



cumberland
heights



2024

ANNUAL OUTCOMES REPORT



**ADOLESCENT
RECOVERY**
of cumberland heights



**STILL
WATERS**
of cumberland heights



**RESEARCH
INSTITUTE**
of cumberland heights

TABLE OF CONTENTS

About Us.....	3
Measurement Based Care.....	4
Our Treatments.....	5
Demographic Characteristics.....	6
Treatment Characteristics.....	7
Summary of Treatment Outcomes.....	8
Outcomes: Readmission.....	9
Progress Monitoring.....	10
References.....	14



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RESEARCH INSTITUTE
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ABOUT US

Founded in 2018, the Cumberland Heights Research Institute has revolutionized our approach to patient care. Through the seamless integration of technology, data science, and research across our programs, we have increased our capacity to optimize treatment, educate the public, and engage more effectively with external stakeholders.

The Research Institute at Cumberland Heights Foundation is proud to present our 7th Annual Outcomes Report. We believe this report underscores our commitment to accurately measuring and transparently reporting on our program's effectiveness. Cumberland Heights Foundation's investment in Measurement-Based Care and research sets us apart from many other treatment facilities. We believe that individuals seeking treatment deserve clear, accessible information that reflects the true impact of care. The findings presented in this report demonstrate our dedication to providing high-quality services that foster lasting change in the lives of those we serve. These advances reflect our continued commitment to monitoring and refining patient care, ensuring that treatment remains effective and responsive to evolving needs. Key findings to date include:



On average, patients reported improvements in symptoms during treatment and throughout the first-year post-discharge.



Patients who engaged in longer treatment periods were more likely to have lower readmission rates.

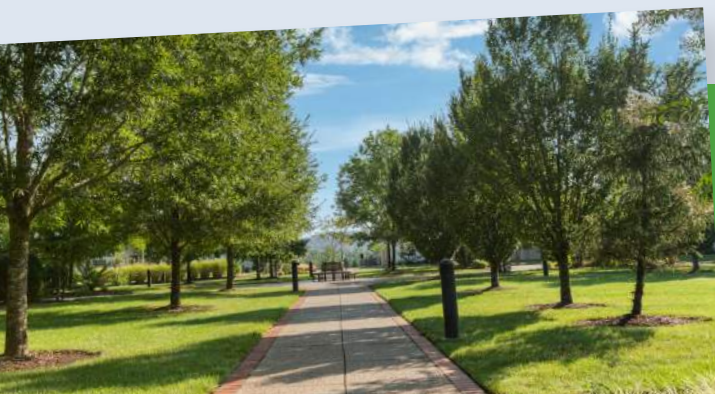
Additionally, the following partners have contributed heavily to our ongoing success. Our collaboration with NAATP's Foundation for Recovery Science and Education's (FoRSE) Addiction Treatment Outcomes Program strengthens our commitment to advancing addiction research and remaining at the forefront of addiction science. At the heart of our efforts is a deep motivation to help those suffering from substance use disorder. We believe that our research not only improves our treatments but also empowers our patients and contributes to the broader field of addiction treatment. We extend our gratitude to the patients, staff, and community stakeholders who continue to support this important work. Together, we remain committed to fighting the good fight.

Respectfully,

Nick Hayes, PhD,
Chief Science Officer

Susan Marcotte, PhD,
Research Associate

Corianne Johnson, MPH,
Research Associate



JOIN US AND HELP CREATE CHANGE

There are many ways to get involved! Partner with our research staff, apply for an internship, or become a donor. There is more than enough room for everyone to get involved.

MEASUREMENT BASED CARE

WHY DO WE MEASURE CHANGE?

At Cumberland Heights, we're committed to providing the most effective care possible. That's why we carefully track progress throughout the treatment journey. Think of it like a roadmap – we need to know where we are to figure out the best way forward.

Measuring progress helps us:

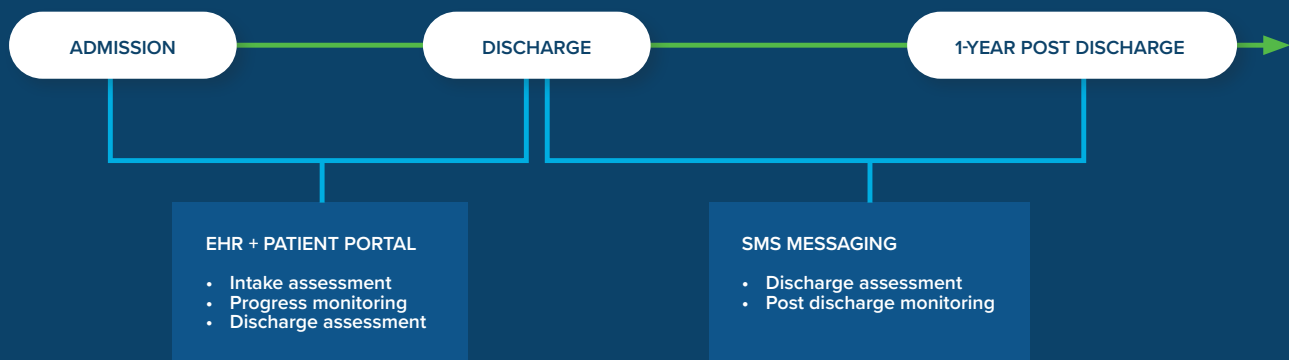
- ✓ **See what's working:** By tracking changes in well-being, we can identify which treatments are making the biggest difference.
- ✓ **Catch potential setbacks early:** Regular check-ins help identify any challenges and make adjustments before they become larger problems.
- ✓ **Set personalized goals:** Progress data helps tailor treatment plans to individual needs and aspirations.
- ✓ **Improve outcomes:** Our goal is to empower individuals to achieve lasting recovery and a healthier life.

