Center for Health Care Strategies

Missouri Children's Behavioral Health Environmental Scan: Executive Summary

April 2024

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Missouri is strongly committed to improving behavioral health services for children and their families; however, critical gaps exist in the state, leaving children and families without access to needed care. While some communities have successfully broadened access and service array, this progress is not uniform statewide, resulting in inequitable access and variability in both availability and quality of services. The absence of accessible home and community-based services resulted in unmet needs, pushing families towards more restrictive and costly intensive interventions. The report's findings suggest a complex landscape of behavioral health service utilization among Missouri's children and youth and point to potential areas for targeted interventions and support. The lack of seamless and consistent access to behavioral health services reveals a fragmented system that is reactive, rather than responsive.

The Center for Health Care Strategies (CHCS) was engaged to assess the state of children's behavioral health services in Missouri, identify gaps and challenges, and inform recommendations for improvement through an environmental scan. The scan incorporates an analysis of the child population accessing behavioral health services in Missouri in 2022, key programs and services available to this population, and policies regarding access, service utilization, and expenditures. To inform the scan, CHCS also conducted interviews with 73 individuals, representing state agencies, community-based organizations, hospitals, provider associations, a family-run organization, the education system, youth, families, and other stakeholders.

The following are key themes that emerged from the interviews:

- **Lack of Coordination at the State Level**: Rather than one coordinated and comprehensive behavioral health system for children and families, Missouri has multiple siloed behavioral health systems which hinders effective communication and collaboration, leading to duplication of efforts and disparate service delivery.
- **Geographic Disparities**: Rural areas face significant resource disparities compared to urban and suburban regions which impacts access to behavioral health services. This is exacerbated by gaps in telehealth infrastructure and workforce challenges.
- **Lack of Standardization**: Variation in screening tools, assessments, and services among state agencies creates challenges for cross-system collaboration, hindering seamless access to care for children and families, despite efforts like the Show Me Health Kids specialty health plan.
- **Accessing Behavioral Health Services through Child Welfare and Juvenile Justice**: Limited options for in-home and community support lead families and systems to child welfare and juvenile justice, increasing the strain on these mandated systems, which are not experts in addressing behavioral health needs.

- **Workforce Challenges**: Insufficient numbers of trained professionals (e.g. a shortage of child psychiatrists) contribute to long waitlists, limit access to behavioral health services, and speak to the need for creative solutions like mentoring.
- **Gaps in Community and Preventive Services**: Limited services for youth not in crisis underscore the need for increased staff and capacity in community-based, preventive services to avoid system involvement and hospitalization.
- **Focus on Adult Services**: Children's behavioral health services are not tailored to meet the needs of youth and families. Adult models are used or adapted, impacting the adequacy of care for children and families (e.g. crisis services, CCBHO -Certified Community Behavioral Health Organization).
- **Lack of Family and Youth Involvement**: Families and youth are not meaningfully engaged in the design, implementation, and evaluation of behavioral health services, at both system and individual service delivery levels.
- **Lack of Accessible Services and Supports**: Long waitlists, high costs, inconvenient service hours, and transportation challenges make behavioral health services hard for youth and caregivers to access.
- **Custody Relinquishment**: Some families resort to custody relinquishment to access needed behavioral health services, revealing a need for alternative solutions and crisis intervention.
- **Show Me Healthy Kids (SMHK) Implementation**: While overall, experience with SMHK has been positive, the rollout of the managed care specialty plan was challenging because initial provider interactions focused on claiming/billing issues.
- **Comprehensive Children's Mental Health Services System**: Senate Bill 1003 established a Comprehensive Children's Mental Health Service System in 2004, emphasizing coordination across state agencies and meaningful partnerships with families and youth. It lost funding after 2011 but remains a promising past initiative and existing legislative framework for establishing a comprehensive statewide children's behavioral health care system.

Based on the analyses, CHCS recommends the following to improve the children's behavioral health continuum of care in Missouri:

1. **Expand, standardize, and build state infrastructure to support a comprehensive mental health system for children**: Missouri should establish a statewide System of Care to address coordination issues, enhance access, and provide comprehensive services, incorporating standard screening, assessment, eligibility processes, oversight, and leveraging federal funding.
2. **Build collaborative cross-system structures to ensure alignment at all levels and increase stakeholder engagement**: Facilitate interagency collaboration at the state level, engaging stakeholders to build relationships, share successes, and develop cohesive plans while ensuring oversight, monitoring, and meaningful engagement with families and youth.
3. **Create pathways for authentic partnership and engagement with families and youth**: Implement a youth and family-driven behavioral health continuum, adopting a System of Care approach, emphasizing authentic engagement that provides the necessary support, preparation, and opportunities, throughout service planning and delivery.

4. **Implement one standardized behavioral health assessment tool**: Streamline screening tools and adopt a common assessment tool, like the Child and Adolescent Needs and Strengths Assessment Tool (CANS), to improve consistency in language across systems and with families, inform individualized care planning, and enhance communication across state-funded programs and services.
5. **Expand capacity for key home- and community-based services for children with behavioral health needs**: Address the low access rates and availability of needed home and community-based services, such as respite, in home services, and intensive care coordination, expand eligibility through Medicaid waivers and promote preventive strategies and programs to meet children's needs earlier (e.g. MRSS).
6. **Provide Intensive Care Coordination (ICC) using a High-Fidelity Wraparound model for children, youth, and their families**: Introduce ICC with High-Fidelity Wraparound as a strategy to coordinate care for children with moderate to intense behavioral health needs, fostering shared responsibility and creating conditions supportive of success in their own homes and communities.
7. **Develop mobile response and stabilization services (MRSS) for children, youth, and their families**: Implement MRSS, using national best practice standards, tailored to children, youth, and their families to provide timely, home- and community-based crisis intervention (that is family-defined) and stabilization that includes immediate support, de-escalation, assessment, counseling, and connection to resources and stabilization services and supports.
8. **Redesign residential care to align with best practice guidelines**: Analyze and understand existing levels of care, develop clinical criteria for admission, and create a statewide bed tracking system to provide oversight, ensuring a seamless behavioral health care system that also addresses health related social needs.
9. **Review data on medication management for psychotropic medication use**: Some medication management for Medicaid-enrolled youth may not be reflected in CHCS' analyses as providers often conduct this service during office visits not categorized as behavioral health visits under the national service billing codes. Due to the high percentage of youth receiving psychotropic medications, Missouri should review the data in more detail to determine if this area requires expansion.
10. **Support and expand the behavioral health workforce**: Expand the behavioral health workforce by recruiting, training, and retaining nontraditional (i.e. non-clinical, bachelor level, interns, etc.) providers, increasing youth and family peer support providers, reevaluating non-clinical position requirements, and fostering multidisciplinary collaboration. Other supportive strategies include recalibrating Medicaid reimbursement rates, offering tuition reimbursement and implementing loan forgiveness programs.
11. **Invest in school-based mental health services**: Leverage Medicaid funding to support school-based mental health services, recognizing schools are trusted partners and logical access points for behavioral health care for school-age children.
12. **Leverage Medicaid funding to prevent and identify behavioral health conditions**: Use Medicaid funding for the prevention and early identification of behavioral health conditions, aligning with

Early and Periodic Screening, Diagnostic and Treatment (EPSDT) requirements and emphasizing routine screenings and early engagement in treatment.

13. **Leverage Centers of Excellence**: Establish relationships with capacity building centers, like the University of Missouri's Center of Excellence, to provide training, technical assistance, and coaching to all child-serving partners, ensuring continuous workforce development, common language use, and effective communication across child-serving systems.

Conclusion

Missouri lacks a statewide comprehensive and accessible behavioral health care system for children, youth, and families. Missouri has an opportunity to revamp its current approach, by leveraging its existing legislative framework, Comprehensive Children's Mental Health Service System statute, to pursue necessary funding and resources, and partnering with families and youth throughout the design and implementation.

Missouri can address the main gaps in state-level infrastructure by bolstering county-level efforts and standardizing services and support. This would level the playing field across the state ensuring that a comprehensive service array is available to all children, youth, and their families, irrespective of their county or demographics. Moreover, addressing these gaps will alleviate strains on systems ill-equipped to address the behavioral health needs of children, youth, and families.

Center for Health Care Strategies

Missouri Children's Behavioral Health Continuum of Care: Environmental Scan Report and Recommendations

April 2024

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Introduction

In Missouri, an estimated 25.1% of children and youth ages 3-17 had at least one mental, emotional, developmental, or behavioral health need in 2022.[1] In the same year, roughly 15% of youth ages 12-17 reported experiencing a major depressive episode within the past 12 months, and 4% experienced substance use disorder.[2] Despite these needs, many children and youth do not receive needed treatment or services. In 2021, only 9.4% of children in Missouri ages 3-17 received mental health care.[3] According to the Health Services and Resource Administration (HRSA), Missouri has met 12.2% of the need for mental health care professionals (largely psychiatrists) compared to 27.7% of need met nationally.[4] The lack of access to providers and home- and community-based services has left many children and families with unmet needs. In many cases, this has led children, youth, and their families to require more intensive services and treatment to meet needs that could have otherwise been addressed further upstream at an earlier stage. These service gaps leave many families without the needed support to keep their children at home and in their communities. This results in a reliance on state government systems, like child welfare, and juvenile justice, to manage the intense needs they are not designed to address. Further, this contributes to an overuse of hospitals and extended stays beyond medical necessity, due to a lack of services and supports in the community.

A growing coalition of state and local stakeholders in Missouri acknowledge the resource gaps and are invested in improving the continuum of care for children's behavioral health services and supporting the state agencies in achieving these goals. This includes the Missouri Children's Collaborative, a group of government and provider stakeholders that meet regularly to discuss strategies to address the increase of youth boarding in hospitals beyond medical necessity, and more recently the broader behavioral health needs of youth. The Children's Collaborative was initiated by Senator Elaine Gannon, indicating strong legislative support. The Missouri legislature has directed the Departments of Social Services and Mental Health to develop recommendations to improve access to services for children in Missouri with behavioral health needs.[5]

In 2023, the Missouri Department of Social Services (DSS) — including the Children's Division (CD, child welfare), Missouri HealthNet Division (MHD, Medicaid), and Division of Youth Services (DYS, juvenile justice) — as well as the Missouri Department of Mental Health (DMH), and the Missouri Behavioral Health Council (MBHC, provider association) engaged the Center for Health Care Strategies (CHCS) to assist in the development of an effective continuum of care for Missouri's children, youth, and young adults with behavioral health needs. CHCS conducted an environmental scan, which included document review, data analysis and stakeholder interviews, to assess the current state of children's behavioral health services in Missouri. This report describes Missouri's behavioral health service landscape, identifies gaps and challenges, and opportunities to better coordinate and fund services that meet youth and families where they are. The recommendations for improvement include designing a comprehensive array of behavioral health services that support youth and their families in their own homes and communities through a coordinated statewide, infrastructure backed by policies and funding that can promote equitable access to the right services at the right time.

Methodology

CHCS worked closely with DSS (CD, MHD, DYS) and DMH to collect available data and documentation on the current state of children's behavioral health services in Missouri. Based on previous work with states to improve their continuum of care, CHCS developed a data and documentation guide to solicit information from state agencies. The most substantial request was from Missouri's State Medicaid agency (MHD) to provide data on the population receiving behavioral health services through Medicaid. MHD provided data for calendar year (CY) 2022 on behavioral health service utilization and expenditures, along with demographic information for children and youth based on Medicaid claims and diagnoses, as well as psychotropic medication use and expenditures, based on CHCS' *Faces of Medicaid* toolkit.[i] CHCS also researched and gathered publicly available information to inform the report, including CHCS' *Faces of Medicaid* report, benchmarking national Medicaid data on children's behavioral health service utilization and expenditures.[6]

CHCS gathered and analyzed key documents and data from CD, MHD, DYS, and DMH along with documents from MBHC from July 2023 through January 2024. Unless otherwise noted, data referenced throughout the report was provided by the state agencies. CHCS also conducted 38 semi-structured key informant interviews with 73 individuals representing multiple state agencies, providers, hospitals, community-based organizations, family-run organization, provider associations, and education associations along with families and youth and other organizations involved in the provision of behavioral health services in Missouri. Initial interviewees were collaboratively identified by CHCS and a cross-agency group of state government representatives. From there, snowball sampling techniques were employed; interviewees were invited to refer other individuals or groups to CHCS for interview. Interviewees were assured confidentiality, allowing them to freely express their views. While some quotes from the interviews are included in the report, none are attributed to an individual or organization. For a list of all organizations and agencies interviewed, see **Appendix A in this report**.

Limitations

Limitations to the methodology and analysis provided in this report include:

- **Agency data**. This report incorporates basic information about behavioral health funding and programs administered by the Department of Elementary and Secondary Education (DESE) but does not focus on the services provided or funded by this agency, nor the demographics of children served in these settings.

- **Behavioral health service use from other services**. Some types of services supported by state agencies are bundled and may include behavioral health treatment in addition to other types of services. For example, reported expenditures for residential treatment services provided

[i] See additional information on this methodology at https://www.chcs.org/media/Childrens-Faces-of-Medicaid-Toolkit-for-States_072618.pdf.

through the juvenile justice system (DYS) may include other costs that are not specific to behavioral health. In other cases, DESE distributed funding through the federal American Rescue Plan Act to support behavioral health in schools, that was also used for other purposes as determined by DESE. Because of limited available data, this funding was excluded from this report.

- **Distinguishing behavioral and physical health services**. Within the dataset, certain claims were labeled as 'indeterminate' because the general service codes at the national level lack clear distinctions between physical and behavioral health services. 'Indeterminate' comprised the largest category of Medicaid data compared to other service categories. This applied to 34.1% of the claims and 53.9% of expenditures for children and youth ages 0-26 as well as 34.0% of claims and 30.4% of expenditures for children and youth ages 0-17 reported by MHD.

- **Protected health information and data suppression.** MHD data was organized and rolled up into broader categories to comply with protected health information requirements. As such, the data analysis was limited as follows:
    - MHD data included service utilization information on youth ages 0-17, 18-20, and 21-26. However, without more discrete age ranges, CHCS was unable to compare service utilization among children ages 0-5 against that of school age youth, for example. Additionally, some data was only provided in the aggregate for children and youth ages 0-26.
    - CHCS was not able to analyze demographic information for specific service types.

- **Enrollment requirements and time period.** MHD required children and youth to be enrolled in Medicaid for at least six months during CY 2022 to be included in the data set. However, CHCS' national *Faces of Medicaid* analyses included claims for youth in Medicaid with a single day of enrollment. In addition, while MHD data captures CY 2022 data; CD, DYS, and DMH largely provided data for fiscal year (FY) 2022, July 1 to June 30.

- **Comparison data.** National comparison data comes from CHCS' Faces of Medicaid analysis on data from 2011. This is the most recent national analysis of Medicaid behavioral health service utilization and expenditure data available to which states can draw comparisons. Due to the age of the data, healthcare policies, Medicaid coverage criteria, and reimbursement rates may have significantly changed over the intervening years, altering patterns of service utilization and expenditure. In addition, the national expenditure data has not been adjusted for inflation.

Upon request, CHCS can assist Missouri's child-serving agencies in gathering additional data and information to address these limitations for future iterations of this report.

Demographics

The following section presents findings on demographic information primarily based on Medicaid data, for children accessing behavioral health services in Missouri. To further describe the population, the section below also includes available data overall on children involved with DMH, CD, and DYS, regardless of behavioral health need or service use. See **Appendix D (report supplement)** for a summary of this demographic information.

As of 2022, there were an estimated 1.4 million children and youth under age 18 in Missouri.[7] Roughly 48% of these children (674,711) had coverage through Medicaid and Children's Health Insurance Plan (CHIP). Of these children, an estimated 18.1% (122,400) received either behavioral health services or psychotropic medication, or both.[ii] This percentage is over one and a half times higher than the estimate in the national *Faces of Medicaid* 2011 report, which estimated a child behavioral health care penetration rate of 11.2%.[8]

Over 96% of children under age 18 receiving behavioral health services in Missouri through Medicaid are enrolled in managed care (111,048), while the remaining 3.3% (3,785) access services through a fee-for-service (FFS) arrangement, the majority of whom are eligible for services through a 1915c waiver or due to permanent disability. However, among the 26,834 transition-aged youth (ages 18-26) accessing behavioral health services in Missouri through Medicaid, only 66.1% are enrolled in Medicaid managed care.

Rates of behavioral health needs among children and youth involved with DMH, CD, and DYS are likely higher when compared to the general population. For example, an estimated 49.0% of youth involved with DYS have a behavioral health diagnosis, an additional 28.8% have behavioral indicators of such a disorder, and 68% have moderate to serious patterns of substance use.[9] Many of these children and youth also have more intensive needs compared to the overall child population accessing behavioral health services through Medicaid. In September 2022, there were 13,591 youth in out-of-home care through Children's Division. Throughout FY 2022, 2,468 youth were in CD residential treatment facilities or behavioral/mental health foster homes (e.g. therapeutic foster care).[10] At least 3,364 children also received CD-funded behavioral health services in the community. Some youth referred to the court due to abuse or neglect are referred specifically for behavioral health reasons, but many other children may have behavioral health needs not captured by the data. For example, according to the Juvenile and Family Services Annual Report for CY 2022, 92 of the 12,216 families referred to the court system were for youth in need of mental health services and 36 were referred to the court system due to abandonment.[11] However, some of these 36 families may have been inadequately supported to address their youth's behavioral health need. Information on the proportion of children and youth involved with MHD, CD, DYS, and MHD with behavioral health needs is summarized in **Exhibit A**.

