

Report on Recovery:

An Update on the Recovery Journey Project at Homewood Health Centre

March 2021

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Report prepared for
Addiction Medicine Program at Homewood Health Centre
and
Homewood Health Inc.

Suggested citation: Walji, A., Sousa, S., & Costello, J. (2021). *Report on Recovery: An Update on the Recovery Journey Project at Homewood Health Centre – March 2021*. Guelph, ON: Homewood Research Institute.

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Homewood Research Institute (HRI) is a registered Canadian charity dedicated to transforming mental health and addiction treatment through research. We partner with leading scientists, universities, patients and clinicians to improve care, services and outcomes.

For more information about the Recovery Journey Project, please visit:
www.recoveryjourneyproject.com

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PROJECT OVERVIEW

The Recovery Journey Project (RJP) is a research study designed to measure recovery outcomes among people who receive inpatient mental health and addiction (MHA) treatment. This multi-year, longitudinal study is conducted and led by researchers at Homewood Research Institute (HRI). As an independent research organization, HRI works directly with treatment providers to collect data from former patients and clients to better understand the recovery process and inform improvements to MHA treatment.

This research study offers a platform to monitor treatment outcomes continually and generate scientific evidence related to the recovery process. More specifically, data collected can be used to:

- Monitor and evaluate program quality and effectiveness;
- Inform program planning and quality-improvement efforts;
- Generate new knowledge about the recovery process; and,
- Shape future improvements across the MHA system.

The RJP was first launched in the Addiction Medicine Service (AMS) at Homewood Health Centre in 2015. Appendix A provides a brief description of AMS. In the second generation of the project (2018-2021), admission (baseline) and discharge (end of treatment) data were collected electronically as part of routine clinical screening practices using psychometrically valid self-report scales. Upon entry to the program, patients consented to the use of their clinical data for research purposes. After leaving treatment, participants were invited via email to complete a similar series of questionnaires voluntarily and scales at 1-, 3-, 6- and 12-month time points.

Key indicators of recovery were measured over time, including substance use, mental and physical health, occupational performance, social relationships and functioning, and overall quality of life and life satisfaction. Several other measures were collected for exploratory purposes given their expected link to recovery, including therapeutic alliance, craving, physical activity and continuing care involvement.

A key component of the RJP is the generation of outcome reports. These reports compare changes in key recovery outcomes over time using aggregated data. Results in these reports can be used to: (1) understand and continually monitor program outcomes; and, (2) identify and target areas for program improvement.

Two previous reports (July 2017 and August 2019) presented changes in key recovery outcomes for patients who were admitted to AMS between **April 2015 and March 2017**. This report presents changes in key recovery outcomes for people who entered treatment in the AMS between **April 2018 and March 2019** and who completed a survey at admission and 12 months after completing treatment.

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EXECUTIVE SUMMARY

Overall, participants (n=104) reported significant improvements in several recovery-oriented outcomes from admission to 12 months after treatment. The main findings are summarized below:



Recovery focus area: Substance use

- 62% of participants reported having not used any substances in the 12 months after treatment in the Addiction Medicine Service
- The average number of substance use days over a 30 day period decreased significantly from 20 days (prior to treatment) to 5 days (at 12 months after treatment)
- The proportion of participants who indicated strong cravings decreased significantly from 32% at admission to 6% at 12 months after treatment



Recovery focus area: Mental health

- The proportion of participants who reported having good, very good or excellent mental health increased significantly from 38% at admission to 74% 12 months after treatment
- The proportion of participants who reported experiencing moderately severe or severe depression decreased significantly from 43% at admission to 11% at 12 months after treatment
- The proportion of participants who reported experiencing severe anxiety decreased significantly from 40% at admission to 7% 12 months after treatment
- The proportion of participants who reported experiencing clinically significant PTSD symptoms decreased significantly from 44% at admission to 16% at 12 months after treatment



Recovery focus area: Social relationships and functioning

- Significant improvements were found from admission to 12 months after treatment in abilities to meet or fulfill various social roles and responsibilities



Recovery focus area: Physical health

- Higher perceived ratings of physical health and greater participation in physical activity were found from admission to 12 months after treatment, although findings were not statistically significant



Recovery focus area: Quality of life and life satisfaction

- Significant improvements were found from admission to 12 months after treatment in quality of life and several areas of life satisfaction



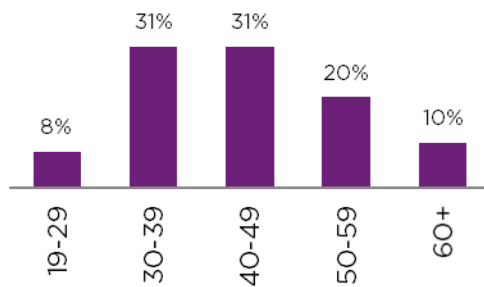
Who did we speak to?

