



May 4, 2023

Senator Wlnsvey Campos, Co-Chair
Representative Andrea Valderrama, Co-Chair
Joint Ways and Means Human Services Sub-Committee
900 Court Street NE
State Capitol
Salem, OR 97301

Dear Co-Chairs and Committee Members:

Please find below some additional information requested at the meeting of the Joint Ways and Means Human Services Sub-Committee meeting on April 23, 2023, regarding behavioral health data.

1. What are the metrics being measured by behavioral health?

Attached is a list of 40 performance metrics related to recent investments in behavioral health that are currently being tracked by OHA. They fall into 13 program areas ranging from Aid & Assist Services to Youth Suicide Prevention & Intervention.

These metrics fall into different categories based on the implementation phase of the investments themselves. Early implementation metrics broadly involve distribution of funds, creation or expansion of programs, demand or need for services and programs, and initial outputs by programs and providers, such as how many people have been served. Later in the implementation process, evolving metrics can address more in-depth service issues, such as whether a patient received prompt follow-up care after the initial services, or whether patients report positively or negatively on the services they receive. Long-term, once an investment or program has matured, it is possible to track more specific outcomes on health of individuals and populations. Many of the newer legislative investments in behavioral health have not had sufficient operation time to identify such outcomes.

2. Who decides that these are the metrics being used?

The metrics are determined in a variety of ways. Some are required by the federal government under the terms of Medicaid or grant funding. Others are required to fulfill specific statutory goals. Some metrics are necessary to ensure accountability by entities that receive state funds, by tracking the work they have committed to complete. Yet other metrics are not explicitly required, but could be especially useful in making future policy and prioritization decisions and validating progress on the agency's strategic goal to eliminate health inequities by 2030. The latter are

identified by OHA in close collaboration with partners, including providers, funding recipients, advocacy organizations, and community groups. The attached list notes which of the 40 metrics currently being tracked are required by OHA or the federal government.

3. Is there data that demonstrates improvement?

Data on long term improvement associated with the recent investments in behavioral health is not yet available. In large part, this is due to the sheer newness of the investments; it takes time to distribute funds, begin or expand services with those funds, recruit, hire and train workforce, and identify the outcomes of those services. Furthermore, during the pandemic, some data reporting was scaled back.

The best available information right now is process data held at the individual program level. To provide an example, as part of recent workforce investments, over 275 behavioral health professionals have been awarded \$16 million in debt relief as part of a direct loan repayment program. The interest and demand for this type of support is much greater; in total, over 2,300 applicants requested debt relief for more than \$200 million. The awardees are people who, compared to the overall workforce, were more likely to be a member of communities that have experienced health inequities, to provide services in rural areas, and/or to speak languages other than English.

OHA has every expectation that these workforce investments will lead to better long-term outcomes for many people in Oregon facing behavioral health challenges. This is due to the clear demand for services in our state, and the rationale that a larger workforce can provide more of these needed services. Additionally, data demonstrates the value of a workforce that better reflects the experiences and needs of patients. However, it is not yet possible to identify specific outcomes.

For another example, Oregon has expanded Intensive In-Home Behavioral Health Treatment (IIBHT) services for youth in the past few years. The attached 2022 annual report on IIBHT notes that more youth have been served than previously. Additionally, it demonstrates that some IIBHT programs took advantage of state supports for their workforce, and that individual providers have shown notable commitment and creativity in identifying ways to support youth, particularly in remote areas. Broadly the outcomes presented in the report demonstrate that youth served in the program show significant improvement in a variety of domains; however, small sample sizes and missing data limit the ability to draw definitive conclusions. As IIBHT programs continue to expand and gain experience, we anticipate that these positive outcomes will become even more pronounced.

It will take years, possibly even a decade, to see outcomes related to behavioral health change at the population level. The long-term outcomes will be aligned with data measures that the Oregon Health Policy Board Behavioral Health Metrics

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Committee is required to collect including: physical and mental health integration, timely and least restrictive access, reduction of hospitalizations and reduction of incidents of overdose.

Please do not hesitate to reach out if you have any further questions or clarifications.

Sincerely,

Dave Baden
Interim Director

Oregon Health Authority
Key Performance Metrics tracked by Behavioral Health program teams
March 2023

| Program Area | Implementation Phase | Metric | Required |
|--|----------------------|--|-------------|
| 988 Call Center | Early Implementation | Number of 988 Calls that were resolved and prevented death by suicide when suicide was in progress. | Yes-OHA |
| 988 Call Center | Early Implementation | Number of 988 calls that were resolved for individuals or families who were in behavioral health crisis | Yes-OHA |
| 988 Call Center | Early Implementation | Number of individuals and families who received Mobile Crisis Intervention Services after calling 988. | Yes-OHA |
| 988 Call Center | Early Implementation | Number of individuals and families who got connected to M110 line or BHRNs after calling 988 | Yes-OHA |
| Adult Suicide Prevention & Intervention | Early Implementation | Contract with a university to provide process and outcomes measures for the ASIPP | N/A |
| Adult Suicide Prevention & Intervention | Early Implementation | Establish an adult suicide prevention advisory to OHA by July 1 st of 2024 to guide the ASIPP initiatives | N/A |
| Aid & Assist Services | Ongoing-Evolving | Number of individuals in community restoration who are classified as homeless by quarter | Yes-OHA |
| Aid & Assist Services | Ongoing-Evolving | Number of individuals placed in community restoration by quarter | Yes-OHA |
| Aid & Assist Services | Ongoing-Evolving | Current OSH goal is to come into compliance with the Mink order (Hospital admission within 7 days of written order) Per Dr. Pinals report this was to be a phased in approach | Yes-OHA/Fed |
| Behavioral Health Resource Networks | Early Implementation | Service utilization: Number clients and number of client encounters reported a BHRN Partner in each of the 7 service areas by demographic group (race/ethnicity, age, gender identity) | Yes-OHA |
| Behavioral Health Resource Networks | Early Implementation | Spending by service area and budget category | Yes-OHA |
| BH Rate Increase | Early Implementation | FFS: Number of Culturally & Linguistically Specific Services (CLSS) provider applications approved by county, and number received | N/A |
| BH Rate Increase | Early Implementation | CCO BH Directed Payment: Receipt of All CCO attestation of BHDP compliance by March 31, 2023 | Yes-OHA |
| BH Workforce Development | Early Implementation | Developmental: Number of students awarded loan re-payment grants | N/A |
| BH Workforce Development | Early Implementation | Recruit/Retain: number of individuals with new Social Worker licenses funded by grants | N/A |
| BH Workforce Development | Early Implementation | Recruit/Retain: number of Behavioral Health supervisors trained via Clinical Supervision grants | N/A |
| BH Workforce Development | Early Implementation | Recruit/Retain: number individuals with certifications through MHACBO, funded by grants | N/A |
| Certified Community Behavioral Health Clinics (CCBHCs) | Ongoing-Evolving | Access (I-Eval) - time between initial point of contact to formal evaluation/billable outpatient services. CCBHCs are required to meet a 10 day window | Yes-Federal |
| Certified Community Behavioral Health Clinics (CCBHCs) | Ongoing-Evolving | Follow-up after ED/hospital for Mental Health (FUM, FUH-BH-A) - demonstrate CCBHCs' ability to provide a continuous episode of treatment through transitions of care | Yes-Federal |
| Certified Community Behavioral Health Clinics (CCBHCs) | Ongoing-Evolving | Initiation/engagement of SUD treatment (IET-BH) - two part metric tracks both the start and continuous progress of an individual in substance use treatment | Yes-Federal |
| Certified Community Behavioral Health Clinics (CCBHCs) | Ongoing-Evolving | Patient experience of care survey (PEC) - survey balances quantitative and qualitative feedback from perspective of diverse service users | Yes-Federal |
| Children's System of Care | Ongoing-Evolving | https://www.oregon.gov/dhs/Pages/SOC-Dashboard.aspx | N/A |

Oregon Health Authority
Key Performance Metrics tracked by Behavioral Health program teams
March 2023

| Program Area | Implementation Phase | Metric | Required |
|---|-----------------------------|---|-----------------|
| Civil Commitment Services | Ongoing-Evolving | Number of Notice of Mental Illness (NMIs) filed and the number of NMIs that become civil commitments | |
| Civil Commitment Services | Ongoing-Evolving | Number of 14-day diversions statewide and how many result in discharge vs. civil commitment hearing | |
| Civil Commitment Services | Ongoing-Evolving | Number of community-based commitments: trial visits, conditional releases, outpatient commitment | |
| Civil Commitment Services | Ongoing-Evolving | Lengths of stay at acute psychiatric care facilities | |
| Harm Reduction Clearinghouse | Early Implementation | Reach: Number, type and location of entities participating in the HR Clearinghouse. | N/A |
| Harm Reduction Clearinghouse | Early Implementation | Financial: Amount spent by entities on the HR Clearinghouse' allowable supply lists, including naloxone. | N/A |
| Harm Reduction Clearinghouse | Early Implementation | Process: (a) Supply orders by entity type (b) Entity naloxone distribution reports (c) Optional community impact stories shared by entities in distribution reports | N/A |
| Mobile Crisis Intervention Services | Early Implementation | All ages: Number of individuals and families who received Mobile Crisis Intervention Services | Yes-OHA |
| Mobile Crisis Intervention Services | Early Implementation | All ages: Services that the individuals was taken to connected to by the Mobile Crisis Intervention Teams. | Yes-OHA |
| Mobile Crisis Intervention Services | Early Implementation | Number of individuals who required overdose reversal. | Yes-OHA |
| Mobile Crisis Intervention Services | Early Implementation | Number of incidents that were resolved by Mobile Crisis Intervention team when suicide effort was active. | Yes-OHA |
| Treatment Capacity/SDOH | Early Implementation | Total RFA Awards allocated (defn) | N/A |
| Treatment Capacity/SDOH | Early Implementation | Total RFA Awards spent (defn) | N/A |
| Treatment Capacity/SDOH | Early Implementation | Total residential beds associated with grantee projects, by type and by county | N/A |
| Treatment Capacity/SDOH | Early Implementation | Total supportive housing units associated with grantee projects, by county | N/A |
| Youth Suicide Prevention & Intervention | Ongoing-Evolving | Youth Suicide Fatality Number + Rates (ORVDRS) | N/A |
| Youth Suicide Prevention & Intervention | Ongoing-Evolving | Visits to Emergency Departments for Suicide (ESSENCE report) | N/A |
| Youth Suicide Prevention & Intervention | Ongoing-Evolving | Percentage of students self-report suicide thoughts of suicide (Student Health Survey) | N/A |



INTENSIVE IN-HOME BEHAVIORAL HEALTH TREATMENT

2022 ANNUAL REPORT



Prepared by the Data, Evaluation and Technical Assistance (DAETA) Team at
Oregon Health & Science University

March 24th, 2023

Intensive In-Home Behavioral Health Treatment 2022 Annual Report

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Intensive In-Home Behavioral Health Treatment 2022 Annual Report

Annual Summary

Intensive In-Home Behavioral Health Treatment (IIBHT) has enrolled 240 youth with 118 youth being discharged from IIBHT since its inception in 2021 (Table 1). As of December 31, 2022, there were 122 youth actively enrolled in the program across the state.