[ii] This is an unduplicated count of behavioral health care users. 82,482 of these children received psychotropic medications and 114,833 received behavioral health services. This may be a slight overestimate of service users, if children and youth only receiving indeterminate services were included in the data provided by MHD

Exhibit A. Information on the Number of Children and Youth with Behavioral Health Needs Enrolled in or Involved with Medicaid (MHD), Child Welfare (CD), Juvenile Justice (DYS), and Department of Mental Health (DMH), 2022

Agency	# of Children	Proportion with Behavioral Health Needs
MHD	674,711	122,400 children received either behavioral health services or psychotropic medication or both, representing 18.1% of the total child population enrolled in Medicaid in Missouri.[iii]
CD	25,171[iv]	2,468 children were in residential treatment facilities or in foster care in homes designated as behavioral/mental health foster homes, including therapeutic foster care. 3,364 children received behavioral health services in the community.
DYS	1,346[v]	49% have a behavioral health diagnosis, and an additional 28.8% had behavioral indicators of a disorder. 68% had moderate to serious patterns of substance use.[12]
DMH BH	21,971	21,971 children and youth accessed behavioral health services through DMH. 8.2% (1,795) of children and youth accessed behavioral health services through non-Medicaid funds.
DMH DD[vi]	19,668	28% (5,488) of youth receive non-Medicaid funded services through the Missouri Autism Project.

Age and Gender

The majority of Medicaid-enrolled children and youth ages 0-26 receiving behavioral health services in Missouri are between the ages of 0-17. This age group represents 81.1% of the population using behavioral health services, and youth ages 18-20 represent 10.8% of the population. Male children and youth are more likely to access behavioral health services in Missouri than female youth. Among all children and youth ages 0-24 in the state, 51.3% are male and 48.7% are female.[13] Yet, among youth ages 0-26 enrolled in Medicaid accessing behavioral health services, an estimated 46.0% are female and 54.0% are male. This is reflected in the rates of behavioral health service utilization for these populations, shown in **Exhibit B**: of those youth enrolled in Medicaid, 18.4% of males 0-26 receive behavioral health services compared to just 14.8% of females. This is even more pronounced among the youth in a Medicaid FFS arrangement. Nearly 30% of males enrolled in Medicaid FFS received behavioral health services compared to 22% of females.

[iii] May include a percentage of children and youth with a primary psychiatric diagnosis who received only "indeterminate" services.
[iv] Represents youth in the custody of CD in out-of-home settings and youth receiving CD family-centered services throughout FY 2022.
[v] Represents youth who received case management services through DYS throughout FY 2022.
[vi] DMH provided point-in-time data from February 2024 for youth under the age 21.

Exhibit B. Rate of Behavioral Health Service Utilization[vii] for Medicaid Enrolled Children and Youth Ages 0-26, CY 2022

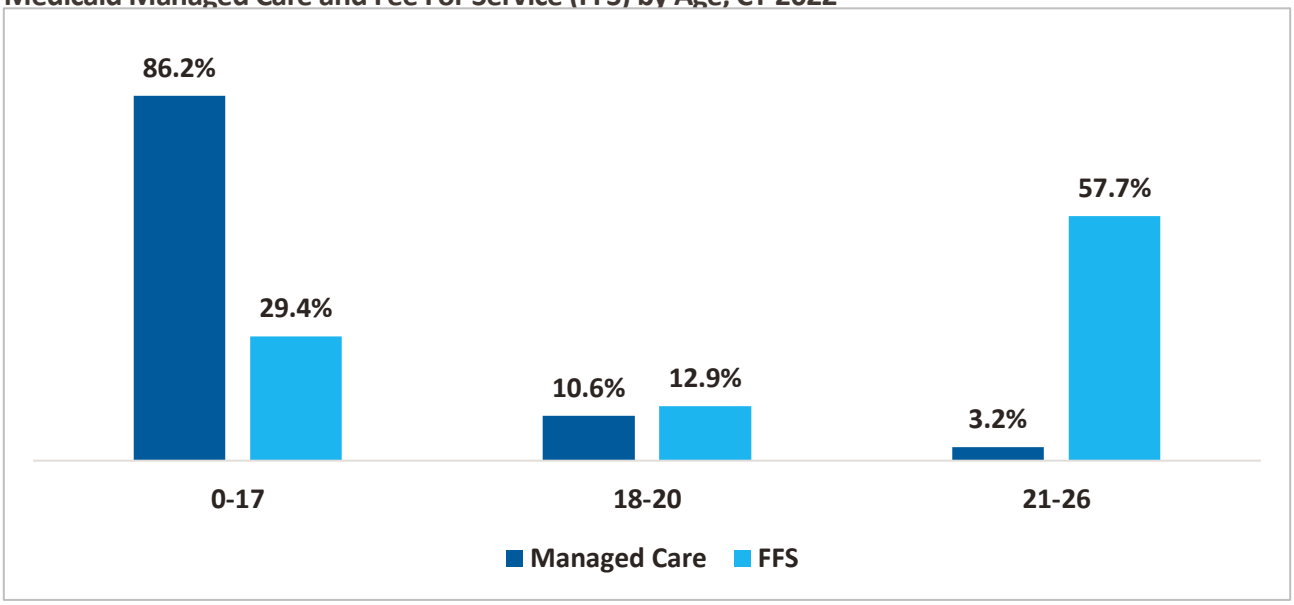
	Female			Male			Total
Medicaid Delivery System	**All**	**MC**	**FFS**	**All**	**MC**	**FFS**	
Enrolled Youth	**441,564**	418,647	22,917	**416,181**	389,930	26,251	**857,745**
Enrolled Youth Receiving Behavioral Health Services	**65,160**	60,073	5,087	**76,507**	68,700	7,807	**141,667**
Rate of Service Utilization	**14.8%**	**14.3%**	**22.2%**	**18.4%**	**17.6%**	**29.7%**	**16.5%**

	Ages 0-17			Ages 18-26		
Medicaid Delivery System	**All**	**MC**	**FFS**	**All**	**MC**	**FFS**
Enrolled Youth	**674,711**	649,042	25,669	**183,034**	159,535	23,499
Enrolled Youth Receiving Behavioral Health Services	**114,833**	111,048	3,785	**26,834**	17,725	9,109
Rate of Service Utilization	**17.0%**	**17.1%**	**14.7%**	**14.7%**	**11.1%**	**38.8%**

Note: Rates of service utilization are penetration rates that show the percentage of children in each cohort who receive behavioral health services out of all children in that cohort enrolled in Medicaid.

As shown in **Exhibit C**, compared to children and youth receiving services through a FFS arrangement, a higher percentage of children in the 0-17 age group receive behavioral health services through a managed care (MC) plan (29.4% FFS vs 86.2% MC) while a lower percentage is in the 18-26 age group (70.6% FFS vs 13.8% MC). Additionally, children and youth ages 0-26 receiving services via FFS are more likely to be male than children and youth receiving services through managed care (60.5% vs. 53.3%).

Exhibit C. Percent of Missouri Children and Youth Receiving Behavioral Health Services [viii] Through Medicaid Managed Care and Fee For Service (FFS) by Age, CY 2022



[vii] May include a percentage of children and youth with a primary psychiatric diagnosis who received only "indeterminate" services

As expected, children in the care and custody of child welfare are more likely to be younger with 37.9% of children in the 0-5 age group, while children involved with juvenile justice are more likely to be older (i.e. all children are over age 5 and 92.3% are over age 12).[14] The majority (95.7%) of children receiving DMH services are school aged.[15] Additionally, while the gender of the population in the custody of child welfare is roughly proportionate to that of the overall child population in Missouri, 86% of children and youth in DYS facilities in FY 2022 were male while 14% were female.

Race and Ethnicity

An estimated 62.8% of all Medicaid enrollees ages 0-26 are white, and 74.0% of children and youth ages 0-26 receiving behavioral health services in Missouri are white. Compared to the racial demographics across all children and youth ages 0-26 enrolled in Medicaid in Missouri, more children and youth who are white received behavioral health services in the state in 2022. This disproportionality is also reflected in national data.[16] Comparatively, while 21.8% of Medicaid enrollees are Black, only 15.1% of Black children and youth ages 0-26 receive behavioral health service. Similarly, children and youth who identify as Asian, or Hispanic/Latino are underrepresented among those accessing behavioral health services. There is less than 0.5 percentage points difference between the populations for children and youth who identify as American Indian/Alaska Native, Native Hawaiian/Pacific Islander (NH/PI), or with two or more races. Stigma can contribute to seeking behavioral health services where needed, especially among non-white populations.

Children and youth ages 0-26 accessing behavioral health services in Missouri via Medicaid FFS are slightly more likely to be white (76.8%), Black (16.9%), or Asian (0.8%) and less likely to be multi-racial (1.3%) or Hispanic/Latino (9.0%) compared to children enrolled in managed care. Additionally, the general population of children and youth involved with child welfare or juvenile justice are more likely to be Black compared to the general child population in Missouri and the population accessing behavioral health services through Medicaid, as shown in **Exhibit D**.

Exhibit D. Race and Ethnicity of Youth Receiving Services Through Medicaid (MHD), Child Welfare (CD), and Juvenile Justice (DYS) in Missouri, 2022[viii]

Race	All Youth in MO (0-17)[17]	Youth Enrolled In MO Medicaid (0-26)			
		All	Receiving Behavioral Health Services[ix]	Receiving Behavioral Health Services via Managed Care[x]	Receiving Behavioral Health Services FFS[x]
Total	1,374,475	857,745	141,667	128,773	12,894
White	71.2%	62.8%	74.0%	73.7%	76.8%
Black	13.4%	21.8%	15.1%	14.9%	16.9%
Asian	2.1%	1.3%	0.6%	0.6%	0.8%
AI/AN**	0.3%	0.3%	0.4%	0.4%	0.4%
NH/PI***	0.2%	0.3%	0.1%	0.1%	0.1%
Two+ races	5.1%	2.0%	2.2%	2.3%	1.3%
Hispanic/Latino	7.6%	17.4%	14.7%	15.3%	9.0%

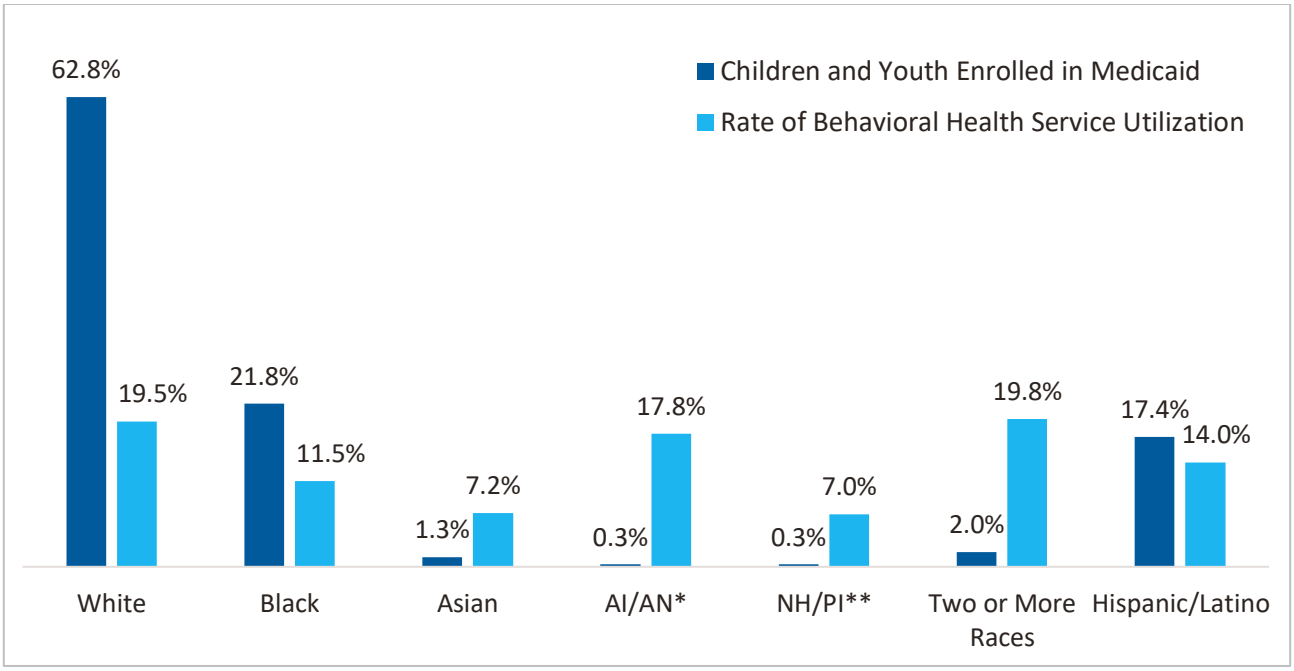
Race	All Youth in MO (0-17)[18]	Youth in Custody of Child Welfare (Out-of-Home Settings)* [19]	Youth in Juvenile Justice Facilities (0-20)
Total	1,374,475	20,279	913
White	71.2%	70.8%	68.2%
Black	13.4%	18.4%	26.8%
Asian	2.1%	0.2%	-
AI/AN**	0.3%	0.4%	0.2%
NH/PI***	0.2%	0.1%	-
Two+ races	5.1%	10.0%	2.2%
Hispanic/Latino	7.6%	7.9%	-

Note: A dash (-) indicates data was not available
*Throughout FY 2022
**American Indian/Alaska Native
***Native Hawaiian/Pacific Islander

Exhibit E shows that not only do white children and youth make up the majority of the Medicaid-enrolled population, but they also have the second highest rate of service use at 19.5%. Multiracial children and youth have the highest rate of behavioral health service use (19.8%) but are only 2.0% of the Medicaid-enrolled population. Similarly, youth who identify as American Indian/Alaska Native are only 0.3% of the Medicaid-enrolled population and receive services at a rate of 17.8%.

[viii] Percentages may not add to 100% due to "Unknown" reported by state agencies.
[ix] May include a percentage of children and youth with a primary psychiatric diagnosis who received only "indeterminate" services.

Exhibit E. Medicaid Enrolled Children and Youth (Ages 0-26) and Rate of Behavioral Health Service Utilization[x] by Race and Ethnicity in Missouri, CY 2022



Note: Rates of service utilization are penetration rates that show the percentage of children in each cohort who receive behavioral health services out of all children in that cohort enrolled in Medicaid.

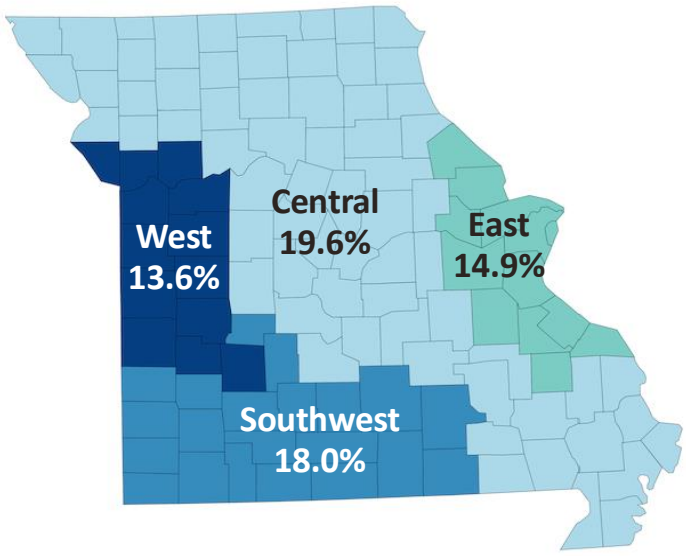
*American Indian/Alaska Native

**Native Hawaiian/Pacific Islander

Region

There are four managed care regions in Missouri: Central, Eastern, Southwest, and West. The Central region is the largest geographic area and represents the largest group of children and youth ages 0-26 receiving behavioral health services in the state with almost 32% of the population residing in this area. This region also has the highest penetration rate of services at almost 20%, as shown in **Exhibit F**. The Eastern region, containing the St. Louis metropolitan area, has the second most children receiving behavioral health services within its boundary (almost 28%), but has a relatively low rate of behavioral health

Exhibit F. Rate of Behavioral Health Service Utilization of Medicaid Enrolled Children and Youth (0-26) in Missouri by Managed Care Region, CY 2022



Note: Rates of service utilization are penetration rates that show the percentage of children in each cohort who receive behavioral health services out of all children in that cohort enrolled in Medicaid.

[x] May include a percentage of children and youth with a primary psychiatric diagnosis who only received "indeterminate" services

service utilization compared to other regions (almost 15%). The Southwest region represents the third largest group, with about 21% of children and youth receiving behavioral health services residing in this region and an 18% service penetration rate. The Western region, including Kansas City, represents the smallest portion of the population (almost 19%) and the lowest rate of service utilization (almost 14%).

Missouri's child welfare system has also established regions, which include Northwest, Northeast, Southeast, Southwest, Kansas City, and St Louis. As shown in **Exhibit G**, in FY 2022, the Southeast region had the highest out-of-home care at 25.2%.[20] Followed by the Southwest region at 25%, the Northeast region with 17.1%, St. Louis with 12.5%, Kansas City with 10.9%, and the Northwest region with 9.2%.

DYS has five regions: Northeast, Northwest, Southeast, Southwest, and St. Louis. The largest proportion of children and youth involved with DYS are in the Northwest (29.2%), followed by the Southwest (22.6%), Southeast (21.4%), St. Louis (16.5%), and the Northeast (10.3%).

See **Appendix B** for maps of the agencies' regions, noting that the unique regional structures could benefit from increased alignment across systems.