Of the 726 people who entered the AMS between April 26, 2018 and March 31, 2019 and completed treatment, **104** participated in the 12-month survey for the RJP.

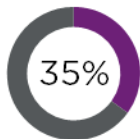
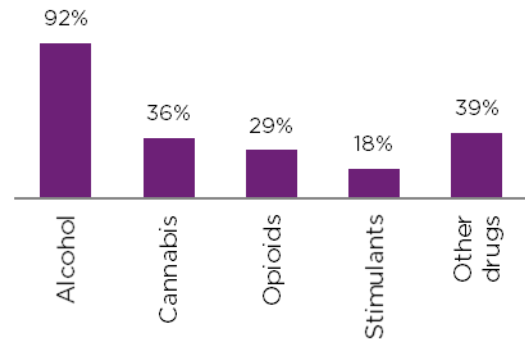
This represents about **14%** of the entire AMS population. As such, this report only represents the recovery outcomes for this 14% and may not be generalizable across everyone.

Note: 20% of participants completed the 12-month survey at the onset of the COVID-19 pandemic (March 31, 2020 to June 7, 2020). No statistical differences were found between those who completed the survey before and during COVID-19.

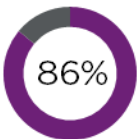
44 was the average age



Substance use at admission



were female



self-identified as white



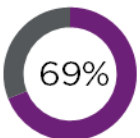
self-identified as heterosexual



completed at least some college or university



were married or partnered



were employed



Substance use

INDICATOR: **CONTINUOUS ABSTINENCE RATE**

62% of participants reported **continuous abstinence from alcohol and drugs** in the 12 months after treatment.

Time point	Sample size*	Continuous abstinence rate
1 month	188	73%
3 months	133	58%
6 months	110	66%
12 months	83	62%

*Sample sizes reflect participants who completed the survey at admission and each of the corresponding time points. Each time point does not necessarily include the same people.

What it is: The percentage of participants who reported not using alcohol or drugs since leaving treatment at 1, 3, 6 and 12 months.

How it was measured: *At follow-up, participants were asked:* Since you left Homewood, about [1, 3, 6, 12] months ago, how often, if at all, did you have any [asked separately]... alcohol, cannabis (prescription or non-prescription), cocaine (any form), illicit stimulants (other than cocaine) and/or prescription stimulants*, prescription sedatives¹, prescription sleep aids¹, any opioids (e.g., heroin or heroin mixed with any drugs) or prescription opioids¹, any hallucinogens, any inhalants, or any other drugs¹.

¹that were not prescribed to you OR that you used for a purpose other than was prescribed/intended (i.e., to get high).

How it was calculated: The number of participants who reported use of any substance since leaving treatment, divided by the number of participants who completed the questionnaire at each time point.

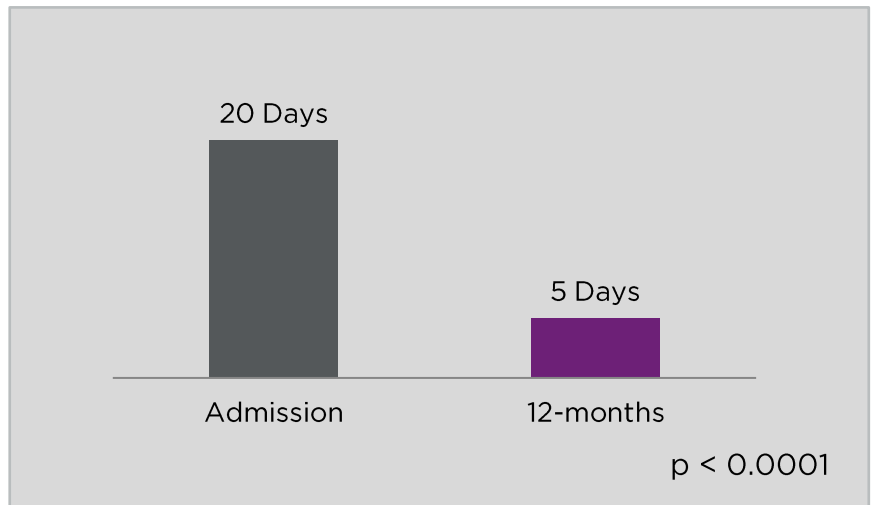
What the data say: The proportion of participants who reported being completely abstinent from alcohol and drugs ranged from 73% at 1 month after treatment to 62% at 12 months.



