FINAL REPORT

Crisis and Transition Services

2018-2022

Oregon Health & Science University

Data, Evaluation and Technical Assistance Team

ACKNOWLEDGEMENTS

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“Thank you – they were really helpful and it was just a really good program in our time in need… I don't know what we would have done if this resource wasn't available.”

- A CATS Parent

SUMMARY

Crisis and Transitions Services (CATS) was a novel program in Oregon that provided crisis stabilization and bridging services for youth and their families who sought help at emergency departments (EDs) for mental health crises. It was created in 2015 as a pilot program in four counties with the highest rates of ED boarding in the state and expanded to eleven counties over the next seven years.

This final report documents the history and timeline of CATS, and its development from a pilot program to a replicable model of care. It describes the collaborative approach used to involve partners in refining the program and developing the data system for tracking youth outcomes. It also contains data collected from clinical and family peer providers, as well as the families who participated in the program.

In 2022, CATS services ended and were replaced by youth stabilization services that are part of Oregon's Crisis Intervention Services continuum. This final report on CATS presents the objective findings and subjective learnings from the DAETA Team's work with CATS, in the hope that these lessons may help guide future programs for youth and families in crisis.

CONTENTS

TIMELINE of EVENTS

2014

- OHA Emergency Department (ED) boarding workgroup recommends piloting ED Diversion (EDD) programs in response to youth boarding crisis

2015

- EDD programs launched in 4 counties
- Oregon Legislature directed OHA to conduct a study on ED boarding
- Legislation passed related to ED discharges (HB 2023, HB 2948)

2016

- EDD and legislative summit highlighted early successes and challenges of the program

2017

- EDD program expanded to 3 additional counties
- Legislation passed related to EDs and requirements for payers (HB 3090, HB 3091)
- OHA contracted with OHSU to evaluate EDD program

2018

- EDD program renamed to Crisis and Transition Services (CATS)
- CATS program expanded to 1 additional county
- OHSU data collection began
- CATS Family Guide created

2019

- CATS program expanded to 1 additional county
- Commercial carrier workgroup began developing strategy for commercial insurance coverage for CATS

2020

- COVID-19 pandemic caused statewide school closures and stay-at-home orders
- Secretary of State audit released, highlighting a lack of data and monitoring in the children's mental health system

2021

- CATS program expanded to 2 additional counties for a total of 12 programs in 11 counties
- CATS data pause enacted in response to COVID-19 pandemic
- CATS Practice Guidelines developed

2022

- CATS program (and data collection) ended, to be replaced by the statewide Stabilization Services program

2023

- Stabilization Services (MRSS) program launches in conjunction with the federal rollout of 988 and statewide Mobile Response system

HISTORY

Oregon has high rates of youth with mental health concerns including depression, anxiety, and suicidality, and access to mental health services is limited compared to many other states.[1] Both in Oregon and nationwide, many families turn to the Emergency Department (ED) to obtain mental health care for their children. However, with shortages of inpatient psychiatric beds and outpatient services, many youth end up boarding, or waiting, in the ED for hours or days before obtaining the recommended level of care.

In 2014, in response to the increasing number of youth in mental health crisis presenting to EDs, the Oregon Health Authority (OHA) convened a multi-sector workgroup that included providers from EDs and other levels of care, county mental health programs, commercial and public payers, and families and young adults with experiences in the mental health system. The workgroup was asked to identify factors contributing to increased boarding times in the ED, including systemic issues impacting access to care for youth. The group identified three main factors contributing to ED boarding: system capacity and gaps in the continuum of care; coordination and referral practices; and payment barriers (i.e. insurance coverage gaps).[2]

The group recommended that OHA fund ED diversion programs to provide immediate access to care and to transition youth out of EDs. These programs were instructed to be insurance blind and leverage existing community-based care options. Later that year, OHA launched four ED Diversion (EDD) pilot programs in counties with high rates of youth psychiatric boarding.

The pilot programs provided rapidly accessible, community-based mental health care for youth presenting to EDs in crisis. They served youth up to age 18 who otherwise met criteria for psychiatric inpatient admission, but had potential to safely transition home with sufficient support after initial evaluation and safety planning in the ED.

[1] Reinert, M, Fritze, D. & Nguyen, T. (2022). The State of Mental Health in America 2023. Mental Health America, Alexandria VA.
[2] Oregon Health Authority Addictions & Mental Health Division (2014). Children's Mental Health Increased Emergency Department Visits: Crisis Workgroup Recommendations.

Legislative Interest

In a parallel effort during the initial years of the EDD pilot programs (2015-2017), mental health advocates partnered with legislators to identify safe practices related to discharging patients from emergency departments and inpatient units who were seen for mental health crises. A number of related bills were passed during this time period, further strengthening the partnerships in the pilot program and the structure of the program itself (Figure 1).[3]

In 2015, the Oregon Legislature directed OHA to conduct a study on the boarding of patients with mental illness in hospital emergency departments. OHA contracted with Oregon State University's College of Public Health and Human Services to conduct the study, which was completed in October 2017.[4] The group recommended action items for OHA including:

- Use new data sets to monitor boarding
- Hire acute care coordinator
- Expand mobile crisis services
- Support the development of community crisis services
- Expand child and adolescent EDD pilots

Figure 1. Legislative Bills Related to Emergency Department Discharge, 2015-2017

HB2023 (2015) What hospitals are required to do when they discharge patients hospitalized for mental health treatment.

HB2948 (2015) How families (lay caregivers) are to be included in the discharging patient's care. Clarifies the conditions under which protected health information may be disclosed by a healthcare provider without obtaining an authorization from the individual or a personal representative.

HB3090 (2017) What emergency departments are required to do for patients (and their families/supporters) when being seen for a mental health crisis.

HB3091 (2017) Defines care coordination and case management and requires all payers (OHP + Commercial Insurance) to include as covered services.

[3] Oregon State Legislature (2015, 2017). House Bills 2023, 2948, 3090, 3091.
[4] Oregon Health Authority Public Health Division (2017). Emergency Department Boarding of Psychiatric Patients in Oregon: Report Briefing.

In 2018, the program was renamed from the ED Diversion Pilot to Crisis and Transition Services (CATS)

This new name more accurately represented the expanded aim of these services – to move youth safely from the ED to the community, providing intensive stabilization services and transitional care coordination.

Program Expansion

With early success of the pilots and increased interest from legislators, hospitals and other stakeholders, OHA worked to secure additional funding to expand the program. From 2015 to 2022, the program expanded to 12 programs in 11 counties across the state (Figure 2). In 2018, the program was renamed Crisis and Transition Services (CATS).

Organization of Services

CATS referrals were made to community providers in the youth's county of residence by an ED or crisis center. In some counties, schools made direct referrals to prevent youth being sent to EDs for behavioral health reasons. Community providers screened referrals first by phone; if appropriate, an in-person assessment was completed either in the ED prior to discharge or in the community within 24 hours of discharge. Inclusion criteria for CATS was that the youth was of an acuity level that they would be likely to board in the ED awaiting an inpatient psychiatric bed if appropriate outpatient services were not available, however acceptance was ultimately dependent on the intake specialist's clinical judgment. Programs had flexibility not to accept referrals if a youth was assessed as not acute enough to need the CATS program, too acute for outpatient care, or if the youth was not able to safety plan.

The programs were organized as coordinated care teams, directing services to the enrolled youth and to their caregivers.

- All programs offered safety planning, lethal means restriction counseling, 24-hour crisis support, and care coordination.
- Variable services included in-home individual and family therapy, psychiatric evaluation and medication management, and family or youth peer support.
- All programs aimed to facilitate connections to longer-term services and supports to assist the youth and their families with ongoing needs after the program ended, thereby increasing the durability of the short-term stabilization efforts.

Figure 2. CATS Program Providers & Locations

Benton County
Benton County Mental Health, Samaritan Health Services, & Oregon Family Support Network

Clackamas County
Catholic Community Services & Oregon Family Support Network

Deschutes County
Youth Villages

Jackson County
Jackson County Mental Health

Klamath County
Klamath Basin Behavioral Health

Lane County
The Child Center

Linn County
Linn County Behavioral Health & OneIIAnother

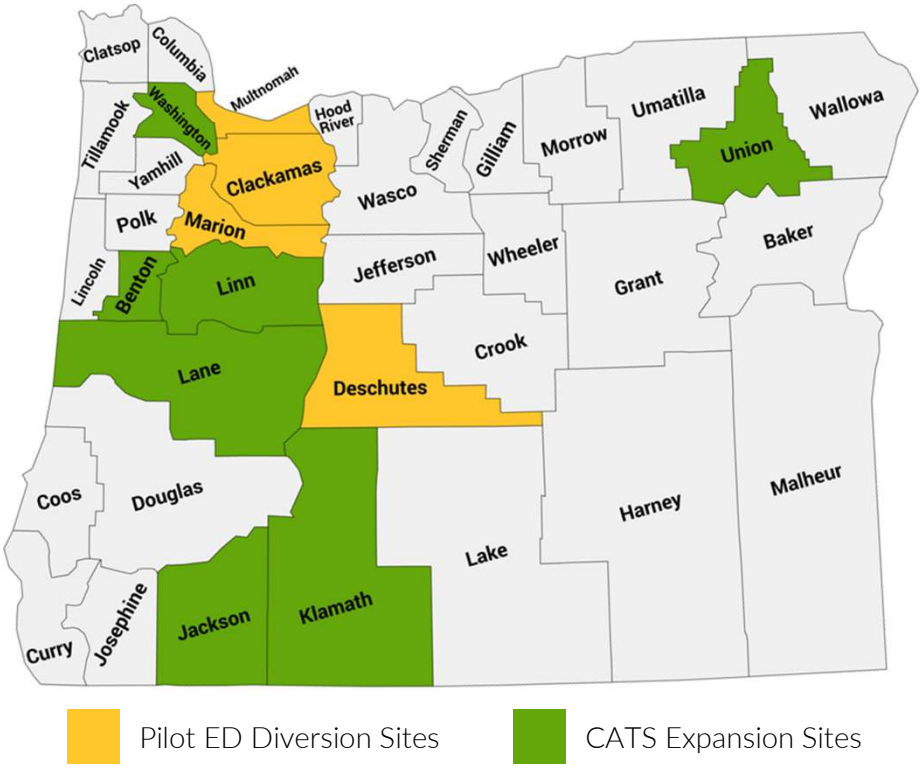
Marion County
Marion County Behavioral Health & Oregon Family Support Network

Multnomah County
Catholic Community Services & NAMI Multnomah

Union County
Center for Human Development

Washington County
Catholic Community Services & Lifeworks Northwest

Providence St. Vincent, Catholic Community Services & Youth Villages



Integration of Clinical and Peer Service Providers

An aspect of CATS that was unique among many clinical interventions for youth was the team approach that integrated clinical and peer services as a cohesive set of services (Figure 3). This approach offered directed support to the enrolled youth and their parents or other adult family members.