Exhibit G. Proportion of Children and Youth Involved with CD and DYS and Placed in an Out-of-Home Setting by Region, FY 2022[xi]

	Northwest	Northeast	Southeast	Southwest	St. Louis	Kansas City
CD	9.2%	17.1%	25.2%	25.0%	12.5%	10.9%
DYS	29.2%	10.3%	21.4%	22.6%	16.5%	-

Diagnosis

Overall, an estimated 4% of children in Missouri are designated with a "serious emotional disturbance" (SED).[xii] As shown in **Exhibit H**, ADHD is most common diagnosis among Medicaid-enrolled children and youth ages 0-26 receiving behavioral health services in Missouri, representing 30.3% of the population. This aligns with national data indicating that ADHD is the most prevalent assigned diagnosis among children.[21] Depression, intellectual/developmental disability, and anxiety are the next most common diagnoses among children in Missouri, representing 24.8%, 21.8%, and 20.3% of the population, respectively. This diverges from 2011 national data, which identifies conduct disorder as the second most prevalent diagnosis (31.9%).[22] In Missouri, conduct disorder is the eighth most prevalent, with 8.1% of children receiving this diagnosis. Compared to the 2011 national data however, fewer children and youth receiving behavioral health services in Missouri have an anxiety or

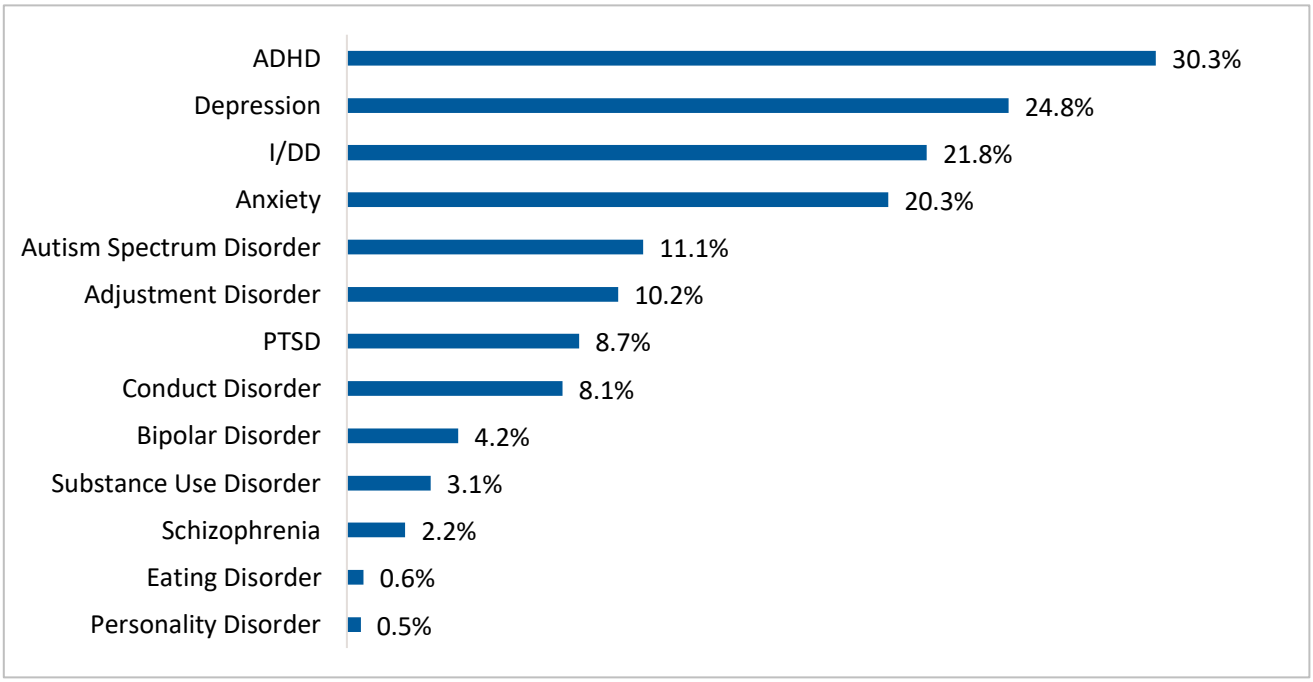
[xi] CD and DYS regions are similar but do not align. See Appendix J.

[xii] The percent with SED is based on data collected in August 2020 for Missouri's Medicaid Section 1115 SMI/SED Demonstration Initial Availability Assessment.

depression diagnosis.[xiii] Rates of anxiety and depression diagnoses have been rising among children and youth over the last decade and have been exacerbated by the COVID-19 pandemic.[23]

The next largest diagnostic categories among children and youth in Missouri include autism spectrum disorder (11.1%), adjustment disorder (10.2%), post-traumatic stress disorder (8.7%), and conduct disorder (8.1%). The prevalence of the following diagnoses was less than 5%: bipolar/mania disorder (4.2%), substance use disorder (3.1%), schizophrenia (2.2%), eating disorders (0.6%), and personality disorders (0.5%).

Exhibit H. Diagnoses of Medicaid Enrolled Children and Youth (Ages 0-26) Receiving Behavioral Health Services[xiv] in Missouri, CY 2022[xv]



[xiii] In the national 2011 data, depression diagnoses were included within the "Mood Disorder" diagnosis category, which may include additional diagnoses that were not included in Missouri's "Depression" diagnosis category. Therefore, the real difference between the prevalence of depression nationally and in Missouri is difficult to determine.

[xiv] May include a percentage of children and youth with a primary psychiatric diagnosis who only received "indeterminate" services.

[xv] Note: children and youth may receive multiple diagnoses so percentages may not total to 100%

Infrastructure, Eligibility, and Access

The following section describes Missouri's overall infrastructure of publicly funded children's behavioral health services, eligibility requirements and processes, and other access considerations, such as provider availability. See **Appendix E** and **Appendix F (report supplement)** for a list of the programs described below, a brief description, eligibility and assessment requirements, and services.

Medicaid Eligibility

There are several pathways through which children in the state are eligible for Medicaid, as shown in **Exhibit I**. Children and youth may be eligible based solely on their family's modified adjusted gross income (MAGI), which covers children ages 0-1 with family income up to 196% of the federal poverty level (FPL) and children and youth ages 1-18 with family income up to 148% FPL.[24] For adults, including youth ages 19-26, this threshold decreases to 138% of FPL.[25] In FY 2022, the majority of children and youth receiving Medicaid-financed behavioral health services were eligible based solely on their family's modified adjusted gross income (MAGI), which is the eligibility pathway for 71.7% of these children and youth. This aligns with national data that indicates 72.1% of children accessing behavioral health services are eligible for Medicaid through this pathway.[xvi,26] An even larger percentage – 77.3% — of children enrolled in a managed care plan are eligible for Medicaid based on their income, while this applies to just 15.6% of the FFS population. Children whose families have incomes between 150% FPL - 300% FPL may be eligible for the Children's Health Insurance Program (CHIP), which covers 3.7% of the population, including 4.0% of the managed care population and 1.0% of the FFS population.

The second largest Medicaid eligibility group includes children and youth in foster care; who were adopted; who are under guardianship; or who are involved with the juvenile justice system. Compared to national data from 2011, these children are disproportionately represented among those receiving behavioral health services in Missouri. While 15.9% of children and youth ages 0-26 receiving behavioral health services in the state are enrolled in Medicaid through this category **(see Exhibit I)**, nationally, this group represents just 11.1%.[27] Among the populations of children receiving behavioral health services through a managed care plan and through FFS, 16.1% and 14.3%, respectively, are eligible through this pathway.

Missouri's income limit for the aged, blind, and disabled (ABD) eligibility pathway is 85% FPL. As shown in **Exhibit I**, the ABD category provides eligibility to 6.1% of the child and youth population ages 0-26 accessing behavioral health services in Missouri. The majority of this population (99%) receive services through Medicaid FFS. At 6%, a disproportionately low rate of children accessing behavioral health services in Missouri are enrolled in the SSI/disabled category compared to national estimates that almost 17% of children are enrolled in Medicaid through this eligibility category.

The Missouri Children with Developmental Disabilities (MOCDD) 1915(c) waiver provides a Medicaid eligibility pathway for children and youth under age 18 who would otherwise be ineligible for

[xvi] In the 2011 report, this pathway is "Temporary Assistance for Needy Families (TANF)".

Medicaid by virtue of parental income. This waiver covers 1.8% of children receiving behavioral health services via FFS in Missouri. An additional 2.4% of the population ages 0-26 is eligible for Medicaid through MO HealthNet for Pregnant Women, which covers pregnant women with incomes up to 300% of the federal poverty level and Show Me Healthy Babies covers 0.06% of the population ages 0-26 through managed care.

Exhibit I. Percentage of Missouri Children and Youth Receiving Behavioral Health Services[xvii] Through Medicaid by Eligibility Pathway and Income Requirement, CY 2022[28]

Eligibility Pathway	Maximum Family Income Compared to Federal Poverty Level	% of MO Children and Youth (0-26) Receiving Behavioral Health Services
Aged, Blind, and Disabled (ABD)	Disabled: <85% Blind: <100%	6.1%
CHIP	150-300% (with premium)	3.7%
Child Welfare/Juvenile Justice involved	N/A	15.9%
Income/Modified Adjusted Gross Income (MAGI)	Ages 0-1: <196% Ages 1-18: <148% Ages 19-26: <138%	71.7%
MO HealthNet for Pregnant Women	<196%	2.4%
MO Children with Developmental Disabilities (MOCDD) 1915c Waiver	<85%	0.17%
Show Me Healthy Babies	<300%	0.06%

This data reflects Medicaid enrollment for children and youth enrolled for at least six months in CY2022.

Nationally, enrollment in Medicaid for children and youth is currently undergoing changes that could impact eligibility and services in the state. These changes include:

- The unwinding of Medicaid enrollment provisions from the COVID-19 public health emergency, which has led to over 50,000 children disenrolled from Medicaid in Missouri between May and September 2023.[29]
- As federally required, the state announced the implementation of continuous enrollment (12-month) for children and youth beginning January 1, 2024, which will support continuity of health care coverage.

[xvii] May include a percentage of children and youth with a primary psychiatric diagnosis who only received "indeterminate" services.

1915(c) Waivers

Eligibility for the MOCDD waiver is determined by regional Division of Developmental Disabilities (DDD) offices, which contract with targeted case management (TCM) providers to serve individuals enrolled in the waiver. There are three other 1915(c) waivers administered by DDD that serve people of all ages with I/DD:

1. Community Support Waiver
2. Comprehensive Waiver
3. Partnership for Hope Waiver

To be eligible for these waivers, a child must have a diagnosis related to an intellectual/developmental disability (I/DD) and have functional limitations based on scores from the Missouri Adaptive Ability Scale (MAAS) assessment tool. Previously, DDD recommended the Vineland Adaptive Behaviors Scale as an eligibility assessment for children and youth under age 18 and the Missouri Critical Adaptive Behaviors Inventory (MOCABI) for adults. [30] In 2023, the DDD replaced these tools with the MAAS, which is used to determine eligibility for all DDD waivers, though Vineland may be used if the MAAS finds that the child is ineligible.[31] However, when a youth involved with DYS does have a qualifying diagnosis for DD services, they are often denied by DMH, and the reason tends to be that they do not score high enough on the assessment and/or there is not enough of an impairment. There may be a gap in services for youth who need assistance to the extent that they cannot live independently but do not qualify for DD services. If youth was involved with child welfare, then they would automatically score higher on the assessment, unintentionally promoting involvement with the child welfare system to access services.

Show Me Healthy Kids Specialized Health Plan

The majority of children and youth insured through Medicaid in Missouri are enrolled in managed care plans. Of all children and youth ages 0-17 accessing behavioral health services in the state, 96.7% are enrolled in managed care and just 3.3% are FFS. Missouri contracts with three managed care organizations (MCOs) to operate three general health plans that are available to Medicaid enrollees in the state. While children and youth may be enrolled in any of these plans, there is a specialty plan, Home State Health's Show Me Healthy Kids (SMHK) plan, designed for children in child welfare or juvenile justice care, the mandatory eligibility category for former foster care children (FFCC), up to age 26 and includes youth from another state, and youth who receive adoption or legal guardianship subsidy assistance.

The SMHK specialty plan was launched in July 2022 and, as of June 2023, had enrolled 53,293 children and youth.[32] Prior to the implementation of SMHK, physical health services were administered through managed care and behavioral health services through FFS. This plan aims to provide care coordination and utilization management to better meet the needs of special populations by expanding the range of behavioral health services available to the covered populations and improve care coordination. Children enrolled in SMHK are assessed and stratified into case management tiers based on the intensity of their needs. This plan covers Comprehensive Community Support (CCS)

rehabilitation services, including residential treatment, aftercare services, and treatment foster care services administered by child welfare-licensed programs. However, several key behavioral health services are carved out of the managed care plan's covered benefits. These include Applied Behavior Analysis (ABA), pharmacy services, school-based services, and DMH-administered Community Psychiatric Rehabilitation (CPR) program and the Comprehensive Substance Treatment and Rehabilitation (CSTAR) program. The SMHK plan is required to coordinate these services, that are paid through Medicaid FFS.

CMHCs, CCBHCs, and Community-Based Behavioral Health Services

Missouri is divided into 25 mental health service areas responsible for providing services directly or through a Community Mental Health Center (CMHC) to those residing within the region. As of 2019, there were 40 CMHCs in the state. As of July 2022, 25 of these CMHCs were Healthcare Homes (HCH) that integrate physical and behavioral health care into the CMHC by providing comprehensive case management, care coordination and health promotion, patient and family support, comprehensive transitional care, and referrals to community and support services.[xviii,33] To be eligible for HCH services, individuals must be covered by Medicaid and have a serious mental illness or SED, a mental health condition and a substance use disorder, or a mental health condition or substance use disorder and a chronic health condition or risk factor.[34] As of 2019, 16% of program participants were youth (ages 0-15) and an additional 11% were young adults (ages 16-25).[35]

Twenty-two CMHCs are Certified Community Behavioral Health Clinics (CCBHCs)[xix] (see **Exhibit J**) and are required to meet national standards for behavioral health care.[xx] CCBHCs are referred to as CCBHOs in Missouri. Child and youth populations of focus for CCBHC services include those with a diagnosis of SED; those with moderate to severe substance use disorders; children and youth in state custody who have behavioral health needs; and young adults with mental illness or substance use disorders identified as in need of treatment by the courts, law enforcement, or hospital emergency rooms. Screening and assessment tools used in these settings include the PHQ2 or PHQ9 for depression screening and the DLA-20, mGAF, or CGAS as a functional assessment. Missouri's CCBHC and CMHC HCH program has shown improved outcomes across several measures, including reduced emergency department visits and hospitalizations, increased rates of behavioral health screening and assessment for youth, and follow up care for children prescribed ADHD medication.[36,37]

Missouri also has a Primary Care Health Home (PCHH) program, which provides integrated care for people with chronic conditions in 43 primary care organizations in the state with 208 operating sites. The portion of the population served through PCHHs that are children is roughly similar to that of the HCH program. Generally, individuals with two or more chronic conditions are eligible for PCHH services, including children and youth with depression, anxiety, and/or substance use disorder. As of

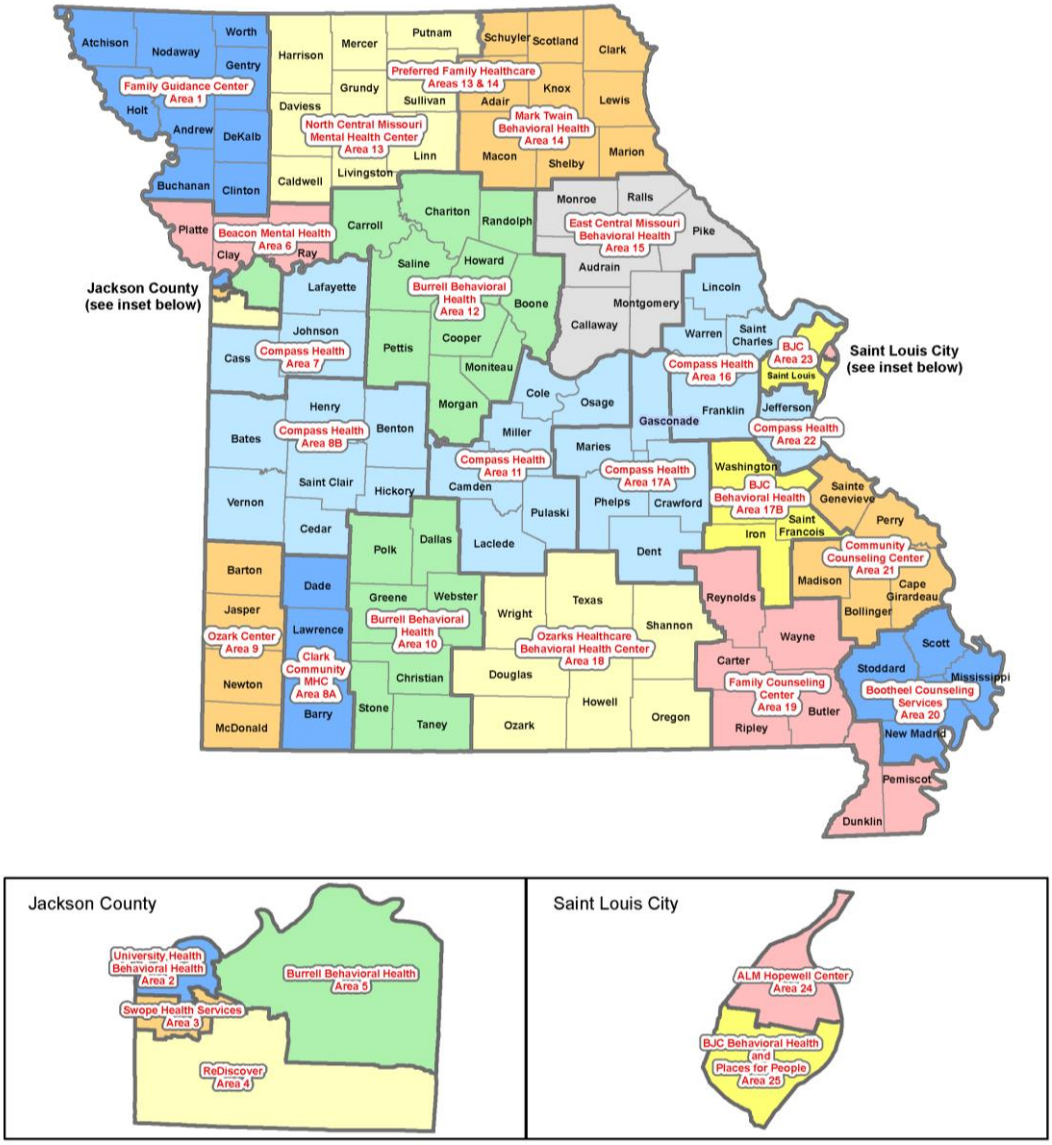
[xviii] The state also has HCHs through primary care providers such as Federally Qualified Health Centers (FQHC), Rural Health Clinics, and Hospital-Operated Primary Care Clinics. These all align with the Affordable Care Act's Health Homes, see https://www.medicaid.gov/medicaid/long-term-services-supports/health-homes/index.html for more information.