Table 1. Number of youth enrolled and discharged by quarter/year

| | 2021 | 2022 | | | | 2022 | GRAND TOTAL |
|------------|-------|------|----|----|----|-------|----------------|
| | TOTAL | Q1 | Q2 | Q3 | Q4 | TOTAL | |
| Enrolled | 62 | 23 | 51 | 58 | 46 | 178 | 240 |
| Discharged | 26 | 17 | 14 | 29 | 32 | 92 | 118 |

The Q4 2022 IIBHT Quarterly Report (submitted to OHA on February 15, 2022), summarizes aggregate data for the 16 agencies reporting in REDCap. The report includes quarterly and cumulative annual data. A number of trends were identified in the report:

Demographics

Age: The average age of youth enrolled in IIBHT is 13 years old, with most youth being 11-15 years old.

Gender Identity and Sexual Orientation: In 2022, IIBHT served more male (50%) and female (40%) youth and fewer non-binary or transgender (8%) youth, compared to 2021 (44%, 37%, 17%, respectively). The number of LGBTQ+ youth served by the program also decreased slightly in 2022 from 34% in 2021 to 25%.

Race and Ethnicity: IIBHT primarily serves White (75%) and Non-Hispanic/Latino/Spanish (76%) youth. However, there has been an increase in the number of youth identifying as Hispanic, Latino, or Spanish over time, from 10% in 2021 to 20% in 2022.

Total Household Income and Average Household Size: An estimated 28%-42% of families report household incomes of less than \$25,000/year. The average household size ranges from 3.32-4.60 people.

Foster Care and Adoption Status: 39% of the youth in IIBHT are currently (at the time of enrollment) or were previously in foster care. 11% of youth in IIBHT are adopted, however, 29% of the data for this question is missing.

Pathway into Program

Referral Source: 47% of IIBHT referrals come from outpatient therapists. The second most common referral source is Wraparound (9%).

Presenting Referral Issue: Almost half of youth in IIBHT present with a condition that significantly affects their functioning (44%) and/or are at high risk of developing a condition of a severe or persistent nature (45%).

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Clinical Presentation

Diagnoses: The most common presenting diagnostic groups for the youth in IIBHT include Trauma and Stressor-Related Disorders (51%), Attention Disorders (48%), Anxiety Disorders (34%), and Depressive Disorders (35%).

Trauma History: Most youth (88%) in IIBHT have a trauma history, which includes emotional abuse or neglect (48%), physical abuse or neglect (44%), sexual abuse (31%), and/or domestic violence (26%).

Suicidality History: 74% of youth in IIBHT have a history of suicidal ideation, non-suicidal self-injury (NSSI), and/or have attempted suicide.

Substance Use History: 28% of youth in IIBHT have a history and/or current use of alcohol and/or drugs.

Discharge Information

Care at Discharge: 52% of youth discharging from IIBHT transition to a lower level of care, with most discharging to outpatient therapy, outpatient psychiatry, and/or Wraparound. Among the youth who did not discharge to a higher level of care, 11% were admitted to a higher level of care, 22% stopped engaging with the program, and 15% discharged for other reasons.

Barriers to Accessing the Recommended Care: The most common barriers to accessing the recommended level of care include the youth being unwilling to engage in further treatment (14%), limited access to an in-network provider (11%), and/or the family deciding to not access the recommended level of care (10%).

Major Events During the Program: The most common major events to occur during IIBHT include the youth having a mental health Emergency Department (ED) visit (20%), the youth self-harming (14%), and/or the youth engaging in problematic substance use (12%). 2022 observed a decrease in the number of youth self-harming during the program (11%), compared to 2021 (27%). 2022 also had fewer youth presenting to EDs while enrolled in the program (16%), compared to 2021 (35%).

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Table 2. IBHT programs reporting inREDCap, 2021-2022

| County | Agency | CCO(s) |
|---------------|---|---|
| Baker | New Directions | Eastern Oregon CCO |
| Benton | Youth Villages | InterCommunity Health Network CCO |
| Clackamas | Youth Villages | HealthShare of Oregon, OpenCard |
| Clatsop | Clatsop Behavioral Health | Columbia Pacific CCO |
| Coos | Coos Health and Wellness | Advanced Health |
| Crook | Best Care | PacificSource Community Solutions: Central Oregon |
| Deschutes | Youth Villages, Options for Southern Oregon | PacificSource Community Solutions: Central Oregon, OpenCard, AllCare CCO |
| Douglas | Adapt | Umpqua Health Alliance |
| Grant | Community Counseling Solutions | Eastern Oregon CCO |
| Jackson | Options for Southern Oregon | Jackson Care Connect, AllCare CCO, OpenCard |
| Jefferson | Youth Villages, Best Care | PacificSource Community Solutions: Central Oregon |
| Josephine | Options for Southern Oregon | AllCare CCO |
| Klamath | Youth Villages | PacificSource Community Solutions: Central Oregon |
| Lane | The Child Center | PacificSource Community Solutions: Lane |
| Lincoln | Lincoln County Health and Human Services | InterCommunity Health Network CCO |
| Linn | Youth Villages | InterCommunity Health Network CCO |
| Malheur | Lifeways | Eastern Oregon CCO |
| Marion | Youth Villages | PacificSource Community Solutions: Marion/Polk, OpenCard, InterCommunity Health Network CCO |
| Morrow | Community Counseling Solutions | Eastern Oregon CCO |
| Multnomah | Youth Villages, Catholic Community Services | HealthShare of Oregon, OpenCard |
| Polk | Youth Villages | PacificSource Community Solutions: Marion/Polk |
| Umatilla | Community Counseling Solutions, Lifeways | Eastern Oregon CCO |
| Union | Center for Human Development | Eastern Oregon CCO, OpenCard |
| Wallowa | Wallowa Valley Center for Wellness | Eastern Oregon CCO |
| Washington | Youth Villages, Trillium Family Services | HealthShare of Oregon |
| Yamhill | Yamhill County Health and Human Services | Yamhill Community Care, OpenCard, AllCare CCO |

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Statistical Analysis

A comprehensive statistical analysis was completed on the subset of youth who discharged from IIBHT before December 31, 2022. Data was exported on January 26, 2023 and the final sample included 109 youth from 10 programs representing 9 CCOs in addition to OpenCard, commercial insurance, and uninsured youth (Table 3).

The goal of the analysis is twofold: describe the youth discharged from IIBHT and understand what demographic and clinical factors may impact their experience in the program.

First, the sample's demographics, history, and clinical presentation at intake are described on page 7 in Table 4 (this differs slightly from the summary in the previous section, since only youth who have *completed* the program are included in this statistical analysis). On page 8, an analysis is presented on important program factors related to discharge, including program length, reason for program closure, major events during the program, and barriers to follow-up care. This analysis assesses whether there are any relationships between these discharge factors and youths' demographics, mental health history, and/or clinical characteristics.

Next, on page 11, the IIBHT pre- and post- assessment measures, including the Hope Scale and the Ohio Scales, are evaluated. For each measure, the difference in a youth's score at enrollment and score at closure is calculated. Next, the sample's average difference in scores is compared and tested to see if youth show meaningful improvement over the course of the program. The analysis then introduces the variables in Table 4 to look for any relationships between the pre- and post- scores and the demographic, history, clinical, and/or discharge factors. If any of these variables are found to be associated with changes in scores, it is important to control for those variables when interpreting results to allow for a more accurate comparison across youth. To do so, a secondary analysis re-tests the pre- and post- scores, to determine if there was still significant improvement across the sample while controlling for these factors.

Statistically significant findings are reported. In this report, statistical significance is assumed when $p < 0.05$. When statistical significance is noted, this means that there is statistical support for a relationship between two variables (versus the assumption that a relationship does not exist). Determining statistical significance is the first step in determining practical importance and signals that further investigation is warranted. Each analysis in this report is testing for relationships, or associations, between the factors outlined above, and causation (one factor *causes* the other) cannot be assumed, even if the relationship is statistically significant. A detailed description of the methods used in this analysis can be found in Appendix A and the full model output can be found in Appendix B.

