

Children's Intensive Mental Health Services Study

Final Report to the Minnesota Legislature

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Study overview

The Children’s Intensive Mental Health Services Study was commissioned by the Minnesota Department of Human Services (DHS) at the request of the 2017 Minnesota Legislature. The purpose of the study was to conduct an analysis of Minnesota’s current continuum of intensive mental health services and identify the service models and funding mechanisms needed to address gaps in the state’s system of care; ensure that youth and families have access to appropriate and effective residential and community-based treatment options; and ultimately improve youth well-being and success in home, school, and community settings.

The specific goals of the study are to:

- Assess the purpose, need, and appropriate role for children’s mental health residential treatment in Minnesota’s publically financed continuum of care
- Describe the effectiveness of Minnesota’s current residential treatment services and other intensive mental health service models
- Establish criteria or characteristics of effective treatment models and identify effective treatment models that could be adopted in Minnesota
- Analyze changes in service delivery capacity, financial implications, and potential impacts on youth and families resulting from federal Institution of Mental Diseases (IMD) designation
- Recommend one or more children’s mental health treatment models with potential funding options

This report describes the current context for the study, including implications of the IMD designation and a description of youth currently receiving residential treatment services, drawing on data currently available. The report includes a review of the literature to describe effective residential intervention strategies and compares those best practices to current practices in Minnesota’s children’s residential facilities and experiences shared by caregivers and local stakeholders.

The report then describes the role of residential treatment as a component of a more enhanced continuum of children’s mental health services and provides an assessment of Minnesota’s current capacity to offer these services across the state. Examples illustrating ways that provider agencies and state administrators have adopted these best practices into the design and implementation of new services, as well as examples of efforts to reform residential services are offered to both highlight promising approaches and to identify potential challenges.

Common terms

Throughout the report, there are key terms that are used to describe broader concepts or to simplify terminology. These are briefly described below:

Continuum of care. In this report, this term is used to refer to the array of mental health services that should be in place to ensure youth with mental illnesses receive the right level of care at the right time. Although a full continuum of care includes prevention and early identification services as well as traditional clinical services (e.g., outpatient therapy, psychiatry), this study focuses largely on the more intensive services available in community-based and residential settings.

Intensive mental health needs or treatment. Throughout this report, when referencing intensive mental health needs, we are referring to symptoms and behaviors that necessitate supervision and mental health treatment multiple times a week. When used broadly, we consider these to include needs that can be treated in community-based settings or, when appropriate, in residential settings.

Residential treatment. The phrase “residential treatment” is used to reinforce that changes in outcomes are a result of the mental health services provided in a residential setting, rather than a result of the placement itself.

Residential treatment centers (RTCs). We are using this term to describe the residential settings where youth are receiving mental health treatment. Unless specified otherwise, these are all licensed in the state as Children’s Residential Facilities (CRFs).

Youth with mental illnesses. Many state statutes and regulations use the categories of emotional disturbance (ED) or severe emotional disturbance (SED) when describing eligibility for services. ED is a category that includes a number of mental health diagnoses and indicates the child’s mental health symptoms are impacting daily functioning at home, at school, or in the community. The SED category adds that the mental health symptoms or behaviors are more intensive (e.g., self-harm), have lasted more than a year, and may require intensive mental health treatment in a residential setting. Throughout this report, the reference to “youth with mental illnesses” is referring to youth who are included in this SED category.

Acronyms

CRF

Children's Residential Facility

CTSS

Children's Therapeutic Services and Supports

IMD

Institution of Mental Disease

ITFC

Intensive Treatment Foster Care

PRTF

Psychiatric Residential Treatment Facility

RTC

Residential treatment center

About the project team

A multidisciplinary team, with varied expertise and experience, partnered with Wilder Research to implement this study. The team includes: AspireMN, the Minnesota Association of Children's Mental Health (MACMH), NAMI Minnesota, and the following independent consultants: Glenn Andis, Chris Bray, and Glenace Edwall. Each team member has a history of working in the area of children's mental health and brought their own experience and professional expertise to review data, interpret the findings, and discuss potential recommendations.

AspireMN (formerly the Minnesota Association of Child Caring Agencies) is a professional association of therapeutic providers in Minnesota. Through their involvement, Wilder Research had frequent and ongoing opportunities to gather information directly from residential treatment providers. While providers acting in their own self-interest is a potential conflict of interest, this was mitigated by Wilder Research gathering and reporting information from providers and the report recommendations being developed with consensus of the full project team. As described in the study methods, additional outreach was done to gather input from residential providers who are not AspireMN members.

Methods

A mixed-method approach, including the following data collection strategies, was used to understand the need for and role of residential treatment in the state’s continuum of children’s mental health services, characteristics of effective treatment, and potential treatment models and finance mechanisms to best meet the needs of youth with mental illness and their families.

Literature review. A focused literature review was conducted to identify best practices in residential treatment and factors contributing to treatment effectiveness. The literature also informed development of the data collection tools used to gather input from providers and local stakeholders.

Stakeholder engagement. Interviews or discussion groups were conducted with a range of stakeholders (listed below) to understand the effectiveness of current residential treatment, who is being well-served with current residential services, and what is missing in Minnesota’s current residential treatment options. A core set of questions (see the Appendix) was used to gather information from the following stakeholder groups, largely statewide associations.

American Indian Mental Health Advisory Committee	Minnesota Coalition of Licensed Social Workers
Association of Black Psychologists	Minnesota Council of Health Plans
Child Psychiatrists	Minnesota Hospital Association
Children’s Mental Health Subcommittee	Minnesota Juvenile Detention Association
Indian Child Welfare Act Advisory Council	Psychiatric Residential Treatment Facility working group
	Psychiatry Leaders
Juvenile Justice Advisory Committee	Safe Harbor and homeless youth providers
Mental health providers (AspireMN members; Melrose Place; Minnesota Girls Academy)	Special Education Directors
Minnesota Association of County Social Service Administrators (MACSSA)	

Caregiver interviews. Interviews and an online survey were used to gather feedback from a diverse sample of caregivers who have a child who was currently being, or who had recently been, served at a residential treatment center. The data collection approaches were reviewed and approved by Wilder’s Research Review Committee. To ensure geographic and demographic representation, the work group reached out to residential treatment facilities and providers across the state to recruit families. A total of 46 caregivers completed the survey or participated in an interview. Responses were primarily from parents of children ages 15-21, but included caregivers of youth as young as 11. Half of the caregivers were speaking about their child’s first experience in residential treatment; three caregivers had youth who had experienced residential treatment 6 or more times. A majority of caregivers identified their child’s race/ethnicity as white (70%); fewer youth were African American (30%), Asian (7%), Hispanic/Latino (7%), and Native American (2%). One-third of the respondents were from greater Minnesota, with feedback from the far northeast to the far southwest borders. Caregivers received a \$25 gift card as an incentive in appreciation of their time.

Case study. A mixed method approach, including a facilitated discussion with local stakeholders followed by separate meetings with behavioral health leaders from Leech Lake and Red Lake nations, and a compilation of Beltrami County data formed the basis of a case study intended to identify reasons contributing to and strategies to minimize out-of-home placements. Key findings from the case study are integrated in the report. A standalone summary will be submitted to DHS separately.

County referral and financial data. Through the Minnesota Association of County Social Services Administrators (MACSSA), a data collection form was administered to all counties to require information about the number of youth referred to mental health treatment and residential treatment centers and the cost to the county, current care coordination practices, and gaps in needed mental health services for youth and families. Nearly three-quarters of counties (72%) submitted information, including counties in the Twin Cities metro region, counties with regional urban centers, and rural counties. Fifty counties submitted forms in response to the initial request. An additional 14 counties submitted responses to a second version of the form, which included a subset of the original questions. The form is included in the Appendix.

Information gathering from residential providers. Multiple approaches were used to gather the perspectives of residential providers. Two facilitated discussions were hosted by AspireMN to hear the perspectives of agencies providing residential treatment. In addition, a written survey was developed and administered to agencies currently operating children’s residential treatment facilities in Minnesota. The form was completed by eight agencies that provide children’s mental health residential services in the state. A second form was developed to better understand the number of youth served annually by each facility, as well as the characteristics of youth who are not admitted into children’s residential facilities or who are not successful in the program. The form also asked providers to identify the services that, if in place in the community, would result in earlier discharges and more effective continuity of care. Both forms are included in the Appendix. Phone interviews were also conducted with the following children’s residential facility providers who did not complete the forms and who serve unique youth populations: Minnesota Girls Academy, Omegon, and Park Nicollet Melrose Place. Site visits were also conducted with Gerard Academy to learn more about its implementation of the Collaborative Intensive Bridging Services (CIBS) model and Northwood Children’s Services, the state’s first agency to develop and implement a Psychiatric Residential Treatment Facility (PRTF).

Interviews with national experts. To learn about effective residential treatment practices used in other states, interviews and discussion groups were held with providers in other states via the National Organization for State Associations for Children and the National Association for Children’s Behavioral Health. In addition, interviews were conducted with providers who implemented PRTFs in the following states: Kansas, Oregon, Pennsylvania, and South Dakota. Interviews were also conducted with the following national experts in models bridging residential and community-based services or with experience leading statewide transformations of children’s mental health services:

Name	Affiliation
Cathy Connolly	CEO, St. Charles Youth and Family Services, WI
Robert Lieberman	Building Better Bridges Initiative, OR
Bruce Kamradt	Director – Wraparound Milwaukee, WI
Elizabeth Manley	The Institute for Innovation and Implementation University of Maryland School of Social Work (Formerly: Assistant Commissioner for New Jersey’s Children’s System of Care), NJ
Tim Marshall	Director of Community Mental Health, Connecticut Department of Children and Families, CT
Sheamekah Williams	Senior Director of Oklahoma System of Care, OK
Sheila Pires	Human Service Collaborative (a partner in the National Technical Assistance Network for Children’s Behavioral Health), MD
Jeff Venderploeg	President and Chief Executive, Office of the Child Health and Development Institute of Connecticut and the Children’s Fund of Connecticut, CT

Student Data Reporting System (SDRS) analysis. Demographic and descriptive information for youth receiving residential services in 2017 was analyzed by the Center for Advanced Studies in Child Welfare, AspireMN’s contracted evaluation vendor. The SDRS data presented in the report include demographic, descriptive, and outcome information reported by participating mental health agencies for 280 youth who began services and 255 youth discharged by participating residential treatment providers in 2017. In that year, the following agencies submitted discharge data into the system: Avanti; Bar None Residential Treatment; Children’s Residential Treatment Center; Gerard; the Leo A. Hoffmann Center; Northwood Children’s Services; St. Joseph’s Home for Children; and Woodland Hills. While this does not include youth discharged from all residential treatment programs in the state, the descriptive information (including presenting problems) reported for the study are assumed to be fairly representative of youth seen in all residential programs.

Limitations

The project team initially proposed an 11-month multi-phase study, with the first five months of the study being an intensive information gathering phase to compile information from multiple sources, including service utilization data from the Medicaid Management Information System (MMIS), Social Service Information System (SSIS), and qualitative information from multiple stakeholder groups, including youth and caregivers. That phase of work was intended to be followed by development of initial recommendations, additional data gathering, if needed, and stakeholder engagement to review the recommendations before preparing the final report. As a result of delays in contracting, the actual study period was shortened by four months, an issue that contributed to a number of the limitations described below.

Quantitative and descriptive data. The project team initially proposed using a combination of data from SSIS and MMIS to describe the characteristics of youth who receive residential treatment services, including diagnostic information, services they receive prior to and following residential treatment, and length of stay. Analysis of this descriptive information was planned to establish a foundational understanding of the number of youth who receive intensive mental health services and patterns of service utilization, inform the scope and sampling approach for a series of case file reviews, and refine the caregiver and youth interview sampling approach. DHS did not have the capacity to provide the study team with a SSIS data file or analyzed output. The MMIS data files the project team received proved to be incomplete. As a result of these data issues, additional data collection activities were used to gather information about youth served from counties and providers and a description of service utilization and cost data could not be included in the report.

Youth engagement. A number of approaches were attempted to gather input directly from youth (age 13-18) who had received services from a children’s residential facility. MACMH made multiple attempts to work directly with residential providers to obtain the caregiver consent necessary for youth participation in an interview. This proved to be difficult for multiple reasons and, as a result of these challenges, only a handful of interviews were completed. MACMH also attempted to engage youth and young adults through its growing Youth Power network, but found that most of the youth participating in that youth advocacy work had not experienced residential services. While the report does include a brief summary of best practices in youth-guided services, the lack of youth voice in the report is a gap in the study.

Breadth of stakeholder engagement. Although the study team worked to meet with as many different stakeholder groups as possible during the study period, additional engagement, including opportunities to discuss the study results and recommendations, may have allowed for further refinement of the recommendations. While working through a number of professional organizations was useful in hearing from multiple stakeholder groups across the state, organization and institutional leaders may not have the same perspectives as staff who provide direct services to youth and families.

Background

Minnesota has a fragmented and complicated mental health system that has been under-resourced for decades. As a result, youth with mental illnesses have varying access to mental health services depending on where they live in the state, the type of insurance they have, and whether they are involved in other child-serving systems.

While the state has made immense gains over the past two decades in establishing a strong community-based array of services, there are still notable statewide gaps in key services, particularly intensive in-home services, care coordination, and children’s mobile crisis response teams. While Minnesota is still working to build a strong continuum of care, funding for one key service component – current residential treatment facilities – has fallen into jeopardy.

In 2018, based on a survey of children’s residential treatment facilities provided by the Minnesota Department of Human Services (DHS), the Centers for Medicare and Medicaid Services (CMS) made a final decision to define many of Minnesota’s current children’s residential treatment facilities as Institutes of Mental Disease (IMDs) – and therefore ineligible to receive federal Medicaid reimbursement for treatment services. The IMD policy change was not a surprise to Minnesota; the state had actively opposed these facilities being classified as IMDs, and the state’s rationale was accepted by CMS for a number of years. However, now with a final decision made with CMS and a firm deadline when the state’s current allocation of funding for these services is set to end, there is urgency to determine ways to ensure youth receive the services they need and how to financially support those services.

The stated goals of the Intensive Mental Health Services Study are much broader than identifying ways to ensure youth with mental illnesses who currently receive treatment from children’s residential treatment facilities do not lose access to critical services. However, because of the financial implications of the IMD designation, this study does include a large focus on this issue and, therefore, the report begins with information describing the current status of children’s residential treatment facilities. It is with this context that the report will then more fully describe the robust in-home and community-based array of services essential for residential treatment to be effective and for the state to implement a strong continuum of children’s mental health services and supports.

Current status: Children’s residential treatment

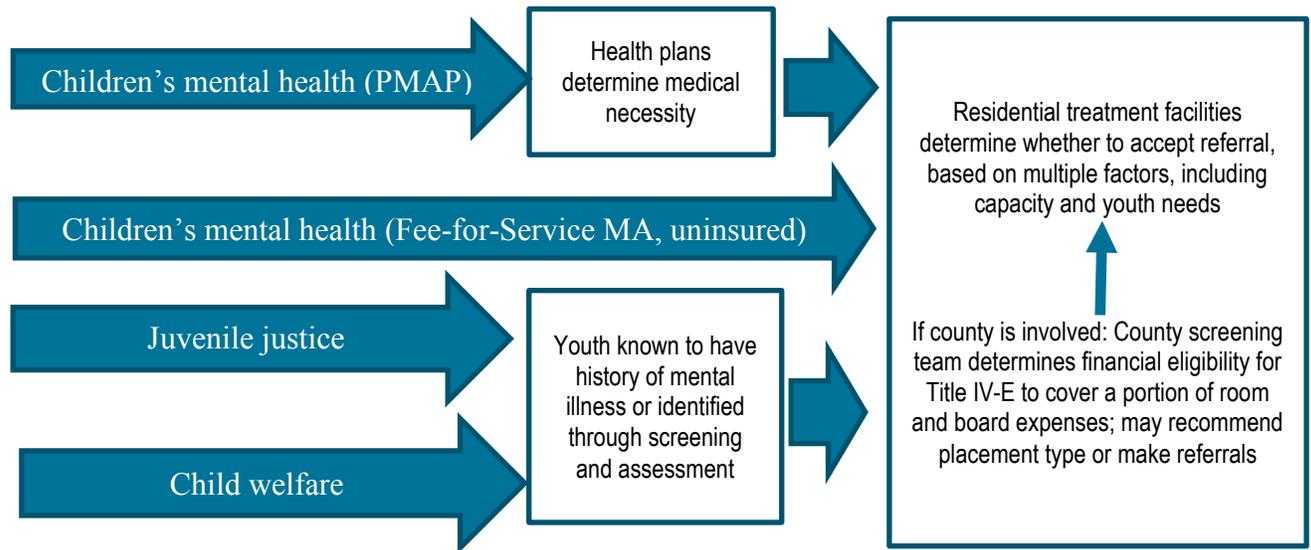
Children’s residential treatment services are intended to stabilize crises, help the child develop the skills necessary to return to the community, including improved family and social functioning, and avoid placements that are more intensive, costly, or restrictive than necessary to meet the child’s needs (Minnesota Department of Human Services, 2013). Children’s residential treatment centers (RTCs) in Minnesota are licensed as Children’s Residential Facilities (CRFs) and are considered less restrictive than inpatient hospitalization and Psychiatric Residential Treatment Facilities (PRTFs). There are currently 18 CRFs licensed by DHS in Minnesota. As will be described, some of these facilities provide specialized services to youth with eating disorders or do not serve youth insured through public programs (i.e., Medical Assistance, MinnesotaCare). In addition, DHS has certified six facilities in other states (South Dakota, Wisconsin, Arizona, and Missouri) as meeting CRF licensing requirements.

Pathways to children’s residential treatment

A variety of factors ultimately determine the treatment placement, including facility capacity. There are multiple pathways to residential treatment, with variation within each of these generalized paths and multiple ways these paths may intersect for an individual child in need of intensive mental health services (Figure 1). The county plays a role in determining financial eligibility for Title IV-E funds (used to cover a portion of room and board expenses) among youth who may need out-of-home placement services through children’s mental health, juvenile corrections, or child welfare systems. The role of the county in making placement recommendations, composition of screening teams, and processes used vary across the state, with some counties being much more involved in helping caregivers identify the most appropriate placement option than others. However, it is beyond the scope of the study to assess county screening team and case management practices.

If the child is in need of residential treatment for a mental illness and is covered by a Prepaid Medical Assistance Plan (PMAP), the relevant health plan will make a determination of medical necessity and coordinate decision making with the county placement process. Families with insurance through private commercial plans may also work with counties if their insurance coverage ends.

1. Pathways to children’s mental health residential treatment for youth in insured through public plans



Note. Youth may be insured through Medicaid Prepaid Medical Assistance Plan (PMAP) or fee-for-service Medicaid. The composition of county screening teams, the types of placement decisions they review, and process used to recommend placement types varies considerably across counties. Many, but not all, youth access residential services with county involvement.

Capacity implications of the IMD designation

In Minnesota, 9 facilities operated by five different agencies were designated as IMDs by CMS in 2018. **The CMS decision currently impacts a total of 371 residential beds in Minnesota** (Figure 2). In addition, two Wisconsin facilities that see a number of Minnesota youth annually (Eau Claire Academy and Milwaukee Academy), were also designated as IMDs and are not included in this count. This potential reduction in capacity comes on top of other changes to the network of residential treatment providers in the state; St. Cloud Children’s Home and St. Joseph’s Home for Children closed in 2018, with an additional loss of 90 residential beds in the state.

2. Minnesota’s children’s residential treatment centers and IMD designation

Facility (agency)	City	County	Capacity
Facilities designated as IMDs			
Avanti Center for Girls (VOA)	Blaine	Anoka	28
Children’s Residential Treatment Center (VOA)	Minneapolis	Hennepin	24
Gerard Academy (Nexus)	Austin	Mower	93
North Homes Cottage	Grand Rapids	Itasca	20
Leo A. Hoffman Center, Inc.	St. Peter	Nicollet	32
Mille Lacs Academy (Nexus)	Onamia	Mille Lacs	96
Northwood Children’s Services	Duluth	St. Louis County	44
Northwood Children’s Services – Assessment and Diagnostic Center	Duluth	St. Louis County	8
Omegon, Inc (VOA)	Minnetonka	Hennepin	26
Facilities not designated as IMDs			
Bar None Residential Treatment Services (VOA)	Anoka	Anoka	24
North Homes - Itaskin Center	Grand Rapids	Itasca	41
Minnesota Girls Academy	Bricelyn	Faribault	8
Nexus Glen Lake	Minnetonka	Hennepin	12
Pathfinder Children’s Treatment Center (Sanford)	Thief River Falls	Pennington	14
Woodland Hills (Hills Youth and Family Services)	Duluth	St. Louis	40

Notes: A number of facilities have gender- or age-specific services. While most serve youth with a broad range of mental health symptoms and behaviors, two facilities are more specialized. The Leo A Hoffman Center services youth who have exhibited harmful or inappropriate sexual behavior and Omegon specializes in integrated co-occurring mental health and substance abuse treatment. Three additional facilities are certified as children’s residential facilities but serve populations that are not the primary focus of this study. Paragon is a small facility (20 beds) and does not currently provide services to youth insured through public insurance places. Anna Westin House (The Emily Program) and Park Nicollet Melrose Center provide specialized treatment services to adolescents with eating disorders. The latter is a designated IMD.

Financial implications of the IMD designation

Since 2001, counties and federal Medicaid dollars have been used to pay for the cost of care for children's residential facilities.¹ Prior to the IMD designation, the portion of costs associated with mental health treatment not covered by federal Medicaid dollars was the responsibility of the county. Similarly, counties were also responsible for the cost of room and board and sought reimbursement through Title IV-E funds for youth whose families meet the program income requirements. This funding mechanism was negotiated as the state was working to more fully optimize its ability to capture federal dollars through Medicaid. It was a benefit to counties as youth in foster care (through child welfare) were always eligible for public insurance and this approach helped counties better optimize federal reimbursement. This payment agreement was approved by CMS under the state's Medicaid Rehabilitation Option. Since 2009, state and federal Medicaid funds have covered the treatment component of mental health residential placements for children enrolled in PMAPs. The admission process is coordinated with county screening for placement, with counties continuing to have responsibility for room and board costs. Counties also have primary responsibility for the cost of care for:

- **Native youth.** The cost of treatment for Native youth, who are both members of sovereign nations and citizens of the county, are also covered by the county. This includes youth who live on a reservation as well as youth who live elsewhere, but who are members of a tribe.
- **Youth in need of out-of-state specialized services.** When youth receive care at children's residential facilities that are not in the state or one of the six facilities in other states also credentialed as meeting state licensing requirements, the cost of treatment and portion covered by Medicaid must be negotiated, with counties paying the remaining cost, less any Title IV-E dollars that can be used to cover a portion of room and board costs. Health plans may cover a portion of the costs for youth insured under PMAP plans.
- **Youth insured through private insurance plans with limited coverage.** While some private commercial plans do include a benefit for children's residential treatment for youth, the actual cost of care to families may be high with deductibles, co-pays, and shared costs of care. Currently, the child's county of residence will cover the cost of care if the private insurance coverage is exhausted and services are still necessary.

¹ Minnesota State Statute 256B.0945, passed in 1999 and implemented in 2001

When the CMS decision was made in 2018, the state established a short-term mechanism to pay for the mental health treatment services at a number of residential facilities. Among children insured through a Medicaid fee-for-service plan, counties have continued to pay their portion of treatment costs, with state funds paying for the portion that had previously been covered by federal Medicaid dollars. For youth insured through Prepaid Medical Assistance Program (PMAP) plans, the capitated payments have been paid entirely with state funds. Room and board costs have continued to be the responsibility of the county. When this program expires on April 30, 2019, counties must bear the full cost of care for youth in all (i.e., fee-for-service and PMAP) public insurance plans. **The estimated funding gap, based on the DHS fiscal note, is approximately \$2.4 million annually.**²

Potential impacts on the availability of residential treatment services

With the CMS decision, mental health treatment services will not be federally reimbursed (through Medicaid) at the nine facilities designated as IMDs, impacting 371 residential treatment beds. This places different potential types of financial pressure on providers, counties, and the state. Residential providers face high risk to their business without a known, long-term source of funding for services. While this study identifies some potential models with sources of reimbursement, financial support will be needed in order for providers to continue providing mental health services during any transition in program model or facility type.

Currently counties, already concerned about the amount of funding allocated for residential services and out-of-home placements, will bear the full cost of residential treatment. This will impact all counties, and is likely to disproportionately impact counties that have a smaller tax base, a larger number of youth living in the county in need of residential services, or limited options for other intensive in-home and community-based services.

Without action, access to intensive mental health treatment in the state may decrease dramatically. Changes in access to services doesn't change the need for intensive mental health services. Without adequate intensive community-based or residential services available, youth and families across the state could experience longer waits for services, access inadequate treatment that lacks the intensity needed or non-optimal services at a more restrictive level than necessary, or be more likely to be referred out of state for intensive mental health services. Financial uncertainty is a challenge for providers, as well. A reduction in residential treatment options, without increased capacity of intensive community-based and in-home services, will leave youth with mental illnesses without access to the mental health treatment they need, jeopardizing their health and well-being and placing immense burden on families. While the full implications of these potential

² The fiscal note estimates this gap to be \$2.34 million in FY20 and increasing to \$2.64 million by FY23.

changes in capacity are not completely clear, a gap in services will certainly lead to greater use of emergency departments and hospitals, neither equipped nor appropriate for providing this level of service.

Out of crisis, an opportunity

The financial and service delivery implications of the IMD designation require immediate attention. However, the purpose of this study is not simply intended to identify a replacement funding mechanism to support the residential mental health services in place exactly as they are today. If that approach is taken, the state may find itself in a similar situation in a few years. The Family First Prevention Services Act, passed in early 2018, may significantly impact the ways that Title IV-E funds can be used. Although full details will not be known until federal and state rules are completed, it is clear that child welfare financing streams will be reformed to try to prevent children from entering foster care and by reducing youth placements in congregate care. Hence, a funding mechanism for residential services that relies on Title IV-E to cover the cost of room and board may be short-sighted.

The current context and future uncertainty creates an opportunity to reassess the mental health continuum of care in the state. This includes considering the optimal role of residential treatment in the context of a more robust array of community-based services needed to fully support the needs of youth and families.

Youth with intensive mental health needs

An estimated 20 percent of children experience an emotional disturbance each year. DHS estimates that 9 percent of Minnesota's school-age and 5 percent of preschool children have a severe emotional disturbance, further impacting daily functioning. Based on current population estimates from Minnesota Compass (n.d.), this is nearly 84,000 school age youth and 17,000 preschool children (age 4 or under).

For many of these children and youth, community-based mental health services, which include Minnesota's school-linked mental health services, are the right level of service needed to address acute mental health concerns or long-term mental illnesses. Only a relatively small number of youth with mental illnesses have symptoms or behaviors serious enough to impact daily functioning at a level where intensive mental health treatment is needed.

However, it is difficult to identify exactly how many youth fall into this category and who are receiving, or who may be in need of, children's mental health residential treatment. This is largely the result of data systems in place that are organized by funding stream and specific to a single child-serving system, rather than encompassing all youth with intensive mental health needs. For example, Medicaid Management Information System (MMIS) data can be used to determine service utilization for specific types of services and the cost of care for youth insured through public insurance plans. However, it excludes youth who are insured through public commercial plans, served in out-of-state settings that the state does not have agreements with, or served in juvenile corrections settings where Medicaid reimbursement cannot be sought for mental health treatment.

Another challenge is the issue of clearly identifying the level of mental health needs among youth currently in multiple types of out-of-home placement settings. For example, youth in children's residential treatment facilities and juvenile corrections residential programs may be in need of the same level and type of mental health service, but referred to one setting over another based on a judge's determination of the most appropriate placement for the child. Similarly, youth with intensive mental health needs also involved with the child protection system may have difficulty transitioning to a less restrictive level of care because of an instable home environment, but cannot easily be counted as a group that is distinct from youth with mental illnesses without any child protection involvement.

For many of these children and youth, outpatient community-based mental health services, which include Minnesota’s school-linked mental health services, are the right level of service needed to address acute mental health concerns or long-term mental illness. Only a relatively small number of youth with mental illnesses have symptoms or behaviors serious enough to impact daily functioning at a level where intensive mental health treatment is needed. However, for these youth and their families, it is critical that they are able to access the right level of service at the right time.

There are challenges to identifying the total number of youth in the state who have intensive mental health needs. This is largely the result of data systems in place that are organized by funding stream and for specific child-serving systems. For example, Medicaid Management Information System (MMIS) data can be used to determine service utilization for specific types of services and the cost of care for youth insured through public insurance plans. However, it excludes youth who are insured through public commercial plans, served in out-of-state settings that are not certified by Minnesota, or served in juvenile corrections settings where Medicaid reimbursement cannot be sought for mental health treatment. Further, not all youth with intensive mental health needs may be served in the appropriate setting. Youth involved in the juvenile justice system, for example, may be court ordered to a setting that is not as well equipped to meet a child’s needs.

Estimates of youth receiving residential treatment

Neither counts of, nor the data necessary to calculate, the total number of youth who receive mental health residential treatment were provided by DHS. Therefore, information from multiple sources was gathered to estimate the number of youth who received mental health residential services and the number of youth who may have intensive mental health needs.

- Children’s residential treatment providers who responded to requests for information³ reported a combined total of over 1,500 youth received mental health residential treatment in 2017. In addition, Clinicare, which operates three of the eight agencies⁴ credentialed by DHS as meeting its licensing requirements reported serving 109 youth

³ The following facilities reported information: Avanti, Bar None, Children’s Residential Treatment Center, Gerard Academy, The Hills Youth and Family Services, Leo A Hoffman Center, Mille Lacs Academy, Minnesota Girls Academy, Nexus Glen Lake, North Homes Children and Family Services, Northwood Children’s Services, and Omegon. Information could not be gathered for Pathfinders or Paragon. The counts do not include youth served at two facilities that provided services in 2017, but that have since closed: St. Cloud Children’s Home and St. Joe’s Residential Treatment. It also excludes youth receiving treatment for eating disorders at the Anna Westin House (The Emily Program) and Melrose Place.

⁴ These facilities include Eau Claire Academy and Milwaukee Academy in Wisconsin and Aurora Plains PRTF in South Dakota.

from Minnesota in 2017. Some of these youth may have been served by more than one provider during the year. However, because some providers did not participate, these counts likely underestimate the number of youth who received mental health residential treatment services.

- The 64 counties that submitted data⁵ reported that nearly 1,000 children received intensive mental health services from a children’s residential treatment center⁶ in 2017, including over 170 youth served out-of-state. For some counties, this included services provided in corrections settings.
- According to a recent DHS report, 2,775 of the over 16,000 youth in out-of-home care in 2017 had mental health concerns in the emotional disturbance (ED) category (Department of Human Services [DHS], 2018). This count includes youth who have mental health needs or developmental disabilities, as well as youth involved in the child protection or juvenile corrections systems. Potential placement types include foster home placements as well as group homes, emergency shelters, residential facilities, child-care institutions, and pre-adoptive homes. A subset of these youth would fall into the group of youth with intensive mental health needs that are the focus of this study.
- The Minnesota Department of Education (MDE), responsible for paying for education services provided for youth in out-of-state placements, identified 320 students with disabilities and receiving special education services that received services out of state. However, it is not known how many of these youth were receiving out of state mental health treatment.

Establishing a clear data framework in the future can help ensure there is clear and consistent tracking and monitoring of youth who receive services from children’s mental health residential treatment centers.

⁵ Information was not available for the following counties: Blue Earth, Carver, Clearwater, Dodge, Douglass, Houston, Hubbard, Jackson, Kanabec, Koochichig, Lincoln, Lyon, Mahnomen, Marshall, Martin, McLeod, Meeker, Murray, Nicollet, Pine, Pipestone, Redwood, Rock, Waseca, and Winona.

⁶ Counties considered all youth who received intensive mental health services from residential facilities licensed by DHS or the Minnesota Department of Corrections (DOC) (referred to as “Rule 5” programs).

Descriptive information

There is not a single data source available that can be used to describe the mental health needs, presenting behavioral concerns, family situation, and other descriptive information for youth who receive residential treatment. Information from residential providers and county human services staff were gathered to help describe the mental health needs of youth who receive intensive mental health services and to more clearly understand the symptoms and behaviors that are not well-met by Minnesota's continuum of care.

Youth receiving services from residential treatment centers

Information reported by residential providers and managed by AspireMN in its Student Data Reporting System (SDRS) includes some key descriptive information about youth served each year. In 2017, the SDRS included information about 280 youth who began services and 255 youth discharged from residential programs that reported information: Avanti; Bar None; Children's Residential Treatment Center; the Leo H. Hoffman Center; Northwood Children's Services; St. Joseph's Home for Children; and Woodland Hills. While this does not include youth from all programs, the presenting issues and past treatment history of these youth are expected to be fairly representative of youth that would be served by all programs combined. It is not as certain whether the demographic characteristics of the sample are representative of all youth receiving residential treatment. This group of youth was predominately male (64%) and white (64%). Fewer youth were identified as multiracial (13%) or black (11%). The average age in this sample is 13, although it included youth ranging in age from 6 to 18. Detailed tables with additional demographic information and descriptive information, in addition to the highlighted data that follow, are included in the Appendix.

