintegration as well as reductions in healthcare costs and criminal justice system involvement (Kaskutas et al., 2014; Laudet & White, 2008; Peterson, Li, Xu, Mikosz, & Luo, 2021; Recovery Centers of America, 2020; Richardson et al., 2018).

Co-occurring vulnerabilities make SUD program engagement and the recovery journey more challenging for clients and for providers. Several vulnerabilities can exacerbate SUDs and increase challenges to recovery including: (1) co-occurring mental health problems; (2) involvement in the criminal justice system; (3) trauma and victimization; (4) loneliness and isolation; and (5) limited basic resources. These vulnerability factors often intersect.

Having a mental health problem is associated with also having a substance use disorder (SUD), while SUD recovery is associated with reductions in mental health problems (Jones et al., 2020). Higher levels of mental distress are associated with an increased risk for dropping out of SUD programs (Andersson, Steinsbekk, Walderhaug, Otterholt, & Nordfjaern, 2018). Additionally, adults with co-occurring mental health problems were arrested 12 times more often than adults with neither a mental health or a substance use problem and 6 times more often than those with a mental health problem alone (Wertheimer, 2023). Women with co-occurring substance use disorder and mental health problem were arrested 19 times more often than women with neither issue and accounted for more than 1 in 5 of all women arrested.

Individuals with incarceration histories are often in need of SUD programs upon arrest

and post-incarceration because of the high prevalence of SUDs among incarcerated adults (Tangney et al., 2016; Tsai & Gu, 2019). However, only a minority of adults with SUDs and incarceration histories engage in SUD programs (Tsai & Gu, 2019). Some research suggests individuals with incarceration histories with the highest risk and highest needs are least likely to complete SUD treatment (Olver, Stockdale, & Wormith, 2011).

Although overall victimization rates between men and women who use substances do not vary much, type of perpetrator does (de Waal, Dekker, Kikkert, Kleinhesselink, & Goudriaan, 2017). Individuals victimized by partners and acquaintances are more likely to have experienced repeated assaults and to experience trauma-related mental health problems, and are more likely to be women (Logan & Cole, 2022; 2023a; 2023b; Logan, Cole, & Schroeder, 2022; Logan, Cole, & Walker, 2020; Logan, Walker, Jordan, & Leukefeld, 2006). Both men and women who use substances or who have been incarcerated have higher rates of interpersonal victimization and trauma symptoms than individuals in the general population (Browne, Miller, & Maguin, 1999; Logan et al., 2006; Wolff, Huening, Shi, & Frueh, 2014). Also, individuals who have recent victimization experiences have fewer resources when entering SUD programs than those without recent victimization experiences (Logan & Cole, 2022; 2023a; 2023b; Logan et al., 2022; Logan et al., 2020).

Additionally, the U.S. Surgeon General recently released a report on the epidemic of loneliness and isolation in the U.S. (Murthy, 2023). Rates of loneliness and isolation have increased dramatically over time and are associated with negative physical and mental health consequences (Murthy, 2023). Loneliness and feelings of isolation have been associated with increases in substance use (Ingram et al., 2020) while positive recovery outcomes have been associated with increased social support (Binswanger et al., 2012; Brooks, Lopez, Rannucci, Krumlauf, & Wallen, 2017; Sliedrecht, Waart, Witkiewitz, & Roozen, 2019). SUD programs help individuals increase social support and those supports enhance program engagement and positive outcomes, particularly for individuals with co-occurring SUD and trauma symptoms (Jarneck et al., 2022; Kelly et al., 2010).

Successfully addressing addiction requires removing personal and environmental obstacles while establishing and maintaining an environment supportive of recovery, identifying and engaging with community-based services to support ongoing recovery needs, and increasing efficacy, hope, motivation, confidence and skills needed to initiate and maintain the difficult and prolonged work of recovery (Davidson et al., 2010). When an individual is struggling to meet basic needs such as shelter, food, safety, and experiencing disconnection from friends and family, they may have greater difficulty with the tasks needed to address addiction (Browne et al., 2016; Lee et al., 2017; Logan et al., 2020; Logan, McLouth, & Cole, 2022; Padgett et al., 2016; Substance Abuse & Mental Health Services Administration, 2016). Vulnerable substance abusers, such as those transitioning out of jails or prisons, may have more limited internal and external recovery resources and these resources are thought to play an important role in SUD program initiation, maintenance, and longer-term recovery (Chen, 2018; Kahn et al., 2019; Priester et al., 2016). At the same time, clients with significant resource deficits can overwhelm traditional SUD treatment programs because program resources are often limited, and specialized SUD services have become even more limited in recent years (Padgett et al., 2016; Priester et al., 2016; Su, 2017). Resource deficits, along with polysubstance abuse,

can also make it difficult for these clients to participate in medication assisted treatment (Walker, Logan, Chipley, & Miller 2018). Although current evidence indicates that the uptake of opioid agonist therapy can be effective for opioid use disorder (Connery, 2015), the evidence is less clear for individuals with polysubstance use and for those with significant resource deficits.

Given the importance of both substance use treatment and mental health services for recovery outcomes, addressing the full nature and scope of barriers to service access and utilization is crucial. An analysis of 122 studies on factors associated with drop-out from SUD programs found that 91% focused on client factors collected at intake (e.g., age, sex, education, marital status, substance use, co-occurring disorders, cognitive function) (Brorson, Arnevik, Rand-Hendricksen, & Duckert, 2013). However, only 4% examined risk factors associated with the program (e.g., program duration, setting, or approach) and only 5% examined factors beyond individual client level factors collected at intake such as therapeutic alliance or program satisfaction.

Documenting programmatic and systemic barriers that could be addressed with policy changes and/or targeted funding may be an important interim step in helping more people engage in SUD programs. The overall goal of this study was to document client barriers to SUD program engagement in Kentucky. There are three main objectives this study examined:

1. Identify key SUD performance indicators recommended by the literature and compare client-level performance indicators by specific program/region and statewide across three Kentucky SUD program outcome datasets (Performance Indicators Project; Project 1).
2. Describe SUD services program level performance indicators (including types of evidence-based practices used as well as barriers to using evidence-based practices), and barriers SUD program staff have in serving SUD clients (Provider Survey Project; Project 2).
3. Explore unmet treatment needs as well as personal, program, and systemic barriers to SUD treatment in Kentucky among adults who need, but who do not engage, with SUD treatment (have not entered a program or who have dropped out of a program in the past year) (Consumer Survey Project; Project 3 and Secret Shopper Project; Project 4)

Method

For the past two decades, the state of Kentucky has partnered with the University of Kentucky Center on Drug and Alcohol Research (UK CDAR) to provide outcome evaluations of substance abuse disorder (SUD) programs which focus on community treatment (Kentucky Treatment Outcome Study), criminal justice treatment (Criminal Justice Kentucky Treatment Outcome Study), and recovery programs (Recovery Center Outcome Study) as well as other targeted studies. These external performance reviews describe the state-funded programs and provide client-level outcome performance indicators (as indicated by relapse and recidivism and other targeted factors). Despite this growing evidence base, the existing evaluation infrastructure does not address program-level performance indicators or information about the unmet needs of individuals with a substance use disorder (SUD) in the state who may not be accessing or engaging in services. In addition, it is not clear what service gaps exist within the state treatment structure that could be leveraged to reach additional people.

Building on the existing evaluation infrastructure at UK CDAR, which includes ongoing evaluation of client-level outcome performance indicators across a number of programs, this project examined program-level performance indicators, barriers to SUD program engagement, and staff barriers to working with SUD clients with four research projects.

There were four projects overall as shown in Figure 1.

FIGURE 1. SUMMARY OF PROJECTS



Case Studies

The case studies highlight some of the barriers to SUD program engagement reported in the Consumer Survey Project (Project 3) to highlight many of the themes discussed throughout the reports. Both of these stories show individuals who have had significant substance use histories and difficulty with SUD program engagement even though, in general, they both thought SUD treatment works at least some of the time. The barriers highlighted by these case studies include resource barriers (e.g., transportation, employment or risk of losing employment to go to treatment, housing) but also underscore program barriers that were highlighted by many consumers who were interviewed, staff who were surveyed, and in the secret shopper project.

Adam's Story

Adam is a 35-year-old, White, heterosexual male who reported being unemployed and living as homeless for most of the past 12 months. Adam reported an extensive history of substance use with a severe substance use disorder (meeting 11 of the DSM-5 SUD criteria) which began at the age of 17 for illicit drug use and 15 for alcohol use. He reported using drugs regularly for 10 years, not using alcohol regularly, and had overdosed four times in his life, once within the past 12 months. Additionally, he began injecting drugs at the age of 28.

Adam's highest level of education is some college without obtaining a degree, and he has served in the military. Adam has some criminal justice involvement, with two arrests in his lifetime and he was incarcerated in the past year. In general, Adam reported "very good" health, he has been diagnosed with hepatitis C, has moderate depression, mild anxiety, and takes no medication for mental or physical health problems. Currently he is living separate from his four children who are all under the age of 18.

Adam has been to several treatment programs including residential, outpatient or intensive outpatient (IOP), medical detox, recovery housing, recovery programs, and medication for opioid use disorder (MOUD). He has dropped out of some residential, IOP, and MOUD treatment programs due to a lack of treatment program integrity ("everything they promised was pretty well a lie"), poor housing accommodations, and long wait times to see a doctor noting that "you would sit there... for two and three, sometimes four hours just to see the doctor." Adam stated that the primary barriers to treatment he experienced were the financial burdens of programs or the "extra charges" required of programs outside of insurance coverage, the inability to work or maintain employment due to the rigid program schedule requirements, and the lack of availability or acceptance of couple's treatment programs. He also noted some other barriers including experiences with unprofessional staff and having difficulty with transportation to attend treatment or maintain employment. Adam also reported that some of the programs he attended had "impossible" program requirements like attending classes for "10 hours a day, every day" and being expected to "make five meetings a week after class and have... a job;" and a lack of freedom within treatment centers, noting that "it's almost like being in jail" and "it's

hard to want to make that commitment to [the treatment program].” Adam believes substance use disorder treatment works “sometimes,” which he further explained depended on the motivations for people attending treatment and noted that his ability to get off or stay off drugs/alcohol is “moderately good”.

Cynthia’s Story

Cynthia is a 42-year-old, White, pansexual female who reported working part-time in a service profession. Cynthia reported she first used alcohol around the age of 3 and illicit drugs at age 8. Overall, she reported about 10 years of regular alcohol use and 20 years of regular illicit drug use. Additionally, she overdosed three times within her lifetime, one of which was in the past 12 months. She noted her primary drug of choice was opiates/opioids and her secondary drug of choice being marijuana. Cynthia noted an extensive history of substance use with a severe substance use disorder (meeting 8 of the 11 DSM-5 SUD criteria).

Cynthia’s highest level of education is a GED and she has never been incarcerated. Cynthia has been homeless at least once in the past 12 months but has lived most of the year in an apartment/house. She is divorced and has five children, two of whom are under the age of 18 with one child under the age of 18 currently living with her. Additionally, she reported that she has had caregiver responsibility for six children in the past 12 months. In general, Cynthia described her health as “good” and reported having high blood pressure as well as chronic pain. She also reported struggling with bipolar disorder, depression, anxiety, and meeting criteria for PTSD. Cynthia takes medications to treat both physical and mental health problems. Further, she reported high childhood trauma with 10 out of 10 types of adverse childhood experiences as well as a history of interpersonal victimization in adulthood.

Cynthia has attended residential and outpatient treatment programs, reporting that she has also dropped out of a residential treatment program within the last 12 months due to close peers leaving the program, the length of the program (“the amount of time that I have to be out of my life”), lack of childcare (“the amount of time that I have to be away from my kids.... I can’t take and find a sitter for 14 days”), feeling uncared for or treated unprofessionally by programs and staff (“you get staff that’s all holier than thou and act like they’re better than the people who are in treatment, even if they were also people in treatment at one time. You get the ones that have the power trip.... I’ve had that happen to me more than once”), and the distance from home. Additionally, she stated that there were employment and financial barriers particularly with so many children to care for (“I can’t just take 14 days off of my work schedule”). Cynthia also noted that treatment is “highly impractical” because “they’re so far away, your kids don’t have care, maybe you have pets or you’re caring for other family members. There’s nobody here to take my place, so if I go to treatment, it’s like a hole in my household.” On a scale of 1 to 10 (1 being the worst possible, 10 being the best possible), Cynthia rated her quality of life today as a 7. She also noted that she believes that substance use disorder treatment works “most of the time/always” but is uncertain of her ability to stay off drugs/alcohol.

Results

This section summarizes the objectives, method, key results, key recommendations, and where to find each of the four specific reports. The four reports include: Performance Indicators Project (Project 1), Provider Survey Project (Project 2), Consumer Survey Project (Project 3), and the Secret Shopper Project (Project 4).

The Project 1 report provides performance indicator profiles for each CMHC region as well as examples of profiles of performance indicators for Recovery Kentucky, CMHC, and Department of Corrections Substance Abuse Program (DOC SAP) in this current report.

Project 2 surveyed 833 providers in SUD programs to examine personal, program, and systemic barriers to client engagement in SUD programs as well as organizational barriers that make it more difficult to effectively work with SUD clients.

Project 3 conducted interviews with 62 consumers with SUDs to understand the restrictions and barriers at the program level that discourage treatment entry and/or engagement from the perspectives of individuals with SUD; and to explore personal level barriers to treatment related to SUD program entry or dropout.

The Project 4 report provides results of the Secret Shopper Project for all fourteen CMHC regions, four prenatal programs, and for two referral lines. The current report shows the outcomes of the Secret Shopper Project for all of the CMHC regions and also for the four Prenatal Programs as an example of what can be seen for individual results.

The next section of the report discusses the results and recommendations from each of the four projects before the final section, Conclusions and Recommendations, which discusses integrated recommendations from all four projects and next steps.

Project 1: Performance Indicators Project Summary

Objective: *The objective of the Performance Indicator Project Report (i.e., Project 1) was to: (1) identify key SUD performance indicators recommended by the research literature; (2) describe Kentucky's current efforts to measure performance indicators for SUD programs; (3) conduct a secondary data analysis of existing client-level outcome data from outcome evaluations from three types of SUD programs; (4) present profiles of performance indicators for each CMHC region, all of Recovery Kentucky programs, and Department of Corrections Substance Abuse Program (DOC SAP) in prison using existing data; and (5) provide recommendations for Kentucky's use of performance indicators of SUD programs.*

Method: Research literature and practice guidelines for performance indicators were searched for within scholarly databases and online google searches. Additionally, reference lists of identified articles were searched to identify relevant articles. Within several identified articles, performance indicator efforts at the national or state level were mentioned, and the source documents for these efforts were located online. Abstracts of articles were reviewed to determine if articles were about the conceptual frameworks for performance indicators or empirical data on performance indicators.

The Kentucky Department for Behavioral Health, Developmental and Intellectual Disabilities (DBHDID) Performance Indicator Implementation Guide was accessed to examine the performance indicators for SUD treatment currently collected in relation to the state's contracts with the community mental health centers (CMHCs).

The secondary data analysis conducted for this project uses data from three SUD program outcome evaluations: (1) Recovery Center Outcome Study (RCOS) for Recovery Kentucky programs, (2) Kentucky Treatment Outcome Study (KTOS) for publicly-funded SUD treatment in community mental health centers (CMHCs), and (3) Criminal Justice Kentucky Treatment Outcome Study (CJKTOS) for substance abuse programs (SAP) in jails, prisons, and community corrections facilities. Each outcome evaluation involves the collection of client-reported data face-to-face in SUD program settings by program staff using an evidence-based assessment via an online survey (i.e., intake or baseline survey) and at follow-up by the UK CDAR team via telephone. The length of time between the intake survey and follow-up surveys differs depending on the study.

To present client-level performance indicators statewide across three Kentucky SUD program outcome datasets as well as by specific program type (see Appendix C) and CMHC region (see Appendix D), data sets for multiple years of outcome evaluation data were merged for each study. The literature review on performance indicators (see Appendix A) informed the selection of variables to examine and identification of variables that were common across all three outcome evaluations, when possible. The multi-year datasets include data from the following report years: RCOS, report years 2015 – 2023,²

² Report years 2015 – 2023 for RCOS correspond to intake surveys completed between October 2012 through June 2021 and follow-up surveys conducted between October 2013 - June 2022.

KTOS, report years 2017 – 2023,³ and CJKTOS, report years 2018 – 2022.⁴ Intake surveys completed between these dates: October 2012 through June 2021 for RCOS, July 2014 through June 2021 for KTOS, and March 2016 through December 2019 for CJKTOS. Data in the main part of the report is from clients with intake and follow-up surveys. The primary analysis focuses on the change in targeted variables from intake to follow-up. Additionally, within the section on change in targeted factors, trend graphs for major outcomes at intake and follow-up for the three outcome evaluations are presented by year.