Table 3. Counties represented in the statistical analysis

| <u>County</u> |
|---------------|
| Clackamas |
| Coos |
| Crook |
| Deschutes |
| Douglas |
| Grant |
| Jackson |
| Jefferson |
| Josephine |
| Klamath |
| Linn |
| Malheur |
| Marion |
| Morrow |
| Multnomah |
| Polk |
| Umatilla |
| Union |
| Wallowa |
| Washington |
| Yamhill |

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Table 4. Description of the sample’s demographic, history, clinical presentation at intake, and discharge information

| | n (%) |
|---|------------------|
| Age | |
| Mean (Standard Deviation) | 12.7 (2.9) |
| Median [Min, Max] | 13.0 [5.0, 20.0] |
| Gender | |
| Male | 55 (50.5%) |
| Female | 38 (34.9%) |
| Trans/Non-Binary/Other | 16 (14.7%) |
| Race and Ethnicity | |
| White | 74 (67.9%) |
| Hispanic | 18 (16.5%) |
| Non-White | 17 (15.6%) |
| Currently or Previously in Foster Care | |
| Yes | 44 (40.4%) |
| Number of Mental Health Diagnoses | |
| Mean (Standard Deviation) | 2.34 (0.819) |
| Median [Min, Max] | 2.00 [0, 5.00] |
| Suic idality ¹ | |
| History of non-suicidal self-injury | 41 (37.6%) |
| Current non-suicidal self-injury at intake | 12 (11.0%) |
| History of suicidal ideation | 61 (56.0%) |
| Current suicidal ideation at intake | 21 (19.3%) |
| Has attempted suicide before | 35 (32.1%) |
| Substance Use ¹ | |
| History of substance use | 22 (20.2%) |
| Substance use at intake | 12 (11.0%) |
| Referral Issues ¹ | |
| Acuity 3: Youth at immediate risk of hospitalization or removal from home | 18 (16.5%) |
| Acuity 2: Youth has severe mental health condition(s) that may require residential treatment (RT), or youth discharging from RT or higher levels of care | 26 (23.9%) |
| Acuity 1: Youth exhibits behavior that indicates high risk of developing conditions of severe or persistent nature | 52 (47.7%) |
| Acuity 0: Youth experiencing mental health condition(s) that affect ability to function in everyday life but not requiring hospitalization or removal from home | 58 (53.2%) |
| Highest Acuity Referral Issue ² | |
| Mean (SD) | 0.761 (0.990) |
| Median [Min, Max] | 0 [0, 3.00] |

¹ Notes a multi-select question, options are not mutually exclusive.

² Highest Acuity Referral Issue: As youth can present with multiple referral issues, this variable describes the most acute issue.

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Table 4 (continued). Description of the sample’s demographic, history, clinical presentation at intake, and discharge information

| | n (%) |
|--|----------------|
| Trauma History | |
| Yes | 98 (89.9%) |
| Number of Types of Trauma Experienced³ | |
| Mean (SD) | 2.05 (1.14) |
| Median [Min, Max] | 2.00 [0, 4.00] |
| Total Services in place at IIBHT Intake | |
| Mean (SD) | 1.95 (1.09) |
| Median [Min, Max] | 2.00 [0, 5.00] |

¹ Notes a multi-select question, options are not mutually exclusive.

² Highest Acuity Referral Issue: As youth can present with multiple referral issues, this variable describes the most acute issue.

³ Number of Types of Trauma Experienced: As youth can experience multiple types of trauma, this variable represents the number of types of trauma experienced. Categories are physical abuse or neglect, emotional abuse or neglect, sexual abuse, being witness to domestic violence, and other types of trauma.

Program Length and Reason for Program Closure

Approximately half (51.4%) of the sample transitioned to a lower level of care at program discharge. The average length of services was 124.1 days. Increased program length was associated with increased likelihood of transitioning to a lower level of care upon program completion (p=.004). On the other hand, those with problematic substance use history and lower levels of trauma were more likely to stop engaging with IIBHT prior to program closure (p-values 0.029 and 0.043, respectively). No factors were found to be significantly associated with needing a higher level of care upon program completion (p-values all > .05), suggesting transitions to higher care are likely due to complex individual needs rather than systemic reasons.

Table 5. Reason for program closure

| | n (%) |
|-------------------------------------|----------------------|
| Closure Reason | |
| Transitioned to lower level of care | 56 (51.4%) |
| Needed a higher level of care | 12 (11.0%) |
| Youth and family stopped engaging | 23 (21.1%) |
| Missing | 17 (16.0%) |
| Program Length (Days) | |
| Mean (Standard Deviation) | 124.1 (65.7) |
| Median [Min, Max] | 116.8 [21.9, 405.15] |

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Major Events During the Program

Over half (55%) of the sample experienced at least one major event during the program. Increased program length was associated with increased odds of experiencing any major event during the program ($p=.005$). Those who presented with non-suicidal self-injury (NSSI) at intake had an increased chance of presenting to an ED or being admitted to an inpatient unit for mental health reasons, as well as increased likelihood for self-harm ($p<.001$) during the program. Older youth and those who entered the program with substance use issues were more likely to have problematic substance use during IIBHT (p -values 0.022 and 0.007, respectively).

Table 6. Major events during the program

| | n (%) |
|--|----------------|
| Youth self-harmed (NSSI) | 15 (13.8%) |
| Youth attempted suicide | * |
| Youth had problematic substance use | 14 (12.8%) |
| Youth ran away from home | 12 (11.0%) |
| Youth was expelled from school | * |
| Youth had new interactions with juvenile justice | 7 (6.4%) ** |
| Youth had a new foster care placement | 8 (7.3%) ** |
| Youth was removed from the home | 7 (6.4%) ** |
| Youth had a major family change (family moved, parent divorce) | 10 (9.2%) ** |
| Youth had a mental/behavioral health ED visit | 24 (22.0%) |
| Youth had a mental/behavioral health inpatient admission | * |
| Other traumatic event | 13 (11.9%) |
| Family had new abuse/neglect charges | * |
| No Major Events | 49 (45.0%) |
| Total Major Event Types | |
| <i>Mean (SD)</i> | 1.09 (1.33) |
| <i>Median [Min, Max]</i> | 1.00 [0, 6.00] |

* Data suppressed to maintain confidentiality ($n < 5$)

** Maybe statistically unreliable due to small numbers ($5 \leq n < 12$); interpret with caution

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Barriers to Care

Over half (58.7%) of the sample faced barriers in accessing the recommended level of care at program completion. The total number of barriers per youth ranged from 0-6. Among those with barriers, the most common were: limited access to in-network provider, difficulty finding an outpatient provider willing or able to work with the youth's level of acuity, the family choosing not to access the recommended level of care, and/or the youth being unwilling to engage in further treatment. All barriers can be seen in Table 7 below.

Those with increased program length were less likely to experience barriers in accessing care. No risk factors were found to be associated with increased likelihood of barriers to ideal level of care at program discharge.

Table 7. Barriers to accessing ideal level of care at discharge

| | |
|---|----------------|
| Limited access to an in-network provider | 13 (11.9%) |
| Difficulty finding outpatient provider willing or able to work with youth's level of acuity | 10 (9.2%)** |
| Insurance did not approve/does not cover recommended services | * |
| No insurance/ out-of-area coverage | * |
| Dual diagnosis preventing acceptance to level of care | * |
| Developmental disability preventing acceptance to level of care | * |
| Financial concerns related to cost of ongoing treatment | * |
| Family concerned about system involvement | 8 (7.3%)** |
| Family feels natural supports are adequate support at this time | 5 (4.6%)** |
| Family is unable to take time off work/school to access services | 8 (7.3%)** |
| Family is unable to access transportation to services | * |
| Family is seeking a specific type of provider and has been unable to find one | * |
| Family intends to make an appointment but is choosing not to do so before closing | * |
| Family not prioritizing or having difficulty accessing MH treatment and services | 10 (9.2%)** |
| Family chose not to access recommended care level | 11 (10.1%)** |
| Youth unwilling to engage further | 16 (14.7%) |
| Other barrier | 25 (22.9%) |
| No barriers for obtaining ideal level of care | 45 (41.3%) |
| Total Barriers | |
| <i>Mean (SD)</i> | 1.09 (1.31) |
| <i>Median [Min, Max]</i> | 1.00 [0, 6.00] |

* Data suppressed to maintain confidentiality (n < 5)

** Maybe statistically unreliable due to small numbers (5 ≤ n < 12); interpret with caution

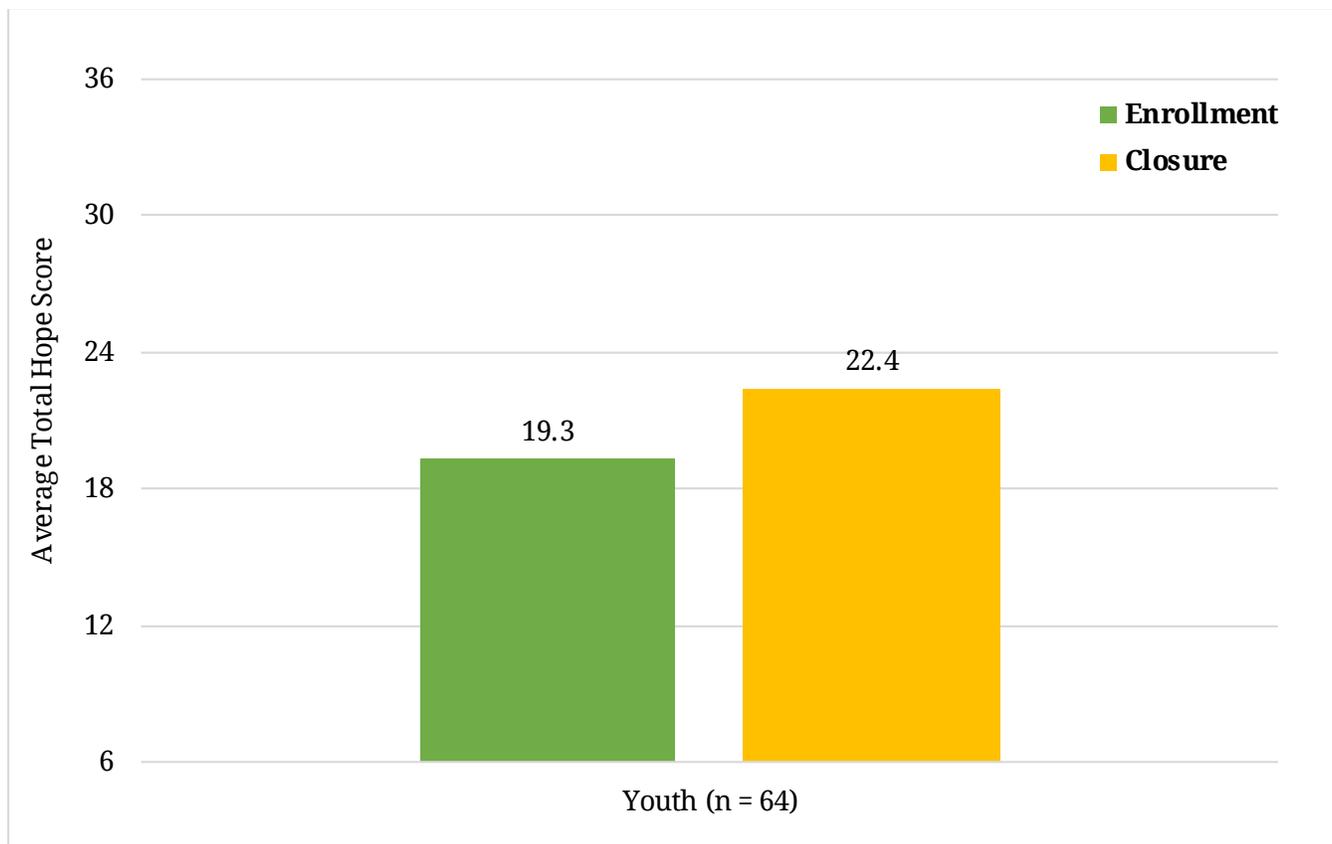
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The Hope Scale