Youth who began to receive residential treatment exhibited a wide range of presenting problems. Providers were most likely to say that it was “often true” or “sometimes true” that youth presenting behaviors or concerns included: disobedience, oppositional behaviors (92%); impulsivity and acting without thinking (91%); depression, sadness, or unhappiness (85%); difficult relationships with peers or others their own age (84%); and difficult relationships with parents/parent figures (82%). Over half of the youth exhibited suicidal thoughts or behaviors (65%) or other self-injurious behavior (55%).

Aggression towards others was another fairly common issue. Providers identified many youth as displaying aggressive behavior towards others. Over half of the youth had the following presenting issues: verbally abusive or threatening others (72%), fighting or physically attacking others (67%), and destroying property (53%). Although fewer youth entered residential treatment with a substance abuse issue (19%), this sample does not include youth who received treatment at Omegon, a provider specializing in treatment of co-occurring disorders.

Past abuse and trauma are common among youth who receive residential treatment.

For just over half of the youth, it was documented or suspected that they had experienced emotional abuse/neglect (56%), physical abuse (56%), sexual abuse (55%), and physical neglect (54%). In addition, loss or grief was identified as a presenting issue for 38 percent of youth.

Most youth who receive services have some degree of involvement with county child-serving systems. For 78 percent of the youth, the county was the primary source of per diem financial support. Private insurance was the primary source of support for 13 percent of the youth. Twenty-five percent of all placements were court-ordered.

Many of the youth discharged had received residential treatment services prior their most current episode of care. More than half of the youth (54%) had at least one previous placement in an inpatient psychiatric facility or hospital. Thirty-seven percent had at least one prior placement in residential treatment. Twenty-four percent had a previous foster care placement.

Most youth were living at home or with family prior to receiving services. While it was most common for youth to have been living in their home or with a family member prior to intake (52%), a number of youth entered residential treatment directly from an inpatient psychiatric facility (15%) or transferred from another residential treatment program (10%). A smaller percentage of youth entered residential treatment directly from a juvenile corrections setting, including a juvenile detention center (6%) or correctional facility (1%). Some youth entered residential treatment from a foster care home or center (5%), shelter (4%), or group home (3%).

Most youth (81%) were discharged after successful completion of treatment. The reasons for unsuccessful program completion vary, but can include: discharge to a more intensive level of service; behaviors that put the child or peers at risk; failure to make ongoing progress towards treatment goals; or a decision made by the child's guardian or entity funding the service to discontinue treatment. Half of the youth (50%) were discharged following a stay of less than nine months. Nearly one-quarter of youth (22%) received

residential services between 1 and 2 years and fewer (8%) received services for more than 2 years.

Profiles of unmet, or difficult to address, needs

Minnesota’s residential treatment facilities currently have limited capacity to meet the needs of youth who exhibit highly aggressive behaviors or to meet the needs of youth with mental illnesses and lower cognitive functioning. Together, residential treatment facilities in Minnesota reported they did not accept over 1,000 referrals for service in 2017.⁷ The most common reasons that providers did not accept treatment referrals were due to their facility not having the capacity to address specific behaviors or conditions. Most often, this was a history of physical aggression towards staff and peers (reported by 9 of the 12 facilities) and lower cognitive functioning (reported by 7 of the 12 facilities). Fewer facilities (up to 3 of the 12 facilities) reported being unable to accept referrals for youth who have demonstrated sexually aggressive behavior; at high risk of suicide; a history of running away; a history of harming animals; complex medical conditions; active psychosis; or co-occurring substance abuse concerns. These youth are among those most likely to wait longer for services or to receive services at out-of-state facilities.

Her behavior had always been challenging. She attempted to set the house on fire, was doing more self harm, stealing, hoarding sharp objects, destroying things. She had as much supervision we could give and still, she wasn't safe.
- Caregiver

Providers identified a number of facility improvements or changes in treatment approach that they would need to meet the needs of these youth, including: lower staff to youth ratios; treatment models appropriate for understanding and responding to aggressive behavior and for youth with lower cognitive functioning; on-site nursing services (for youth with medically complex conditions); and secure units. Two facilities also identified a need for individual rooms to provide services to transgender youth.

Factors that contribute to longer lengths of stay and repeated residential placements need further exploration. Without data available to understand the variability in service utilization and placement history, it was not clear as to how to design and implement a sampling methodology that would provide a representative and quantifiable description of youth served, including a robust analysis of factors contributing to longer lengths of stay and repeated residential placements. While providers noted that the complexity of mental health needs is a factor for longer lengths of stay for some youth, there was also

⁷ Because multiple referrals can be made for a single child, this is not an unduplicated count of youth unable to access services in the state.

consistent recognition that a lack of appropriate community-based services made it difficult for providers to discharge youth as quickly as could be done with appropriate services in place. As will be described in later sections of the report, it is also difficult for providers to find appropriate residential options for youth without family stability, including youth who had experienced repeated failed adoption attempts.

The following descriptions are intended to illustrate some of the common experiences and needs of youth who receive residential treatment services and whose needs are most difficult to meet, due to complexity of mental illnesses and behaviors or gaps in the continuum of community-based services. To protect the anonymity of youth, the following descriptions are composites developed through review of the demographic information, family experience, presenting issues, and treatment approach for multiple youth.

The following stories, illustrate the experiences of youth who have mental illnesses and their families.

Leo, age 9

Leo was referred to an elementary day treatment program by his parents due to increasing concerns they and school staff had about his threatening behaviors, physical aggression, decisions about personal boundaries, and lack of motivation. While in the day treatment program, his behaviors escalated. He was becoming physically aggressive more frequently, defecating on the floor of public restrooms, and expressing suicidal ideation. Leo's parents felt unable to safely care for him at home.

Leo was referred to an inpatient assessment program where the psychiatrist and psychologist determined that Leo presented with conduct disorder with limited prosocial emotions and attention deficit hyperactivity disorder (ADHD). His parents agreed with the recommendation for more intensive services and Leo entered a residential treatment program. Leo responded quickly to the services and made great progress. His parents were highly engaged in treatment, participating in family therapy and monthly parent support groups. Leo started attending public school half days, with the support of staff from the treatment facility. Six months later, Leo had re-enrolled in school full time and continues to participate in the day treatment program. He and his family also started receiving in-home skills services. At a recent school meeting, the teachers and principal commented that they could not believe this was the same child who had left their school a few months ago.

Levi, age 11

Levi has involved, engaged, and supportive parents who started to have concerns about his behavior when he was 3 years old. His parents helped him access individual and family therapy, but he was hospitalized multiple times when his behaviors escalated. When admitted to a day treatment program at age 7, Levi was diagnosed with anxiety disorder, obsessive compulsive disorder, autism spectrum disorder and Tourette's disorder. He did well during each of multiple residential treatment stays, but had difficulty maintaining those gains at home despite receiving in-home skills services, support from a personal care attendant, multiple assessments and evaluations, a county social worker, and family therapy services. For about 18 months, he did very well in a group home setting close to his home while receiving day treatment services. However, after moving to a different group home, his symptoms worsened and he was hospitalized after a serious suicide attempt.

Levi was placed into a residential treatment setting for nearly a year before transitioning to a different group home with day treatment services available. After 8 months of escalating self-abusive and aggressive behavior, the provider did not feel they could ensure the safety of Levi or his peers and he was referred to a higher level of residential treatment at a psychiatric residential treatment facility (PRTF). The enhanced psychiatry services have been helpful in identifying an effective medication regimen. Levi has been stable and safe in this more structured setting. His family and providers know that step-down transitions will need to be carefully planned and implemented when he is discharged from the PRTF.

Marcus, age 14

Marcus' parents' rights were terminated when he was 4 years old and he became a ward of the state. He lived in multiple foster care homes and shelters, none of which could effectively manage his highly aggressive behaviors. When he was first referred to a residential treatment program at age 8, he was diagnosed with attachment disorder and staff also recognized that he had experienced significant trauma and loss. Marcus had lower cognitive functioning, which made it difficult for him to master effective coping skills. Yet, he made steady improvement with more intensive services and eventually stabilized to the point where he was considered for an adoptive placement. A careful and slow-paced transition plan was recommended, but the adoptive parents, who thought they could continue to support his needs, wanted to have him move home more quickly. His placement in the home lasted less than two weeks.

After the failed adoption attempt, Marcus was readmitted to a residential treatment program. He initially demonstrated disruptive and sometimes violent behaviors, but, over time, made progress in treatment and found a hobby that he loved. He eventually moved to a foster home and began to receive day treatment services. A year later, he began attending classes at the public school near the foster home. He has continued to receive individual therapy, day treatment services, and medication monitoring support and has been doing well for the past two years.

Additional considerations for specific populations

Although limited, the descriptive information about youth presenting issues and past family and treatment history provide a high-level understanding the needs of youth who currently receive residential treatment services. However, there are special considerations for youth with unique experiences or treatment needs, as well as a recognition that there are youth with mental illness who are not receiving optimal mental health services. While multiple child-serving systems screen youth for mental health concerns and provide some level of mental health services, not all systems have the capacity to provide the intensive mental health services needed to fully address the child's mental health symptoms and behaviors. Some of the specific populations with known unmet needs are listed below.

American Indian youth

In Minnesota, the out-of-home placement rate for American Indian youth is more than four times higher than for any other race or ethnic group. In 2017, 131 of 1,000 American Indian youth were in out-of-home placements, which is more than double the rate of placements in 2010 (DHS, 2018). A number of the major issues facing children from the American Indian community were identified in a discussion with the American Indian Mental Health Committee. While additional work is needed with all tribes to better understand and respond to the needs of Native youth, the discussion began to identify concerns and ways that DHS can better support the needs of Native youth and families.

American Indian Mental Health committee members felt that current residential treatment providers do not place enough emphasis on supporting wellness and understanding the difference between fostering wellness and providing treatment.

They described that Native youth are often disconnected from their culture while receiving residential services and have few opportunities to incorporate cultural practices and traditions into treatment. They also noted that discharge planning is often limited and, because providers do not work with someone from the tribe to welcome the youth back to the community, the youth's feelings of separation, loss, and grief are not addressed. Committee members suggested creating youth and family advocate positions to help families understand the system, become familiar with rules and laws in different child-serving systems, including special education, and to support families in advocating for cultural practices and traditional healing to be incorporated into their child's treatment plan. They identified a need for improved access to cultural practices and traditions that support wellness, as well as for a range of services, including crisis services, in-home mental health services, and training and education for parents. They also identified the need for greater collaboration between emergency departments and services provided by the Indian Health Board.

Individuals who participated in the discussion also described the importance of improved coordination between the tribes, counties, providers, and hospitals. They stressed the importance of county staff and mental health providers having a stronger foundation of cultural knowledge and the relationships in place to help youth access cultural supports from the community when in treatment. They emphasized the need for respectful conversations as important to having better working relationships and suggested that members of the tribe have roles while the child is in residential placement to help youth transition back to their home and community.

Youth in the juvenile corrections system

Mental illness is common among youth involved in the juvenile corrections system. Beginning in 2009, mental health screening became required for youth age 10-18 ordered to remain in juvenile detention after an initial detention hearing, who are determined to be delinquent, or who have committed three juvenile petty offenses. Screening results have consistently shown that approximately 75 percent of youth have some type of mental health concern, consistent with national data. The most recent data made available from DHS (2005) show that 54 percent of the approximately 9,500 youth in detention or found delinquent and eligible for screening completed a mental health screening. Of these, 71 percent (3,772 youth) had screening results suggesting a mental health concern and were referred for a mental health assessment. Data from the same year also showed that among the 1,728 youth in out-of-home care in a correctional program or detention setting, 31 percent had some type of serious mental illness. In 2013, mental health screening became an opt-in, rather than opt-out, consent process. As a result, there may be a greater number of youth with unrecognized mental illnesses in the juvenile corrections system. This area is further explored in latter sections of the report.

Youth experiencing homelessness or living in shelters

An estimated 6,000 youth in Minnesota are on their own and experience homelessness on any given night (Wilder Research, 2017). This includes 2,500 minors, age 17 or younger, who are without caregivers and 3,500 young adults (ages 18-24). This is a conservative estimate that likely underestimates the total number of youth who experience homelessness. Nearly three-quarters (73%) of homeless youth are African American, American Indian, Asian, Hispanic, or of mixed race, but these groups comprise only 26 percent of Minnesota's total youth population. Youth who identify as lesbian, gay, bisexual, transgender, or questioning (LGBTQ) are also overrepresented in the homeless youth population. Interviews conducted with nearly 1,500 youth on the night of the statewide homeless study show that many youth experiencing homelessness have unmet mental health needs. A majority of these youth (57%) report having significant mental health issues and 31 percent of youth

reported they had lived in a facility to receive treatment for mental health problems at some point in their life.

Youth diagnosed with fetal alcohol syndrome disorders

Youth with fetal alcohol syndrome disorders (FASD) are often undiagnosed and have difficulty accessing appropriate services. FASD is a congenital brain injury caused by prenatal alcohol exposure. According the Proof Alliance (formally the Minnesota Organization on Fetal Alcohol Syndrome or MOFAS), an estimated 7,000 babies are born annually in Minnesota with some level of prenatal alcohol exposure. However, due to limited awareness, limited screening, and low capacity in the state to diagnose FASD, the number of youth with FASD is unknown.

Poor impulse control and lower executive functioning are common among youth with a FASD. However, because it is a symptom disorder, it presents in unique ways for each child. Behaviors related to poor impulse control are often misinterpreted as mental illness. In addition, it is often difficult for individuals with a FASD to have difficulty understanding abstract concepts and misunderstanding of youth reaction may be labeled as definite behavior. Youth may have a FASD and a mental health diagnosis, but when the brain injury is not recognized, these youth may not receive treatment that is appropriate for youth with a neurodevelopmental disorder.

There is currently not a clear system entry point to appropriate services and supports for youth diagnosed with a FASD. It is difficult for families to access services that could be beneficial and afford the cost of care. While some youth with a FASD do qualify for Community Access for Disability Inclusion (CADI) waivers, youth with some symptoms but an average IQ often do not qualify. State statutes also specify that youth with congenital brain injuries, including FASD, are not eligible for brain injury waivers. Increased awareness among providers and common screening points that lead to a referrals for FASD diagnostic assessment could be initial steps for Minnesota to better understand how to better identify, and ultimately meet the needs of, youth with a FASD and their families.

Youth who have been sexually exploited

Mental health services are limited for youth who have been sexually exploited. The Safe Harbor law was passed in Minnesota in 2011 and provided the legislative framework for legal protections and state services for sexually exploited youth and young adults. Since that time, the state has invested resources into developing and implementing trauma-informed services, housing and shelter, outreach, and training to implement Safe Harbor and the No Wrong Door framework to help ensure youth quickly access trauma-informed services and safe housing. Between 2015 and 2017, Safe Harbor programs provided housing, system navigation, and other supportive services to over 1,400 youth (Schauben, et al., 2017). Therapy services are available onsite for youth who receive support and services from some organizations that are part of the Safe Harbor network, and a limited number of therapeutic foster homes have been developed. In addition, a number of organizations that work directly with these youth have developed partnerships with mental health agencies with staff trained to provide more intensive mental health services. Local organizations have identified a need for stronger youth mobile crisis services and specialized intensive mental health residential crisis and stabilization services that can flexibility work with youth.

Additional populations

There are a number of additional populations that may be particularly important for DHS to consider as any system changes are considered, including: youth attending schools through intermediate school districts, and youth who are wards of the state or who lack strong family involvement. Local stakeholders who gave input to the study also identified a number of groups not well served by the state's current array of residential facilities, including: youth from lower-income families or with low quality insurance, children in foster care, youth who are chemically dependent, and youth of parents working through their own mental illness or unable to fully care for and support their child.

Anecdotally, a number of residential providers, county representatives, and individuals representing a number of other stakeholder groups described that, in their experience, the acuity of presenting needs is higher now compared to five years ago. However, there is not an available information source to validate these stakeholder perceptions.

Summary

Youth who currently receive residential treatment share a need for intensive mental health services. These services need to be trauma-informed and individualized to ultimately address a wide range of presenting issues and delivered in ways that are appropriate for youth with different family situations and responsive to the family's culture. This information provides a foundation to consider the array of services needed in the state's continuum of care to better meet the needs of all youth with mental illnesses and their families.

Treatment effectiveness: The evolution of residential mental health services

Residential care has gone through several transformations as new knowledge about children’s mental health and effective treatment approaches has emerged. Current best practices stress the importance of residential care as a shorter-term, intensive intervention that is part of a robust continuum of community-based services. Key elements of effective residential treatment involve trauma-informed treatment approaches, including both trauma-informed frameworks for organizations and evidence-based practices; family engagement; and continuity of care. Best practices are continually evolving. A number of effective trauma-informed and family-centered treatment models have been developed over the past decade. To meet the mental health needs of youth, residential settings must continuously improve and innovate. This section describes past practices, as some remnants of these methods continue to be components in residential treatment today, and the best practices shaping residential treatment practices moving forward.

Milieu as treatment

Orphanages and reformatories were the institutional forerunners of residential care facilities, and were designed to house youth, protect them from abusive or neglectful parents, and prepare them for adult society. Seeing obedience as the most important functional capacity needed by delinquent youth, these institutions were well known for coercive approaches, including isolation and severe corporal punishment. As mental health symptoms and behaviors began to be seen as “character defects” that could be treated, facilities for dependent or delinquent youth and those with special needs were converted into residential programs in the 1940s and 1950s. Because faulty parenting was blamed, families were kept away from the facilities and not involved in treatment (Lieberman & den Dunnen, 2014).

Psychoanalytic models

Psychoanalysis theory, which focused on the interaction of conscious and subconscious mind and addressing repressed fears, drove child treatment approaches in this era (Abramovitz & Bloom, 2003). Two approaches were most common:

- ***Psychoanalytically derived intensive individual therapy.*** In this approach, long-term psychoanalytic therapy was superimposed on residential care (board and room) with little or no modification. The setting itself and impact of living with peers was considered inconsequential and therapists saw the institutional setting as preventing deterioration between sessions. While the approach improved the conditions of institutions for youth, there was little to no evidence of treatment gains (Abramovitz & Bloom, 2003; Foltz, 2004).
- ***Milieu as therapy.*** Seeing youth as damaged by harsh treatment in their homes, this approach focused on creating a “total environment” that increased youth participation in therapy and leadership. A process group, grounded in a psychoanalytic understanding of child development and child therapy, eventually replaced individual therapy as the primary treatment approach (Abramovitz & Bloom, 2003). In more contemporary applications, as experience and group dynamics are considered vehicles for change, both peers and child care workers are considered to have roles as essential as therapists. Positive peer culture models and resiliency development models, such as Circle of Courage, are examples of this development (Lieberman & den Dunnen, 2014). However, studies showed that while youth may make gains while in the facility, there is no evidence that the gains are sustained following discharge (Frensch & Cameron, 2002).

As milieu models were adopted by a growing number of residential treatment facilities, others raised warnings about the potential dark side of group dynamics, particularly for youth already at risk of developing aggressive or antisocial behavior. A review of studies showed that group interventions for youth with problem behaviors can lead to persistent negative outcomes, particularly for adolescent males (Dishion, McCord, & Poulin, 1999). They hypothesized that because social reinforcement of behavior, including subtle encouragement or dissuasion, occurred so much more frequently among peers, any positive impacts of counseling were eliminated in the peer group setting.

Behavioral models

A number of behavioral treatment approaches also gained acceptance during this time:

Behavioral reward systems. “Point and level” systems were developed in residential settings as a strategy to increase good or compliant behavior by providing opportunities for youth to gain more privileges, including access to activities or time with family members. Critics of point and level systems argue that the application is negatively focused, punitive, over- or under-individualized, and because it is not structured similarly to home, school, or community environments, the benefits do not extend beyond the treatment setting (Mohr, Martin, Olson, Pumariega, & Branca, 2009). These systems have been described as traumatizing (Transformation Center, 2010) and are no longer used in some states that have undergone residential care reform (Blau, Caldwell, & Lieberman, 2014).

Skills development. Other programs, also grounded in behavioral theory, and that focus on the acquisition of prosocial, interpersonal and other functional skills are considered more promising. Two skills-based programs included in a review using criteria of the California Evidence-Based Clearinghouse for Child Welfare⁸ are highlighted below (James, 2011):

- **Teaching Family Model (TFM).** Developed at Kansas University and widely known for its adoption (and adaptation) at Boys Town in Omaha, Nebraska, the model emphasizes family-style living and learning in a normalizing care environment. Teaching Parents, trained staff who help to teach living skills and interpersonal interaction, work with parents, teachers, and support networks to maintain progress. Seven published outcome studies have demonstrated positive outcomes, including increased academic functioning, fewer youth offenses, and fewer “coercive behavioral control interventions” on-site. The quality of outcome studies earned TFM a rating of “promising” under the California standards.
- **Re-Education of Children with Emotional Disturbance (Re-Ed).** This short (4-6 month) group model focuses on implementing behavioral goals set by youth and their parents. Study results are promising; gains persisted for a cohort for two years post-discharge. However, the study of the model effectiveness lacked enough rigor to receive a rating under the California standards.

⁸ California Evidence-Based Clearinghouse for Child Welfare. www.cebc4cw.org

Evidence of treatment effectiveness

A comprehensive review of these behavioral models and other specific programs found that the improvements were relatively modest⁹ (with effect sizes of .3), particularly given the assumed intensity of treatment available during residential treatments (Hair, 2005). The same study highlighted some important findings and patterns that have informed current best practices in residential treatment settings. The review of common psychoanalytic and behavioral-focused interventions found:

- Youth who received residential treatment showed a general pattern of modest improvement at discharge, followed by loss of those gains at follow up unless there is structured aftercare.
- At discharge, larger gains are associated with family involvement, stable residence, and planned aftercare. Conversely, antisocial behavior by youth and lack of stable family support are related to poor outcomes.
- Shorter lengths of stay may be optimal; most positive change occurs in the first six months and effects plateau as lengths of stay increase.
- At 6 or 12 months post-discharge, family involvement and availability of aftercare are two factors most critical to maintaining overall gains. There is also some evidence of program-specific effects (e.g., the skills-based programs just discussed have better performance in the areas of their focus).

From traditional milieu to trauma-informed care

The Adverse Childhood Experiences (ACE) studies created a paradigm shift in the field of mental health. These studies, which began in the late 1990s, looked at the relationship between early experiences of trauma (e.g., abuse, death of a loved one, divorce of a parent, living with someone severely mentally ill) and long-term health outcomes. It demonstrated the interwoven health, social, and mental health difficulties faced by persons who had experienced multiple sources of toxic stress during development. These studies of ACEs, combined with a growing understanding of neurodevelopment, demonstrated how trauma prepares both mind and body for stress reactivity and more clearly described behaviors as responses or adaptations to stress (Felitti & Anda, 2010). This is a sharp contrast to earlier psychoanalytic and behavioral

⁹ Effect size is a quantitative measurement used to estimate the strength of the relationship; in this case, the relationship between the treatment approach and youth outcomes. Hair (2005) reported effect sizes of .3, meaning modest change. An effect size of .8 would be considered a large effect size.

models that placed responsibility on youth for changing a chosen or learned behavior, often assumed to be modeled after parents or peers.

Experiences of trauma are common among youth who receive residential treatment.

The initial ACE studies and their replication in several states showed that approximately 45 percent of all children had experienced at least one ACE (Sacks & Murphey, 2018). The population of youth receiving residential care carries a disproportionate history of trauma exposure. A review of more than 500,000 children placed in out-of-home care showed an eightfold higher rate of PTSD relative to the general population, and youth entering residential programs have been found to have higher rates of trauma even than those entering foster or kinship care (Pecora, et al., 2005). A study by the National Association of State Mental Health Program Directors found 98 percent of youth in residential programs having histories of trauma (NASMHPD, 2013).

Changes in family involvement

Just as treatment models have evolved over time, so has family involvement in treatment and decision-making. Family therapy grew considerably in the 1970s and the first family-centered programs introduced in residential settings showed very significant improvements (effect sizes near 0.8) for both adjudicated and non-adjudicated youth (Garrett, 1985). However, residential programs were slow to incorporate families in their programming despite evidence that family involvement was a critical component in youth progress both during and following treatment (Leichtman, 2006). Lieberman and den Dunnen (2014) write that “while individual agencies sought to apply the implications of this evidence, the field as a whole did not. Families found themselves blamed, and providers struggled to know how to incorporate families in response to what appeared to be ‘poor parenting’ or abuse” (p. 11).

Family-driven services has become a fundamental value in the field of children’s mental health. Through the federal System of Care grant program and aligned with parallel developments in other child-serving systems (e.g., disability services and children with special health needs), care delivery systems were increasingly asked to become family-driven, defined as “see[ing] every child as part of a family, and every family as a valued partner” (Hust & Kuppinger, 2014, p. 15). Family advocates named a number of practices in residential treatment that were inconsistent with supporting children in families, including not allowing them to go home for an arbitrary period of time after admission; making time at home contingent on behavior; and holding treatment team/planning meetings without families present (Hust & Kuppinger, 2014). More proactively, families and their advocacy partners began demonstrating ways in which both administrative and clinical processes could be made more open and supportive,

ranging from opening treatment center access to families to supporting new roles for family members as family partners or peer family supports.

As families found and increasingly used their voices, residential clinicians and staff experienced a shift in their roles and needed to re-evaluate their practices and beliefs. For many clinicians, family-driven approaches were not a focus, and were often a contradiction, of their training. However, as clinicians and staff made changes, the pay-off of embracing family-driven care began to be evident in improved outcomes for youth, shorter duration of residential stays, and greater stability and support for youth and family post-discharge (Walters & Petr, 2008). To accomplish their roles in new partnerships with families, clinicians in particular need to expand their skills to better engage families. Emerging research demonstrates an array of universal engagement strategies that are common to many successful interventions, including modules in Multisystemic Therapy (MST), Parent-Child Interaction Therapy (PCIT), Trauma Systems Therapy (TST) and Collaborative Problem Solving (CPS) (Sexton, Datchi, Evans, LaFollette, & Wright, 2013; Sexton, Rios, Johnson, & Plante, 2014). Additionally, some practices – notably Functional Family Therapy (FFT) (Sexton, 2010) and Motivational Interviewing (Miller and Rollnick, 2002) have engagement processes at their core, building on individual oral family engagement as the source of therapeutic change. All of these practices have robust research literature associated with them, and can be implemented across community and residential settings, opening important pathways for coordination across venues. The costs associated with providing these evidence-based practices with fidelity is a barrier to these being more widely implemented.

Residential treatment as part of a continuum of care

Residential treatment services are an important part of a robust, community-based continuum of care. There is a strong and growing body of evidence demonstrating positive outcomes when youth with mental illnesses have access to a well-coordinated continuum of mental health services and supports. As a result, while it is critical that residential treatment facilities provide high-quality and effective services, it is just as important to consider how these residential interventions are part of a coordinated continuum of community-based services.

The Building Bridges Initiative (BBI) (www.buildingbridges4youth.org) is a national effort to support more effective practices and greater coordination across residential and community-based services. BBI has established core principles that, when implemented, lead to positive improvements in agencies, communities, and systems, and improved outcomes for youth and families (see sidebar). These principles align closely with the System of Care values emphasized by the Substance Abuse and Mental Health Services Administration (SAMHSA) through its grant program.

A fundamental aspect of redefining residential treatment as part of a continuum of services is to consider residential “as an intervention for an entire family versus a destination for a young person” (Blau, Caldwell, & Lieberman, 2014, p. 97). When that is adopted as a grounding premise, residential interventions must be designed to preserve all family and community connections and located as close to home as possible (Blau, Caldwell, & Lieberman, 2014, p. 96). In addition, it requires residential and community-based providers to work in much closer partnership to ensure continuity of care and ongoing support to youth and their families.

Building Bridges Initiative principles

- Youth guided
- Family driven
- Culturally and linguistically competent
- Comprehensive, integrated, and flexible
- Individualized and strength-based
- Collaborative and coordinated
- Research based
- Evidence- and practice-informed
- Sustained positive outcomes

BBI has found that successful models that support continuity and linking of community-based and residential services have a number of common characteristics:

- Recognition and demonstration of a clear commitment to the belief that residential care is not a destination where children come to live for extended periods of time
- Proven capacity for rapid stabilization, treatment, analysis, triage, and discharge planning
- Substantial emphasis on family engagement and involvement
- Acknowledgement, understanding, and firm action in instances when family is unavailable, incapable, or unwilling to provide belonging
- Significant attention to ensuring services and supports that begin in residential continue in the community

- Adapted from *Residential Interventions for Children, Adolescents, and Families: A Best Practice Guide* (Blau, Caldwell, & Lieberman, 2014)

Recognizing changes in best practices, and in recognition of the research on trauma, brain development, and attachment that has been published during the past two decades, residential settings are evolving into a new generation of services. In 2005, the Association of Children’s Residential Centers’ (AARC) prepared an open letter and began to publish a series of white papers that establish a vision for residential treatment as a critical component of localized, coordinated systems of care for youth and families. Through these documents, the association encouraged policymakers and providers to consider residential services as one element in an array of coordinated array of services that should be available to youth and families, and brought attention to need for community-based care is available with adequate funding mechanisms in place. The association also elevated efforts of agencies to establish new models of care that involve families in planning and treatment, incorporate wraparound or other care coordination practices, adopt flexibility to provide crisis respite and residential assessment services, hire youth and family peer supports, and implement other practices that ultimately shorten the length of stay.

Treatment effectiveness: Current residential treatment approaches

Residential treatment, particularly when considered as a component of a local continuum of mental health services, will have unique approaches in place to meet the needs of youth and families and complement the array of community-based services locally available. While that innovation and adaptability are important to maintain, there are also underlying factors that drive effective treatment outcomes during a residential intervention and as the child transitions to different community-based and in-home services.

Factors contributing to positive outcomes during residential treatment

A systematic literature review of residential treatment outcomes studies showed that frequent family visits and participation in family therapy was most consistently associated with positive outcomes at the time of discharge (Hair, 2005). It should be noted that for some youth, the family's geographic proximity, socioeconomic stability, or involvement in the child welfare system can be significant barriers to involvement. Additional factors that predict successful outcomes at discharge include: shorter lengths of stay, improvements in academic achievement, and positive family therapy outcomes (Walters, 2007). Again, it is the quality and appropriateness of the treatment services provided and overall approach used during the residential treatment intervention that drive outcomes. A review of studies examining the effectiveness of residential and inpatient mental health interventions shows that outcomes for some youth do improve at these settings, but highlights the wide variation in how residential services are defined and the characteristics of youth who receive care. It is difficult to determine which interventions are most effective, in what settings, and for whom (Bettmann & Jaspersen, 2009).

Family involvement in treatment

Family involvement in treatment is the most important factor contributing to improvement during a residential treatment intervention and successful long-term outcomes. Family-driven care “sees every child as part of a family, and every family as a valued partner” (Hust & Kuppinger, 2014, p. 15). A focus on family-driven care requires providers to involve family members as partners in the child's care, finding ways to meet the family where they are and supporting their increased participation. It is a shift in philosophy that requires providers to deepen and broaden their skills to find ways to be collaborative and flexible in their work with families, and to reassess how current practices may need to change to support family involvement. Starting points for increasing family

involvement include: participation of families in all meetings where treatment goals are identified and decisions are made; incorporation of family therapy and skill building for caregivers in anticipation of the child's return home; and frequent contact between the youth and family throughout the residential treatment intervention. Some of the additional ways that residential providers have increased family involvement include:

- **Using child-family teams.** A common element of family-driven treatment models and services that support continuity of care are child and family teams, or wraparound teams. In some states, these intensive care coordination services are provided by community-based organizations or county case managers. Residential providers foster child-family team involvement or offer that service to ensure continuity of care, if not available locally.
- **Revising residential policies and practices.** There are a number of changes that residential settings can make to more effectively partner and engage with families. Families should continue to be in a parenting role as much as possible, by being involved in treatment and medication decisions, attending medical appointments with their child, and being the primary point of contact for the child's school (Hust & Kuppinger, 2014, p. 15). Providers can ensure staff can be reached directly by caregivers and proactively increase communication with families, especially during transition points, to both ask parents for advice when their child is having difficulties and share what is going well (Association of Children's Residential Centers, 2009).

When a program adopts an overall strategy to minimize time in placement and increase supports in home and in the community, there are a number of steps programs can take to support family connections during residential treatment, including (adapted from Hust & Kuppinger, 2014, p. 21):

- Assume that youth can spend time at home during their first week at the program. Avoid setting arbitrary rules about when or how often youth can go home. Eliminate any practices where youth "earn" the right to go home.
- Assert that youth do not "visit" their homes – they live there and spend time there while receiving services in a residential setting.
- Remove visiting hours for family and instead encourage families to visit when they are able. Have private space available for families, including space for siblings.
- When distance is a barrier, budget for travel and for staff time to transport and support the child while he or she spends time at home. Use Skype or FaceTime to connect families every day. Make sure youth can call friends and family regularly.