We use a system called Measurement-Based Care (MBC). These practices can be simply described as using data to guide patient care. We believe this approach is essential for providing the best possible support as individuals navigate their path to recovery.

HOW DO WE COLLECT DATA?

To best serve our patients, we collect information in the following ways.

- ✓ **Electronic Health Record (EHR) and Patient Portal:** For items such as demographics, medical history, diagnoses, and treatment data.
- ✓ **Patient Portal:** To track progress during treatment.
- ✓ **SMS messaging:** For follow-up assessments post-discharge. This information helps us to provide the best care possible.



OUR TREATMENTS

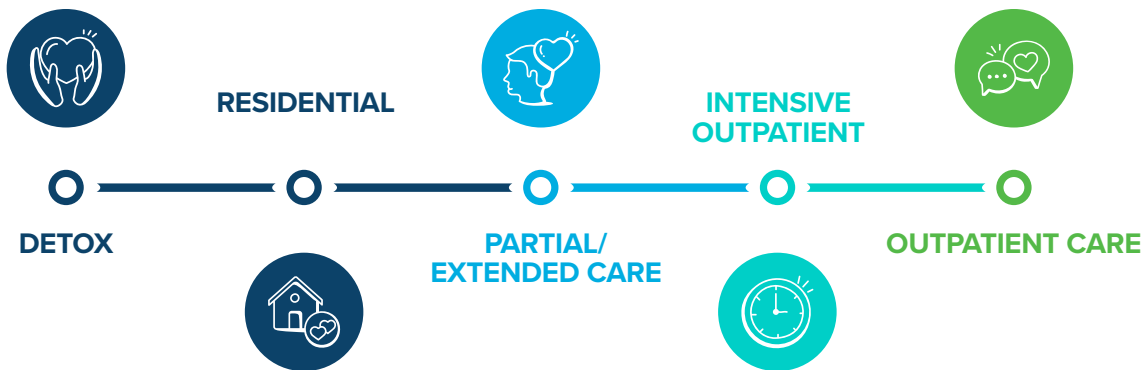
At Cumberland Heights Foundation, our teams strive to provide the best treatments to our patients and their families. We accomplish that goal through the application of Evidence Based Practices (EBPs). Our multidisciplinary treatment teams collaborate to effectively assess each patient, create robust treatment plans of intervention, and help to support the development of the skills needed to effectively engage in recovery.



Evidence Based Practices (EBPs) we use:

- ✓ Motivational Interviewing (MI)
- ✓ 12 Step Facilitation (TSF)
- ✓ Cognitive Behavioral Therapy (CBT)
- ✓ Trauma Stabilization Therapies (TST)
- ✓ Dialectical Behavior Therapy (DBT)
- ✓ Medication-Assisted Treatment (MAT)

Levels of Patient Care



DEMOGRAPHIC CHARACTERISTICS



Patients Served in 2024
 Total: 2,285 Male: 1,665 Female: 619
Heterosexual Sexual Orientation
 Male: 95% Female: 85%

	Total	Male	Female
Average Age	41 ± 13	40 ± 12	42 ± 13
Age Range	18-82	18-75	18-82

Marital Status



Male Marital Status



- Single: 50%
- Married: 35%
- Divorced/Seperated/Widowed: 13%
- Other: 2%

Female Marital Status



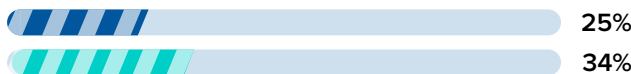
- Single: 41%
- Married: 37%
- Divorced/Seperated/Widowed: 20%
- Other: 2%

Employment Status

Full Time (57%) ● Male ● Female



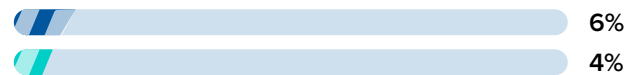
Unemployed/Disabled (27%) ● Male ● Female