Substance use

INDICATOR: **NUMBER OF SUBSTANCE USE DAYS**

The average number of **substance use days** in the past 30 days **decreased** from admission to 12 months after treatment.



What it is: The average number of days on which participants used their most frequently used substance in the past 30 days.

How it was measured: *At admission, participants were asked:* During the 90 days before you came to Homewood, on approximately how many days did you have/use [asked separately] ... at least one drink containing alcohol, any cannabis (non-prescription), any forms of cocaine, illicit stimulants, prescription stimulants*, prescription sedatives*, prescription sleep aids*, heroin, codeine products*, oxycodone products*, fentanyl products*, other opioid products*, hallucinogens, inhalants. The number of days used was then divided by three so to compare more directly with the number of days used at follow-up.

12 months after treatment, participants were asked: During the past 30 days, on approximately how many days did you have/use... [Refer to substance list above]

How it was calculated: At admission and 12 months, the substance with the greatest number of days of use was identified as the most frequently used substance at each respective time point. The total number of days participants used their most frequently used substance was averaged across participants.

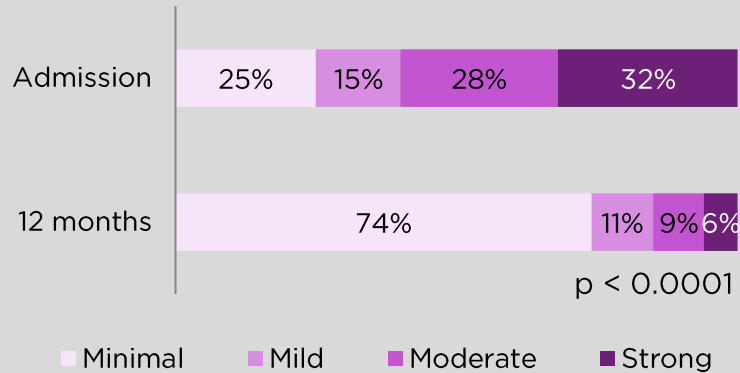
What the data say: The average number of substance use days decreased significantly from admission to 12 months after treatment ($p < 0.0001$).



Substance use

INDICATOR: **CRAVINGS**

6% reported experiencing **strong cravings** 12 months after treatment compared to 32% at admission.



What it is: The proportion of participants who had cravings scores within the minimal (0-9), mild (10-14), moderate (15-20), and strong (21-30) categories on the Aggregated Drug Craving Scale (ADCS).

How it was measured: At admission and 12 months after treatment, participants completed the ADCS. The ADCS is adapted from the Penn Alcohol Craving Scale to measure craving across multiple substances. This ADCS is a 5-item self-rated scale that measures alcohol/drug craving in the past week. Questions ask about the frequency, intensity and duration of thoughts about substance use, ability to resist using alcohol/drugs if they are available, and ratings of overall average cravings (For a list of specific items and response options see:

<https://www.sciencedirect.com/science/article/abs/pii/S0740547220303846>).

Response options range from 0 to 6. A total craving score was calculated by summing the response scores across all five items, ranging from 0 to 30.

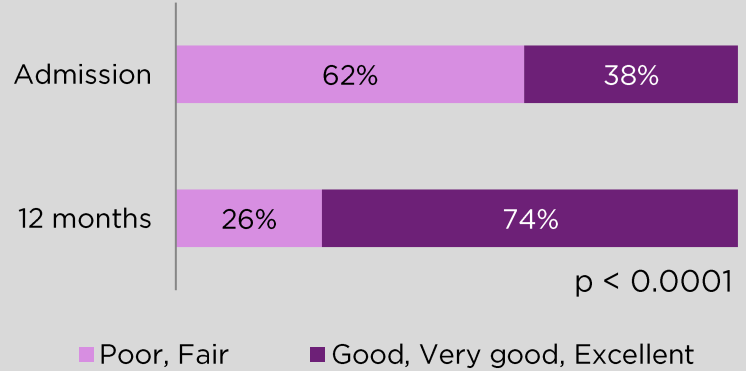
What the data say: The proportion of participants who reported strong cravings decreased significantly from admission to 12 months after treatment ($p < 0.0001$).



Mental health

INDICATOR: **PERCEIVED MENTAL HEALTH STATUS**

74% reported **good, very good** or **excellent mental health** 12 months after treatment compared to 38% at admission.



What it is: The proportion of participants who rated their general mental health as excellent, very good, good, fair, or poor.