- **Family and youth peer support.** Some providers have hired parents who have experience raising a child with mental health challenges as a family peer support person to help caregivers navigate services. Peer supports can also bring emotional support to youth and families.

Youth-guided care

Taking a youth-guided approach is a shift in philosophy from adults working on behalf of youth, to youth and adults working together to develop and implement services. This approach requires building authentic relationships between adults and youth, understanding youth have expertise in their own experiences, and adults are willing to respect young people's unique point of view. In system of care work, youth are also expected to be engaged as equal partners in creating systems change. Services should strive to create meaningful partnerships between adults and youth in planning, implementation, evaluation, and promotion of those services.

The five primary values in partnering with youth include (Valesey & Orlando, 2016):

- Cultivating and maintaining a strength-based focus
- Sharing power and empowering young people
- Recognizing and avoiding adultism
- Valuing cultural and linguistic competence
- Valuing youth culture

Organizations that are youth guided are considered to be safe environments for youth that promote empowerment and self-advocacy. Staff at these organizations recognize that youth should have shared power with adults and provide the necessary supports for youth to make decisions and be integrated into service development and implementation. Some of the specific things that providers can do to be more youth guided at an organizational level include: developing youth peer supports within the organization; using trauma-informed approaches; and making accommodations for youth to successfully take on tasks usually reserved for adults, such as providing training for youth to serve in advisory roles (Lulow, et al., 2014).

Trauma-informed organizations

Specific trauma-informed treatments, including examples highlighted in this report, continue to evolve and may be appropriate for some residential settings. However, for residential programs, the more immediate call to action has been to reconsider the ways in which facilities and programs might contribute to further traumatization, undermining the very processes of healing with which they were charged.

Trauma-informed organizations look critically at themselves to first identify ways that the facility environment and program practices may inadvertently re-traumatize youth, and then determine how these impacts might be ameliorated. Key components of successful trauma-informed organizations include: strong support by leadership; sufficient staff support; practices that amplify the voices of youth and families; policies to support trauma-informed practices; and implementation of trauma-informed programming (Bryson et al., 2017).

SAMHSA, particularly through its support of the National Children’s Traumatic Stress Network (NCTSN), provides guidance for systems in adopting trauma-informed approaches. While not a comprehensive list, the following demonstrate how these principles apply to residential programs:

- Recognize that trauma is not a tangential problem, but a central issue that must be acknowledged and incorporated into residential treatment interventions (LeBel & Kelly, 2014).
- The widespread likelihood of exposure to trauma – even when not acknowledged – affirms that trauma-informed practices should be adopted as a universal standard of care. One way to apply this principle in practice is to incorporate a trauma assessment at, or even before, admission to inform care and treatment (NASMHPD, 2013).
- Because trauma represents a profound loss of personal control, interventions that acknowledge and develop skills and strengths must replace coercive, punitive, or shaming practices, which are inherently re-traumatizing. Research has found that organizations that implement a trauma-informed framework reduce or eliminate the use of seclusion and restraints and other coercive measures and improve staff satisfaction (Bryson et al., 2017).

Use of effective treatment models

There is not a single treatment model that is the “gold standard” to be used in all residential treatment models. Because effective services are individualized to meet the needs of youth, it is critical that residential providers are trained in evidence-based and research-based practices, and can effectively integrate the practice into their overall treatment model. This includes a number of individual and family therapy treatment models and trauma-informed approaches. Youth in residential care have greater trauma exposure than youth in other mental health service settings, contributing to greater functional impairments (Briggs et al., 2012). In addition, youth in residential care are also likely to have had multiple placement transitions, which can be considered traumatic events themselves (Rivard et al., 2004).

There are challenges to implementing evidence-based practices (EBPs); maintaining fidelity to an approach requires training, consultation, and monitoring of implementation and outcomes. The initial investment in training and ongoing administrative work to maintain fidelity to the EBP are not always integrated into grant programs or payment rates. However, these are challenges to address, as incorporating EBPs into practice can strengthen residential treatment approaches as evidence-based models (Association of Children’s Residential Centers, 2008). The following treatment models are not an exhaustive list of all practices that are appropriate in residential settings, but provides examples of approaches that can lead to improved outcomes.

Trauma-Focused Cognitive Behavioral Therapy (TF-CBT). The leading evidence-based treatment, TF-CBT, encourages parent engagement for best results. However, other caregivers with a close relationship to the child, such as a therapist, can witness the narrative when parents are not available. In 2015, the Ambit Network completed training a cohort of 47 clinicians from seven Minnesota residential provider facilities on TF-CBT. Unpublished data provided by the Ambit Network showed the practice led to reductions in youth post-traumatic stress disorder (PTSD) symptoms and was well received by the clinicians. Therapist training and integration into an individualized treatment approach is critical for incorporating TF-CBT into a residential treatment setting (Cohen & Mannarino, 2005). The practice is contraindicated for some youth in residential settings if primary caregivers cannot be involved or if the facility is highly committed to maintaining the milieu and unable to individualize care, particularly when current practices contribute to greater dysregulation and reactivity (Hodgdon et al., 2013).

Trauma Systems Therapy (TST). Initially created for outpatient settings (Saxe, Ellis & Kaplow, 2007), applications of TST have been created for trauma-informed milieu treatment in large settings (Brown, McCauley, Navalta, & Saxe, 2013). The approach defines the trauma system as the child who has experienced trauma and has difficulty regulating their emotional states, and the social environment or system of care that is not able to help the child regulate. Repeated assessment of the child and system determines the course of treatment needed to help the youth better regulate and to stabilize the environment and progress through treatment phases. This clinical model is embedded in an organizational framework which also identifies and coordinates home and community-based services, outpatient skills-based psychotherapy, psychopharmacology, and service advocacy, creating a specialty TST team for each youth.

When adapted for residential settings, the key components of the treatment approach include:

- Creation of a common language, leading to assessment and treatment planning for a small number of “priority problems” (i.e., patterns of specific environmental signals and dysregulated emotional or behavioral responses)
- Focus on the social environment of the residential milieu, assessing and addressing potential distress or threat in the therapeutic milieu, and creating therapeutic alliances with caregivers
- Use of TST as a vehicle to integrate care, with direct care staff regarded as crucial partners and incorporating tools to assess the functioning of the residential team/milieu

Different levels of program incorporation and different sets of outcomes characterized the application of TST to three residential settings, with outcomes including decreased use of seclusion and restraint; improved quality of care; decreased levels of functional impairment on a standardized scale; and increased placement stability post-discharge. While considered a promising approach, there is currently insufficient data for a rating under the California Evidence-Based Clearinghouse for Child Welfare standards.

Sanctuary Model. Originally designed for short-term, acute inpatient psychiatric settings for adults who had been traumatized as children, Sanctuary was adapted for use with youth in residential treatment programs in the early 2000s by Sandra Bloom, M.D. and colleagues. Since then, applications of the model have been made to work across a wide range of organizations. The goal of the approach is to create trauma-informed and trauma-sensitive environments in which specific trauma-focused interventions can be successfully implemented. Because the model requires understanding the impact of trauma on individuals and in the context of organizations and systems, Sanctuary requires extensive leadership involvement (Bloom & Farragher, 2013).

Organizations adopting Sanctuary are required to commit to improvements in seven areas: nonviolence, emotional intelligence, social learning, democracy, open communication, social responsibility, and growth and change. A problem-solving framework known by the acronym SELF (i.e., Safety, Emotions, Loss, and Future) identifies target areas of planning and measuring recovery from trauma. Curricula are available for youth and caregivers, and materials are available in English and Spanish.

The most rigorous study examining the effectiveness of the model compared post-discharge outcomes for youth admitted into different residential programs, some implementing Sanctuary and others without, operated by a single provider (Stein, Sorbero, Kogan, & Greenberg, 2011). The 3-year study focused on measuring length of stay, utilization of outpatient services at 90 days post-discharge, and admission to inpatient hospitalization or other residential care. Outcomes were similar across the programs during the first year Sanctuary was implemented. However, after two years of implementation, length of stay had been reduced from 300 days in all facilities to 250 days in non-Sanctuary facilities and 200 days in Sanctuary facilities. Youth discharged from Sanctuary facilities made greater use of outpatient therapy and had fewer readmissions to residential treatment facility care than their counterparts from other residential programs. Sanctuary has also been rated as having promising research evidence under the California Evidence-Based Standards. Despite having positive outcomes, Sanctuary is not widely used because it is usually cost-prohibitive for organizations to implement the model with fidelity.

ARC (Attachment, Regulation and Competency). ARC, developed by Blaustein and Kinniburgh (2010) is the second most used treatment among National Children’s Traumatic Stress Network sites. ARC is a flexible, components-based intervention designed as both an individual-level clinical intervention and an organizational framework to support trauma-informed care. Adapting the model to meet the needs of youth with complex trauma histories in residential treatment settings required environmental redesign, training, additional staff support, and reframing of the milieu to emphasize teaching and support of alternate skills rather than punishment of unwanted behavior (Hodgdon et al., 2013).

Results from a study implementing ARC at two residential facilities demonstrated significant reductions in PTSD symptoms, as well as internalizing and externalizing behaviors at charge that were maintained or continued to improve post-discharge. In addition, restraint use declined by 54 percent in these two facilities over the course of the intervention, while increasing by 20 percent in other programs administered by the same agency during this period. While these results are promising, there is currently insufficient data for a rating under the California Evidence-Based Clearinghouse. However, the approach is being used widely among organizations that are members or grantees of the National Child Traumatic Stress Network.

Approaches for youth who demonstrate aggressive behavior. There are some interventions designed specifically for youth involved in the juvenile justice system who demonstrate aggressive behavior, including: Trauma Grief and Component Training for Adolescents (TGCT-A) and Aggression Replacement Training (ART). TGCT-A is a manualized individual or group treatment program for trauma-exposed youth age 12 or older. It is organized into four modules that include psychoeducation and skills training, processing of grief and trauma, and skills to support future life adversity. It is rated as promising research under the California Evidence-Based Clearinghouse. ART is a research-based cognitive behavioral intervention that includes three integrated components (social skills training, anger control and moral reasoning) that are addressed through a standardized 10 week curriculum. It had not yet been rated by the California Evidence-Based Clearinghouse. Adaptations to these interventions could be considered for children’s residential facilities.

Additional evidence-based practices may need to be considered for youth with cognitive delays Adaptations have been made to Dialectical Behavioral Therapy (DBT) to work effectively with adults who have lower cognitive functioning (Brown, Brown, & Dibiasio, 2013). However, the same adaptations have not been tested with youth. There has also been some promising results of an adapted cognitive behavior therapy model for youth with mental illnesses, autism spectrum disorders, and lower cognitive functioning (Parent, et al., 2016). However, this highly specialized model may be difficult for residential treatment facilities to implement without partnership with community-based providers already specialized in working with this population.

Managing and Adapting Practice (MAP) System. In residential and community-based settings, therapists and clinicians need to have skills and experience in an array of treatment approaches to provide effective services that meet the needs of youth and families. During the past 15 years, state administrators developed the Managing and Adapting Practice (MAP) system to increase utilization of evidence-based practices by providers and to do so in a uniform way. The MAP direct services component can best be described as a “treatment design, implementation and evaluation toolkit” (Higa-McMillan et al., 2017). MAP includes a collection of information to help providers determine what practices to use and when, how to implement an approach with integrity, and how to determine whether the approach is achieving the desired outcomes.

Today, this review of therapeutic best practices covers more than 2,200 protocols tested in approximately 950 studies, and the Practitioner Guides cover more than 50 common practices and processes. The MAP system offers unique potential to transform the treatment component of residential treatment stay (Regan, M., personal communication, December 2018) as well as to create and reinforce continuity in treatment between residential programs and community services. MAP offers a common language for conceptualizing the difficulties that are targeted for treatment as well as the strengths of youth and families in approaching

treatment, and identifies the interventions that are most likely to be effective for them. Additionally, it is one of the only ways in which broad practice fidelity can be trained, assessed, and credentialed across providers from varied professional, cultural, and geographic backgrounds. Minnesota's adoption and dissemination of MAP is a best practice which can increasingly be used to improve the quality of children's mental health services across the continuum of care.

Optimal length of stay

There is not a national or industry standard for appropriate average length of stay for residential treatment interventions. Because of many of the research limitations described earlier, the current literature on this topic is scarce. National studies have found that average lengths of stay for individual programs vary considerably, from two months to more than two years (Walters, 2007). The few studies that have been done to examine optimal treatment length have found that shorter stays (up to 6 months) are associated with improved functioning, and that longer stays (10 months or more) are associated with negative outcomes (Strickler, Mihalo, Bundick, & Trunzo, 2016). Unnecessarily long lengths of stay in out-of-home group care can cause institutionalized behavior, including greater risk taking, poor educational achievement, disengagement from positive peer influences, and social isolation (Altshueler & Poertner, 2002).

There is evidence that, for many youth, the most significant improvements in mental health symptoms occur within the first three to four months of treatment, and that short-term treatment with staff skilled in intensive therapeutic interventions can lead to positive long-term outcomes for youth (Leichtman, Leichtman, Barber, & Nesse, 2001; Noffle et al., 2011). However, these outcomes are largely dependent on the family's engagement in treatment and the availability of community-based services after discharge. A review of related studies concluded that the family environment and community-based services available to youth after discharge are stronger predictors of positive outcomes than the amount of time spent in a residential setting (Ontario Center of Excellence for Child and Youth Mental Health, 2012). While studies describing the benefits of reduced length of stay often focus on cost savings, the shift is often made because high value is placed on ensuring children and youth have a strong sense of belonging and connection to community (Blau et al., 2014, pp. 96).

There are circumstances under which longer-term residential treatment may be the most effective approach. Although evidence is somewhat limited, studies focused on youth with mental illnesses and substance use disorders have found youth more likely to continue to refrain from substance abuse after participating in a longer-term treatment program (Brunette, Drake, Woods, & Hartnett, 2001; Dasinger, Shane & Martinovich, 2004). In addition, youth

who experience a psychiatric crisis during a residential stay may also benefit from longer stays in a children's mental health residential setting (Barker, Wulczyn, & Dale, 2005).

Factors that support positive outcomes post-discharge

While improved mental health symptoms during residential treatment is critically important, improvement during treatment is not predictive of functioning and maintaining or improving gains after discharge (Bates, English, & Kouidou-Giles, 1997). Instead, the most critical factors that contribute to longer-term positive outcomes following a residential treatment intervention are family involvement, stability after the residential stay, and the availability of effective and appropriate community-based services and supports (Hair, 2005). Therefore, while recognizing that residential treatment is a necessary and important component of the continuum of children's mental health services, positive youth outcomes cannot be effectively maintained without continuity of care and strong in-home and community-based services.

Use of best practices among current residential providers

To understand the degree to which current residential providers have adopted best practices in their work, provider agencies responded to a survey that asked about their capacity to provide evidence-based treatment and trauma-informed care. This descriptive information should be considered a starting point to understand current capacity among residential treatment providers, rather than an exhaustive inventory of all treatment approaches and services provided at current facilities. In addition, it is beyond the scope of this study to determine whether any evidence-based practices used at each facility are being implemented with fidelity. A total of 11 providers shared information about treatment practices through the survey or follow up interview.

Most residential providers report have therapists trained in TF-CBT. In general, the treatment model is used at the digression of the therapist, when appropriate for the child's individual needs. Multiple agencies noted that all staff are trained in trauma-informed care. It is beyond the scope of this study to evaluate the degree to which TF-CBT has been implemented with fidelity, and principles of trauma-informed organizations have been adopted. Multiple agencies use Dialectical Behavioral Therapy (DBT) and Eye Movement Desensitization and Reprocessing (EMDR), practices that are being researched but have not yet been demonstrated to be an effective treatment for adolescents. One agency plans to bring the ARC model to the facility. One agency uses a color and point system, a practice not considered as a current best practice in residential treatment.

Multiple agencies identified psychotherapy models, largely Cognitive-Behavioral Therapy, as a foundation for their treatment model. A number of agencies described aspects of behavioral skills groups, with one noting that Motivational Interviewing is incorporated into the model. Other approaches the agencies identified using in their work include: Glasser-Choice Theory, Solution-Focused Brief Therapy, play therapy, animal-assisted therapy, and art therapy.

While some agencies have staff trained in evidence-based family therapy models, many noted that these inform practice but that treatment models may not be implemented with fidelity. A few organizations have staff trained in Functional Family Therapy (FFT) or Multidimensional Family Therapy (MFT). In other facilities, the type of family therapy used varies and may not follow a specific treatment model. Three facilities have staff trained in the MAP system, reporting it is used regularly to inform treatment approaches.

Some agencies have specialized services available to meet the needs of youth they serve. One of the providers offers a chemical health group, facilitated by a Licensed Alcohol and Drug Counselor, for youth identified as having chemical dependency issues. Two agencies have specialization working with adolescent males who have shown inappropriate or harmful sexual behaviors; both have programs specifically for youth with lower cognitive functioning. One agency has trained staff in the Safe Harbor method to support youth who have been sexually exploited.

Additional information is needed to fully analyze length of stay and outcome data, and understand factors contributing to longer residential placements. Among the youth discharged in 2017 and included in the Student Data Reporting System, the average length of stay was 289 days, or just over 9 months. A small majority of youth (51%) had stays of less than 9 months, while smaller percentages of youth had longer stays of 9-12 months (18%), 1-2 years (25%), or more than 2 years (6%). Providers who had an opportunity to react to the preliminary data thought factors that contribute to these longer stays are a combination of youth who have mental illnesses and lower cognitive functioning, youth who are aging out of services and ultimately moving into independent living, and youth who do not have a stable home environment with the community-based services in place to support the more intensive needs of the youth and family. This included the 74 youth the providers identified in 2017 as wards of the state. In order to determine the array of service options needed to meet the needs of youth, it will be critical to further assess factors that contribute to longer lengths of stay. These factors may include: mental health needs best treated through a longer episode of care; a need for specialized treatment services not currently available; gaps in community-based and in-home support; or a need for greater family stability so that the child can safely return home.

The agencies report they ask youth and families about their cultural values prior to intake and during treatment. Multiple facilities described making accommodations for dietary preferences and religious or spiritual healing practices. A few facilities offered training to staff and encouraged participation in culturally specific community-based events as ways to increase awareness and understanding among staff. One agency working with a number of American Indian youth contracts with a Native community member to provide weekly programming focused on American Indian language, arts, and storytelling, and cultural practices, like smudging.

Current family engagement practices vary widely across the agencies. All residential providers described engaging families at intake or admission to establish treatment goals and to discuss discharge planning. Beyond that, there was considerable variation in what each agency offered in their description of family engagement practices used during the child's residential stay. Some of the practices used include:

- Family therapy, with multiple agencies providing that twice a month
- Weekly calls with the child's therapist or case manager (depending on the agency)
- Monthly family-team meetings focused on identifying strengths, reviewing treatment progress, shared goal setting, and planning for discharge
- One staffing with the family within the first 30 days, followed by quarterly staffings, unless the family requests to be involved more often
- Openness to visits and calls from the family
- An apartment for families to stay when visiting
- Providing transportation for youth to be in their homes

In situations where youth do not have involved parents, most agencies rely on county case managers to identify supportive extended family members. Once identified, potential foster families or extended family members are involved in staffing meetings and receive updates.

Transition planning. While transition planning is part of each agency's care model, the approaches used vary across the facilities. Some of the practices used include:

- Assigning a sex offender counselor to help youth who have shown sexually inappropriate behaviors connect with community resources and local schools and follow the child's progress and transition into the community for up to six months
- Having an Aftercare Coordinator and Parent Partner onsite to assist families with transitions to community resources and the child's school

- Encouraging future service providers to visit the residential facility to meet with the child and current staff
- Setting up appointments for youth and families to attend after discharge
- Offering a structured aftercare program to provide post-discharge support and counseling and coordination of community-based services
- Conducting team meetings that include staff from future step-down services (day treatment) also provided by the agency

Caregiver perceptions of current residential treatment practices

Among the caregivers who responded to the survey, most reported that safety issues, including self-harm and aggression towards others, were the key factors that led to the residential treatment intervention. Most of the caregivers reported that their child had received services from an emergency department or inpatient hospital setting in the six months prior to the residential stay. The interviews and surveys completed with youth and families are not intended to fully capture the experiences of all families, but offer insights into ways that the current continuum of care is working well for families or creating barriers.

Caregivers reported varied experiences; some were completely satisfied and saw very positive improvements in their child’s symptoms and behaviors, while others felt their expectations had not been met. When services worked well for the child and family, residential services helped caregivers better understand their child’s diagnosis and gave the family some respite and an opportunity for caregivers to build the skills and create an environment to help their child be safe at home. Effective services also helped the child develop new coping skills in a more structured environment. Some of the things that were problems for families include: the distance to the facility and the difficulty that creates with relationships and working to learn new skills as a family; limited transition planning and inadequate in-home and community-based supports after discharge; infrequent communication; and staff turnover, which impacts communication and continuity of care for their child.

No one should ever have to go through this. I'm glad and happy our child is [at this facility]. The staff care, treat the children like they're their own, and care for us as parents. I feel like we have a great team.

- Caregiver

Residential treatment is an extreme measure but is necessary in some cases. Not only to keep a child with severe mental illness safe, but their family and community needed. More RTC beds are needed [...] As much as out of home is not preferable, there are cases where it is truly needed.

- Caregiver

Although most caregivers thought that residential treatment was the right level for their child at that time, a number identified services that, if in place, may have helped their child stay home. The services and supports they suggested include: day treatment, intensive in-home therapy, overnight personal care attendant (PCA), structured respite for adoptive families, and more support earlier on. In addition, a number of parents thought that greater support from the child’s schools, both in making school-linked mental health services available and in working with their family to identify alternatives to school suspensions for behavior related to their child’s mental illness, would have helped them support their child at home. Many caregivers felt they had exhausted all other options or lived in areas where there were not many options available.

Caregivers often said that providers included them in creating their child’s treatment plan. They were less likely to report having good communication with providers, having their questions answered, and feeling like a valued member of the treatment team. The caregivers suggested a number of ways that families could be better involved in treatment, including: a pre-admission consultation to ease the transition into the facility, more frequent (i.e., weekly) communication throughout treatment, being asked for input and incorporating that information into the treatment plan, and accommodating what works best for families to communicate with their child (e.g., more family days, Skype phone calls, support with transportation/housing for visits). More specifically, caregivers suggested providers share a general daily schedule and a weekly email/ communication on what the focus of the week was, any struggles or difficulties their child experienced and how they were handled, strengths that week, and an opportunity for the family to provide recommendations back to the provider.

[With residential treatment], we were able to step back and get a breather. Our son has become physically aggressive with us and others. We were able to get more help set up when he was discharged.

- Caregiver

While caregivers were generally pleased with the residential services their child received, they described dissatisfaction with discharge planning and getting supports in place before discharge occurred. Caregivers’ most frequent recommendations focused on improved transition support, increased community supports, easier access to care, and improved communication with residential providers to better support their children’s successful return home or to the community. Caregiver recommendations to improve the continuum of intensive mental health services included:

- Improving transition supports and services and providing better discharge planning to connect youth with community providers and better ensure a positive transition home or to another facility.

- Increasing the use of Certified Family Peer Specialists to help families get connected to supports, understand how the system works and what to expect from different types of treatments, and act as a communication liaison for providers.
- Providing trained supports for after school, summer months, and respite
- Ensuring easier/earlier access to services and fewer barriers to access services
- Improving training for school staff on mental illnesses, symptoms, and how to provide appropriate supports as well as increased formal mental health supports in schools

Parents need more information when getting ready to leave residential. I don't even know what services there are, so how do I know what services to ask for?
- Caregiver

The high structure at residential cannot be replicated at home... Our son might have to go back to residential because we don't have the right support to keep him home.
- Caregiver

Residential treatment has significant financial impact on many families. Multiple caregivers talked about lost wages due to taking time off or leaving a job to care for their child. Travel costs are significant for some families, although some providers did cover the cost of hotel stays or have other housing available for visits. A number of families also talked about financial hardships due to the loss of adoption assistance.

It is exhausting to parent an emotionally dysregulated child. Parents in the adoption community -even experienced parents - are overwhelmed when our children are aggressive and we don't understand their behaviors. Sometimes all we need is a couple of days or even a couple of hours of relief where we know our children are safe and cared for.
-Caregiver

Synthesis: Current use of best practices in residential treatment

Based on the information shared by providers, the experiences of caregivers, and the perceptions of additional stakeholder groups, the study identified a number of ways that current residential treatment approaches align with best practices from the literature, and ways that they can be further enhanced. While providers have and can continue to adopt best practices through agency-level initiatives to improve the quality of care, some of the changes suggested may require additional training, greater administrative work for self-assessment or adherence to evidence-based models, or increase staffing levels. It was not within the scope of this study to determine the degree to which the current rate structure can support the time and resources needed for the training, infrastructure, and ongoing time needed to adopt changes in practice.

3. Alignment between residential treatment approaches and best practices

	Promising practices	Opportunities for improvement
Use of evidence-based practices, including trauma-informed treatment	A number of providers noted that clinicians have received training in evidence-based practices (EBPs), including Trauma-Focused Cognitive Behavioral Therapy; Functional Family Therapy; and Multidimensional Family Therapy. However, EBPs are not typically adopted with fidelity. Few clinicians are trained in MAP.	Increase the number of clinicians trained in MAP and other EBPs. Encourage the use of effective treatment components by increasing the number of clinicians trained in, and using MAP.
Adoption of organization trauma-informed care principles	Nearly all participating providers reported clinicians were trained in TF-CBT. However, fewer volunteered that their organization had taken steps to assess current practices and changes needed to adopted trauma-informed care principles.	Establish expectations for all residential and community-based providers to conduct self-assessment of trauma-informed organization practices.
Family-driven and youth-guided practices	Providers and caregivers report families being involved in the development of the child's treatment plan and receiving regular updates. Family engagement practices vary by provider, with some taking more steps to create opportunities for frequent communication at times that are optimal for the family. Further work is needed to determine the degree to which providers have adopted family-driven care principles.	Adoption of Wraparound, where treatment decisions are led by the family, can help ensure treatment decisions are family-driven. Increase awareness and adoption of family-driven and youth-guided care principles among all staff. Consider opportunities for family and youth peer support services to be part of the treatment model.
Treatment practices	Although many providers reported the use of treatment approaches that focus on addressing youth mental health symptoms and past trauma, remnants of point-and-level systems, such as allowing home visits as an earned reward or allowed after a certain point in treatment, are in place at some facilities.	Adopt a philosophy of time at home to be available to youth as soon as possible.

Best practices: Residential treatment as part of a community-based continuum of care

Nationally, the Children’s Mental Health Initiative, an initiative of the Substance Abuse and Mental Health Services Administration, has established an evidence base for a continuum of care and has led the development and clarification of values that drive service-delivery. Evaluations of System of Care initiatives have shown improvements in clinical mental health symptoms and emotional strengths, more stable living situations, improved school performance and attendance, fewer contacts with law enforcement and juvenile corrections, and reductions in caregiver stress (SAMHSA, 2018).

Through this initiative and other demonstration projects, SAMHSA and Center for Medicaid and CHIP Services have recommended a model benefit set for community-based services that should be used to meet the mental health needs of youth and their families. This benefit set includes traditional mental health services, including individual therapy, family therapy, and medication management, as well as a set of key community-based services: intensive care coordination (also called wraparound), family and youth peer support services, intensive in-home services, mobile crisis response and stabilization, and flex funds (SAMHSA & CMCS, 2013). Residential treatment is a key component of this continuum of services and, as described earlier, are most effective when there are smooth transitions in care.

Best practices in the field of children’s mental health also support local communities and states to adopt System of Care values to guide how systems are structured and services are delivered. Systems of care are coordinated networks of community-based services and supports developed to support the strengths and meet the needs of youth and families. While systems of care may focus on different youth populations and use varied mechanisms to coordinate care, all are grounded by a common set of values.

The services and supports that are part of a continuum of care should reflect the needs of youth and local priorities. For that reason, and because the demand for any single service needs to be considered in the context of what is available across the full continuum of care, there are many ways to establish the best array of services, rather than formulaic provider to youth ratios or capacity guidelines. However, there are a number of services and supports that are consistently part of strong continuums of care.

System of Care services are:

- Family driven
- Individualized, strengths based and evidence informed
- Youth guided
- Culturally and linguistically competent
- Provided in the least restrictive environment
- Community based
- Accessible
- Collaborative and coordinated across an interagency network

Synthesis of stakeholder input

A number of themes and issues emerged across the many stakeholder groups¹⁰ who gave input into this study about the role of residential treatment in the continuum of care and the degree to which this system meets the needs of youth and families.

There are a number of populations not well served by the current continuum of intensive mental health services in the state. Youth who exhibit disruptive or aggressive behavior can be hard to adequately support in a group milieu setting, and these behaviors can contribute to youth being charged with crimes and placed in juvenile corrections settings. As noted by multiple stakeholders, it is important to know why youth demonstrate violence, in order to inform treatment. A number of stakeholders felt that youth without involved family members, either legally or because the parents is unable to participate due to their own mental health, are not well-served by the current continuum of care. Stakeholders from multiple sectors also identified youth with developmental delays or autism spectrum disorder diagnoses as not well served. Additional groups, reported less often but still important to note, include: youth of color; transgender youth; lower-income families or moderate income families without the ability to pay for services; youth with high suicidal ideation; youth in foster care; and families experiencing multi-generational trauma.

¹⁰ These groups are listed in the methods section of the report (page 4).

The lack of in-home therapy was most often cited as the service most needed after discharge or to avoid repeated residential treatment interventions. A few of these stakeholders stressed the importance of this service being delivered by a skilled mental health professional. Other stakeholders identified crisis services or partial hospitalization services as current gaps. Caregivers also discussed the importance of respite and in-home support.

Perspectives of intermediate school districts

In Minnesota, intermediate school districts and special education cooperatives provide education and support to children with the highest and most complex needs. Many of the children served in residential facilities are referred by or received education in one of these schools. To understand their perspective, representatives of Intermediate Districts 916, 917, 287, and Goodhue County Education District add another perspective to understanding the state's current continuum of care, and elevates a number of ways that the current continuum of care is not working.

The group identified Reactive Attachment Disorder (RAD), Post-Traumatic Stress Disorder (PTSD), Fetal Alcohol Spectrum Disorders (FASD), and in-utero drug exposure as the most frequent medical diagnoses for children in residential treatment who are also being served by the districts. It was also noted that youth with aggressive or violent behavior are the most difficult to find services for and are frequently discharged prior to completing treatment.

Delays in accessing more intensive mental health services have negative impacts on youth and families. Despite a law requiring admission to residential treatment be based on clinical need rather than having tried other levels of care¹¹, the group identified this as a widespread practice when trying to get a child into residential treatment. The group reported they would often hear from county case managers or insurers that a child must fail multiple community-based services before the county or insurance would approve residential treatment. This practice delays needed care and jeopardizes the health and safety of children. Further, forcing youth to fail at treatment reduces the family's hope and confidence in future treatment and successful recovery.

¹¹ Chapter 245.4885 subdivision 1d “when a level of care determination is conducted, the responsible entity may not determine that referral or admission to a treatment foster care setting or residential treatment facility is not appropriate solely because services were not first provided to the child in a less restrictive setting and the child failed to make progress toward to meet treatment goals in the less restrictive setting.”

Delays in care may also contribute to greater juvenile justice involvement, especially for children of color. Speaking from their own experience, they observed that youth of color were often determined by the school to meet the criteria for emotional or behavioral disorders (EBD) and also involved with juvenile corrections. Misdiagnoses of behavior as conduct disorders may change the way that people view and interact with the child. They have observed that parents who are educated about how the system works and know the right language to use are most likely to get appropriate supports and stay out of the juvenile justice system. However, they also noted that sometimes the most effective and timely way to get a child into residential treatment is through a corrections placement.

Care coordination and improved coordination has helped address some of these issues. Monthly meetings between the intermediate district and the county have been helpful ways to make sure support children with the most pressing needs receive appropriate treatment. These are often youth without any supports or with numerous, but uncoordinated, supports. Another intermediate district established a consultation team to support member school districts identify strategies to keep students successful in their current school setting.

The group identified a number of action items or potential legislative changes that they felt would result in improved services for youth in their district. Some of the recommendations most directly related to this study include: improving training for Rule 79 targeted case management to improve the quality and consistency of services available to youth and families; using Certified Family Peer Specialists (CFPS) to help families as youth transition from residential treatment centers to home and school; expanding Youth ACT (or a similar service) to support younger children; and increasing the skills and knowledge of mobile crisis teams to better work with children and families.

Perspectives of counties

Counties play multiple roles to fund, coordinate, and provide services for youth in need of intensive mental health services. As a result, social service administrators have a unique perspective on the needs of youth and availability of key services. Feedback from county social services staff was gathered through two meetings with the Minnesota Association of County Social Services Administrators (MACSSA) and completion of a written form administered to each county by MACSSA. These two sources were used to summarize what counties identified as youth needs that are more difficult for the county to respond to and what is needed to build a more robust continuum of care.