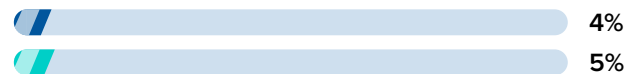
Student (3%) ● Male ● Female



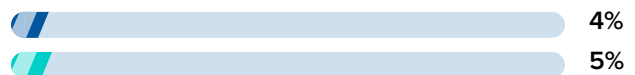
Self Employed (5%) ● Male ● Female



Retired (4%) ● Male ● Female

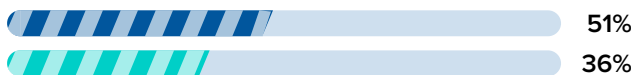


Part Time (3%) ● Male ● Female

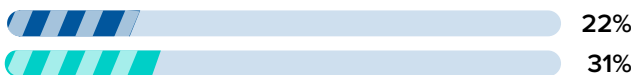


Education

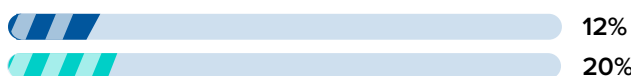
High School or GED (47%) ● Male ● Female



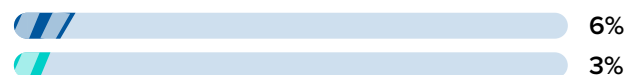
Bachelors (25%) ● Male ● Female



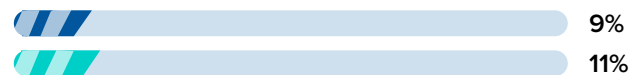
Vocational/Associate (14%) ● Male ● Female



No High School or GED (5%) ● Male ● Female



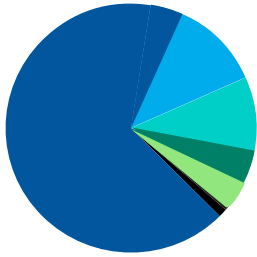
Post Grad Degree (10%) ● Male ● Female



*With the exception of percentages, all values shown are mean +/- standard deviation

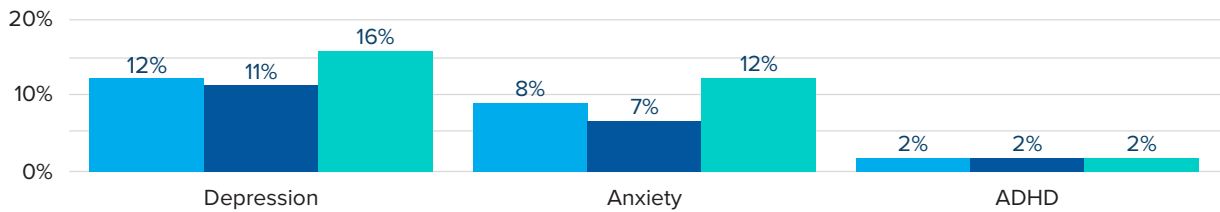
TREATMENT CHARACTERISTICS

Primary SUD Diagnosis



- **Alcohol: 68%**
M: 67% F: 70%
- **Opioid: 16%**
M: 17% F: 14%
- **Stimulant: 11%**
M: 11% F: 11%
- **Cannabis: 2%**
M: 2% F: 2%
- **Other: 2%**
M: 2% F: 1%
- **Sedative/Hypnotic/Anxiolytic: 1%**
M: 1% F: 2%

Co-Occurring Diagnosis



Average Length of Stay



Total: 36 ± 28

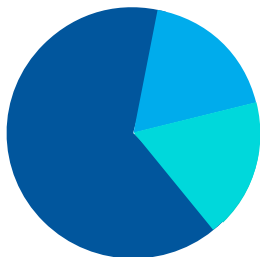


Male: 37 ± 28



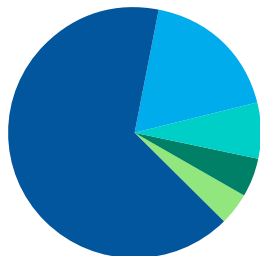
Female: 34 ± 26

Treatment Journey



- **Residential: 59%**
M: 60% F: 56%
- **Residential + Intensive Outpatient Program: 20%**
M: 21% F: 18%
- **Intensive Outpatient Program: 20%**
M: 19% F: 25%

Discharge Type



- **Regular: 62%**
M: 67% F: 65%
- **Against Medical Advice: 19%**
M: 19% F: 18%
- **Administrative: 7%**
M: 6% F: 7%
- **Behavioral: 4%**
M: 4% F: 6%
- **Medical: 4%**
M: 4% F: 4%

*With the exception of percentages, all values shown are mean ± standard deviation

SUMMARY OF TREATMENT OUTCOMES

Cumberland Heights Foundation has been collecting treatment and post-discharge outcomes from patients for over five years. Today, our post-discharge measurement program is supported through our Recovery Care Advocates (RCA) program and our Outcomes Program. Founded in 2017, the RCA program consists of Peer Recovery Support Specialists (PRSSs) who are trained to provide support for individuals who are early in recovery from Substance Use Disorder. Our RCAs assist our patients with peer support, identification of positive recovery resources, and accountability away from maladaptive behaviors associated with addiction.