The Hope Scale is filled out by youth at enrollment and closure. The measure provides two subscores, Pathways and Agency, that range from 3-18, and a Total Hope Score that ranges from 6-36. Pathways represents a youth's perceived ability to set goals and identify concrete steps to achieve them. Agency is a youth's confidence, motivation, and belief that they can follow Pathways to achieve their goals. Together, these two sub-scores provide a Total Hope Score, with **higher scores indicating more hope** (Snyder et al. 1997).

Average total hope scores significantly improved at IIBHT closure by 3.13 points. Gender identity, total types of trauma experience, and program length were all found to be associated with changes in Hope Scale scores. After controlling for these factors, this relationship remained significant with a mean increase of 10.62 points at program closure.

Figure 1. Hope Scale average pre- and post-total scores (before controlling for confounding variables)



Snyder et al. (1997). The Development and Validation of the Children's Hope Scale. *Journal of Pediatric Psychology*, 22(3), 399-421.

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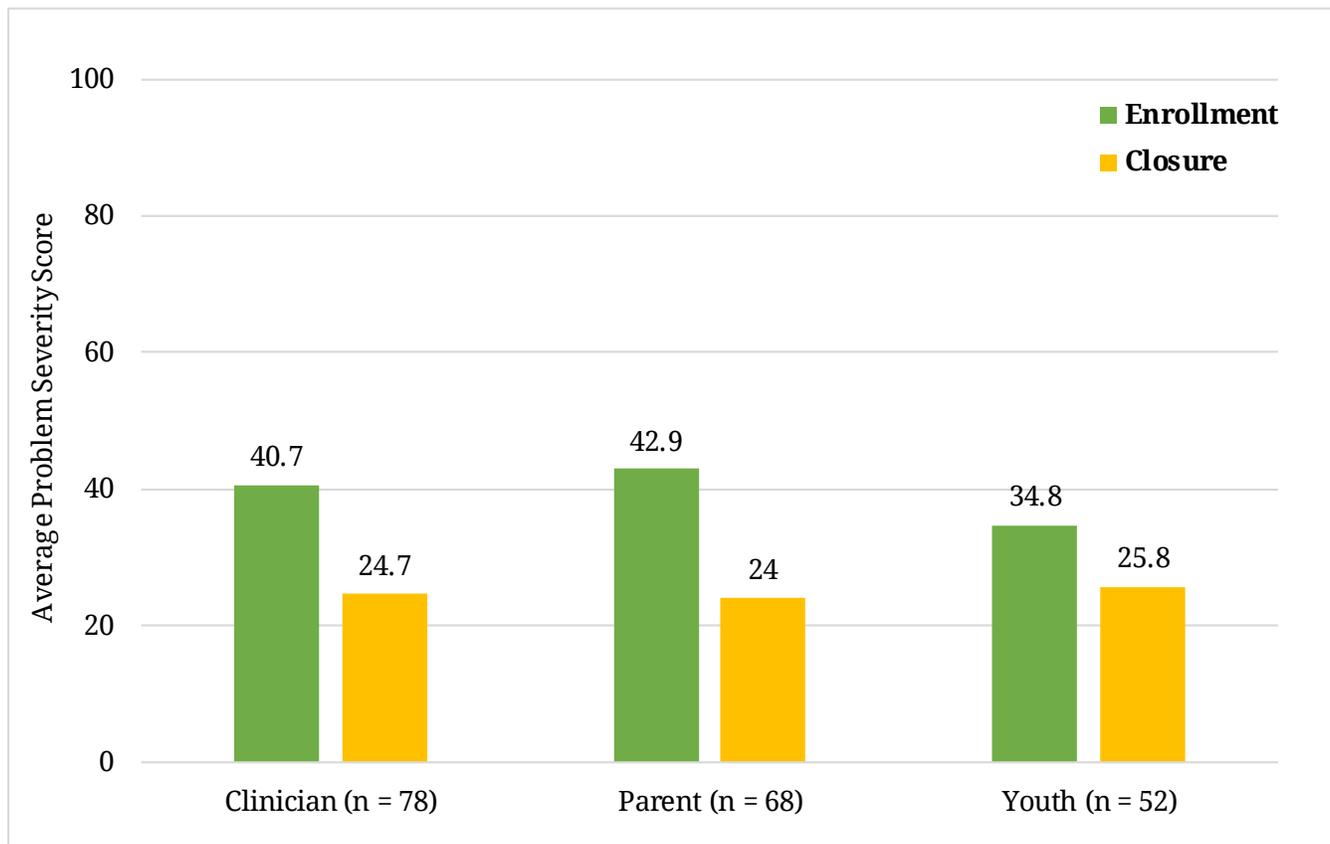
The Ohio Scales

The Ohio Scales are filled out by the clinician, parent, and youth and include five different subscales: The Problem Severity Scale, the Functioning Scale, the Restrictiveness of Living Environment (ROLES) Scale, the Hopefulness Scale, and the Satisfaction Scale.

The **Problem Severity Scale** measures the severity of the youth's mental health symptoms. The clinician, parent, and youth complete this scale. Scores on this scale range from 0-100 with **higher scores indicating more severe challenges**.

The mean difference from intake to closure showed significant improvement across all raters. Difference scores ranged from 15.97 for the clinician report, 18.88 for the parent report, and 8.98 for the youth report. For clinician ratings, after controlling for total diagnoses and youth gender, the change in severity was no longer significant. In contrast, the differences in severity pre- and post-scores remained significant for both the parent and youth ratings after controlling for program length and highest acuity referral issue.

Figure 2. Ohio Problem Severity Scale average pre- and post- scores (before controlling for confounding variables)



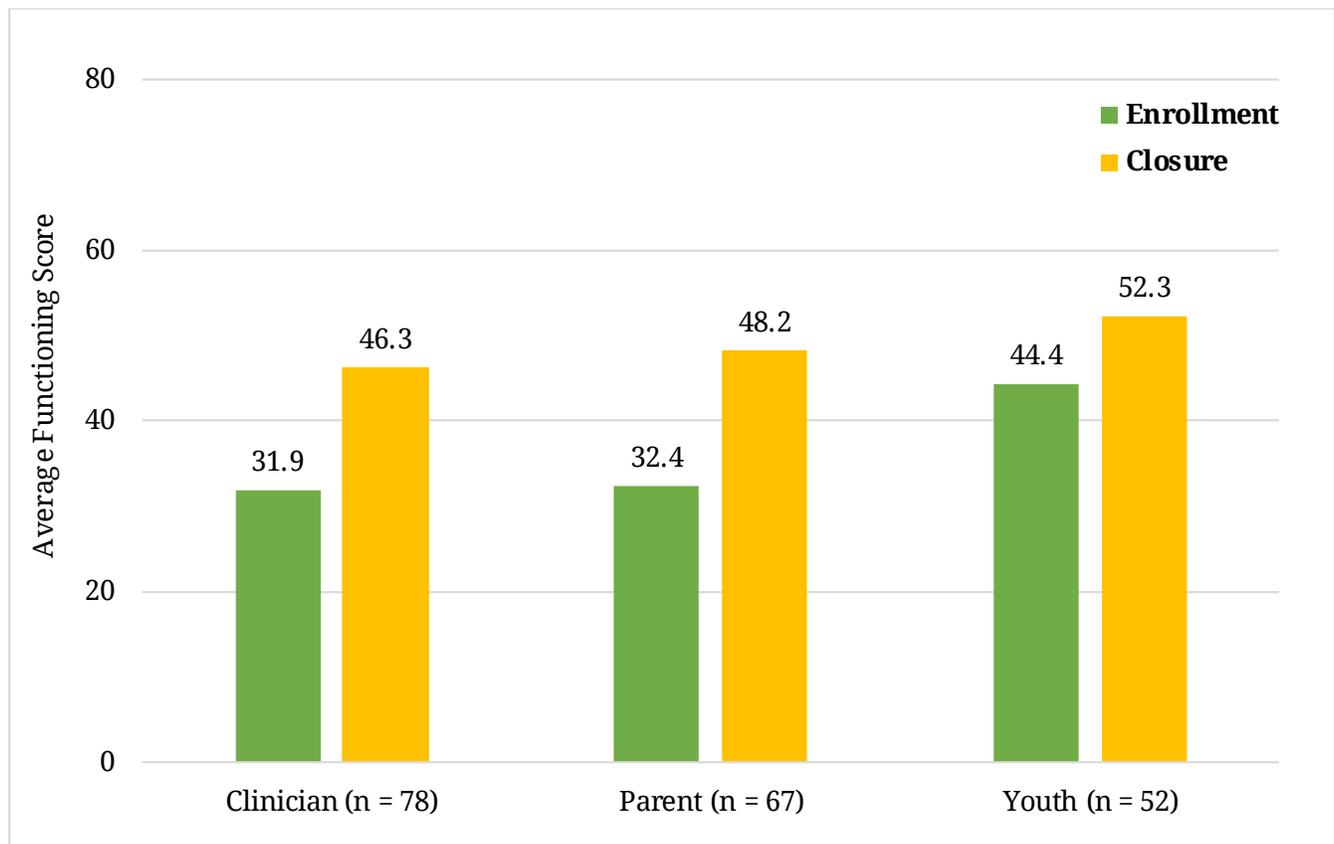
Ogles et al. (2001). The Ohio Scales: Practical Outcome Assessment. Human Science Press, Inc.