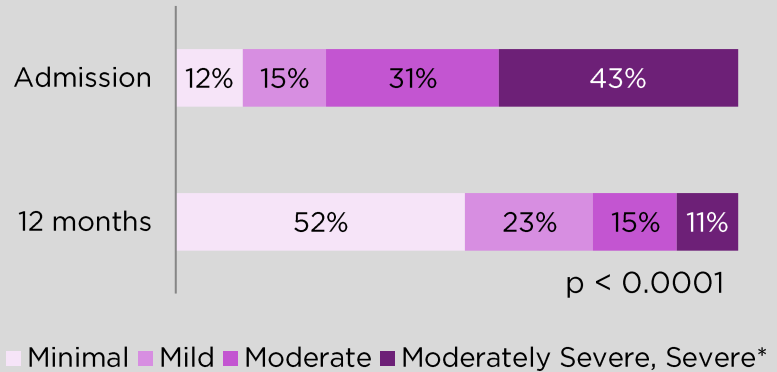
How it was measured: *At admission and 12 months after treatment, participants were asked: In general, would you say your mental health is...? (excellent, good, very good, fair, poor).*

What the data say: The proportion of participants who rated their mental health as excellent, very good or good increased significantly from admission to 12 months after treatment ($p < 0.0001$).



INDICATOR: **DEPRESSION SCORE**

11% reported experiencing **moderately severe** or **severe depression** 12 months after treatment compared to 43% at admission.



What it is: The proportion of participants who had depression scores within the minimal (0-4), mild (5-9), moderate (10-14), moderately severe (15-19) and severe (20-27) categories on the PHQ-9.

How it was measured: At admission and 12 months after treatment, participants completed the 9-item Patient Health Questionnaire (PHQ-9). The PHQ-9 is brief self-assessment tool that can be used to screen for depression and assess severity of depressive symptoms.

The questionnaire asks: Over the past 2 weeks, how often have you been bothered by the following problems... (For list of problems see: https://www.phqscreeners.com/images/sites/g/files/g10060481/f/201412/PHQ-9_English.pdf)

Response options for each question range from “0” (not at all) to “3” (nearly every day). The sum of all responses is calculated for each participant to create a total score, ranging from 0-27.

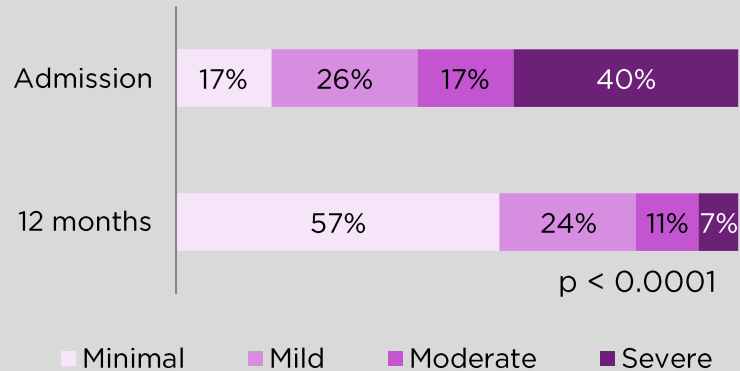
What the data say: The proportion of participants who scored within the moderately severe or severe depression categories decreased significantly from admission to 12 months after treatment (p < 0.0001).

*Categories were combined due to small cell count in the severe category.



INDICATOR: **ANXIETY SCORE**

7% reported experiencing **severe anxiety** 12 months after treatment compared to 40% at admission.



What it is: The proportion of participants who had anxiety scores within the minimal (0-4), mild (5-9), moderate (10-14) and severe (15-21) categories on the GAD-7.

How it was measured: At admission and 12 months after treatment, participants completed the 7-item Generalized Anxiety Disorder (GAD-7) questionnaire. The GAD-7 is a brief self-rated tool that can be used to screen for anxiety and assess severity of anxiety symptoms.

The questionnaire asks: Over the past 2 weeks, how often have you been bothered by the following problems... (For the list of problems see: https://www.phqscreeners.com/images/sites/g/files/g10060481/f/201412/GAD-7_English.pdf)

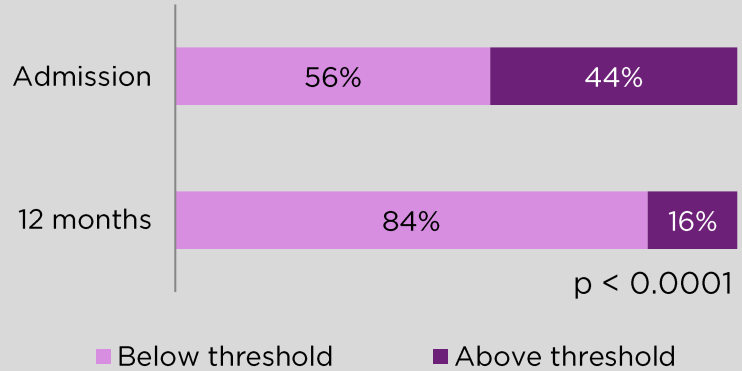
Response options for each question range from “0” (not at all) to “3” (nearly every day). The sum of all responses is calculated for each participant to create a total score, ranging from 0-21.