In 2024, 2,285 patients were surveyed at regular intervals throughout treatment and for one-year post discharge. We utilize approximately 25 standardized assessments across all of our programs. For this report, we present data from:

Standardized Assessments:



Depression (The Patient Health Questionnaire (PHQ-9))⁴



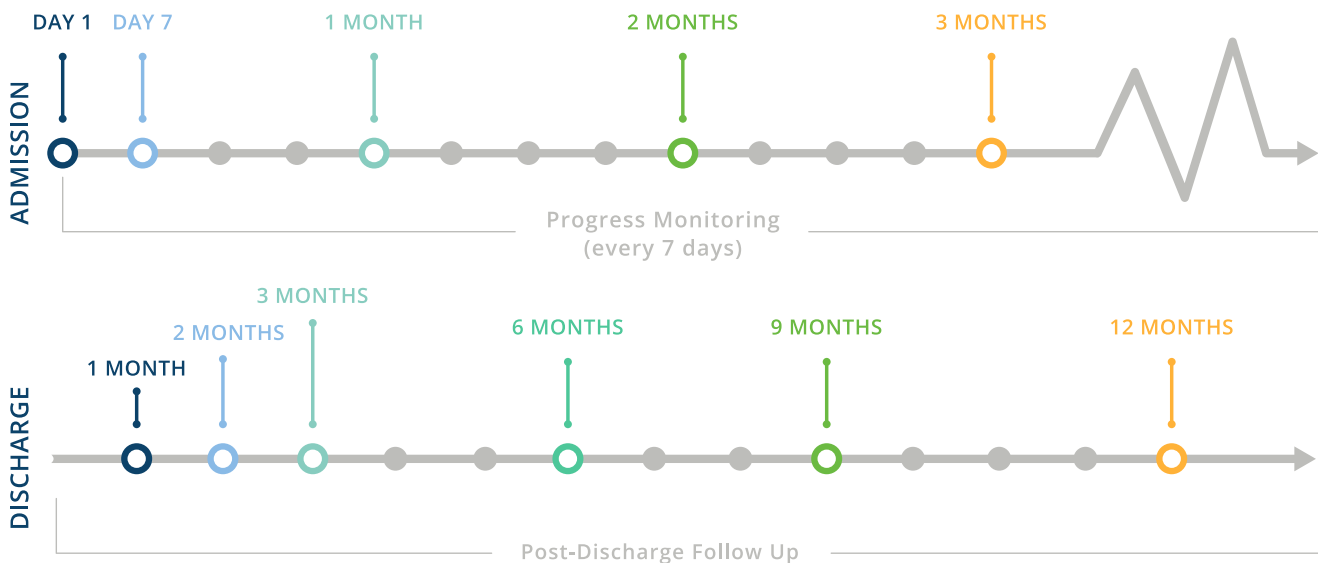
Craving (The Craving Scale)¹⁰



Anxiety (Generalized Anxiety Disorder Scale (GAD-7))⁶



Recovery Capital (The Brief Assessment of Recovery Capital (BARC-10))¹⁰

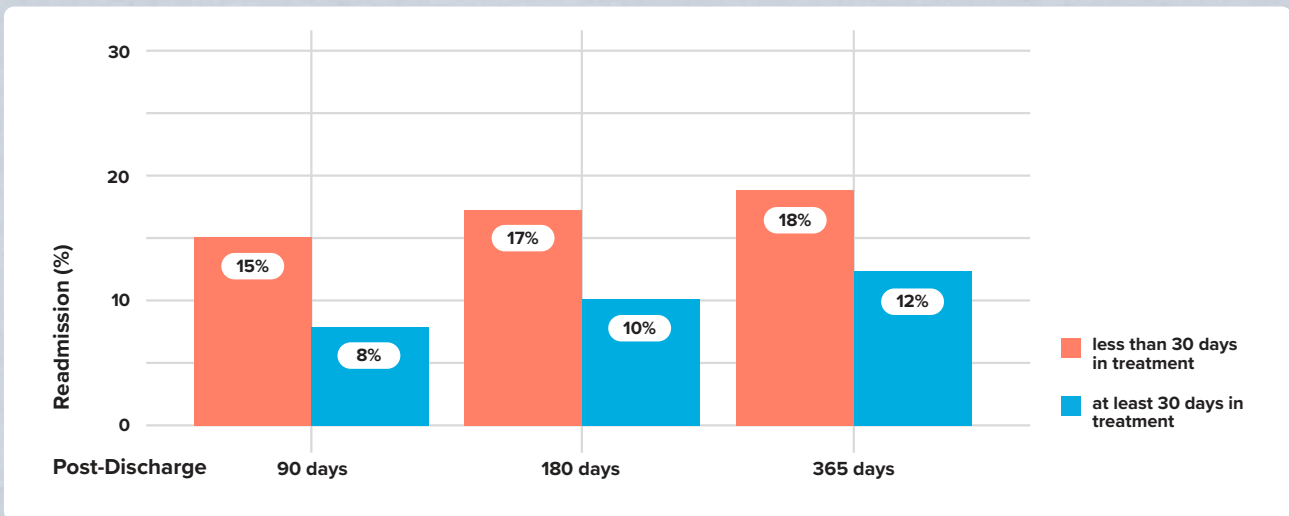


OUTCOMES: READMISSION

POSITIVE IMPACT OF TREATMENT ON READMISSION RATES



(Decreased Readmission) Patients who engage for longer periods of time in treatment were observed to have lower readmission rates.