The support for the parents was provided by a Family Support Specialist (FSS), a specialized role of an individual who has personally experienced the complexities of parenting a child with behavioral health challenges and who has specialty training in providing support to parents and caregivers in similar circumstances.

While the clinical team focused primarily on the needs of the youth, the peer supported the parent or guardian in developing crisis management and advocacy skills, gaining knowledge about mental health and systems of care, and addressing their own needs and the needs of other family members. Teams were encouraged to introduce the program to youth and families as an integrated program, supporting a holistic view of the family's needs and strengths, social determinants of health, education, medical and mental health needs.

Figure 3. Clinical and Peer Components of the CATS Program

Clinical Services

Masters Level Therapist (QMHP)
Psychiatric Provider
Care Coordinator (QMHA)

- Assessment
- Safety planning, lethal means counseling
- Individual therapy
- Family therapy
- Psychiatric assessment
- Medication management
- Care coordination

Peer-Delivered Services

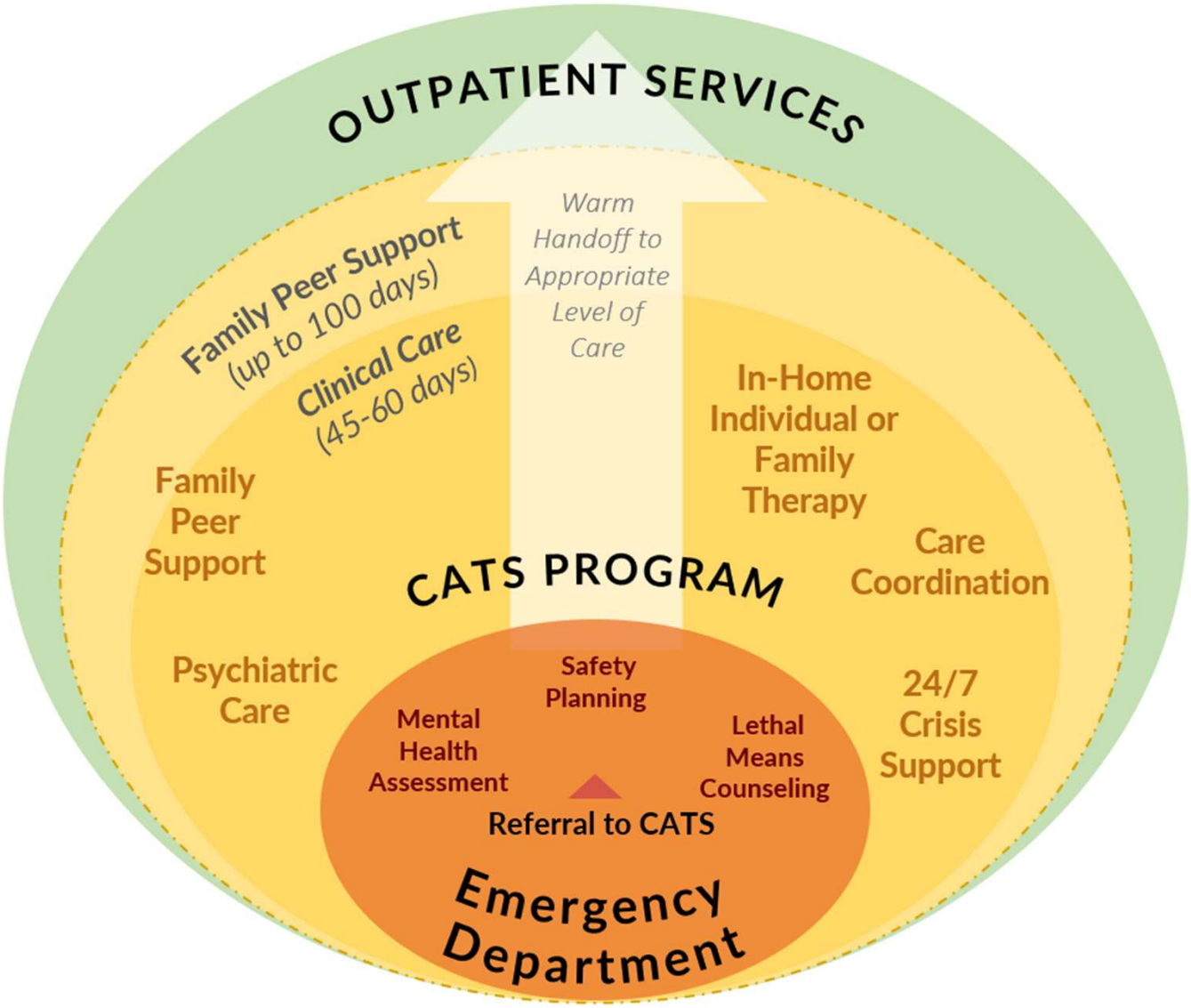
Family Support Specialist (FSS)
Youth Peer Support Specialist (YPSS)

- Focus on the parent/caregiver
- Builds trust based on shared family experiences
- Helps family articulate needs, identify and access resources
- Provides psychoeducation
- Supports skill development, including advocacy, systems navigation, communication, and problem-solving
- Models skills related to parenting and self care

CATS clinical services typically lasted for 45-60 days. Family peer services could be extended based on family needs for an additional 4-6 weeks (Figure 4).

This tiered approach to the length of services provided valuable support to parents, assisting them with lingering needs that were not addressed fully during the clinical portion of the service and facilitating a warm handoff to other community-based services.

Figure 4. The CATS Model



Variations in Service Delivery

Each of the four counties in the pilot received funds to collaborate with hospitals and local providers to create their program. While the workgroup's recommendations helped guide the major structure and objectives of the program, sites were encouraged to capitalize on their local community's strengths.

As a result, different financial models emerged; some counties operated solely with funds from OHA while others leveraged OHA dollars with county general funds or financial support from partnering EDs or crisis centers. Similarly, there was a range of clinical operation models. Some counties funneled youth directly into public mental health services, while others subcontracted with local agencies to provide care; most, but not all, also subcontracted with a family peer support organization. Many counties used the funding to expand the capacity of their community partners' already-established programs.

Generally, urban programs had a stronger focus on providing intensive clinical stabilization and connections to longer-term services, while rural programs focused on crisis response and coordinating rapid access to community providers. The programs providing clinical care generally employed master's level clinicians and psychiatric providers, while most rural programs utilized Qualified Mental Health Associates.

Another variation among the different programs was related to which youth were served based on insurance. Recommendations from the workgroup were to offer services to youth regardless of type of insurance to address payer-related barriers to accessing intensive community-based services. Programs in each county arranged their referral practices variably, with some accepting only youth with commercial insurance, some taking referrals solely with Medicaid (Oregon Health Plan), and others serving both in a true "insurance neutral" model.

DATA and PROGRAM DEVELOPMENT

The Need for Data

When CATS began as the EDD pilot project, there was no effective mechanism in place to track what was happening with youth in need of crisis care, what services and settings were needed and available for them, nor what happened to them after they left the ED. Concerns about data shortages across the state's mental health care system were highlighted in an audit released in 2020 by the Oregon Secretary of State, titled "Chronic and Systemic Issues in Oregon's Mental Health Treatment System Leave Children and Their Families in Crisis."[5] Among other concerns about the children's mental health system, the report cited data shortfalls, a lack of performance measures, weak state statutes and fragmented services, and a lack of monitoring of disbursed funds. The audit underscored systemic issues that had a real, tangible impact on service delivery to vulnerable youth and families; however, even before these issues were highlighted in the 2020 report, OHA's Child and Family Behavioral Health Unit was actively taking steps to address them.

Partnership with Oregon Health & Science University

In 2017, OHA contracted with Oregon Health & Science University (OHSU) to help address these issues. The team was comprised of a child & adolescent psychiatrist, family peer support specialist, research assistant, and social worker. Working collaboratively with OHA and the programs, the team conducted an outcomes study that would improve accountability, demonstrate program impact and value to stakeholders, and identify areas for program development and improvement. This OHSU team is now called the Data Evaluation and Technical Assistance (DAETA) team.

When the DAETA team first became involved, the pilot programs had already been providing services for three years. Initially, the primary goal was to gather data on each program's unique workflow, referral and enrollment volume, service array, and outcomes.