Key results: The literature review on performance indicators for SUD treatment, presented in its entirety in Appendix A of the Project 1 report, discusses the uses of performance indicators along with a brief discussion of the evolution of the performance indicators within SUD treatment. The findings highlight Donabedian’s framework (1980) for performance indicators in medical care has been applied to SUD treatment and has evolved to include five domains: (1) structure, (2) access, (3) process, (4) outcomes, and (5) client perceptions of care (Garnick et al., 2006). The Institute of Medicine (IOM) committee (2015), which examined psychosocial interventions for mental health disorders and SUD, stated that recovery (from a mental or substance use disorder) is a more meaningful objective and domain than solely abstaining/reducing substance use or a reduction in target symptoms. The IOM committee conceptualized outcomes as fitting into three categories: target symptoms (e.g., depression, anxiety), functional status (performance on daily living tasks, participation in work/school, maintaining relationships, and community involvement) and well-being (life satisfaction, quality of life, recovery, self-determination, and client perceptions of care). However, current performance measurement efforts largely omit these client-level outcomes of multiple dimensions of clients’ functioning and well-being because of the infeasibility of collecting these data (ASAM, 2014). Therefore, measurement of treatment outcomes would benefit from measuring these wide-ranging aspects of clients’ lives before and after treatment. This framework for examining client outcomes was adopted in the secondary data analysis of the three outcome evaluations. The literature review also provides numerous real-world examples of SUD performance indicators, including Kentucky’s current efforts, and identifies numerous research gaps and priorities for improving performance indicators in SUD treatment, in general, along with specific recommendations for Kentucky’s efforts.

Key findings from the three multi-year outcome evaluations for Recovery Kentucky (RCOS), SUD treatment in CMHCs (KTOS), and the DOC SAP (CJKTOS) are presented in four major sections: (1) Description of clients at intake, (2) Change in targeted factors (i.e., outcomes) from intake to follow-up and trend graphs for outcomes at intake and follow-up by year, (3) Client perceptions of care reported at follow-up, and (4) Case-adjusted outcomes at follow-up. Within each of these major sections, the results are presented in subsections.

Many states’ performance indicator efforts focus on access and process of SUD treatment, with less attention to client outcomes, because of the cost, lack of human resources, and difficulty of carrying out systematic evaluations (Harris et al., 2009). Thus, Kentucky’s

³ Report years 2017 – 2023 for KTOS correspond to intake surveys completed between July 2015 – June 2021 and follow-up surveys conducted between July 2016 - June 2022.

⁴ Report years 2018 – 2022 for CJKTOS correspond to follow-up surveys conducted between April 2017 – August 2021. Follow-up surveys are conducted among a stratified random sample of participants released one year previously, regardless of treatment intake date. Intake surveys were completed between March 2016 – December 2019.

multiyear client-level outcome evaluations are a valuable resource for understanding and informing publicly-funded SUD treatment in the state.

Clients entering publicly-funded SUD programs in Kentucky and participate in the outcome evaluation typically engage in polydrug use, have symptoms consistent with a substance use disorder, have comorbid mental health problems, have recent involvement with the criminal justice system, are between the ages of 30 and 49, are White, and are parents. Sizeable minorities of clients report economic hardship, unemployment, homelessness, and chronic pain as they enter SUD programs.

In all three outcome evaluation studies, there were statistically significant improvements in substance use and other targeted factors (e.g., symptoms, functioning, well-being, and recovery support). Of primary concern to SUD programs/treatment is the rate of return to substance use among clients. In all three outcome evaluations, there were statistically significant as well as practically significant reductions in problem use of alcohol and use of illicit drugs as well as the percent of individuals having symptoms consistent with a SUD from intake to follow-up. In all three outcome evaluations, there were statistically significant improvements in important outcomes (other than return to substance use) discussed in the literature on performance indicators: symptoms, functioning, well-being, and recovery support. Specifically, regarding symptoms, there were significant reductions in mental health problems from intake to follow-up. Regarding functioning, there were significant reductions in involvement with the criminal justice system and significant reductions in homelessness and economic hardship (for the two studies in which they were examined). For Recovery Kentucky and SAP clients, a significantly higher percentage of clients were employed at follow-up than at intake. The only outcome that did not show improvement in one of the outcome evaluations (KTOS) was the percent of clients who reported having employment at follow-up. For the two outcome evaluations that included subjective quality of life as a measure, there were statistically significant increases in clients' subjective quality of life, which the performance indicator literature frames as a component of well-being. In all three outcome evaluations, individuals had greater recovery support at follow-up than at intake. There was a statistically significant, but small, decrease in the percent of individuals who were employed at follow-up compared to intake.

Clients entering different types of programs may enter with different levels of severity of SUD, comorbid conditions, and vulnerabilities and risks. Therefore, it is important to take these different levels of severity into account when examining client-level outcomes. Multivariate analysis of two key client outcomes was conducted for each study to adjust for sociodemographic and indicators of severity of illness. In all three outcome evaluation datasets, prior treatment episodes were positively associated with the odds of having a mild, moderate, or severe SUD (vs. none) at follow-up. In KTOS and CJKTOS, the number of symptoms of SUD at intake were also positively associated with having a mild, moderate, or severe SUD (vs. none) at follow-up. In KTOS, all the included demographics were associated with having a mild, moderate, or severe SUD at follow-up.

Having more positive dimensions of multidimensional recovery at follow-up was significantly greater for individuals with a higher number of positive dimensions of recovery at intake, greater for women in KTOS and CJKTOS, and lower for individuals who

had prior episodes of SUD in KTOS and CJKTOS. Older RCOS clients had higher positive dimensions of recovery at follow-up.

The measures for perceptions of care included in the three outcome evaluations go beyond asking clients to give a consumer satisfaction rating in that clients were asked to rate multiple specific aspects of their experiences. This is important because client satisfaction ratings in health care and mental health care are well known to be high and do not necessarily reflect negative experiences individuals may have had with their care (Williams et al., 1998). Perhaps even more importantly, the majority of clients believed the program was successful or worked well for them. The vast majority also reported they would refer a close friend/family member to the program, which reflects the high value they place on the program. Moreover, individuals in all three outcome evaluations gave high average ratings for items about being treated with respect, good communication between staff and clients, and the perceived effectiveness of the program for them. Participants in RCOS and KTOS also gave high average ratings for shared decision-making and the quality of the therapeutic alliance; participants in CJKTOS were not asked questions about shared decision-making and the therapeutic alliance.

In summary, findings from the three multiyear client-level outcome evaluations show significant and meaningful positive improvements in the lives of individuals who participate in publicly-funded SUD treatment/programs in Recovery Kentucky, community mental health centers, and DOC SAP. Positive changes in clients' lives in a variety of areas including decreased substance use, improved mental health, decreased involvement in the criminal justice system, improved living circumstances, recovery supports, and subjective quality of life at follow-up.

One of the advantages of having multi-year client-level outcome evaluations is it allows for examination of changes in client characteristics and outcomes over time. Several trend graphs are presented in this report to reflect the year-to-year changes or stability in most of the factors.

The outcomes collected in the three outcome evaluations map well onto the outcomes considered important in the performance measurement literature: return to substance use, symptoms, functioning, recovery supports, and well-being. Thus, an important question is: how can this information be capitalized for performance measurement efforts? In other words, how can this information be made more useful to consumers, providers, policymakers, and other interested stakeholders? Recommendations on changes to performance indicators in Kentucky are discussed in the Conclusions and Recommendations section of this report.

Results for Recovery Kentucky programs as a whole, CMHCs, and DOC SAP in prisons are presented in the Profiles of Performance Indicators in Appendix C and Profiles for Performance Indicators for specific CMHC regions are presented in Appendix D of the Performance Indicator Project Report.⁵ In this overall report, performance indicators for Recovery Kentucky, overall CMHCs, and DOC SAP can be found in Appendix A.

⁵ NorthKey did not have an adequate number of participants in KTOS to justify the creation of a Profile of Performance Indicators for this region.

Key recommendations: Kentucky is in an excellent position to leverage data from existing client-level outcome evaluations that are conducted annually (RCOS, KTOS, and CJKTOS) and performance indicator data collected by community mental health centers that are reported to the Kentucky Department of Behavioral Health, Developmental and Intellectual Disabilities (DBHDID) annually.

Specific recommendations based on the literature of performance indicators for SUD treatment and the findings of the secondary data analysis of three multi-year client-level outcome evaluations for Kentucky are:

- **Expand** collection of performance indicators including structure, access, process, and client feedback during treatment and at program exit,
- **Continue collecting** client-level outcome data, with possible expansion of outcomes,
- **Establish** an evidence base for meaningful and reasonable benchmarks for SUD treatment,
- **Explore** the impact of severity of illness, co-occurring physical and mental health conditions, and social determinants of health on client outcomes with more in-depth analysis,
- **Incentivize** providers' and organizations' participation in performance indicator efforts,
- **Incentivize** quality in programs through reporting performance indicators by program, while carefully considering possible unintended consequences,
- **Link** structure and process indicators to outcome data to develop evidence that SUD treatment and outcomes improve when performance indicators are used,
- **Examine** barriers to SUD programs systematically and regularly,
- **Develop** the infrastructure and processes so that performance indicator data for programs can be widely disseminated to consumers, providers, policymakers, and other interested stakeholders.

Location: Performance Indicator Project Report, Pages 1 – 225.

Citation: Cole, J., Logan, T., Tillson, M., Staton, M., & Scrivner, A. (2023). *State of performance indicators in SUD treatment: How does Kentucky measure up?* Lexington, KY: University of Kentucky, Center on Drug & Alcohol Research.

Project 2: Provider Survey Project Summary

Objective: *This survey examined SUD providers' perspectives on personal, program, and systemic barriers to client engagement in SUD programs as well as organizational barriers that make it more difficult to effectively work with SUD clients.*

Method: Provider surveys (n = 833) were targeted to staff from: (1) Community Mental Health Centers (CMHC) (n = 615), (2) Recovery Kentucky Programs (n = 130), (3) prenatal programs (identified because they received specialized funding from the Kentucky Office of Drug Control Policy) (n = 53), and (4) Department of Corrections (DOC) programs (SAP programs in jails, prisons, community custody and Social Service Clinicians in the community) (n = 35). Surveys were collected from February 20, 2023 to April 11, 2023.

Key results: Survey results are divided into five main sections including provider perceptions of: (1) client barriers to SUD program engagement; (2) challenges to working with SUD clients; (3) organizational challenges and rewards experienced by program staff; (4) key program performance indicators; and (5) services provided for clients. Results are provided by the four program types and overall.

Because of providers' vantage point of working within the systematic and programmatic constraints and resources, their perspective is less focused on individual experiences. Rather, provider experiences give a broader perspective and include the experiences of many clients as well as a more in-depth understanding of organizational and workforce issues that impact the accessibility, availability, and adaptability of SUD services. For this reason, providers in a variety of publicly-funded SUD programs were surveyed about their perceptions of barriers to SUD program engagement as well as their own barriers to working with SUD clients.

Overall results of the provider survey show that respondents consistently ranked clients' personal barriers such as lack of motivation as more significant than systemic or program level barriers. However, personal barriers can be impacted by systemic, program, and resource barriers, which may be less apparent to individuals who are not directly experiencing them (i.e., less apparent to providers than to clients).

Client resource barriers such as lack of stable and safe housing, transportation problems, social support, and difficulty meeting basic needs were frequently mentioned as barriers to SUD program engagement. Research suggests that clients who come into SUD programs with fewer resources are less likely to complete the program and they are more likely to relapse and have other negative recovery outcomes (e.g., criminal justice system involvement, sustained economic vulnerability, mental health problems) (Logan & Cole, 2023; Logan, Cole, & Schroeder, 2022; Logan, Cole, & Walker, 2020; Logan, McLouth, & Cole, 2022). The complex and persistent interplay of poverty, racism, gender-based violence, community violence, stigmatization of SUDs results in reduced employment opportunities, less stable housing, greater vulnerability to physical and mental health conditions, and social alienation and isolation. Recovery encompasses all aspects of an individuals' life, as noted in one of the guiding principles of recovery (i.e., "recovery is holistic") in SAMHSA's working definition of recovery (SAMHSA, 2012) Meaningful

connections between service systems that can help with these interwoven social problems are needed to provide clients with the resources, safety net, and support to facilitate significant progress in their recovery.

Additionally, one-third of staff reported hearing about negative experiences clients had with SUD programs in the past. As shown in the data tables from the Performance Indicators Project Report, just over one-half (54.3%) to two-thirds (67.7%) of individuals coming into treatment programs and who participated in one of three studies (KTOS, RCOS, CJKTOS) have been in SUD programs prior to program entry. Thus, program barriers that may seem minimal to staff working in the programs may have a more negative impact on clients with prior negative experiences.

Both systemic factors and the way relapse is handled within a program can interfere with program engagement and recovery. Systemic barriers such as the cost of treatment, limitations imposed by insurance, and legal issues can increase client stress and reduce program engagement. These factors can also interfere with staying in a program. Additionally, sanctions and termination because of relapse were noted as a particularly concerning challenge to working with clients because relapse is a part of recovery and punishing clients for relapse may set them back unnecessarily.

Staff also face a number of challenges to working with SUD clients such as staff shortages, high caseloads, challenges to implementing evidence-based practices, and burnout. Addressing staff challenges may help them better support and engage clients. One way to do this may be to gather staff feedback in a systematic way that also encourages them to speak openly about their challenges. Additionally, providing staff with opportunities and resources to expand their skills and education can be rewarding in multiple ways.

Peer support workers were overwhelmingly noted as being extremely helpful to clients. Additionally, providers mentioned several key benefits for peer support workers themselves, for current clients who have access to peer support workers, and to the program itself in that peer support workers help with clients, but they are also able to take on tasks that other staff cannot. Several key concerns related to peer support workers were also mentioned including the need to support them in meaningful ways, the importance of educating and providing them with skills training, and the need for supervision.

Most staff rated client-level outcomes or program success as the most important program performance indicators while only a few mentioned client feedback. Perhaps past efforts at obtaining client feedback have not been very informative because client satisfaction surveys are notoriously biased toward positive results. The conditions under which client feedback is collected have an impact on the results. The most honest feedback is provided in contexts when potentially negative feedback will not jeopardize relationships or be perceived as having negative repercussions for the client. Thus, anonymous or confidential methods for collecting client feedback are important for reducing bias in responses. Furthermore, without a systematic way of collecting feedback from all/most clients, the individuals who volunteer to provide feedback tend to be the individuals with the most extreme experiences because they are the most motivated to share their

perspective: the most satisfied and the least satisfied. Thus, collecting feedback in a systematic and regular manner may be key to gathering a more accurate view of the range of clients' experiences.

When asked what staff believed consumers consider in selecting a SUD program, the majority indicated clients look for program approach and length while quality and accessibility were thought to play a lesser role in selection. The fact that providers believe that program quality plays a lesser role in consumers' selection of programs may be more a product of the difficulty of obtaining this information than the usefulness of this information if it were available to potential consumers. Increased education for consumers about program approaches, quality, and success is important in helping them find the right match to the program. Finding the right match is a challenge under the best of conditions, but attempting to do this without useful and accurate information is even more difficult. Clients entering programs that are not a good fit for them will increase the likelihood that they will disengage and possibly have worse outcomes. Each failed experience can undermine a person's sense of hope and self-efficacy that recovery is possible for them. Hope plays an essential role in recovery; according to SAMHSA's (2012) working definition, "Recovery emerges from hope" and "Hope is a catalyst for recovery." Thus, actions that SUD programs and providers can take to facilitate clients' appropriate match to treatment/programs to maximize the likelihood of success should be implemented. Additionally, helping clients with what to expect from a program when they first make an appointment could also help clients better adjust and prepare themselves for the specific program they have selected.

One group of barriers that may need particular attention are the adaptability barriers. In addition to client needs and preferences, clients may have special circumstances that need to be considered in SUD program including mental health problems, physical health problems, disabilities, criminal justice system involvement, or being a part of a marginalized group (e.g., race/ethnicity, LGBTQ+). For example, racial diversity is lower in the KTOS and RCOS samples than in the general population of Kentucky (US Census Bureau, 2023). However, it's important to note that the proportion of clients who are racial/ethnic minorities varies significantly by CMHC region and the counties in which the Recovery Kentucky programs are located. For example, CMHC regions with the highest percentage of KTOS clients reporting at intake their race was other than White include: Four Rivers Behavioral Health (14.0%), Seven Counties, Inc. (14.6%), LifeSkills, Inc. (12.6%), Communicare, Inc. (12.4%), and New Vista (11.8%). Given the variability of racial diversity in different regions of the state, close attention to the racial make-up of clients in regions should be monitored at the regional level to determine if there are disparities in entering and staying in SUD programs by racial groups. Also, the KTOS, RCOS and CJKTOS data from Project 1 show that only 15%-19% of clients that come into those programs are 18-25 years old and only 7.0%-11.4% are ages 50 and older, meaning a significant portion of consumers in the younger and older age groups of adulthood may be struggling with addiction on their own. Innovative strategies need to be developed to engage persons of racial minorities and younger and older age groups.