Note: National readmission rates among those seeking treatment for addiction range between 20-25%¹¹. The above data highlight readmission rates for patients served at Cumberland Heights Foundation from 2020-2024.



Compared to spending less than 30 days in treatment, spending at least 30 days was associated with a 40% reduced risk of being readmitted within one year (RR = 0.598 95% CI [0.527, 0.678], $p < 0.001$).

PROGRESS MONITORING: DEPRESSION

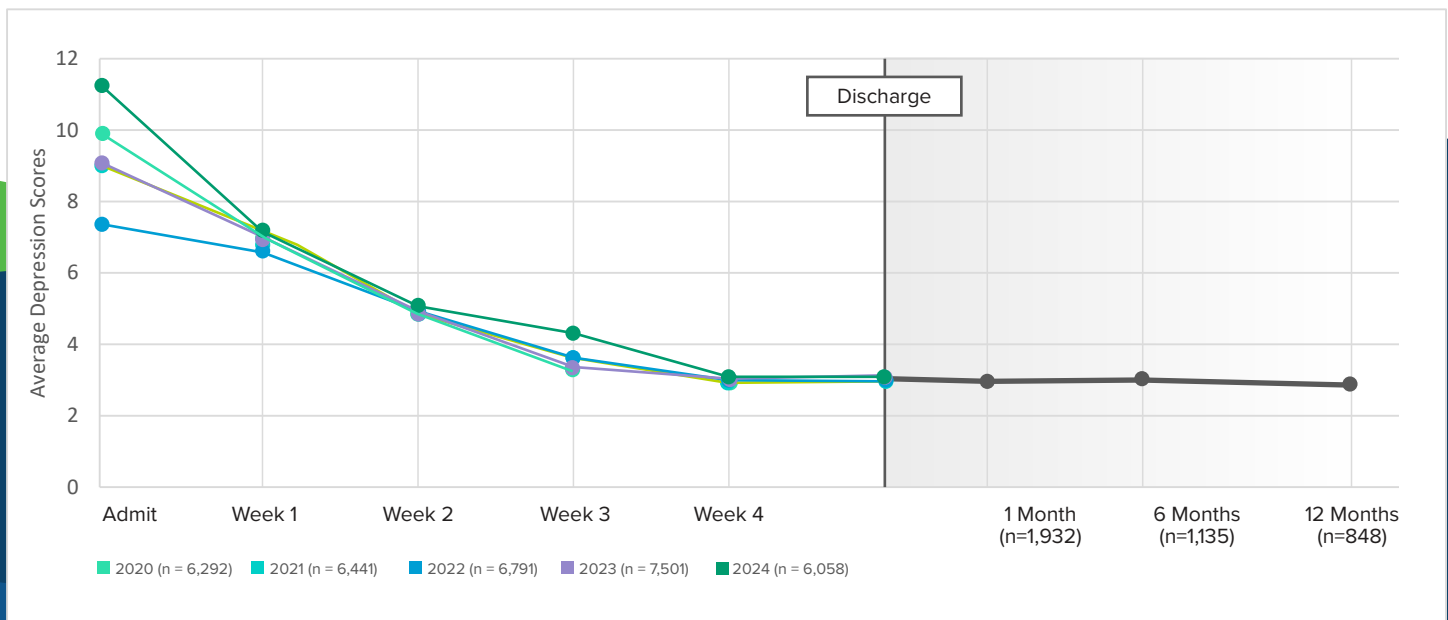
Instrument Description

The Patient Health Questionnaire (PHQ-9) is a standardized assessment used to measure patient levels of depression.⁴ The following represents an example of an indicator taken from the PHQ-9: “Little interest or pleasure in doing things”.⁵ The PHQ-9 is a continuous variable, with scores ranging from (0 – 27), where higher scores indicate elevated levels of depressive symptoms. Scores of 5–9 may indicate mild depression, 10–14 moderate depression, 15–19 moderately severe depression, and 20–27 severe depression.

Reduction in Depression Symptoms in Patients (five-year comparison)

The figure below displays average PHQ-9 scores across treatment through one year discharge. These data highlight the significant positive effect that our treatments have had on patient outcomes throughout engagement in our clinical programs.