[xix] To learn more about CCBHCs, visit https://www.samhsa.gov/certified-community-behavioral-health-clinics

[xx] To review SAMHSA's national standards for CCBHCs, visit https://www.samhsa.gov/sites/default/files/ccbhc-criteria-2023.pdf

2019, an estimated 15% were youth (ages 0-15), and an additional 7% were young adults (ages 16-25).[38] Missouri PCHHs have also shown improvements across key indicators, including greater reductions in hospitalizations and emergency department visits compared to the CMHC HCHs/CCBHCs.[39] However, despite the progress made, there is still a gap in the services available and those needed by youth in Missouri. For example, 92% of the youth involved with CD boarding in hospital settings had previously received services from a DMH-contracted provider and 32% received DMH services at the time of boarding.[xxi]

Exhibit J. Map of Missouri's CCBHO Regions



Source: Missouri Department of Health. January 2024. https://dmh.mo.gov/media/pdf/map-certified-community-behavioral-health-organizations.

[xxi] Data shared by DMH on April 2, 2024

Crisis Response and Stabilization

Missouri requires its MCOs and CCBHOs to ensure that individuals have access to crisis response and stabilization services.[xxii] Missouri DMH has implemented a statewide 988 crisis line that operates through seven regional call centers, which recently transitioned from the state's ten regional Access Crisis Intervention (ACI) Hotlines.[40] Intervention and referral services are available 24 hours per day, 7 days per week for people experiencing a behavioral health crisis. The hotlines are staffed by mental health professionals who conduct a standardized initial safety screening, attempt to resolve the crisis over the phone and provide service referrals, or connect the individual to a mobile crisis mental health professional.[41] There are 18 mobile crisis response providers serving the state, which are required to operate 24/7.[42,43] Missouri DMH is currently working to establish standards and protocols to further guide the mobile crisis response system. While this is an adult model of crisis response and intervention, the state intends to include provisions that tailor the system to service children, youth, and their families. There are also 22 behavioral health crisis centers (BHCC) in the state, five of which serve children, youth, and their families. Three BHCCs serve children over age five, one serves children over age 10, and one serves youth over age 16.[44] All five BHCCs operate an urgent care model with an open-door policy and walk-in services. In 2022-2023, roughly 5% of youth presenting at BHCCs in the state were under age 17, and almost 15% were ages 18-24.[45]

Community Psychiatric Rehabilitation (CPR) Program

The Community Psychiatric Rehabilitation (CPR) program provides essential behavioral health services to children and youth with SED in Missouri, serving an estimated 90% of children and youth who are receiving DMH-supported mental health services and demonstrating the relatively high level of need required by many of the youth served by DMH.[46] Roughly 75% of CMHCs provide CPR services, and DMH has expanded this program to be provided in school settings.[47] In addition to an intensive level of care for acute psychiatric needs, the program provides community support services, including day treatment, psychosocial rehabilitation, targeted case management, community support, respite, family support, and family assistance. Eligibility is based on diagnosis and/or a functional assessment. Functional assessment tools used by the state for children ages 2-5, include the Devereaux Early Childhood Assessment Clinical Form (DECA-C), the Ages and Stages Social Emotional Screening tool, and the Preschool and Early Childhood Functional Assessment Scale.[48] For older children and youth, the DLA-20 is used.

Comprehensive Substance Treatment and Rehabilitation (CSTAR)

The Comprehensive Substance Treatment and Rehabilitation (CSTAR) program provides a range of services to individuals with substance use disorders. Missouri has developed a tailored program, CSTAR Adolescent, to serve youth ages 12-17, paid through Medicaid FFS or, if the youth is not Medicaid-eligible, through DMH funds. There are three levels of care: community-based treatment; intensive outpatient; and supported recovery. Eligibility is based on a diagnosis related to a substance

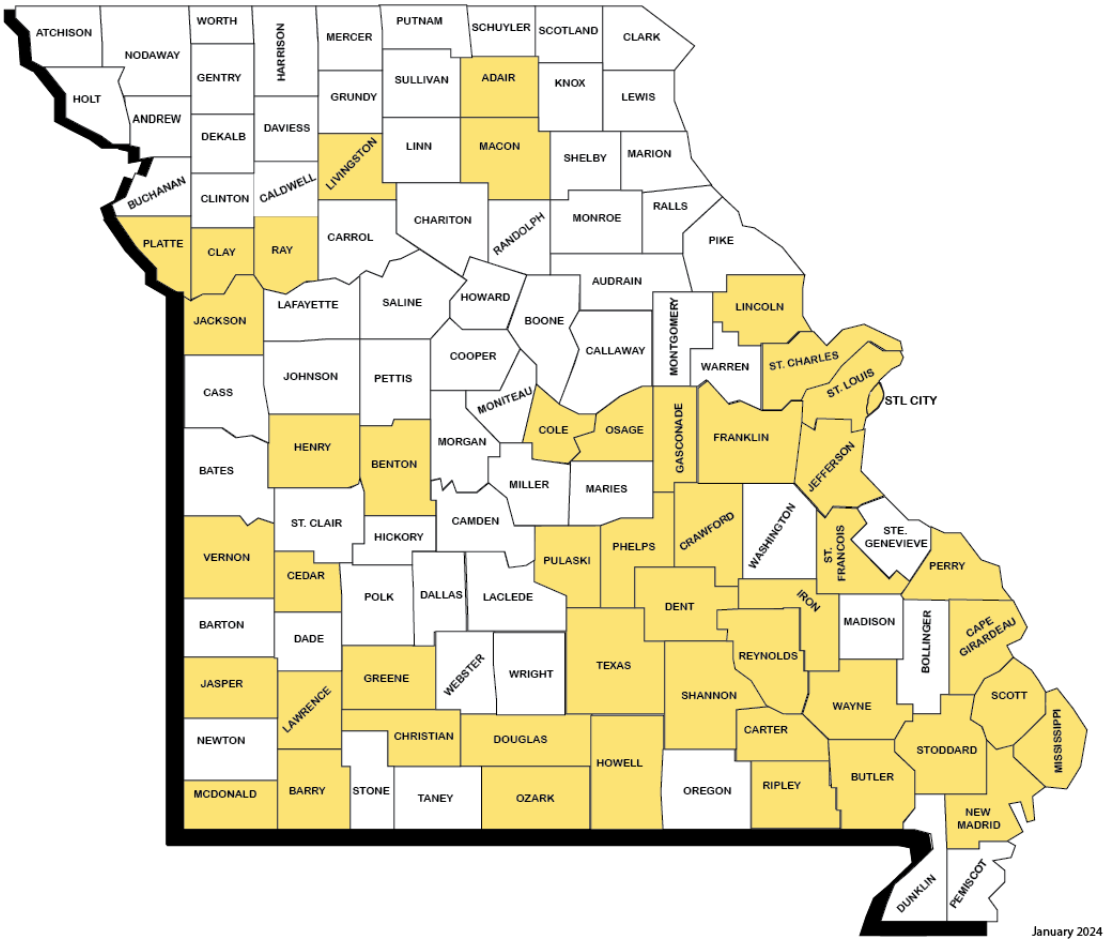
[xxii] For more information see the state home and community-based services transition plans here: https://mydss.mo.gov/mhd/hcbs-transition-plan

use disorder, excluding tobacco use disorder confirmed by a licensed mental health professional. The eligibility determination documentation must include a completed functional assessment using the DLA-20, which also helps to guide service eligibility and treatment planning. Guidance from DMH outlines additional components that must be included in the comprehensive assessment for treatment planning purposes.[49]

System of Care Teams

Beginning in 1992, Missouri DMH has been the recipient of several federal System of Care (SOC) grants through the Substance Abuse and Mental Health Services Administration's Comprehensive Community Mental Health Services for Children and their Families Program (also referred to as the Children's Mental Health Initiative or CMHI). System of Care grants provide resources to improve mental health outcomes for children and youth, birth through age 21, at risk for or with serious emotional disturbance (SED), and their families, and supports the implementation, expansion, and integration of the System of Care (SOC) approach by creating sustainable infrastructure and home and community-based services. As such, there is extensive history and knowledge of System of Care philosophy and practice in the State. Unfortunately, beyond the grant-funded projects (most of which have ended), Missouri has maintained a somewhat antiquated and incomplete 'system of care' structure that does not effectively address the needs of statewide populations of children and youth who would benefit from intensive care coordination, and home- and community-based services and supports. There are system of care teams in 48 of Missouri's 114 counties and the City of Saint Louis, as shown in **Exhibit K**. DMH has state-level system of care liaisons who host quarterly meetings across local system of care teams and provide technical assistance as needed.[50] The state shares information regarding system of care guiding principles, core values, and required partners with the local system of care teams. However, the state's system of care has not matched the evolution of System of Care implementation and practice observed in other states. It has not issued uniform guidance or requirements regarding training and certification, screening and assessment tools, service and eligibility criteria, data collection and monitoring, and other standardized protocols for local 'system of care' teams or established sustainable funding mechanisms to allow the work seeded with federal funding to continue or grow and expand statewide. Missouri's system of care teams are sustained largely by local "champions", many of which are CCBHOs. They operate as interdisciplinary teams that invite families to meetings and try to help but lack both adherence to a fidelity practice model and the supportive state-level infrastructure of a comprehensive, coordinated statewide children's System of Care with access to a full array of home and community-based services and supports.

Exhibit K. Missouri Local System of Care Team Map

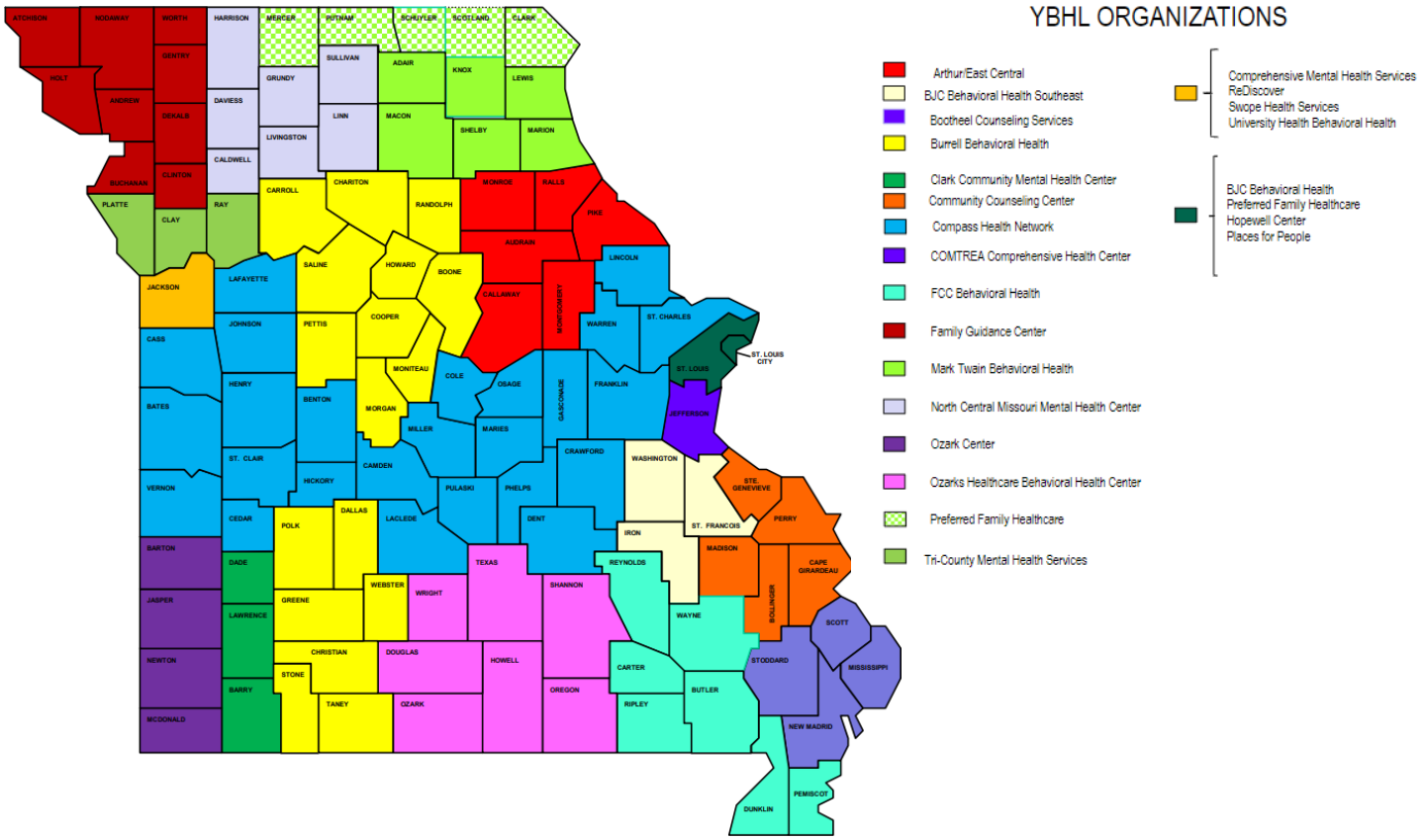


Source: Missouri Department of Health. January 2024. https://dmh.mo.gov/children-services/soc/locate.

Youth Behavioral Health Liaisons

Missouri's Community Behavioral Health Liaison (CBHL) program was established in 2015 to support care coordination and connection to services for people with behavioral health needs through CMHC, law enforcement, and court partnerships.[51] The complementary Youth Behavioral Health Liaison (YBHL) program arose from the adult model, similarly supporting partnerships across child-serving systems, including behavioral health, schools, juvenile justice, courts, and others to link children, youth, and their families with behavioral health needs to resources. YBHLs are employed by CMHCs and CCBHOs and these services are available statewide across 18 service regions, as shown in **Exhibit L**. While the state is moving toward expanding the program, as of October 2023, the state had 33 YBHLs to serve Missouri's 114 counties, requiring some YBHLs to serve multiple counties. The YBHL program appears to align more closely to the evolved understanding of SOC cross-system partnership, linkage and referral, and may complement system of care teams as a pathway for establishing a statewide, care coordination workforce.

Exhibit L. Missouri Youth Behavioral Health Liaison Service Regions

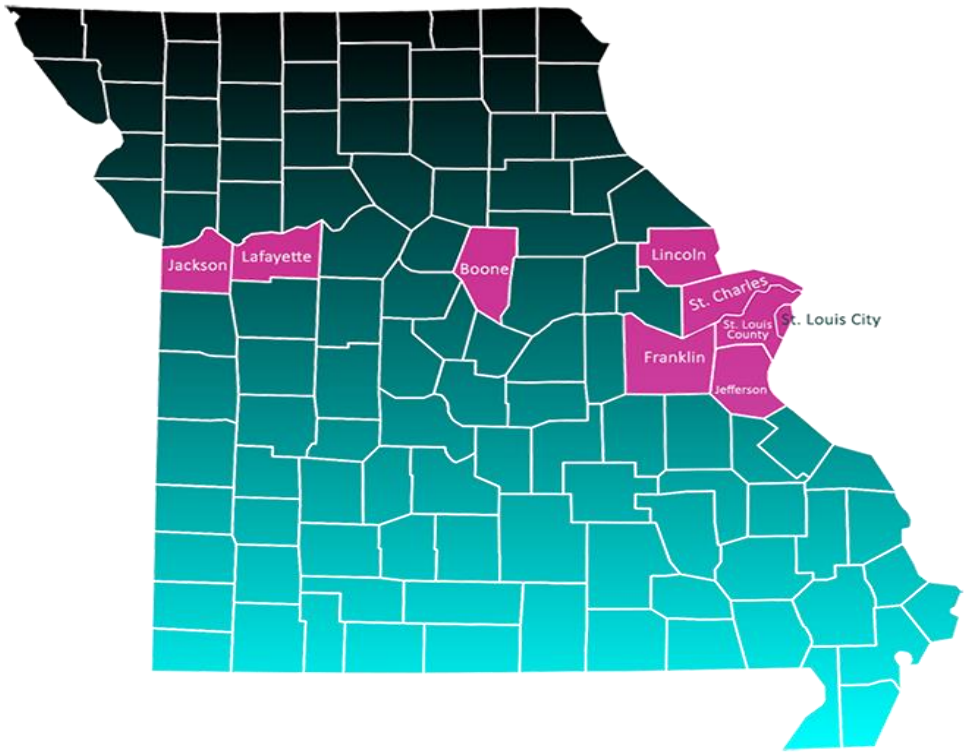


Source: Missouri Department of Health. https://dmh.mo.gov/media/pdf/missouri-map-ybhl-poc-counties

Children's Service Funds

Nine communities, as shown in **Exhibit M,** levy taxes to provide access and improve the provision of behavioral health services across the state. "The Community Children's Services Tax is not intended to supplant or to diminish the critical role that state dollars and agencies must contribute to our children's health. The needs are countless and the resources are limited for children's behavioral health—even in communities with dedicated revenue. The communities that have implemented this tax are fully aware that it cannot solve all the social distress, but rather see it as the starting point to begin developing systems of care that are effective, cross-cutting and contextualized".[52] Before the Community Children's Services Fund, the services available to address children's behavioral health was limited and fragmented. There is an opportunity here for Missouri state departments to work with these communities to complement and maximize funding for all children in the state.