[5] Oregon Secretary of State Audits Division (2020). Chronic and Systemic Issues in Oregon's Mental Health Treatment System Leave Children and Their Families in Crisis.

The aim was to use this data to guide program development and improve standardization across the state, while maintaining flexibility for region-specific variations.

The DAETA Team worked with the providers to set up a data system that captured the necessary data points while minimizing provider burden. The team used the Research Electronic Data Capture (REDCap) web application to collect and manage data.[6,7]

To gather comprehensive information about the program, data was collected from multiple perspectives: CATS clinicians and peers, youth and caregivers, and the All Payer All Claims (APAC) Database (Figure 5). This required building strong partnerships with agencies and engaging them in a collaborative process to determine what data would be meaningful and valuable to collect. After a comprehensive planning process with the programs and OHA, the team began collecting data in January 2018.

Figure 5. Data Sources for the Outcomes Study

CATS Clinician: Submitted patient history, referral information, program service data, and program outcomes. Also completed a standardized measure called the **Crisis Assessment Tool** [8], which measured patient acuity at intake.

CATS Family Peer Support Specialist: Submitted referral information, program service data, and program outcomes.

Youth: Completed a standardized measure of patient quality of life called the **KIDSCREEN-10** [9] at intake and discharge.

Parent/Caregiver: Completed a phone or online survey two months after CATS completion that included questions about program satisfaction, clinical and functional outcomes, and connection to care ★ more than 800 families completed the survey from 2018-2022 ★

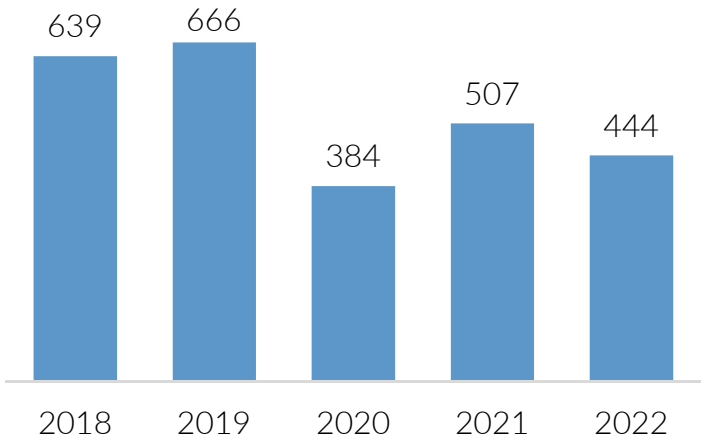
All Payer All Claims Database: Statewide claims database [10] that was used to assess long-term clinical outcomes, such as suicide attempts and recidivism to EDs or psychiatric inpatient units in the year after completing CATS.

[6] Harris, P.A., Taylor, R., Thielke, R., Payne, J., Gonzalez, N., Conde, J.G. (2009). Research electronic data capture (REDCap) – A metadata-driven methodology and workflow process for providing translational research informatics support. Journal of Biomedical Informatics.
[7] Harris, P.A., Taylor, R., Minor, B.L., et al. (2019). The REDCap consortium: Building an international community of software partners. Journal of Biomedical Informatics.
[8] Buddin Praed Foundation. Crisis Assessment Tool.
[9] Pabst Science Publishers. KIDSCREEN-10.
[10] Oregon Health Authority Office of Health Analytics. All Payer All Claims Database.

Youth Served by CATS

CATS programs across the state enrolled a total of 2,640 youth over five years (Figure 6). Enrollment rates dropped dramatically during 2020, which can be partially attributed to the national and local impacts of the COVID-19 pandemic. Some programs also shifted their program's enrollment capacity based on model standardization developments, contributing to lower enrollment numbers in the later years of the program.

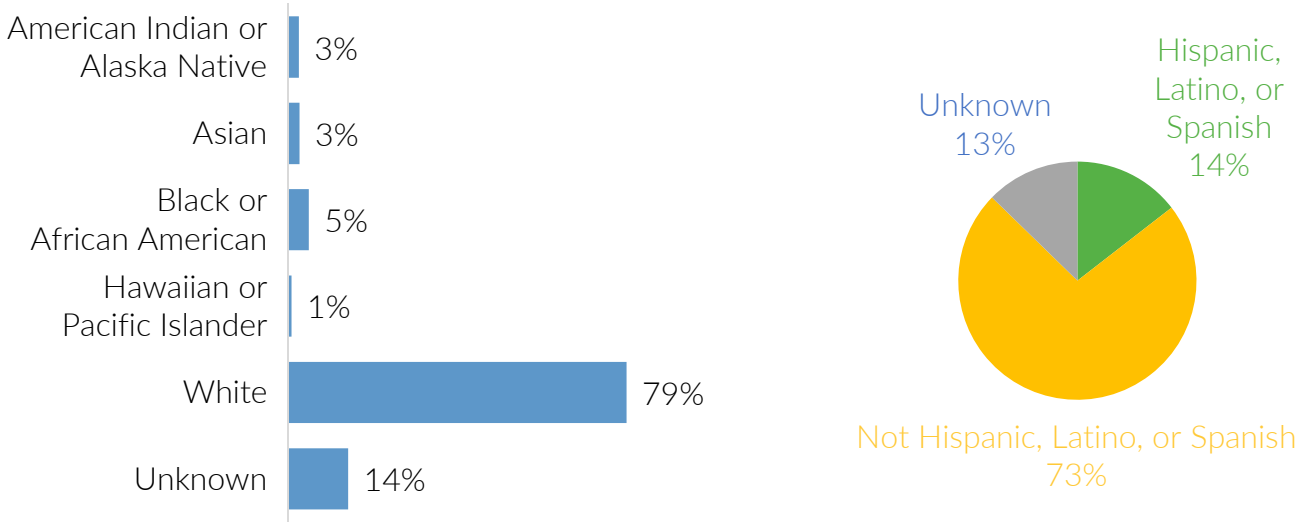
Figure 6. Total Youth Enrolled by Year (n = 2,640)



Demographic information

The average age of youth enrolled was 14, with most youth being between the ages of 13-17. The youngest youth enrolled was 3 years old and oldest was 24 years old. More than half of youth identified as female (58%), followed by male (36%) and transgender, non-binary or other (6%). For race and ethnicity, CATS primarily served White and Non-Hispanic/Latino/Spanish youth (Figure 7).

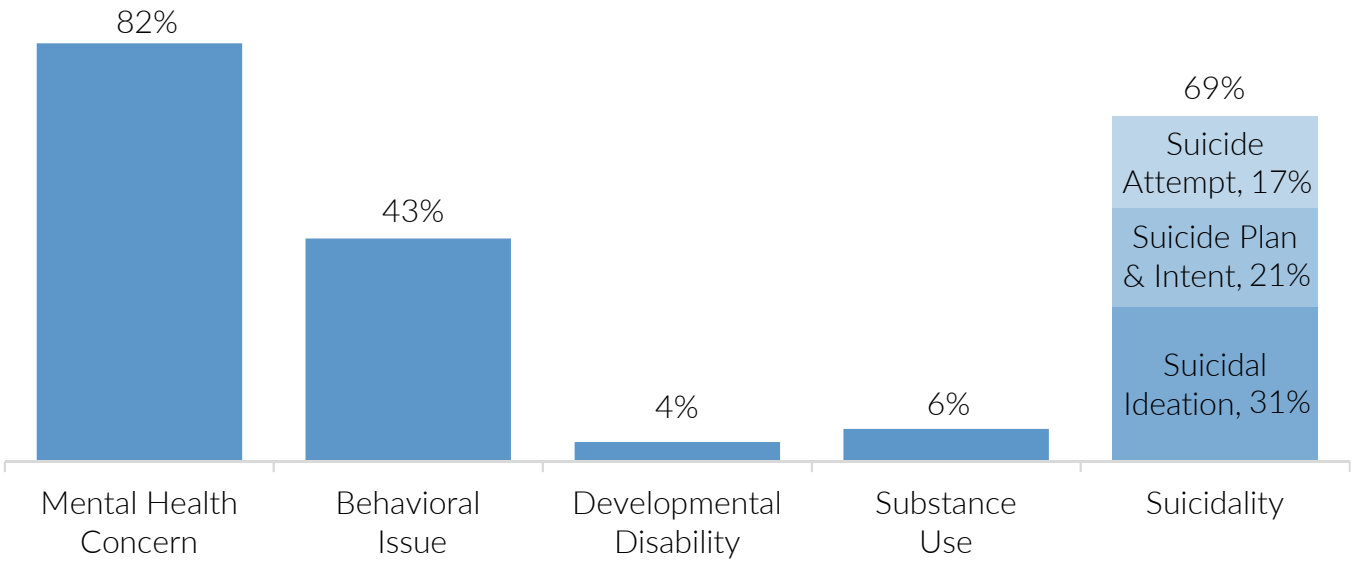
Figure 7. Race and Ethnicity (n = 2,640)



Clinical presentation

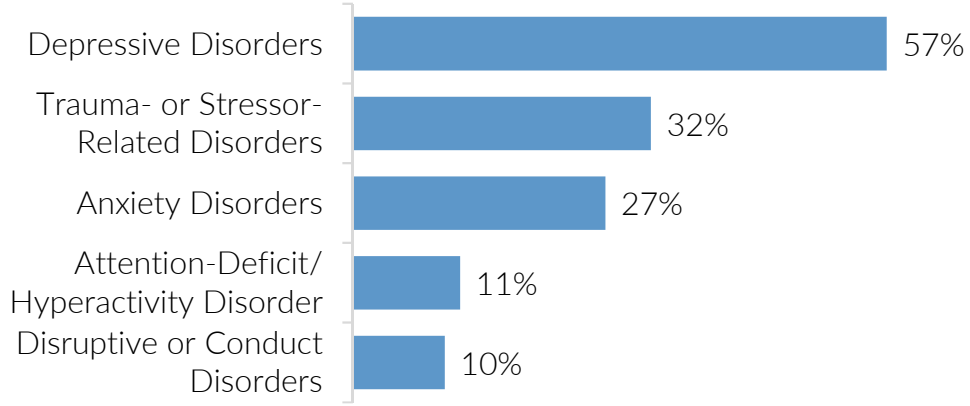
Most CATS youth presented at intake with a mental health concern and/or suicidality, which included suicidal ideation, suicide plan/intent, or a suicide attempt (Figure 8).