OBSERVED REDUCTION IN DEPRESSION SYMPTOMS



64.2% Decrease in Depression Symptoms across 2020-2024

PROGRESS MONITORING: ANXIETY

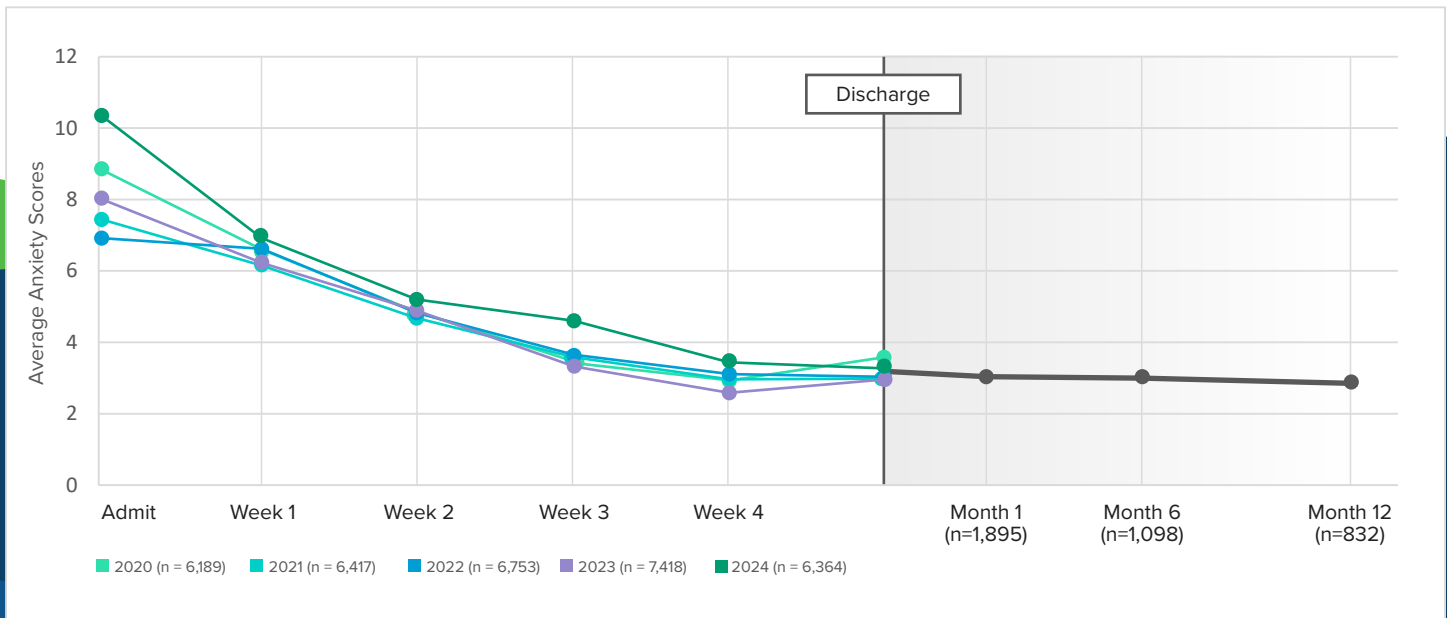
Instrument Description

The Generalized Anxiety Disorder Scale (GAD-7) is a standardized assessment used to measure patient levels of anxiety.⁶ The following represents an example of an indicator taken from the GAD-7: “Feeling nervous, anxious, or on edge”. The GAD-7 is a continuous variable, with scores ranging from (0 – 21), where higher scores indicate elevated levels of anxiety symptoms. Scores of 5–9 may indicate mild anxiety, 10–14 moderate anxiety, 15 and higher severe anxiety.

Reduction in Anxiety Symptoms in Patients (five-year comparison)

The figure below displays average GAD-7 scores across treatment through one year discharge. These data highlight the significant positive effect that our treatments have had on patient outcomes throughout engagement in our clinical programs.