Most staff indicated that abstinence-based versus harm reduction should be decided depending on the client needs and preferences, which is consistent with one of the

guiding principles of recovery: “recovery occurs via many pathways” (SAMHSA, 2012). Nonetheless, some staff had strong and conflicting opinions about which approach is best as well as regarding specific harm reduction strategies that should be incorporated into SUD programs.

Key recommendations: Several recommendations were developed based on the provider survey results. First, addressing systemic, program, and resource barriers may be a pathway to increasing client engagement by reducing interference with staying in a program as well as to increasing motivation for recovery and engaging in the program. At the very least, it may be helpful for clients if staff acknowledged the challenges clients face with getting to and staying in the program. Assessing or offering ongoing support directly or through referrals could help clients as needs and barriers may change over time. Regular check-ins with clients about their potentially changing needs and resources, if they are not already occurring in the course of treatment, may improve the responsiveness of SUD programs to clients.

Second, programs could more widely share information that is tracked about the program to their own staff. In particular, clients should have an opportunity to provide feedback to program administrators and staff on various aspects of their experiences including the use of evidence-based practices, particularly given that about two-thirds of staff thought a challenge to using evidence-based practices is client acceptance.

Third, it is important to recognize and acknowledge that staff are sometimes divided about the best approaches to SUD programs, although the majority of respondents agree that it is important to meet the client where they are with regard to smoking cessation as well as using harm reduction strategies to support recovery. Whatever the program focus is, clients should be educated about what to expect so they can choose a SUD program approach that fits their needs and preferences. Having educated choices in program selection may help clients with motivation.

Fourth, peer support workers provide a valuable service in SUD programs. Agencies experience high staff turnover, high caseloads, and must operate within strict and constraining billing regulations; thus, there is an incentive to turn to peer support workers to fill in gaps that may not be appropriate for their expertise and training. Considerable investment and effort need to be put into training, education, supervision and support for peer support workers, as well as with clinical staff about the role of peer support workers so that peer support workers are not overburdened or put into situations that are outside of their appropriate role. Additionally, it is important to have a program culture and options for peer support workers who are struggling with their own recovery to be honest and open with their supervisors without fear of losing their employment.

Fifth, more creative and innovative strategies need to be considered to address specific client needs, vulnerabilities, and preferences within the same program or more education for clients in selecting specific programs approaches within their resource constraints (e.g., location or distance to travel, time conflicts). Greater flexibility in approaching a client’s recovery with a harm reduction approach versus abstinence-only may be possible in outpatient counseling in a way that would be more difficult to implement in group-

based settings such as residential and intensive outpatient treatment. In other words, a therapist meeting for individual counseling with clients may have greater flexibility in working with multiple clients with very different approaches.

Location: Provider Survey Report, pages 1 – 93.

Citation: Logan, T., Cole, J., Johnson, O., Scrivner, A., & Staton, M. (2023). *What Do Providers Say about Client Barriers to SUD Program Engagement?* Lexington, KY: University of Kentucky, Center on Drug & Alcohol Research.

Project 3: Consumer Survey Project Summary

Objective: *The Consumer Survey Project included the following primary objectives: (1) Understand the restrictions and barriers at the program level that discourage treatment entry and/or engagement from the perspectives of individuals with SUD; and (2) Explore personal barriers to treatment related to SUD program entry or dropout.*

Method: This mixed methods study used in-depth interviews consisting of both open-ended and close-ended responses with 62 diverse consumers who had thought about but did not enter a SUD program (41.9%) or who had entered a SUD program and then dropped out (66.1%) in the past year to understand program and individual barriers to SUD treatment.

Key results: Consumer survey results are divided into four main sections including: (1) Substance use history; (2) SUD treatment utilization and entry barriers; (3) SUD treatment retention and barriers; and (4) SUD treatment-related needs.

Overall findings of this Consumer Survey Study highlight the significance of both personal and program level barriers for individuals entering, engaging, and/or staying in SUD treatment programs. There is a lack of research on facilitating factors and barriers associated with treatment entry and retention for individuals who have thought about treatment and decided not to go or who have entered treatment and dropped out. This study addresses these gaps and contributes to a greater understanding of treatment barriers and experiences among individuals living in Kentucky.

Survey findings noted a number of barriers at the **personal** level for both entering and staying in SUD treatment. Commonly noted barriers included employment and feeling like their job would be threatened by taking the time off for treatment. Considering a number of individuals may have obligations to stay employed (probation & parole, family needs), it is important for treatment programs to be flexible to accommodate work responsibilities. These responsibilities may also be related to noted resource barriers such as being able to secure safe housing, meeting basic needs, transportation, and being able to feel safe. Other barriers included being able to maintain contact with family, friends, and children during the time they were in treatment. Since none of these noted barriers are likely to occur in isolation, it is likely that individuals feel a tremendous burden when considering entering treatment and still being able to meet their daily responsibilities. The obligations for single parents are even more challenging with having to turn over care of their children to someone else, or perhaps even being involved with Child Protective Services. Even though the consumers discussed generally having access to publicly-funded treatment, limits imposed by insurance and costs associated with treatment were mentioned as barriers.

Consumers also noted a number of barriers at the **program** level (such as maintaining strict regulations, program quality) and within the broader treatment system. Consumers noted specific concerns related to program quality and being able to adapt the program to fit the needs of specific clients. One example is individuals in the criminal justice system. While not a targeted recruitment criteria for the study, most (88.7%) reported

lifetime history of incarceration, and 37.1% were incarcerated in the past year. Tailoring treatment to meet the needs of individuals' involvement with the justice-system is critical, particularly with regard to maintaining flexibility for meeting their responsibilities, as well as their unique treatment needs. In addition, a high percentage of clients reported mental health issues, history of abuse and neglect, and ongoing chronic health concerns, all of which may require certain specialized or unique forms of adaptations for treatment programs to consider. In addition, potential concerns were raised related to perceptions of program quality and program exploitation by treatment clients. Consumers in this study had very positive things to say about working with peer support specialists and recognized that they provide a unique understanding of the experience of addiction, as well as the pathway toward recovery.

Key recommendations: Survey results shed light on the need to (1) educate clients on what to expect regarding different treatment approaches including the time and expectations of continuing care, as well as any additional costs associated with treatment; (2) review state-level auditing procedures to ensure staff also have viable outlets to discuss any concerns related to exploitation, mistreatment, and misconduct; (3) increase flexibility to respond to the individual needs of clients may facilitate treatment engagement and reduce dropout; (4) increase program adaptation for special needs such as criminal justice involvement or mental health; (5) consider changes to SUD staff training, support, and supervision for program staff, as well as considering initiatives to incentivize expansion of SUD clinical workforce; (6) support public campaigns aimed at reducing stigma, positive messaging about people in recovery, public education about recovery outcomes and pathways; and (7) expand peer support specialists' roles broadly in treatment venues including those focused on criminal justice and mental health issues with an eye to improving any potential concerns with treatment quality.

Location: Consumer Project Report, pages 1 – 49.

Citation: Staton, M., Tillson, M., Logan, T., Scrivner, A., & Cole, J. (2023). *Understanding Barriers to SUD Treatment in Kentucky from the Consumer Perspective*. Lexington, KY: University of Kentucky, Center on Drug & Alcohol Research

Project 4: Secret Shopper Project Summary

Objective: *The secret shopper project was carried out to better understand the process and the barriers consumers may experience as they make their first appointment for SUD treatment in Kentucky.*

Method: Callers posed as consumers who were interested in SUD treatment using five different scenarios. In two scenarios, the consumer was pregnant (and in one of those scenarios the consumer also used opioids/injected drugs) and in two scenarios the consumer was recently released from jail (and in one of those scenarios the consumer used opioids/injected drugs). In the first four scenarios the consumer told the program they had Medicaid insurance. In the fifth scenario the consumer was pregnant, recently released from jail and did not have insurance due to losing their job during their recent incarceration.

Two types of programs across the state of Kentucky were targeted for the secret shopper study: (1) Community Mental Health Centers (CMHCs) and (2) programs that received funding from the Kentucky Office of Drug Control Policy for pregnant women (prenatal programs). Two referral lines were also included in the secret shopper project although the data collection varied from the other two types of programs because the referral lines do not make appointments. One of the referral lines was included at the request of a key stakeholder and the other referral line was included as a comparison.

Calls were made from February 17, 2023 to April 27, 2023. At least three attempts to make an appointment were made during normal business hours and at least two attempts to make an appointment were made after business hours using five different scenarios. Calls to the referral lines followed this same format. Specific information about the interaction was recorded during and right after the call using a structured data collection form and a narrative description of the experience was also written.

Overall, 71 different scenarios were used in an attempt to make an appointment with a CMHC SUD program, 20 different scenarios were used to make an appointment for one of the four prenatal programs, and 10 different scenarios were used to obtain referrals to SUD programs from two different referral lines. For every scenario where an appointment was made, the consumer debriefed the program staff person about the Secret Shopper study so that no appointments were held. The consumer also debriefed referral line staff if they mentioned they planned to follow-up with the consumer at a later time.

Key results: Making the first appointment for SUD treatment is a crucial point of entry into treatment and an important first step in engaging clients in the recovery process. Eliminating barriers such as ensuring clients are called back if they are told they will be called back and not requiring clients to physically come to the program to fill out paperwork before they can schedule an appointment may also facilitate SUD program engagement. Asking about scheduling preferences and transportation at the time of appointments may also help reduce barriers SUD treatment engagement. Furthermore, only a few of the program staff explained the program location, what to bring, or what to expect at their first appointment. This may be helpful for clients in managing their

expectations but also in helping them to be prepared with the necessary information to begin SUD programs.

Each CMHC region, prenatal program, and referral line is profiled in the Secret Shopper Project Report Appendices A-C, which includes the information shown below as well as a descriptive narrative for each scenario attempt to make an appointment. The overall results for CMHCs and prenatal programs can be found in Appendix B of this report.

Key recommendations: Given the number of people who were told they would receive a call back, consumers with phones may be more successful in obtaining an appointment than consumers without a phone. Further, not having insurance and an accurate social security number on hand may be a barrier to making an appointment.

Additionally, screening for factors associated with potentially increased health risks may be important such as pregnancy, recent incarceration, suicidality, and overdose history. When appointments cannot be made quickly, it may be important to work with clients to address their needs and concerns during the wait time. Also, offering information or referrals regarding overdose and Narcan, detox, and AA/NA may be important regardless of how long consumers have to wait for the appointment. Standardized training for key elements of fielding phone calls from clients/potential clients may be helpful. Additionally, friendly, professional, and caring interactions may encourage consumers to show up to their appointment.

Location: Secret Shopper Project 1 – 74.

Citation: Logan, T., Johnson, O., Cole, J., Scrivner, A., & Staton, M. (2023). *Hello, Is Anyone There? Results of A Secret Shopper Project to Make a First Appointment for SUD Treatment in Kentucky*. Lexington, KY: University of Kentucky, Center on Drug & Alcohol Research.

Conclusions and Recommendations

Identifying, documenting, and targeting key program policies and procedures that work as barriers to SUD program engagement is needed. Understanding barriers to SUD program engagement is an ongoing process and is part of the process of measuring program quality indicators. Additionally, targeted funding may be needed to reduce barriers and increase client engagement in SUD programs in general and specifically for those with unmet treatment needs.

This overall report summarized results of four separate studies that serve as an important interim step in identifying barriers to SUD program engagement and making recommendations to reducing some of those barriers as well as other steps that need to be taken to fully identify and document barriers to SUD program engagement. The integrated conclusions and recommendations for the four research projects are organized in response to five main questions.

1. Why does the first phone call for an appointment for a SUD program matter?

The first phone call may be one of the most important steps in engaging clients in the SUD program. As noted in the background of this report, researchers have estimated that 80% of people who attempt to enter a SUD program drop out before completing 30 days in the program (Loveland & Driscoll, 2014). In particular, almost half (45%) of consumers disengage from the first phone call to attending the first appointment.

Even if clients drop out of the process after that first call, the tone of the interaction as well as the referrals and information provided during that interaction may increase the likelihood that consumers will engage in SUD programs or seek needed resources to be better prepared to engage in SUD programs later. Findings from both the provider and consumer surveys found that embarrassment, stigma, fear of judgement, fear of the unknown, and fear of change are all sources of anxiety when clients ask for help with their addiction. The secret shopper project results confirm that negative, blaming, and stigmatizing interactions can and do occur even during the first phone call. Even perceived negative responses may reduce client motivation for seeking SUD treatment particularly given they may already have high levels of anxiety and fear before they even make that first call. Thus, the consumer's first impression during the phone call is important in influencing their continued engagement with SUD programs.

Asking consumers about scheduling preferences (e.g., time and date) may facilitate people showing up for the first appointment. It is also important, given client anxiety and fears described in both the provider and consumer surveys, to let clients know what to bring and what to expect during the appointment (particularly if there will be out-of-pocket costs as was noted by some of the consumers who were interviewed). Additionally, ensuring clients know where to go for the appointment and asking about transportation may also help increase attendance for the first appointment. Less than five percent of consumers (4.7%) who called a CMHC and two-thirds (66.7%) of consumers who called prenatal programs during business hours to make an appointment were asked about travel distance or transportation.

The first phone call could also be used to educate consumers about the program approach and program options. This information is helpful for consumers in managing their expectations and may also show that program staff care about them. Only 16.3% of consumers who called CMHCs and 41.7% of consumers who called prenatal programs during business hours were asked about their preferred program approach. Providing information about the program approach may help clients better understand what to expect and also give consumers information so they can better choose a program they believe would best fit their needs. Having choices can increase motivation and commitment. Even if the consumer does not follow through at that point with the program, the first phone call to a SUD program can lay the groundwork for future program engagement.

Additionally, using the first phone call to assess key risk factors like recent incarceration, overdose history, suicidality, personal safety, and pregnancy may be important for prioritizing an appointment but also for educating and making key referrals for at-risk consumers. For example, offering information or referrals regarding overdose and Narcan, detox, AA/NA, the national suicide hotline, and local shelter or national domestic violence hotline may be important regardless of how long consumers have to wait for an appointment. As one consumer interviewed for this project said, “if you call and tell someone you need help, you need help right then and there, not 2-3 days down the line. If they don’t take you right then, you might decide to go out and do it one more, and that be the end of it, kill yourself or something.” Over half of providers overall (58.0%) believed that clients are offered interim services while waiting for an appointment. However, the secret shopper results found that only 23.3% of consumers who spoke with CMHC program staff and 33.3% of consumers who spoke with prenatal program staff during business hours were offered any information or services to support recovery while waiting for an appointment, and most of the information provided, in the minority of cases it was provided, centered on informing consumers of the agency or program crisis line.

Standardized training for key elements of fielding phone calls from clients/potential clients may be helpful, if not already implemented. Additionally, the importance of beginning the process of establishing rapport from the first call cannot be overemphasized; friendly, professional, and caring interactions may encourage more consumers to show up to their appointment. Front-desk staff may come to expect a higher number of no-show clients, which may influence their interactions with potential clients during the enrollment process. This expectation of a negative outcome may subtly or not so subtly be communicated to potential clients and may be perceived by clients as less than welcoming and friendly, reinforcing any reticence they may have about showing up to the appointment. The challenge of training front-desk staff to adopt a positive and supportive customer service approach in all their interactions with potential and established clients is amplified within the current labor market and the persistent problem of staff shortages in SUD programs. Findings from the provider surveys underscore the pervasive challenge of staff shortages and high caseloads in SUD programs.

In addition to understanding barriers when consumers call for the first appointment, identifying the full extent of the systemic and program-level barriers to SUD programs

is necessary to inform program quality, accountability, barriers to SUD program engagement, and client outcomes. Research generally suggests there are three steps in initiating program engagement: (1) getting to the first appointment, (2) assessment for program enrollment, and (3) enrollment in the program for 30 or more days. Prior research suggests that 32% of consumers disengaged between the assessment and enrollment in the program and another 37% left, or were removed from, the program before completing 30 days in the program (Loveland & Driscoll, 2014). One option, to more fully document barriers, might be to use key informants as mock consumers to “walk-through” and map entry into the program to identify barriers at each step in the process (Quanbeck et al., 2011). Information for Network for the Improvement of Addiction treatment (NIATx) members about important elements to include in a walk-through during the first contact include: whether a live person answered the call, whether an appointment was offered on the first call, how long the client had to wait for the first appointment, would the client have difficulty reaching the site without access to a car, and whether the agency offered transportation to clients who didn’t have their own transportation (Center for Health Enhancement Systems Studies, 2023). Additionally, identifying barriers during the intake and assessment as well as with scheduling and implementation of program components and other program paperwork and requirements could be documented in the walk-through process. These walk-throughs are similar to what is called a safety audit in business. Interviewing staff individually or as a group to obtain and/or contextualize staff perceptions about client barriers as well as staff challenges to working with SUD clients could also be an important component of fully documenting SUD program engagement barriers.