Continuum of care

As with other stakeholder groups, county representatives noted that youth with mental illnesses who demonstrate aggressive behavior, have lower cognitive function, or who are at high risk self-harm are not being well served by Minnesota's current continuum of services. Some also identified youth who have been sexually exploited, children with autism, and youth who have been the perpetrators of a sexual assault.

Long waiting lists for residential services and limited intensive community-based options make it difficult to help youth get the services they need. They named a number of related and interconnected issues that contribute to this issue, including: a limited number of residential providers, a lack of intensive community-based services, rate setting formulas and the impact those have on the county's ability to pay for care, workforce shortages, and difficulty finding providers willing to admit youth with very challenging behaviors or a long history of placements.

County administrators saw the lack of community-based intensive services as a critical gap, impacting youth and families throughout the state. The counties felt there was a need for more in-home family therapy and services to help youth to transfer the skills they learned in a residential setting to home. They also saw a need for different types of step-down services, supports for the family, including family peer support, crisis services, culturally specific services, and more foster care options. One county suggested a youth-version of Intensive Residential Treatment Services (IRTS). Prior authorization processes and limited data to help guide decisions to effective services were also identified as gaps in the current continuum of services.

There is no in-between a 24/7 placement and being at home. If the family can't participate in family therapy, nothing changes. – County administrator

Availability of community-based services

Several county staff identified the need for more extensive work done in partnership with the family during and after residential placement. This can be challenging, especially if the child is placed several hours away from the family, making transportation difficult. They noted that youth can make a lot of progress in a residential environment and then regress when returning home without supports in place to help the family. This observation was common among both metro and rural counties.

Many counties described that while there are some community-based and in-home services available, they lacked the capacity to meet the needs of youth, leading to long wait times for services. CTSS was often described as understaffed and underfunded, and not robust enough to meet the needs of youth following a residential stay. County staff reported a demand for respite among families, but had a limited number of high quality, trained professionals to provide the services. Child psychiatry and medication management has another common gap identified by county staff.

Multiple counties saw a need for more intensive services to be located closer to the child's home, including residential services. This was most often identified as an issue in greater Minnesota, but identified as a gap across the state. Several respondents also suggested a more robust array of in-home services, including individual therapy, family therapy, CTSS, and other intensive skill building services. Again, while many counties had some of these services in place, capacity is limited and not everyone is able to take advantage of them due to a shortage in staffing and funding. Some counties identified a need for more robust respite services, crisis teams that specifically work with children, as well as Youth ACT services.

The Appendix includes an additional summary of county social services feedback that focuses more directly on county case management practices related to transitions from residential care and county cost considerations.

Perceptions of juvenile corrections stakeholders

As part of this study, a discussion group was held with members of the Minnesota Juvenile Detention Association (MnJDA). Participating facility representatives talked about the many ways that youth with mental illnesses are failing to get the mental health treatment services they need while in these facilities. Multiple participants gave examples of youth coming to their correctional facility after being turned away from other types of placement settings, including children's residential treatment centers, as a result of aggressive behavior. Multiple representatives also noted that, while they can keep youth at high risk of suicide safe, their facilities are not equipped to provide the mental health services the child needs. For example, one representative stated that 50 percent of their critical incidents in the past year were the result of actions to prevent self-harm.

Participants also offered examples of the challenges in discharging a child to another type of facility where more appropriate care can be provided. For example, one representative noted that they have had youth at their facility who are actively suicidal and after taking them to a hospital many are cleared to return rather than admitted to the hospital. Multiple discussion participants noted that these challenges contribute to staff burnout and result in the facility focusing more on minimizing liability than on adopting best practices.

To attempt to further understand the extent to which juvenile corrections centers are working with youth with mental illnesses, the MnJDA President administered a brief survey to members. Three detention centers responded, all in the Twin Cities metro region. Together, the detention centers in Dakota, Hennepin, and Ramsey counties served 2,710 youth in 2017, and this group was disproportionately youth of color. While limited, the sample showed that many of the youth in detention had some type of mental health or dual diagnosis issue, particularly neurobiological disorders, behaviors consistent with past trauma, or a history of suicide attempts. Few youth were known to be waiting for a court-ordered placement to a children's mental health residential facility. One provider noted that youth stay longer in detention because not all residential treatment facilities will accept youth with assaultive behaviors.

The juvenile detention centers that provided information had some mental health services available to youth at the facility, including crisis services. One juvenile corrections provider estimated that 90 percent of the 130 served by the correctional facility had a known mental health diagnosis. While screening is done if a diagnostic assessment or evaluation has not been completed in the last six months, the facility does not track the screening information. While this facility did have the capacity to provide some mental health treatment services, including Trauma-Focused Cognitive Behavioral Therapy and some skills groups, the facility thought the mental health needs of youth would be better met with a staff psychiatrist, additional mental health professionals, and a lower staffing ratio.

The discussion with MnJDA members brought attention to the high level of mental health needs among youth involved with the juvenile corrections system. Corrections facilities can become the institutions where youth are placed when other child-serving systems are not able to address the needs of youth, particularly youth who are highly aggressive towards staff and peers. Unsuccessful residential treatment attempts and repeated involvement with juvenile corrections become reasons not to admit these youth for mental health treatment, creating an ongoing cycle of youth not getting the most optimal services for their mental health needs. This complex issue necessitates more time and attention than was available over the course of this study, but should be the focus of additional future work.

Perspectives of providers

Providers were engaged in multiple ways throughout the course of the study to identify challenges and potential strategies to address these issues. An initial conversation with providers in June 2018 focused on some of the challenges they face and what they saw as gaps within the current continuum of care.

The providers had concerns that adopting a PRTF level of service may mean some youth who need residential services will not meet the eligibility requirements. In that discussion, the providers brought attention to the divide between services developed under a medical model (i.e., PRTFs) and those with a human services emphasis and the need for those two types of intervention models to work together. They also noted that there are fewer residential providers today, compared to 10 years ago, and high demand for residential services, as evidenced by youth having long stays in emergency departments as they wait for a residential placement to become available. They had concerns about the addition of PRTFs to the continuum of services potentially leading to more transfers in care and greater disruption for youth.

The providers emphasized that, for many kids, residential treatment services work well. Some suggestions for improvements made at that meeting include: more thorough assessments that include the youth's strengths prior to admission; funding to support follow-up services; strategies to address historical and generational trauma; and more options for crisis stabilization and step-down services.

The group reconvened in September to discuss topics that had emerged in the initial information-finding stages of the study. These topics and a brief summary of themes is briefly described below:

Transitions between residential settings and community-based services. Currently, some providers are gradually lengthening time at home or providing aftercare services to support youth transitioning from residential settings to home. One suggestion was adopting more bridging services where community-based mental health providers can begin to work with youth during the residential stay. Challenges to that are related to funding and, given the large numbers of counties and providers each facility would need to work with, and being familiar with the options available in each community. The providers thought there may be opportunities to optimize hours under CTSS. Some providers discussed the unique aspects of working with foster parents during transitions, noting that offering additional skills training may be a way to support parents.

Youth who respond with aggressive behavior. The providers noted that, because they are working with youth who have complex issues and have experienced trauma, it is important to understand why the behavior is taking place. Suggestions made to enhance services include: adding trauma screening; having more community-based and in-home services in place; and considering ways to increase mental health services in juvenile settings.

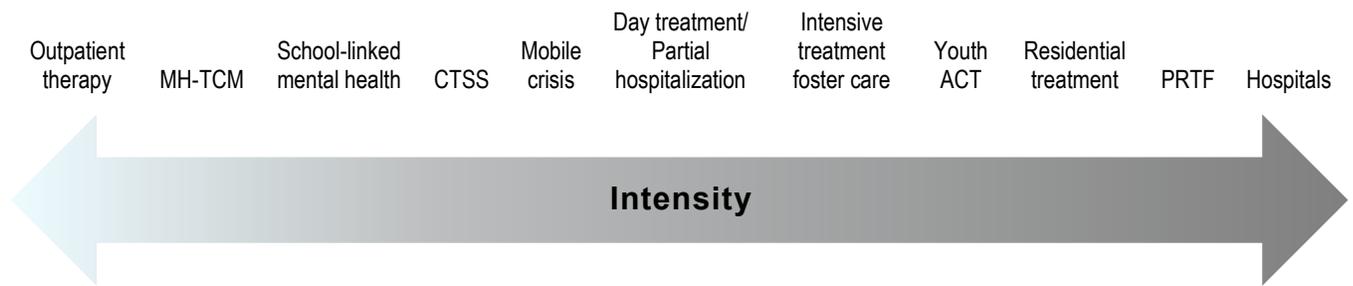
Family engagement. The providers recognized the importance of family involvement and are currently doing a number of things to engage families, including: providing resources and information to families; discussing expectations for collaboration at intake; using technology for family time, particularly when distance is an issue; working to meet the family where they are; and helping with transportation. They suggested that more funding for transportation costs, an expanded definition of family, and changing practices to be more welcoming are ways to potentially involve families.

Minnesota's current continuum of care: Capacity, gaps, and opportunities for enhancements

A vision for Minnesota's continuum of mental health services was developed by the Minnesota Mental Health Action Group (MMHAG) in 2004. This has been the state's roadmap to improve access, quality, and accountability in children's mental health services. Recommendations from this group informed the state's comprehensive mental health benefit set to ensure funding for key services and evidence-based practices and to reduce disparities in access due to variation in health care coverage.

Since 2004, Minnesota has worked to develop a Medicaid (Medical Assistance and MinnesotaCare) benefit set that provides a structure to build and expand the community-based and in-home services necessary to ensure that youth and families are able to get the right level of care at the right time (Figure 3). However, as described in this section, these opportunities to optimize Medicaid reimbursement and expand the continuum have not been fully realized. While a number of these services are fairly new in the state (e.g., PRTFs established in 2018, Youth ACT and school-linked mental health grants in 2014, Intensive Treatment Foster Care in 2012), early implementation efforts for a number of services can help clarify what is needed to establish the infrastructure needed for providers to adopt and begin to implement these services.

4. Minnesota's continuum of children's mental health services



Notes. Adopted from the Department of Human Services, 2018.

Child psychiatry and respite services are also part of the state's array of services and may be appropriate for youth at multiple points across the continuum. Because this study focuses largely on intensive mental health services, the early childhood mental health services available in the state are not included in this figure.

MH-TCM: Mental Health Targeted Case Management

CTSS: Children's Therapeutic Support Services

Youth ACT: Assertive Community Treatment

PRTF: Psychiatric Residential Treatment Facility

Current service capacity

The residential services currently available in the state include inpatient hospitalization, PRTFs, and children's residential facilities. According to information provided by the Minnesota Hospital Association, there are 201 youth mental health hospital beds available in Minnesota with most of these (79%) available in the Twin Cities metro. In contrast, a majority of the beds available in children's residential facilities are located in greater Minnesota (439 of 608, or 72%). This is, of course, an oversimplification of the availability of capacity at the children's residential level, as some facilities do focus on a specific gender, age group, or need (e.g., treatment for eating disorders). The first PRTF was opened by Northwood in June 2018 and currently has the capacity to serve 40 youth, with plans to increase to 48. Two additional facilities are scheduled to open in 2019, which will result in a capacity of 150 youth to be served at any given time. The Child and Adolescent Behavioral Health Services (CABHS) facility, a state-operated children's hospital located in Willmar, currently services very few youth (approximately 6).

Inpatient hospitalization

Over the past four years, the number of pediatric mental health related emergency department visits has steadily increased. According to data provided by the Minnesota Hospital Association (MHA), there were over 20,000 mental health related emergency department or inpatient visits at Minnesota hospitals in 2017. The number of mental health related emergency department visits has steadily increased from 9,108 in 2014 to 11,723 in 2017. It is not known what may be contributing to this trend. The total number of inpatient hospitalizations has varied somewhat year to year, but has not followed a consistent trend.

5. Pediatric (0-17) mental health inpatient hospitalization and emergency department use

	2014	2015	2016	2017
Inpatient hospitalization	6,045	6,238	5,857	5,941
Emergency department to inpatient	2,900	2,947	2,661	2,690
Emergency department only	9,108	10,037	10,396	11,723
Total	18,053	19,222	18,914	20,354

Source. Minnesota Hospital Association, unpublished

Note. This is encounter data; not the number of unique youth served

Children's residential facilities and PRTFs

The number of agencies providing residential treatment services and total number of youth who can be served at any given time has decreased over the past decade. In just the past year, St. Joseph's Home for Children and St. Cloud Children's Home ended their residential treatment programs. They are two of multiple agencies including the Amherst H. Wilder Foundation and Catholic Charities that have chosen to discontinue residential treatment services in the past decade.

According to the 12 current residential treatment providers who provided information, the facilities served a total of over 1,500 youth in 2017.¹² In addition, over 100 youth received services from 3 of the 8 out of state facilities certified by Minnesota as meeting CRF licensing requirements.¹³ Among the 12 facilities located in Minnesota who submitted

¹² The following facilities reported information: Avanti, Bar None, Children's Residential Treatment Center, Gerard Academy, The Hills Youth and Family Services, Leo A Hoffman Center, Mille Lacs Academy, Minnesota Girls Academy, Nexus Glen Lake, North Homes Children and Family Services, Northwood Children's Services, and Omegon. Information could not be gathered for Pathfinders or Paragon. The counts do not include youth served at two facilities that provided services in 2017, but that have since closed: St. Cloud Children's Home and St. Joe's Residential Treatment. It also excludes youth receiving treatment for eating disorders at the Anna Westin House (The Emily Program) and Melrose Place.

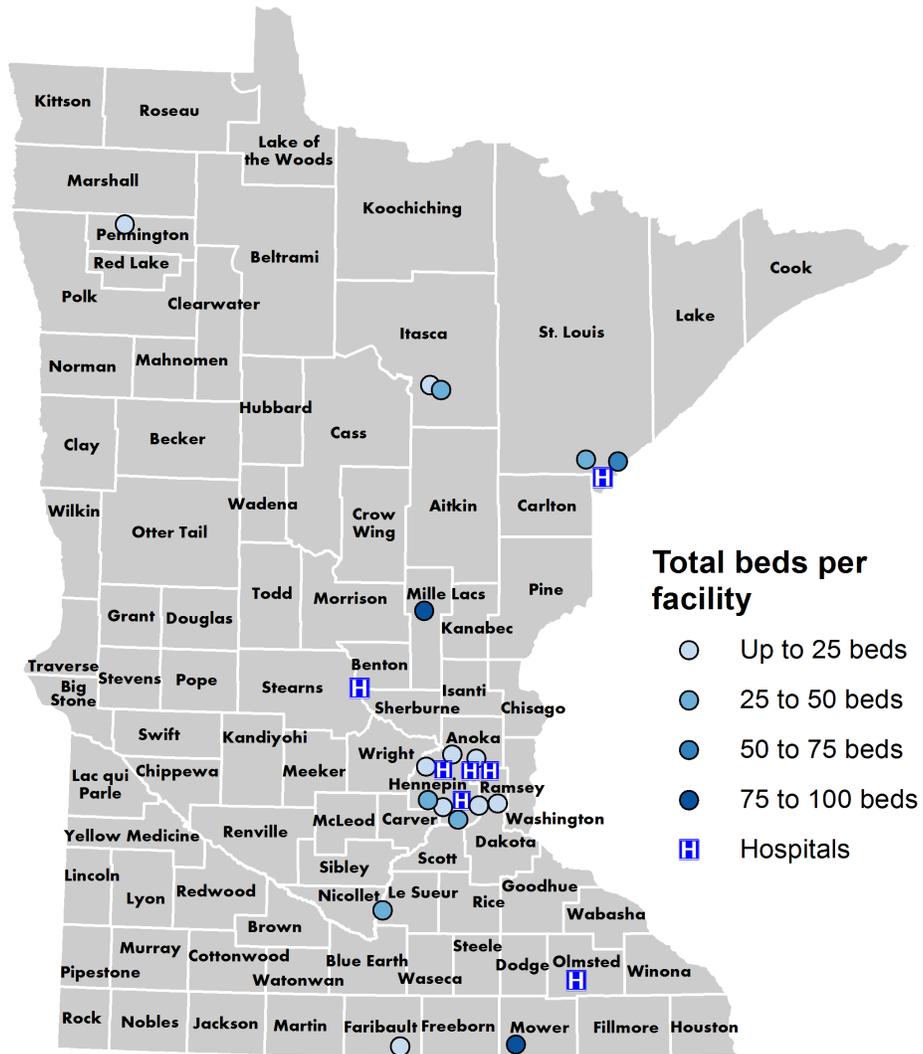
¹³ These out of state facilities are Aurora Plains in South Dakota and Eau Claire Academy and Milwaukee Academy in Wisconsin.

information, the number of youth currently on the facility's waiting list ranged from 0 to 55 youth. The average wait time for services ranged from two weeks to six months.

A goal of this study is to determine the role of and need for residential services in the continuum of care. While the capacity need for residential services is tightly linked to the availability of community-based and in-home services, the following issues should also be considered when determining the need for residential services in the state:

- Moving to PRTFs as a primary service level for children's residential services does force the state and counties to more clearly differentiate the need for active treatment of mental health symptoms and behaviors from a primary need for residential services where mental health services may be provided. Smaller facilities, group home settings, or foster care options may be appropriate settings where less intensive mental health services, such as day treatment or enhanced CTSS or ITFC services are provided.
- There are two children's residential facilities (The Emily Program/Anna Westin, and Melrose Place), one with a long-standing IMD designation, that specialize in treating eating disorders. Any changes to licensing and funding should consider, and work to mitigate potential unintended impacts to these programs while also identifying ways to ensure MA-enrolled youth can access this type of care.

6. Location and capacity of children's mental health residential settings



Intensive in-home and community-based services

Minnesota has been working to expand its continuum of community-based services by increasing the capacity of providers and expanding the Medicaid benefit set to reimburse providers for services. In a number of cases, the development and expansion of new services has been supported through state grants, with treatment costs reimbursed through public health insurance plans. A brief description of these services, their current capacity, and opportunities for expansion follow.

Youth Assertive Community Treatment (ACT). Youth ACT is an intensive, team-based rehabilitative mental health service for youth and young adults (age 16-20). The Youth ACT team must be comprised of a mental health professional, licensed alcohol and drug counselor, certified peer specialist, and advanced practice registered nurse or psychiatrist, but additional service providers can be added to the team, if needed. Together, the team provides a range of coordinated services, including: individual and family psychotherapy, skills training, crisis assistance, medication management, care coordination, transition services, consultation to schools, and dual disorders treatment (for youth with mental illnesses and substance use needs). There are currently four providers offering Youth ACT to eligible youth in the following 12 counties: Crow Wing, Dakota, Fillmore, Hennepin, Morrison, Mille Lacks, Olmsted, Ramsey, Todd, Wabasha, Wadena, and Winona.

Multiple stakeholder groups have suggested expansion of Youth ACT across the state and to youth as young as 6 could be one way to provide more intensive in-home and community-based services. Changes may be needed to the current benefit to expand the eligible age range.

Intensive Treatment Foster Care (ITFC). Through this benefit, intensive therapy and care coordination benefit that can be provided to youth with intensive mental health needs in foster care settings by a licensed provider agency. The therapeutic service includes individual and family therapy three times a week with the youth, foster family, and, when appropriate, with the biological family to support reunification. Care coordination is done with schools and some therapy can be provided in that setting, if permission is given by the school. Currently, when a child leaves a foster placement for reunification or adoption, the youth and family are no longer eligible for ITFC. If there is a need for further services, some agencies can provide CTSS, a lower-intensive service, sometimes with the same clinician. ITFC, a new service in the state, is currently provided by four providers in the state: Family Innovations, Hiawatha Valley CMHC, Lee Carlson Center for Mental Health and Wellbeing, and Lutheran Social Services of Minnesota.

ITFC is an example of an intensive in-home therapy service that could be used more broadly, if expanded to be available to all families. Changing the benefit so that it is available when needed by the child rather than limited to a foster care setting would improve continuity of care and increase support during critical transitions for youth joining a biological or adoptive family. The state could also consider redefining the benefit to be implemented in group home settings, making it a more flexible option as a local post-residential step-down service.

Minnesota Intensive Therapeutic Homes (MITH) is a state-operated service that provides mental health services to youth in foster homes using a team approach where a foster parent is hired as a full-time employee. This service is not part of the state's Medicaid benefit set. The service is supported by state funding and, for youth who have Home and Community Based Services (HCBS) waivers, a portion of those funds.

Children's Therapeutic Services and Supports (CTSS). The CTSS benefit allows a flexible package of mental health services to be provided in home and community-based settings. All therapeutic and rehabilitative services must align with the child's treatment plan, but can be delivered using a variety of treatment modalities. CTSS core services include individual or family psychotherapy, skills training, crisis planning, and treatment plan review and development. Psychotherapy interventions are provided by mental health professionals, while skills services are provided largely by a mental health practitioner, a bachelor's level paraprofessional working under the supervision of a mental health professional. CTSS is offered by at least one mental health provider in all Minnesota counties, but overall capacity is more difficult to measure (Figure 4).

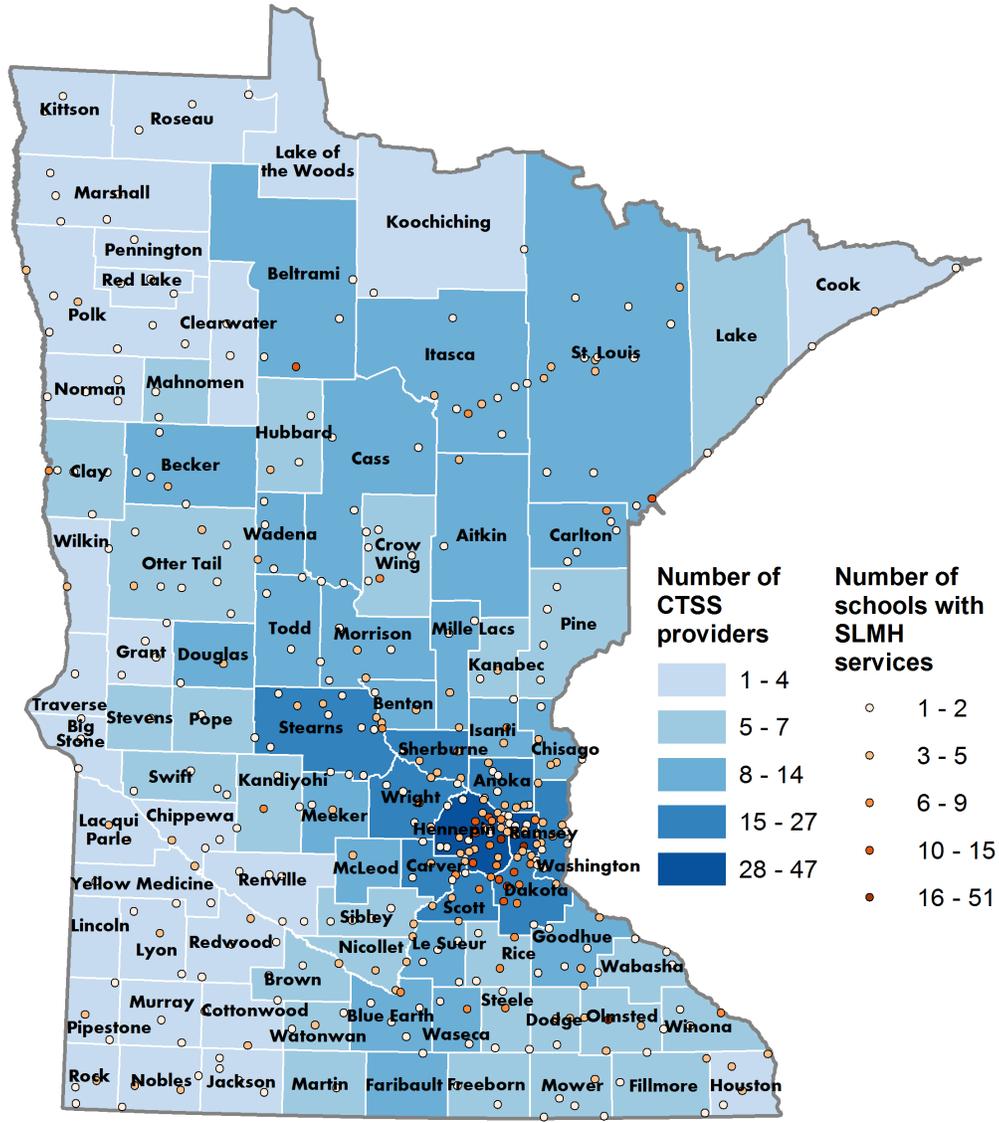
CTSS services have expanded dramatically across the state over the past decade. While the service, as currently provided, meets the needs of many youth and families who need that level of care, stakeholders in some counties have noted that by providing CTSS in schools, in-home services are limited. To expand this service to meet youth with more intensive mental health needs, mental health professionals would need to be more heavily involved in the delivery care. However, a recent study found current reimbursement rates in Minnesota for this service are lower than the costs associated with service delivery (Mercer, 2018). Increased rates are needed overall, and new rates could be set for additional therapeutic services to be provided, or to incentivize the use of evidence-based practices, which often require professionals to deliver treatment.

School-linked mental health services. School-linked mental health (SLMH) services, which place community mental health professionals and practitioners into school settings, have expanded dramatically across the state since first developed in 2007. Onsite mental health providers help identify students with mental health needs, provide services, and offer consultation to teachers. These services are intended to increase access to mental health services, particularly for uninsured and underinsured students, in a setting that is familiar and that reduces other accessibility barriers, such as transportation.

There is variation in the approach used in different schools and the amount of time mental health providers are present in schools with SLMH services. In some school districts, only a small percentage of the mental health professional's time is spent at each school, making it difficult to both provide direct services and have adequate time with school staff to describe the service and provide consultation. In 2017, school-linked mental health service grantees provided 14,971 students with school-linked mental health services. As of the current school year (2018-19), grantees are in 325 school districts (61% of all school districts) and 1,210 school buildings (58% of all schools) (Figure 4). These services are available to all students in participating school districts, regardless of insurance or county social service involvement. These services have been a way to reduce racial and socioeconomic disparities in access and to create an earlier entry point to mental health services.

The infrastructure to school-linked mental health services are supported by state dollars so that clinicians can do outreach and provide consultation to school staff. The grant-making mechanisms have also supported the time and resources needed for providers to track and report data used to measure access and utilization, referrals to other mental health services, and changes in outcomes, information critical to understanding the degree to which services are reducing racial and socioeconomic disparities.

7. Location of Children’s Therapeutic Services and Supports (CTSS) and school-linked mental health services



Mobile crisis response services. Mobile crisis response services are intended to ensure youth and families can rapidly access support in crisis situations and connect to appropriate intervention and stabilization services. The crisis team conducts a crisis assessment and determines which intervention services are needed to address immediate stressors and help the child return to their usual level of functioning. A crisis plan is developed to clearly describe what is needed during the crisis intervention (typically a 48-hour period). Services may last longer if the crisis team determines that stabilization services are necessary.

Crisis services in the state are organized by county, with each county having its own crisis number. Many Minnesota counties have received crisis response grants to expand their capacity to support individuals experiencing a mental health crisis and their families. DHS does provide trainings for all crisis response providers, including trainings specific to working with adolescents in crisis, early childhood, and multigenerational responses in crisis services. However, there are only three children’s crisis teams in the state, located in Hennepin County, Ramsey County, and Bemidji (available to serve counties and tribal nations in the region).

As will be noted as examples of best practices in other states, mobile crisis response services are considered a key entry point into mental health services and a necessary resource for families, particularly following discharge from a residential treatment setting. Further, there is increasing evidence to demonstrate that most crisis services shorten the length of residential treatment and divert the need for residential treatment (SAMHSA, 2016; Ontario Center of Excellence for Child and Youth Mental Health, 2012; DHS 2009, MMHAG 2007). Ensuring these services are timely, provided by staff skilled in working with youth and families, and culturally responsive are critical to their success. Multiple states have also noted the importance of ongoing information and awareness campaigns to ensure caregivers, teachers and school staff, and professionals who work with youth and families are aware of the service.

Respite care services. Caring for a child with a serious mental illness can be isolating and emotionally draining. Respite care offers families a short period of time for a break, which can be an opportunity to focus on skill building for children and families, a break for the caregiver and fun for the child, and an opportunity to address the child’s symptoms and help the child to achieve their goals.

In Minnesota, respite care services are grant funded and available to families who care for children with a severe emotional disturbance with or without a case manager. The purpose is to provide traditional and non-traditional planned and emergency services with the goal of avoiding out-of-home placement. Respite care can be provided in the family’s home, a foster home, or a licensed facility in the community. Seventy-seven of Minnesota’s 87 counties have respite care grants and 2,899 youth were served by grants in 2017. The availability of respite care providers varies across counties. Respite care is often scheduled months in advance to provide the family with a planned break; greater capacity is needed to have the service be available to meet unexpected or urgent needs.

Respite gave us the ability to focus on our other child. The consistent structured respite environment for him. The longer period of time allowed staff to really get to know him.
- Caregiver

Care coordination/Wraparound. Care coordination is critical for ensuring continuity of care for youth with complex mental health needs, particularly when multiple systems and providers are involved in providing services and support. For youth with mental illnesses, care coordination services may be missing or offered by multiple entities providing services. In short, there are not consistent care coordination practices used to address the needs of youth who require intensive mental health services and their families.

Targeted case management services are provided by counties, county-contracted agencies, and tribal agencies. However, these case management services are not necessarily grounded in the principles of family-driven care and do not consistently provide the intensive care coordination support needed to ensure continuity of care. The Behavioral Health Home (BHH) model does incorporate a robust care coordination service; however, according to data provided by the Department of Human Services, the 25 certified BHHs across the state service a relatively small number of youth (227, or 13% of all BHH enrollees). Case management or care coordination services are also available to some youth by residential providers, the state's Certified Community Behavioral Health Centers (CCBHC), or health care providers.

Sixteen counties who received grants through the state's System of Care statewide expansion grant are planning to implement Wraparound to better support the mental health needs of youth and families. The evaluation of these services will be an important aspect in determining how to best provide an effective care coordination service.

Gaps in the continuum of care

Although an increasingly broad range of services are available in the state, there are geographic, racial, and socioeconomic disparities in access. The 2013 Gaps Study, commissioned by DHS, gathered input from county representatives, parents, and providers about the capacity of the state to meet the needs of children who have mental health conditions. The study showed that access to many of these children's mental health services, particularly some of the most intensive services in the continuum, is limited (Figures 5, 6). The information gathered showed the largest gaps in the southwest (region 8) and headwaters (region 2) areas of the state. The only services described in some areas of the state as meeting demand are crisis response services and school-linked mental health.

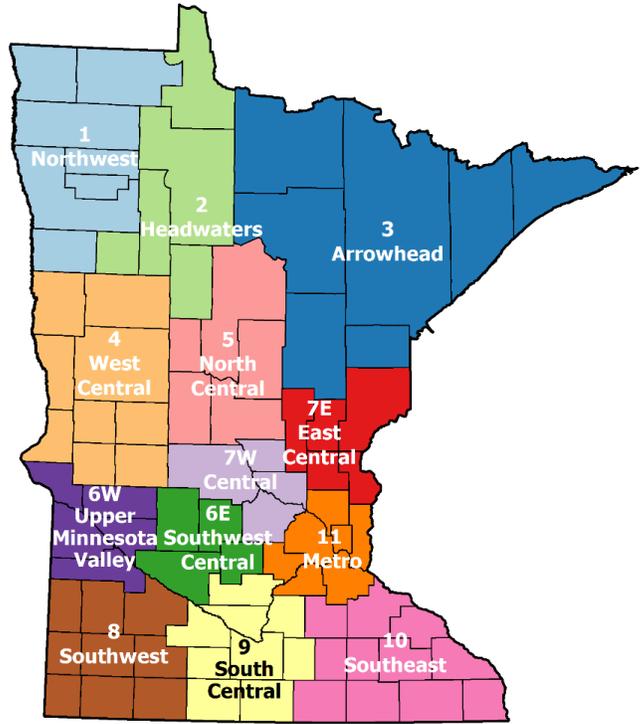
8. Assessment of children’s mental health service availability, 2013-14

Children’s mental health service	Minnesota planning region													
	Statewide	1	2	3	4	5	6E	6W	7E	7W	8	9	10	11
Inpatient hospitalization	Yellow	Yellow	Blue	Yellow	Yellow	Blue	Yellow	Blue	Blue	Yellow	Blue	Yellow	Yellow	Yellow
Residential treatment center	Yellow	Yellow	Blue	Yellow	Yellow	Blue	Blue	Blue	Yellow	Yellow	Blue	Blue	Yellow	Yellow
Therapeutic foster care	Yellow	Yellow	Blue	Yellow	Blue	Yellow	Yellow	Yellow						
Youth ACT	Yellow	Blue	Blue	Blue	Blue	Yellow	Blue	Blue	Blue	Blue	Blue	Blue	Yellow	Yellow
Day treatment	Yellow	Blue	Yellow											
Crisis services	Yellow	Yellow	Green	Yellow	Yellow	Green	Yellow	Green	Green	Yellow	Yellow	Yellow	Yellow	Yellow
CTSS	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Outpatient treatment	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
School-linked	Yellow	Yellow	Yellow	Yellow	Yellow	Green	Yellow	Yellow	Blue	Yellow	Yellow	Yellow	Yellow	Yellow

Yellow = limited access
 Blue = not available
 Green = meets demand

Source. Department of Human Services, 2013 Gaps Study; as cited by the Minnesota Hospital Association (2015).
 Note. The first PRTF was not yet open at the time this assessment was completed.