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The **Functioning Scale** measures the youth’s functional strengths and needs in areas of daily life. The clinician, parent, and youth complete this scale. Scores on this scale range from 0-80 with **higher scores indicating better functioning**.

The mean difference in score for improvement in child functioning was 14.41 for clinician ratings, 15.81 for parent ratings, and 7.92 for youth ratings. Interestingly, **only the clinician-rated functioning scales had statistically significant improvements** in average score after controlling for suicidal ideation, problematic substance use history, and program length. In comparison, neither youth- nor parent-rated scales had significant changes in functioning at closure after controlling for other variables. The discrepancy in clinician reported improvement vs lived experience by youth and their caregivers warrants further study.

Figure 3. Ohio Functioning Scale average pre- and post- scores (before controlling for confounding variables)



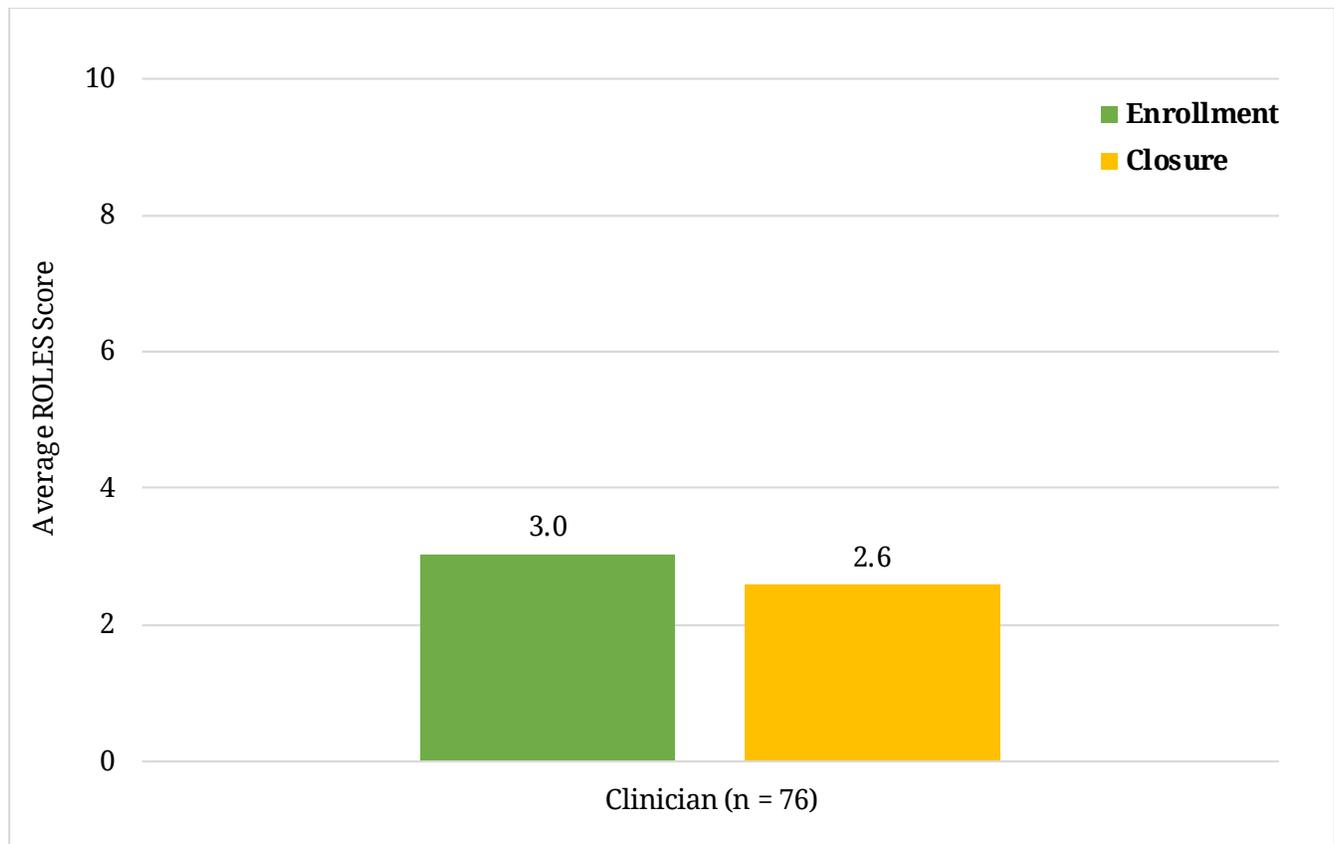
Ogles et al. (2001). The Ohio Scales: Practical Outcome Assessment. Human Science Press, Inc.

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The **Restrictiveness of Living Environments Scale (ROLES)** assesses the level of restriction in the youth's living environment over the past 90 days. The clinician completes this scale. Scores range from 0.5 to 10, with **higher scores reflecting more restriction in the youth's living environment**.

The mean intake ROLES score was 3.03 and the mean closure score was 2.57. Maximum ROLES score decreased from 8.50 at intake to 5.86 at closure. Only a slight mean decrease in score, 0.46, was seen. After controlling for program length, total diagnoses and total types of trauma experienced there was no longer a significant change in score, suggesting **restrictiveness of living environments was not strongly associated with a youth's experience in IIBHT**.

Figure 4. Ohio ROLES Scale average pre- and post-scores (before controlling for confounding variables)



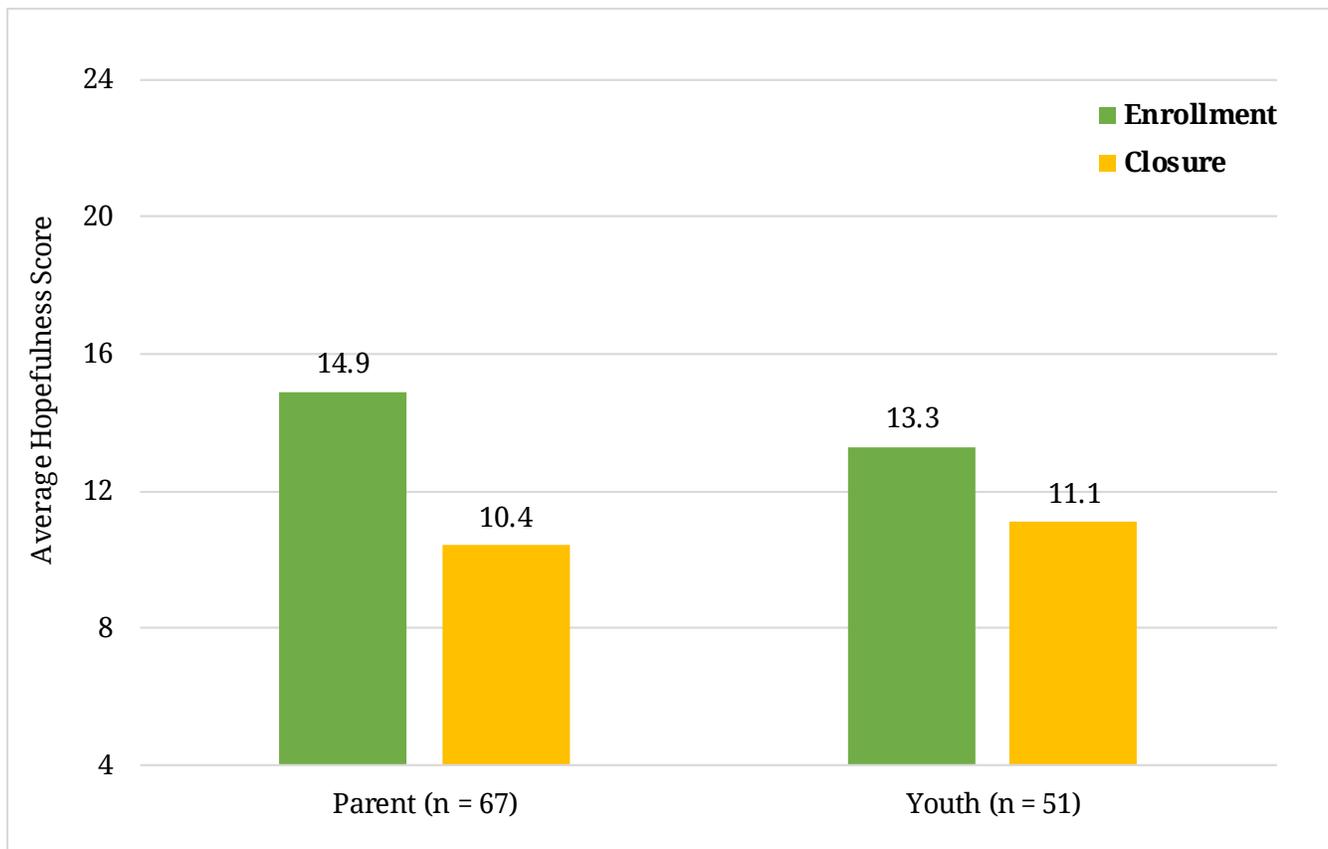
Ogles et al. (2001). The Ohio Scales: Practical Outcome Assessment. Human Science Press, Inc.