2. How can SUD programs make the recovery journey more successful for clients?

Three main themes emerged about what may increase the likelihood of recovery success including: (1) creating community, increasing clients’ social support, and reducing loneliness and isolation; (2) providing clients with opportunities to make choices; and (3) identifying and monitoring staff barriers so staff have the tools, support, and time to effectively support SUD clients.

Creating community and support for recovery can help clients with their resource needs, care for children, and with their sense of belonging. Having support for recovery is crucial for clients to be able to engage in SUD programs. SUD programs can facilitate supportive relationships with clients’ family and other people, if clients wish, through education to family members of how to best support individuals in SUD programs and in recovery as well as providing support for the friends and family members themselves. SUD programs have long faced the challenge of building services that support family/partner involvement in treatment programs. Moreover, the relationships that clients form with one another are potent in supporting their behavior change and recovery.

In addition, one of the most valuable assets in SUD programs are peers including other clients in the program and peer support workers. Consumers in this study had very positive things to say about working with peer support workers and recognized that they provide a unique understanding of the experience of addiction and pathways toward recovery. Program staff also talked about the significant benefit of having peer support

workers as part of the program. Having caring staff and peer support workers can provide the support needed to stay engaged in SUD programs as noted in the staff and consumer surveys. Although the research on peer support workers has found mixed support in terms of SUD outcomes, a literature review found that individuals with complex needs in addition to substance use benefited from the support of peers across diverse types of interventions (Bassuk, Hanson, Greene, Richard, & Laudet, 2016). Yet, there were several concerns with peer support workers identified in the provider survey. In particular, boundary issues, lack of training and skills, and concern for peer support workers themselves being overwhelmed or even relapsing in the context of their employment were all mentioned as concerns. Agencies experience high staff turnover, high caseloads, and must operate within strict and constraining billing regulations; thus, there is an incentive to turn to peer support to fill in gaps that may not be appropriate for their expertise and training. Considerable investments need to be put into training, education, supervision, and support for peer support persons, as well as with clinical staff about the role of peer support so that peer support workers are not overburdened, overwhelmed, or put into situations that are outside of their appropriate role.

Allowing **opportunities for client choices** may help increase personal motivation. Consumers in the SUD program discussed feeling that the rules and regulations made them feel overwhelmed and constrained. The worst (and likely uncommon) examples described by consumers and providers painted a picture of capricious and arbitrary rules and policies that left clients feeling disrespected, undermined their sense of autonomy and self-efficacy for recovery, and seemingly increased obstacles to engagement with the SUD program. The need for programs to have rules and regulations to operate effectively must continually be reconsidered with the clients' need for autonomy in mind. The balance of the institutional needs and the client's needs is challenging to achieve. Having program flexibility to meet client needs (e.g., harm reduction strategies, having input and support to taper off of MOUD/MAT, flexibility of program hours, smoking cessation, program approach [i.e., MOUD/MAT, abstinence based]) can help clients feel more in control of their own well-being. Also, having flexibility with regard to scheduling throughout the program so that clients' can navigate their recovery and their personal life (and so their resources are not threatened) may be important (e.g., having more evening and weekend hours or increasing telehealth options for clients with transportation and childcare difficulties; Priester et al., 2016). Additionally, educating clients about different SUD program components and allowing them to have an ongoing consent to treatment prioritizes clients' autonomy (Walker, Logan, Clark & Leukefeld, 2005).

One of the most valuable assets in SUD programs is the staff, underscoring the importance of identifying and targeting **staff barriers** to working with SUD clients. Identifying, addressing, and monitoring staff barriers is crucial to maximizing staff tools, support, and time to support their clients. As noted previously, high quality staff are key considerations for consumers' engagement with SUD programs. Providers surveyed for this project were typically highly satisfied with their jobs and felt rewarded for being able to make a difference in clients' lives and for society. However, these same providers identified organizational challenges including staff shortages, high caseloads, and staff burnout. Additionally, 1 in 4 staff indicated the job was demanding and low reward, 1 in 4 indicated there were limited opportunities for advancement within the organization, and

1 in 5 indicated that organizational decision making had limited transparency and about 22.8% thought there was not enough time with clients. In prior research, these factors are all associated with burnout and increased staff turnover (Duchaine et al., 2020; Dyrbye et al., 2020; Mannion & Davies, 2018) as well as a negative impact on client outcomes (Braithwaite et al., 2017). The providers also identified an average of 5 challenges with using evidence-based practices such as limited time or money to do training, limited time to learn or refresh evidence-based practices, lack of confidence, and concern with clients accepting some of the evidence-based practices the providers thought might be useful.

3. Who is at risk of having unmet SUD treatment needs?

Although some barriers to SUD program engagement likely exist for all clients, certain groups may have increased barriers due to their unique vulnerabilities or because they are part of a marginalized population with unique needs and preferences.

Both providers and consumers were asked about individuals who have the most difficulty engaging with SUD programs and providers were also asked about individuals they thought could be better served by them or their organization. Across these questions, the most frequently mentioned individuals with unmet treatment needs include (not necessarily in this order): (a) individuals with co-occurring mental health problems; (b) youth including adolescents (11-17) and young adults (18-24 years old); (c) women and particularly pregnant and post-partum women; (d) individuals who are homeless; (e) marginalized individuals (e.g., racial/ethnic minorities, LGBTQ+, non-English speaking); (f) individuals with limited personal resources; (g) individuals with co-occurring vulnerabilities other than mental health (e.g., physical, mental, developmental, or learning disabilities, chronic pain); (h) seniors/older adults (55+), and (i) veterans, persons on active duty in the military and their families.

It may be important to track demographic information associated with who is, and who is not, being served. Tracking program engagement among vulnerable groups of individuals may need deliberate attention and sharing the information with program staff so that progress and setbacks can be monitored by the organization. As an example, data from Project 1 shows (based on data from KTOS, RCOS, and CJKTOS) that only 15%-19% of clients who come into those programs are 18-25 years old and only 7.0%-11.4% are ages 50 and older, meaning a significant portion of consumers in the younger and older age groups of adulthood may be struggling with addiction on their own. As another example (as noted in Project 1), racial diversity was lower in the KTOS and RCOS samples than in the general population of Kentucky (US Census Bureau, 2023). However, it is important to note that the proportion of clients who are racial/ethnic minorities varies significantly by CMHC region and the counties in which the Recovery Kentucky programs are located. CMHC regions with the highest percentage of clients reporting at intake their race was other than White include: Four Rivers Behavioral Health (14.0%), Seven Counties, Inc. (14.6%), LifeSkills, Inc. (12.6%), Communicare, Inc. (12.4%), and New Vista (11.8%). Given the variability of racial diversity in different regions of the state, close attention to the racial make-up of clients in regions should be monitored at the regional level to determine if there are racial disparities in entering and staying in SUD programs.

Increased difficulty engaging in SUD programs is often related to adaptability barriers. Adaptability barriers exist because SUD programs have not made the necessary changes to address the unique needs or vulnerabilities of clients. Having services co-located or integrated to meet multiple needs may be helpful (Priester et al., 2016). Additionally, increased communication and collaboration among medical, mental health and SUD service providers may increase identification, inter-professional knowledge, and treatment referrals (Priester et al., 2016). These are persistent recommendations for SUD programs and mental health care treatment that are challenging to achieve, even in the best of circumstances.

One option to adapting to needs is to provide opportunities for clients and consumers from the target population to have input into acceptable ways to address their unique needs. Further, when SUD programs adopt innovative and novel strategies, it is important to obtain timely, consistent, and anonymous feedback from clients along the way to ensure the approaches are working and to make adjustments as needed during the implementation process. Innovations and meeting client needs may need to be reassessed regularly, as context of drug use and clients' needs change.

4. What is the state of measuring SUD program quality in Kentucky and why does it matter?

Improvements to program quality are often informed by program performance indicators as discussed in the Performance Indicator Project (i.e., Project 1). Performance indicators provide two main kinds of information: **feedback** to providers to improve care and assess progress toward organizational goals and **information** on how providers are delivering services to client populations and communities (i.e., program accountability). The following information pertains to Kentucky CMHCs, Recovery Kentucky programs, and DOC-SAP programs.

Kentucky collects several key indicators for SUD programs within CMHCs including indicators of access, treatment engagement, treatment retention, client outcomes, and client perceptions of care. The first three performance indicators are used within the contracting process between DBHDID and the CMHCs, and they apply only to outpatient SUD services (Kentucky Department of Behavioral Health, Developmental and Intellectual Disabilities, 2023). These performance indicators are used within the contracting process between DBHDID and the CMHCs, and they apply only to outpatient SUD services.

The client-level outcomes and clients' perceptions of care collected in the three outcome evaluations (KTOS, RCOS, CJKTOS) map well onto the outcomes considered important in the performance measurement literature: return to substance use, symptoms, functioning, recovery supports, well-being, and client perceptions of care. These studies also provide feedback regarding specific aspects of the SUD program that worked or did not work well for clients. The findings from the outcome evaluations are shared with the provider organizations and DBHDID, as well as posted on UKCDAR's website, which can be accessed by the public. Nonetheless, many of the surveyed CMHC providers in this study had not seen the statewide reports, regional reports, or the research translational documents (Fact Sheets and Findings at a Glance).

Consumers face a potentially overwhelming decision when trying to find and choose an SUD program that fits their needs. In the provider survey, providers were asked what they thought consumers looked for when selecting a program. The most frequently mentioned group of factors was program or service preference (60.5%), then program quality (41.5%) and program accessibility (40.1%). When looking at specific themes, providers more frequently mentioned program approach (31.0%), high quality staff (28.2%), program location (20.6%), and ease of getting into the program (17.9%).

Along the same lines, one of the findings from the provider survey is that although the majority of providers indicate their organizations are tracking a lot of information about program performance, the information is not transparent or shared widely in a way that staff or consumers can use. Transparency in performance is crucial to educating consumers about SUD programs as well as others who are investing in these programs. The infrastructure and quality control that are required to accurately measure, analyze, and validate the data for performance indicators is challenging for SUD programs that struggle to fund their standard operating costs. Nonetheless, additional efforts to broaden the utility and implementation of performance indicators for SUD treatment are recommended.

The research literature on performance measurement in SUD programs underscores numerous challenges that systems must carefully consider to develop and implement performance indicators that are valid and credible, developed with input from key stakeholders, feasible to collect, shared in user-friendly and appropriate ways with interested stakeholder groups (e.g., providers, consumers, payers, and policymakers), and include evaluation of the implementation and utility of the performance indicators so that any unintended consequences can be addressed in a timely manner. Key stakeholders in collaboration (including consumers, providers, and DBHDID) are in the best position to select program performance indicators based on their priorities. An important lesson from the literature on performance indicators in behavioral health care is that the use of performance indicators without an understanding of the community context can lead to misleading conclusions. There may be community issues that impact dimensions of clients' access, engagement, re-engagement with SUD programs that should be considered when reviewing program performance indicators. Deciding on a process for examining these contextual factors should be incorporated into the development of performance indicators for SUD treatment.

Collaboration with academic and technical consultants, state partners, and providers are necessary to make performance measurement efforts successful (Garnick et al., 2011); yet, research networks to test the performance indicators are limited (ASAM, 2014). Increasing knowledge of barriers to implementation of performance indicators will allow for more effective solutions and strategies to improve performance measurement efforts.

Many states' performance indicator efforts focus on access and process factors of SUD treatment, with less attention to client outcomes, because of the cost, lack of human resources, and difficulty of carrying out systematic evaluations (Harris et al., 2009). Thus, Kentucky's multi-year client-level outcome evaluations are a valuable resource for understanding and informing publicly-funded SUD treatment in the state. Examining

the association between access and process performance indicators and client-level outcomes would be a logical and informative next step for Kentucky's evaluation of the quality of SUD programs.

Based on the research literature and the findings of the four projects, in addition to the performance indicators already collected, some recommended performance indicators for SUD programs in Kentucky are:

1. structure indicators (such as information about staffing, number of peer support specialists, process for tracking referrals from the criminal justice system, limits on SUD services imposed by Medicaid MCOs and insurance carriers);
2. access indicators (such as counts of number of individuals who received SUD treatment services by key demographic information including age, race/ethnicity, pregnant, non-English-speaking, veterans, etc.);
3. process indicators (such as proportion of potential clients who show up to first appointment, wait times, proportion of clients who receive transportation vouchers/assistance, proportion of clients who end treatment by completion or transfer);
4. client perceptions of care indicators in addition to the data already gathered in the outcome evaluations (collecting client feedback in a systematic and anonymous manner during treatment and at program exit); and
5. outcomes collected by SUD programs as clients exit (such as percent of clients with no arrests since admission, percent of clients who are abstinent at program exit, percent of clients who have stable housing at program exit, percent of clients who are employed at program exit).

An important question to answer is: how do consumers learn about the quality of SUD programs? Several recommendations discussed in response to the previous questions provide suggestions. First, treatment staff taking time in the first phone call to educate consumers about different program approaches may be one way to help them discover the program approach that best meets their needs. Second, disseminating information from client-level outcome evaluations and structure, access, and process performance indicators in user-friendly ways to the public could partially fill the information void that many consumers face when selecting in which SUD programs to enroll. Increasing dissemination of the findings to the various stakeholder groups that would be interested in the findings but are not currently receiving them is a worthwhile effort to pursue in advancing the utility of Kentucky's performance measurement of SUD programs.

5. Where can program policy or targeted funding changes make the most difference for SUD program client barriers?

The response to this question may vary depending on who is answering (i.e., consumers, current or former clients, staff); thus, it is important to include multiple perspectives when fully assessing barriers. Even so, several key barriers that were identified in both the staff

and the consumer surveys will be discussed here: (1) client resource barriers, (2) program and staff quality barriers, and (3) policies regarding sanctions and termination due to relapse. Before discussing resource and program quality barriers, it is important to note that client motivation was identified as a barrier by over half of staff for program entry and retention. It was also noted as a barrier to SUD program engagement by consumers.

Clients' motivation to work toward recovery and participate in SUD programs can be undermined by resource deprivation and struggling to meet basic needs for themselves and their families which undermines feelings of autonomy, competence and belonging which are hypothesized to be important for well-being and motivation (Ryan & Deci, 2000). Clients being isolated from social support while in SUD programs and/or clients experiencing social conflict within the program can undermine client's sense of connection and belonging. Additionally, program factors mentioned as barriers from the consumer and provider surveys suggest there are rigid program schedules and requirements, and those program requirements may undermine client autonomy by taking away choices or even making clients choose between engaging in the program or risk losing essential basic resources and/or care of children.

Also, judgement and stigma from program staff may undermine feelings of competence and belonging. Staff members may not be aware that some of their responses and interactions with clients may be interpreted by clients as judgmental or negative. One of the particularly challenging aspects of working with individuals with SUD is that, particularly in the early stages of recovery from SUD, denial and minimizing the negative impacts of SUD on one's life are common. Staff in SUD treatment may be so accustomed to denial as an aspect of clients' substance use and avoidance of accountability that they could reflexively assume clients' resistance and ambivalence in treatment are part of the natural part of the recovery process. Yet, staff members taking the time to work with the client to address their concerns may uncover barriers that can be addressed with practice and policy changes, additional resources or adaptations.

As noted in the background of this report, **client resource barriers** interfere with their ability to engage in SUD programs. Behavioral changes are difficult to take on for everyone, but people in recovery are often working on changing their behavior while also coping with mental health problems, trauma, and legal issues, all while balancing program appointments, requirements, and paperwork in the face of maintaining their "regular" life responsibilities (e.g., employment, housing, children, and other family responsibilities). Compounding these issues with negativity and stigma from others, clients can become overwhelmed and frustrated. As an example, Recovery Kentucky clients tend to have significant economic vulnerabilities, but because the program provides for many basic needs (e.g., housing, food, social support), most clients who enter Phase 1 of the program complete Phase 1 (85.0%) and they have lower relapse rates (around 15%) than some other programs (Logan et al., 2020; 2022). It is important to note that clients also stay in the program between 6 and 7.5 months and longer program length is also associated with better outcomes (Logan et al., 2020; 2022). Thus, support for basic resources may be crucial to successful program engagement and sustained recovery.

Another barrier noted throughout the staff and consumer surveys was related to **program**

and staff quality, although fewer program staff mentioned these barriers compared to consumers. Consumers mentioned experiences of being treated like a number, feeling that they were only there for program financial reasons, or being exploited in other ways. Favoritism or treating clients differently, particularly with regard to consequences of relapse while in the program was also mentioned as an issue by providers. Programs should consider confidential ways for clients to express meaningful feedback on program concerns related to exploitation or corruption in a way where they feel heard and validated. It is also important to review state-level auditing procedures to ensure staff also have viable outlets to discuss any concerns related to exploitation, mistreatment, and misconduct.

Additionally, over half of both staff and consumers indicated that clients who do not take the program seriously are a barrier for program engagement for other clients. Although this was a frequently mentioned barrier in both the staff and consumer surveys, this is one area that needs more research to better understand what exactly is meant by this statement. A better understanding of how some clients may act in ways that are disruptive to their peers is needed to target changes in program policies and strategies. Additionally, increasing education about program policies related to relapse, particularly reasons for those program policies and applying those policies to everyone, may help increase clients' understanding of why some clients may be allowed to stay in the program even though they seem to be disruptive.