Exhibit M. Missouri Jurisdictions with Children's Service Funds



Source: Missouri Kids Count. March 2017. https://mokidscount.org/stories/missouris-tax-children-investment-counts/.

Children's Division (CD) Prevention Services

To help keep families together and promote stability, CD provides services through the Children's Treatment Services (CTS) program. These services can be provided to families involved with child welfare who have an open child abuse/neglect case and to foster families. Available CTS services include assessments, behavioral health services, crisis intervention, therapeutic services, day treatment, respite, and substance use services, among others.[53] Children's Division also provides Family-Centered Services that can be requested by families or court-ordered, as well as Intensive In-Home Services that provide crisis intervention for families at risk of separation. Missouri is also beginning to implement services for families through the state's Family First Prevention Services Act, which was approved in August 2022. Services currently in Missouri's FFPSA plan include Brief Strategic Family Therapy, Focused Family Therapy, Multisystemic Therapy, and Parent-Child Interaction Therapy. These services began to launch in 2023 through pilot sites.

Additionally, in FY 2023 Missouri was allocated 100 new full-time employees to focus on prevention efforts statewide. The focus of this work is to allow prevention workers to connect with families before a safety concern is present in the home. Currently, CD plans to hire 20 prevention workers dedicated to facilitating team decision-making, 20 prevention workers to support the existing Family Centered Services program, and the remaining 60 positions would focus on community support. These 60 prevention workers would engage with schools, medical facilities, and other organizations in the community to identify resource gaps and connect families with community services.

Missouri is also working to leverage Title IV-E and other sources to fund high-quality legal representation for parents and caregivers involved in child abuse/neglect cases when families do come under the court's purview.[54]

Treatment Foster Care

Missouri offers treatment foster care (TFC) for children and youth with medical, developmental, emotional, or behavioral needs who require a high level of care and are at risk of being placed in a more intensive out-of-home treatment setting. There are three types of TFC: traditional TFC provided in a foster home, relative TFC (RTFC), and transitional TFC, which is designed to support children transitioning to a permanent or less restrictive setting. Assessment tools include the CSPI, CS-3 Life Skills Inventory, Daniel Memorial Life Skills Inventory, or CS-1 and the CS-10 Medical Foster Care Assessment Tool. Authorization for the level of TFC is determined by the MCO or MO HealthNet based on a clinical assessment of the youth's needs.

The treatment team for TFC includes a case manager, the TFC resource parent(s), a TFC specialist who provides additional support to access therapeutic services, a TFC supervisor, a therapist, guardian ad litem, and others as appropriate. Services provided by TFC providers include case management, crisis intervention, mentoring, permanency, physical maintenance services, psychiatric services, respite care, supportive services, treatment planning, permanency planning, and discharge and transition planning.[xxiii] As of May 2022, there were at least eight TFC provider agencies in the state.

Residential Treatment Settings

Missouri's residential treatment settings include several levels of residential treatment services, Qualified Residential Treatment Programs (QRTP), and Psychiatric Residential Treatment Facilities (PRTF). Child welfare uses the CS-9 form to refer children and youth to residential treatment, which includes the Childhood Severity of Psychiatric Illness scale. Approved referrals are shared with an independent assessor to administer the Child and Adolescent Needs and Strengths (CANS) tool to inform the appropriate level of care to meet the child's needs.[55] In 2021, Missouri established both QRTP and private PRTFs as part of the service array and, as of February 2024, intends to submit an 1115 Demonstration waiver to obtain Medicaid reimbursement for services provided in QRTPs that would otherwise be ineligible due to the Institutions for Mental Disease (IMD) exclusion.

Missouri's state plan amendment to cover PRTFs was also approved in 2021.[56] General managed care plans and the SMHK specialty plan are required to include private and state-operated PRTFs in their networks. As of February 2024, there are 4 programs in the state with a total of 253 beds providing PRTF level of care.[57] Prior to the 2021 implementation of private PRTFs, the only Medicaid approved PRTF program was Hawthorn Children's Psychiatric Hospital, the state's only children's psychiatric hospital, located in St. Louis County with a total of 24 beds.[58]

[xxiii] Services described in the CD TFC provider manual

Juvenile Justice (DYS and Local Juvenile Office) Services

DYS has 21 residential sites and 6 day treatment centers across the state. The residential facilities each provide trauma-informed care in a group setting and can be categorized by level of care: community-based, moderate, and secure residential care. When a youth is committed to DYS, DYS staff conduct an initial interview with the youth and their family, basic health screening, two proprietary assessments, MAYSI-2[xxiv], and review the information provided by the courts to determine the appropriate services and supports required for the youth.

DYS contracts with University of Missouri's Psychiatric Center (UMPC) to provide consistent and coordinated telehealth psychiatric services to youth in four of the five agencies' regions. The facilities in the southeast region (see **Appendix B** to review DYS regions) do not contract with UMPC but have a longstanding relationship with a psychiatrist who provides services for youth. DYS provides community-based services to committed youth, including counseling and day treatment. In the 90 days prior to youth leaving residential care, youth and their family drive the creation of a transition and aftercare plan.

DYS also administers the juvenile court diversion program that support children and families in their community, with the intention of diverting them from formal DYS involvement. Missouri's Juvenile Detention Assessment (JDTA) is used to determine which youth are placed in residential treatment and which may be eligible for alternative treatment.[59]

Missouri implements the Annie E. Casey Foundation Juvenile Detention Alternatives Initiative (JDAI) which aims to reduce the number of youth placed in detention through community-based interventions.[xxv] Implementation of JDAI began in Missouri in 2006 in four urban jurisdictions (Jackson County, Greene County, St. Louis County, St. Louis City) and has expanded to 17 of the state's 18 detention centers as of FY 2022. [60,61]

Missouri's work in juvenile justice has been seen as a national model[xxvi] and in 2008, Missouri Division of Youth Services received the Innovations in American Government Award[xxvii]. Missouri's juvenile justice reform is referred to as the 'Missouri model', nationally.

Due to lack of coordinated efforts around access and delivery of appropriate behavioral health services in Missouri, systems use DYS to gain access to residential beds and services. Access is gained by committing youth to the juvenile justice system, which is not designed to, nor intended to address behavioral health needs.

[xxiv] https://www.nysap.us/maysi2/index.html

[xxv] For more information on JDAI, visit https://www.aecf.org/work/juvenile-justice/jdai

[xxvi] http://missouriapproach.org/publications/tag/harvard-university

[xxvii] http://missouriapproach.org/publications/2010/8/26/innovations-in-american-government-award.html

Service Utilization

Across the programs and agencies described in the previous section, similar types of behavioral health services are available to children. MHD provided data on a total of 25 services used by 141,667 children and youth ages 0-26, including 19 services used by 114,833 children and youth ages 0-17 in the state.[xxviii] While most children and youth involved with DMH, CD, and DYS are included in the MHD data, some children were not included in the MHD data if they were not enrolled in Medicaid or if the services were CD- or DYS-funded residential services. DMH reported data on 15 of the 25 services used by 1,508 children who used mental health services and 287 children who used substance use services who are not enrolled in Medicaid.[xxix] CD reported data based on 3,364 children who were not enrolled in Medicaid and received non-residential, CD-funded services across 34 service codes. CHCS cross-walked and grouped these services into seven of the Medicaid service categories, plus an additional service category — transportation — which was not reported by MHD or DMH. CHCS also leveraged publicly available information on CD- and DYS-funded residential services.[62,63] See **Appendix G (report supplement) and Appendix C** for summarized data on service utilization in Missouri.

These services can be organized into the following major service types (see **Appendix H in the report supplement** for a complete list with definitions):

- **Case management**, including targeted case management, initial service planning, and medication management
- **Crisis intervention and stabilization,** including telephone hotline services, mobile crisis and stabilization services, crisis stabilization units, crisis respite beds, and medically monitored crisis detoxification units
- **Home- and community-based services**, including behavior management consultation and training, peer support, psychosocial rehabilitation, respite, and wraparound
- **Hospital**, including acute care and emergency room
- **Residential**, including therapeutic group homes, and treatment foster care
- **Outpatient counseling**, including individual, family, and group, and partial hospitalization/day treatment
- **Screening, assessment, and evaluation**, including psychological testing and substance use screening/assessment

Based on the MHD data, the four most frequently utilized Medicaid children's behavioral health services in Missouri are outpatient counseling (used by 35.8% of children receiving services), emergency room services (35.0%), screening, assessment, and evaluation (34.4%), and psychosocial rehabilitation (18.5%) for children 0-17 years old. Similarly, children receiving services from DMH are

[xxviii] MHD also reported an "indeterminate" category that captures services that are likely behavioral health-related but cannot otherwise be categorized. The "indeterminate" category was the largest service category, with 104,658 children ages 0-17 (91.1% of all children in Missouri using behavioral health services) accessing an "indeterminate" service at least one time in FY 2022. This category has been excluded from service utilization and expenditure results unless otherwise noted.

[xxix] DMH reported data on children using mental health and substance use services separately. Therefore, the total number of children served by DMH used in these calculations may include duplication of children receiving both types of services.

most likely to receive psychosocial rehabilitation (78.1%), screening, assessment, and evaluation (53.0%), and outpatient counseling (30.0%). These services are also reflected as some of the most frequently used services based on national data.[64] In Missouri, all service categories other than the four most utilized were accessed by less than 10% of children accessing behavioral health services. Five services were accessed by less than 1% of the children receiving behavioral health services: partial hospitalization/day treatment; substance use outpatient services; substance use screening and assessment; substance use residential treatment; and respite.

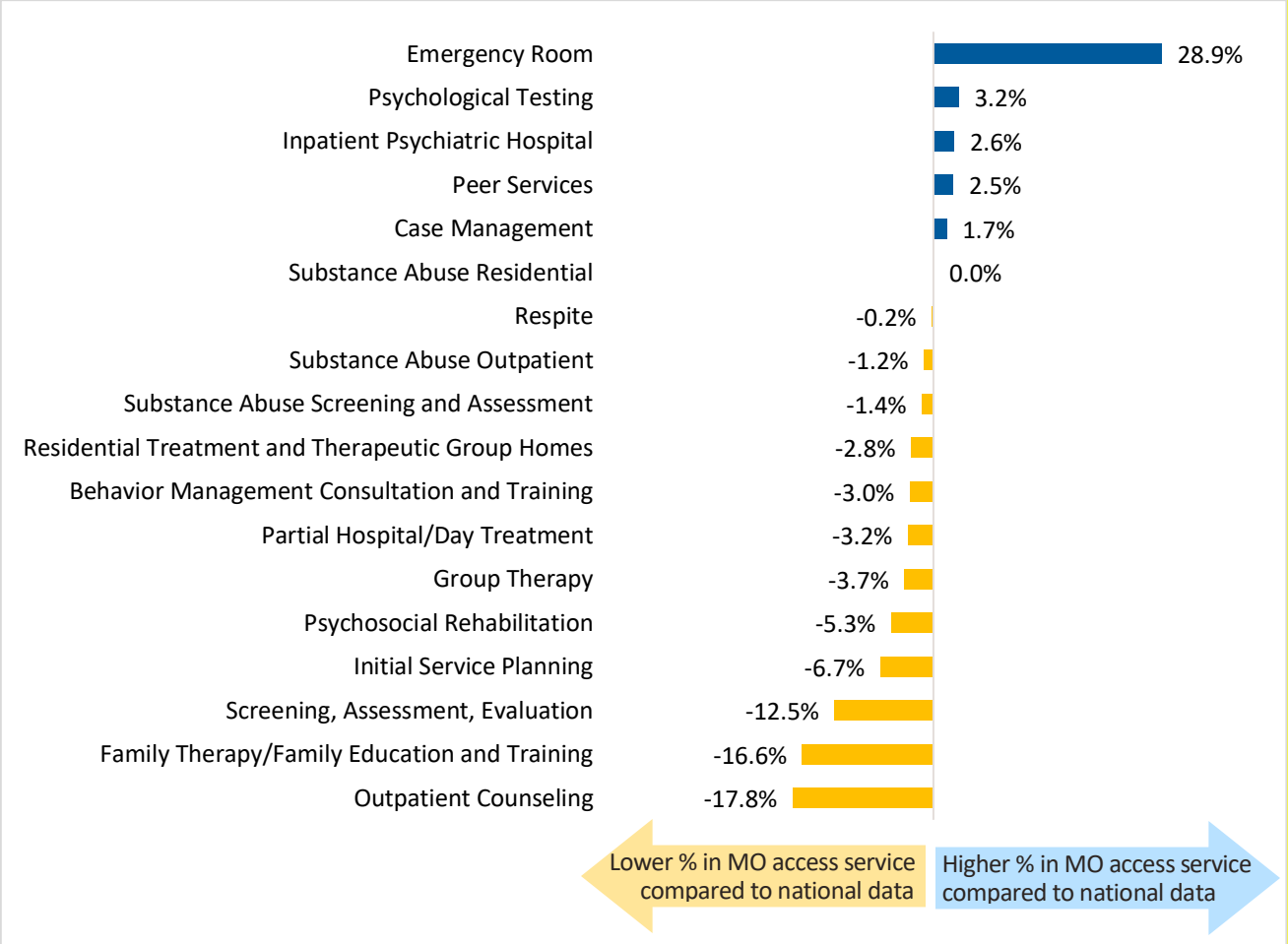
As shown in **Exhibit N**, compared to the national 2011 data, children ages 0-17 in Missouri accessing behavioral health services are less likely to receive 13 out of the 19 services reported.[65] Some of these differences may be attributable to lower behavioral health service utilization among children enrolled in Medicaid during the COVID-19 pandemic.[66] The largest differences in utilization are in emergency room services and medication management. [xxx] However, medication management may be reflected in the "indeterminate" service category as providers often conduct this service during office visits not categorized as behavioral health visits under the national service codes. Medicaid reported utilization of five services to a higher proportion of children in the state compared to the national data: emergency room services, peer services, psychological testing, inpatient psychiatric hospital treatment, and case management.[xxxi] Data on five services could not be analyzed for ages 0-17 due to data aggregation: targeted case management; mental health consultation/collateral; crisis intervention and stabilization (non-ER); wraparound; and treatment behavioral support. However, this indicates low utilization of these services. Additionally, for ages 0-17, the MHD data did not have claims data on six services included in the national data: therapeutic/treatment foster care;[xxxii] supported housing; home-based/in-home; activity therapies; transportation; and Multisystemic Therapy.

[xxx] Differences in service use ranged from 0.0 percentage points to 22.0 percentage points.

[xxxi] Differences in service use ranged from 1.7 percentage points to 28.9 percentage points.

[xxxii] Residential treatment and treatment foster care services did not appear in Medicaid claims data until October 1, 2022.

Exhibit N. Difference in Children's Behavioral Health Service Utilization in Missouri (CY 2022) Compared to National Data (2011), Ages 0-17[xxxiii]



Managed Care and Fee-for-Service

There are differences in behavioral health service utilization between the population enrolled in Medicaid FFS versus managed care.[xxxiv] Some Medicaid services are only provided through FFS like applied behavioral analysis (included in the behavior management consultation and training service category), targeted case management, comprehensive substance treatment and rehabilitation program services (CSTAR, included in the substance use services programs), and community psychosocial rehabilitation (CPR, included in the psychosocial rehabilitation services category). As shown in **Exhibit O**, among children ages 0-17 enrolled in managed care, the most commonly utilized Medicaid-funded services are outpatient counseling (36.0%), emergency room services (35.1%), screening, assessment and evaluation (34.6%), psychosocial rehabilitation (18.6%). The most commonly utilized services for children ages 0-17 enrolled in FFS were case management (41.7%), emergency room services (31.8%), outpatient counseling (28.1%), screening, assessment, and

[xxxiii] Medication management was removed because the data may not accurately reflect true service utilization as providers often conduct this service during office visits not categorized as behavioral health visits under the national service codes.

evaluation (27.8%)). The largest difference was in service utilization of case management, which 41.7% of the FFS population accessed and only 6.8% of the MC population accessed. The next largest differences in service utilization are for screening, assessment, and evaluation, and outpatient counseling. Children enrolled in MHD FFS are 6.8 percentage points less likely to receive screening, assessment, and evaluation, and 7.9 percentage points less likely to receive outpatient counseling, compared to children enrolled in MHD through managed care. Children in managed care had a higher rate of emergency room use, even with higher rates for outpatient and screening, assessment and evaluation services.

Exhibit P shows the most utilized services among youth and young adults ages 18-26.