Figure 8. Presenting Referral Issue (n = 2,640)



The most common diagnoses of youth enrolled were Depressive Disorders, Trauma and Stressor-Related Disorders, Anxiety Disorders, Attention-Deficit Hyperactivity Disorder, and Disruptive or Conduct Disorders (Figure 9).

Figure 9. Most Common Diagnoses (n = 2,640)



Many youth enrolled in CATS reported complex social and mental health histories (Figure 10). The majority of youth endorsed a history of trauma, and had high proportions relative to the general population of previous ED mental health visits, previous suicide attempts, previous or current involvement in the foster care system, and/or previous or current involvement with juvenile justice.

- More than half of youth enrolled in CATS were identified as having a trauma history. The percentage of youth with a history of trauma increased slightly over time, with 2022 reaching the highest at 72%.
- Between one-fourth and one-third of patients reported a previous mental health visit. Similar proportions reported prior suicide attempts.
- The percentage of youth who were previously or currently (at time of enrollment) in foster care ranged from eight to 13 percent and was highest in 2022.
- Youth who were previously or currently (at time of enrollment) involved with the juvenile justice system decreased slightly over the years.

Figure 10. History and Social Demographics by Year

	2018	2019	2020	2021	2022
Has a trauma history	56%	62%	71%	68%	72%
Has a previous mental health ED visit	32%	26%	25%	29%	27%
Has a previous suicide attempt	28%	26%	29%	28%	26%
Previously/currently in foster care	8%	10%	10%	9%	13%
Previously/currently involved with juvenile justice	9%	8%	6%	5%	5%

The Crisis Assessment Tool, which measures patient need on a variety of domains, highlighted the acute clinical presentations of CATS youth.[8] Most commonly, youth had significant needs in the domains of *Depression*, *Anxiety*, *Family Stress*, *Suicide Risk*, and *Adjustment to Trauma*.

Crisis Assessment Tool Scoring Guidelines

Scores range from 0-3, with higher scores indicating more severe/acute needs.

0: no evidence or no action needed

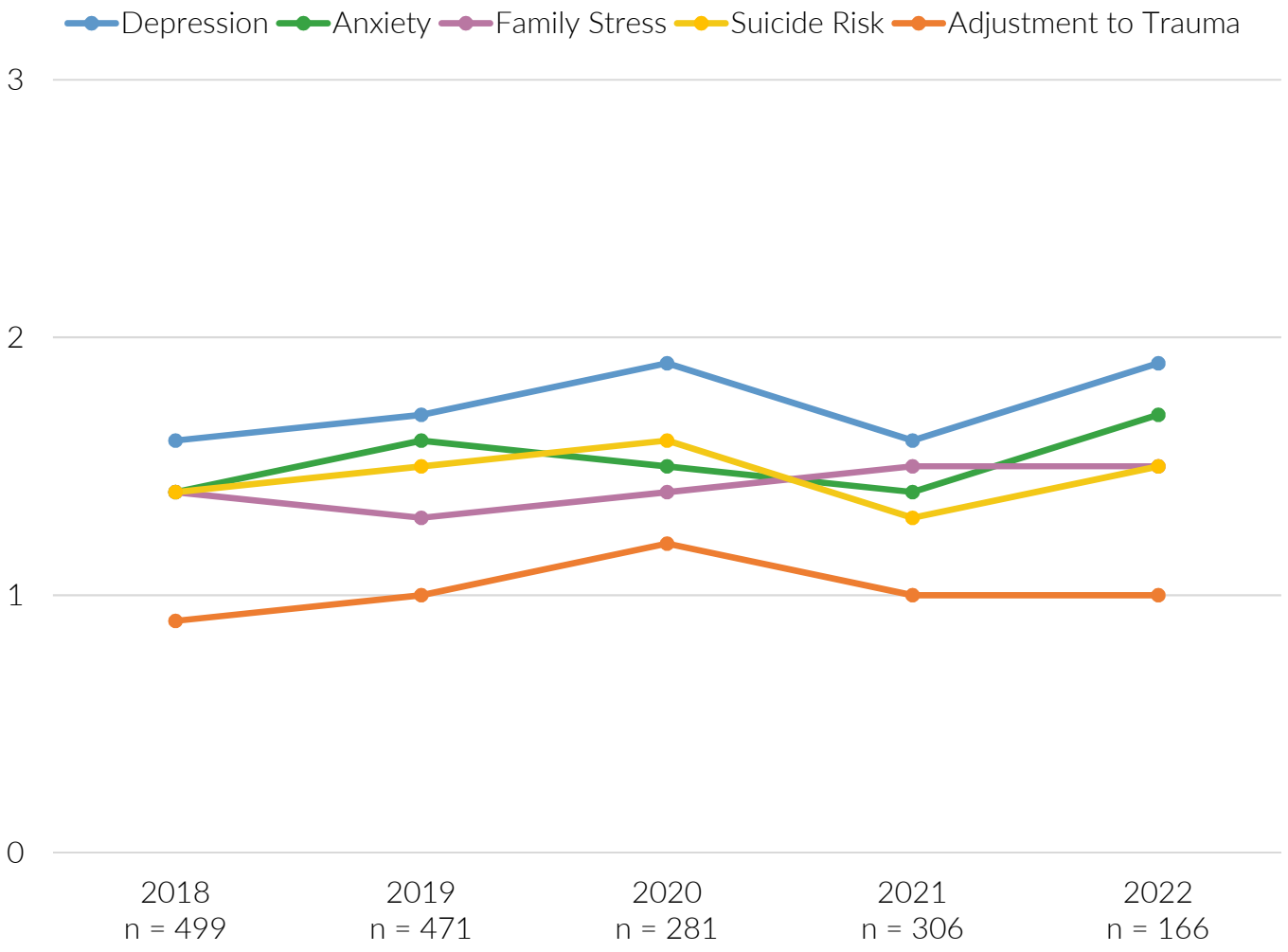
1: indicates a need for monitoring or preventive action

2: indicates a need for action

3: indicates a need for immediate or intensive action

Average scores ranged from 1.5 to 2.0, suggesting that CATS youth needed services in place to address these needs. Domains of *Depression*, *Suicide Risk*, and *Adjustment to Trauma* all peaked in 2020, while *Family Stress* peaked in 2021 and *Anxiety* peaked in 2022 (Figure 11).

Figure 11. Crisis Assessment Tool Scores Top 5 Domain Ratings Over Time



Statistical analysis of Crisis Assessment Tool data revealed two notable trends:

First, a number of items on the scale were significantly associated with a youth's trauma history.[11] Recent or acute sexual aggression, moderate or severe problems with their living situation, and issues with social behavior were associated with increased odds of a youth having a trauma history ($p < 0.01$). Youth with both moderate to severe living situation concerns and recent or acute social behavior issues were most likely to have experienced trauma. These associations highlight the importance of using a trauma-informed approach when caring for youth with these presentations.

Second, specific needs on the scale shifted during the COVID-19 pandemic, offering insight into the pandemic's impact on youth in mental health crisis.[12] During the COVID-19 pandemic, mean scores on the *Caregiver Needs* and *Family Stress* domains increased ($p = 0.021$, $p = 0.002$, respectively). In contrast, lower scores were found across multiple domains: *Bullying Perpetration* ($p < 0.0001$), *School Issues* ($p < 0.0001$), and *Depression* ($p < 0.0001$). These findings outlined some of the impacts of the COVID-19 pandemic on youth and families, as well as highlighting the importance of ongoing access to high-intensity mental health programs such as CATS.

Key Takeaways

1. There are specific presentations associated with a youth's trauma history, highlighting the need for a trauma-informed lens when assessing and caring for youth in mental health crisis.
2. Clinical and functional needs shifted during the COVID-19 pandemic, highlighting specific ways the pandemic affected vulnerable youth and families.

[11] Ribbers, A., Laurie, A., Sheridan, D., Marshall, R. (2021). Clinical and behavioral indicators associated with trauma history in children and adolescents enrolled in an emergency department diversion program. Emergency Psychiatry.
[12] Nguyen, S., Freeman, I., Ribbers, A., Marshall, R. (2023, under peer review). The impact of the COVID-19 pandemic on mental health acuity for youth in a crisis stabilization program: A propensity score analysis using the Crisis Assessment Tool.

COVID-19 Pandemic: Service Adaptations

Adapting to a changing landscape during the COVID-19 pandemic

In March 2020, mental health service delivery in Oregon (and nationwide) was impacted dramatically by the onset of the COVID-19 pandemic. Oregon's mandated school closures began on March 12, 2020, and stay-at-home orders were in place from March 23, 2020, to June 25, 2021. Emergency departments grappled with how to serve youth in mental health crisis while balancing the demands of the influx of COVID positive patients.