The evidence is clear that SUD is a chronic disorder and relapse is a common occurrence. However, when clients relapse while in the program, it can endanger the recovery of other clients and make other clients feel they are not taking the program seriously. For these reasons, some programs heavily **sanction or terminate** these clients when they relapse. In other cases, it is not due to the SUD program policies but rather the criminal justice system that has mandated the client's participation in SUD program with specific rules and procedures regarding relapses. Staff mentioned this as a significant barrier to client engagement in SUD programs. Alternative responses to relapse should be explored that can protect other clients from the harms of substance use in their proximity while allowing for clients to stay involved in the program, and working toward recovery, even when relapses occur.

References

- Andersson, H., Steinsbekk, A., Walderhaug, E., Otterholt, E., & Nordfjærn, T. (2018). Predictors of dropout from inpatient substance use treatment: A prospective cohort study. *Substance Abuse: Research and Treatment, 12*, 1-10.
- American Society of Addiction Medicine [ASAM]. (2014). *The ASAM performance measures for the addiction physician specialist*. Chevy Chase, MD: American Society of Addiction Medicine.
- Bassuk, E., Hanson, J., Greene, R., Richard, M., & Laudet, A. (2016). Peer-delivered recovery support services for addictions in the United States: A systematic review. *Journal of Substance Abuse Treatment, 63*, 1-9.
- Binswanger, I., Nowels, C., Corsi, K., Glanz, J., Long, J., Booth, R., & Steiner, J. (2012). Return to drug use and overdose after release from prison: A qualitative study of risk and protective factors. *Addiction Science & Clinical Practice, 7*(1), 3.
- Braithwaite, J., Herkes, J., Ludlow, K., Testa, L., & Lamprell, G. (2017). Association between organizational and workplace cultures, and patient outcomes: a systematic review. *British Medical Journal Open*. DOI: 10.1136/bmjopen-2017-017708.
- Brooks, A., Lòpez, M., Ranucci, A., Krumlauf, M., & Wallen, G. (2017). A qualitative exploration of social support during treatment for severe alcohol use disorder and recovery. *Addictive Behaviors Reports, 6*, 76-82.
- Brorson, H., Arnevik, E., Rand-Hendricksen, K, & Duckert, F. (2013). Drop-out from addiction treatment: A systematic review of risk factors. *Clinical Psychology Review, 33*(8), 1010-1024.
- Browne, A., Miller, B., & Maguin, E. (1999). Prevalence and severity of lifetime physical and sexual victimization among incarcerated women. *International Journal of Law and Psychiatry, 22*(3-4), 301-322.
- Browne, T., Priester, M., Clone, S., Iachini, A., DeHart, D., & Hock, R. (2016). Barriers and facilitators to substance use treatment in the rural south: A qualitative study. *The Journal of Rural Health, 32*(1), 92-101.
- Center for Health Enhancement Systems Studies (CHESS). (2023). *How to perform a walk-through*. Madison, WI: University of Wisconsin-Madison. Retrieved from <https://chess.wisc.edu/niatx/Content/ContentPage.aspx?NID=146>.
- Centers for Disease Control and Prevention, National Center for Health Statistics. (2022a). *Drug overdose mortality by state, 2020*. Retrieved from https://www.cdc.gov/nchs/pressroom/sosmap/drug_poisoning_mortality/drug_poisoning.htm
- Centers for Disease Control and Prevention, National Center for Health Statistics.

(2022b). *Drug overdose mortality by state, 2021*. Retrieved from https://www.cdc.gov/nchs/pressroom/sosmap/drug_poisoning_mortality/drug_poisoning.htm

Chen, G. (2018). Building recovery capital: The role of “hitting bottom” in desistance and recovery from substance abuse and crime. *Journal of Psychoactive Drugs, 50*(5) 420-429.

Choi, S., Adams, S., Morse, S., & MacMaster, S. (2015). Gender differences in treatment retention among individuals with co-occurring substance abuse and mental health disorders. *Substance Use & Misuse, 50*, 653-663.

Connery, H. (2015). Medication-assisted treatment of opioid use disorder: A review of the evidence and future directions. *Harvard Review of Psychiatry, 23*(2), 63-75.

Davidson, L., White, W., Sells, D., Schmutte, T., O’Connell, M., Bellamy, C., & Rowe, M. (2010). Enabling or engaging? The role of recovery support services in addiction recovery. *Alcohol Treatment Quarterly, 28*(4), 391-416.

de Waal, M., Dekker, J., Kikkert, M., Kleinhesselink, M., & Goudriaan, A. (2017). Gender differences in characteristics of physical and sexual victimization in patients with dual diagnosis: a cross-sectional study. *BMC Psychiatry, 17*(270), 1-9.

Dunchaine, C., Aubé, K., Gilbert-Ouimet, M., Vézina, M., Ndjaboué, R., Massamba, V., Talbot, D., Lavigne-Robichaud, M., Trudel, X., Pena-Gralle, A., Lesage, A., Moore, L., Milot, A., Laurin, D., & Brisson, C. (2020). Psychosocial stressors at work and the risk of sickness absence due to a diagnosed mental disorder: a systematic review and meta-analysis. *Journal of the American Medical Association Psychiatry, 77*(8), 842-851.

Dyrbye, L., Major-Elechi, B., Hays, T., Fraser, C., Buskirk, S., & West, C. (2020). Relationship between organizational leadership and health care employee burnout and satisfaction. *Mayo Clinic Proceedings, 95*(4), 698-708.

Garnick, D.W., Horgan, C.M., Acevedo, A., McCorry, F., & Weisner, C. (2011). Performance measures for substance use disorders—What research is needed? *Addiction Science & Clinical Practice, 7*(18). <https://doi.org/10.1186/1940-0640-7-18>.

Garnick, D. W., Horgan, C. M., & Chalk, M. (2006). Performance measures for alcohol and other drug services. *Alcohol Research & Health, 29*(1), 19-26. <https://link.gale.com/apps/doc/A169826698/AONE?u=googlescholar&sid=bookmark-AONE&xid=5f1cd30c>

Greenfield, L., Burgdorf, K., Chen, X., Porowski, A., Roberts, T., & Herrell, J. (2003). Effectiveness of long-term residential substance abuse treatment for women: Findings from three national studies. *American Journal of Drug and Alcohol Abuse, 30*, 537-550.

Harris, A.H.S., Humphreys, K., Bowe, T., Kivlahan, D.R., & Finney, J.W. (2009). Measuring the quality of substance use disorder treatment: Evaluating the validity of the Department of Veterans Affairs continuity of care performance measure. *Journal of Substance Abuse Treatment, 36*(3), 294-305.

Ingram, I., Kelly, P., Deane, F., Baker, A., Goh, M., Raftery, D., & Dingle G. (2020). Loneliness among people with substance use problems: A narrative systematic review. *Drug and Alcohol Review, 39*(5), 447-483.

Institute of Medicine. (2015). *Psychosocial Interventions for Mental and Substance Use Disorders: A Framework for Establishing Evidence-Based Standards*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/19013>.

Jarnecke A., Saraiya T., Brown, D., Richardson, J., Killeen, T., & Back, S. (2022). Examining the role of social support in treatment for co-occurring substance use disorder and posttraumatic stress disorder. *Addictive Behaviors Reports, 15*(100427), 1-9.

Jones, C., Noonan, R., & Compton W. (2020). Prevalence and correlates of ever having a substance use problem and substance use recovery among adults in the United States. *Drug and Alcohol Dependence, 214*(108169), 1-5.

Kahn, L., Vest, B., Kulak, J., Berdine, D., & Granfield, R. (2019). Barriers and facilitators to recovery capital among justice-involved community members. *Journal of Offender Rehabilitation, 58*(6), 544-565.

Kaskutas, L., Borkman, T., Laudet, A., Ritter, L., Witbrodt, J., Sumbbaraman, M., Stunz, A., & Bond, J. (2014). Elements that define recovery: The experimental perspective. *Journal of Studies on Alcohol and Drugs, 75*, 999-1010.

Kelly, S., O'Grady, K., Schwartz, R., Peterson, J., Wilson, M., & Brown, B. (2010). The relationship of social support to treatment entry and engagement: The community assessment inventory. *Substance Abuse, 31*(1), 43-52.

Kentucky Department for Behavioral Health, Developmental and Intellectual Disabilities. (2023). *BHDID performance indicator implementation guide: Applicable to state fiscal year 2023 contracts*. Retrieved from <https://dbhdid.ky.gov/CMHC/documents/pi/current/Guide.pdf?t=13005309202021>.

Kentucky Injury Prevention and Research Center. (2023). *Data alert*. https://governor.ky.gov/attachments/Data-Alert_2022-Overdose-Mortality.pdf

Kentucky State Data Center. (2022). *Annual estimates of the resident population by single year of age and sex for Kentucky: April 1, 2020 to July 1, 2021*. Louisville, KY: University of Louisville. Retrieved from <http://ksdc.louisville.edu/data-downloads/estimates>

Kentucky Substance Use Research & Enforcement. (2021, December). Six major overdose-related substances in Kentucky, January 1, 2017-June 30, 2021. *K-SURE Brief* (16). Accessed April 10, 2023 at <https://kiprc.uky.edu/sites/default/files/2022-01/K.SURE%20Product%2016%2C%202021-final.pdf>

Laudet, A., & White, W. (2008). Recovery capital as prospective predictor of sustained recovery, life satisfaction, and stress among former poly-substance users. *Substance Use &*

Misuse, 43(1), 27-54.

Lee, K., Jun, J., Kim, Y., Roh, S., Moon, S., Bukonda, N., & Hines, L. (2017). Mental health, substance abuse and suicide among homeless adults. *Journal of Evidence-Informed Social Work*, 14(4), 229-242.

Logan, T. & Cole, J. (2022). Firearm-related threat exposure and associated factors among men and women entering a supportive housing substance use disorder recovery program. *The American Journal of Drug & Alcohol Abuse*, 48(3) 367-377.

Logan, T. & Cole, J. (2023a). Mental health and recovery needs among women substance use disorder treatment clients with stalking victimization experiences. *Journal of Drug Issues*. <https://doi.org/10.1177/00220426231159307>

Logan, T. & Cole, J. (2023b). Subjective Quality of Life Ratings at Substance Use Disorder Treatment Entry: Associated Client Recovery Needs and Outcomes. *Journal of Social Work Practice in the Addictions*. <https://doi.org/10.1080/1533256X.2023.2164967>

Logan, T., Cole, J., & Schroeder, M. (2022). Examining Recovery Status and Supports Before and After Substance Abuse Disorder Treatment Among Clients Who Experienced Lifetime and Recent Firearm-Related Threats. *Journal of Drug Issues*, 52(3), 306-328.

Logan, T., Cole, J., & Walker, R. (2020). Examining recovery program participants by gender: Program completion, relapse, and multidimensional status 12-months after program entry. *Journal of Drug Issues*, 50(4), 436-454.

Logan, T., McLouth, C., & Cole, J. (2022). Examining Recovery Status Trends Over 7- Years for Men and Women Clients of a Substance Use Disorder Recovery Housing Program. *Journal of Drug Issues*, 52(4), 527-546.

Logan, T., Walker, R., Jordan, C., & Leukefeld, C. (2006). *Women and victimization: Contributing factors, interventions, and implications*. Washington, DC: American Psychological Association.

Loveland, D., & Driscoll, H. (2014). Examining attrition rates at one specialty addiction treatment provider in the United States: a case study using a retrospective chart review. *Substance Abuse Treatment, Prevention, and Policy*, 9(41), 1-13.

Malivert, M., Fatseas, M., Denis, C., Langlois, E., & Auriacombe, M. (2012). Effectiveness of therapeutic communities: A systematic review. *European Addiction Research*, 18, 1-11.

Mannion, R., & Davies, H. (2018). Understanding organizational culture for healthcare quality improvement. *British Medical Journal*, 363, doi: <https://doi.org/10.1136/bmj.k4907>

Murthy, V. (2023). *Our epidemic of loneliness and isolation: The U.S. surgeon general's advisory on the healing effects of social connection and community*. Accessed on June 12, 2023 at <https://www.hhs.gov/sites/default/files/surgeon-general-social-connection-advisory.pdf>.

- Nsimba, S. (2007). Outpatient treatment programs: A review article on substances of abuse outpatients treatment outcomes in the United States. *Addictive Disorders and Their Treatment*, 6(3), 91-99.
- Olver, M., Stockdale, K., & Wormith, S. (2011). A meta-analysis of predictors of offender treatment attrition and its relationship to recidivism. *Journal of Counseling and Clinical Psychology*, 79(1), 6-21.
- Padgett, D., Tiderington, E., Smith, B., Derejko, K., & Henwood, B. (2016). Complex recovery: Understanding the lives of formerly homeless adults with complex needs. *Journal of Social Distress and Homeless*, 25(2), 60-70.
- Peterson, C., Li, M., Xu, L., Mikosz, C., & Lou, F. (2021). Assessment of annual cost of substance use disorder in US hospitals. *JAMA Network Open*, 4(3), e210242, 1-8.
- Priester, M., Browne, T., Iachini, A., Clone, S., DeHart, D., & Seay, K. (2016). Treatment access barriers and disparities among individuals with co-occurring mental health and substance use disorders: An integrative literature review. *Journal of Substance Abuse Treatment*, 61, 47-59.
- Quanbeck, A., Madden, L., Edmundson, E., Ford, J., McConnell, K., McCarty, D., & Gustafson, D. (2011). *Journal of Behavioral Health Services & Research*, 39(1), 91-100.
- Recovery Centers of America. (2020). *Economic cost of substance abuse disorder in the United States, 2019*. Marwood Group. Accessed on June 12, 2023 at <https://recoverycentersofamerica.com/resource/economic-cost-of-substance-abuse-disorder-in-united-states-2019/>
- Richardson, G., Blount, T., & Hanson-Cook, B. (2018). Life history theory and recovery from substance use disorder. *Review of General Psychology*, 23(2), 263-274.
- Ryan, R., & Deci, E. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist Association*, 55(1), 68-78.
- Simpson, D., Joe, G., Rowan-Szal, R. (1997). Drug abuse treatment retention and process effects on follow-up outcomes. *Drug and Alcohol Dependence*, 47(3), 227-235.
- Sliedrecht, W., Waart, R., Witkiewitz, K., & Roozen, H. (2019). Alcohol use disorder relapse factors: A systematic review. *Psychiatry Research*, 287, 97-115.
- Steel, M., & Mirzaian, M. (2022a). *Kentucky resident drug overdose deaths, 2017-2021: Annual report*. Lexington, KY: University of Kentucky, Kentucky Injury Prevention and Research Center. Accessed on April 10, 2023 at <https://kiprc.uky.edu/sites/default/files/2022-06/KY%20Drug%20Overdose%20Deaths%20Annual%20Report%202021.pdf>.
- Steel, M., & Mirzaian, M. (2022b). *Kentucky resident emergency department visits for*

nonfatal drug overdoses, 2017-2021: Annual report, updated September 2022. Lexington, KY: University of Kentucky, Kentucky Injury Prevention and Research Center. Accessed on April 10, 2023 at <https://kiprc.uky.edu/sites/default/files/2022-12/Drug%20Overdose%20ED%20Report%202022.pdf>.

Su, X. (2017). Dimensional publicness and serving the vulnerable: Analysis of specialized substance abuse treatment programs. *American Review of Public Administration*, 47(8), 898-913.

Substance Abuse and Mental Health Services Administration (SAMHSA). (2012). *SAMHSA's working definition of recovery: 10 guiding principles of recovery*. <https://store.samhsa.gov/sites/default/files/d7/priv/pep12-recdef.pdf>

Substance Abuse and Mental Health Services Administration. (2016). *Substance use and suicide: A nexus requiring a public health approach*. In Brief. Retrieved at <https://store.samhsa.gov/product/In-Brief-Substance-Use-and-Suicide-/sma16-4935>.

Substance Abuse and Mental Health Services Administration. (2021). *Key substance use and mental health indicators in the United States: Results from the 2020 National Survey on Drug Use and Health* (HHS Publication No. PEP22-07-01-005, NSDUH Series H-57). Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. <https://www.samhsa.gov/data/report/2021-nsduh-annual-national-report>

Substance Abuse and Mental Health Services Administration. (2022). *Key substance use and mental health indicators in the United States: Results from the 2021 National Survey on Drug Use and Health* (HHS Publication No. PEP22-07-01-005, NSDUH Series H-57). Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. <https://www.samhsa.gov/data/report/2021-nsduh-annual-national-report>

Tangney, J., Folk, J., Graham, D., Stuewig, J., Blalock, D., Salatino A., Blasko, B., & Moore, K. (2016). Changes in inmates' substance use and dependence from pre-incarceration to one year post release. *Journal of Criminal Justice*, 46, 228-238.