OBSERVED REDUCTION IN ANXIETY SYMPTOMS



60.2% Decrease in Anxiety Symptoms across 2020-2024

PROGRESS MONITORING: CRAVING

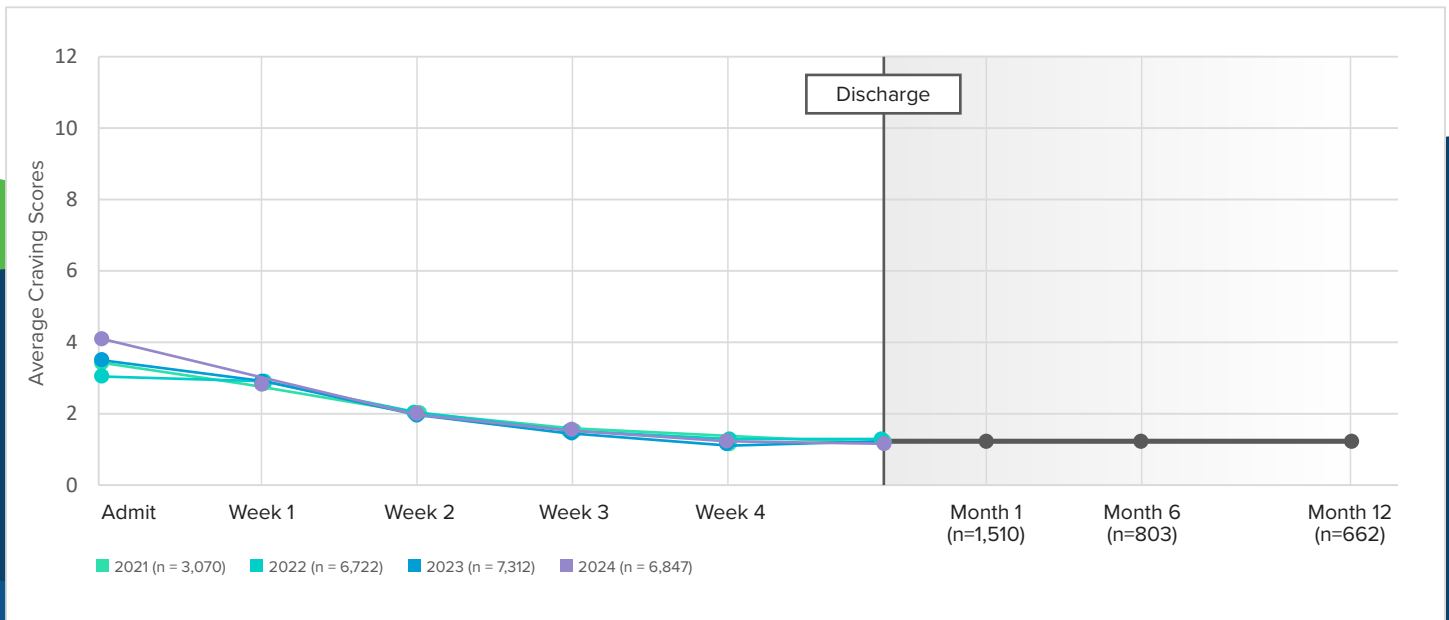
Instrument Description

The Craving Scale is a standardized assessment used to measure craving associated with Substance Use Disorders.⁸ The following represents an example of an indicator taken from the Craving Scale: “Please rate how strong your desire was to use in the past 24 hours”. Each item on the Craving Scale is rated on a scale from (0-9), and the total score is calculated as the average of the three items. Higher scores indicate elevated levels of craving symptoms.

Reduction in Craving Symptoms in Patients (four-year comparison)

These data highlight the significant positive effect that our treatments have had on patient outcomes throughout engagement in our clinical programs.