9. Minnesota Department of Human Services: planning regions



Feedback from county social services administrators further illustrated the variation in the availability and accessibility of mental health services in different parts of the state. Most counties described case management, CTSS services, outpatient therapy, school-linked mental health services, and respite services as being available to youth and families following a residential treatment intervention. However, many described a need for greater capacity to serve more youth and reduce wait times for services. In addition, the counties identified a number of services they would like to have in place to have a more robust continuum of services available, including: in-home intensive family therapy, psychiatric services, crisis response and stabilization services, and other more intensive services, including partial hospitalization, Youth ACT, and therapeutic foster care. A number of counties would like to have more local residential treatment options available for youth, although some rural counties recognized that may not be feasible.

In addition to the geographic variability of the types of services available to youth and families across the state, insurance status has a significant impact on the accessibility of services and supports. Most of the services available in the state are part of the state’s public insurance (i.e., Medical Assistance or Minnesota Care) benefit set. However, commercial health insurance plans cover few community-based services and supports (Figure 7). The literature clearly demonstrates that strong community-based services include long-term effective residential treatment interventions, yet youth insured with commercial plans are particularly vulnerable to fragmented and uncoordinated care.

10. Mental health services, Medicaid and commercial private insurance plan comparison

	Basic clinical services	Community-based services and supports	Intensive community-based services	Crisis response/acute services	Hospitalization, residential services
Reimbursed services for youth under public insurance plans (MA or Minnesota Care)	Physician/primary care Psychiatric services Mental health professional Community mental health center ^a School-linked mental health ^a Telemedicine Dialectic Behavior Therapy (DBT) Clinical care consultation with mental health professionals	Case management Targeted case management Children's therapeutic services and supports (CTSS) Behavioral health Homes Community Alternatives for People with Disabilities (CAC) waiver Family psychoeducation Behavioral Health Home (BHH)	Partial hospitalization Intensive therapeutic foster care Day Treatment Youth Assertive Community Treatment (ACT) DBT – intensive outpatient In-reach services	Crisis teams Emergency department services Crisis stabilization ^a	Inpatient hospitalization Children's residential treatment Psychiatric residential treatment facilities (PRTF) Child and Adolescent Behavioral Health Services (CABHS) ^a
Reimbursed services for youth insured by private commercial plans	Physician/primary care Psychiatric services Mental health professional Community mental health center ^a School-linked mental health ^a Telemedicine Dialectic Behavior Therapy (DBT)		Partial hospitalization Intensive therapeutic foster care Day treatment	Crisis teams Emergency department services	Inpatient hospitalization Children's residential treatment <i>Psychiatric residential treatment facilities (PRTF)^b</i> Child and Adolescent Behavioral Health Services (CABHS) ^a
Funded through county, state, or federal grants only		Respite care Corporate foster care Family foster care Special Ed/504 plans ^c		Crisis numbers	

Source. Adapted from the Governor's Task Force on Mental Health: Final Report (2015). Retrieved from: <https://www.leg.state.mn.us/lrl/lrl>

Note. Services in orange font are only available to youth enrolled in Medical Assistance (MA) or Minnesota Care

^a Also supported with county, state, or federal grants or appropriations

^b Private insurance benefit still being negotiated

^c Also education funding

As described, Minnesota does have a strong Medicaid benefit set in place that can be the basis for further expansion of critical community-based and in-home services, particularly if paired with changes to service regulations to increase access and minimize barriers to service development and implementation. When the Medicaid benefit set is aligned with the levels of service intensity used in the Child and Adolescent Service Intensive Instrument (CASII), the framework appears robust. However, the availability of intensive in-home and community-based services (CASII Level IV services) are limited by geographic location and setting (Figure 8). In addition, while there are care coordination components built into service benefits like IFTC and Youth ACT, there are transitions in responsibility for care coordination when moving across different types of services. In some cases, targeted case management does play this role, but was not designed to provide the more robust intensive care coordination used in Wraparound.

Based on discussions with stakeholders and a review of available services, there are a number of ways Minnesota could continue to build on its existing benefit set to establish a more robust continuum of care. These opportunities include: continued support for school-linked mental health services to continue increasing access; broadening the intensive therapeutic foster care (ITFC) benefit to non-foster care settings; expanding the eligibility of Youth ACT, making adjustments to the service, as necessary, to be age-appropriate; and considering rate structures that could be used to develop secure or specialized units within PRTFs to expand the reach of that level of service.

11. Potential enhancements to Minnesota’s continuum of care

CASII level	Current continuum	Potential enhancements for a more robust continuum
II – Outpatient services	School-linked mental health Outpatient therapy	Optimal staffing level in schools for school-linked services
III – Intensive outpatient services	Day Treatment Targeted case management Children’s therapeutic services and supports (CTSS)	
IV – Intensive integrated services without 24-hour psychiatric monitoring	Partial hospitalization Intensive therapeutic foster care (ITFC) Youth ACT (ages 16-21)	ITFC expansion to adoptive family and in-home service Expansion of Youth ACT to younger ages (age 6+)
V – Non-secure, 24-hour services with psychiatric monitoring	Children’s residential treatment facilities Psychiatric residential treatment facilities (PRTF)	Changes in rate structure for specialized services and varied levels of care for children’s RTFs and PRTFs
VI – Secure, 24-hour services with psychiatric management	Inpatient hospitalization	Secure PRTF units

Intensive care coordination or Wraparound is not readily available in the state. However, this could be addressed by developing an intensive care coordination benefit, expanding care coordination services within other existing services to ensure coordination extends through transitions in care, or clarifying how care coordination services already in place can continue across transitions in services. Because Wraparound is not a current service option, a brief summary from the literature about the impact and effectiveness of the service follows.

Wraparound/intensive care coordination effectiveness

Wraparound is an intensive, individualized case planning and management process for youth with mental illnesses and their families. It provides a structured, individualized team planning process that results in care plans more relevant to the child and family. Key elements include: strength-based, individualized to the family, and team-based care planning (Miles & Brown, 2011). As of 2014, eight states and counties successfully implemented Wraparound including New Jersey, Massachusetts, Indiana, and Milwaukee County, Wisconsin, while four additional states were involved in implementing the approach statewide, including Oklahoma, Georgia, Maryland, and Pennsylvania (Simons et al., 2014). Evidence supporting effectiveness associated with wraparound consists of at least 22 controlled studies all showing mostly positive or mixed results.

As with other evidence-based treatments, fidelity to the model is important in order to ensure changes in practice have been made and to optimize the approach's effectiveness. A number of states have successfully implemented and demonstrated improved outcomes for families, children, and youth using Wraparound services and processes. However, there are situations where Wraparound is not as useful (e.g., youth in foster homes). Wraparound is considered a viable context for the delivery of clinical content for evidence based treatments and other mental health services and supports.

Wraparound effectiveness is defined differently depending on the type of study (experimental vs. quasi-experimental) and methodology, however, the most common definitions include improved functioning, decreased problematic behaviors, and cost effectiveness. Overall, youth who receive Wraparound services fare better on multiple functional outcomes, including fewer suspensions from school, increased use of community services, less runaway behavior, living in a lower level of restrictiveness, and achieving permanency more often (Coldiron, Bruns, & Quick, 2017; Painter, 2012). One study (Kinsey, 2012) showed that wraparound mitigated the risk of placement failure as compared to previous placements.

Several studies demonstrate that Wraparound services decrease the use of residential treatment and improves outcomes for youth when coupled with evidence-based interventions, such as multi-systemic therapy (MST) (Coldiron, Bruns, & Quick, 2017; Bruns, Pullmann, Sather, Bringson, Ramsey, 2015). There is also some information noting the importance of school system involvement on the wraparound team to achieve positive outcomes (Painter, 2012).

Clearly the consensus in the literature is that high quality implementation including measures of fidelity to the model are needed for successful implementation (Coldiron, Bruns, & Quick, 2017; Painter, 2012; Bruns, et al., 2015; Bernstein et al., 2015). Bruns et al., (2015) found poor implementation in sites that did not pay attention to organizational factors such as organizational culture and climate and worker morale.

Flex funds

The final type of service recommended by SAMHSA as part of a continuum of services is flex funds. Youth with mental illnesses and their families benefit from being able to access an array of formal services and informal supports. Flex funds, often used in states with System of Care initiatives, are one way to meet the individualized needs of families. While not an intervention that alone impacts outcomes, they can be used for a wide range of supports, including transportation, respite, connections to cultural practices, and in-home supports. Because flex funds are typically grant dollars or supported by state or county general fund revenue rather than a reimbursable service, they can be difficult to maintain.

Potential service models and funding mechanisms

This report highlights multiple ways to enhance and expand services to ensure a more robust continuum of services in Minnesota, particularly intensive in-home and community-based treatment services that are currently insufficient. This section of the report draws on lessons learned in Minnesota and other states to identify potential service models that could be part of Minnesota’s continuum of care and funding mechanisms that not only support individual services, but continuity across transitions in care.

PRTF design and implementation

Although new to Minnesota, Psychiatric Residential Treatment Facility (PRTF) is a common residential treatment option in most states. Similar to services provided in children’s residential facilities, PRTFs provide a safe setting where youth can receive intensive mental health treatment, if community-based treatment options cannot meet the child’s needs. Initially, Minnesota had envisioned PRTFs broadening the continuum of residential treatment options available to youth, providing a higher level of care than available at existing residential treatment centers while still being less restrictive than inpatient hospitalization.

DHS has given guidance to mental health providers and county case managers that describe the differences in medical necessity and the populations the two types of residential settings are intended to serve (Figure 9). This guidance reinforces PRTFs as providing a more intensive level of service, implying that some youth who currently receive residential treatment at a residential treatment facility (licensed as a CRF) may not be considered eligible for this higher level of care.

12. DHS guidance on medical necessity definitions and populations served at residential facilities (2018)

	Residential treatment facilities (licensed as CRFs)	PRTF
Intended population	Children (under age 18) with Severe Emotional Disturbance	Children and youth (under age 21) with diagnosed mental illnesses and complex medical conditions, including severe aggression and functional impairment
Eligibility determination	County screening committee makes determination of necessity or level of care; process varies widely county by county	Eligibility is determined by a state medical review agent using a standardized tool
Clinical supervision	Services delivered under the clinical supervision of a mental health professional	Services delivered under the direction of a physician 7 days/week
Level of service	Rehabilitative service, with mental health treatment and skills work provided	Inpatient level of care in residential facility

Source. Minnesota Department of Human Services (2018). Medical necessity distinction: Children’s Residential Facilities (CRF) and Psychiatric Residential Treatment Facilities (PRTF). Retrieved from: https://mn.gov/dhs/assets/crf-prtf-med-necessity-memo_tcm1053-356859.pdf

12. DHS guidance on medical necessity definitions and populations served at residential facilities (2018) (continued)

	Residential treatment facilities (licensed as CRFs)	PRTF
Substance abuse treatment	Substance use disorder cannot be the primary diagnosis	Substance use disorder may be the primary diagnosis
Evidence of need	No prior evidence of poor treatment outcomes is required	Must show evidence that past treatment interventions have been unsuccessful
Treatment	Rehabilitation services	Active treatment (individual, family, or group therapy) must be provided 7 days/week
Family involvement	Family involvement is encouraged	Families are required to participate in treatment at least once a week

Source. Minnesota Department of Human Services (2018). Medical necessity distinction: Children's Residential Facilities (CRF) and Psychiatric Residential Treatment Facilities (PRTF). Retrieved from: https://mn.gov/dhs/assets/crf-prtf-med-necessity-memo_tcm1053-356859.pdf

Local stakeholders had varied expectations of who would best be served by PRTFs and how the service would help reduce demand on other child-serving systems. For example, some anticipated PRTFs would help meet the mental health needs of youth currently involved in the juvenile corrections system or who have mental health symptoms and behaviors that are difficult for intermediate school districts to effectively manage. Others hoped the level of service would be an alternative for youth who receive emergency department services but who do not require inpatient hospitalization.

The commonality across multiple stakeholder groups is that they saw PRTFs as an opportunity to expand the continuum of services with a more intensive service to better meet the needs of youth whose mental health needs are being managed in other child-serving systems. Without a funding mechanism for mental health treatment provided by residential treatment centers now designated as IMDs, there are many concerns that residential treatment options will become more limited and focused on higher intensive services as these new facilities open.

Early implementation

In June 2018, Northwood Children's Services opened Minnesota's first PRTF in Duluth. The facility currently serves 40 youth, with plans to expand to 48 in the future. Two other locations plan to open, although over six months later than initially anticipated by DHS. Clinicare Corporation plans to open a PRTF with the capacity to serve 42 youth in early 2019, while The Hills Youth and Family Services plans to open a new facility in East Bethel to serve up to 60 youth later in the year. While it is too early to report outcome data for the first youth who received services at the Northwood PRTF, information from this facility's early implementation may be useful to future service expansion.

DHS did not have information available to describe the characteristics of youth served at Northwood or lessons learned from early implementation. As a result, this information comes largely from the provider agencies who are currently, or committed to, implementing a PRTF.

Northwood admission data

Northwood provided some initial information about youth they have served at the PRTF since June 2018. The information they reported was from mental health professionals making the referrals. The high-risk behaviors leading to referrals tended to most often be: risk of running away (23%), self-injurious behaviors (21%), or aggressive behavior (18%). Staff reported this likely underrepresents the prevalence of these issues at intake; additional risk behaviors and mental health concerns typically become known while completing a diagnostic assessment or over the course of treatment. None of the youth referred have been found ineligible for service or refused for admission by the facility. However, the director did note that their staff have received more training and have greater experience working with younger youth; older adolescents with chronic mental illnesses (e.g., schizophrenia) may not be the best fit for their program.

According to Northwood staff, there are some difference in characteristics of youth served at the PRTF in comparison to its residential treatment center. Although the residential treatment center also served a population with high needs, staff have noticed greater acuity among youth referred to the PRTF. The population at the PRTF is also somewhat older. The average age of youth is 13 years, which is somewhat older than youth served by their residential treatment center (11.5 years).

As of October 2018, there were 95 youth on the wait list for services at the PRTF. Northwood staff estimated the wait time is approximately 3-5 months for boys and 6 months for girls.

Early lessons learned and challenges

As the first provider to open a facility, Northwood's experience offers lessons to state agencies and other providers who will be providing this level of care. They have seen a number of benefits from implementing certain aspects of the PRTF level of care. Overall, they have found the 3:1 staffing ratio to be very helpful in meeting the needs of youth. In particular, it provides the opportunity for them to provide individualized attention for youth who are dysregulated, while continuing to support the other youth. They have found access to nursing to be useful, both in providing services to youth with more complex medical needs and in having new perspectives on the treatment team. They have also found that having multi-disciplinary team reviews occurring more frequently (every 30 days, compared with every 90 days in the residential treatment center), the team stays focused on discharge and transitions to community-based services. Northwood felt the following factors helped them be well-positioned to implement the PRTF:

- **Continuity of care.** As a provider of multiple levels of residential care, day treatment programs in the community, and some in-home therapy and skills services, they are well-positioned to maintain continuity of care for youth who live close to the facility. Staff are trained in TF-CBT, which is used with all youth in the residential setting. They are also exploring developing more formal partnerships with other community-based providers as a way to help youth who live further away successfully transition to community-based care.
- **Family engagement practices.** Northwood has two on-site apartments available at no cost to families traveling from a distance to visit their child. They also provide transportation for youth to go to their homes on a monthly basis. Staff feel that because family engagement has been a focus of the agency they are able to further enhance good practices that are already in place.

As the first agency to implement a PRTF, Northwood identified a number of system-level barriers that made it difficult to open their facility when initially planned, including some that continue to pose challenges to implementation. They have been working with DHS to address these barriers.

- **Licensing and certification.** Currently, PRTFs in the state have to meet multiple licensing and accreditation requirements. They are licensed by the Minnesota Department of Health (MDH) as a supervised living facility, under rules developed in 1972 for a different treatment purpose. MDH is also the agency that ensures compliance with the CMS standards. In addition, PRTFs are required to meet Rule 2960 standards from DHS and also be accredited by a separate agency. The rules and standards in place across these agencies are not aligned, and at times, recommend contradictory timelines for training or require different standards.

- **Billing infrastructure.** According to Northwood staff, the data system currently in place to process claims data and billing does not allow for monthly billing. The agency has needed to dedicate additional administrative time to develop a workaround with DHS to ensure timely payment and a permanent solution is identified.
- **Reimbursement from private commercial and Prepaid Medical Assistance Program (PMAP) health insurance plans.** There have also been significant challenges in getting health care plans to include reimbursement for PMAP services in its benefit set, and – as of the time this report was finalized – one health care plan has determined it will not pay for this level of care. This may have significant implications for access to residential treatment in some areas of the state.

These administrative issues led to delays in Northwood being certified and licensed to begin providing care. This had significant financial implications for the agency, as it had hired staff and reduced its overall patient census to transition some youth in the residential treatment center to the PRTF. While this agency was large enough to absorb the unexpected costs, smaller agencies may be unable to do so. Further, the unexpected administrative costs related to billing and adherence to certification requirements may not be fully reflected in the cost of care and per diem rate.

Northwood and the other two provider agencies who will be the first to open PRTFs in the state identified a number of early concerns that will need to be considered as the service is expanded. Again, these issues have been brought to the attention of DHS and will be part of ongoing discussion and planning.

- Certain staffing requirements (e.g., on-site 24/7 nursing) are difficult to meet, particularly in more rural areas of the state with a smaller workforce.
- The providers anticipate challenges emerging if youth no longer meet medical necessity criteria and are discharged without adequate home- and community-based services in place.
- Some of the implementation delays have been due to difficulty finding a location and obtaining city approval for the facility; mental health stigma can make it difficult to garner enough support from public officials.
- The current PRTF rates are based around a milieu model assumption, where much of the work is group-based. However, some youth with highly aggressive behaviors need more individualized support to provide effective treatment and to ensure the safety of other youth. Acuity can be difficult to accurately predict, and can change quickly, so flexibility to be able to respond to changes in level of need are important.

In separate conversations with county representatives, there is some concern that, with referrals to PRTFs coming from mental health professionals, there may be further fragmentation between county social services and residential providers. Counties are also concerned about transitions in care and their potential financial responsibility for youth determined as no longer meeting the definition of medical necessity, particularly if there is a gap in appropriate step-down community-based services.

PRTF implementation in other states

Interviews with other states and providers give some examples of ways PRTFs have been implemented. While the following examples may not be optimal for Minnesota, they demonstrate the opportunity for greater flexibility at this level of care. The examples from other states also demonstrate the challenges of developing and maintaining the continuum of residential and community-based services necessary to avoid unintentional increases in emergency department use and psychiatric hospitalizations.

In **New Jersey**, one PRTF option is a cluster design that includes small 5-unit homes with a centralized office for allied professionals (e.g., nursing, psychiatry) who provide 24/7 medical and psychiatric care. Although it is still difficult to purchase property in more affluent areas in the state, the smaller facility design helps providers avoid barriers resulting from zoning rules and regulations. To meet the needs of youth, some homes do provide specialized therapeutic services at a higher reimbursement rate. In addition, the state will reimburse the cost of ancillary mental health treatment provided by a community-based provider with the appropriate expertise, when necessary. Family advocates in the state described the model as “teaching homes” and felt access was limited, resulting in some youth being referred out of state for residential interventions.

Kairos, a residential provider in **Oregon**, was an early adopter of PRTFs and Wraparound in the 1980s. Initially, to ensure continuity of care, the facility only accepted youth who lived within a 50 mile radius. Over time, they accepted referrals from a larger geographic area, and established transition services to ensure continuity of care into community-based settings. The PRTF offered two different levels of service intensity, with one being more of a stabilization unit, and each with its own established reimbursement rate. The provider was able to work with the health plans (the primary funder for services in the state) to establish a single average rate and was able to have their own clinical staff approve changes in service level, rather than seeking prior authorization. While health plans always had the option to conduct an audit if a decision was questioned, the approach reduced administrative burden for the provider and health plan, and also resulted in more timely responses to changes in youth symptoms and behaviors. The provider had also adopted a practice of holding an initial wraparound meeting prior to the youth being admitted for the residential intervention to clarify treatment goals and discuss the plan for discharge. Despite this provider being able to operate a financially sound and effective PRTF model with strong

connections to community-based services, a statewide coordinated system hasn't been fully achieved.

Kansas increased its capacity to provide services through PRTFs when CMS designated their residential programs as IMDs. The rules and regulations for the PRTFs were developed through a series of weekly meetings that included the four provider agencies who offered this level of care and the state's juvenile justice, health, and child welfare agencies. After defining medical necessity, the group determined a rate structure that was similar to nursing home services. Each PRTF could determine the level of acuity needs they would accept and determine the appropriate staffing ratio. Cost-based rates were set for each PRTF, with facilities who served youth with highest acuity needs receiving the highest reimbursement rates. Some specialization occurred; one facility, for example, focuses on youth with intellectual developmental delays. If the needs of youth could not be met at a facility, the child was transferred to another facility instead of receiving care out of state. The state also licenses the facilities developed to replace state hospitals as PRTFs, although these facilities function as hospitals and have a daily rate structure that includes all treatment costs, including pharmacy costs. Initially, screening for PRTF services was conducted by community mental health centers. As the state focused on length of stay, they authorized services for 90 days with a 30 day extension afterwards. As managed care organizations began to authorize PRTF services, length of stay was reduced and initial 30 day authorization with 7 day extensions and the average length of stay has become 45 days. According to one facility representative, this has resulted in families seeking foster care or group homes – often through the child welfare system – to make sure their children are in a safe place at discharge. Treatment recidivism has increased, as has the number of youth shelter facilities. The total number of beds has shifted as the PRTF funding mechanisms changed. After initially building the overall capacity of PRTFs to serve 780 youth in 2007, the number of beds decreased over time, first as a result of improved coordination of services, and then as a consequence of changes in rates and regulations. In 2015, PRTFs have the combined capacity to serve 300 youth at any one time.

South Dakota has provided PRTF services since 2005, with two levels of care, with one facility providing a higher level of intensive residential services for youth who have been terminated from other facilities or refused access based on their needs. The more intensive setting has a higher staffing ratio and increased psychiatric services. The state has experienced an expansion and contraction of facilities and beds to get to the current number. Some facilities closed due to low census, challenges finding a financially sustainable model, or difficulty hiring and retaining workers. The state has been able to continue providing services for this level of care by leveraging telehealth capabilities, particularly for assisting with discharge and family engagement during a residential stay and also by providing on-call nursing care during night time hours.

While **Pennsylvania** has approximately 85 PRTFs statewide, family advocates report that timely access to care is still an issue. The state also is challenged to place youth with sexual or aggressive behaviors. The high number of facilities provides variable specialization, with programs developed to specialize on a range of issues, including aggressive behaviors, juvenile sex offenders, autism, traumatic brain injury (TBI), and reactive attachment disorder (RAD). One particularly successful program specializes in nonverbal youth with aggressive behaviors and manages this population with a low census (lower than their license allows) and providing more intensive services, consistently engaging families. The state sees a trend of many facilities lowering their numbers in order to provide more effective services, which may drive up wait times and make access less timely.

Utah underwent changes in their residential services about 10 years ago, also as a result of multiple facilities being designated as IMDs. Currently, the state has one PRTF with a capacity to serve 72 youth and a daily census of approximately 50. Across the state, they have six other residential treatment providers, all operating facilities smaller than 16 beds. They have lost a number of providers over the years and have doubled the per diem rate for room and board costs to help maintain this small group. Utah also has a number of facilities that are privately owned and operated. These facilities provide care almost exclusively to youth who come from other states. While these businesses can easily operate in the state, Utah has not included these facilities in their state plan.

The experiences of other states demonstrate that in its interpretation of federal PRTF requirements, Minnesota has established a more prescriptive set of rules and regulations than necessary, which may pose barriers to new facilities opening, limit the number of youth eligible to receive services, and reduce the flexibility and adaptability of providers to meet the needs of youth and families. Changes that could be made at the state level or with federal approval to reduce these barriers and take full advantage of the flexibility that can be pursued at that level of care include:

- Clarify that PRTFs need to provide 24/7 access to nursing and psychiatric services, but not requiring 24/7 on-site services
- Broaden the definition of medical necessity to include youth who have experienced complex trauma
- Require documentation of community-based services not meeting the child's mental health needs without necessitating youth to fail treatment in less restrictive settings
- Ensure MDH and DHS are aligned and streamline the accreditation and licensing standards PRTFs are required to meet
- Require the state medical review agent ask for caregiver consent to notify the social service division in the children's county of residence if PRTF services are authorized to help facilitate timely coordination with community-based services

- Establish a PRTF level with secure units to better enable providers to work with youth who have more serious mental health needs and who are at high risk of running away.

Bridging models and other intensive services

A variety of treatment models involving intensive care coordination services have been developed to help youth transition from residential to community-based services or to ensure the appropriate array of community-based and in-home services can meet the needs of youth and families. One example is the Collaborative Intensive Bridging Services (CIBS) model developed in Minnesota and being piloted in multiple counties through the System of Care expansion grant. This section describes that model and offers other examples of services developed to creatively address the need for improved continuity of care.

Collaborative Intensive Bridging Services (CIBS)

In Minnesota, the Collaborative Intensive Bridging Services (CIBS) model was designed to support youth and families and ensure continuity of care before, during, and after a short-term (30-45 day) residential treatment intervention. The same community-based mental health professional from FACTS (the CIBS therapist) works with the youth and family throughout all phases of the model. To learn more about the model and how it is being implemented, interviews were conducted with the CIBS model developers and staff from Gerard Academy, the residential provider partner.

CIBS is currently being used in Dakota, Hennepin, and Olmsted counties, with Gerard as the residential provider for all. Youth who receive CIBS services are screened by county staff and Gerard makes the final determination on whether they are approved for admission. According to Gerard, youth who receive CIBS are not different in regard to type of diagnoses or acuity; the primary difference is the level of family involvement.

Consistent and seamless services. CIBS program offers three phases. In the first phase, the CIBS therapist meets with the youth and family, begins to establish a strong therapeutic relationship, conducts an assessment, and helps the youth and family develop clear treatment goals. If residential treatment continues to be needed after intensive in-home services begin, these treatment goals are adopted by the residential treatment provider. During the residential intervention (phase two), which begins after 4 to 6 week of the initial in-home therapy, the CIBS therapist continues to work with the youth and caregivers, both individually and as a family. The CIBS therapist partners with the facility therapist in providing all clinical services in phase two. The same CIBS therapist continues intensive in-home therapy with the child and family after discharge and works with the county case manager to ensure the family has the right array of community-based services in place (phase three). During this phase, there are up to three sessions (or a total of 6 hours) of in-home therapy with the child, parent, or family each week.

The CIBS model is a departure from how services are typically coordinated. Rather than Gerrard staff leading the admission meeting, the CIBS Coordinator takes a lead role at the admission meeting to set shared expectations with the family, CIBS therapist, county case manager, residential staff, and any other key community-based providers. The meeting sets the tone for how much parent involvement is expected and how service providers will communicate and coordinate care. During the meeting, the discharge date is determined and every family therapy session and youth time at home is scheduled. In contrast to standard treatment at Gerard, when time at home begins about a month after intake, youth time at home under the CIBS model begins during the first week of the residential stay. These are important times for the CIBS therapist to observe what is working and to make adjustments in the treatment plan. It took time for staff at Gerrard to understand and feel comfortable with the treatment model, and to take on a somewhat different role. Gerrard initially wanted to see youth stay longer in the residential placement because they felt there was more they could do. In their experience, they have found that 30 days has been enough time for youth to be discharged and move into the final phase of the model. However, it took time, and required some risk, to trust that the crisis planning and intensive in-home mental health services would be enough to ensure safety during time at home and after a much shorter residential stay than typical for the provider.

The CIBS model doesn't require that Gerard make changes to its treatment model for all youth. For example, it is the CIBS therapist, not Gerard staff, who are responsible for the more frequent communication with the county case manager and other members of the family team. The 15 youth participating in CIBS are in units with youth who are following the agency's standard treatment model, following the same routine, but receiving additional individual and family therapy from the CIBS therapist. While formal changes aren't required, the partnership has introduced new ideas and reinforced changes already underway. From Gerard's perspective, their partnership in the CIBS model came at a time that the agency was already working to increase family involvement and redefining success to focus on outcomes for youth at home. Some changes in practice are occurring. For example, they have reconsidered whether some expectations they set for youth (e.g., youth are expected to learn all staff names) are necessary, and considering where there can be more flexibility in some of their program rules. Therapists at Gerard have also appreciated working with new colleagues, seeing different therapeutic approaches, sharing their observations, and learning about what is working and not working during the youth time at home.

While not to be overstated as a variation of the CIBS model, there is some synergy between the CIBS model and a short-term (3-4 month) residential treatment model that Gerard has been working to develop. With that shorter-stay model, Gerard has emphasized coordination with community-based services, particularly in the last month leading to discharge. Somewhat surprisingly from Gerard's perspective, the county screening teams have continued to more often request longer-term (8-9 month) residential stays. This observation

may be an important reminder of the influence child-serving systems have in how services are delivered.

The model necessitates having highly-trained mental health professionals in place who are willing and able to provide in-home services and who have a strong interest in collaborating with other service providers. In addition to time spent providing direct individual, parent, or family therapy, the CIBS therapist is in frequent communication with the residential treatment provider, case manager, and other member of the care team. Because of the very intensive services provided, CIBS therapists have small caseloads of four to six youth. The model also requires a few changes in practice for the residential provider: working collaboratively with the CIBS therapist, increasing their level of family engagement, prioritizing family visits as part of the treatment model, and conducting more child and family team meetings.

The target population of youth and families whose needs are best met with this model have been identified. The developers of the local model do not open the services to youth with cognitive delays, youth with chemical dependency as the primary diagnosis, youth who have sexually assaulted others, or youth without a family to engage in services. The limiting factor for expansion of services is the availability of highly-trained mental health professionals willing to do this intensive in-home work. However, gaps in other community-based services, particularly child psychiatry, present challenges for discharge planning and continuity of care. For staff at Gerard, their experience with CIBS further highlights the lack of options they see for youth who do not have involved families. Youth stay longer than needed when counties are unable to find foster care or some type of group home setting appropriate for youth. Another group they see without good aftercare options are 18-year-old youth without involved family or for whom an independent living skills program is most appropriate.

The CIBS model has been used in Dakota, Hennepin, and Olmsted counties, with the developers describing promising evidence of improved family and child functioning, reduced repeated placements, and an overall reduction in costs. Through the state's System of Care expansion grant, CIBS will be expanded to 17 counties across the state. This expansion creates an opportunity to not only evaluate the effectiveness of the model itself, but to consider how it can be part of a stronger statewide continuum of care and be financially sustainable. The CIBS developers, for example, are considering whether a similar approach could be used for youth who are in corporate foster care or corrections settings. Adopting the CIBS model, or a similar type of transition model, has important planning considerations for the location of residential treatment settings and how referrals to residential services are made so that distance does not create a barrier to effective services.

Robust community-based services

Research shows that, when effective community-based services are in place, these services can be as effective as residential treatment services. As illustrated throughout the report, there are evidence-based models that have been demonstrated as effective approaches for improving youth outcomes. Time and cost can be barriers to implementing evidence-based practices, as some models require considerable training, credentialed state, and data gathering to monitor fidelity and outcomes. It should be noted that studies evaluating the effectiveness of these practices are often well-funded and the cost of these ongoing training, capacity-building, and data monitoring are not always considered when payment rates are set. With this caveat noted, a few studies do compare the effectiveness of in-home intensive services, such as multi-systemic therapy (MST), with mental health residential treatment. A recent study randomly assigned adolescents with co-occurring substance use and mental health disorders to residential treatment or Multidimensional Family Therapy (MDFT) provided in-home or in a community-based setting (Liddle et al., 2018). The study found youth in both groups had significant reductions in substance use and positive improvements in externalized behaviors in the first two months, and these gains were better maintained or further improved upon with MDFT.

The authors concluded this study suggests that behaviors and symptoms of some youth who meet criteria for residential treatment can be effectively managed in community-based settings with appropriate treatment options. However they cautioned that the study results should not be interpreted to suggest that all youth referred to residential treatment would benefit more from intensive in-home and community based services. They concluded, “There is and always will be a strong need for residential treatment, especially for youth at high risk of overdose, suicide, who present a public safety risk, or who are without family members who can be involved in treatment” (Liddle et al., 2018, p.54).

Another study found that, while not statistically significant, positive treatment outcomes tended to be more likely for youth who received intensive in-home treatment compared with youth who received residential treatment, when youth of similar demographic, diagnostic, and treatment histories were compared (Barth et al., 2007). The authors reported the agency that provided both types of services was able to offer intensive in-home services at approximately one-quarter of the cost of residential treatment. They also hypothesized that the relatively small difference in outcomes may be mitigated by greater family involvement in residential treatment.