Exhibit O. Most Utilized Children's Behavioral Health Services in Missouri, CY 2022, Ages 0-17

MHD Managed Care (N=111,084)	MDH FFS (N=3,785)
Outpatient counseling (36.0%)	Case management (41.7%)
Emergency room (35.1%)	Emergency room (31.8%)
Screening, assessment, and evaluation (34.6%)	Outpatient Counseling (28.1%)
Psychosocial rehabilitation (18.6%)	Screening, assessment, and evaluation (27.8%)

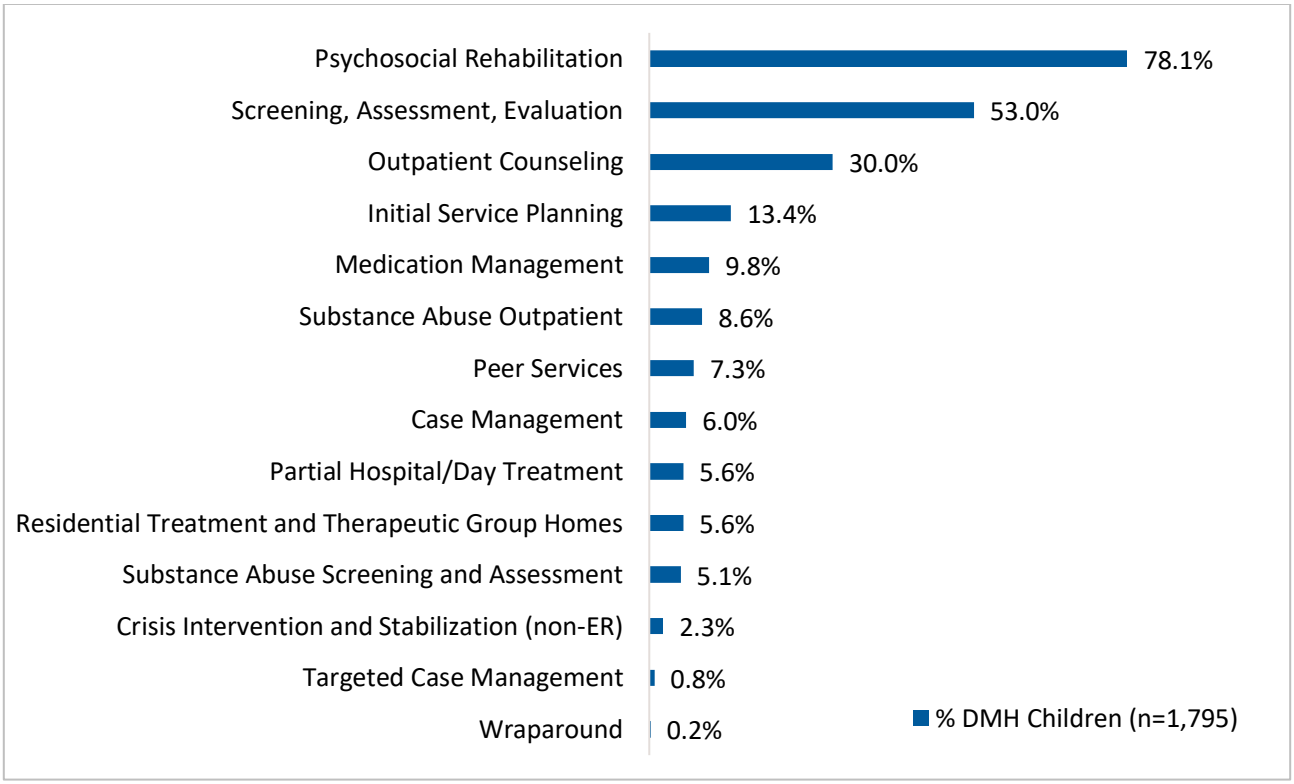
Exhibit P. Most Utilized Behavioral Health Services by Youth and Young Adults in Missouri, CY 2022, Ages 18-26

MHD Managed Care (N=17,725)	MHD FFS (N=9,109)
Emergency room (48.9%)	Case management (51.1%)
Outpatient counseling (34.1%)	Emergency room (39.3%)
Screening, assessment, and evaluation (31.7%)	Screening, assessment, and evaluation (29.1%)
Psychosocial rehabilitation (16.1%)	Psychosocial rehabilitation (23.3%)

Department of Mental Health Services

Not all behavioral health services provided to children in Missouri are funded through Medicaid; some are provided by other state agencies, like the Department of Mental Health (DMH). Based on the data provided by DMH for behavioral health or substance use services provided to 1,795 non-Medicaid eligible children in SFY 2022, the behavioral health services that youth were most likely to receive were psychosocial rehabilitation (78.1%), screening, assessment, and evaluation (53.0%), outpatient counseling (30.0%), initial service planning (13.4%), and medication management (9.8%). The breakdown across all DMH-funded services provided to children is shown in **Exhibit Q**. Three of the top five services listed are also most utilized Medicaid behavioral health services for children ages 0-17 (outpatient counseling; screening, assessment, and evaluation; and psychosocial rehabilitation).

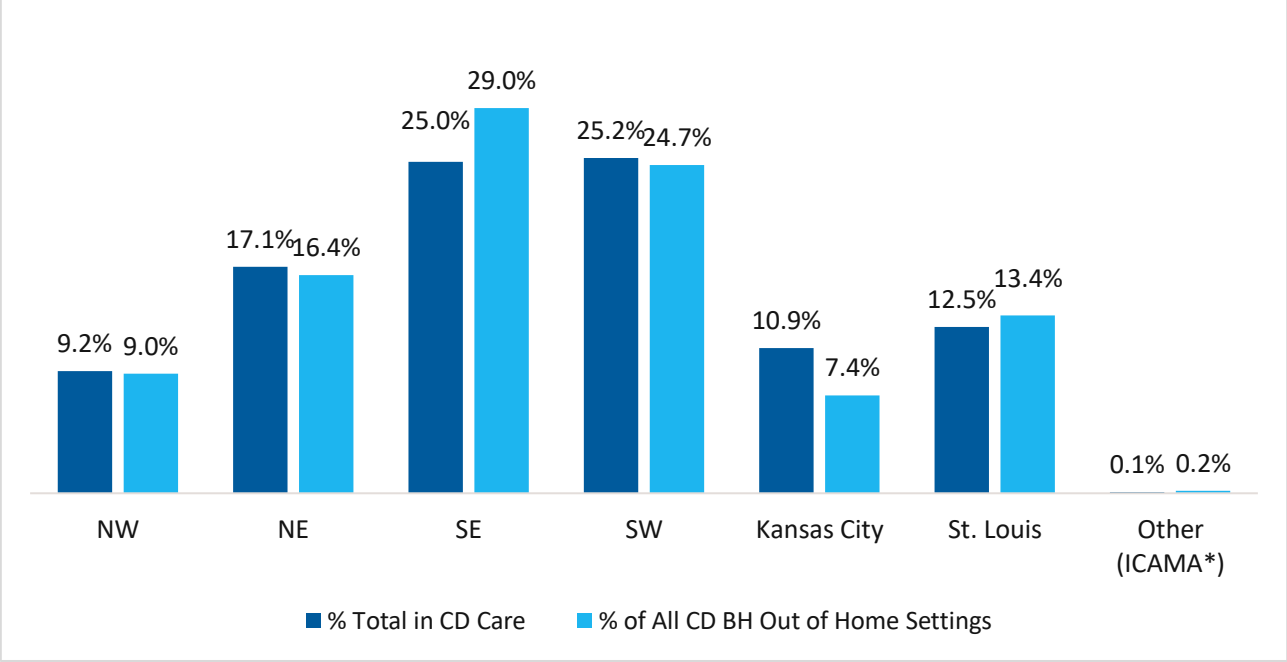
Exhibit Q. Percentage of Children and Youth Receiving DMH-funded Behavioral Health Services by Service Type, FY 2022



Children's Division Services

Based on the data from CD (see **Appendix G in the report supplement**), children were most likely to receive CD-funded medical transportation services (48.0%) and residential treatment or therapeutic group homes (36.2%). Of the youth in CD custody, 12.2% (2,468) of children were in behavioral health-related residential treatment facilities or TFC settings.[67,68] See **Appendix I (report supplement)** for additional data on children placed in behavioral health-related settings. Among these children and youth, 58.8% (1,451) were in residential treatment facilities, 30.3% (748) were in behavioral foster or relative homes, 5.9% (146) were in a mental health facility or psychiatric hospital, and 5.0% (123) were in either a mental health facility, psychiatric hospital, or treatment foster home. This includes 19.6% of children and youth who were eligible through a DMH Medicaid waiver and were placed in DMH foster homes, mental health facilities, or psychiatric hospitals. As shown in **Exhibit R**, there are differences in treatment setting by region. When compared to other regions, Kansas City has the lowest total number of children in these settings (182 or 7.4%). Of the 182 children in CD custody in the Kansas City region, 31.3% (57) are in residential treatment settings while 59.9% (109) are in foster or relative TFC settings. In comparison, the Southeast region, has the highest total number of children in out-of-home treatment settings (715 or 29.0%); 68.4% of the 715 children in the Southeast region are in residential treatment settings and 22.4% are in TFC settings.

Exhibit R. Missouri Children and Youth in CD Behavioral Health-Related Out of Home Treatment Settings by Region, FY 2022



* The Interstate Compact on Adoption and Medical Assistance (ICAMA) governs the payment for and delivery of services for children with special healthcare needs who are adopted and move from one state to another

Funding and Expenditures

In 2022, MHD, CD, DYS, and the DMH spent an estimated $304.6 million of federal and state funding on children's behavioral health services (see **Exhibit S**). This funding comes from a variety of federal and state sources, such as Medicaid, Title IV-E, and state general funds. The funding attributed to MHD ($196.8 million for children ages 0-17 and $71.5 million for youth ages 18-26) also includes funding for Medicaid eligible youth with DMH, CD, and DYS involvement.[xxxv] Medicaid is the largest statewide funder of children's behavioral health services in Missouri which reflects the significant role that Medicaid plays in financing behavioral health services nationally.[69] In comparison, DMH spends $15.8 million for youth not eligible for Medicaid which is only 5% of expenditures on children's behavioral health services, likely due to the limited funding for children's behavioral health within the department. DMH budget was $2.8 billion for FY22 -includes state and federal funds.[xxxvi] [xxxvii]

Exhibit S. State Agency Expenditures on Children's Behavioral Health Services, 2022

Agency	Total
Department of Social Services, Missouri HealthNet Division (0-17)	$196.8 M[xxxviii]
Department of Mental Health, Division of Behavioral Health	$6.6 M[xxxix]
Department of Mental Health, Division of Developmental Disabilities (Autism Project)	$9.2 M[xl]
Department of Social Services, Children's Division	$51.9 M[xli]
Department of Social Services, Division of Youth Services[70]	$40.1 M[xlii]

The total expenditures outlined above do not include other state agencies' spending on behavioral health services for children in Missouri, such as the Department of Elementary and Secondary Education (DESE) and the Department of Health & Senior Services, which also fund behavioral health services for children and youth. However, given the lack of available information on expenditures specifically funding behavioral health services from these agencies, this funding has been excluded. For example, DESE has received federal funding from the Coronavirus Aid, Relief, and Economic Security Act (CARES) and the American Rescue Plan Act (ARP) through the Elementary and Secondary Emergency Relief (ESSER) funds. Federal law requires that at least 90% of ESSER funds are distributed to local education agencies as grants to support a variety of initiatives, including but not limited to

[xxxv] The total spent by MHD does not include spending on indeterminate services ($86.1 million for ages 0-17 and $230.4 million for ages 18-26) or spending on services expenditures on psychotropic medications ($60.4 million for ages 0-17 and $27.8 million for ages 18-26). Use and expenditures on psychotropic medications is described separately below. Together, total spending by MHD is $346.3 million for children ages 0-17 and $329.7 million for youth ages 18-26.

[xxxvi] https://dmh.mo.gov/media/pdf/fy22-budget-summary-report

[xxxvii] https://oa.mo.gov/sites/default/files/FY_2022_HB_10_TAFP_Fact_Sheet.pdf

[xxxviii] See above

[xxxix] Only includes spending for children who were not Medicaid eligible and received Mental Health and/or Substance Use Disorder services paid by DMH general revenue funds or grant funds. DMH paid services for Medicaid eligible children were reported to MHD.

[xl] Budget for FY 2024

[xli] Includes $51.2 million for residential treatment services, which are not necessarily exclusively behavioral health services.

[xlii] This is an overestimate as it includes DYS Treatment Services and Juvenile Court Diversion, which include services that are not necessarily behavioral health services. https://dss.mo.gov/re/dysar.htm

mental health supports. In FY 2022, DESE spent a total of $771.9 million of ESSER funding. As of June 30, 2021, $4.9 million had been spent on mental health supports, which could include services as well as other initiatives, such as those to support recruitment and retention of mental health staff in schools.[71] Additionally, an estimated 28% of children receiving special education services in schools have a behavioral health need, but data is not available to determine the specific services provided nor the corresponding spending.[72] Some of these services may be funded through the Individuals with Disabilities Act (IDEA), while others may funded by Medicaid or other sources.

Total Medicaid Expenditures on Children's Behavioral Health Services

In SFY 2022, MHD spent $3.1 billion on services for all Medicaid-enrolled children under 18. [73] Just 6.3% of this total was spent on behavioral health services for children ages 0-17. This differs from the Faces of Medicaid analysis of children's behavioral health service data which found that service expenditures were disproportionately higher than the percentage of children accessing these services.[74] Missouri MHD also spends less than half as much on average per child (aged 0-17) accessing behavioral health services ($1,714) compared to the average for all children (aged 0-17) enrolled in Medicaid in Missouri ($4,500) and compared to the average for children (aged 0-17) receiving behavioral health services nationally ($3,654).[xliii , 75, 76]

Expenditures by Medicaid Eligibility Pathway[xliv]

Of the $587.7 million in spending on children and youth's behavioral health services reported by MHD for CY 2022, $285.9 million was spent on children ages 0-17. Of the total spent on children and youth ages 0-26, the majority ($158.3 million) was spent on children and youth eligible for Medicaid based on their family income. This accounts for 26.9% of the total spent, which is lower than the proportion of this population in Missouri who are eligible through this pathway (71.7%). On average per child, Missouri spends the least on children and youth accessing behavioral health services enrolled in Medicaid based on family income alone ($1,559) — except for those enrolled through Show Me Healthy Babies ($1,584) and pregnant women ($1,226), which together make up less than 1% of total spending. The highest average spent per child is for children and youth enrolled in the MOCDD waiver ($40,870) followed by the ABD eligibility pathway ($23,211), though these categories account for a small proportion of the population (0.2% and 6.7% of population, respectively). While spending on children and youth enrolled in through the MOCDD waiver only accounts for 1.6% of total spending, the ABD pathway accounts for more than one third of total spending (34.1%). Children and youth who are involved with CD or DYS represent 15.9% of the population, but 35.1% of the total amount spent at $9,168 spent on average per child. These findings are consistent with national data that shows that children eligible through the ABD and child welfare pathways account for the highest portion of Medicaid expenditures on behavioral health services.[77]

[xliii] National Faces of Medicaid expenditure data is from 2011 and have not been adjusted for inflation as noted in the limitations of the report

[xliv] The data and analyses in this section include spending on services categorized as indeterminate because they could not be separated out in the data disaggregated by Medicaid eligibility category provided by MHD.

Service Expenditures

See **Appendix J in the report supplement** for a table summarizing data on service expenditures. Compared to other services, MHD spent the most on psychosocial rehabilitation ($71.4 million or 36.3% of total expenditures on children's behavioral health services) for children under the age of 18 in 2022.[xlv] Other services that together accounted for more than half of expenditures for children ages 0-17 were: residential treatment and therapeutic group homes (14.7%), behavioral management consultation and training (13.1%), outpatient counseling (9.6%), and case management (7.7%). All other services accounted for less than 5% of spending, and seven services accounted for less than 1% of spending. These include several key services such as medication management (0.01%), respite (0.12%) and peer services (0.07%). All five service categories with the highest overall expenditures (psychosocial rehabilitation; residential treatment and therapeutic group homes; and behavior management consultation and training, outpatient counseling, and case management) also have the largest differences in their percentage of total expenditures for the FFS population compared to the managed care population, as described below.[xlvi]

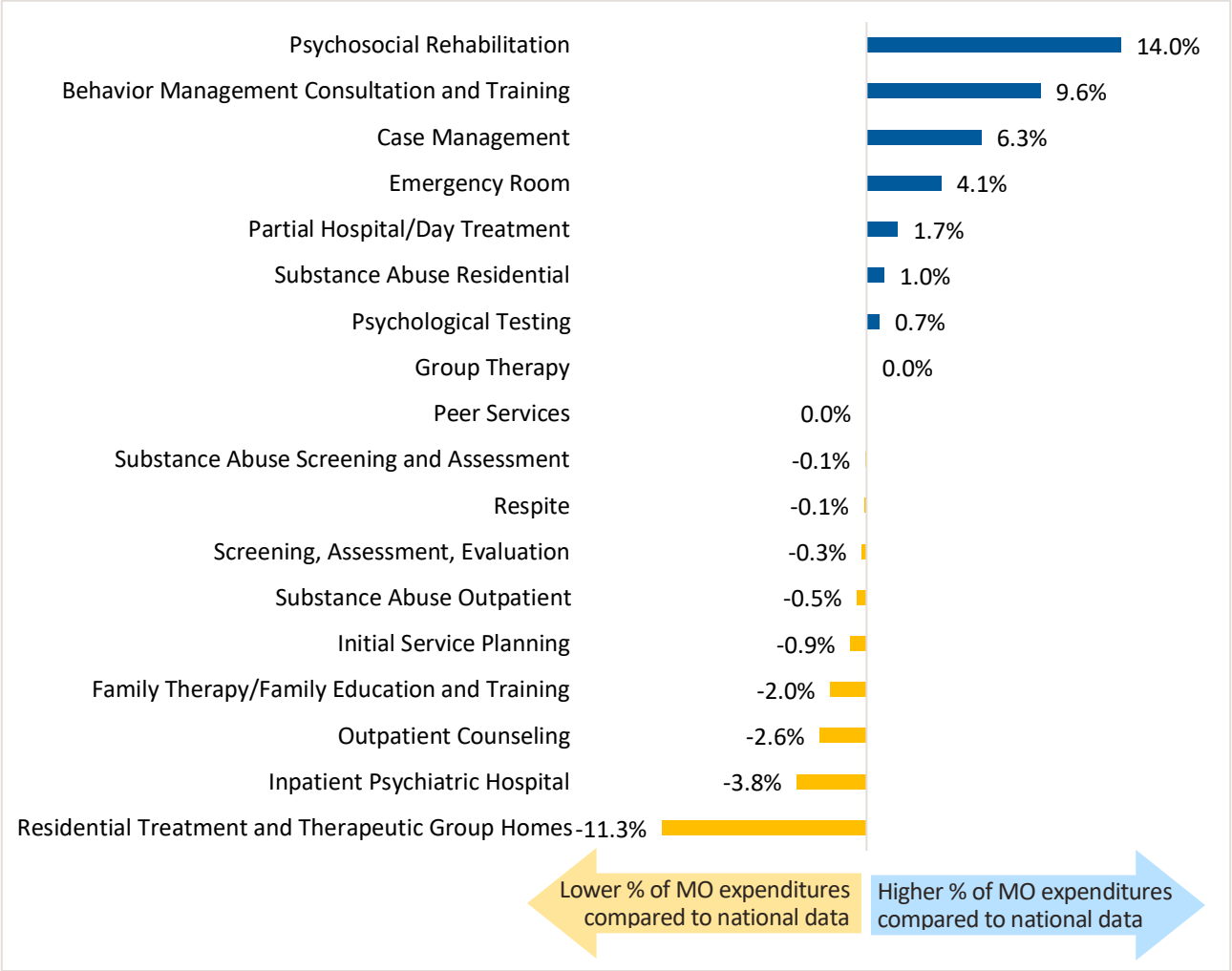
As shown in **Exhibit T**, compared to the national data, MHD spends more than 11 percentage points less on residential treatment as a proportion of its total spending on behavioral health services for children ages 0-17.[xlvii, 78] MHD also spends less on inpatient psychiatric hospital services (3.8 percentage points) and outpatient counseling (2.6 percentage points), but more on psychosocial rehabilitation (14.0 percentage points), behavior management consultation and training (9.6 percentage points), and case management (6.3 percentage points) compared to the national data.