CATS programs quickly adapted their workflows to continue serving youth and families. Some adaptations to service delivery included:

- Providing tablets to emergency departments so that CATS intake coordinators could remotely conduct program eligibility and safety assessments
- Providing CATS clinical and peer services via telehealth, including doing home safety assessments and lethal means counseling via videoconference
- Offering safe in-person support by meeting families at a park or other public, outdoor space where social distancing could be maintained
- Extending the length of time a youth could be enrolled in CATS to offset the dramatic decreases in community outpatient availability

Additionally, OHA and the DAETA team made several adjustments to meet the needs of programs. OHA instituted a temporary pause in data reporting requirements to help ease administrative burden while programs were facing unprecedented challenges in service delivery and shortages in the statewide peer and clinical workforce.

Programs were provided with the option to continue standard data collection or switch to an abbreviated data set. This option was available through the remaining years of CATS. Overall, 49% of REDCap records included the full dataset, and 51% utilized the abbreviated data set during 2021 and 2022.

Program Outcomes

Connection to care

In addition to providing direct services, an important outcome of CATS was to ensure that youth were connected with long-term services at closure from the CATS program.

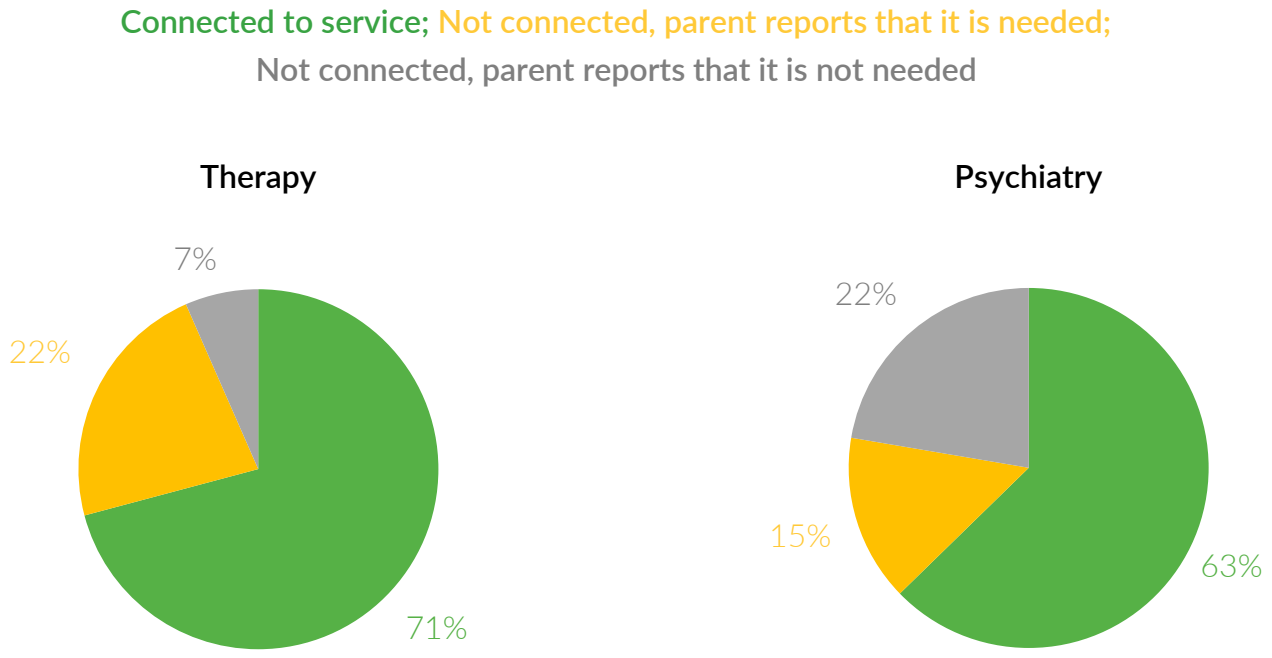
Upon closure from CATS, the following proportions of youth were connected to services:

- 77% of youth were connected with individual therapy and 37% with family therapy
- 53% of youth were connected with psychiatric care
- 71% of youth were connected to the clinically recommended level of care

Two months after program completion, caregivers reported the following (Figure 12):

- 71% reported that their child was connected to therapy services.
- 63% reported that they were connected to a psychiatric provider.
- 85% of families reported that their current care was meeting their needs.

Figure 12. Connection to Care Two Months After CATS (n = 683)

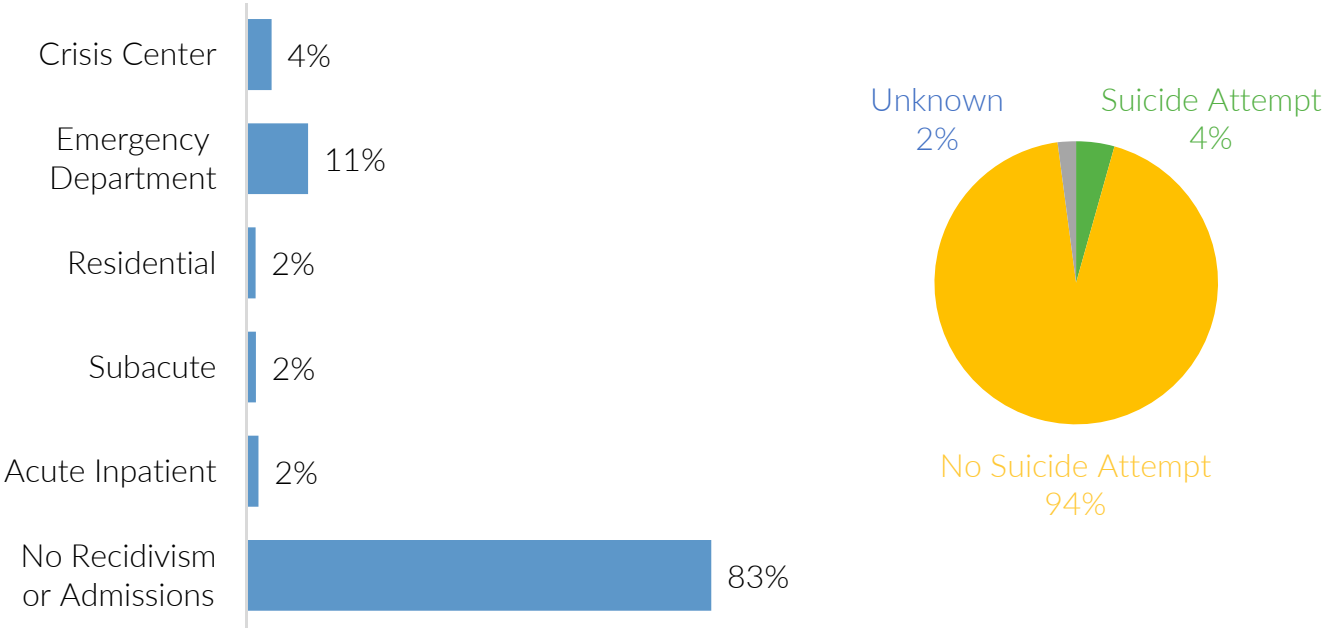


Clinical and safety outcomes

A key objective of the outcomes project was to track clinical and safety outcomes of youth who participated in CATS, both during and after the program.

Programs reported on major clinical events that occurred while youth were enrolled in CATS. Figure 13 shows the number of youth who had suicide attempts, re-presentations to crisis centers or EDs, or an admission to a psychiatric inpatient level of care.

Figure 13. Recidivism, Admissions and Suicide Attempts During CATS (n = 1,335)



To further evaluate the long-term safety and efficacy of the CATS program, a longitudinal analysis was completed using data from the APAC database.[10] This analysis compared outcomes of youth who participated in CATS with youth who received the community standard of care, which included all youth who went to EDs with similar mental health presentations and did not discharge to CATS. APAC data included all ED or psychiatric inpatient (IP) claims for Oregon youth with Medicaid or commercial insurance from 2012-2020. The analysis controlled for patient demographics, intake visit clinical presentation, mental health related ED or IP visits, suicidality, and other comorbid

conditions. The analysis found key differences between groups for risk of recidivism, which is defined as re-presentation to an ED or IP unit:

- Risk of recidivism to an **ED or IP** for the first 0-7 days from initial presentation is 3.28 ($p < 0.001$) times higher for controls than CATS patients and 3.15 ($p < 0.0001$) times higher for recidivism between 8-365 days of initial presentation.
- Risk of recidivism to **IP** for the first 0-7 days from index presentation is 10.32 ($p < 0.001$) times higher for controls than CATS patients and 7.86 ($p < 0.001$) times higher for IP recidivism between 8-365 days of initial presentation.
- There was no significant difference in **ED** recidivism between CATS and controls (adjusted hazard ratio: 1.1 ($p = 0.30$)).
- Suicide attempt risk of recidivism to both **ED or IP** is 2.00 ($p = 0.019$) times higher for controls compared to CATS cases.
- For suicide attempt risk of recidivism to **IP**, the hazard is 2.42 times higher ($p = 0.028$) for controls compared to CATS patients.
- There was not a significant difference in the risk of suicide attempt recidivism to an **ED** (adjusted hazard ratio: 1.68 ($p = 0.20$)).

Key Takeaways

1. Positive outcomes for recidivism and suicide attempts were observed during the program, considering the high-risk characteristics of the population served.
2. Within one year of the index crisis event, **overall recidivism** *and* **recidivism specifically to a psychiatric inpatient unit** was lower for CATS youth than youth who received the standard of care, for both general mental health complaints and suicide attempts.[13]
3. Within one year of the index crisis event, recidivism **specifically to an emergency department** was the same between groups, for both general mental health complaints and suicide attempts.[13]

[13] Marshall, R., Ribbers A., Freeman I., Magers J., Nguyen S., Maitland L., Sheridan D. (2023, under peer review). Youth mental health ED or inpatient returns to care following participating in a community-based crisis stabilization program: A retrospective cohort study with matched controls.

