Findings from the Recovery Kentucky Outcome Study

2019 Findings at a Glance
Introduction

Recovery Kentucky was created to help Kentuckians recover from substance abuse, which often leads to chronic homelessness. There are currently 18 Recovery Kentucky centers across the Commonwealth, providing housing and recovery services for up to 2,200 persons simultaneously. Recovery Kentucky is a joint effort by the Kentucky Department for Local Government (DLG), the Department of Corrections, and Kentucky Housing Corporation. Local governments and communities at each Recovery Kentucky center location have also contributed greatly to making these centers a reality. The overall program is composed of 4 main components through which clients advance:

The Behavioral Health Outcome Studies team at the University of Kentucky Center on Drug and Alcohol Research (UK CDAR) independently conducts the Recovery Center Outcome Study (RCOS) which is an annual outcome evaluation that includes 17 of the Recovery Kentucky centers that participated in RCOS this fiscal year. Recovery center staff conduct an intake interview when clients enter Phase I after completing SOS and MT 1 and 2 to assess behaviors and problems clients had prior to entering the recovery center. Follow-up interviews are then conducted over the telephone by an interviewer at UK CDAR with eligible, consenting RCOS clients 12 months after Phase 1 entry. A random sample of eligible clients, stratified by target month (based on the intake month), gender, and Department of Corrections (DOC) referral into the program, was selected. Client responses are kept confidential to help facilitate the honest evaluation of client outcomes and program services.

This Findings at a Glance report summarizes outcomes for 280 men and women who participated in a Recovery Kentucky program, completed a Phase 1 intake interview between July 2016 and June 2017 and a follow-up interview between July 2017 and June 2018. At intake, most clients included in this report were White (91%), not currently married or cohabiting (75%), predominately female (53%) and, on average, 33 years old.

1 For more information about Recovery Kentucky, contact KHC’s Mike Townsend toll-free in Kentucky at 800-633-8896 or 502-564-7630, extension 715; TTY711; or email MTownsend@kyhousing.org.

2 In FY 2017, there were 17 Recovery Kentucky programs.
Factors Examined at Intake and Follow-up

**Past-6-month substance use**[^2]

<table>
<thead>
<tr>
<th>Substance Use</th>
<th>At Intake</th>
<th>At Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REPORTED ANY ILLEGAL DRUG USE</strong>*</td>
<td>92%</td>
<td>10%</td>
</tr>
<tr>
<td><strong>REPORTED OPIOID USE</strong>*[^3]</td>
<td>68%</td>
<td>4%</td>
</tr>
<tr>
<td><strong>REPORTED HEROIN USE</strong>*</td>
<td>43%</td>
<td>4%</td>
</tr>
<tr>
<td><strong>REPORTED STIMULANT USE</strong>*[^4]</td>
<td>50%</td>
<td>3%</td>
</tr>
</tbody>
</table>

[^2]: Fifty-four individuals were not included in the analysis of change in substance use from the 6 months before entering the recovery center to the 6 months before follow-up because they reported being incarcerated the entire period measured at intake (n = 51) or they had missing data on the number of days incarcerated at follow-up (n = 3).

[^3]: Misuse of opioids other than heroin, including prescription opiates, methadone, and buprenorphine-naloxone.

[^4]: Amphetamine, methamphetamine, ecstasy, Ritalin.

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**How much has opioid and methamphetamine use changed over time?**

This intake trend analysis examines the percent of RCOS clients who reported misusing prescription opiates/opioids, non-prescribed methadone, non-prescribed buprenorphine-naloxone (bup-nx), heroin, and methamphetamine in the 6 months before entering the program from FY 2010 to FY 2017.

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<table>
<thead>
<tr>
<th>FY</th>
<th>Prescription Opiates/Opioids</th>
<th>Methamphetamine</th>
<th>Heroin</th>
<th>Buprenorphine-Naloxone</th>
<th>Methadone</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY2010</td>
<td>60%</td>
<td>35%</td>
<td>15%</td>
<td>20%</td>
<td>5%</td>
</tr>
<tr>
<td>FY2011</td>
<td>50%</td>
<td>40%</td>
<td>20%</td>
<td>15%</td>
<td>10%</td>
</tr>
<tr>
<td>FY2012</td>
<td>40%</td>
<td>30%</td>
<td>10%</td>
<td>10%</td>
<td>5%</td>
</tr>
<tr>
<td>FY2013</td>
<td>30%</td>
<td>20%</td>
<td>5%</td>
<td>5%</td>
<td>2%</td>
</tr>
<tr>
<td>FY2014</td>
<td>20%</td>
<td>10%</td>
<td>3%</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>FY2015</td>
<td>10%</td>
<td>5%</td>
<td>2%</td>
<td>2%</td>
<td>1%</td>
</tr>
<tr>
<td>FY2016</td>
<td>5%</td>
<td>2%</td>
<td>1%</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>FY2017</td>
<td>0%</td>
<td>1%</td>
<td>0%</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Substance Use</th>
<th>At Intake</th>
<th>At Follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>REPORTED ANY ALCOHOL USE</strong>*[^3]</td>
<td>56%</td>
<td>8%</td>
</tr>
<tr>
<td><strong>REPORTED ALCOHOL INTOXICATION</strong>*[^3]</td>
<td>52%</td>
<td>5%</td>
</tr>
<tr>
<td><strong>REPORTED BINGE DRINKING</strong>*[^3]</td>
<td>48%</td>
<td>5%</td>
</tr>
</tbody>
</table>