OBSERVED REDUCTION IN CRAVING SYMPTOMS



63.8% Decrease in Craving Symptoms across 2021-2024

PROGRESS MONITORING: RECOVERY CAPITAL

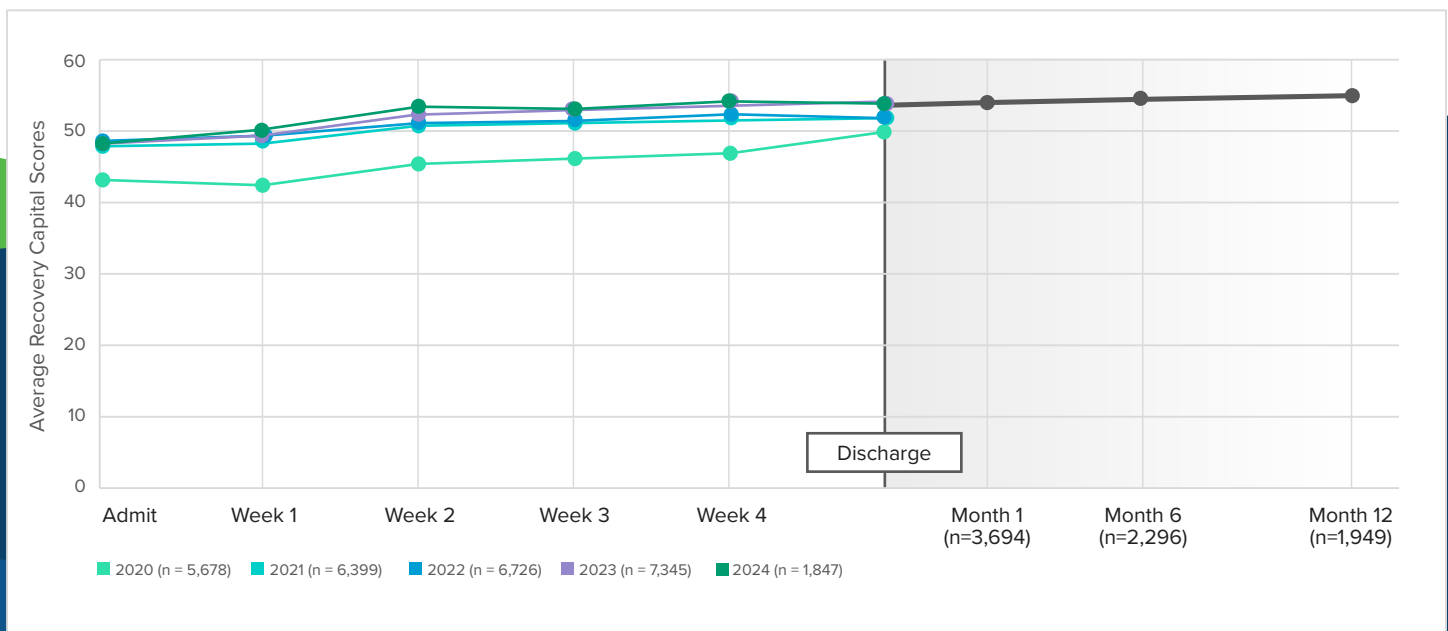
Instrument Description

The Brief Assessment of Recovery Capital (BARC-10) is a standardized assessment used to measure patient levels of recovery capital.¹⁰ Recovery Capital refers to the quantity and quality of internal and external resources that support initiating and maintaining recovery from substance use disorder (SUD). The BARC-10 increases our ability to measure patient success as the measure is associated with “recovery progress that extends beyond mere abstinence”. The BARC-10 is a continuous variable, with scores ranging from (10 – 60), where higher scores indicate higher levels of Recovery Capital resources. Scores of 47 or higher are likely to reach or sustain a year or longer of recovery from substance use disorder.

Increase in Recovery Capital Resources observed in Patients (five-year comparison)

These data highlight the significant positive effect that our treatments have had on patient outcomes throughout engagement in our clinical programs.

OBSERVED INCREASE IN RECOVERY CAPITAL RESOURCES



13.2% Increase in Recovery Capital
Symptoms across 2020-2024

REFERENCES

- ¹ Lambert, M. J., Harmon, C., Slade, K., Whipple, J. L., & Hawkins, E. J. (2005). Providing feedback to psychotherapists on their patients' progress: Clinical results and practice suggestions. *Journal of Clinical Psychology, 61*(2), 165-174.
- ² Scott, K., & Lewis, C. C. (2015). Using measurement-based care to enhance any treatment. *Cognitive and Behavioral Practice, 22*(1), 49-59.
- ³ American Psychological Association (APA) Presidential Task Force on Evidence-Based Practice. (2006). Evidence-based practice in psychology. *American Psychologist, 61*, 271–285.
- ⁴ Löwe, B., Kroenke, K., Herzog, W., & Gräfe, K. (2004). Measuring depression outcome with a brief self-report instrument: sensitivity to change of the Patient Health Questionnaire (PHQ-9). *Journal of Affective Disorders, 81*(1), 61-66.
- ⁵ Spitzer, R. L., Kroenke, K., Williams, J. B., & Patient Health Questionnaire Primary Care Study Group. (1999). Validation and utility of a self-report version of PRIME-MD: the PHQ primary care study. *Journal of the American Medical Association, 282*(18), 1737-1744.
- ⁶ Spitzer, R. L., Kroenke, K., Williams, J. B., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: the GAD-7. *Archives of Internal Medicine in Journal of the American Medical Association, 166*(10), 1092-1097.
- ⁷ Löwe, B., Decker, O., Müller, S., Brähler, E., Schellberg, D., Herzog, W., & Herzberg, P. Y. (2008). Validation and standardization of the Generalized Anxiety Disorder Screener (GAD-7) in the general population. *Medical Care, 46*(3), 266-274.
- ⁸ McHugh, R. K., Trinh, C. D., Griffin, M. L., & Weiss, R. D. (2021). Validation of the craving scale in a large sample of adults with substance use disorders. *Addictive Behaviors, 113*.
- ⁹ Heinz, A. J., Epstein, D. H., Schroeder, J. R., Singleton, E. G., Heishman, S. J., & Preston, K. L. (2006). Heroin and cocaine craving and use during treatment: measurement validation and potential relationships. *Journal of Substance Abuse Treatment, 31*(4), 355-364.
- ¹⁰ Vilsaint, C. L., Kelly, J. F., Bergman, B. G., Groshkova, T., Best, D., & White, W. (2017). Development and validation of a Brief Assessment of Recovery Capital (BARC-10) for alcohol and drug use disorder. *Drug and Alcohol Dependence, 177*, 71-76.
- ¹¹ Morel, D., Kalvin, C. Y., Liu-Ferrara, A., Caceres-Suriel, A. J., Kurtz, S. G., & Tabak, Y. P. (2020). Predicting hospital readmission in patients with mental or substance use disorders: a machine learning approach. *International Journal of Medical Informatics, 139*, 104-136.

1st in Tennessee

As part of our ongoing commitment to quality patient care, Cumberland Heights Foundation sought and received the American Society of Addiction Medicine's (ASAM) certification for Levels 3.7 (Medically Monitored Inpatient Services) and 3.5 (Clinically Managed Residential Services) (the first provider in Tennessee).



ASAM American Society of Addiction Medicine

Cumberland Heights at a Glance



Mission

To transform lives, giving hope and healing to those affected by alcohol or drug addiction.



Locations

Seventeen (17) locations throughout Tennessee



Employees

400 Employees



Patients

On average, treating **2,500** patients every year



Telehealth

Intensive Outpatient and Individual Psychotherapy



Treatments

Detox, Residential, Extended Care, Intensive Outpatient, Outpatient, Family Care, and more.



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