Functional outcomes

When evaluating the functional outcomes of youth who completed CATS, several measures and data points were used.

The KIDSCREEN-10 is an 11-item questionnaire that was filled out by youth at intake and discharge.[9] Scores range from 11 to 55, with higher scores indicating better functioning. An average increase of 3.68 points was observed from intake to discharge (Figure 14); however, these scores should be interpreted with caution due to large amounts of missing data. Programs struggled with having youth complete the KIDSCREEN-10, especially at program closure. A majority of youth are not represented in the sample below.

Figure 14. KIDSCREEN Intake and Discharge Scores Over Time

In the family survey, caregivers were asked about their family's functioning two months after program completion. A majority of parents reported that their youth was doing better than when they entered the CATS program (Figure 15). Families who reported that their child was doing a little or much worse were contacted to explore what their service needs were.

Caregivers were also asked about their confidence level in handling a future crisis; 93% felt confident about what to if their child experienced another mental health crisis (Figure 16).

"My child is doing better… We are at a good place right now. I'm so happy to have the skills that I learned from the program… It was a relief to know that I wasn't alone in the emergency room."

- A CATS Parent

Figure 15. How is your child doing now compared to when they started CATS? 2020-2022 (n = 398)

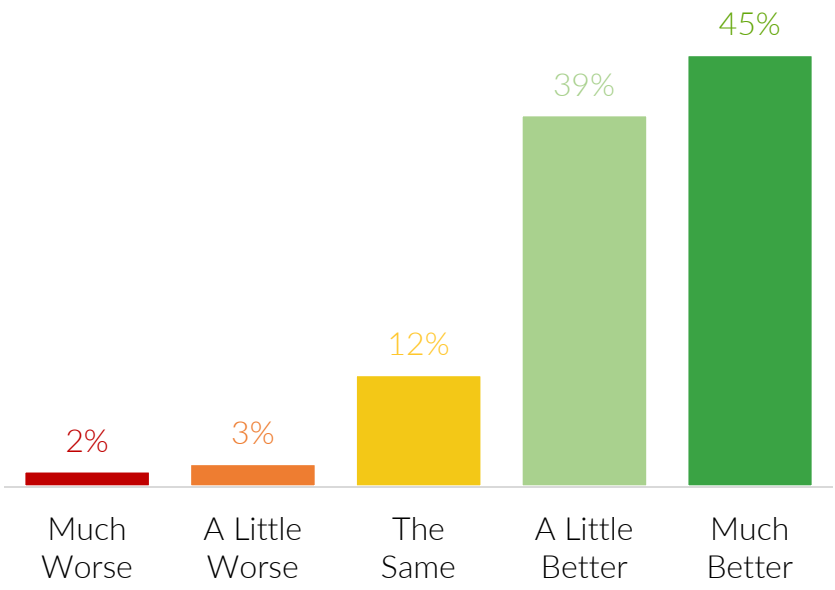
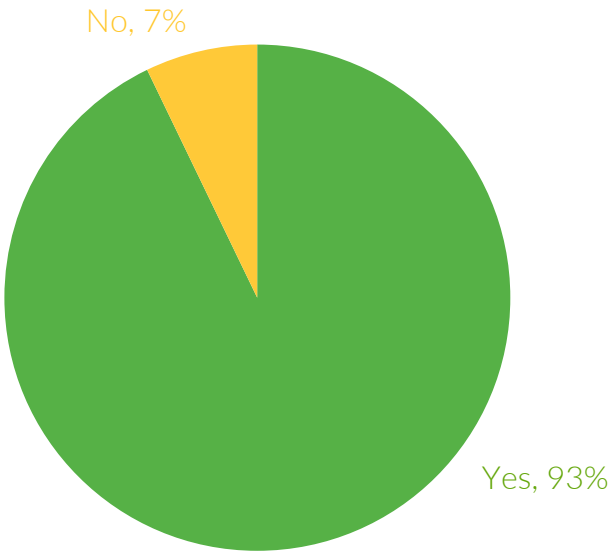


Figure 16. Do you feel confident about what to do in a crisis? 2018-2022, (n = 826)



Family experience of services

Families were asked to rate their satisfaction level with two components of the CATS program: clinical services and peer-delivered services. Ratings are based on a scale of 1-10, with 1 being completely unsatisfied and 10 being completely satisfied. More than 80% of families consistently rated clinical services as a 7 or above (Figure 17), and 84% rated their experience with peer-delivered services as a 7 or above (Figure 18).

Figure 17. Satisfaction with Clinical Services (n = 804)

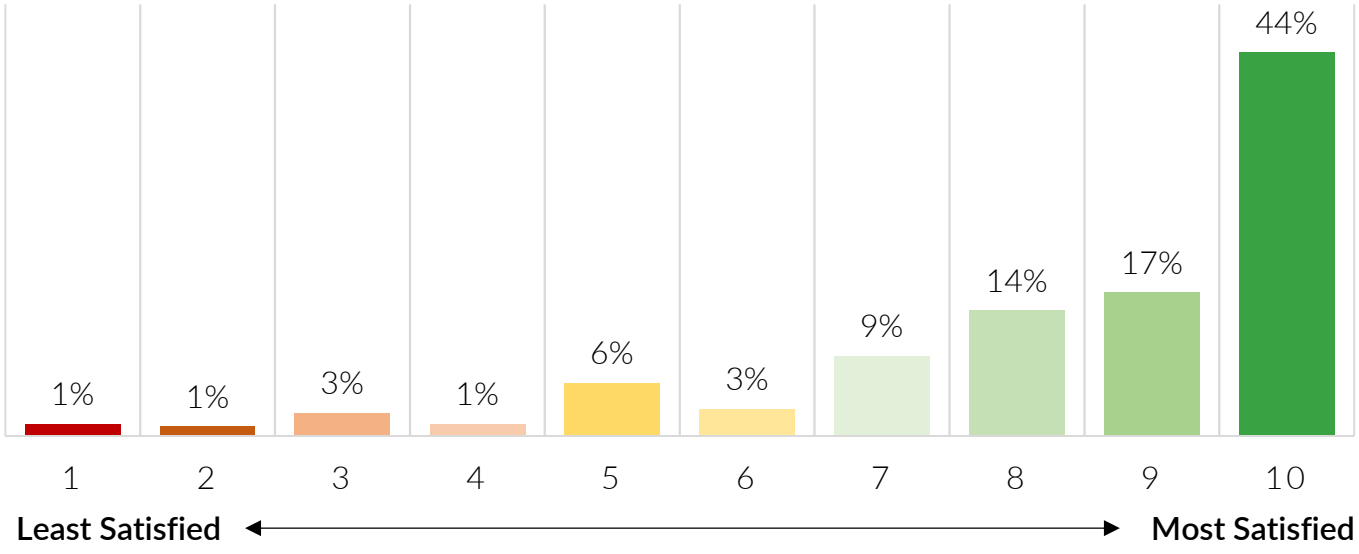
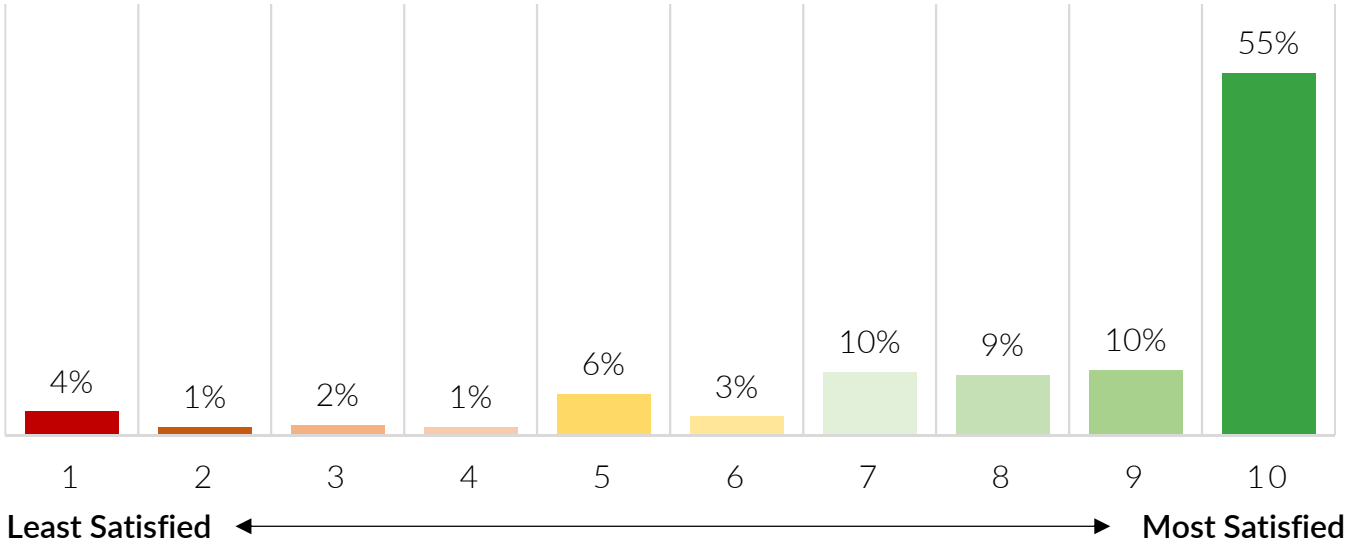


Figure 18. Satisfaction with Peer-Delivered Services (n = 384)



FAMILY QUOTES

"It is very sad that it takes going to the ER to show the scars on my child's arms to finally get some action and care that they needed. Thankfully, CATS exists and could step in and help my child. I only wish there were other ways to get this kind of support when needed."