Tsi, J., & Gu, X. (2019). Utilization of addiction treatment among U.S. adults with history of incarceration and substance use disorders. *Addiction Science & Clinical Practice*, 14, 1-9.

Turner, B., & Deane, F. (2016). Length of stay as a predictor of reliable change in psychological recovery and wellbeing following residential substance abuse treatment. *Therapeutic Communities: The International Journal for Therapeutic Communities*, 37(3), 2-21.

U.S. Census Bureau. (2023). *Quick facts: Kentucky, 2020 Census*. Retrieved from <https://www.census.gov/quickfacts/fact/table/KY/EDU635221>

Walker, R., Logan, T., Chipley, Q., & Miller, J. (2018). Characteristics and experiences with buprenorphine among poly-substance abusers. *American Journal of Drug and Alcohol Abuse*, 44(6), 595- 603.

Walker, R., Logan, T., Clark J., & Leukefeld, C. (2005). Informed consent to treatment for substance abuse and co-occurring disorders: A recommended approach. *Journal of Substance Abuse Treatment*, 29(4), 241-251.

Wertheimer, J. (2023). More than 1 in 9 adults with co-occurring mental illness and substance use disorders are arrested annually. *The Pew Charitable Trusts*. Accessed on April 10, 2023 at <https://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2023/02/over-1-in-9-people-with-co-occurring-mental-illness-and-substance-use-disorders-arrested-annually>.

White, W., & Kelly, J., (2011). Recovery Management: What If We Really Believed That Addiction Was a Chronic Disorder? in J. Kelly and W. White (Eds), *Addiction Recovery Management: Theory, Research and Practice* (pp. 67-84).

Williams, B., Coyle, J., & Healy, D. (1998). The meaning of patient satisfaction: an explanation of high reported levels. *Social Science & Medicine*, 47, 1351–9.

Wolff, N., Huening, J., Shi, J., & Frueh, C. (2014). Trauma exposure and posttraumatic stress disorder among incarcerated men. *Journal of Urban Health: Bulletin of the New York Academy of Medicine*, 91(4), 707–719..

Appendix A: Profile of Selected Key Performance Indicators for Overall CMHCs, Recovery Kentucky, and SAP

Substance Use Disorder Treatment in Kentucky's Community Mental Health Centers

Profile of Selected Key Performance Indicators

A brief profile of performance indicators for substance use disorder (SUD) treatment in Kentucky's Community Mental Health Centers (CMHC) is presented in six main categories: (1) making a first appointment, (2) barriers to treatment engagement, (3) services provided, (4) clients' perceptions of treatment, (5) client-level outcomes, and (6) organizational factors. Information about making a first appointment for treatment at Pathways, Inc. is from a secret shopper study (n = 71).⁶ Information about barriers to treatment, services provided, and organizational factors is from a survey with 615 providers who work with clients with SUD in CMHCs.⁷ Findings about clients' perceptions of treatment and client-level outcomes is from 7,158 clients in SUD treatment in Kentucky's CMHCs who completed an intake and follow-up survey in a multi-year outcome evaluation, Kentucky Treatment Outcome Study (KTOS).⁸

Making a First Appointment

In a secret shopper study, the average wait time to the first appointment in CMHCs was 12.3 days (0 - 79 days). Thirty of 50 callers who spoke with staff (60.0%) were screened for opioid/injection drug use, 20 (40.0%) were screened for pregnancy, and 14 (28.0%) were screened for incarceration. Ten of the fifty staff persons (20.0%) who spoke to callers offered information/services (e.g. offer of information or referral) to them while waiting for the appointment. Callers gave an average rating of 7.3 (1 = worst and 10 = best) for the professionalism, friendliness, and caring of staff.

Barriers to Treatment Engagement

The five most commonly staff-reported structural or organizational barriers to clients staying in SUD program (n = 615)



65.5%

Concern about separation from children or other people



65.2%

Some clients not taking recovery seriously which makes it difficult for other clients



62.3%

Lack of family or social support for recovery



53.8%

Limits imposed by insurance



51.7%

Time conflicts (e.g. childcare, work schedule)

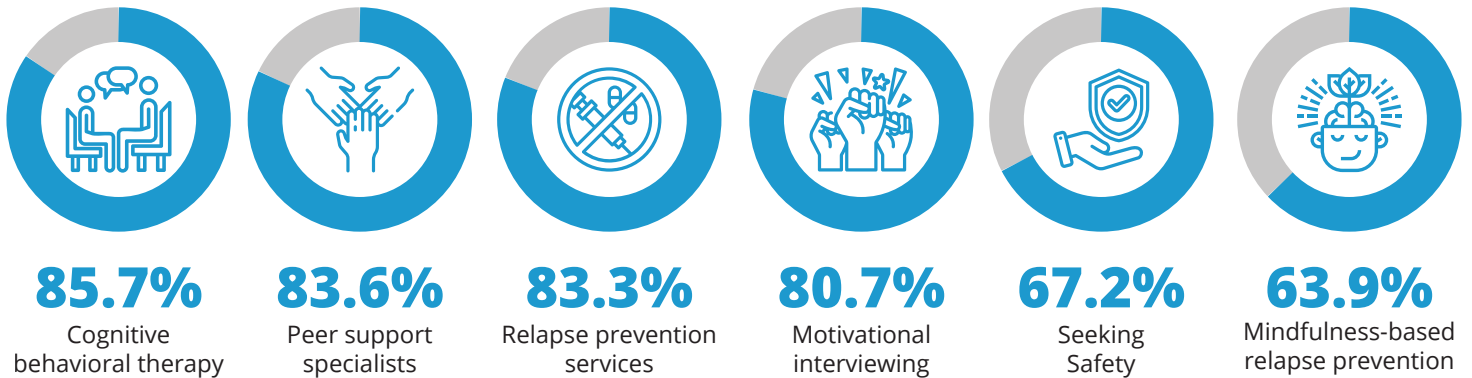
⁶ A secret shopper study was conducted February 17, 2023- April 27, 2023. Seventy-one calls were made to CMHCs: 43 during normal business hours, and 28 after hours calls.

⁷ Data from 615 staff members was collected in a larger study of providers in all CMHCs and other SUD programs in Kentucky. Surveys were conducted between February 20, 2023 to April 11, 2023. The survey was completed online, with verification of eligibility, and took an average of 45 minutes.

⁸ Data was collected from 7,158 clients who entered SUD treatment in CMHCs and completed an intake survey in Kentucky Treatment Outcome Study (KTOS) in FY 2015-2021 and then completed a follow-up survey with the research team about 12 months later. Details about KTOS are available at <https://cdar.uky.edu/KTOS/>

Services Provided

The six most commonly staff-reported evidence-based practices the program uses (n = 615)



Most commonly and least commonly staff-reported services provided to some or all clients in SUD treatment (n = 615)

	Most commonly reported	Least commonly reported
Services		
Individual counseling.....	95.9%	
Mental health services	95.1%	
Telemedicine/telehealth	94.1%	
Medications to treat addiction	82.6%	
Offer medical detoxification.....		35.3%
Provide childcare services		20.0%
Resource supports		
Case management or linking to resources for basic needs ...	95.3%	
Help clients access health insurance.....	91.4%	
Help clients get an ID or birth certificate	85.0%	
Transportation assistance	81.1%	
Help with criminal legal issues.....		43.9%
Help with civil legal issues		41.5%
Discharge planning		
Discharge planning.....	96.4%	
Perform exit assessment for recovery needs	90.4%	
Perform exit assessment with individuals who have dropped out		68.9%

Clients' Perceptions of Treatment

Clients' ratings of treatment at follow-up

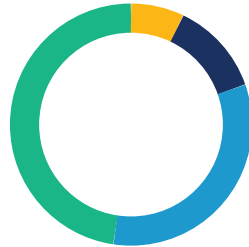
Clients had largely favorable perceptions of the treatment program^{9, 10}



8.3

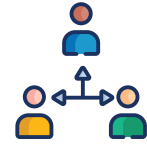
Average rating of program

[1 = Worst, 10 = Best, n = 7,059]



How well treatment worked for client

(among individuals who were asked the question, n = 3,578)



90.0%

Client would refer a close friend or relative to this provider

[% Yes, n = 3,589]



8.5

Shared decision-making between client and staff

[Low = 0, 10 = high rating for "worked on things important to the client" and "client had input into goals, plans, and progress", n = 3,244]



8.7

Respect shown to client

[0 = Low, 10 = high rating for "staff believed in client", n = 3,246]



8.1

Communication between staff and client

[Low = 0, 10 = high rating for "client felt heard" and "client fully discussed issues with staff", n = 3,246]



8.5

Therapeutic alliance

[Low = 0, 10 = high rating for "client had a connection with staff" and "believed staff cared about them", n = 3,241]



8.3

Perceived effectiveness of treatment

[Low = 0, 10 = high rating for "the approach and method were a good fit for client," and "client's expectations for the program were met", n = 3,233]

⁹ Ninety-nine individuals had missing values for overall rating of the program.

¹⁰ Items about perceptions of care were changed several times during this period of data collection; thus, not all respondents were asked these items.

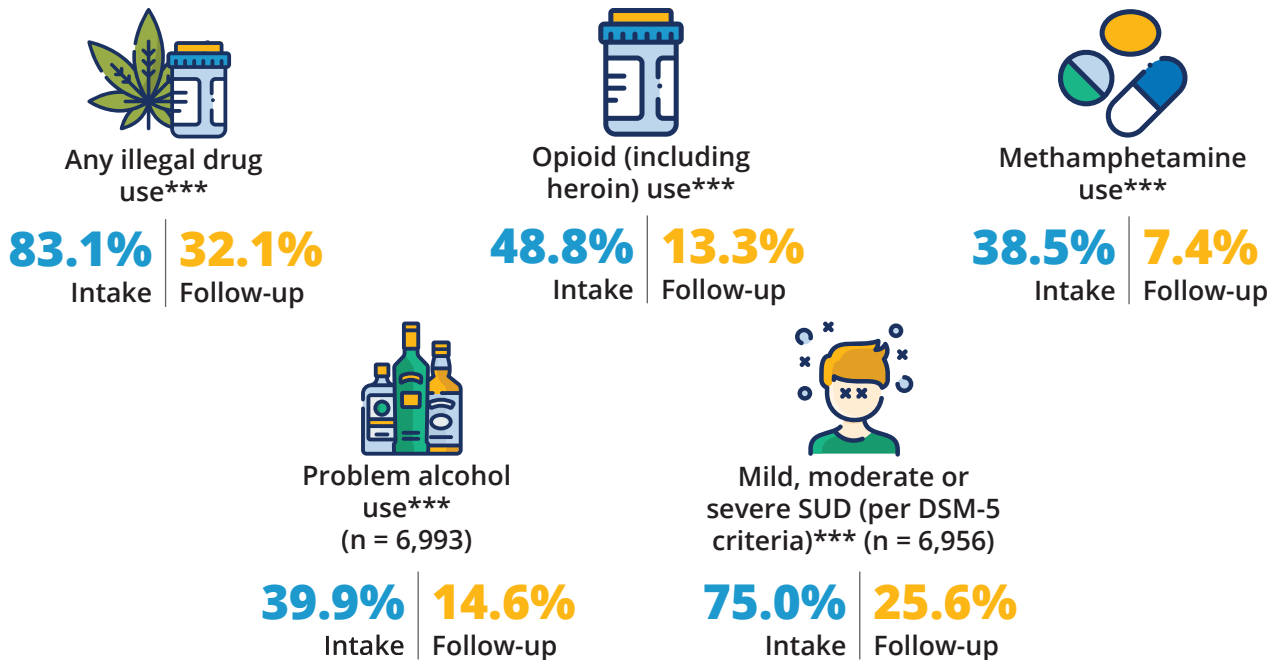
Client-level outcomes

Demographics of SUD clients in CMHCs followed up in KTOS

About half of the 7,158 clients were male (50.8%), the vast majority of clients were White (92.1%), and 5.3% were Black/African American. The majority of clients (50.8%) reported living in a non-metropolitan county, 29.3% lived in a metropolitan county, and 19.9% in a very rural county. The average age of clients was 35.0 years old.

Change in behavioral health from intake to follow-up

Significant reductions in past-12-month substance use (n = 6,994)^{11, 12}

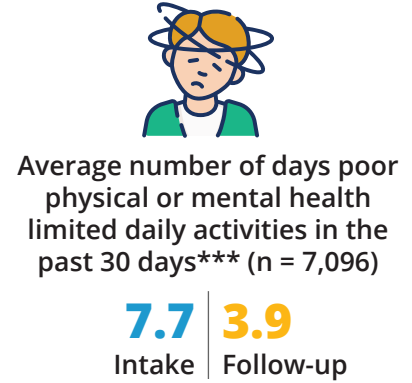
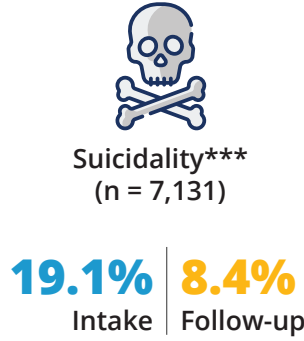
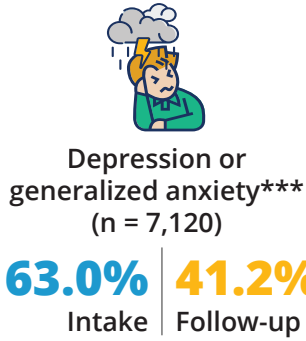


***p < .001

¹¹ Individuals who were incarcerated all 365 days before intake or follow-up were excluded from this analysis because being incarcerated inhibits opportunities for using substances.

¹² Questions about SUD criteria were asked of all clients, regardless of incarceration status; however, a small number of individuals did not answer all the items at intake and/or follow-up.

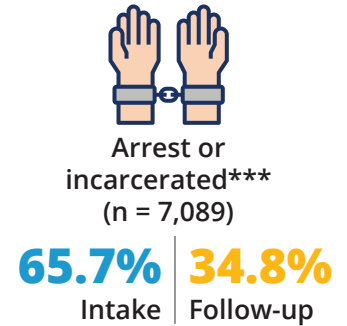
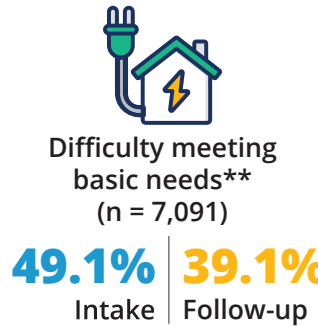
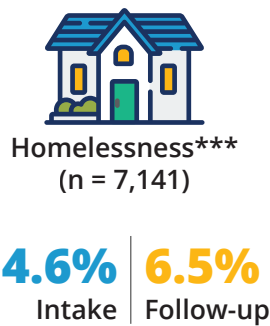
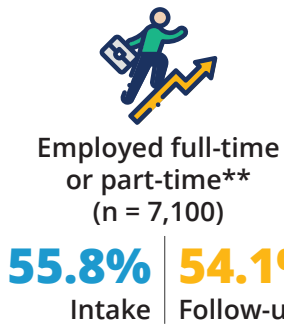
Significant reductions in past-12-month mental health and physical health problems¹³



***p < .001

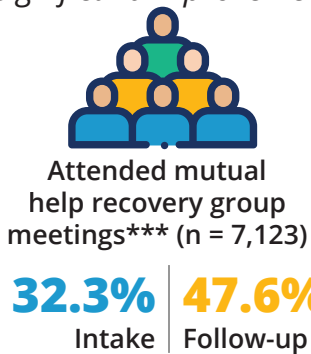
Change in other targeted factors from intake to follow-up

Significant improvements in homelessness, economic hardship, and criminal justice system involvement^{14, 15}



p < .01, *p < .001

Significant improvement in recovery support and subjective quality of life^{16, 17}



*p < .001

¹³ Thirty-eight individuals did not answer items at follow-up about depression and/or anxiety, twenty-seven individuals had missing data for suicidality at follow-up, and sixty-two individuals had missing data for number of days poor health limited daily activities at follow-up.

¹⁴ Fifty-eight individuals had missing data for usual employment status at follow-up, seventeen individuals had missing data for homelessness at follow-up, and sixty-seven individuals had missing data for at least one item on the difficulty meeting basic needs scale at follow-up.

¹⁵ Sixty-nine individuals had missing values for arrest or incarceration at follow-up.

¹⁶ Thirty-five individuals had missing values for mutual help recovery meetings at follow-up.

¹⁷ The item about quality of life was added in June 2015; thus, 1,182 had missing values on quality of life because they were not asked the question and an additional 31 individuals had missing values on rating of quality of life at follow-up.