However, the shift to a community-based system of care is challenging and may lead to unintended negative consequences if not well-implemented. Lyons and McCulloch (2006) argue that, to avoid potential unintentional consequences of increased hospitalization and juvenile detention involvement, residential treatment center capacity should not be reduced before capacity for in-home services is developed. International studies have found that drastic reductions in residential care can place additional strain on family foster care services, increase juvenile justice involvement, and lead to youth receiving services from treatment facilities far from home (as cited in James, 2011). Policies aiming to ensure youth are served in the least restrictive setting possible may lead to youth with higher acuity symptoms being served in residential treatment centers, rather than inpatient hospital settings (James, 2011).

Example: CMS Medicaid Demonstration waiver

With robust home- and community-based services in place, residential treatment stays for some youth can be shortened or eliminated. Examples of how states have increased their capacity to provide effective home- and community-based services as an alternative to placing children in PRTF settings came through a 3-year Medicaid Demonstration waiver awarded by the Centers for Medicare and Medicaid (CMS). Significant state and federal resources were invested into the project. Each of the nine states funded for the full 5-year planning and implementation period received state grants ranging from \$15 million to \$50 million annually, and were also required to provide state matching funds.

The nine states that received grants (Alaska, Georgia, Indiana, Kansas, Maryland, Mississippi, Montana, South Carolina, and Virginia) had flexibility to use the funding to support the services most needed in their state. All states created or expanded their respite care options, and most established family and youth peer support (N=8), Wraparound or other types of care coordination (N=8), and paraprofessional training and consultation (N=7). The states also expanded other services, including: supported employment, community transition services, flexible funds for informal supports, and transportation.

The evaluation found that children in these demonstration states improved their level of functioning in multiple areas, with youth with higher level needs across multiple functioning domains benefitting most (Urdapilleta et al., 2013). The evaluators also concluded that the expanded services were most beneficial for youth transitioning from residential (PRTF-level) interventions to community-based services, rather than youth diverted from receiving services in PRTFs. All states saw a significant reduction in total Medicaid costs; on average the states' costs for waived home- and community-based services was 32 percent of total Medicaid costs for services in institutions. While significant amounts of these reductions in cost supported new training and consultation to support new services and infrastructure and expanded reach to a larger number of youth and families, the evaluators concluded the waiver programs were cost-neutral in all demonstration states. The study underlined

the importance of states passing policy changes to support changes being made through the demonstration waiver. At the time of the final report, the states were exploring multiple sustainability options, including changes in allocations of state funds, submitting applications for 1915 (c) and 1915 (i) waiver programs, and working directly with CMS to expand the program into the state's home- and community-based severely emotionally disturbed waiver. It is important to note that eligibility criteria for states that participated in this demonstration program may be different than in Minnesota. It is being cited in this report because it is the largest study to compare outcomes between PRTF and community-based services, not as suggested funding mechanism for waiver programs currently in place in Minnesota.

Implications for services in Minnesota:

- In situations where 24/7 monitoring is not needed, home- and community-based mental health services can be an effective alternative to residential treatment, if robust, well-coordinated, and adequately funded
- Multiple services, including Wraparound/care coordination and respite care, need to be expanded and enhanced to create strong continuums of services
- Strengthening home- and community-based services will require significant workforce development and training

Example: Justice Resource Institute

One of the services developed in Connecticut is **Intensive Diversion**, which provides an array of intensive in-home services to youth, including treatment planning, individual therapy, family therapy and skill building, crisis planning, and triage. During the 6-month service, youth are in home and completely engaged in their school and in all community activities. The youth and family receives intensive services from an assigned clinician and therapeutic mentor, who also coordinate with the child's school, and access to 24/7 support. The service is often used following inpatient hospitalization or other high-intensity intervention. The Justice Resource Institute (JRI) is one provider of this service. Caseloads are kept small and respite is available, if needed. From the provider's perspective, the greatest concern is the safety of staff who are providing in-home services.

Example: Catholic Services of Western Washington

Wraparound with Intensive Services (WISe) is a new service available in Washington that combines intensive in-home services, crisis response services, wraparound, and youth and family peer support to support youth at risk of placement in a more restrictive setting, involved in multiple child-serving systems, and meeting clinical eligibility. Each WISe team, comprised of a mental health clinician, care coordinator, parent peer, and youth peer, works with approximately 10 families. Parent and youth peer support is a key element and, particularly when they are the first from the team to hear the youth's story, can establish a critical connection and provide a unique type of support for youth and families. The services provided by the team are very individualized and aim to help the youth and family not only access the appropriate intensive mental health treatment, but also establish connections to school and community supports. Catholic Community Services of Western Washington, a WISe provider, is considering ways for teams to specialize to address specific needs, such as youth diagnosed with autism spectrum disorders, and exploring the use of therapeutic foster homes as a respite option for families.

Example: St. Charles – A provider's perspective

St. Charles Home for Boys (St. Charles), a large residential treatment facility for boys with emotional disturbances and behavioral concerns, had an established treatment model that they felt was effective and had reduced their average length of stay to approximately one year as Wraparound Milwaukee started. Over time, the agency moved to being a community-based provider offering a wide array of services and supports to youth and their families. The transition was not an easy one, as it challenged them to more closely assess the quality of their services and how they could improve. An important element of their transition was identifying where they were falling short of adopting principles of family-driven care. The Appendix includes a brief case study of this provider's experience.

Additional provider examples

A number of providers affiliated with the National Association for Children's Behavioral Health (NACBH) also provided examples of ways they are trying to increase family-involvement and trauma-focused interventions into their treatment models. These are highlighted not as specific treatment services but as examples of ways that providers can innovate and adopt best practices within a variety of residential models.

- In Alaska, a provider that runs multiple PRTFs, has incorporated the ARC model and Sanctuary Model into their residential facilities had have been able to eliminate restraint and seclusion practices. They have focused on creating a more home-like environment in smaller (7-9 bed) settings and report improved behavior and less destruction of property.

- Another provider in Alaska noted that for youth who are moving into a foster home, they ensure there are multiple stayovers while the child is receiving residential services and more involved outpatient support post-discharge.
- A residential facility in Baltimore “closes” one of its units on weekends so that staff can accompany youth for their time at home and provide support to the family.
- The transition services for one of the facilities in Connecticut includes in-home family therapy while the child is in a residential placement and providing three in-home meetings with the family after discharge to support the transition to community-based services.
- A provider in Virginia noted that, while many residential treatment centers do an excellent job of teaching kids how to be successful at the facility, they see their job as teaching youth to be successful with their families. They have changed their treatment model so that everything is geared towards discharge and helping youth be at home with their family.

Large scale reform efforts

Any state or region that has undergone a significant change to its intensive mental health services has needed to make multiple change simultaneously. A clear vision and thoughtful planning need to be accompanied by ongoing, real-time monitoring to ensure implementation does not create service gaps and adjust to ongoing changes to the overall capacity of the mental health system.

Many states that have reformed their intensive mental health services have done so out of financial concerns, crisis (e.g., lawsuits against the state), or opportunity (e.g., statewide System of Care grants). For this study, interviews were conducted with representatives of five efforts to reform children’s mental health services: Connecticut, New Jersey, Oklahoma, Oregon, and Wraparound Milwaukee. While each approach is unique, they all share similar goals: to establish a continuum of services to meet the needs of youth and families; ensure the appropriate level of care and services, as defined by the family, are available at the right time; and to do so in a way that is financially sustainable.

Admittedly, none of the models are perfect and all continue to adjust and make corrections to ensure youth and families receive the services and supports needed during a crisis or when intensive mental health services are most needed. A notable tension for many initiatives is around whether the community-based services in place are adequate and readily available in states where strong emphasis has been placed on reducing the length of residential stays. Challenges with accessibility also exist in these states, and rather than being a static system, services have continued to evolve in response to changes in the population of youth served, new information about effective treatment approaches, and changes in funding mechanisms. Despite their limitations, these models offer examples of ways that states have developed more flexible funding mechanisms, expanded services

statewide, and created a broader continuum of services for youth and families in their state. All are examples of efforts that aim to prioritize services in community-based settings whenever possible and that work to emphasize family involvement in residential and community-based services.

The example from **Connecticut** illustrates the state's shift to having a predominantly community-based array of intensive mental health services and highlights ways that the state uses data and ongoing training to assess and improve the quality of services. **New Jersey** has established a strong mobile crisis response and stabilization service and multiple residential options, including a unique PRTF model. In **Oklahoma**, the state has created a strong mobile crisis response and stabilization service and, through thoughtful roll-out of Wraparound, has been able to demonstrate the effectiveness of the service and secure regular state allocations to support the service. The example from **Oregon** comes primarily from the perspective of provider that was an early PRTF adopter and illustrates both the opportunities for creative implementation and challenges of establishing changes statewide. Finally, **Wraparound Milwaukee**, a frequently cited early System of Care grantee, describes how multiple simultaneous changes are needed to build a robust continuum of community-based services that can meet the needs of youth who had traditionally been served in residential settings.

Full summaries from each state's reform efforts are available in the Appendix, with key lessons learned from their work, relevant to Minnesota, highlighted below:

Key services

- Crisis response services, wraparound, and intensive in-home services are critical services, as without those, the community-based behavioral health system cannot respond quickly to support youth with intensive mental health needs and their families.
- Connecticut has found that a benefit of implementing MATCH-ADTC is that it offers evidence-based strategies for four of the most common presenting conditions. In Minnesota, MAP provides clinicians with a similar framework to identify effective treatment elements appropriate for a child's age and presenting conditions.
- Wraparound teams play important roles in helping families plan for and adapt to transitions in services and levels of care.
- In multiple states, mobile crisis services require an in-person response and are considered an important first contact with families and a critical opportunity to build trust.

Financial considerations

- The necessary funding mechanisms, policies, and legislation need to be in place to ensure any cost savings from reductions in residential placements are reinvested into the expansion of community-based services.
- By pooling funds across multiple systems and centralizing how those funds are administered, Wraparound Milwaukee was also able to clearly monitor service utilization and cost savings. A more complicated framework is necessary in Minnesota to understand how changes to service availability and impact utilization and cost across multiple state agencies and at the county level.
- It is critical to have the systems in place to gather and analyze data needed to understand the population of youth served by the system, service outcomes, and cost. New Jersey's ability to demonstrate positive outcomes has helped them secure state funding on an ongoing basis. Similarly, Oklahoma has been able to attain state legislative allocations by carefully tracking the costs associated with implementing wraparound and offering a cost-benefit analysis looking at service costs and demonstrated improvements in outcomes.

Other lessons learned

- Connecticut initially expanded its group home capacity to create small, local settings to support family involvement in treatment. While these are not an alternative to a community-based system of care, they may be a necessary step while a more robust set of in-home and community-based services are established.
- Over time, many residential providers in these states have diversified their service lines to offer more community-based and in-home services. This has helped providers be nimble and adaptable to changes in the youth population and demand for services.
- Multiple changes need to occur simultaneously to create the array of community-based services needed to reduce reliance on residential placements and ensure youth can access intensive in-home and community-based services.
- Residential providers have experience working with youth who need intensive mental health services and should be partners in considering creative ways to provide community-based and in-home services.
- There is value in piloting new service types locally, but the state needs to monitor outcomes and be willing to make course corrections while working to expand statewide.

Potential financial mechanisms

Minnesota can take a number of steps to expand its continuum of community based services. States that have worked to develop a more robust continuum of mental health services have looked for ways to optimize Medicaid reimbursement, ensure that private commercial plan coverage includes the same mental health benefits, reinvest cost savings to expand services, and strategically use state or county dollars for key services and supports without other funding mechanisms.

As stated earlier, Minnesota does have a fairly robust Medicaid benefit set in place. However, current payment rates for many services, including CTSS, day treatment, children’s crisis response services, and various outpatient psychotherapy services, are set at levels that are lower than the cost of delivering care (Mercer, 2018). In addition, as described throughout the report, the limited availability of intensive family therapy to support youth and families during and following residential treatment is a notable gap in the continuum of care. The use of intensive care coordination and changes in practice in residential settings that emphasize family-driven services and increase opportunities for family therapy will help ensure that families have the skills and supports needed when youth return home. However, due to distance limiting family therapy during a residential placement or the specific needs of the family requiring additional therapeutic supports, additional options may be needed to create appropriate step-down services that include intensive family therapy. Multiple strategies can be used to fill this gap including:

- broadening the intensive therapeutic foster care (ITFC) benefit to continue services after reunification with the biological family or adoption
- redefining the ITFC benefit to be used in homes without any foster care involvement and potentially in group home settings
- expanding of the CIBS model, if shown to be effective through pilots underway through the System of Care expansion grant
- redefining Youth ACT to be appropriate for younger children, age 6 and older
- encouraging innovation among residential providers to address this gap

The strategies used to meet this gap will likely need to vary across the state, as current workforce issues make some options less feasible in some settings.

Financing for residential treatment models

Mental health as a whole is an underfunded system. Therefore, it is critical for the state to optimize the federal Medicaid reimbursement for services and ensure youth have access to the full continuum of services needed to support their mental health needs. Medicaid reimbursement is available for PRTF level of care and, as noted in this report, is a service level that has the potential to be implemented with multiple service tiers to be a more flexible treatment option. Smaller residential treatment centers (16-bed or smaller) can still secure Medicaid reimbursement and could play a key role as a transition or step-down service where intensive family therapy can be provided in locations close to home or offer additional ongoing support. Smaller residential settings may be an appropriate level of care for youth who have specialized treatment needs. However, smaller facilities may not be realistic option in areas of the state with the most significant workforce shortages, particularly areas with few highly skilled mental health professionals.

Currently, residential programs for eating disorders are classified as children's residential facilities, but provide specialized services to a niche population. Similarly, one RTC has specialized in working with youth who have sexual behavior problems. In addition specialized services in a smaller setting may also be an appropriate option for youth with lower cognitive functioning who do not benefit fully from treatments based in cognitive behavioral therapy.

Special considerations for youth involved in the child protection system

It is critical that youth receive the appropriate level of mental health service they need regardless of setting. There are youth who, because of child protection involvement, need a safe and stable place to live after receiving mental health residential treatment, but no longer require that intensity of mental health treatment. Multiple residential providers noted that a gap in placement options for youth with child protection involvement or difficulty finding options for youth with multiple failed adoption attempts contributed to residential stays of a year or longer. It is critical that the level of mental health needs, not the youth's home environment, determine when mental health residential treatment is appropriate. However, additional cross-system planning and coordination may be needed to ensure that there are adequate options for kinship care, foster care, and, when appropriate, congregate foster care or group home settings and clarity in how those residential services should be financed.

Potential funding mechanisms for best practices in residential treatment settings

While the need for service integration and family involvement in treatment is well supported by the research, it is more challenging to establish the funding mechanisms that support care coordination, as well as practices aligned with family-driven and youth-guided care. Often, while these services are key to providing effective treatment, they require flexible time and resources that are not usually considered as part of the direct treatment costs. The Building Bridges Initiative (BBI) has prepared a document outlining five potential funding mechanisms used by state and regional initiatives: a) Medicaid reimbursement/Medicaid waivers; b) performance-based or incentive contracting; c) private funds; d) reallocation of existing funds; and e) reinvestment strategies (Figure 10). The following table briefly describes these financial mechanisms, as well as challenges inherent in each option.

13. Financial mechanisms used to support integration of residential and community-based care

Finance mechanism	Description	Challenges
Medicaid Waivers (ex. 1115, 1915 waivers)	Historically, these funds have been flexible and allow for development of new and creative models.	The funds are not guaranteed and may be less available or more restrictive if there are federal budget concerns.
Performance-based contracting	Often used by managed care organizations (MCOs), key outcomes can be incentivized to reward high performance and encourage innovation.	It may be a disincentive for programs to work with youth with the most complex needs. Without careful planning, development, and monitoring, these can have unintended negative consequences.
Blended funds	Blended funds combine funds from multiple systems to pay for services and fund new or innovative programs. This can create mechanisms for centralized monitoring of service utilization and costs for youth serviced by multiple child-serving systems and reduces administrative burden on providers billing multiple systems.	It may require changes to, or relaxing of, regulations that direct the use of current funding streams.
Braided funds	Braided funds also use funds from multiple systems, but maintain separate tracking of each stream. Combining resources can increase funds available to pay for services and fund new or innovative programs. Tracking of funds remains clearer for reporting.	It may require changes to, or relaxing of, regulations that direct the use of current funding streams. Additional resources may be necessary to manage reporting to ensure accountability to all funders.

Source. Adopted from The National Building Bridges Initiative Fiscal/Policy Workgroup, 2011

13. Financial mechanisms used to support integration of residential and community-based care (continued)

Finance mechanism	Description	Challenges
Case rates	<p>Blended funds are used to establish a set amount of money per child/per day based on prior experience.</p> <p>With a predictable amount of money, providers can innovate to develop services and provide individualized care. Caps or “risk corridors” can be used create shared risk and protections for both providers and funders.</p>	Case rates can be complicated to develop and can require significant investment in time so that they cover the full cost of providing services, included administrative, data gathering and reporting, transportation, and other time and resources that are not direct treatment time.
Private funds	Health plans, philanthropic organizations, and other private agencies can fund demonstration projects with robust evaluation components to develop approaches to address specific issues or improve outcomes.	<p>Donors needs to be willing to take risk over a long-enough period to measure change.</p> <p>It can be difficult to identify an ongoing revenue stream after the demonstration project ends.</p>
Reinvestment funds	Reductions in use of high cost services can be reinvested into lower-cost alternatives that address youth needs in a more optimal way. This can be done with individual case rates or tied with system-level spending.	<p>Policies need to be established to ensure savings are not redirected to other systems.</p> <p>New tracking and accountability systems may need to be created.</p>

Source. Adopted from The National Building Bridges Initiative Fiscal/Policy Workgroup, 2011

There are unique advantages and disadvantages to some of the funding mechanisms identified:

- The evaluation of the state’s System of Care expansion grant can measure the effectiveness, costs, and cost savings associated with CIBS and Wraparound, two models that would help to address gaps in services identified through this study.
- While performance-based contracting is often achieved by MCOs or other funders shortening the authorization period or narrowing the eligibility requirements for high-cost services, without monitoring, these changes can have unintended negative consequences. Another option could follow examples piloted in Oregon and through the PRTF demonstration project, where providers can receive residential per diem rates while having the flexibility to use the funds for community-based services instead of residential treatment when possible.
- States that have been successful in reinvesting funds have tended to have large numbers of youth who receive long episodes of high-cost residential treatment. While Minnesota may have some opportunity to reinvest cost savings, it is not clear how much revenue that reinvestment would bring to the continuum of care, as a number of states that used this strategy began with longer average lengths of residential treatment.
- Health plans in Minnesota have a history of supporting demonstration projects to develop and evaluate new models of care. They may be well-positioned to work with residential and community-based providers to pilot creative ways to implement best practices in residential treatment and establish feasible ways to deliver effective intensive community-based services.

Looking forward: Recommendations to support a robust continuum of care

Overall, the information gathered through the literature review, exploration of current practices, and input from local stakeholders show that while Minnesota has been taking key steps to strengthen its community-based services, there are notable gaps in the state's continuum of care, particularly in the availability of intensive community-based and in-home services. In addition, the study recommends a number of ways that PRTFs can be designed to address a broader range of mental health needs than initially envisioned and to reduce barriers to implementation. However, time is needed to update clear standards that can be implemented by providers and determine the need for any other types of residential services while also expanding the availability of intensive community-based and in-home services. Therefore, the recommendations include stop-gap funding over the next two years to ensure youth with mental illnesses and their families do not lose access to needed services while changes are implemented to create a more robust continuum of children's intensive mental health services across the state.

The following concurrent changes, informed by the literature and aligned with gaps identified through the study, are needed to help Minnesota develop a more robust continuum of care to meet the needs of youth with mental illnesses and their families: a) increase the adoption of effective residential treatment practices; b) expand the capacity of the state's intensive in-home and community-based mental health treatment options; c) expand PRTFs in the state using a flexible approach that will allow this level of care to reach youth with a broader range of mental health needs; d) continue efforts to increase the mental health workforce; and e) develop the data framework needed to understand the needs of youth with mental illnesses and the effectiveness of services.

A. Increase the adoption of effective residential treatment practices

Rationale: The literature review of effective residential treatment approaches describes a number of best practices, including: the use of trauma-informed treatment models, appropriate for meeting the individualized needs of youth; adoption of organization-level trauma-informed care principles; early and frequent family involvement in treatment planning and services; residential services that are intensive, but focused on youth being home as soon as possible; and strength-based approaches that set expectations for ongoing family and community connections. Adoption of new practices or enhancements of existing services should be supported through adequate payment rates, funded training initiatives, or other mechanisms.

The following recommendations, based in the literature and informed by local stakeholders, are ways to achieve this goal:

- **Set expectations for clinicians and therapists to be trained in MAP to increase their capacity to implement evidence-based treatment models.** Clinicians and therapists need an array of skills to provide effective and culturally competent individual and family treatment. MAP payment rates should take into account the initial and ongoing training, refreshers, and consultation needed to implement effective mental health treatment. As described in the recent study commissioned by the Minnesota State Legislature, Minnesota’s current mental health reimbursement rates do not adequately consider the costs of training, certification, supervision, consultation, and other work to ensure fidelity of evidence-based practice models (Mercer, 2018). Rates do need to increase in order for providers to adopt these practices in ways that are financially sustainable.
- **Consider finance mechanisms to encourage the adoption of effective treatment components in innovative and creative ways.** Family involvement and continuity of care are two examples of practice components that are important aspects of high quality residential services that can be achieved in multiple ways. Currently, family engagement practices vary widely across agencies and can be improved to further support family connections, family involvement in decisions, and family therapy as more intensive treatment components. However, this can be accomplished in multiple ways. Similarly, providers may identify a variety of approaches to ensure continuity of care from residential to community-based services, including expanding their own array of services. Expanded services could include making appointments with community-based providers as part of visits home or adopting models (like CIBS) where community-based providers work with youth at the facility. Performance-based contracting and demonstration projects are examples of approaches that can incentivize providers to adopt practices that improve outcomes while encouraging innovation and creativity. The time and resources needed for training, program model development, and early implementation should be considered and supported through any potential funding mechanism.
- **Involve counties, tribes, schools, and other supports in determining how to establish consistent lines of communication and improve continuity of care.** While recognizing that families should be the ones to choose who is involved in their child’s care and treatment decisions, a combination of standard processes and more individualized communication is needed to ensure there is strong communication between providers and the services and supports youth will access after discharge.

- **Engage tribes directly in ongoing discussion of the services and supports needed to best meet the needs of Native youth.** While the study brought some attention to the specific needs of Native youth, additional and ongoing work is needed to ensure effective mental health treatment is provided in ways that help youth maintain and strengthen connections to their community and traditional healing practices. At a provider level, this requires increased awareness of and openness to integrating Native traditions and healing practices into individualized youth treatment plans. Community suggestions to improve state-level responsiveness to the needs of Native youth include: listening to tribal communities to better understand and take actions that foster the community connections and healing practices needed to support the well-being of Native youth and families; providing proactive technical assistance and communication with tribes about new services; and developing grant opportunities that foster collaboration, rather than competition between tribal nations.
- **Continue to explore ways to better understand the needs of, and services most appropriate for, youth with mental illnesses who are involved in the juvenile corrections system.** Providers and other local stakeholders identified youth with highly aggressive behavior as among the most difficult to serve and most likely to enter the juvenile corrections system. While this study began to explore some of the unique and important considerations to provide services to this group of youth, additional work is needed to more clearly identify the treatment models, diversion programs, and coordination needs for this population of youth.

B. Expand the capacity of the state’s intensive in-home and community-based mental health treatment options

Rationale: The literature review of effective residential treatment practices underscores the importance of community-based services that reduce the need for and help maintain the gains youth make while receiving residential treatment services. However, a consistent concern across multiple local stakeholder groups is a gap in intensive community-based and in-home therapy options (CASII Level IV services). Expanding the Youth ACT and ITFC benefits would create an opportunity for much-needed, intensive family therapy options to be more widely available across the state. Minnesota does have a robust benefit set in place for youth insured through public plans (Medical Assistance/MinnesotaCare) but the services are not available in all parts of the state and few intensive community-based services are covered by private commercial plans. Interviews with administrators from other states also underlined the importance of effective mobile crisis response and stabilization services to support youth and families in home and community settings.

The following recommendations, based in the literature and informed by local stakeholders, are ways to achieve this goal:

- **Eliminate barriers and disincentives to care coordination.** Intensive care coordination – a higher level of services than case management – and other practices that support continuity of care are important for youth with mental illnesses and their families, particularly when residential treatment is needed. However, expectations of care coordination need to be clearly articulated and rates need to support the time needed for all providers who the family sees as critical in their child’s ongoing treatment plan to be involved and engaged. Interdisciplinary training opportunities may also be a way to foster connections between residential and community-based providers, county case managers, or other types of care coordinators. In the short term, providers could play a larger role in care coordination for youth and families who do not have a person playing this role. As the evaluation of the Wraparound pilot is completed through the state’s System of Care expansion grant, recommendations for adoption of effective care coordination practices and sustainable funding mechanisms should be identified.
- **Identify and establish funding mechanisms to expand ITFC to additional settings and broaden the age eligibility for Youth ACT.** Multiple stakeholder groups identified a lack of intensive community-based and in-home mental health services as a gap in the state’s continuum of services. The Intensive Therapeutic Foster Care (ITFC) benefit provides the level of service described by many as lacking in the state. However, it is currently only available to youth in foster care settings. Expanding that service benefit to other settings or creating other service benefits and related financing mechanisms are ways to ensure step-down services are in place for youth transitioning from residential to community-based settings. Making adjustments to Youth ACT to expand the service to younger youth (age 6 and older) is another approach increase the availability of this level of service.
- **Use results from the System of Care evaluations of Wraparound and CIBS to consider how those services may be integrated into the state’s current continuum of care.** As described in the study, intensive care coordination and models that support continuity of care from residential to community-based settings are limited or lacking in many areas of the state. With the roll-out of these two service models as part of the state’s System of Care expansion grant, there is an important opportunity to not only evaluate the effectiveness of the services, but the implementation process and associated costs so that any further expansion of services is informed by the work done in counties.

- **Continue to strengthen the state’s mobile crisis response and stabilization services.** Interviews with administrators in other states stressed the importance of having a strong mobile crisis response system that can respond quickly and in ways that build family trust and create connections to appropriate mental health services and supports. Currently, the state has three designated children’s crisis teams and training is provided to all teams on the specific needs of youth and families. The state is encouraged to continue its efforts to increase the capacity of teams to work with youth and families and use data for ongoing monitoring and quality improvement.
- **Enforce mental health parity** so that families who have private insurance can access the needed in-home services to keep their child at home. Currently, youth insured through private, commercial plans have limited access to the community-based and in-home services that are important for both reducing the need for, and the effectiveness of, residential treatment. Because these services are currently limited in most areas of the state, health plans may also be uniquely positioned to fund innovative demonstration projects to help inform effective service models.

As identified in this study and past reports¹⁴ commissioned by the Department of Human Services, there are gaps in the continuum of care throughout the state which result in youth and families not getting the right level of service at the right time. The following recommendations continue to be relevant to this study, as they are all part of ensuring a robust continuum of care:

- Increase funding for **respite care**, including providing crisis respite, so families can access respite when needed and not just when planned.
- **Create and fund crisis homes, or stabilization units** within PRTFs or other residential settings to address short-term crisis situations.
- **Increase funding for school-linked mental health grants**, including funding for Intermediate School Districts, Cooperatives, and Level 4 settings, so that children and youth can access mental health treatment earlier. This includes setting aside part of the funding to increase the capacity of schools to support children with mental illnesses.
- **Ensure service regulations have the flexibility needed for service providers to integrate culturally responsive practices into treatment.**

¹⁴ NAMI Minnesota and AspireMN. (2017). Children’s Crisis Residential Services Study. Retrieved from: <https://namimn.org/wp-content/uploads/sites/188/2018/07/Childrens-Crisis-Residential-Study-Report-2.pdf>

C. Expand PRTFs in the state using a flexible approach that will allow this level of care to reach youth with a broader range of mental health needs.

Rationale: Because mental health is an underfunded field, it is critical to fully optimize Medicaid reimbursement whenever possible. Minnesota can do this by expanding PRTFs, using more flexible regulations, to provide intensive mental health services to youth with mental illnesses. The state can also strategically use smaller facilities to provide specialty services or step-down services that provide additional opportunities for intensive family therapy before youth fully transition to home and community. It is important to note that if PRTF are expanded and become the primary level for future residential treatment services, the roles and relationship between counties, providers, and the state will change in a number of ways. Without shared interest in and expectations of collaboration, having more PRTFs in the state could increase fragmentation and siloing of services. A different type of collaboration is needed to ensure that youth in the child welfare and juvenile corrections systems, who the county will continue to support through transitions in placements, will receive the appropriate level of mental health services in a variety of settings.

The following recommendations, based in the literature and informed by local stakeholders and the experiences of other states, are ways to achieve this goal:

- **Appropriate stop-gap state funding through June 2021 for residential treatment facilities that will no longer be eligible for Medicaid reimbursement.** Residential treatment is a key component of the state’s continuum of care, particularly for youth with complex needs. Allowing financial responsibility to fall to counties will have wide-ranging impacts, likely reducing access to services for youth and families, particularly in counties with a small tax base or large numbers of youth in other types of out-of-home placements. A stable source of funding is needed as additional agencies transition to a PRTF model or consider other options to optimize Medicaid reimbursement.
- **Amend PRTF licensing rules and statutes to: a) expand eligibility and b) mitigate barriers to opening new facilities.** The PRTF level of service is a way to provide effective mental health services to youth and optimize federal Medicaid reimbursement. Results from the study show a number of ways that Minnesota, in its initial conceptualization of the PRTF level of care, created barriers to implementation. A number of changes can be made to ease implementation and ensure the right level of effective mental health services are available to youth and families, including:
 - Lifting the statewide 150 bed limit to allow for expansion of the service
 - Developing an electronic billing system that easily allows for monthly billing and reimbursement for services
 - Reviewing licensing and certification standards developed by the departments of Health and Human Services to simplify and streamline administrative requirements

- Considering the need to create a new PRTF license rather than using standards developed for skilled nursing facilities
 - Offering an exemption for current residential providers to begin transitioning to a PRTF level of care without submitting a formal response to a state Request for Proposals (RFP).
 - Determining whether new licensing rules are needed for programs currently licensed as children’s residential facilities that provide specialized services, including eating disorder treatment and integrated treatment for co-occurring disorders
 - Broadening the definition of medical necessity to ensure that all youth in need of intensive mental health services can receive the right level of care
 - Changing state licensing standards currently requiring 24/7 on-site nursing and other allied professional roles to 24/7 access to these services
 - Clarifying that referring mental health professionals can demonstrate the need for this level of care, without requiring youth to have failed in other treatment settings
 - Readjusting the current PRTF rate structure to: a) fully support the time and resources needed to implement effective treatment practices; b) fully cover administrative expenses; and c) consider unique geographic considerations, such as a need for higher room and board allocations to reduce barriers to establishing facilities in the Twin Cities metro
 - Creating a rate for secure units at PRTF facilities or specialized units to increase capacity within the state to meet the needs of youth currently referred to out of state for services due to aggressive behavior
 - Establishing multiple rate levels to meet the needs of youth with varied levels of acuity
- **Continue to explore the need for additional types of residential models for step-down services from PRTFs or to meet lower levels of mental health needs.** As new criteria for PRTFs are developed and implemented and additional community-based services are developed, it will become clearer where there are unmet needs and gaps in the continuum of mental health services. The report highlights a number of options that can be considered, while also noting the importance of supporting innovation and creativity to find ways to best support the needs of youth in families that will be feasible in different areas of the state. In addition, as described in the report, additional work is needed with counties to determine the array of services for youth with mental health needs also served through the juvenile corrections or child protection system.

D. Continue efforts to increase the mental health workforce

Rationale: A strong continuum of care can only be implemented and effective with an adequate workforce. Current residential providers, experienced in working with youth who have complex needs, may need additional training and consultation to provide more intensive evidence-based therapies, particularly at a PRTF level of care. Payment rates also need to be set at a level where provider agencies can fully meet the individualized needs of youth and pay high enough wages to attract new employees. In addition, members of tribal nations who offered suggestions to improve the quality of services available to Native youth identified a need to increase the number of Native clinicians and therapists and suggested DHS could play a larger role in advertising open positions and supporting the tribes' efforts to expand their mental health workforce.

Minnesota does have a plan to improve and expand the mental health workforce in the state, which includes a number of key recommendations many which have yet to be fully implemented (HealthForce Minnesota & Minnesota State Colleges and Universities, 2015). The plan is intended to increase the number of qualified people working at all levels of the mental health system, ensure appropriate coursework and training, and create a more culturally diversity mental health workforce. Examples of recommendations to be implemented include:

- Increasing opportunities for higher-level mental health degree programs in rural areas of the state
- Expanding capacity to train family peer specialists, particularly from communities of color
- Creating funding support for mental health settings to provide students with practicum experience that includes clinical supervision
- Increasing awareness of loan forgiveness programs for mental health professionals

E. Develop the data framework needed to understand the needs of youth with mental illnesses and the effectiveness of services.