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The **Hopefulness Scale** measures hopefulness and well-being. The parent and youth complete this scale about themselves, and scores reflect the parent's self-reported hopefulness and well-being and the youth's self-reported hopefulness and well-being. Scores on this scale range from 4-24 with **lower scores indicating more hopefulness and well-being**.

Improvement in hopefulness was seen for both youth and parents' ratings, with average changes in score being -2.20 for youth and -4.5 for parents. This relationship remained highly significant for parents after controlling for youth age and youth problematic substance use at IIBHT enrollment. On the other hand, for youth, there was no longer a significant change in hopefulness and well-being after controlling for gender identity.

Figure 5. Ohio Hopefulness Scale average pre- and post-scores (before controlling for confounding variables)



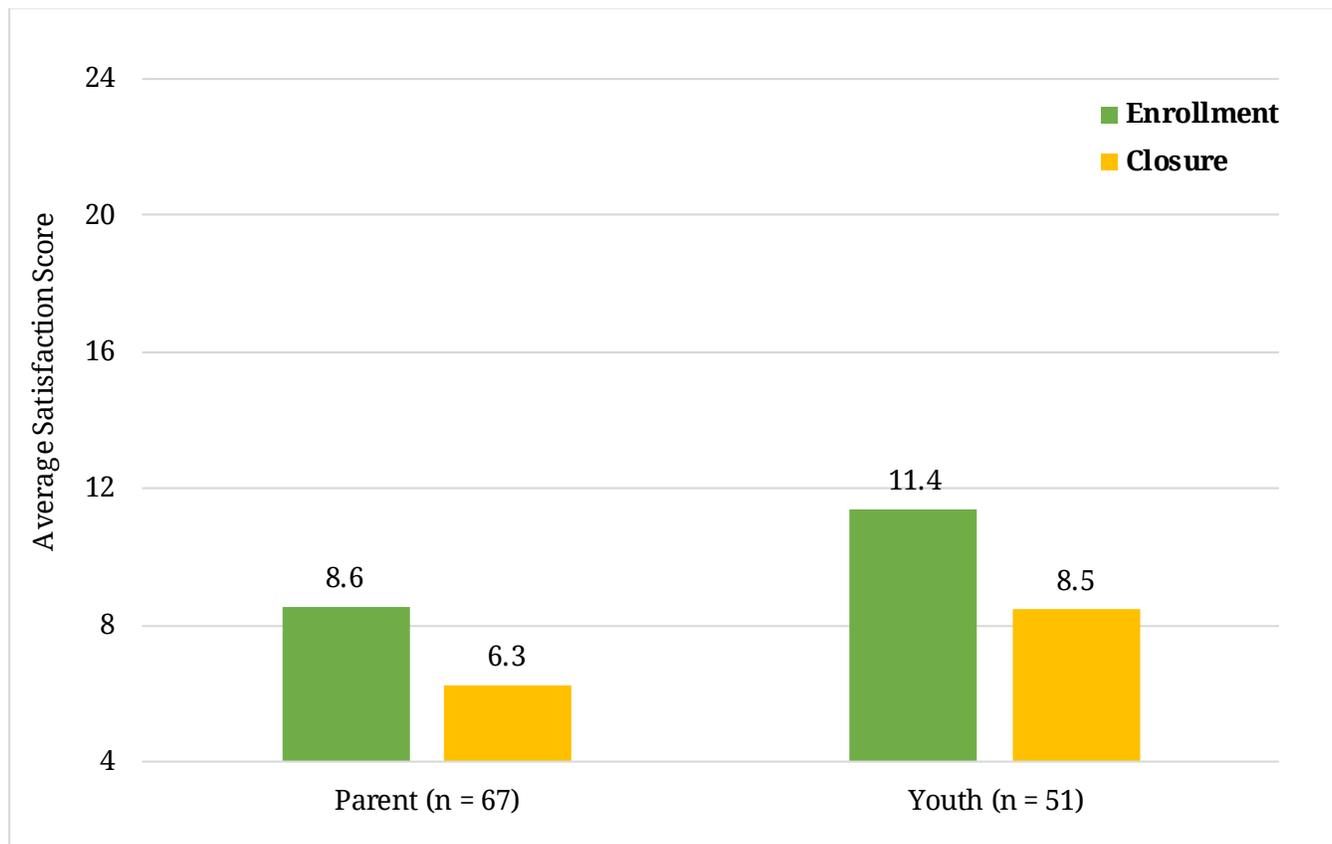
Ogles et al. (2001). The Ohio Scales: Practical Outcome Assessment. Human Science Press, Inc.

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The **Satisfaction Scale** measures satisfaction with services. The parent and youth both complete this scale; scores reflect the parent’s satisfaction with services and the youth’s satisfaction with services. Enrollment scores are likely to reflect experiences with past providers, while closure scores should reflect the family’s experience with IIBHT. Scores on this scale range from 4-24 with **lower scores indicating better satisfaction**.

Improvement in satisfaction with services was seen for both youth and parents in IIBHT with average changes of -2.94 for youth and -2.30 for parents. This relationship remained highly significant for both parents and youth after adjusting for program length, problematic substance use history, and NSSI history, suggesting that IIBHT was successfully able to increase satisfaction for youth enrolled in IIBHT and their caregivers.

Figure 6. Ohio Satisfaction Scale average pre- and post-scores (before controlling for confounding variables)



Ogles et al. (2001). The Ohio Scales: Practical Outcome Assessment. Human Science Press, Inc.

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Summary

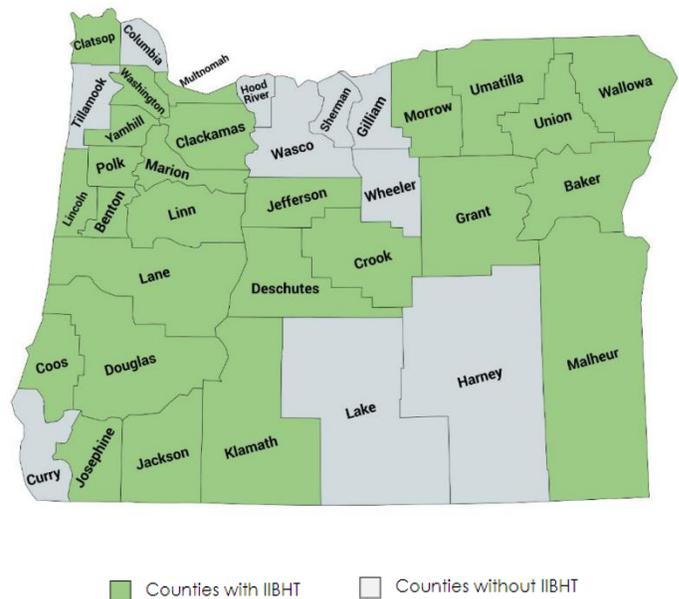
Youth in IIBHT services statewide are a high-risk group in terms of behavioral health. Almost 90% of participants have a trauma history; 39% have previously been or are currently in foster care; almost half (44%) of youth enrolled in IIBHT are identified as significantly impaired due to mental health challenges, and 74% have a history of suicidality or self-harm. IIBHT was developed to serve the behavioral health of a high-needs population, due to gaps and barriers that were preventing them from receiving this care. The data presented in this report confirms that IIBHT is providing services to the population it was intended to serve; however, this data also suggests that IIBHT is not providing services to the number of youth and families originally projected to need this level of care.

While IIBHT has expanded over the last two years, statewide access remains limited. As of December 31, 2022, IIBHT was not available in 10 counties (Figure 7). When the program was initially proposed to the legislature, the Oregon Health Authority (OHA) estimated a potential 1,500 youth to be enrolled in IIBHT per year ([2019-2021 Policy Option Package](#)).

This estimate varies dramatically from actual enrollment numbers. In the first two years of IIBHT, a total of 240 youth were reported to have been enrolled, although it should be noted that enrollment in 2022 almost tripled compared to 2021. It should also be acknowledged that the numbers presented in this report may be underestimates of the actual number of youth served, as these numbers rely on accurate data entry by programs, and some programs have reported that data entry has been limited by staff shortages. Finally, even in counties where IIBHT has been implemented, access may be limited: some programs have limited intake spots and waiting lists for intakes, rather than immediate access.

Limits to IIBHT access and overall enrollment can be attributed to a number of factors, but most notably workforce shortages. The global pandemic disrupted community-based programs' ability to serve youth and families. Overall workforce shortages across both clinical and peer mental health professions worsened, particularly in community-based programs. [Coordinated Care Organizations \(CCOs\)](#), who are responsible for providing IIBHT to their members, report that workforce shortages, particularly in rural areas, are hard to overcome. The state has tasked CCOs with identifying and addressing barriers to IIBHT access and expansion for their regions, however this has not successfully occurred in all areas.

Figure 7. Map of counties with IIBHT programs



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Many IIBHT programs have demonstrated strengths in addressing the challenges they faced in starting up this new program. Several programs implemented creative strategies to recruit, train, and maintain staff. Some programs took advantage of state supports that enabled them to offer signing bonuses, child care and housing assistance, and scholarships ([HB 2949](#), [HB 4071](#)). Individual providers have shown notable commitment and creativity in identifying ways to support youth particularly in remote areas.