What the data say: The proportion of participants who scored within the severe anxiety category decreased significantly from admission to 12 months after treatment (p < 0.0001).



INDICATOR: **PTSD SCORE**

16% reported experiencing **clinically significant PTSD symptoms** 12 months after treatment compared to 44% at admission.



What it is: The proportion of participants who had post-traumatic stress disorder (PTSD) scores below the clinically significant threshold (0-37) or above the clinically significant threshold (38-80) on the PCL-5.

How it was measured: At admission and 12 months after treatment, participants completed the 20-item PTSD Checklist for DSM-5 (PCL-5). The PCL-5 is a brief self-rated scale that can be used to screen for PTSD and assess severity of PTSD symptoms.

At admission and 12 months after treatment, the questionnaire asks: Below is a list of problems that people sometimes have in response to a very stressful experience or life event. Keeping in mind the most stressful experience or life event you may have experienced, please read each problem carefully and choose which response best describes how much you have been bothered by that problem in the past 2 weeks. (For the list of problems see: https://www.ptsd.va.gov/professional/assessment/documents/PCL5_Standard_form.PDF)

Response options for each question range from “0” (not at all) to “4” (extremely). The sum of all responses is calculated for each participant to create a total score, ranging from 0-80.

What the data say: The proportion of participants who scored above the clinically significant PTSD threshold decreased significantly from admission to 12 months after treatment (p < 0.0001).



Occupational performance

Due to small sample sizes, occupational performance outcomes are not included in this report.

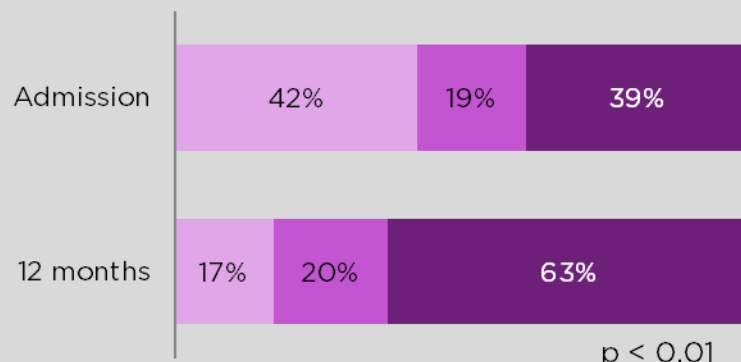


Social relationships and functioning

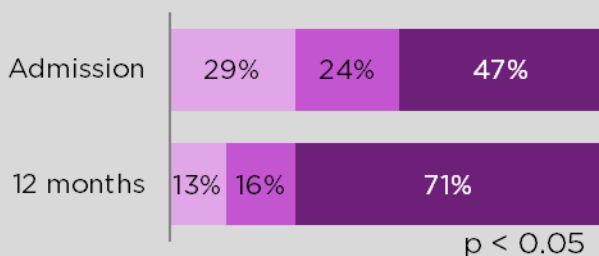
INDICATORS: ABILITIES TO MEET SOCIAL ROLES AND RESPONSIBILITIES

Participants reported **improvements** in their ability to meet **various social roles and responsibilities** 12 months after treatment.

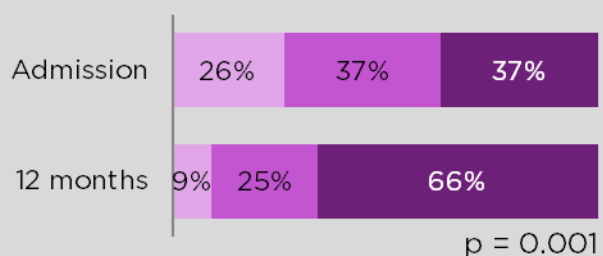
Establish/maintain healthy relationships