- A CATS Parent

"My family support specialist has provided incredible support these last few months - both emotionally and also through recommending outside resources. They are compassionate and also remember all the details from our last session, providing an amazing continuity of care. I have found them to be absolutely invaluable as we navigate this family crisis."

- A CATS Parent

"We are so grateful to the CATS program, and that it was free of cost for us. It was an invaluable program. I honestly don't know how we would have navigated our child's crisis without the program. It has given us to the tools to be able to get through another such crisis, if it happens again, and to get out of crisis mode. Thank you"

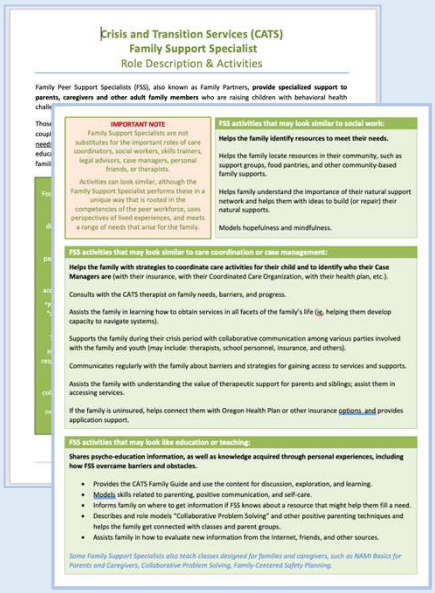
- A CATS Parent

Family-Informed Improvements

Though family peer support was available in most programs, overall rates for engagement with the peer component of the program were low early on in the CATS program, with only 19% of families working with a peer in 2018. Data from the family survey indicated that some families weren't engaging with the FSS in part because they didn't understand the role and weren't sure how the service could be helpful to them. A statistical analysis found that parents were more likely to engage with peer-delivered services when the FSS attended the first meeting with the family after intake compared to when the clinical staff member was the only one who met with the family.[14] This suggested that the first meeting may be an important time for family peers to introduce themselves, their role, and how they could help support the parents or caregivers.

OHA, the DAETA team, and community programs worked collaboratively to identify ways to improve family engagement. These collaborative efforts helped to establish a workflow for when and how to introduce the FSS to the family.

Figure 18. Strategies for Improving Family Engagement with Peer-Delivered Services


Crisis and Transition Services (CATS)
Family Support Specialist
Role Description & Activities

Family Peer Support Specialists (FSS), also known as Family Partners, **provide specialized support to parents, caregivers and other adult family members** who are raising children with behavioral health chall

IMPORTANT NOTE
Family Support Specialists are not substitutes for the important roles of care coordinators, social workers, skills trainers, legal advisors, case managers, personal friends, or therapists.
Activities can look similar, although the Family Support Specialist performs these in a unique way that is rooted in the competencies of the peer workforce, uses perspectives of lived experiences, and meets a range of needs that arise for the family.

FSS activities that may look similar to social work:
Helps the family identify resources to meet their needs.
Helps the family locate resources in their community, such as support groups, food pantries, and other community-based family supports.
Helps family understand the importance of their natural support network and helps them with ideas to build (or repair) their natural supports.
Models hopefulness and mindfulness.

FSS activities that may look similar to care coordination or case management:
Helps the family with strategies to coordinate care activities for their child and to identify who their Case Managers are (with their insurance, with their Coordinated Care Organization, with their health plan, etc.).
Consults with the CATS therapist on family needs, barriers, and progress.
Assists the family in learning how to obtain services in all facets of the family's life (ie. helping them develop capacity to navigate systems).
Supports the family during their crisis period with collaborative communication among various parties involved with the family and youth (may include: therapists, school personnel, insurance, and others).
Communicates regularly with the family about barriers and strategies for gaining access to services and supports.
Assists the family with understanding the value of therapeutic support for parents and siblings; assist them in accessing services.
If the family is uninsured, helps connect them with Oregon Health Plan or other insurance options and provides application support.

FSS activities that may look like education or teaching:
Shares psycho-education information, as well as knowledge acquired through personal experiences, including how FSS overcame barriers and obstacles.
- Provides the CATS Family Guide and use the content for discussion, exploration, and learning.
- Models skills related to parenting, positive communication, and self-care.
- Informs family on where to get information if FSS knows about a resource that might help them fill a need.
- Describes and role models "Collaborative Problem Solving" and other positive parenting techniques and helps the family get connected with classes and parent groups.
- Assists family in how to evaluate new information from the internet, friends, and other sources.

Some Family Support Specialists also teach classes designed for families and caregivers, such as NAMI Basics for Parents and Caregivers, Collaborative Problem Solving, Family-Centered Safety Planning.

- Family peers developed shared language about their role, creating consistency in how the role was introduced to families and also setting uniform expectations across teams.[15]
- This helped clarify and articulate the role of family support within the multi-disciplinary team, which helped to improve families' and clinical partners' understanding of the role.
- Teams were encouraged to modify their workflow to include the FSS in the first meeting with the family and to present the CATS service as a full set of services, demonstrating cohesion among the various roles on the team.

[14] Magers, J., Ribbers, A., Nguyen, S., Marshall, R. (2020). Incorporating family peer support specialists to assist families during crisis. Journal of Family Strengths.
[15] OHSU Data Evaluation and Technical Assistance Team, NAMI Multnomah, Oregon Family Support Network, Lifeworks NW, and Oregon Health Authority (2019). Crisis and Transition Services (CATS): Family Support Specialist Role Description & Activities.

Family engagement with peer support notably improved following these program changes (Figure 19). In 2018-2019, CATS clinicians referred fewer than 50% of families enrolled in the service to the peer support provider, with no more than 25% of families engaging. In 2020 through 2022, following the efforts to increase program access to peer support providers, modify the workflow, and better describe the family peer role, referrals increased steadily, eventually rising to 88%. Family engagement also rose year by year in that period, reaching 75% of families utilizing the service. Peers provided approximately 5,500 hours of direct support to families, with over 2,296 of those hours being in person.

Figure 19. CATS Families Referred To and Engaged With Peer Support

	Families Referred To CATS Family Support Specialist	Families Engaged With CATS Family Support Specialist
2018	33%	19%
2019	41%	25%
2020	54%	32%
2021	71%	58%
2022	88%	75%

"I have been extremely fortunate to have been referred to the CATS team. My peer support's care and compassion came when I needed it most. She helped me remain grounded in a crisis situation which allowed me to persevere and get my child into treatment. I am thankful beyond words for her check-ins, gentle reminders about self-care and reinforcement that my concerns about my child's welfare are valid and need to be addressed"

- A CATS Parent

COLLABORATION

CATS Learning Collaborative

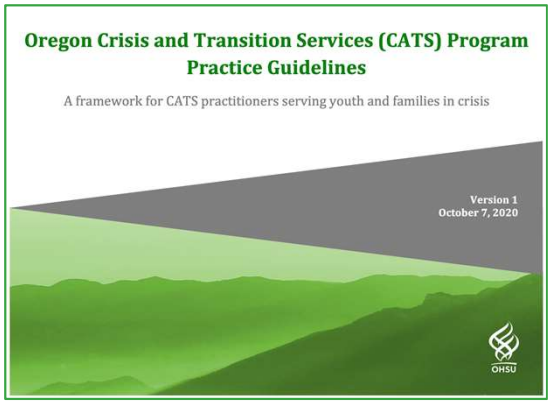
To foster a sense of community, collaboration, and program improvement efforts among all CATS providers, OHA and the DAETA team held bi-monthly learning collaboratives. Two dedicated spaces were created: one convened the full teams, and the second gathered the family peer support providers. The CATS Learning Collaboratives included topical guest speakers, discussions about program concerns, presentations on data findings, and community-building activities. Time was also dedicated for teams to share their successes and strategies for addressing common systems barriers. In the FSS Learning Collaborative, family peers connected around the shared challenges of providing peer support in a service with a strong clinical focus. This was a new experience for many in this workforce and adaptations to their practice were necessary, as well as developing skills around communication, coordination, and problem-solving.

CATS teams were convened for the collaboratives beginning in 2017 and over time, these shared group experiences seemed to foster positive mindsets and openness around making program improvements, addressing challenges, and celebrating successes.

COVID-19 Pandemic: Technical Assistance

Adapting to a changing landscape during the COVID-19 pandemic

The learning collaborative served a crucial role during the COVID-19 pandemic. Already offered a remote option to accommodate the geographic spread of programs, the whole group was able to nimbly move to exclusively virtual. This became a supportive space for providers to share pandemic-related challenges they were facing and solutions for overcoming them. Providers discussed program adaptations, provided feedback to OHA and OHSU about what technical and programmatic support was needed, and strategically planned for the return to in-person visits.

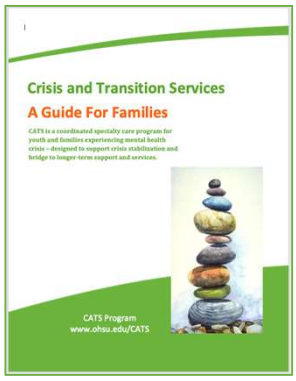


CATS Practice Guidelines

During the CATS Learning Collaborative, the participants developed the *Oregon Crisis and Transition Services (CATS) Program Practice Guidelines: A framework for CATS practitioners*. These practice guidelines provide a framework for CATS practitioners serving youth and families in crisis. Drawing from existing best practices and research, this document incorporates effective practices of CATS programs and findings from the OHSU CATS Outcomes Study.