In addition to allocating more funds to help agencies with their challenges in launching IIBHT services, OHA provided additional supportive activities. The OHA-led IIBHT Learning Collaborative was fortified with timely topics and engagement of national experts, as well as adding a space dedicated to the challenges faced by rural and remote areas of the state. The OHSU DAETA Team presented quarterly data and outcomes to the Learning Collaborative to help inform decision-making around program development and improvement, effectively creating a feedback loop. OHA also worked with the OHSU DAETA Team to maintain a rigorous schedule of training opportunities for agency staff that included offering the IIBHT Foundations, Clinical, Peer-Delivered Services/Skills Training, and REDCap Training modules on a monthly basis and adjusting the schedule according to demand. Finally, in addition to the IIBHT Learning Collaborative and training opportunities, OHA has worked with the Wraparound Evaluation and Research Team (WERT) at the University of Washington to develop fidelity monitoring tools for IIBHT.

It is also worth noting that over half of all participants in IIBHT faced barriers in accessing the recommended level of care at program completion; common barriers included not being able to access an in-network provider or inability to find a provider willing to work with the youth. These barriers to appropriate care are reflected across the system of care for youth in Oregon. Importantly, these barriers are reported by the programs, therefore the family perspective may be different.

The outcomes presented in this report demonstrate that youth served in the program show significant improvement in a variety of domains. Small sample sizes and missing data, due to the factors outlined above, limit our ability to draw definitive conclusions, however early results indicate that meaningful improvement is occurring during the program. As IIBHT programs continue to expand and gain experience, we anticipate that these positive outcomes will become even more pronounced.

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Recommendations

The following actions are recommended to move strategic initiatives and program improvements forward:

1. OHA should convene a workgroup with mandatory participation by CCOs and county programs, to:
 - a. Identify and address barriers to launching IIBHT in counties where it has not launched.
 - b. Identify and address barriers to adequate and timely coverage in counties where it has launched.
 - c. Clarify the responsibility of CCOs in supporting the effective operation of IIBHT.
 - d. Work with CCOs to estimate current need by region, to identify who is accessing and not accessing IIBHT services, as well as alternatives utilized by those not accessing IIBHT
 - e. Clarify and improve pathways to care for youth eligible for IIBHT services who are not being referred or otherwise getting access to the program.
2. OHA should continue to strengthen the youth behavioral health workforce overall and for IIBHT in particular, including:
 - a. Developing and supporting the clinical and peer workforce. This may include consultation from national experts; establishing a Center of Excellence, e.g., the EASA Center of Excellence, to strengthen workforce and supervisory capacity; further workforce incentives; and other strategies.
 - b. With the peer workforce in particular, efforts should be embedded in the broader need to support peer worker retention and workforce expansion that spans all community-based services that include peers in the service array.
3. For more accurate and meaningful data to drive systems improvement, OHA and OHSU should:
 - a. Continue to highlight the importance of data collection to programs, and to identify barriers to timely and accurate data reporting;
 - b. Develop a mechanism to track referrals to IIBHT that are not accepted or delayed due to capacity issues, and to track the barriers preventing prompt enrollment;
 - c. Develop mechanisms to integrate data about youth mental health programs and services, including IIBHT, across the behavioral health continuum of care, to create a more comprehensive picture of needs as well as strengths in the system.
4. OHSU should work with OHA to develop a follow-up family survey to obtain family perspectives on IIBHT services, including barriers to care following IIBHT.
5. Taking note of high trauma rates in this population, we recommend that OHA partner with other child-serving agencies to identify avenues for prevention, as well as expanding early evidence-based treatment; these efforts should be incorporated into IIBHT programs.
6. Given the high percentage of youth in foster care in IIBHT, ODHS should be invited to regular reviews of IIBHT to ensure that the needs of this population are being understood and addressed in IIBHT programs.

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Appendix A: Methods

Binary Outcomes

Logistic regression was used to determine which demographic and clinical factors were associated with program outcomes and barriers to care. Hosmer Lemeshow goodness of fit tests were performed to ensure overall model fit for final adjusted models. Adjusted odds ratios for associated variables are presented in the following pages.

Continuous Outcomes

Three standardized measures are completed at IIBHT program intake and closure: The Hope Scale, the Ohio Scales, and the DSM-5 Level 1 and 2 Self-Rated Substance Use Scale. The DSM-5 Substance Use Scale was not analyzed due to low completion rates.

Linear regression was used to test the hypothesis that all domains of the Ohio Scales and the total score on the Hope Scale would show significant improvement from IIBHT enrollment to closure. To identify potential confounding variables, best subset selection along with an exploratory analysis was used to test for significant associations between demographic and clinical factors (Table 4) and the measure results. For all regression models, the outcomes measured were divided by 100. Model output for all outcomes (Appendix C), were back-transformed to be consistent with the original scale of each measure. The unadjusted models in Table 8 show the results of the regression model without controlling for confounding variables. The model intercept assesses if the mean change in domain score is different than 0. The adjusted models show the regression results when controlling for confounding variables. The Likelihood Ratio Test (LRT) p-value assesses the model fit of the adjusted model in comparison to the unadjusted model. To ensure model validity for continuous outcomes, model diagnostics included examining residual plots and performing Breusch-Pagan Test for constant variance. Detailed model output can be found in Appendix C. Due to missing data, there is potential for selection bias as only youth with both pre and post scores were included for analysis. When examining crude associations, the mean difference among all perspectives and all domains of the Ohio Scale and the Total Hope Scale score demonstrated significant improvement at IIBHT closure compared to intake. The differences in model estimates and significance for the same domains support the importance of including multiple perspectives when working with youth with complex needs. Individual scale results are presented in the following pages.

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Appendix B: Model Output for Binary Outcomes

Reason for Program Closure

| Closure Reason: Stopped Engagement | | | |
|------------------------------------|--------------------|--------------|------------------|
| <i>Predictors</i> | <i>Odds Ratios</i> | <i>CI</i> | <i>p</i> |
| (Intercept) | 0.01 | 0.00 – 0.07 | <0.001 |
| Substance Abuse History | 3.52 | 1.13 – 11.10 | 0.029 |
| Total Traumas | 1.64 | 1.04 – 2.72 | 0.043 |
| Log(ProgramLength) | 0.25 | 0.10 – 0.60 | 0.003 |

Observations 108
R² Tjur 0.154

| Closure Reason: Transition to Lower Care | | | |
|--|--------------------|--------------|--------------|
| <i>Predictors</i> | <i>Odds Ratios</i> | <i>CI</i> | <i>p</i> |
| (Intercept) | 3.33 | 1.08 – 11.00 | 0.041 |
| Log(ProgramLength) | 3.32 | 1.51 – 7.97 | 0.004 |
| All Ohio's complete | 2.35 | 1.02 – 5.54 | 0.047 |

Observations 108
R² Tjur 0.145

| Closure Reason: Need Higher level of Care | | | |
|---|--------------------|-------------|--------------|
| <i>Predictors</i> | <i>Odds Ratios</i> | <i>CI</i> | <i>p</i> |
| (Intercept) | 0.14 | 0.03 – 0.65 | 0.015 |
| Gender [Cis-Female] | 0.16 | 0.01 – 0.94 | 0.093 |
| Gender [Trans/NB/Other] | 1.50 | 0.29 – 6.23 | 0.590 |
| Log(ProgramLength) | 0.88 | 0.31 – 2.60 | 0.804 |

Observations 108
R² Tjur 0.043

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Major Events During the Program

| AnyMajor Event (Yes/No) | | | |
|--|--------------------|--------------|--------------|
| <i>Predictors</i> | <i>Odds Ratios</i> | <i>CI</i> | <i>p</i> |
| (Intercept) | 4.01 | 1.22 – 14.30 | 0.026 |
| Log(ProgramLength) | 3.17 | 1.47 – 7.42 | 0.005 |
| Foster Care | 2.18 | 0.93 – 5.28 | 0.075 |
| Current Problematic Substance Use | 3.50 | 0.88 – 18.00 | 0.095 |
| Current NSSI | 3.73 | 0.93 – 19.35 | 0.081 |
| All Ohio's complete | 0.45 | 0.18 – 1.05 | 0.070 |

Observations 109
R² Tjur 0.152

| ED Mental Health Visit or Inpatient Admission (Yes/No) | | | |
|--|--------------------|--------------|--------------|
| <i>Predictors</i> | <i>Odds Ratios</i> | <i>CI</i> | <i>p</i> |
| (Intercept) | 0.49 | 0.16 – 1.48 | 0.211 |
| Log(ProgramLength) | 1.83 | 0.78 – 4.62 | 0.180 |
| Current NSSI | 6.04 | 1.72 – 23.00 | 0.006 |

Observations 109
R² Tjur 0.097

| Non-Suicidal Self Injury (Yes/No) | | | |
|-----------------------------------|--------------------|---------------|------------------|
| <i>Predictors</i> | <i>Odds Ratios</i> | <i>CI</i> | <i>p</i> |
| (Intercept) | 0.08 | 0.02 – 0.22 | <0.001 |
| Current NSSI | 20.45 | 3.82 – 142.99 | 0.001 |
| Suicide Attempt | 7.15 | 1.96 – 30.18 | 0.004 |
| NSSI History | 0.27 | 0.05 – 1.14 | 0.099 |

Observations 109
R² Tjur 0.260

| Problem Substance Use (Yes/No) | | | |
|--|--------------------|--------------|--------------|
| <i>Predictors</i> | <i>Odds Ratios</i> | <i>CI</i> | <i>p</i> |
| (Intercept) | 0.00 | 0.00 – 0.05 | 0.001 |
| Age | 1.51 | 1.11 – 2.27 | 0.022 |
| Current Problematic Substance Use | 6.87 | 1.66 – 28.99 | 0.007 |

Observations 109
R² Tjur 0.211

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Barriers to Care

| Barriers to Care (Yes/No) | | | |
|----------------------------|--------------------|-------------|--------------|
| <i>Predictors</i> | <i>Odds Ratios</i> | <i>CI</i> | <i>p</i> |
| (Intercept) | 1.93 | 0.75 – 5.20 | 0.181 |
| Log (ProgramLength) | 2.31 | 1.13 – 5.08 | 0.028 |