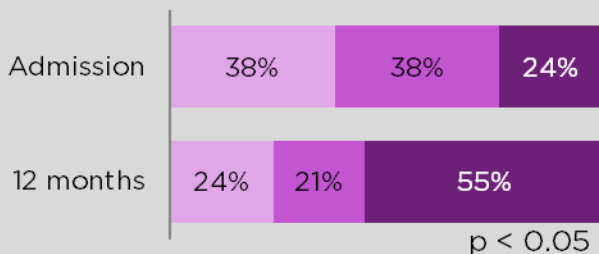
Fulfill role as a parent



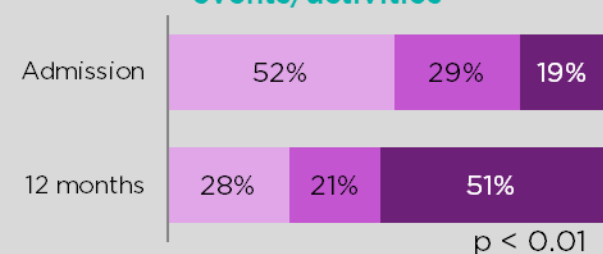
Responsibilities at home



Fulfill role as a spouse/partner



Participate in healthy social events/activities



Not at all, A little Moderately Very much, Extremely

What it is: The percentage of participants whose perceived ability to establish/maintain healthy relationships, fulfill role as a parent, meet responsibilities at home, fulfill role as a spouse/partner and participate in healthy social events/activities was extremely, very much, moderately, a little, or not at all.



Social relationships and functioning

How it was measured: *At admission (during the past 90 days before coming to Homewood) and 12 months after treatment (during the past 30 days), participants were asked: During the past [90/30 days], to what degree to you feel you have been able to...*

- ... participate in social roles and responsibilities?
- ... meet your responsibilities at home?
- ... fulfill your role as a spouse/partner?
- ... fulfill your role as a parent?
- ... establish or maintain healthy relationships with friends, coworkers, etc.?

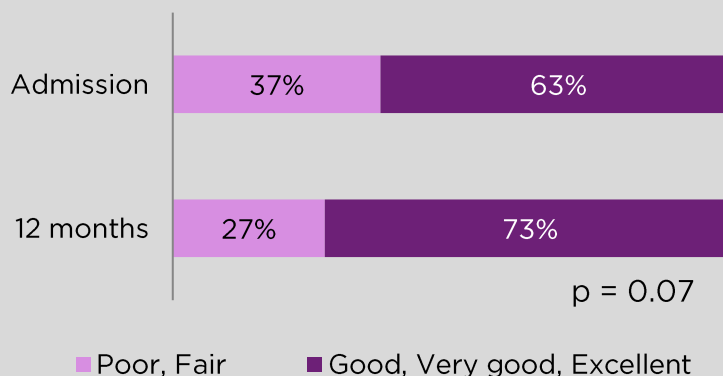
What the data say: The proportion of participants who were extremely or very much able to fulfill social roles and responsibilities increased significantly for establishing/maintaining healthy relationships ($p < 0.01$), fulfilling role as a parent ($p < 0.05$), meeting responsibilities at home ($p = 0.001$), fulfilling role as a spouse/partner ($p < 0.05$), and establishing/maintaining healthy relationships ($p < 0.01$) from admission to 12 months after treatment.



Physical health

INDICATOR: **PERCEIVED PHYSICAL HEALTH STATUS**

73% reported meeting **good, very good or excellent physical health** 12 months after treatment compared to 63% at admission.



What it is: The proportion of participants who rated their general physical health as excellent, very good, good, fair or poor.

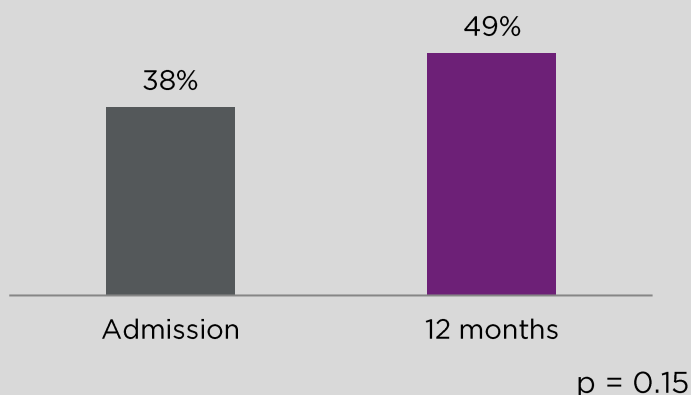
How it was measured: *At admission and 12 months after treatment, participants were asked: In general, would you say your physical health is...?*

What the data say: The proportion of participants who rated their general physical health as excellent, very good or good increased from admission to 12 months after treatment. This increase was not statistically significant (p = 0.07).



INDICATOR: **PARTICIPATION IN PHYSICAL ACTIVITY**

49% met the **Canadian Physical Activity Guidelines** 12 months after treatment compared to 38% at admission.