[^3]: Misuse of opioids other than heroin, including prescription opiates, methadone, and buprenorphine-naloxone.
Past-6-month mental health

**MET STUDY CRITERIA FOR DEPRESSION***
- At intake: 72%
- At follow-up: 13%

**MET STUDY CRITERIA FOR ANXIETY***
- At intake: 76%
- At follow-up: 16%

**MET STUDY CRITERIA FOR COMORBID DEPRESSION AND ANXIETY***
- At intake: 64%
- At follow-up: 8%

**REPORTED SUICIDAL IDEATION AND/OR ATTEMPTS***
- At intake: 36%
- At follow-up: 3%

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**Trends in depression and/or generalized anxiety**

The number of clients meeting criteria for depression or generalized anxiety in the 6 months before entering the recovery center has fluctuated from a little less than three-fourths to 87% over the past five fiscal years. Each year there has been a significant decrease from intake to follow-up in the number of clients reporting either depression or generalized anxiety – with the lowest percentage at follow-up in FY 2015 and the highest in FY 2017.

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**Past-30-day physical health**

**AVERAGE NUMBER OF DAYS PHYSICAL HEALTH WAS NOT GOOD***
- At intake: 9.6
- At follow-up: 1.3

**AVERAGE NUMBER OF DAYS MENTAL HEALTH WAS NOT GOOD***
- At intake: 19.6
- At follow-up: 2.4

**REPORTED CHRONIC PAIN***
- At intake: 24%
- At follow-up: 9%

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*Past-6-month measure.
Past-6-month economic indicators

**Employed at least one month***

- At intake: 48%
- At follow-up: 82%

**Gender wage gap**

At follow-up, employed women made only $0.79 for every dollar employed men made.

**Trends in employment by gender**

Since FY 2011, the disparity in employment between men and women in the RCOS follow-up sample has been documented.

**Current homelessness***

- At intake: 38%
- At follow-up: 5%

**Reported difficulty meeting basic living needs***

- At intake: 47%
- At follow-up: 17%

**Reported difficulty meeting health care needs***

- At intake: 26%
- At follow-up: 7%
Trends in self-reported homelessness

In the past 5 fiscal years, the number of people reporting homelessness at intake has increased slightly and the number of people reporting homelessness at follow-up has decreased.

Past-6-month criminal justice involvement

<table>
<thead>
<tr>
<th>REPORTED ANY ARREST***</th>
<th>REPORTED BEING INCARCERATED***</th>
<th>REPORTED CRIMINAL JUSTICE SUPERVISION***</th>
</tr>
</thead>
<tbody>
<tr>
<td>58% at intake</td>
<td>76% at intake</td>
<td>66% at intake</td>
</tr>
<tr>
<td>8% at follow-up</td>
<td>13% at follow-up</td>
<td>58% at follow-up</td>
</tr>
</tbody>
</table>

Trends in arrests

Over the past 5 years, over half of RCOS clients reported being arrested at least once in the past 6 months. At follow-up, significantly fewer clients reported an arrest in the past 6 months.
Past-6-month global functioning index

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

Return on investment in recovery center services

Estimates of the cost per drug user and alcohol user were applied to the sample to examine the total costs of drug and alcohol abuse to society in relation to expenditures on the Recovery Kentucky program. The cost savings analysis suggests that for every dollar invested in recovery services there was an estimated $2.56 return in avoided costs (i.e., costs to society that would have been expected given the costs associated with drug and alcohol use).

Conclusion

Overall, Recovery Kentucky program clients made significant strides in all of the targeted areas and have much more support for their recovery after participating in program services. In addition, the Recovery Kentucky Program saved taxpayer dollars through avoided costs to society or costs that would have been expected based on the rates of drug and alcohol use.

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6 It is important to keep in mind that the RCOS sample includes only clients who advanced to Phase 1 after completing the SOS and Motivational Tracks and who agreed to be contacted for the follow-up survey 12 months after entering Phase 1.