Rationale: Due in part to the bifurcated state-led and county-administered children's mental health system and fragmentation across child-serving systems, it is difficult to gather information to describe the needs of all youth with mental illnesses in the state and the effectiveness of the treatment services they receive. Lessons learned from other states demonstrate the importance of having the data tracking and monitoring infrastructure in place to understand the needs of youth and quickly identify and address any unintended consequences of changes to the continuum of care.

The following recommendations, informed by this study and the needs identified by local stakeholders, are ways to achieve this goal:

- **Establish the data framework needed to monitor PRTF implementation, system capacity, and key outcomes.** Data currently available through multiple systems can be better utilized to understand youth needs, patterns in service utilization, and overall service capacity. For example, while the CASII is used largely to determine level of service needs, a more robust analysis of its subcategories can help better describe the population of youth with intensive mental health needs. As PRTFs are implemented and capacity of other mental health services increases, it is critical to both monitor improvements and quickly identify and address any unintended consequences (e.g., changes in wait times leading to an increase emergency). If additional data are needed, ensure the time resources needed for data gathering and reporting are fully considered in provider rates and that DHS has the resources and capacity to use and share the information to support planning and performance improvement efforts.
- **Consider adding a FASD screening requirement when PRTF referrals are made.** There is currently very limited information about the number of youth who have Fetal Alcohol Spectrum Disorders (FASD) in the state, making it difficult to understand how to best meet the needs of this population. Although some screening does occur in the state, screening at a centralized point, such as when youth are referred to PRTF services, and ensuring referrals are made for a FASD diagnostic assessment are ways to begin to better understand the number of youth and families impacted by this disorder and how to better meet the needs of this population.
- **Revisit mental health screening processes and requirements to help ensure youth and their families receive the mental health services they need as early as possible.** Using opt-out, rather than opt-in, permissions for screening across all child-serving systems (e.g., juvenile corrections, child protection, education) is one way to more consistently identify youth who may have a mental illness and begin the process of working with families to complete a diagnostic assessment, which is often the first step needed for youth to access mental health services.

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Appendix

Case study: Connecticut

Case study: New Jersey

Case study: Oregon –Psychiatric Residential Treatment Facilities (PRTF) as part of a continuum of care

Case study: Wraparound Milwaukee

Case study: Oklahoma

Case study: Transformation to community-based services - A provider's perspective

Student Data Reporting System (SDRS): 2017 Residential Treatment Report

Youth served in residential settings: A county perspective

Local stakeholder engagement: Semi-structured interview guide

Intensive Mental Health Services Study Caregiver Interview Protocol

Case study: Connecticut

Summary of interviews conducted with: Tim Marshall, Director of Community Mental Health, Connecticut Department of Children and Families, and Jeff Vanderploeg, President and CEO of the Child Health and Development Institute (CHDI) of Connecticut and its parent organization the Children's Fund of Connecticut

Background

Multiple iterations of system reform, starting in the 1990s, have resulted in Connecticut having a predominantly community-based array of mental health services, including Wraparound, mobile crisis response, and intensive in-home services with a strong emphasis on the adoption of evidence-based practices (Trauma-Focused Cognitive Behavioral Therapy (TF-CBT); Cognitive Behavioral Intervention for Trauma in Schools (CBITS); Multisystemic Therapy (MST); Functional Family Therapy (FFT); Modular Approach to Therapy for Children: Anxiety, Depression, Trauma, and Conduct (MATCH-ADTC); and the Attachment, Regulation, and Competency (ARC) Framework).

Connecticut's behavioral health services is administered through the Department of Children and Families, but funded and managed in other parts of the public system as well. Prior to the state's reform efforts, Connecticut had allocated many of its financial resources for mental health services in residential treatment and had high levels of out-of-home placements, many of which were child welfare and juvenile justice-related. The director described that the system in place "built a highway" to residential services, both for intensive treatment and as a network of group homes for long-term care. However, without the community-based resources in place, there were no alternatives to residential placements for most youth in need of intensive mental health services. A number of key changes in Connecticut provide examples that may be relevant to system reform in Minnesota.

Shift to a community-based system

Connecticut began its reform efforts with goals of reducing the out-of-home placement rate in the state. After researching what had been done in other cities and states, they set goals for the system and began a series of difficult changes to shift culture and create a new vision for the state's children's mental health system. One of the most significant periods of change was in the mid-2000s when the state introduced a much more robust set of in-home and community-based services, including FFT and MST. Wraparound is used throughout the state and is the service, according to the state division director, most valued by families. The state has found improvement in outcomes when the model is implemented with fidelity. They also changed expectations around residential treatment and now focus on short (3-6 month) lengths of stay with transitions to intensive in-home family therapy. The changes have had a major impact on providers; with few exceptions,

the providers in place today have converted to, or diversified to provide, community-based services.

This has also been a major shift for families. Prior to reform efforts, family therapy and other interventions were not offered by residential providers. As a result, gains made by the child in the residential setting couldn't be maintained at home. The current philosophy of the state department is that residential placements offer families an opportunity for rest, and then, with the support of a Wraparound team, to build up the services and supports needed for in-home and community-based treatment to be effective. The state focuses on having the community-based system in place to help families respond to crises and changes in mental health symptoms and behaviors, rather than a residential system that is not set up in a way to integrate families in treatment.

Mobile crisis services

Through the state's Community Kid Care legislation, passed in the 1990s, there was an increase of mobile crisis teams across the state. However, each crisis team had its own toll-free phone number and there was wide variability in quality of services, including how often teams determined the need for a face-to-face visit, and hours of availability. To increase quality and improve access, the state created RFPs for six regional mobile crisis service providers and contracted with the state's 211 call center to take all crisis calls and ensure a warm transfer to the regional mobile crisis team. The state then contracted with CHDI to establish a Performance Improvement Center (PIC) that supports service quality and outcomes in mobile crisis through data analysis, reporting, quality improvement activities, and statewide training.

As a result, over 90 percent of calls to the crisis line result in an in-person visit, compared to approximately 50 percent before the changes occurred. In addition, they are able to respond to over 80 percent of calls within 45 minutes, with a median response time of 30 minutes. There is evidence that mobile crisis utilization results in reductions in emergency department use and the mobile crisis services has high levels of family satisfaction. The state considers mobile crisis response as a first entry point for many families and aims to "open the door wide" by responding to any concern or situation defined by the family or other referrers (e.g., school personnel) as a crisis. They also require crisis providers to do at least two community outreach presentations each month to help make sure that caregivers and professionals who work with families are aware of the service and how it can be accessed.

Workforce development

Connecticut has invested a high amount of resources into workforce training and adoption of evidence-based practices (EBPs). CHDI and other contractors work with the Department of Children and Families to provide ongoing learning collaborative models and quality assurance or improvement initiatives that support agencies to implement multiple EBPs. These contractors train community-based providers to deliver the service, and are also responsible for monitoring outcomes and determining when quality improvement is needed. According to CHDI, there is emerging evidence from thousands of families that indicates EBPs result in better outcomes than “treatment as usual” and that EBPs are more effective in closing treatment outcome gaps between white families and families of color.

Data infrastructure and technical assistance

CHDI’s mission is to improve health, mental health, and early care systems for children in Connecticut. In addition to their involvement in mobile crisis and multiple behavioral health EBPs, CHDI provides technical assistance to behavioral health and primary care providers; conducts evaluation, quality improvement, and outcome measurement; and supports policy changes, health care reform efforts, and system development and integration that results in more efficient and effective health care delivery for children. CHDI plays a critical role in supporting the implementation of EBPs across the state and monitoring child and system outcomes.

Financial sustainability

Connecticut invests heavily in its mental health infrastructure and works to optimize Medicaid reimbursement. Approximately \$12 million per year in state general dollars are invested into the state’s crisis response service providers; in addition, the call center and PIC receive approximately \$1 million to support the state’s infrastructure. Medicaid reimbursement is sought by providers, including crisis teams, and many of the state’s commercial plans also cover the cost of care. Similarly, the infrastructure to support the state’s intensive in-home services are supported through mental health block grant and state general dollars, with the cost of treatment being reimbursed through Medicaid. A caveat to the state’s sustainability model is that, as a fairly wealthy state on a per capita basis, Connecticut may be able to invest more than other states in its mental health system.

Challenges

- **Agency capacity.** EBPs, when implemented with fidelity, require considerable staff time and agency resources. Agencies need to consider whether they have the capacity to implement multiple EBPs.
- **Responding to crises.** There are families and advocates who argue that there is a shortage of residential placements and deep-end services in the state. The local NAMI affiliate shared that this is leading to an increase in emergency department use. From the state perspective, crises cannot be completely eliminated and, while difficult for families in the short-term, are responded to more effectively in the long-term with robust in-home with community-based services in place. Further, while mobile crisis and care coordination services can effectively reduce emergency department use, ongoing efforts are needed to increase awareness of these services and to ensure families, schools, and others are willing to utilize the services.
- **Responding to the needs of youth with autism.** Youth with behaviors and symptoms on the severe end of the autism spectrum need intensive ongoing services and supports, as autism is a life-long issue. The state is working with providers and schools to improve early identification and using Wraparound to help families anticipate and receive the support they need.

Key lessons learned, relevant to Minnesota

Connecticut's mental health system is organized very differently than in Minnesota. It is a centralized state-administered system with a Medicaid administrative service organization (ASO) managing care coordination and service utilization management, including authorization for residential treatment. The state had a very clear vision for what it wanted to achieve and strong leadership in place to implement significant changes. While Minnesota may not have the same overarching goals, there are lessons learned from Connecticut in building a more robust continuum of community-based services.

- Crisis response services, high-fidelity Wraparound, and intensive in-home services are critical, as without those, the community-based behavioral health system won't be strong enough to quickly support youth and families.
- It is critical to have the systems in place to monitor outcomes, support quality improvement, and understand the financial implications of changes to the system.
- Connecticut initially expanded its group home capacity to create small, local settings to support family involvement in treatment. While these are not an alternative to a community-based system of care, they may be a necessary step while a more robust set of in-home and community-based services are established.

- The necessary funding mechanisms, policies, and legislation need to be in place to ensure any cost savings from reductions in residential placements are reinvested into the expansion of community-based services.
- Connecticut has found that a benefit of implementing MATCH-ADTC is that it offers evidence-based strategies for four of the most common presenting conditions. In Minnesota, the Managing and Adapting Practice (MAP) model provides clinicians with a similar framework to identify effective treatment elements appropriate for a child's age and presenting conditions.

Case study: New Jersey

Summary from an interview conducted with Liz Manley, University of Maryland, former Assistant Commissioner for New Jersey's System of Care

Background

Reforms to improve children's mental health services in New Jersey began in the late 1990s, when the state had overburdened juvenile justice and child welfare systems, and very limited behavioral health services in place. Parents of children with mental health needs found that to access services, they needed an open child protection case or have involvement in the justice system. Knowing that services could be better, parents approached the governor and worked with state partners in the development of a concept paper that set a vision for a system centered on the needs of youth and families.

The first concept paper highlighted three core service components in that launched the state's initial reform efforts: not-for-profit care management organizations across the state responsible for providing Wraparound services and coordination for child and family teams; mobile crisis response services; and a family-run organization to provide parent and youth peer support. Over time, the state implemented these core components and developed an array of intensive in-home and residential services available to any youth receiving crisis response services or with a child and family team in place.

Role of child and family teams

When the child and family team recognizes that a child may need a residential intervention, the wrap facilitator leads the admission process. The family is able to have introductory meetings at multiple programs and choose the facility they feel is most appropriate; facilities are not able to refuse admission. Wraparound services stay in place while the child is in the residential intervention to maintain connections to home and familiar staff.

Mobile crisis response

New Jersey has developed a crisis response system that requires a face-to-face response within an hour. Crisis response services can be requested at any time the caregiver identifies the situation as a crisis. After recognizing that most youth in the child protection system weren't getting mental health services until after multiple placements, crisis response and stabilization services are now used whenever youth are placed in foster care. The state stresses the importance of the family's first experience with crisis response services and recognizes that if caregivers won't use the service, youth will be less likely to get the right level of care at the right time, resulting in higher costs to the state.

Residential intervention options

For youth who have needs greater than what can be provided in the community, New Jersey has developed a set of five residential options of varied intensities, and a range of in-home mental health services that can be provided within those settings. The array includes a flexible PRTF model called Psychiatric Community Homes that are clusters of 5-bed homes and central office. With this arrangement, they can avoid expensive zoning requirements and ensure that all youth have access to nursing and other required ancillary services. While there are a few residential providers that have larger programs, most of the residential options available in the state are smaller settings rates based on the intensity of services provided and specialization (e.g., treatment for co-occurring disorders). When specialized services are not available, the state will pay the cost of a community-based provider with specialized skills to provide treatment at the residential facility. Transitions to community-based care begin 45 days prior to discharge where youth begin to meet with community-based providers during time at home. The residential facility receives a different per diem rate during those days to cover the cost of room and board, so that the community-based provider receives reimbursement for treatment services.

Sustainability

As New Jersey underwent reform, they were intentional in fostering changes in practice by establishing payment rates for in-home therapy and residential services covered the full cost of care, including travel time and involvement in care teams. Best practices regarding family involvement in residential services were incorporated in to state-administered Requests for Proposals (RFPs) and care management organizations had contracts large enough and with flexibility for innovation. Data is collected and used regularly to measure changes in outcomes, service utilization, and capacity.

New Jersey is a Medicaid expansion state and has taken a number of steps to leverage Medicaid reimbursement for services. For example the state received a 1115 Medicaid waiver for youth with high levels of clinical need but that do not need financial criteria for Medicaid. Youth who meet the criteria are able to receive mental health treatment

services in residential setting or home, as long as the clinical need remains. The state created a Medicaid lookalike number so that providers can bill for services in the same way during lapses or changes in insurance. A state level behavioral health fund is used to ensure providers are reimbursed for providing the services youth need. Outcome data is used to ensure the investment of resources, such as the state decision to pay higher rates for skilled case managers to have smaller caseloads, adds value.

Challenges

- There are communities that have not been open to residential facilities being developing in their neighborhood. To address this issue, the state developed a brochure and materials to share with the mayor and city council. Over time, providers have been able to address concerns by pointing to their demonstrated history of providing high-quality residential services.
- With fewer youth now receiving residential services, providers need to respond to less demand by diversifying their array of services.
- There are times when there is disagreement about when discharge from residential facilities is appropriate. However, New Jersey has found that when an established child and family team is in place, discharge does not come as a surprise and the team plays an important role in negotiating the discharge date if they feel the child would benefit from additional treatment in a residential setting or additional time to ensure the necessary community-based services are in place.

Key lessons learned, relevant to Minnesota

In New Jersey's state-led and state-administered system, billing, contracting of providers, management of electronic health records, performance monitoring, and quality improvement, are all centralized. Rutgers University is also involved and provides training to parents, teachers, and other professionals on system of care values and children's mental health. Despite these differences, a number of strategies used in New Jersey and lessons learned through its reform efforts may be applicable to Minnesota.

Lessons learned, relevant to Minnesota:

- It is critical to have the systems in place to gather and analyze data needed to understand the population of youth served by the system, service outcomes, and cost. New Jersey's ability to demonstrate positive outcomes has helped them secure state funding on an ongoing basis.
- Over time, many residential providers have diversified their service lines to offer more community-based and in-home services. This has helped providers be nimble and adaptable to changes in the youth population and demand for services.

- There is value in piloting new service types locally, but the state needs to monitor outcomes and be willing to make course corrections while working to expand statewide.

Case study: Oregon –Psychiatric Residential Treatment Facilities (PRTF) as part of a continuum of care

Summary based on interview with Bob Lieberman, former CEO of Kairos through 2017, current chair of Outcomes Workgroup with the Building Bridges Initiative and co-editor of Residential Interventions of Children, Adolescents, and Families: A Best Practice Guide; Certified trainer in Collaborative Problem Solving and the Understanding ACEs curriculum.

Background

Kairos, located in southwest Oregon, became a PRTF provider in 1984. It began as an alternative to the children’s state hospital, and served youth within a 50-mile radius of the facility. Over several years, Kairos started to have a regional focus, working with youth and families from a 5-county area, and eventually became a statewide resource.

In Oregon, over a similar time frame, Behavioral Residential Services (BRS, Oregon’s residential rehabilitation service) were also developed, but the two types (PRTF and BRS) did not become part of an integrated statewide continuum. The PRTF providers in the state worked to establish service delivery and outcome benchmarks to support quality improvement. They received higher rates, and provided a higher intensity service than BRS treatment centers. Although the two service lines did work with similar populations of youth, the PRTF young people were generally experiencing higher levels of acuity. A number of community-based programs were developed and there was some specialization of services across providers, such as working with medically-fragile youth. While changes happened regionally, especially in response to legislatively incentivized pilot projects to integrate intensive treatment services with community services in a managed care environment, Oregon never fully created a coordinated statewide continuum of care.

Changes in Kairos’ treatment approach

Starting in 1999, Kairos made a number of changes in its treatment model and staff practices, toward family-driven and youth-guided services. With intention, they became family- and community-focused, which helped them more holistically understand and address the needs of youth in the context of their family. They began to see themselves as part of the child’s community, no matter the physical distance from the facility to the child’s home. They built a family unit where families could stay while their child was receiving services. They also challenged themselves to think about all the ways that they can connect with families and broadened their definition of family to extend beyond parents, to help youth build and maintain connections with extended family, when needed.

While continuing to have a primary focus on creating connections with family, Kairos staff received training on neuroscience and brain development. This helped their staff understand youth behavior as a response to the stresses and traumas they had experienced historically as well as currently, and thereby understand why changes to their treatment model would better meet the needs of youth.

Pilot projects to expand community-based services

Kairos developed and piloted innovative models, intended to further enhance effective community-based services. It implemented a pilot project in response to a legislative authorizing budget note, through which it extended residential services into home and community settings in what was essentially a case rate model. Kairos negotiated a single per diem rate for youth, with the flexibility to determine whether residential or home/community-based services were needed. Sometimes these decisions were made immediately in response to pressing clinical indications, with the family as the driver.

According to the former CEO, this project had significant success, yielding improvement in functional outcomes as measured by the CAFAS, statistically significant improvement in experience of care, as measured by the YSS and YSS-F, and a cost savings of approximately \$630,000 over three years for the project, with the capacity to serve 21 youth. However, the program was discontinued because new leadership of the payor organization preferred categorical utilization management processes and decisions, and the accompanying fee for service rate methodologies. As a result, the youth being served by Kairos in the community at that time were required to be served in the residential program, regardless of progress. Kairos elected to continue to grandfather the youth then in service, by serving some youth at home without reimbursement, in the best interest of the child and family until they transitioned to other levels of service.

Kairos later developed a “virtual residential” program, similar to the CIBS model being used in some Minnesota counties, where the provider worked with youth in their homes and in partnership with the Wraparound team when a residential intervention was being considered. If a residential intervention was needed, the same team would stay in place, with the Wraparound coordinator having a lead planning and coordination role, throughout treatment and following discharge. While the service showed positive outcomes, changes in local leadership resulted in confusion in implementation. Without state leadership to establish clear expectations for the local managed care organizations managing the benefit along with stable alternative payment methodologies, it was not sustainable.

Adoption of Wraparound

Wraparound has been in place in Oregon for over a decade and helps support the transition between residential and community based services. The Oregon Wraparound Initiative began with an executive order. The initial intent of the order was to direct agencies to braid and blend funding across systems to support services at the local (county or region) level, but it evolved into a direction to establish the Oregon Wraparound Initiative, which eventually matriculated into state statute. Wraparound didn't begin with a high fidelity model, but did adhere to the same principles of care coordination and family-driven care. The state created a Wraparound billing code in its Medicaid benefit set that could be used by facilitators employed by community mental health centers and programs. For the Kairos PRTF, the time and resources for their involvement in the Wraparound process was reflected in its per diem billing rate. While it didn't bill for care coordination services, it did closely track and monitor how staff time was spent and what contributed to improvements in youth outcomes.

Broader reflections on best practices in residential settings. The Building Bridges Initiative engages residential providers and state administrators nationally to encourage the adoption of best practices reflective of current research. While there is no single, perfect model for residential services in a continuum of care, a number of takeaways have relevance to Minnesota.

Partnering with providers during periods of change

Over the last two decades, there has been a proliferation of research describing the impact of adverse childhood experiences (ACEs) and advancing knowledge in the field about the neuroscience of brain development in response to trauma and stress. This has introduced new frames for understanding behavior and has led to new treatment models and a much clearer understanding of the importance of youth connection to caregivers. While change can be mandated and fostered by training, it has been Mr. Lieberman's experience that innovation occurs optimally when providers are involved in the co-creation of new or enhanced services. A starting point is to have a shared vision for success and goals for the system, focused on outcomes and the experience of youth and families in the continuum of care. When there are clear, shared goals, innovation and change can happen at multiple places to improve quality, outcomes, and experience. While changes under Families First are likely to have an impact on payment for some residential services, the change could be a business opportunity for innovative residential providers to expand their services into a broader array of community-based and in-home options.

Implementing PRTF level of service

There are a number of ways that PRTFs or any residential setting can be developed to better integrate best practices in residential interventions and best meet the needs for youth and families. Some factors for the state and providers to consider, include:

- Flexibility in the development of licensing rules. Nursing services, for example, do not need to be available on-site 24/7 for the majority of youth, but need to be accessible at all times. Different rates could be offered for facilities with on-site nursing and better equipped to meet the needs of youth with complex medical conditions.
- Integration of hired family and youth peer support specialists into the treatment model during a residential intervention and following discharge.
- Through rates and training, incentivizing providers to develop the specialization needed at a PRTF level to support youth who exhibit aggressive behaviors and who are, as a result, at high risk for or already involved with the juvenile justice system.
- Establish medical necessity criteria broad enough to not restrict access to such youth as well as those in need of intensive mental health treatment.

Funding mechanisms

Optimally, payment for services should incentivize outcomes, rather than paying for services. However, it is difficult to shift systems and payors to that type of model. Some states, including Oregon, have experienced problems when Managed Care Organizations (MCOs) have been too rigid in their definition of medical necessity and concomitant admissions criteria or appeared focused on cost savings, resulting in limited access to the right level of service and youth not being well-served. There are a number of things that can be considered:

- **Reimbursement rates that reflect the true cost of care.** It is critical that negotiated payment rates reflect the true cost of care for all the services and supports that support best practices for residential providers. This not only includes the resources needed to provide direct treatment and services, but also time to engage with families and provide in-home family therapy, coordination with community-based providers, participation in care coordination meetings, administrative costs, including the tracking and reporting of data, the costs associated with maintaining on-call staff, and staff training.
- **Medicaid waivers.** In situations where specialized services may need to be developed for youth with complex behaviors, legislative action and, potentially, Medicaid waivers can offer funding mechanisms to develop programs and establish standards that apply to a specific youth population.

- **Blended rates.** Kairos' PRTF had a secure unit and the ability to provide services at more than one treatment level. Initially, they needed authorization from the health plan to transfer youth between units. Over time, and with trust established, Kairos developed protocols for their own clinical staff to make that determination and negotiated a single, blended rate with the health plans rather than separate rates for each level of service. This allowed Kairos to be more responsive to changes in acuity and reduced administrative time and costs for both the facility and the health plan. By contract, concurrent and retrospective utilization review needed to validate such decisions.

Current challenges

More recently, Oregon has struggled to find and maintain the right balance of residential and community-based services necessary to meet the needs of youth with mental illnesses statewide. They currently have a growing number of youth with complex mental health needs being sent out of state for services, and have had difficulty finding foster homes for youth served through their child welfare system. While the issues contributing to this are complex, it underlines the importance of statewide tracking and monitoring and the challenges of maintaining the capacity, including workforce, necessary to meet the needs of youth the most intensive mental health needs.

Key lessons learned, relevant to Minnesota

Both Kairos' experience in Oregon and the lessons learned from providers nationally highlight some important considerations for Minnesota.

- PRTFs can be implemented with more flexible licensing standards than initially adopted in Minnesota. Specialized services or higher intensity services can be supported with higher payment rates.
- While residential interventions are an important part of the continuum of services, it is just as important -- arguably more important -- to develop a broader and stronger array of intensive in-home and community-based services. Residential providers can play a unique role by developing a wider array of programs and services to optimize reimbursement and support youth in crisis or when transitioning from residential services.
- Developing clear system-level goals, agreed upon by state administrators, providers, and payors, are important for driving change and avoiding unintended negative outcomes.

Case study: Wraparound Milwaukee

Interview with Bruce Kamradt, administrator of Children's Mental Health Services for Milwaukee County and director of Wraparound Milwaukee.

Wraparound Milwaukee began in 1994 as one of the first recipients of a System of Care award. They focused on youth served by the juvenile justice, child protection, or mental health systems; an intentional aspect of their approach focused on breaking down barriers to collaboration across these child-serving systems. Their work began with concerns that the county had too many youth receiving high-intensity, high-cost residential treatment services that were not effective. At that point, more than half of youth who received residential care were back in the same level of placement within six months of discharge. There were also concerns about youth having long stays in psychiatric hospitals. While Wraparound Milwaukee's locally-driven, multi-sector approach to improve children's mental health services may not be a template for Minnesota to follow, a number of the strategies they used and lessons learned from their work may be relevant to Minnesota.

Start small and expand

The Wraparound Milwaukee project began with a focused demonstration project. They identified 25 kids in residential treatment without any immediate plans for discharge and committed to finding ways to help kids transition to community-based services at equal or less cost without compromising safety. Within 3 weeks, the youth were identified and within 4 months, 17 of the 25 kids were living in their homes. Seeing promising outcomes, they moved into full implementation. Wraparound Milwaukee needed to make multiple changes simultaneously to reduce the length of residential placements and build its array of community-based services. In addition to Wraparound, the system created a mobile crisis response system, a provider network that grew to include 70 services, and peer support services. This expansion required a high investment of resources, which came as system partners, Child Welfare, Juvenile Justice, and Mental Health pooled financial resources to create a system of care.

Care coordination

Wraparound is the foundational service for providing individualized, highly-flexible services to youth and their families. Over time, Wraparound Milwaukee contracted with eight agencies to provide care coordination services, which included three residential treatment providers. All care coordinators have small caseloads of eight families and are cross-trained to understand mental health, child welfare, and juvenile justice systems. Agencies have flexibility in how they provide the service and receive incentives for better youth outcomes. The position was designed to require a bachelor's degree; the agencies look for care coordinators who embrace the concept of family-driven services. Care Coordinators are trained and oriented to understand and work collaboratively with other child serving systems.

Facilitating child and family teams that can access whatever clinical and supportive services that are needed, care coordinators have the tools to work with families with the most complex needs.

Residential placements as stabilization

Wraparound Milwaukee sees residential placements as short-term stabilization interventions. Youth who need residential interventions are authorized for an initial 30 days of service and progress is monitored on a weekly basis. With these changes, care coordination, and a more robust set of community-based services, the average length of stay in residential settings decreased from 14 to 4 months. The overall number of youth receiving residential interventions have also decreased. An underlying premise of the system is that residential placements are only used to provide services that can't be offered in a community-based setting. At the onset of the initiative, Wraparound Milwaukee worked closely with the 16 residential treatment directors to think creatively about ways to strengthen community-based services available to support youth and their families in-home. As a result of moving from a milieu-focused philosophy of care to one that emphasizes individualized community-based treatment, a number of agencies began to provide care coordination services, mentoring, and in-home services. There is still some need for residential services, although much less than before. For example, they have established a number of professional foster homes for adolescent girls who have a history of running away. They do have a small number of youth (approximately 40) who have needs that cannot be well-met by the services available and who receive services out of state.

Financial sustainability

Wraparound Milwaukee has established a pooled funding model. Monies from Child Welfare, Juvenile Justice, and Medicaid are pooled through case rate and capitation strategies to create flexibility so that monies follow the needs of the child and family. Cost savings from reductions in the use of residential treatment, juvenile correctional care, and psychiatric inpatient care form much of the basis for these pooled financial resources.

For the initial pilot, funds from the federal System of Care grant along with Medicaid savings from reduced psychiatric inpatient use paid for necessary services for any of the 25 Youth in pilot. Once successful, Wraparound Milwaukee negotiated the case rates with Child Welfare and Juvenile Justice and a capitation rate with Medicaid that now sustain an average enrollment of over 1,400 families.

Eligibility for enrollment in Wraparound Milwaukee, which is now its own managed care entity under the County's Mental Health Authority, requires that a youth meet criteria for severe emotional disturbance. This requires a DSM-5 diagnosis, involvement in two or

more child-serving systems, and immediate risk of residential treatment, psychiatric hospitalization, or juvenile correctional placement.

Wraparound Milwaukee also became the single payer of all care for the youth other than physical health needs, including the cost of institutional care and all community-based services. This allowed them to more closely manage the care of each child and establish performance expectations. With financial incentives in place and a much more robust array of community-based services, the overall number of youth in residential treatment, juvenile correctional, and psychiatric hospitals has significantly decreased. The Director estimates that, based on projections that assume an increased use of residential treatment services would have occurred over the past 20 years if Wraparound Milwaukee had not been created, expenditures by these systems would have been \$50 million higher annually.

Wraparound Milwaukee has placed a strong emphasis on eliminating barriers across child-serving systems, pooling funding, establishing a strong, comprehensive and integrated system of services and providers to create a true system of care for all children with serious emotional and mental health needs and their families. The story of the system's evolution includes some helpful lessons learned about expanding community-based services.

Key lessons learned, relevant to Minnesota

- Wraparound (or other care coordination approaches) are critical for ensuring youth and families can access the community-based and in-home services and supports they need.
- Multiple changes need to occur simultaneously to create the array of community-based services needed to reduce reliance on residential placements and ensure youth can access intensive in-home and community-based services.
- By pooling funds across multiple systems and centralizing how those funds are administered, Wraparound Milwaukee was also able to clearly monitor service utilization and cost savings. A different mechanism would need to be developed in Minnesota to track service utilization and financial expenditures across child-serving systems.
- Residential providers have experience working with youth who need intensive mental health services and should be partners in considering creative ways to provide community-based and in-home services.

Case study: Oklahoma

Summary based on interview with Shaemekah Williams, Senior Director - OKSOC (Oklahoma System of Care), Oklahoma Department of Mental Health and Substance Abuse Services

Background

Oklahoma has been a SAMHSA System of Care grantee since 2001. Initially, the grants were used to build state infrastructure to support adoption of Wraparound and evidence-based practices. Some of this infrastructure includes a network for ongoing training, including coaches to train Wraparound coordinators, and cultural competence and youth engagement specialists who work with providers. Over time, they have expanded the availability of services across the state and developed a strong mobile crisis treatment and stabilization network. These services are supported with multiple funding streams including Medicaid reimbursement, federal grants, and state funds.

Adoption of Wraparound

Wraparound began with a grant in a single county in 2001 and slowly expanded until it was ultimately adopted statewide. Oklahoma has been intentional in its efforts to create codes to fully document the time needed by coordinators and providers to adopt Wraparound and to evaluate the fidelity and outcomes. As a result, they have been able to both expand across all counties and secure ongoing state funding. Today, the state's legislature allocates approximately \$15 million annually to pay for services that are not reimbursable through Medicaid. This includes the full cost of Wraparound, including telephone contacts, family outreach, time for involvement of multiple providers, data collection for evaluation, and transportation costs.

The state has also developed an infrastructure to support ongoing Wraparound training, evaluation, and learning. The state has worked in partnership with the University of Oklahoma Outreach to design and implement training, technical assistance, and an evaluation of Wraparound. This has helped ensure that state administrators, county leaders, and wraparound facilitators have access to real-time information. In 2016, a number of online eLearning modules were developed to support training and technical assistance, which can be used by providers to meeting their Continuing Education Units (CEUs) requirements.

Mobile crisis response in the continuum of care

Oklahoma has developed a strong mobile crisis response network. When a call is made to the statewide crisis number, a crisis team is deployed immediately if the family is experiencing a crisis where safety is at risk or within 24 hours if the crisis is less urgent. In rural areas, where there are fewer mental health professionals and an immediate face-to-face visit with a crisis team is more logistically challenging, telehealth is often used in partnership with hospitals, police departments, and other first responders. In some situations, telehealth is used so that the mental health professional can begin an assessment and help determine what is most needed to meet the needs of the youth in crisis. In some situations, particularly when youth are leaving an emergency department or discharged from an inpatient setting, families will receive an iPad to help ensure they receive ongoing support at home. While it took some time to work with providers so that they were comfortable with telehealth, they have found that families do like the intervention.

As in other states, families can call the crisis line whenever they feel a situation is escalating into a crisis. Initially, most crisis calls were made at the point when families felt their child needed to be hospitalized. Over time, and with a mobile crisis response network in place that families trust, more work is being done in the home to try to avoid the need for more intensive care. The state has also invested resources into training first responders and staff in child-serving systems to better recognize and respond to youth in crisis. This has helped a growing number of professionals understand running away, truancy, and youth behavior as a potential indication that a mental health intervention is needed.