What it is: The proportion of participants who reported meeting or exceeding the Canadian Physical Activity Guidelines that recommend participating in at least 150 minutes of moderate to vigorous physical activity per week, in bouts of 10 minutes or more.

How it was measured: *At admission and 12 months after treatment, participants were asked: During the past 7 days, how many days did you participate in moderate or vigorous physical activity? How much time did you usually spend doing moderate or vigorous activity on one of those days?*

Participants were categorized into less than 150 minutes per week or 150 minutes per week or more.

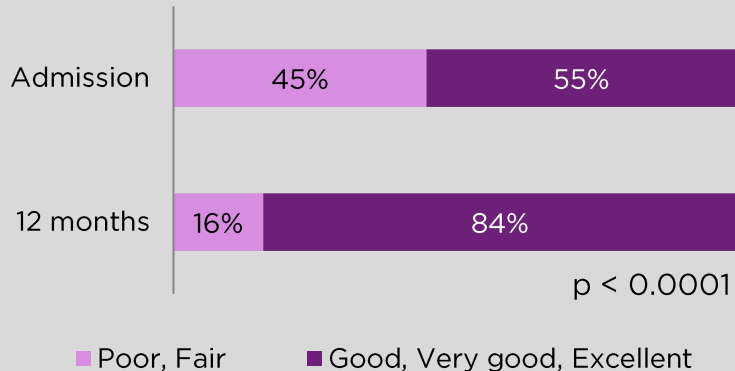
What the data say: The proportion of participants who reported meeting or exceeding the Canadian Physical Activity Guidelines increased from admission to 12 months. This increase was not statistically significant ($p = 0.15$).



Quality of life and life satisfaction

INDICATOR: **PERCEIVED QUALITY OF LIFE**

84% reported meeting **good, very good or excellent quality of life** 12 months after treatment compared to 55% at admission.



What it is: The proportion of participants who rated their overall quality of life as excellent, very good, good, fair or poor.

How it was measured: *At admission and 12 months after treatment, participants were asked: Overall, how would you rate your quality of life?*

What the data say: The proportion of participants who rated their overall quality of life as excellent, very good or good increased significantly from admission to 12 months after treatment ($p < 0.0001$).

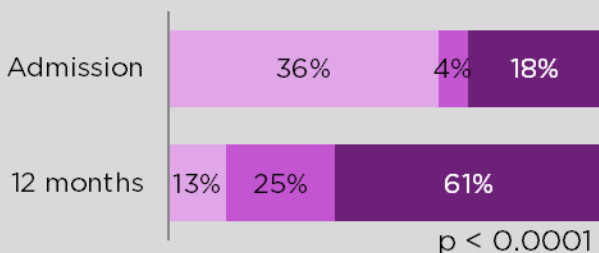


Quality of life and life satisfaction

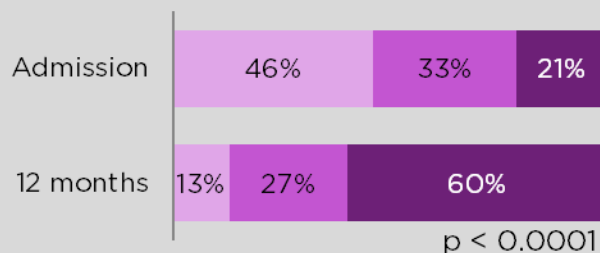
INDICATOR: **PERCEIVED LIFE SATISFACTION**

Participants reported **increased satisfaction** in many **areas of life** 12 months after treatment.