Significant improvement in multidimensional recovery (n = 5,667)¹⁸



Had all positive dimensions of recovery***

5.6% | **35.3%**
Intake | Follow-up

***p < .001

Organizational factors

Percent of staff reporting their organization tracks and widely shares information on (n = 615)



41.6%

Number of clients who enter the program



32.4%

Obtain feedback from clients about the program



31.9%

Wait time from clients' first contact to assessment



30.6%

Clients' use of recovery support services



30.4%

Number of clients who drop out



29.9%

Percent of clients who attend treatment for 30 days or longer

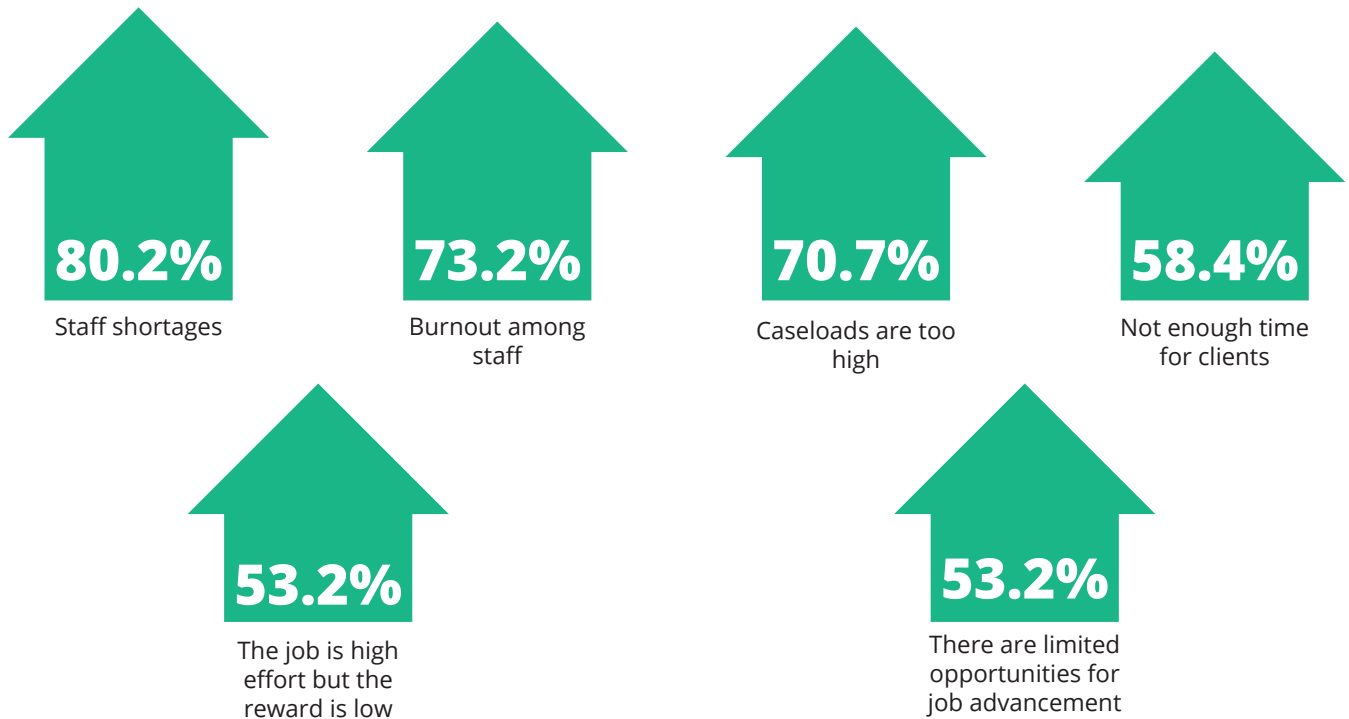


22.4%

Clients' status and progress after leaving the program (systematically)

¹⁸ Multidimensional recovery 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 suicidality, fair to excellent health, had at least one person supportive of recovery, and mid-to high-level quality of life. Some of the items used to compute the multidimensional recovery index were added in 2015 and 2016.

The six most frequently staff-reported organizational challenges (n = 615)



Staff members have high job satisfaction (n = 615)



Recovery from Substance Use Disorder in Recovery Kentucky Programs

Profile of Selected Key Performance Indicators

A brief profile of performance indicators for substance use disorder (SUD) programs in Recovery Kentucky is presented in five main categories: (1) barriers to treatment engagement, (2) services provided, (3) clients' perceptions of treatment, (4) client-level outcomes, and (5) organizational factors. Information about barriers to treatment, services provided, and organizational factors is from a survey with 130 providers who work with clients with SUD in Recovery Kentucky programs.¹⁹ Findings about clients' perceptions of treatment and client-level outcomes is from 2,417 clients in Recovery Kentucky programs who completed an intake and follow-up survey in a multi-year outcome evaluation, Recovery Center Outcome Study (RCOS).²⁰

Barriers to Treatment Engagement

The five most commonly staff-reported structural or organizational barriers to clients staying in SUD program (n = 130)



58.5%

Concern about separation from children or other people



47.7%

Clients having severe mental health problems



45.4%

Some clients not taking recovery seriously which makes it difficult for other clients



31.5%

Lack of family or social support for recovery



30.8%

Clients having a physical disability

Services Provided

The five most commonly staff-reported services offered during the program (n = 130)



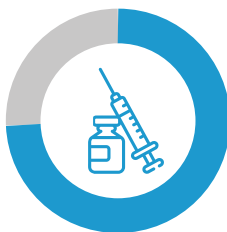
96.9%

AA/NA groups



81.5%

Housing assistance



74.6%

Nalaxone and overdose training



73.8%

Peer support specialist



71.5%

Trauma education and safety planning

¹⁹ Data from 130 staff members in Recovery Kentucky programs was collected in a larger study of providers in CMHCs, recovery programs, and other SUD programs in Kentucky. Surveys were conducted between February 20, 2023 to April 11, 2023. The survey was completed online, with verification of eligibility, and took an average of 45 minutes.

²⁰ Data was collected from 2,417 clients who entered Phase 1 of Recovery Kentucky programs and completed an intake survey in Recovery Center Outcome Study (RCOS) in FY 2013-2021 and then completed a follow-up survey with the research team about 12 months later. Details about RCOS are available at <https://cdar.uky.edu/RCOS/>

Most commonly and least commonly staff-reported services provided to some or all clients in Recovery Kentucky programs (n = 130)

	Most commonly reported	Least commonly reported
Services		
Telemedicine/telehealth	57.7%	
Individual counseling.....	53.1%	
Allow children to stay on-site or visit.....	50.8%	
Offer medical detoxification.....		22.3%
Provide childcare services		10.8%
Resource supports		
Help clients access health insurance.....	95.4%	
Have housing options as part of program.....	93.8%	
Help clients get an ID or birth certificate	89.2%	
Case management or linking to resources for basic needs ...	86.9%	
Help with civil legal issues		53.1%
Offer smoking cessation counseling or other nicotine addiction support		51.5%
Discharge planning		
Discharge planning.....	94.6%	
Perform exit assessment for recovery needs	91.5%	
Perform exit assessment with individuals who have dropped out		50.0%

Clients' Perceptions of the Recovery Program

Clients' ratings of the recovery program at follow-up

Clients had largely favorable perceptions of the recovery program^{21, 22}



8.6

Average rating of program
[1 = Worst, 10 = Best, n = 2,414]



How well the program worked for client
(among individuals who were asked the question, n = 2,417)



89.7%

Client would refer a close friend or relative to this provider
[% Yes, n = 1,167]



8.4

Shared decision-making between client and staff
[Low = 0, 10 = high rating for "worked on things important to the client" and "client had input into goals, plans, and progress", n = 1,052]



8.7

Respect shown to client
[0 = Low, 10 = high rating for "staff believed in client", n = 1,052]



7.9

Communication between staff and client
[Low = 0, 10 = high rating for "client felt heard" and "client fully discussed issues with staff", n = 1,049]



8.5

Therapeutic alliance
[Low = 0, 10 = high rating for "client had a connection with staff" and "believed staff cared about them", n = 1,053]



8.5

Perceived effectiveness of the program
[Low = 0, 10 = high rating for "the approach and method were a good fit for client," and "client's expectations for the program were met", n = 1,053]

²¹ Three individuals had missing values for overall rating of the program.

²² Items about perceptions of care were changed several times during this period of data collection; thus, not all respondents were asked these items.

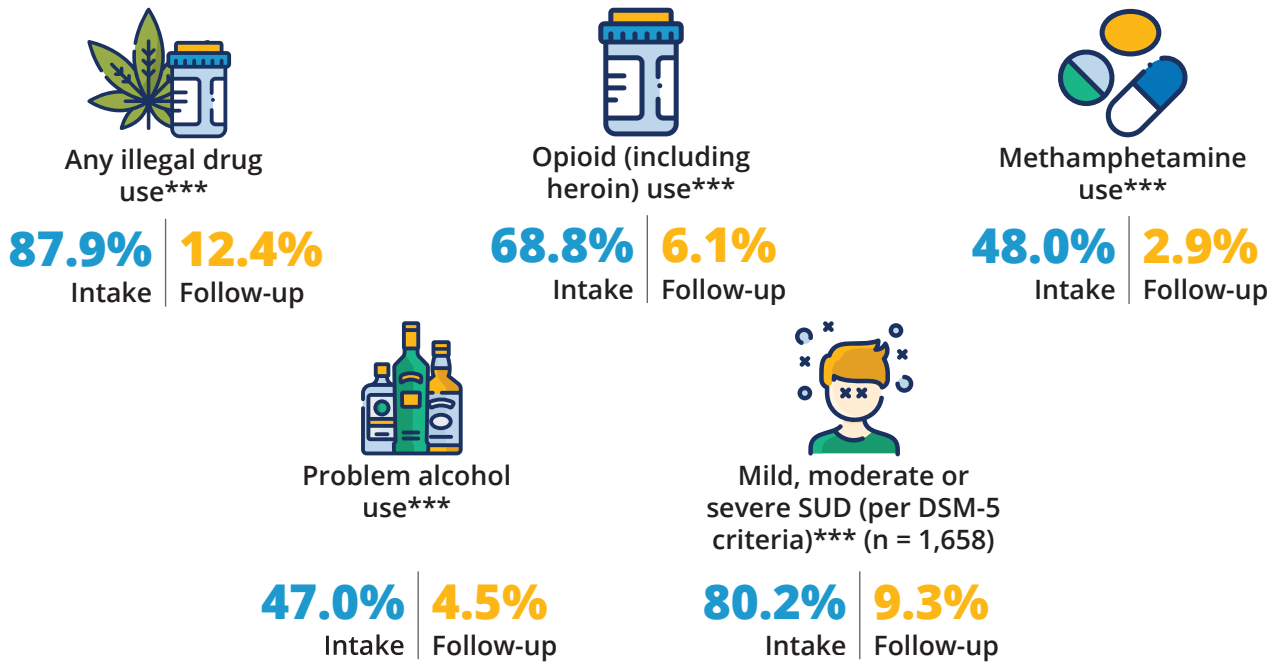
Client-level outcomes

Demographics of SUD clients in Recovery Kentucky programs followed up in RCOS

A little more than half of the 2,417 clients were female (53.1%), the vast majority of clients were White (91.5%), and 5.8% were Black/African American. The majority of clients (52.8%) reported living in a metropolitan county, 37.2% lived in a non-metropolitan county, and 10.0% in a very rural county. The average age of clients was 33.9 years old.

Change in behavioral health from intake to follow-up

Significant reductions in past-12-month substance use (n = 1,990)^{23, 24}

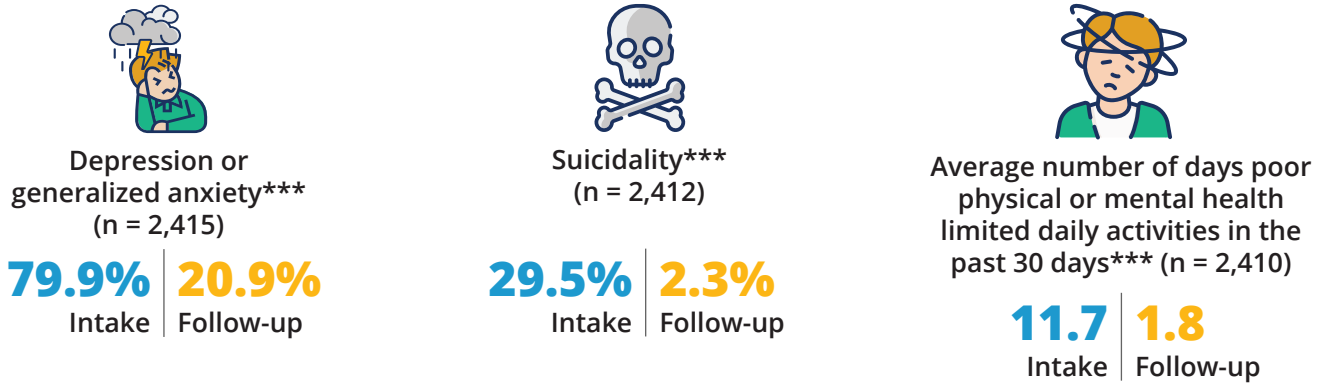


***p < .001

²³ Individuals who were incarcerated all 365 days before intake or follow-up were excluded from this analysis because being incarcerated inhibits opportunities for using substances.

²⁴ Questions about SUD criteria were added in July 2015; thus, 759 individuals were not asked these questions at intake and/or follow-up.

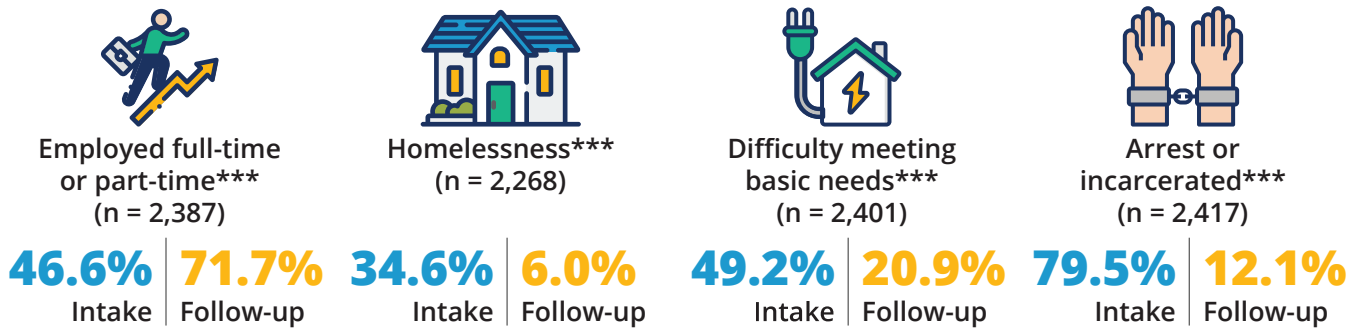
Significant reductions in past-12-month mental health and physical health problems²⁵



***p < .001

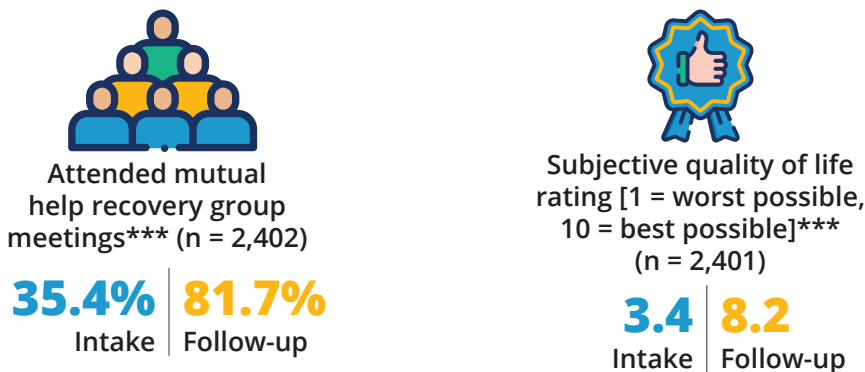
Change in other targeted factors from intake to follow-up

Significant improvements in homelessness, economic hardship, and criminal justice system involvement²⁶



p < .01, *p < .001

Significant improvement in recovery support and subjective quality of life^{27, 28}



***p < .001

²⁵ Two individuals did not answer items at follow-up about depression and/or anxiety, five individuals had missing data for suicidality at follow-up, and seven individuals had missing data for number of days poor health limited daily activities at follow-up.

²⁶ Thirty individuals had missing data for usual employment status at follow-up, 149 individuals had missing data for homelessness at follow-up because they were living in a recovery center and were not asked the question (n = 128) or they had missing data for other reasons (n = 21), and 16 individuals had missing data for at least one item on the difficulty meeting basic needs scale at follow-up.

²⁷ Fifteen individuals had missing values for mutual help recovery meetings at follow-up.

²⁸ Sixteen had missing values on the rating of quality of life at follow-up.