Observations 109
R² Tjur 0.046

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Appendix C: Model Output for Continuous Outcomes

Table 8. Exploratory analysis and linear regression model results testing if true change in score is different than 0 for continuous outcomes

| | Regression Analysis | | | n | Exploratory Analysis | | |
|--|---------------------------|-------------------------|-------------|----|----------------------|-------------------------|--------|
| | Unadjusted Intercept (SD) | Adjusted Intercept (SD) | LRT p-value | | Mean Difference | 95% Confidence Interval | |
| Difference in Ohio Severity Score | | | | | | | |
| Clinician | -15.98***(1.78) | -0.96(5.58) | 0.019 | 78 | -15.97 | -19.53 | -12.42 |
| Youth | -8.98***(2.35) | -18.77** (5.75) | 0.069 | 52 | -8.98 | -13.70 | -4.26 |
| Parent | -18.88***(2.30) | -14.93***(2.83) | 0.027 | 68 | -18.88 | -23.47 | -14.29 |
| Difference in Ohio Functioning Score | | | | | | | |
| Clinician | 14.41***(2.00) | 22.89*** (4.91) | 0.016 | 78 | 14.41 | 10.44 | 18.38 |
| Youth | 7.92***(2.29) | 7.76(9.18) | 0.009 | 52 | 7.92 | 3.32 | 12.52 |
| Parent | 15.81***(2.02) | 1.53(6.10) | 0.012 | 67 | 15.81 | 11.78 | 19.83 |
| Difference in Ohio ROLES Score | | | | | | | |
| Clinician | -0.46*(0.21) | 1.21(0.92) | 0.001 | 76 | -0.46 | -0.88 | -0.04 |
| Difference in Ohio Hopefulness Score | | | | | | | |
| Youth | -2.20** (0.67) | -1.04(0.95) | 0.106 | 51 | -2.20 | -3.54 | -0.85 |
| Parent | -4.45***(0.53) | -8.39***(1.60) | 0.002 | 67 | -4.45 | -5.51 | -3.39 |
| Difference in Ohio Satisfaction Score | | | | | | | |
| Youth | -2.94***(0.71) | -2.28*(0.91) | 0.254 | 51 | -2.94 | -4.37 | -1.51 |
| Parent | -2.30***(0.61) | -6.56***(1.62) | 0.018 | 67 | -2.30 | -3.53 | -1.07 |
| Difference in Total Hope Scale Score | | | | | | | |
| Total | 3.13***(0.88) | 10.62***(2.76) | 0.002 | 64 | 3.13 | 1.36 | 4.89 |

Footnote: * $p < .05$ ** $p < .01$ *** $p < .001$ (Two-Sided Test)

The Hope Scale

| Change in Total Children Hope Scale Score | | | |
|---|-----------|---------------|--------|
| Predictors | Estimates | CI | p |
| (Intercept) | 0.11 | 0.05 – 0.16 | <0.001 |
| Gender [Cis-Female] | 0.05 | 0.01 – 0.08 | 0.012 |
| Gender [Trans/NB/Other] | 0.00 | -0.05 – 0.05 | 0.936 |
| Total Traumas | -0.02 | -0.04 – -0.01 | 0.004 |
| Log(Program Length) | 0.04 | 0.00 – 0.08 | 0.027 |

Observations 64
 R^2 / R^2 adjusted 0.252 / 0.201

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Ohio: Problem Severity Scale

| <i>Predictors</i> | Change in Clinician Severity Score | | |
|--------------------------------|---|---------------|--------------|
| | <i>Estimates</i> | <i>CI</i> | <i>p</i> |
| (Intercept) | -0.01 | -0.12 – 0.10 | 0.864 |
| Gender [Cis-Female] | -0.08 | -0.16 – -0.01 | 0.029 |
| Gender [Trans/NB/Other] | -0.01 | -0.11 – 0.10 | 0.883 |
| Total Diagnoses | -0.05 | -0.09 – -0.01 | 0.022 |

Observations 78
R² / R² adjusted 0.125 / 0.089

| <i>Predictors</i> | Change in Youth Severity Score | | |
|----------------------------|---------------------------------------|---------------|--------------|
| | <i>Estimates</i> | <i>CI</i> | <i>p</i> |
| (Intercept) | -0.19 | -0.30 – -0.07 | 0.002 |
| Log(Program Length) | -0.09 | -0.19 – 0.01 | 0.069 |

Observations 52
R² / R² adjusted 0.065 / 0.046

| <i>Predictors</i> | Change in Parent Severity Score | | |
|-----------------------------|--|---------------|------------------|
| | <i>Estimates</i> | <i>CI</i> | <i>p</i> |
| (Intercept) | -0.15 | -0.21 – -0.09 | <0.001 |
| Maximum Issue Acuity | -0.05 | -0.09 – -0.01 | 0.027 |

Observations 68
R² / R² adjusted 0.072 / 0.058

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Ohio: Functioning Scale

| Change in Clinician Functioning Score | | | |
|---------------------------------------|------------------|--------------|------------------|
| <i>Predictors</i> | <i>Estimates</i> | <i>CI</i> | <i>p</i> |
| (Intercept) | 0.23 | 0.13 – 0.33 | <0.001 |
| Current Suicidal Ideation | 0.10 | 0.01 – 0.20 | 0.036 |
| Substance Use History | -0.10 | -0.20 – 0.00 | 0.052 |
| Log(ProgramLength) | 0.08 | -0.00 – 0.16 | 0.051 |

Observations 78
R² / R² adjusted 0.129 / 0.094

| Change in Youth Functioning Score | | | |
|-----------------------------------|------------------|---------------|--------------|
| <i>Predictors</i> | <i>Estimates</i> | <i>CI</i> | <i>p</i> |
| (Intercept) | 0.08 | -0.11 – 0.26 | 0.402 |
| Current NSSI | -0.16 | -0.29 – -0.04 | 0.013 |
| Current Suicidal Ideation | 0.17 | 0.05 – 0.29 | 0.005 |
| Foster Care | -0.07 | -0.16 – 0.01 | 0.099 |
| Total Diagnoses | 0.04 | -0.01 – 0.09 | 0.101 |
| Log(ProgramLength) | 0.08 | -0.01 – 0.17 | 0.092 |

Observations 52
R² / R² adjusted 0.276 / 0.198

| Change in Parent Functioning Score | | | |
|------------------------------------|------------------|--------------|--------------|
| <i>Predictors</i> | <i>Estimates</i> | <i>CI</i> | <i>p</i> |
| (Intercept) | 0.02 | -0.11 – 0.14 | 0.803 |
| Gender [Cis-Female] | 0.09 | 0.00 – 0.17 | 0.044 |
| Gender [Trans/NB/Other] | -0.04 | -0.16 – 0.08 | 0.481 |
| Total Diagnoses | 0.03 | -0.01 – 0.08 | 0.126 |
| Maximum Issue Acuity | 0.04 | 0.00 – 0.08 | 0.030 |

Observations 67
R² / R² adjusted 0.184 / 0.131

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Ohio: Restrictiveness of Living Environment Scale (ROLES)

| <i>Predictors</i> | Change in ROLES Score | | |
|---------------------------|-----------------------|---------------|--------------|
| | <i>Estimates</i> | <i>CI</i> | <i>p</i> |
| (Intercept) | 0.01 | -0.01 – 0.03 | 0.194 |
| Total Diagnoses | -0.01 | -0.01 – -0.00 | 0.004 |
| Total Traumas | 0.00 | 0.00 – 0.01 | 0.009 |
| Log(ProgramLength) | 0.01 | 0.00 – 0.02 | 0.046 |

Observations 76
R² / R² adjusted 0.206 / 0.173

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Ohio: Satisfaction Scale

| Change in Youth Satisfaction Score | | | |
|------------------------------------|------------------|---------------|--------------|
| <i>Predictors</i> | <i>Estimates</i> | <i>CI</i> | <i>p</i> |
| (Intercept) | -0.02 | -0.04 – -0.00 | 0.016 |
| Maximum Issue Acuity | -0.01 | -0.02 – 0.01 | 0.254 |

Observations 51
R² / R² adjusted 0.026 / 0.007

| Change in Parent Satisfaction Score | | | |
|-------------------------------------|------------------|---------------|------------------|
| <i>Predictors</i> | <i>Estimates</i> | <i>CI</i> | <i>p</i> |
| (Intercept) | -0.07 | -0.10 – -0.03 | <0.001 |
| NSSI History | 0.02 | 0.00 – -0.05 | 0.113 |
| Substance Abuse History | 0.04 | 0.00 – 0.07 | 0.031 |
| Log(ProgramLength) | -0.03 | -0.06 – 0.00 | 0.032 |

Observations 67
R² / R² adjusted 0.147 / 0.106

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Ohio: Hopefulness Scale

| Change in Youth Hopefulness Score | | | |
|-----------------------------------|------------------|---------------|--------------|
| <i>Predictors</i> | <i>Estimates</i> | <i>CI</i> | <i>p</i> |
| (Intercept) | -0.01 | -0.03 – 0.01 | 0.278 |
| Gender [Cis-Female] | -0.03 | -0.06 – -0.00 | 0.038 |
| Gender [Trans/NB/Other] | -0.01 | -0.04 – 0.03 | 0.687 |

Observations 51
R² / R² adjusted 0.089 / 0.051

| Change in Parent Hopefulness Score | | | |
|--|------------------|---------------|------------------|
| <i>Predictors</i> | <i>Estimates</i> | <i>CI</i> | <i>p</i> |
| (Intercept) | -0.08 | -0.12 – -0.05 | <0.001 |
| Age | 0.01 | 0.00 – 0.01 | 0.005 |
| Current Problematic Substance Use | -0.05 | -0.08 – -0.02 | 0.004 |

Observations 67
R² / R² adjusted 0.180 / 0.154