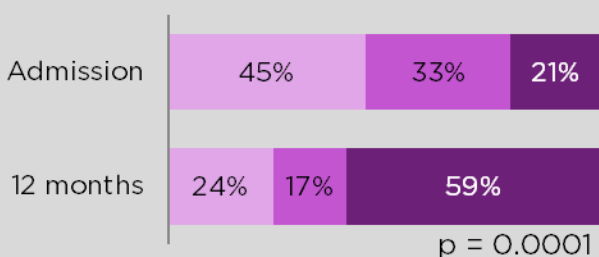
How life is going so far



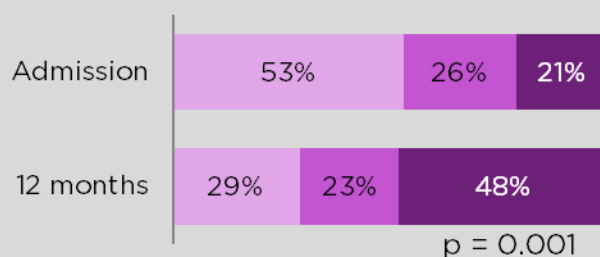
Happiness



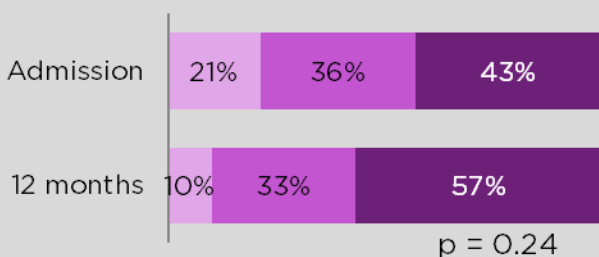
Work/school situation



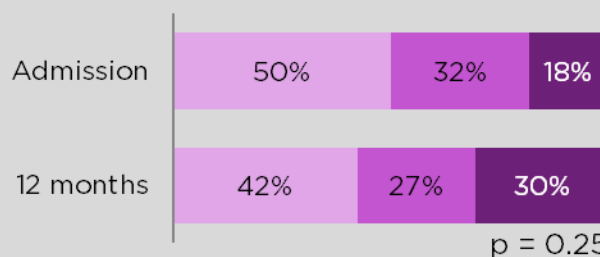
Recreation/social activities



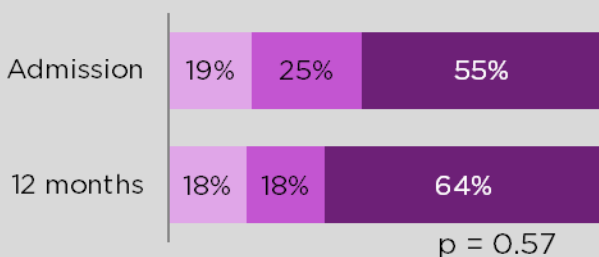
Family Relationships



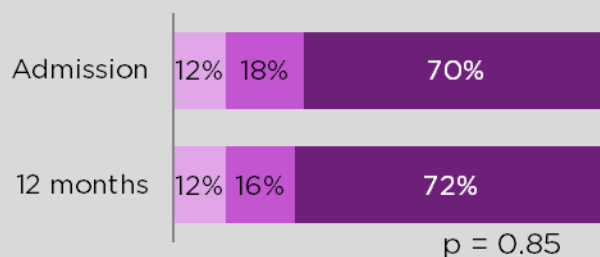
Intimate Relationships



Friends



Living situation



Very dissatisfied, dissatisfied Mixed Satisfied, Very Satisfied



Quality of life and life satisfaction

What it is: The percentage of participants who rated their satisfaction with intimate relationships, family relationships, friends, happiness, living situation, how life is going so far, work/school situation and recreation/social activities as very satisfied, satisfied, mixed, dissatisfied or very dissatisfied.

How it was measured: *At admission and 12 months after treatment, participants were asked:* Currently how satisfied are you with...

- ... the level of intimate relationships?
- ... your family relationships?
- ... your friends?
- ... your general level of happiness?
- ... where you are living?
- ... how life is going so far?
- ... your work or school situation?
- ... recreation and social activities in your life?

What the data say: The percentage of participants who rated their satisfaction as satisfied or very satisfied increased significantly for how life is going so far ($p < 0.0001$), happiness ($p < 0.0001$), work/school situation ($p = 0.0001$), and recreation/social activities ($p = 0.001$) from admission to 12 months after treatment.

The percentage of participants who rated their satisfaction as satisfied or very satisfied did not significantly increase for family relationships ($p = 0.24$), intimate relationships ($p = 0.25$), friends ($p = 0.57$) or living situation ($p = 0.85$) from admission to 12 months after treatment.

APPENDIX A: OVERVIEW OF TREATMENT PROGRAM

The present report uses data collected from 2018 to 2019, in a treatment program that was formerly known as the Addiction Medicine Service (AMS). Since collecting this data, the program name has been changed to the Addiction Medicine Program, in addition to changes in the patient population and treatment programming. The AMS was a large, 105-bed, inpatient addiction treatment program situated at Homewood Health Centre – a large mental health and addiction treatment facility – in Guelph, Ontario. The voluntary, semi-private program provided primarily group-based treatment to adults (19+) addicted to alcohol and/or drugs, as well as specialized programming for co-occurring post-traumatic stress disorder (PTSD). At the time of this study, the typical length of treatment was 35 days and 56 days for treatment of concurrent PTSD. Treatment was traditionally abstinence-based and comprised of medical stabilization, assessment, recovery-oriented education, skills training, and 12-step facilitation provided by an interdisciplinary team of health professionals. Continuing care planning was a standard component of the discharge process and included referral to professional outpatient services (e.g., weekly, group-based support; individual counselling) and/or ongoing involvement in community-based mutual support groups (e.g., 12-step groups).