Significant improvement in multidimensional recovery (n = 1,495)²⁹



Had all positive dimensions of recovery***

0.4% | **52.1%**
Intake | Follow-up

***p < .001

Organizational factors

Percent of staff reporting their organization tracks and widely shares information on (n = 130)



58.5%

Number of clients who enter the program



46.2%

Number of clients who drop out



36.2%

Clients' use of recovery support services



34.6%

Obtain feedback from clients about the program



34.6%

Percent of clients who attend treatment for 30 days or longer



33.1%

Wait time from clients' first contact to assessment

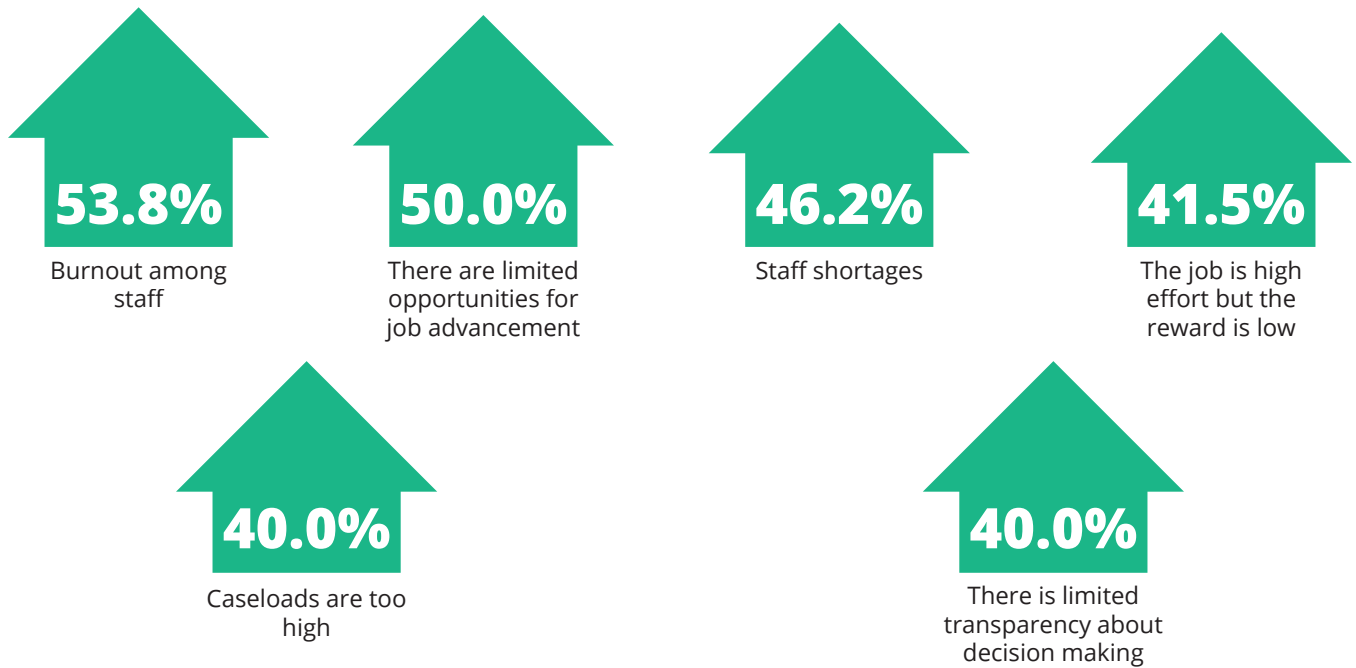


31.5%

Clients' status and progress after leaving the program (systematically)

²⁹ Multidimensional recovery 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 suicidality, fair to excellent health, had at least one person supportive of recovery, and mid-to high-level quality of life. Some of the items used to compute the multidimensional recovery index were added in 2015 and 2016.

The six most frequently staff-reported organizational challenges (n = 130)



Staff members have high job satisfaction (n = 130)



Substance Use Disorder Treatment in Department of Corrections Prison Substance Abuse Program

Profile of Selected Key Performance Indicators

A brief profile of performance indicators for substance use disorder (SUD) treatment in Prison Substance Abuse Program (SAP) is presented in five main categories: (1) barriers to treatment engagement, (2) services provided, (3) clients' perceptions of treatment, (4) client-level outcomes, and (5) organizational factors. Information about barriers to treatment, services provided and organizational factors is from a survey with 12 providers who work with clients with SUD in prison SAP.³⁰ Findings about clients' perceptions of treatment and client-level outcomes is from 331 clients at prison SAP who completed an intake and follow-up survey in a multi-year outcome evaluation, Criminal Justice Kentucky Treatment Outcome Study (CJKTOS).³¹

Barriers to Treatment Engagement

The five most commonly staff-reported structural or organizational barriers to clients staying in SUD program (n = 12)



66.7%

Clients having severe mental health problems



58.3%

Limits imposed by insurance



58.3%

Some clients not taking recovery seriously which makes it difficult for other clients



41.7%

Cost of treatment

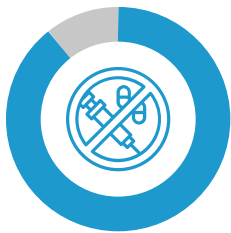


41.7%

Medication for chronic mental or physical problems

Services Provided

The five most commonly staff-reported evidence-based practices the program uses (n = 12)



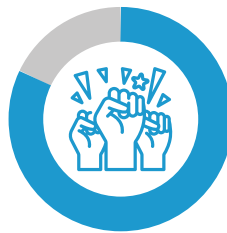
91.7%

Relapse prevention services



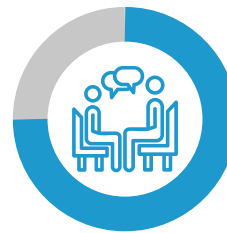
83.3%

Contingency management



83.3%

Motivational interviewing



75.0%

Cognitive behavioral therapy





58.3%

Mindfulness-based relapse prevention

³⁰ Data from 12 staff members in prison SAP was collected in a larger study of providers in Kentucky's CMHCs, Department of Corrections SAP, Recovery Kentucky, and neonatal facilities. Surveys were conducted between February 20, 2023 to April 11, 2023. The survey was completed online, with verification of eligibility, and took an average of 45 minutes.

³¹ Data was collected from 331 clients who entered SUD treatment in prison SAP and completed an intake survey in Criminal Justice Kentucky Treatment Outcome Study (CJKTOS) in FY 2018-2021 and then completed a follow-up survey with the research team about 12 months after release from custody. Details about CJKTOS are available at <https://cdar.uky.edu/cjktos/>

Most commonly and least commonly staff-reported services provided to some or all clients in SUD treatment (n = 12)

	 Most commonly reported	 Least commonly reported
Services		
Individual counseling.....	83.3%	
Medications to treatment addiction.....	66.7%	
Mental health services	41.7%	
Offer medical detoxification.....		16.7%
Offer family counseling.....		16.7%
Resource supports		
Case management or linking to resources for basic needs ...	75.0%	
Housing options as part of the program	66.7%	
Help clients get an ID or birth certificate	41.7%	
Help with civil legal issues		25.0%
Help with criminal legal issues		25.0%
Offer smoking cessation counseling or other supports		16.7%
Discharge planning		
Discharge planning.....	91.7%	
Perform exit assessment for recovery needs	66.7%	
Perform exit assessment with individuals who have dropped out		33.3%

Clients' Perceptions of Treatment

Clients' ratings of treatment at follow-up

Clients had largely favorable perceptions of the treatment program (n = 331)



7.2

Average rating of program
[1 = Worst, 10 = Best]



80.4%

Client considered the program to be successful
[% Yes]



8.6

Respect shown to client
[0 = Low, 10 = high rating for "staff believed in client"]



8.6

Communication between staff and client
[Low = 0, 10 = high rating for "client felt heard" and "client fully discussed issues with staff"]



7.9

Perceived effectiveness of treatment
[Low = 0, 10 = high rating for "the approach and method were a good fit for client," and "client's expectations for the program were met"]

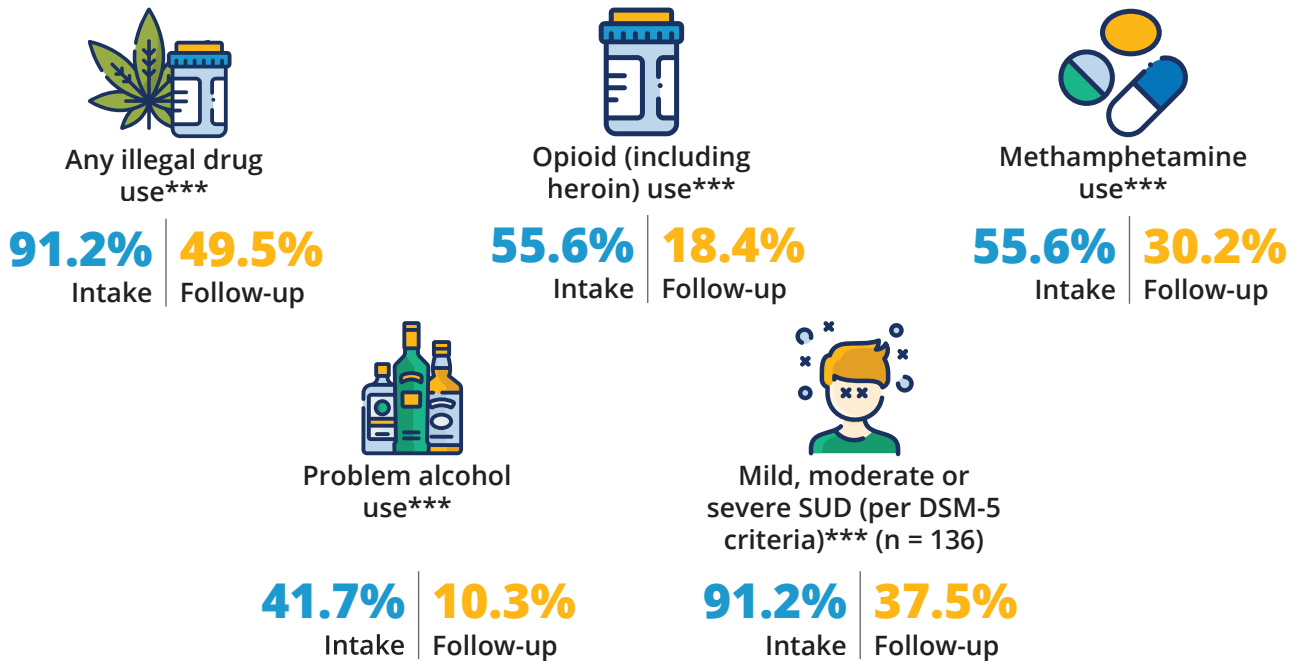
Client-level outcomes

Demographics of SAP clients followed up in CJKTOS

About three-quarters of the 331 clients were male (75.8%), most clients were White (81.9%), and 14.2% were Black/African American. The largest proportion of clients (48.0%) reported their arrest was in a metropolitan county, 42.9% in a non-metropolitan county, and 9.1% in a very rural county. The average age was 37.5 years old.

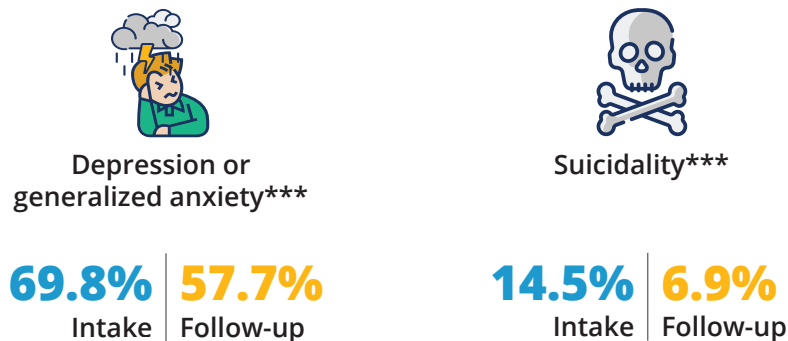
Change in behavioral health from intake to follow-up

Significant reductions in past-12-month substance use (n = 331)³²



***p < .001

Significant reductions in past-12-month mental health problems (n = 331)



***p < .001

³² 195 clients completed a version of the follow-up survey before implementation of SUD items.

Change in other targeted factors from intake to follow-up

Significant improvements in employment and criminal justice system involvement (n = 331)



Employed full-time or part-time**

64.9% | **75.0%**
Intake | Follow-up



Living in stable housing

84.6% | **87.0%**
Intake | Follow-up



Arrest or incarcerated^a

100% | **36.0%**
Intake | Follow-up

**p < .01

a—Statistical significance cannot be calculated due to all individuals being incarcerated at time of program entry.

Significant improvement in recovery support (n = 331)



Attended mutual help recovery group meetings

24.5% | **30.5%**
Intake | Follow-up



Had contact with family or friends who were supportive of recovery***

75.4% | **92.1%**
Intake | Follow-up

***p < .001

Improvement in multidimensional recovery (n = 136)³³



Had all positive dimensions of recovery

0.0% | **33.1%**
Intake | Follow-up

³³ Statistical significance cannot be calculated due to no participants at baseline endorsing all dimensions of recovery; this is due to all individuals being incarcerated at time of program entry. Multidimensional recovery is based on 7 items, including: no SUD, employed at least part-time or in school, stably housed, no arrest or incarceration, no suicidality, had recent contact with friends or family who were supportive of recovery, and reported moderately or very good self-efficacy for sobriety. SUD items were not added to follow-up until 2019.

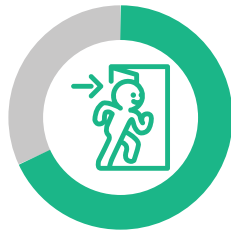
Organizational factors

Percent of staff reporting their organization tracks and widely shares information on (n = 12)



75.0%

Number of clients who drop out



66.7%

Number of clients who enter the program



58.3%

Wait time from clients' first contact to assessment



41.7%

Clients' use of recovery support services



33.3%

Obtain feedback from clients about the program



33.3%

Percent of clients who attend treatment for 30 days or longer



25.0%

Clients' status and progress after leaving the program (systematically)

The five most frequently staff-reported organizational challenges (n = 12)



83.3%

Caseloads are too high



75.0%

Staff shortages



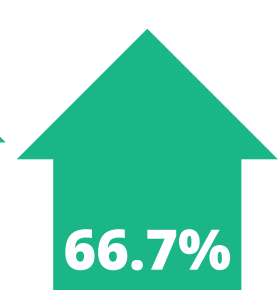
75.0%

Lack of coordination with other community organizations



75.0%

Not enough time for clients



66.7%

Location problems (e.g. not enough space, too far away from other services)

Staff members have moderately high job satisfaction (n = 12)



3.8

Average job satisfaction of staff members
[1 = lowest, 5 = highest]

Appendix B. Secret Shopper Overall Results for CMHCs and Prenatal Programs

CMHC Overall Results

BUSINESS HOURS SCENARIOS n = 43



43

Spoke with a staff person



38

Scenarios where an appointment was made



12.2

Average minutes spent on phone
(Range 3-34 minutes)



12.6

Average days to first appointment
(Range 1-79 days)



29

Calls consumer had to disclose pregnancy, incarceration, or opioid/injection drug use



5

Number of appointments changed after disclosure of pregnancy, incarceration, or opioid/injection drug use

CALLS STAFF PERSON ASKED ABOUT:

	SCENARIOS
Pregnancy	18
Incarceration	14
Opioid or injecting drug use	27
Type of program or treatment preference	7
Scheduling preferences	21
Travel distance or transportation	2
Resource needs other than payment or transportation (e.g., housing, cell phones)	1
Screening (other than pregnancy, incarceration, or opioid/injection drug use)	28

INFORMATION OFFERED



10

Information or services to support recovery while waiting for an appointment (e.g., crisis line)



3

Alternate treatment provider

AFTER BUSINESS HOURS SCENARIOS n = 28



7

Spoke with a staff person



3

Scenarios where an appointment was made



2

Consumer was told to call back for an appointment



8

Consumer had an option to leave a message on voicemail

AVERAGE OVERALL RATING



7.6

1 = Worst to 10 = Best
(friendliness, professionalism, and caring)

Prenatal Program Overall Results

BUSINESS HOURS SCENARIOS n = 12



12

Spoke with a staff person



12

Scenarios where an appointment was made



20.1

Average minutes spent on phone
(Range 6-28 minutes)



1.4

Average days to first appointment
(Range 0-5 days)



3

Calls consumer had to disclose pregnancy, incarceration, or opioid/injection drug use



0

Number of appointments changed after disclosure of pregnancy, incarceration, or opioid/injection drug use

CALLS STAFF PERSON ASKED ABOUT:

Pregnancy	11
Incarceration	8
Opioids or injecting drug use	11
Type of program or treatment preference	5
Scheduling preferences	9
Travel distance or transportation	8
Resource needs other than payment or transportation (e.g., housing, cell phones)	4
Screening (other than pregnancy, recent incarceration, or IV/opioid drug use)	12
Prenatal care	6
Other needed pregnancy-related services	1

SCENARIOS

INFORMATION OFFERED



4

Information or services to support recovery while waiting for an appointment mentioned (e.g., crisis line)



1

Alternate treatment provider

AFTER BUSINESS HOURS SCENARIOS n = 8



2

Spoke with a staff person



0

Scenarios where an appointment was made



7

Consumer was told to call back for an appointment



8

Consumer had an option to leave a message on voicemail

AVERAGE OVERALL RATING



8.7

1 = Worst to 10 = Best
(friendliness, professionalism, and caring)