[xlv] These analyses exclude the indeterminate service category. MHD spent $86.1 million for ages 0-17 and $230.4 for ages 18-26 on indeterminate services.

[xlvi] There may also be large differences in expenditures for crisis intervention and stabilization, Wraparound, and/or targeted case management, but data on these service categories were suppressed or only reported for ages 0-26 due to small population size.

[xlvii] Residential treatment and treatment foster care services did not appear in Medicaid claims data until October 1, 2022.

Exhibit T. Medicaid Service Expenditures in Missouri (CY 2022) Compared to National Data (2011), Ages 0-17[xlviii]



Psychosocial Rehabilitation

Expenditures on psychosocial rehabilitation are a higher percentage of all spending for children enrolled in managed care (36.5%) compared to children enrolled in FFS (33.9%). The difference between these two expenditures is the fifth largest compared to other service categories. This difference is primarily due to the percentage of children accessing these services through managed care (18.6%) compared to FFS (15.7%). However, children receiving psychosocial rehabilitation through managed care tend to receive fewer units of the service (76) compared to children enrolled in FFS (103), and the average amount spent per child is significantly lower for children enrolled in managed care ($3,206) compared to children enrolled FFS ($8,912).

[xlviii] Medication management was removed because the data may not accurately reflect true service expenditures. Providers often conduct this service during office visits categorized as 'indeterminate' services in this analysis. The billing codes used are general and do not clearly identify where psychotropic medication management was provided.

Residential Treatment and Therapeutic Group Homes

Residential treatment and therapeutic group homes account for 14.7% of total behavioral health services spending in CY 2022 and only 1.4% of children ages 0-17 received the service, the second largest difference compared to other services.[xlix] Similar to behavior management and counseling, expenditures for residential treatment and therapeutic group homes are driven by the average spent per child ($18,162), as shown in **Exhibit U**. This is the highest amount spent annually per child on any service. MHD also spends the third most per service unit on residential treatment and therapeutic group homes compared to other service categories, but the cost per service unit is roughly the same between children who access the service through FFS and MC ($178 versus $183).

Behavior Management Counseling and Training

In contrast to spending on outpatient counseling, the high proportion of spending on behavior management counseling and training is primarily driven by the average spent per child, $17,000. This is the second highest amount spent annually per child of any service, which is largely a result of the quantity of service units that children receive. The 1,518 children ages 0-17 who accessed this service in CY 2022 received an average of 1,133 units of service each (over 1.7 million units total) at an average cost per service unit of $14.93 for children enrolled in managed care and $15.55 for children enrolled in FFS. The percentage of all spending on behavior management and counseling is also higher for the FFS population (about 20%) compared to the MC population (almost 13%), and the difference between these percentages is the third largest compared to other service categories. However, the average spent on children accessing this service through MC is higher at $17,169 per child, compared to $15,877 for children enrolled through FFS (see **Exhibit U**).

Outpatient Counseling

Outpatient counseling is the highest-utilized service in Missouri for children ages 0-17, with 35.8% of the population receiving behavioral health services who are accessing this service. The percentage spent on outpatient counseling is primarily driven by the number of children receiving these services (41,068) rather than the average spent per child in CY 2022 ($458). At an average cost per service unit of roughly $43, children receiving outpatient counseling received an average of 11 service units per year. It would be beneficial for Missouri to explore utilization of this service due to its significant use-data on outcomes, length of involvement, outpatient use by region, modalities of treatment offered are a few examples of areas that could be reviewed. Outpatient counseling has the fourth largest difference in the percentage spent on the service for children enrolled in managed care compared to children in FFS. Outpatient counseling represents only 3.7% of spending for children enrolled in FFS, and 10.1% for children enrolled in managed care. This difference may be largely because of the lower rate for children enrolled in FFS compared to managed care, as the average spent per child is roughly similar ($541 and $456, respectively) as shown in **Exhibit U.**

[xlix] Residential treatment and treatment foster care services did not appear in Medicaid claims data until October 1, 2022.

Case Management

Case management services represent a higher proportion of spending for the FFS population (23.3%) compared to the managed care population (6.4%), and the difference between these percentages is the largest compared to other service categories. For case management services, MHD spends an average of $1,660 per child. As shown in **Exhibit U**, this average is higher for the FFS population ($2,310) than the managed care population ($1,524). These differences are largely due to the higher percentage of the FFS population who access these services (41.7%) compared to the managed care population (6.8%), and because, on average, the FFS population receives a higher number of units of the service (267 service units) compared to the managed care population (175 service units). These differences could be a function of what is covered under the HCBS waivers.

Exhibit U. Mean Annual Medicaid Service Expenditures Per Child in the United States and Missouri

Service Type	Average Expenditure Per Child (0-17)	
	National (2011) (Not adjusted for inflation)	Missouri (CY 2022)
Behavior Management Consultation and Training	$3,009	$17,000
Case Management	$812	$1,660
Emergency Room	$179	$215
Family Therapy/Family Education and Training	$457	$241
Group Therapy	$675	$593
Initial Service Planning	$287	$1
Inpatient Psychiatric Hospital	$4,840	$672
Medication Management[l]	$336	$4
Outpatient Counseling	$827	$458
Partial Hospital/Day Treatment	$5,499	$8,836
Peer Services	$1,171	$41
Psychological Testing	$398	$266
Psychosocial Rehabilitation	$3,412	$3,366
Residential Treatment and Therapeutic Group Homes[li]	$22,711	$18,162
Respite	$4,282	$12,160
Screening, Assessment, Evaluation	$213	$124
Substance Abuse Outpatient	$1,624	$758
Substance Abuse Residential	-	$9,655
Substance Abuse Screening and Assessment	$253	$352
Average Expenditure Per Child	**$3,654**	**$1,714**

Note: A dash (-) indicates data not available

[l] The medication management service category may not accurately reflect true service expenditures as providers often conduct this service during office visits not categorized as behavioral health visits under the national service codes.

[li] Residential treatment and treatment foster care services did not appear in Medicaid claims data until October 1, 2022.

Other Medicaid Service Categories with High Average Spending Per Child

The third highest average amount that MHD spends per child is for respite services. Though respite services account for only 0.12% of MHD spending on behavioral health services, MHD spends an average of $12,160 per child, who receive an average of 753 units of this service. Similarly, the average spent on partial hospitalization ($8,836) is high compared to the other service categories, though it accounts for a low percentage of total spending (3.6%) due to low rates of utilization.

Additional DMH, CD, and DYS Funded Services

In addition to MHD service spending, DMH reported $15.8 million, CD reported $51.9 million, and DYS reported $40.1 million in expenditures on children's behavioral health services. The majority of DMH spending was on psychosocial rehabilitation (67.8%), which aligns with the high utilization of this service based on the DMH-provided data. DMH also spent 8.0% of the total on outpatient counseling and 6.2% on partial hospitalization/day treatment. All other service categories accounted for less than 5% of the total spent by DMH. On average per child, DMH spent the most on partial hospitalization/day treatment ($25,321) and psychosocial rehabilitation ($3,189). Compared to MHD, DMH spends almost three times as much on average per child on partial hospitalization/day treatment. The vast majority of CD and DYS spending was on residential treatment and therapeutic group homes (98.6% and 91.4%, respectively). While representing just 1.06% of total CD spending, the agency also spent $550,960 on medical transportation services. CD also funds youth in its care and custody who access the provider network contracted for DMH DD waiver services through "Child Specific Contracts."[lii] For children in Child Specific Contracts in DMH licensed/certified settings, CD spent $42.4 million in CY 2022. This represents a 14.3% increase from 2021 to 2022 and a 44.2% increase from 2020 to 2022.

Psychotropic Medication Access and Expenditures

In addition to the services described above, 82,482 children and youth ages 0-17 and 31,501 youth and young adults ages 18-26 received psychotropic medications, including medications for attention deficit and hyperactivity disorder, bipolar disorder, anti-anxiety, anti-depression, anti-psychosis, during CY 2022.[liii] This represents an estimated 67% of all children ages 0-17 receiving behavioral health care through Medicaid in the state and 12.2% of all children enrolled in Medicaid in the state, which is six percentage points higher than what was found nationally in *Faces of Medicaid* data.[79] Spending on these medications totaled $60.4 million for children ages 0-17 and $27.8 for youth and young adults ages 18-26. When combined with the service category expenditure data, spending on psychotropic medications accounts for 23.4% of total MHD spending on behavioral health for children ages 0-17, with an average expense of $733 per child. For youth and young adults ages 18-26 these figures increase with expenditures on psychotropic medication representing 27.2% of all spending with an

[lii] For more information, visit https://dmh.mo.gov/sites/dmh/files/media/pdf/2019/07/guideline-72.pdf

[liii] Data on psychotropic medication use was reported by psychotropic drug class, including ADHD, Anxiety, Bipolar, Depression, and Psychosis. The total number of children receiving medications is likely an overestimate as any children who may accessed more than one type of medication in CY 2022 would be duplicated.

average expense of $882 per member. See **Appendix K in the report supplement** for a table summarizing data on psychotropic medication use.

While the largest percentage of children and youth ages 0-26 accessed depression medications (50.2%), MHD spent just 9.5% of total medication expenditures on this type of medication. Of the total expenditures on medications, MHD spent the majority (48.4%) on ADHD medications, which accounted for 29.4% of all children and youth receiving medications in 2022. At 41.5%, MHD spent the second largest proportion on medications for psychosis, with 17.3% of children and youth receiving this type of medication. An estimated 6.5% of children and youth received anxiety medication, which accounted for 0.5% of expenditures, and 1.0% of children received bipolar medication, which accounted for 0.2% of all spending.

Demographics for children and youth receiving psychotropic medications in Missouri are similar to those for all children receiving behavioral health services in the state. The majority of children and youth receiving psychotropic medication are white and male. Compared to children and youth accessing behavioral health services, children accessing psychotropic medications are slightly older, with 15.9% ages 18-20 and 11.7% ages 21-26 compared to 10.8% and 8.2% of service users, respectively. These children are also more likely to be male and white, and less likely to identify as a race other than white compared to all children receiving behavioral health services.

As seen in **Exhibit V**, rates of medication use among all Medicaid enrollees follow similar trends. In 2022, the penetration rate of psychotropic medication across all demographic subpopulations of Medicaid enrollees was 13.3% and rates were highest among older, white males.

Exhibit V. Rates of Psychotropic Medication Utilization for Medicaid Enrolled Children and Youth (Ages 0-26) in Missouri, CY 2022

	Total	Age 0-17	Age 18-26	Female	Male
Medicaid Enrolled Youth	**857,745**	674,711	183,034	441,564	416,181
Youth Receiving Psychotropic Medication	**113,983**	82,482	31,501	55,178	58,805
Penetration Rate	**13.3%**	**12.2%**	**17.2%**	**12.5%**	**14.1%**

	Total	White	Black	Asian	AI/AN*	NH/PI**	2+ Races	Hispanic /Latino
Medicaid Enrolled Youth	**857,745**	538,705	187,011	11,399	2,879	2,312	16,762	149,225
Youth Receiving Psychotropic Medication	**113,983**	91,337	14,446	343	379	91	2,476	14,467
Penetration Rate	**13.3%**	**17.0%**	**7.7%**	**3.0%**	**13.2%**	**3.9%**	**14.8%**	**9.7%**

Note: Penetration Rate refers to the percentage of children in each cohort who receive psychotropic medication out of all children in that cohort enrolled in Medicaid.

*American Indian/Alaska Native

**Native Hawaiian/Pacific Islander

Following a lawsuit filed in 2017 regarding the use of psychotropic medications for children and youth in foster care, CD reached a joint agreement in 2019. This agreement outlined provisions including training and education for providers, and automatic review and monitoring of psychotropic medication use. Missouri has been working to meet these requirements and is coordinating with the SMHK health plan.[80]

Stakeholder Interviews

Over a total of four months, the CHCS team conducted 38 semi-structured interviews with 73 individuals representing state agencies, community-based organizations, hospitals, provider associations, family-run organization, the education system, along with youth and families and other stakeholders. These interviews highlighted common understanding related to several key themes, including current opportunities, which are outlined below:

Lack of Coordination at the State Level

Both state employees and external partners interviewed noted the lack of effective communication and coordination across both departments and divisions as a barrier to cohesion and collaboration. This is felt internally, by state-agency partners, and externally, in communities across Missouri, and negatively impacts access and delivery of behavioral health care for children and families in Missouri. For example, new services are often developed and rolled out in agency "silos," leading to duplication rather than coordinated, strategic efforts that complement existing resources, and consider scalability. Multiple interviewees highlighted the pervasive fragmentation that prevents effective behavioral health service delivery. As one interviewee framed it "There is not one behavioral health system in Missouri, but several overlapping systems, working in silos" and another said "Siloing is everywhere...[there are] silos within silos."

There is not one behavioral health system in Missouri, but several overlapping systems, working in silos.

Geographic Disparities

As is true across the nation, rural areas in Missouri are far less resourced in comparison with their urban and suburban counterparts (e.g., Springfield, Kansas City, St. Louis). Interviewees perceived behavioral health services and resources like CCBHOs, local system of care teams, and YBHLs, to be more accessible for youth and families that live in urban and suburban areas.

Metro areas are also more likely to be supported by Community Children's Services Funds, a local mental health sales tax that is used to support child well-being in 8 of the state's 114 counties (Jackson, Clay, St. Louis, Boone, Franklin, Lafayette, St. Charles, Jefferson) and the city of St. Louis.[81]

While virtual appointments and services can be a useful tool to bridge such gaps in services, and some saw it as a valuable tool, infrastructure gaps (i.e. lack of Wi-Fi and broadband) impose limitations on the use of telehealth. In addition, one provider noted that "What we've seen with telehealth is that adults love it, but kids and providers not so much. It's very difficult to keep kids' attention via telehealth and hard to observe the things you need to observe, and to get accomplished what you need to get accomplished."

Lack of Standardization

In addition to geographic disparities in service availability, interviewees noted that a lack of standardization creates variability in the quality and accessibility of behavioral health services offered to children and youth in Missouri. For example, each state agency uses different screening and assessment tools for behavioral health programs and services. State representatives and providers noted this as burdensome and a barrier to cross-system collaboration and adversely impacts streamlined care for youth and families.

CCBHOs are available throughout the state and are required to provide a uniform set of services, but access to these services depends on eligibility criteria and provider availability. An interviewee noted that "There are a lot of services, but limited slots" at CCBHOs in Missouri. Other interviewees shared appreciation for the standardization that the SMHK specialty health plan, operationalized in July 2022, has provided.

Accessing Behavioral Health Services Through Child Welfare and Juvenile Justice

Several interviewees cited that due to lack of options available to families to support them in their home and communities, the service request is quickly escalated to residential level of care. Families self-refer to the child welfare agency to access behavioral health services, and a case is opened in the absence of abuse and neglect concerns. Several interviewees also stated that youth are committed to the juvenile justice system to access behavioral health services. Missouri's prior work to improve its juvenile office and detention system through the Juvenile Detention Alternative Initiative (JDAI)[liv] would be effective if other child-serving systems are also maintaining and responding to the constituents' needs. As services are limited for children's behavioral health statewide, the 'burden' can fall on other systems, resulting in delivery of services by a system that is not equipped or the appropriate entity to respond to behavioral health concerns (e.g., juvenile justice (local juvenile courts and DYS) and child welfare (CD)).

Workforce Challenges

Almost all interviewees indicated that the insufficient number of trained and/or licensed individuals in the behavioral health field has contributed to long waitlists and made behavioral health services less accessible to children and families, even if the service is located or available statewide, like CCBHOs. Data shows that there were 292 licensed child psychiatrists in Missouri, with an average of two per county in 2022.[82] Interviewees noted this shortage of child psychiatrists as well as advanced practice nurses, but also a lack of creativity in addressing workforce shortages. For example, one interviewee noted that "mentoring could help" address rates of suicidal ideation. It also was suggested that "retired Vets could provide transportation and mentoring." Another interviewee spoke about the peer workforce and stated, "every family should have a choice of parent support partner."

[liv] For more information, visit https://www.aecf.org/resources/juvenile-detention-alternatives-initiative-scale-up

Gaps in Community and Preventive Services

Many interviewees noted that there are few accessible services for youth and families who are not yet in crisis. Increased staff and capacity for community-based services, early intervention efforts, and other preventive services, like respite, were mentioned as needs to prevent child and family involvement with state systems and hospitalization. As one provider described it: "The long-term solution is investing deeply in preventive services... if we are going to transform, we need to have a period of both [reaction and prevention] types of interventions, and there does not seem to be a great deal of openness to funding what we are doing now while we are funding what we need to be doing in the future so that we are not creating more crises in the meantime." Another stakeholder stated that there "needs to be greater commitment to prevention and early intervention…critical to the system – people don't get that." Missouri's Child Psychiatry Access Project is an example of this. The program is currently funded through federal dollars and DMH but has no permanent, sustainable state funding mechanism. Another interviewee noted that there is "No large-scale systematic understanding of how to get access to services." This was reflected in the interview with families and youth when asked about access to services.