This contributes to existing literature on crisis stabilization for families: helping establish safety, address underlying difficulties that lead to crises, and facilitate connections to ongoing community-based support, for long-term stability and wellbeing.

A Guide for Families



During the peer-led FSS Learning Collaborative, the family peer providers developed *Crisis and Transition Services: A Guide for Families*, which incorporated knowledge from the lived expertise of the family peers in navigating behavioral health crises and the complex system of services.[16] It was provided to families enrolled in CATS services and utilized as a tool to help families to understand concepts such as safety planning, suicide risk and protective factors, and navigating systems. It also included information on relevant skills, such as communication, setting boundaries, asking for help, advocacy, and emotional regulation.

The *Guide for Families* is a useful tool to support positive communication with peer and clinical providers and includes prompts to support explorations about social and cultural needs of the family.

[16] Magers, J.E. (2019). Crisis and Transition Services: A Guide For Families.

Interest from Commercial Insurance Stakeholders

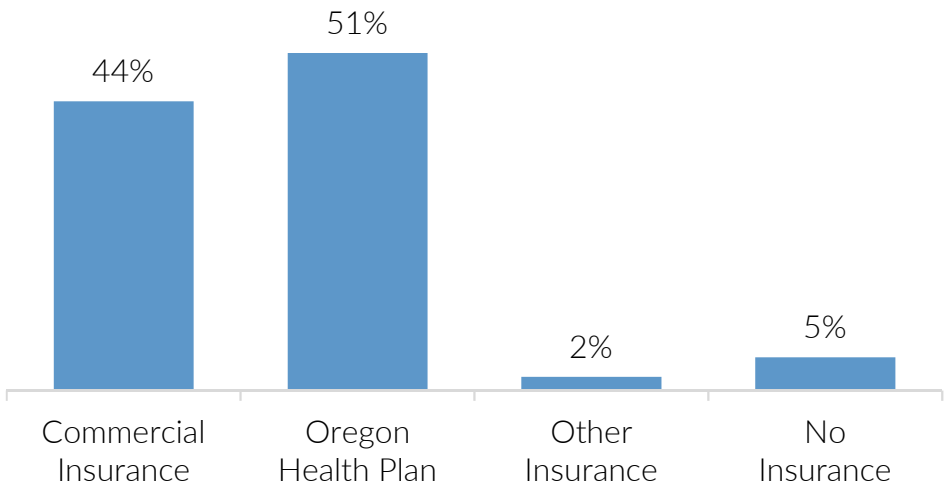
The model's early successes drew the interest of private insurance stakeholders to assess whether CATS services could be included in their plans. Insurers were motivated by the passage of House Bill 3091 in 2017, which requires case management and care coordination to be covered by both commercial health insurance plans and Oregon Health Plan.

In September 2018, commercial carriers, OHA, OHSU, and CATS providers formed a steering committee to explore ways to expand access to CATS beyond the state-funding limits. The steering committee developed plan language, service descriptions, defined outcomes, and billing and contracting language that enabled a pathway for providers to bill private insurance.

This group effort fostered innovations for partnerships among the state, service providers, private and public health insurance stakeholders and held great promise for further development of similar models among other publicly funded mental health services.

While the group started with a focus on the CATS program, it expanded its interest to other community-based services, such as Intensive In-Home Behavioral Health Treatment (IIBHT) and MRSS, and developed a Charter.[17]

Figure 20. Insurance Coverage of CATS Youth (n = 2,640)



Given widespread disparities in access to mental health care based on insurance status, CATS services were funded by the state for all youth in crisis, regardless of their insurance.

[17] CATS Commercial Carriers & County Mental Health Programs Workgroup (2022). Charter for Commercial Carriers & County Mental Health Programs Workgroup.

Lessons Learned

In June 2022, CATS providers captured their thoughts about lessons learned in delivering and improving CATS services. This was in anticipation that the program as it had been developed in the 12 sites would be replaced by a new version of Stabilization Services embedded within Oregon's Mobile Crisis Response System. Questions posed to the group and some of their responses are included in Figure 21.

Figure 21. CATS Providers' Lessons Learned

Teamwork

- Communication between the therapist and parent peer is important, making sure that the working relationship is good, so the caregivers and child's needs are both being heard.
- Provide services as a team and be present for initial meetings together as family support and clinical support presented as a package deal.

Individualized Care & Support

- Throw out the agenda, really pay attention to the family and listen to their story. That can build connection/trust. Simply listening can be tough and require a lot of training; too often, the agenda of the staff/providers is what leads, especially if folks are stressed with heavy workloads.
- Being aware of what the families in your area prefer is vital for making connections with families; maintain flexibility in the services in order to be culturally responsive to what works best in each community.

Resources and Supports in Your Community

- Knowing local resources where we can refer has been so critical for us.
- Being willing to learn about the specific needs a family has and help them explore options. I've learned so much about resources through exploring individual family needs alongside them, and trying to think creatively together.

Sustainability & Worker Self Care

- Take care of ourselves! Make sure that we are doing what we can and have permission and space to do what (providers) need to do to take care of themselves. Some days will be easier than others.
- Need an atmosphere of support among your team. Have supportive supervision.

Figure 21. CATS Providers' Lessons Learned

What are the most essential elements for CATS program success?

Prompt & Responsive

- Get there QUICKLY because when you're in crisis, you shouldn't have to wait a week.
- Listen and make it individualized to the family, focus on the family and their needs.
- Psychoeducation from the peers and clinical – for youth and the family.
- Serve youth who have commercial insurance or are uninsured.
- Rapid, expedited navigation and access to other services.

Roadmap for Care

- Access to quality assessments: the assessment piece is important for families as it provides the start of a road map that gives direction to situations in which parents might be struggling to identify a starting place.
- Peer support as an ESSENTIAL, integrated part of the program, not an "add-on" so that there is directed support to the family in addition to the youth.
- Have family support outside of the hours of 8-5, increasing coverage so there is always someone there.
- Add a youth peer so the youth can experience feeling understood/seen.

Effective Transition at Closure

- Flexible closure to make sure they have access to the right services and are engaged in those services. WARM HANDOFFS.
- Outcomes-based transitions: flexibility with discharge timelines.
- Take the time to make sure they're stabilized/connected.
- Don't just get people connected and OUT, slow down and ensure that we're meeting their needs.

Listening to Youth and Families

- No checkboxes, just listen to what the family needs and wants and work with them on their goals, which can evolve over time.
- Support the family in what they need in terms of listening to where they are and what they need as a support/empowering them rather than "fixing" them.
- Mantra: how do we support the family?

Figure 21. CATS Providers' Lessons Learned

What would you change or add to CATS to make it even better?

- More access to psychiatry. Access to these essential elements.
- Increased flexibility with community partners for coordination and warm handoffs.
- Be realistic: maintain adequate staffing and don't make promises to families that you can't keep.
- Being able to move youth from CATS to IIBHT internally has been very successful and helpful for us. One piece that is a barrier for us being able to do that is kiddos who have private/no insurance and finding resources for them.

Peers: Reflecting on your role as FSS in CATS, what are your thoughts on how to build the workforce so that every county will have FSS on their Stabilization Services teams?

- Improve understanding of the role and what FSS can do to support the family's process.
- Increase awareness that FSS are highly specialized, skilled, trained individuals doing valuable and valued work.
- Increase salary/personnel packages so that families wanting to serve as FSS are paid fair wages.
- Send job postings to families who have formerly received services.
- Improve clarity for funding streams so organizations (beyond CMHPs) who want to provide family peer services have access to those funds so that they can pay fair wages.
- Intentionally build out the infrastructure for FSS and YPSS that includes integration opportunities for CMHPs and diverse and numerous community organizations that have been in subcontracting position, such as NAMI, OneIIAnother, OFSN and Youth ERA.
- Continue this Learning Collaborative forum for FSS once CATS is done and MRSS is being implemented.

CONCLUSIONS

CATS began as an innovative pilot in Oregon to address ED boarding; it grew into a crisis stabilization program that served over 2,500 youth and families. CATS has been shown to be an effective alternative to the standard of care for many high-risk youth who present to emergency departments for mental health concerns and who might otherwise be boarded while awaiting a higher level of care or sent home without support. Many important lessons can be learned from the model and the process used to develop it.

- CATS was not defined in Oregon Administrative Rules as a level of care and it was not available statewide. It was implemented based on individual counties' voluntary opt-in to apply for funding from the state. This approach created unique opportunities to unify the community around developing innovative crisis services, enabling the development of a uniform yet flexible set of services that were designed for the benefit of youth and families.
- Participation in data collection was required of counties that provided CATS. Data obtained in the outcomes evaluation was helpful in standardizing a model of care and evaluating program success. Importantly, different types of data were collected, representing different perspectives, to get a balanced view of the program. The perspective provided by families was invaluable; family feedback created a different sense of accountability among the providers, the DAETA team and OHA, helping the groups work together to better meet family needs.
- CATS program development occurred through an intentionally collaborative approach. Learning collaboratives enabled the teams to discuss challenges, barriers, adjustments, and successes. Using this approach allowed the state and the DAETA team to refine the workflow, essential elements, contract language, and the data collection system that helped inform data-based decision-making.

The effectiveness of the CATS program is demonstrated through both objective outcomes as well as the perspectives of families and providers. This report offers insights into how other such efforts can be organized with a similar intent and approach.

“[CATS] is truly amazing and should be offered to families even before a crisis. This is the type of support that families and young people need. Makes a huge impact on our lives.”

- A CATS Parent