The state's mobile crisis response service is a critical component of the continuum of care. There are outpatient mental health services in the state, and Wraparound and day treatment services are considered to be the two most intensive community-based services available to youth. Oklahoma has implemented Community-Based Authorization (CBA), which allows mobile crisis teams to authorize the need for acute inpatient services (up to 7 days) or longer-term residential services. The state's acute inpatient services are intended to provide crisis stabilization services while two levels of service intensity are provided through the state's PRTFs. As members of the Wraparound team, the child's mobile crisis team is involved in determining when the child is ready for discharge and ensuring the services and supports are in place at home.

Key lessons learned, relevant to Minnesota

The lessons learned by Oklahoma are relevant to Minnesota in a number of ways, particularly as the state begins to pilot Wraparound through its System of Care expansion grant:

- Communication and clarity on the problems that need to be solved are critical for improving services and changing systems to support the needs of youth and families.
- Routine meetings at multiple levels (e.g., state, county, providers) where outcome data are presented and discussed have been helpful for identifying how to improve service quality.
- The state's system of care director has found it is helpful to take time to learn from what is happening in other parts of the country; starting with a completely clean slate can present problems.

Case study: Transformation to community-based services - A provider's perspective

Summary based on interview conducted with Cathy Connolly, President of St. Charles Youth & Family Services

Background

St. Charles Home for Boys (St. Charles) is a large residential treatment facility for boys with emotional disturbances and behavioral concerns. St. Charles had an established treatment model that they felt was effective and had reduced their average length of stay to approximately one year as Wraparound Milwaukee started.

Under Wraparound Milwaukee, new policies that included a shorter (30-day) initial approval and required approvals for any requests for additional services, shortened the average length of stay to approximately four months. As it became clearer that Wraparound was going to remain and be the driving philosophy for care, the leadership and board from St. Charles realized that for the agency to be in the community for the long term, they needed to change their approach.

Transformation from residential to community-based services

According to the agency's president, transitioning to a family-driven, community-based approach required a lot of changes. They did a complete overhaul of their organization, including its mission, internal and external image, and name. Through these changes, the agency saw itself less as the facility and the services they offer, and instead focused on kids and ways they can support kids and families in the community.

During the transition period, staff were anxious about their own future, the agency's financial sustainability, and whether the needs of youth and families could be met with home and community-based services. To help staff navigate changes, the agency's leadership held weekly meetings with staff to not only provide training, but to engage staff in creating a vision about the types of community-based services and supports they could offer, and how their current jobs could look different with new services in place. This work, which created space for staff to talk about their concerns, was critical and resulted in openness to new service options and learning new skills. At an agency- and system-level, St. Charles' leaders found Wraparound Milwaukee to be proactive in sharing information and open to creative ideas from the agency, all while maintaining a clear vision for the future.

After a year-long planning and visioning process, they began implementing changes. The president described the transition period as "painful," but through that process, they made some key realizations about their work:

- After receiving Wraparound training, they realized their agency was not as strengths-focused and family-driven as they had considered themselves to be. For example, some practices (e.g., point systems to reward behavior) were outdated and needed to be changed. Staff realized that the rules they created to maintain safety and order in the family were at odds with individualized care. The Wraparound coordinators were strong advocates for youth and families, and were able to point out changes in practice or policy that could better support the needs of an individual child.
- New performance and quality standards developed by the initiative brought attention to changes they needed to make. Prior to Wraparound Milwaukee, St. Charles evaluated its own work on metrics they determined. As Wraparound created standards that all providers were measured against, St. Charles made a number of changes, such as finding ways to help youth connect to informal supports in community.
- They needed to make changes to their workforce. Prior to Wraparound Milwaukee, we needed to have residential staff who could run units and work consistent shifts. As they provided more community-based services, they needed staff who wanted more flexibility in scheduling and were willing to go into family homes.
- Shifting to a community-based service model adds significant financial pressure. St. Charles had predictable revenue and expenses with their residential model. As their services evolved, children had shorter residential stays and more of the agency's revenue needed to come through reimbursement for community- and in-home services. This required a different type of engagement with youth and families.

After the transition period from a residential- to community-based provider, the agency looked notably different. Rather than providing one service (residential treatment), they provided 20 services including Day Treatment, intensive in-home, Wraparound care coordination, mentoring, supportive employment, and a limited amount of residential

services. Over time, they had five times the number of staff and four times the amount of annual revenue.

Financial sustainability through change

While St. Charles likely experienced more growth than other residential providers, the agency president thought that most providers were able to evolve and adapt to Wraparound Milwaukee's community-based system of care. Organizations that closed tended to be small or providers unwilling to change. The agency was supported through its evolution by Wraparound Milwaukee's openness to create new types of services and establish grants or other funding mechanisms. The president also noted that St. Charles had a forward-thinking board of directors and a small trust that they were able to draw from when developing new community-based services.

Association role

The provider association's role in the transition changed over time. Initially, they were focused on supporting and being advocates for the agencies; in some ways working to oppose changes underway. Over time, the association helped organizations come together and learn from one another. However, there is greater competition between providers with common ratings and needing to compete for services and when responding to RFPs.

Student Data Reporting System (SDRS): 2017 Residential Treatment Report

Analyzed by the Center for Advanced Studies in Child Welfare (CASCW) for AspireMN

Summary from an interview conducted with Liz Manley, University of Maryland, former Assistant Commissioner for New Jersey's System of Care

Some information about children in residential services was provided by AspireMN (formerly known as the Minnesota Council of Child Caring Agencies). AspireMN is an association of private agencies located throughout Minnesota. These agencies provide an array of out-of-home and community-based services for children, adolescents, and families. AspireMN providers submit information at intake, discharge, and six months following discharge for youth served at their facility. In 2017, information was provided from Avanti; Bar None, Children's Residential Treatment Center; Gerard; the Leo A. Hoffmann Center; Northwood Children's Services; St. Joseph's Home for Children; and Woodland Hills.

Demographic and descriptive data were available for 280 youth admitted to these facilities in 2017, representing a subset of all youth who received services this year (Figures 1-7). While these data do not represent the experiences of all youth, they do offer a snapshot of

the needs of youth receiving residential treatment services in 2017, as well as their living situation prior to placement. This is one of multiple sources of information that, together, can describe the needs of youth receiving intensive mental health services in residential treatment centers.

Discharge data were available for 255 youth who completed treatment or were otherwise discharged from the same participating facilities in 2017. This information demonstrates that most youth (81%) successfully completed the program (Figure 8). The length of stay for all youth ranged from 17 to 1150 days, with an average (mean) stay of 289 days. Thirty percent of youth had stays of one year or longer (Figure 9).

AspireMN also attempts to collect **satisfaction data** from all youth discharged from residential treatment and their parent or other caregiving professional. This satisfaction survey and use of a six-month follow up survey is an important attempt to capture the voices of these critical stakeholders and a best practice in residential services. In 2017, results were only available for 95 youth and 66 adults, and because these data are not linked to demographic or discharge data, it is not clear who may be underrepresented in the group of stakeholders that did provide feedback. Because of these limitations, these data are not included in the summary.

Data for all youth admitted to participating residential treatment centers

A1. Demographic background for youth admitted to residential treatment centers (N=280)

Response	Frequency	Percent
Gender		
Male	179	64%
Female	99	35%
Missing	2	1%
Race		
White	179	64%
Black	32	11%
Native American	23	8%
Eskimo-Aleutian	0	0%
Asian-Pacific Islander	1	<1%
Other	7	2%
2 Races Indicated	37	13%
Missing	1	<1%
Ethnicity		
Hispanic	22	8%
Hmong	0	0%
Somali	1	<1%
Not Indicated	257	92%
Age		
10 or younger	56	20%
11-12	49	18%
13-14	71	25%
15-16	84	30%
17-18	17	6%
Missing	3	1%

Note. Youth age at the time of intake ranged from 6-18, with an average of 13.

A2. Residential setting prior to intake (N=280)

Response	Frequency	Percent
Parent/Adoptive home	121	43%
Pre-adoptive placement	1	<1%
Relative/Extended family	21	8%
Foster care/Home	13	5%
Group home	9	3%
Shelter	11	4%
Residential treatment program	29	10%
Inpatient psychiatric facility	42	15%
Correctional facility	4	1%
Detention	18	6%
Other	3	1%
Frequency missing	8	3%

A3. Presenting problems at intake (N=280)

Presenting problem	Often true	Sometimes true	Not true	Unknown	Not applicable	Missing
Chemical use/abuse (alcohol or drugs)	31 (11%)	23 (8%)	214 (76%)	5 (1.8%)	5 (2%)	2 (1%)
Communication disorder (e.g., nonverbal/unable to communicate)	7 (3%)	13 (5%)	250 (89%)	2 (1%)	5 (2%)	3 (1%)
Compulsive, repeats certain acts over and over	60 (21%)	33 (12%)	181 (65%)	3 (1%)	1 (<1%)	2 (1%)
Cruel to animals	36 (13%)	23 (8%)	210 (75%)	7 (3%)	3 (1%)	1 (<1%)
Depressed, sad, or unhappy	194 (69%)	40 (14%)	31 (15%)	2 (1%)	2 (1%)	1 (<1%)
Disobedient, oppositional	214 (76%)	37 (13%)	22 (8%)	5 (2%)	1 (<1%)	1 (<1%)
Eating disorder, bulimia, anorexia	19 (7%)	4 (1%)	251 (90%)	3 (1%)	2 (1%)	1 (<1%)
Fights or physically attacks people	129 (46%)	61 (22%)	87 (31%)	1 (<1%)	1 (<1%)	1 (<1%)
Fire setting	11 (4%)	17 (6%)	244 (87%)	4 (1%)	3 (1%)	1 (<1%)
Guiltless after misbehaving	98 (35%)	53 (19%)	123 (44%)	4 (1%)	1 (<1%)	1 (<1%)

Note. Youth may have multiple presenting problems

A3. Presenting problems at intake (N=280) (continued)

Presenting problem	Often true	Sometimes true	Not true	Unknown	Not applicable	Missing
Hyperactive, restless, can't sit still	137 (49%)	42 (15%)	99 (35%)	1 (<1%)	0 (0%)	1 (<1%)
Impulsive, acts without thinking	222 (79%)	29 (10%)	24 (9%)	4 (1%)	0 (0%)	1 (<1%)
Loss or grief suffering	68 (24%)	40 (14%)	161 (58%)	7 (3%)	3 (1%)	1 (<1%)
Lying or cheating	129 (46%)	52 (19%)	95 (34%)	2 (1%)	1 (<1%)	1 (<1%)
Messes pants, encopretic	6 (2%)	10 (4%)	257 (92%)	1 (<1%)	4 (1%)	2 (1%)
Parent/parent figure relationship difficulty	178 (64%)	45 (16%)	51 (18%)	2 (1%)	3 (1%)	1 (<1%)
Peers/others own age relationship difficulty	185 (66%)	47 (17%)	45 (16%)	2 (1%)	0 (0%)	1 (<1%)
Phobias, unreasonable fears	39 (14%)	23 (8%)	214 (75%)	2 (1%)	1 (<1%)	1 (<1%)
Prostitution or pimping	2 (1%)	1 (<1%)	266 (95%)	6 (2%)	3 (1%)	2 (1%)
Runs away	81 (29%)	47 (17%)	146 (52%)	3 (1%)	2 (1%)	1 (<1%)
Self-mutilating, head banging, scratching, hair pulling	110 (39%)	45 (16%)	118 (42%)	3 (1%)	2 (1%)	2 (1%)
Self-esteem problems	151 (54%)	50 (18%)	74 (26%)	3 (1%)	1 (<1%)	1 (<1%)
Sexually assaultive, molesting	17 (6%)	28 (10%)	229 (82%)	3 (1%)	2 (1%)	1 (<1%)
Sexual problems, behaviors, sexual identity (other than sexually assaultive)	44 (16%)	27 (10%)	206 (74%)	1 (<1%)	1 (<1%)	1 (<1%)
Sibling(s) relationship difficulty	112 (40%)	44 (16%)	113 (40%)	5 (2%)	5 (2%)	1 (<1%)
Sleeping problems	88 (31%)	36 (13%)	148 (53%)	4 (1%)	3 (1%)	1 (<1%)
Smears or plays with bowel movements	3 (1%)	5 (2%)	266 (95%)	1 (<1%)	4 (1%)	1 (<1%)
Stealing	85 (30%)	43 (15%)	141 (50%)	7 (3%)	3 (1%)	1 (<1%)
Stubborn, sullen, irritable	163 (58%)	57 (20%)	56 (20%)	2 (1%)	1 (<1%)	1 (<1%)

Note. Youth may have multiple presenting problems

A3. Presenting problems at intake (N=280) (continued)

Presenting problem	Often true	Sometimes true	Not true	Unknown	Not applicable	Missing
Suicidal thoughts or behaviors	128 (46%)	55 (20%)	93 (33%)	1 (<1%)	2 (1%)	1 (<1%)
Vandalism, destroys property	95 (34%)	55 (20%)	126 (45%)	2 (1%)	1 (<1%)	1 (<1%)
Verbal tantrums	164 (59%)	42 (15%)	69 (25%)	3 (1%)	0 (0%)	2 (1%)
Verbally abusive, threatens people	155 (55%)	48 (17%)	73 (26%)	3 (1%)	0 (0%)	1 (<1%)
Wets bed or wets during day, enuretic	25 (9%)	14 (5%)	236 (84%)	2 (1%)	2 (1%)	1 (<1%)
Younger acting than own age	89 (32%)	33 (12%)	151 (54%)	6 (2%)	0 (0%)	1 (<1%)
Gang involvement	4 (1%)	2 (1%)	262 (94%)	8 (3%)	3 (1%)	1 (<1%)
Other	5 (2%)	0 (0%)	248 (89%)	1 (<1%)	2 (1%)	24 (9%)

Note. Youth may have multiple presenting problems

A4. Suspected or documented abuse or neglect prior to intake (N=280)

	No	Suspected	Documented	Unknown	Missing
Emotional abuse/neglect	124 (44%)	24 (9%)	106 (38%)	15 (5%)	11 (4%)
Physical abuse	122 (44%)	20 (7%)	109 (39%)	17 (6%)	12 (4%)
Physical neglect	128 (46%)	18 (6%)	103 (37%)	19 (7%)	12 (4%)
Sexual abuse	126 (45%)	29 (10%)	87 (31%)	28 (10%)	10 (4%)

A5. Primary source of per diem support (N=280)

Response	Frequency	Percent
County	218	78%
Private Insurance	37	13%
Frequency Missing	8	3%
Parent(s)	7	3%
State	6	2%
School	2	1%
Indian Funds	1	<1%
Other	1	<1%
Consolidated Fd.	0	0%

A6. Court-ordered placements (N=270)

Response	Frequency	Percent
	68	25%

A7. Number and type of previous placements (N=280)

Placement setting	Number of previous placements						Average number of placements
	0	1	2	3	4	5+	
Relatives/extended family	245 (88%)	24 (9%)	6 (2%)	3 (1%)	0 (0%)	2 (1%)	0.2
Foster care	212 (76%)	39 (14%)	10 (4%)	12 (4%)	2 (1%)	5 (2%)	0.4
Group home	259 (93%)	12 (4%)	4 (1%)	3 (1%)	2 (1%)	0 (0%)	0.1
Shelter/shelter foster care	230 (82%)	38 (14%)	9 (3%)	1 (<1%)	1 (<1%)	1 (<1%)	0.2
Residential treatment facility	175 (63%)	79 (28%)	16 (6%)	3 (1%)	4 (1%)	3 (1%)	1.3
Inpatient psychiatric facility/hospital	128 (46%)	45 (16%)	33 (12%)	25 (9%)	15 (5%)	15 (5%)	1.7
Chemical dependency treatment program	271 (97%)	5 (2%)	1 (<1%)	2 (1%)	0 (0%)	1 (<1%)	0.1
Correctional facility	275 (98%)	4 (1%)	1 (<1%)	0 (0%)	0 (0%)	0 (0%)	0.02
Detention	257 (92%)	17 (6%)	4 (1%)	1 (0.4%)	1 (<1%)	0 (0%)	0.11
Other	270 (96%)	9 (3%)	1 (<1%)	0 (0%)	0 (0%)	0 (0%)	0.04

Data for all youth discharged from participating residential treatment centers (2017)

A8. Youth completing program (N=255)

Response	Frequency	Percent
Youth completed program	207	81%

Note. Reasons for unsuccessful program completion vary, but can include: discharge to a more intensive level of service; behaviors that put the child or peers at risk; failure to make ongoing progress towards treatment goals; or a decision made by the child's guardian or entity funding the service to discontinue treatment.

A9. Length of care (days in program) (N=249)

Number of days in program	Frequency	Percent
0-90 days	41	16%
91-180 days	43	17%
181-270 days	43	17%
271-360 days	45	18%
361-450 days	35	14%
451-540 days	15	6%
541-630 days	6	2%
631-720 days	13	5%
721-810 days	5	2%
More than 810	3	1%

Note. Length of stay information was missing for 6 youth. Length of stay ranged from 17-1150 days, with an average of 289 days.

Youth served in residential settings: A county perspective

To better understand the role that counties play in financing residential treatment services other out-of-home placements, counts of youth who received services in these settings and cost information was requested from county social service departments. The project team worked with the Minnesota Association of County Social Services Administrators (MACSSA) to administer the form.

There are limitations to the data presented. Counties were asked to report information for all youth who received intensive mental health services in 2017 from a Rule 5 setting. Not all counties had cost data available, and there may be variability in how counties defined the population of youth with intensive mental health needs when determining which youth to include in their counts of youth served. Despite limitations, this information helps bring attention to the needs of a broader group of youth involved in multiple child-serving systems (mental health, child protection, and juvenile corrections) with varied mental health needs.

Youth in residential placements

A total of 60 counties submitted information about youth who received intensive mental health services in Rule 5 settings during calendar year 2017. These counties reported, a total of 997 youth received services in one of multiple Rule 5 settings during calendar year 2017. These settings include children’s residential treatment centers, as well as juvenile corrections settings where mental health services are provided. Over 150 of these placements were at out-of-state facilities. While a few counties noted that residential treatment options in other states were closer in proximity for families in their county, most felt that in-state residential services were preferable. County staff had most difficulty identifying in-state residential options for youth who displayed aggressive behavior, sexualized behavior, had lower cognitive functioning, or who were at high risk of suicide. Based on information submitted by 50 counties, of the placements that occurred in 2017, half (50%) were at a facility three or more hours away from home. Distance is one factor that can limit the degree to which families and case managers can be involved in the transitions between residential services and community-based services.

Insurance status, eligibility for Title IV-E funds

Fifty of the counties submitted information about insurance status and eligibility for Title IV-E funds. A majority of youth were insured through Medicaid fee-for-service (60%) or PMAP (35%) plans. Very few youth had private commercial insurance (4%) or were uninsured (1%). Nine of the reporting counties reported experiences where a combined 25 youth with PMAP coverage became the financial responsibility of the county because insurance coverage was exhausted. The total cost to these counties in this situation, was just over \$430,000.

Over one-third of youth (36%) were in homes with income levels low enough to qualify for Title IV-E funds. Seventeen of the reporting counties noted that they had some difficulty being able to obtain the maximize level of Title IV-E reimbursement for the cost of room and board. Most often, counties reported this was the result of challenges getting paperwork completed on time, particularly when child protection is involved. County representatives also noted high caseloads contribute to difficulty meeting paperwork deadlines and that IV-E reimbursement isn’t an option for all out-of-state facilities. All but one of the counties were not able to estimate the amount of lost potential revenue.

Cost to counties for residential treatment services

Among the 60 counties that reported information, the financial responsibility to the counties (after optimizing Title IV-E and Medicaid reimbursement) for the 997 youth in Rule 5 out-of-home placements for mental health needs was over \$23 million dollars. The counties were not asked how these costs were incorporated into county budgets or to describe the revenue sources used to offset these costs.

It is important to note that these are not the full costs paid by counties for youth with mental health needs served in other types of (non-Rule 5) residential placements. The counties spent millions of dollars to pay for the cost of care in juvenile shelters, juvenile corrections/detentions settings, group home, and therapeutic foster homes.

A10. County referrals and estimated costs for selected residential services (2017)

	Number of counties who reported youth received services from the setting	Number of youth served in the setting	Number of youth reflected in estimated costs	Estimated cost to counties (may not include offset revenue)
PRTF ^a	4	43	11	\$450,000
Therapeutic foster home	34	557	532	\$6,700,000
County home school	3	157	157	\$12,000,000
Juvenile correction center	25	453	410	\$4,000,000
Juvenile detention facility	25	323	292	\$4,500,000
Shelter	30	1,417 ^b	1,417	\$10,500,000
Group home	37	364	330	\$5,900,000
Inpatient psychiatric hospitalization – pediatric	15	79	72	\$120,000
State-operated psychiatric hospitalization (CABHS)	3	5	4	\$200,000

Notes. Youth may be served in more than one setting during the year. The cost data are only costs to the county, not the total cost of care. Due to a typo in the form, not all counties may have made the same distinction between juvenile corrections centers and juvenile detention facilities.

^a All PRTF level of care would have been provided by out-of-state facilities, as Minnesota did not have one in place until 2018.

^b Most of the youth who received shelter services (1,023 of the 1,417) are in Hennepin County.

Trends over time

The number of youth in out-of-home Rule 5 placements was fairly stable between 2015 and 2017. When asked about the recent trends of children served in their counties, staff in nine counties said they had similar or decreased numbers of placements over the previous years. In five counties, the length of stays had been reduced. One county staff said placements were longer. Staff in four counties mentioned they had experienced, pro-active staff who were working with families to ensure in-home and community-based services are in place as a way to reduce placements.

Case management practices

Counties were also asked to describe current case management practices related to discharge planning and helping youth and families connect to the most appropriate community-based services. It is important to note that while this summary describes the practices used by the 50 counties that submitted information, and there is wide variation in case management practices and the composition and processes used by county screening teams.

This is not an evaluation of current case management practices or the degree to which they follow best practices in Wraparound or other intensive care coordination models. County staff who responded to the survey described how they aim to be involved during transitions from residential to community-based care. Future studies could be done to gather information about the quality, consistency, and effectiveness of these services, including from the perspective of caregivers and youth. As noted in the full report, some counties will be piloting Wraparound through the state's System of Care expansion grant, which will be an opportunity to establish more intensive care coordination practices to support youth and families.

Involvement in discharge planning

County staff reported that they are most frequently involved in discharge planning by being in close communication with the facility while a child is in placement, through meetings and phone calls, and attending the discharge planning meeting. A few county staff noted it was important to start planning for discharge from the beginning of a placement. When necessary, county staff coordinate with courts and probation officers.

A number of counties described providing support to parents by helping them participate in their child's treatment, coordinating services they need to parent their child, and planning how to address family needs when the child returns home. Many counties reported regularly visiting youth while they are in treatment; some reported using Family Group Decision Making or other structured processes when planning for discharge.

To make the transition from a residential facility to the community as smooth as possible, county staff reported that they are involved in setting post-discharge treatment goals and recommending or setting up after-care services. This usually includes coordinating with schools and local services such as therapy, medication assistance, and in-home services. This sometimes includes securing another residential placement in a less restrictive setting or helping a youth age out of the system. For some rural communities, where community services may be harder to secure, county staff reported that a discharge date may need to be negotiated based on the services available when the child leaves a residential facility. At a very practical level, county staff often transport children from residential treatment to their next placement or home.

County representatives anticipated their role in throughout treatment and during discharge planning from PRFTs would be similar to current practices. Many described that case managers' knowledge of the child, family, and community resources is important for the transition process and post-discharge care coordination. Some counties suggested having more options available for Vidyo conferencing (which offers a secure connection) as a way for county staff to be involved throughout treatment, particularly if distance is a barrier.

Factors influencing referrals and connections to community-based services

County staff, especially those in rural counties, described referrals as being affected by the availability of services and the match between available services and needs of youth. These limited community services included lower-level care providers such as foster homes, as well as prevention programs and early intervention services. Multiple counties reported being stretched financially, resulting in limited capacity to provide more in-home support or hire more staff. Some counties noted that because communities lack appropriate step-down services, children are in a higher-level placement longer than needed. Conversely, when residential facilities are not available, youth may need not be getting the intensity of services they need from what is available in the community and through lower-level services.

We still see consistent amounts of kids needing a Rule 5 [placement] but due to lack of availability, they are going without or ending up in a high or lower level of care.

– County representative

County representatives across the state reported increased mental health and behavioral needs among youth. Many reported working with a larger number of youth with autism spectrum disorders, early childhood traumas (ACEs), attachment disorders, aggressive behaviors, and prenatal exposure to drugs and alcohol. One county observed children presenting with mental health symptoms and behavioral concerns at a younger age. Multiple counties also identified challenges working with youth in the child protection system, particularly when parental substance abuse is a concern. Overall, a number of counties described gaps in local services that made it difficult to meet the mental health needs of youth and their families.

The needs of youth continue to grow beyond what can be managed in the community, especially when the youth exhibit aggressive behavior. [Our] County does not have enough in-home treatment options, and there is a staffing shortage with CTSS providers. Some of these youth could have been served in the community with skilled therapists and skilled, licensed respite care as needed.

– County representative

Concerns

Looking ahead, staff from multiple counties expressed concerned about the number of youth who need county support and severity of their mental health symptoms and other needs. County staff expect the number of kids needing help will continue expanding, including those needing services at a younger age. County staff had concerns about meeting the needs of more children diagnosed with autism or who exhibit aggression.

County representatives, especially those in rural areas, have ongoing concerns about the availability of services. Many reported a shortage of community residential placements such as group homes, foster care, and respite care that are appropriate for youth who exhibit aggressive behaviors. In addition, they described limited community services including preventive services to stabilize families and prevent out-of-home services, limited school resources, and workforce shortages a multiple levels, including psychiatrists and paraprofessionals.

County staff also expressed concerned about costs of residential placement, and how changes in federal reimbursement will affect counties. Some counties expressed concerns about how any reduction in the number of available facilities will affect travel time and costs. Multiple counties suggested exploring alternative residential options, such as group homes, as part of the continuum of services.

Local stakeholder engagement: Semi-structured interview guide

Interview questions

1. In this study, our project team has been defining the continuum of intensive mental health services as the array of acute, community-based, and residential treatment services that children and youth may be able to access. We also recognize that there are youth who have intensive mental health needs who are not receiving mental health treatment services. Does this list capture what is available? What additions or edits would you make?
2. Where are there gaps in the continuum? (What services are missing from the continuum? What is needed to help youth and families transition between services along this continuum?)
3. In our current continuum, who is well-served by the services in place? Who are the youth and families who are not well-served? (Are there racial, socioeconomic, or geographic disparities in who can access these services? Why is that the case?)

I'd like to now focus specifically on Minnesota's residential treatment services and how those fit into the continuum of services available.

4. In your experience, what about Minnesota's current children residential treatment facilities has been working well? [Probes: In what ways does residential treatment meet the needs of youth and families? What is available to youth and families who receive services from residential treatment facilities that isn't available elsewhere along the current continuum of intensive mental health services? What positive outcomes occur when youth receive services in residential settings?]
5. When you think about the services and supports youth and families receive through the state's current residential treatment facilities, what isn't working well? [Probes: Are youth getting the right level of service at the right time? When is residential treatment not the preferred option? What needs are not well-met by the state's current residential treatment facilities?]
6. What services and supports are most critical for youth and families to have in place when youth are discharged from a residential treatment setting to home? [Probes: Are these types of services and supports currently available? What is needed to ensure a smooth transitions from residential to community-/home-based services?]
7. What services and supports, if in place, do you think would help more children stay in their homes (instead of receiving services in residential settings) or avoid repeated residential placements? [Probes: Is this a model that has been used? Why do you think those services or supports could be effective?]
8. Are there specific types of service delivery or funding models that you think may be beneficial to better meet the intensive mental health needs of youth and their families? [Probes: What promising approaches are you aware of? Who (e.g., providers, states, tribes) is leading the way or developing new effective approaches? What culturally-specific service models/approaches are needed?]
9. When we talk about children's mental health services, we often focus on the most pragmatic and feasible strategies for improving the continuum of services or the most urgent issues that need to be addressed. If you step back to think about what Minnesota's optimal continuum of intensive mental health services should look like, what would be different than what we have in place today? What would be the same?
10. Are you familiar with any reports or resources that you think may be helpful to this study? Has your organization gathered any information that you think may be relevant and that you would be willing to share with us?
11. (Optional) Is there anyone else you think we should talk to?

Intensive Mental Health Services Study

Caregiver Interview Protocol

[To the interviewer: The consent form should be reviewed and signed before conducting the interview.]

Before we begin, I want to remind you that your name will not be used in the final report. If there is a question that you would prefer not to answer, we can skip it. You can also choose to end the interview at any time. Do you have any questions before we begin?

I'd like to record the interview so that my notes are accurate. Do I have your permission to turn on the recorder?

I'm going to start by just asking you a few questions about yourself and your child. Some of the questions we're asking are to help us make sure that we're hearing from caregivers who have different experiences and suggestions.

1. How old is your child? [Interviewer: Do not read options]

- 3-5 years 6-10 years 11-14 years 15-21 years

2. What is your child's race or ethnicity? [Interviewer: Do not read options]

- American Indian/Native American Pacific Islander
 Asian White/Caucasian
 Black/African American Prefer not to answer
 Hispanic/Latino Other: _____

3. What county do you live in? _____

4. About how far away (in miles) is this residential treatment center from your home? _____

5. How many times has your child received services at a residential treatment center? _____

5b. If more than one: Has your child ever gone to residential treatment center out of state?

- Yes
 No

6. What is your child’s mental health diagnosis? [Interviewer: Do not read options, check all that apply]

- ADHD/ADD
- Anxiety
- Autism spectrum disorder
- Bipolar disorder
- Depression
- Eating disorder
- Fetal alcohol spectrum disorder (FASD)
- Obsessive compulsive disorder (OCD)
- Oppositional defiant disorder (ODD)
- Post traumatic stress disorder (PTSD)
- Reactive attachment disorder (RAD)
- Schizophrenia
- Substance use disorder Pacific Islander
- Traumatic brain injury (TBI)
- Other: _____

7. What type of health insurance does your child have?

- Private
- Medicaid
- MNCare
- Managed Care/PMAP
- No insurance

7b. If the child is enrolled in Medicaid, does your child receive Medicaid through TEFRA?

- Yes
- No

8. How has your child’s stay at a residential treatment setting impacted your family financially? [Probes: Have you had to pay for services not covered by insurance? What about any transportation costs or lost wages due to missing work?]

Now I’d like to ask you some questions about the services your child and family has received. Again, this information will not be shared with any staff at this facility.

9. Did your child receive any of the following types of intensive services/supports in the 6 months before coming here for treatment? [Interviewer: Read each item]

- Day Treatment
- Emergency department visit
- Inpatient hospitalization
- Partial hospitalization
- Therapeutic foster care
- Youth ACT
- CADI Waiver

10. What other treatment and services did your child receive in the 6 months before residential treatment?

Now I'd like to ask you some questions about the help that you've gotten here (at this residential treatment center).

11. In what ways has residential treatment been helpful for your child and family?

12. In what ways has residential treatment been difficult or unhelpful for your child and family?

13. Are there other treatment methods or therapies you would like to have your child or family receive through this treatment center?

14. I'd like to ask you some questions about your involvement in your child's treatment. For each statement, let me know if you: strongly agree; somewhat agree; somewhat disagree; or strongly disagree.

	Strongly agree	Agree	Disagree	Strongly disagree
a. The providers included me in creating a treatment plan for my child.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. I feel there is good communication between the provider and me about my child.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. My questions and concerns are addressed by providers.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. I feel like a valuable member of the treatment team.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Providers asked about my family's culture, our values and beliefs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. My child's treatment has been in line with our family's cultural values and beliefs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

15. What could residential providers do to better include families in their child's treatment?

TO INTERVIEWER: If the child has not been in residential treatment before, SKIP TO Q18.

16. I'd like you to think about the last time your child was discharged from a residential treatment center. I'm going to read five statements. I'd like you tell me how much you agree or disagree that the facility did a good job with each.

Would you say you strongly agree, agree, disagree, or strongly disagree that the facility did a good job:	Strongly agree	Agree	Disagree	Strongly disagree
a. Educating me about how to support my child as he/she transitions home.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Recommending next steps in treatment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Holding multiple meetings to prepare for discharge	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Communicating with staff who would be working with my child when they come home. [This could include school staff, case manager, therapist, etc.]	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Scheduling follow-up appointments with community providers prior to discharge.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

17. What would you like to see included in the discharge process as your child returns home from this facility? [Probe: What services or supports do you think will be helpful to you when your returns home?]

I just have a few more questions for you.

18. What, if any, services, supports, or changes in treatment approach that could have prevented your child from needing residential treatment?

19. Do you have any suggestions about ways to improve existing services or ideas for any new services that would be helpful to your child and family?

20. Is there anything else you would like to add?

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