If we are going to transform, we need to have a period of both [reaction and prevention] types of interventions, and there does not seem to be a great deal of openness to funding what we are doing now while we are funding what we need to be doing in the future….

Focus on Adult Services

Several interviewees highlighted that children's services are designed or adapted from adult behavioral health models, and state agencies do not appropriately design programs to address the needs of children and families. The lack of preventive services, early intervention, and screenings tailored to children and youth also leads to more young adults presenting with serious needs, which overburdens the existing systems and reinforces the focus on older youth and adults. For example, the YBHL program is modeled after the success of the CBHLs for adults. The outcomes of the YBHL program and other pilot and new youth-focused behavioral health services should be assessed as they could be a useful model to expand or modify. CCBHOs should also ensure that they deliver services that are designed for youth and their families.

Lack of Family and Youth Involvement

With little exception, families and youth are not meaningfully engaged in the design, implementation, or evaluation of behavioral health services or processes at state, county, or provider levels in any ongoing way. Families have limited to no relationships at the state level. Some relationships have developed at the county level as some rural counties access natural resources because they lack other options. However, youth and family members interviewed had a range of experiences and levels of engagement in their individual

There's a lot of blame and shame happening.

treatment planning. While some felt like valuable members of their team, others expressed that they felt uncomfortable, or, in some cases, fearful of speaking up to voice questions or concerns about their treatment plan. As one interviewee noted "there's a lot of blame and shame happening." Multiple youth and one caregiver felt that when they did speak up, they were ignored. Family representative indicated that families do not know how they can access and participate in any groups addressing needs in Missouri's behavioral health systems. Families and youth were, for the most part, unaware of the availability of peer support and stated the organization was largely working with families involved with the juvenile justice system.

Lack of Accessible Services and Supports

Youth and families shared that behavioral health services were hard to access, due to many factors, including long waitlists for services, high cost of care even with insurance, location/hours, and transportation barriers. These barriers prevented both youth and caregivers from getting the support they needed. For example, both youth and caregivers noted that services are offered during work and school hours, which not only is difficult for caregivers but detrimental to youth who may be pulled out of class for treatment. One interviewee described how the lack of standardization and coordination of behavioral healthcare at the state level creates barriers for both families and systems: "There is no large-scale systematic understanding of children's behavioral healthcare, and how you access those services. So, families, of course, struggle to access those services but when Children's Division workers or schools realize that a child needs help, they don't know where to turn at all."

There is no large-scale systematic understanding of children's behavioral healthcare, and how you access those services.

Custody Relinquishment

Custody relinquishment was mentioned in several interviews as a means to access behavioral health services for youth. Missouri historically has avoided placing children in the custody of child welfare solely for the purpose of accessing mental health services.[83, lv] In 2005, CD and DMH began implementation of a portion of Missouri Senate Bill 1003 (described in Section 208.204 of Missouri State Statute) intended to prevent families solely seeking mental health services for their youth from entering or remaining in state custody through a custody diversion protocol.[lvi] The protocol was described as a "last resort" employed when limited options had been exhausted and families were in crisis.

[lv] For more information on the prevalence of custody relinquishment and states' approaches to preventing custody relinquishment, visit https://wraparoundohio.org/wp-content/uploads/2020/09/Relinquishing-Custody-Full-Report-FINAL-August-2020-9-2-2020.pdf

[lvi] To review Senate Bill 1003, visit: https://www.senate.mo.gov/04info/billtext/perf/sb1003.htm. To review state statute 208.204, visit https://revisor.mo.gov/main/OneSection.aspx?section=208.204

Show Me Healthy Kids (SMHK) Implementation

Interviewees familiar with SMHK indicated that the rollout of the managed care specialty plan has been difficult on providers, causing the initial focus of the plan to be on Medicaid claiming rather than addressing substantive issues, like access and service delivery. However, most interviewees expressed having positive experiences with SMHK and were pleased that MHD contracted a single statewide plan for this specialized population, highlighting satisfaction of statewide standardization. Some interviewees expressed that there is "a lot of confusion around managed care…a lack of knowledge of who MCOs are."

Comprehensive Children's Mental Health Service System

A few interviewees brought to the forefront, a promising past initiative that is still upheld by Senate Bill 1003, passed in 2004, Section 630.097 of Missouri State Statute, which describes the Comprehensive Children's Mental Health Service System intended to coordinate children's behavioral health services across state agencies and facilitate "meaningful partnerships with families and youth" throughout the system.[lvii] Annual reports document the progress made to establish the system through 2011, when the initiative lost funding.[lviii]

[lvii] To review Senate Bill 1003, visit: https://www.senate.mo.gov/04info/billtext/perf/sb1003.htm. To review state statute 630.097, visit https://revisor.mo.gov/main/OneSection.aspx?section=630.097&srch=y

[lviii] To view the annual reports, visit https://dmh.mo.gov/childrens-office/reports

Recommendations

Based on this analysis, CHCS has the following recommendations for improving Missouri's children's behavioral health continuum of care.

1. **Expand, standardize, and build state infrastructure to support a comprehensive mental health system for children.**

   The state lacks a comprehensive infrastructure that extends beyond local coordination of care for children with complex behavioral health needs. Missouri can consider building a statewide System of Care (SOC) organized at the state level.[lix] This will address the lack of coordination, improve equitable access across the state, and provide services and support to prevent utilization of high-cost services. This includes implementing a standard assessment and eligibility processes, improving oversight and accountability, and tracking processes and outcomes. Missouri can leverage its statute for a Comprehensive Children's Mental Health Service System that supports the SOC approach to seek funding.[lx] There are also federal funding opportunities available through SAMHSA and Medicaid.

2. **Build collaborative cross-system structures to ensure alignment at all levels and increase stakeholder engagement.**

   Interagency and cross-system collaboration is especially critical at the state level. As described in the Comprehensive Children's Mental Health Service System statute (630.097), Missouri can regularly convene state agencies, providers, family-run organizations, advocacy organizations, families and youth, and others invested in improving behavioral health outcomes for children and youth not only to work toward solutions but also to build collegial relationships and consensus among all stakeholders. To some extent the Children's Mental Health Collaborative is a successful example of this. However, state-level oversight, obligations and infrastructure should not be delegated without close oversight and monitoring. Cultivating relationships within and across state agency departments and divisions can promote effective cross-system communication and lead to more coordinated, cohesive planning and action, while offering the ability to comprehensively identify strengths, needs, and innovative ideas. This will require a concerted effort to authentically and meaningfully engage and partner with families and youth so that they are embedded in decision-making processes. At a local level, local communities and regions could also engage in peer-to-peer learning to share lessons learned and successes to strategize and develop better systems.

[lix] For more information on the System of Care model, visit https://www.cmhnetwork.org/wp-content/uploads/2021/05/The-Evolution-of-the-SOC-Approach-FINAL-5-27-20211.pdf

[lx] To review state statute 630.097, visit https://revisor.mo.gov/main/OneSection.aspx?section=630.097&srch=y

3. Create pathways for authentic partnership and engagement with families and youth.

Commitment to meaningful and authentic engagement of youth and families is the foundation of transformational connections between youth, families, and child-serving systems. In keeping with System of Care philosophy, a responsive, proactive, and effective children's behavioral health continuum of care should be youth and family driven.[84] This is a paradigm shift from the traditional medical model that elevates the youth and families as experts on their family and their experiences within the systems they encounter, and valued partners in the planning, development, and delivery of services and supports.

According to the Annie E. Casey Framework for Effectively Partnering with Young People, authentic youth engagement requires: *Youth-adult partnership* (i.e. working together to develop, co-design and co-present); *preparation* enabling "adults to support young people in using their strengths, using their expertise and asserting their leadership," including general preparation for skill development, as well as preparation for specific events; *opportunity* (e.g. being invited to serve on a youth advisory board or collaborate on the development of material, resources, policy, etc.); and physical, emotional and financial *support.*[85] "Young people should be financially compensated for their knowledge, time and contributions as equal partners. Sharing their experiences and contributing to systems change can be emotionally taxing and difficult work that requires intentional emotional support."[lxi, 86]

Ongoing partnership with families and youth at every level (service and system design, planning, implementation, and evaluation) is key to more effective service delivery and development, better health outcomes, and reduced expenditures.[87] This includes partnership with youth and families receiving behavioral health care to design more effective policies and programs. As part of the Family Support Team for child-welfare-involved youth, juvenile court officers receive training in trauma-informed care to increase engagement with families and manage the effects of removal and resulting trauma. Engaging youth and family in decision-making empowers families and supports creating sustainable outcomes, including stability and well-being.

Missouri has at least one family-run organization, Missouri Families 4 Families, that could support centering youth and family in Missouri's efforts in the design and implementation of comprehensive behavioral health system.

4. Implement one standardized behavioral health assessment tool.

Missouri state agencies and programs use a variety of screening and assessment tools to determine program and service eligibility. These tools include:

- MHD's DDD Waivers: MAAS and Vineland;
- DMH: DLA-20, PECFAS,DECA-C, Ages and Stages Social Emotional Screening tool, mGAF, CGAS, PHQ2 or PHQ9;

[lxi] For more information on equitable compensation for individuals with lived experience, visit https://www.chcs.org/resource/engaging-community-members-a-guide-to-equitable-compensation/

- CD: CSPI, CANS; and
- DYS: Missouri Juvenile Offender Classification System, MAYSI.

Screening, Assessment, and evaluation services were the third highest utilized service category among children and youth (ages 0-26 and 0-17) enrolled in Medicaid (34%) and second-highest among DMH-funded youth (53%). Missouri can consider opportunities to streamline the use of screening tools – offering a menu providers may choose from, and identifying one common assessment tool that can be used by all child-serving partners across state-funded programs and services.

For example, the Child and Adolescent Needs and Strengths Assessment Tool (CANS), is a multi-purpose tool developed to support decision making, including level of care and service planning, to facilitate quality improvement initiatives, and to allow for the monitoring of outcomes of services.[lxii] CANS is designed to be used as part of a comprehensive assessment process for children, youth and young adults to support decision making related to intensity of need, facilitation of quality outcomes, and monitoring efficacy of services. CANS is open domain and available to the public for use. The tool is based on communications theory and assesses strengths and needs in multiple domains, including school, trauma, mental health, and risk behaviors. CANS is designed to inform an individualized care plan covering multiple domains, eliminating the need for multiple duplicative assessments. The CANS supports information integration and communications across the multiple systems in which a child may be involved and with the child and family.

Following analysis of Missouri's strengths and needs, the authors recommend implementation of the CANS, a communimetric tool that can be more easily tailored to various needs (i.e. to determine service eligibility, track outcomes, and support individualized treatment planning).[lxiii] The tool is non-clinical, can be used broadly, requires no advanced degree or clinical expertise to administer and is considered family-friendly, as it allows youth and family to drive their care. It can also reveal systemic needs by conducting analyses.

5. Expand capacity for key home- and community-based services for children with behavioral health needs.

There are key services that few children in Missouri can access. These services include respite, intensive care coordination using High-Fidelity Wraparound, mobile response and stabilization services, and in- home services. Additionally, rates of access to psychosocial rehabilitation, family therapy/family education, group therapy, behavior management consultation and training, and outpatient counseling for children in Missouri are low compared to the national 2011 data. Missouri Medicaid also did not provide data on multisystemic therapy, home-based services,

[lxii] For more information, visit https://praedfoundation.org/

[lxiii] For more information on the CANS assessment see https://praedfoundation.org/tcom/tcom-tools/the-child-and-adolescent-needs-and-strengths-cans/

activity therapies, mental health consultation, and TFC.[lxiv] At the same time, rates of inpatient psychiatric hospital and emergency room utilization were higher in Missouri than nationally. Missouri can consider opportunities to expand access to home- and community-based services to better meet the needs of children further upstream, at an earlier stage before crises occur or more intensive services are needed.[lxv] Medicaid waivers are also an option to expand eligibility to access services, eliminating the need for custody relinquishment and needing to 'fail up'.

6. **Provide Intensive Care Coordination (ICC) using a High-Fidelity Wraparound model for children, youth, and their families.**

   Missouri is one of few states that does not offer ICC as part of the service array.[88] ICC with High-Fidelity Wraparound[lxvi] is the most appropriate model for intensive care coordination "to support children and youth whose needs exceed the resources and expertise of any one provider organization or child- and family-serving system" as it has been shown to improve health outcomes and reduce care expenditures for high-need youth.[89,90] The success of the Wraparound model is its ability to create a "climate that moves beyond the walls of a single organization and embraces a shared responsibility to provide necessary treatment and support to empower youth and their families to be successful in their homes and communities."[91]

   Missouri does have several programs and initiatives to provide integrated and coordinated care for children with behavioral health needs, including CMHCs, HCHs, and PCHHs. However, these approaches may be less applicable to children because services and expenditures for children with complex behavioral health needs is driven by behavioral health care more so than physical care.[92] In comparison, care for adults is primarily driven by physical health care. Missouri should consider opportunities to implement ICC that are tailored to serving children and youth. A scan commissioned by SAMHSA provides state examples. [lxvii]

7. **Develop mobile response and stabilization services for children, youth, and their families.**

   Missouri does not offer Mobile Response and Stabilization Services (MRSS) at this time.[lxviii] The state has some crisis services however only five (of 22) BHCCs serve children and youth, three of which serve children over age 5, one which serves children over age 10, and one serving youth over age 16.[93] Furthermore, while youth peer support providers appear eligible to be mobile response team members, the extent to which mobile crisis response services are tailored to

[lxiv] Residential treatment and treatment foster care services did not appear in Medicaid claims data until October 1, 2022.
[lxv] For more information visit https://www.medicaid.gov/sites/default/files/federal-policy-guidance/downloads/CIB-05-07-2013.pdf
[lxvi] For more information on High-Fidelity Wraparound and to review the evidence base visit https://nwi.pdx.edu/NWI-book/Chapters/Bruns-3.2-(research-base).pdf
[lxvii] To read the scan commissioned by SAMHSA, visit https://store.samhsa.gov/sites/default/files/intensive-care-youth-coordination-pep19-04-01-001.pdf
[lxviii] For more information on MRSS and to review the evidence-base and best practices, visit https://innovations-socialwork.media.uconn.edu/wp-content/uploads/sites/3657/2023/07/Mobile-Response-Best-Practices.January-202372.pdf and https://healthlaw.org/resource/childrens-behavioral-health-mobile-response-and-stabilization-services/

children, youth, and families is unclear. Missouri should consider opportunities to implement MRSS, designed specifically for children, youth, and their families for several reasons.[lxix]

MRSS are a critical access point and conduit for youth and families seeking services and provide a preventative strategy for defining and addressing urgent and emergent needs as defined by the family. MRSS are specifically designed to intercede before urgent behavioral situations become unmanageable emergencies and are instrumental in averting unnecessary emergency department visits, residential interventions and placement disruptions, reducing the need for child welfare and juvenile justice involvement, and in easing overall system costs.[94] From a fiscal perspective, MRSS divert youth from higher, more expensive levels of care, particularly when used across populations and financed through blended or braided funding streams.

MRSS also serve as resources in educating the public and in responding to and de-escalating crises in homes, schools, and in the community. They bridge partners in children's behavioral health delivery systems, providing access points for linkage and referrals to services and supports (both formal and informal) such as care management entities, faith-based and family/youth organizations, and other behavioral health service providers. A caregiver's first impression of the behavioral health system is likely to shape their experience and perception of its helpfulness for years to come. MRSS effectively deescalate, stabilize, and improve treatment outcomes.

8. **Redesign residential care.**

Insufficient home- and community-based service options, financial incentives that drive residential treatment, and reduced use of inpatient psychiatric care all contribute to increases in the use of residential level of care.[95] Children and youth in residential treatment settings can benefit from a System of Care approach that facilitates coordination between residential and community-based providers and engages youth and their families as partners in care. It is recommended that Missouri understand all the levels and types of care they now offer, and how these intensive programs may be accessed. This will provide an opportunity to develop clear clinical criteria for admission, as well providing oversight through a seamless behavioral health care system that also embraces an understanding and a response to the concomitant social determinants of health that are equally important. Creating a statewide bed tracking system can be a useful way to track data and trends on admissions, discharges, presenting conditions, as well as informing program design, as needs shift.

9. **Review data on medication management for psychotropic medication use.**

While 12% (82,482) of Medicaid-enrolled children received psychotropic medications in Missouri in CY 2022, only 2.2% (2,522) of children aged 0-17 accessed medication management services through MHD based on the data provided.[lxx] However, some medication management may be reflected in the "indeterminate" service category as providers often conduct this service during

[lxix] To learn more about the importance of designing MRSS specifically for children and families, visit: https://www.oregon.gov/OHA/HSD/BH-Child-Family/Documents/Need-for-Child-MRSS.pdf

[lxx] This percentage may be smaller if children accessed medication management services for non-psychotropic medications.

office visits not categorized as behavioral health visits under the national service codes. Due to the high percentage of youth receiving psychotropic medications, Missouri should review the data in more detail to determine if this is an area in need of expansion. This service is especially critical given the high number and proportion of children accessing psychotropic medication and Missouri's psychotropic medication settlement for youth involved with CD.[lxxi] CD has specific protocols and oversight mechanisms in place for youth receiving psychotropic medication.[lxxii]

10. Support and expand the behavioral health workforce.

A lack of providers was cited by many interviewees as a key barrier to making behavioral health services and assessments more accessible to children and youth. While Missouri has taken steps to address this by increasing Medicaid provider rates, through the Missouri Child Psychiatry Access Project (MO-CPAP) and signing on to the Social Work Licensure Compact and Psychology Interjurisdictional Compact, there is still a gap.[96,97,98,99] Missouri's cross-system partnerships can work together on efforts to recruit, train, and retain behavioral health providers and staff. It may be helpful to employ the Annapolis Framework for Workforce Planning in Behavioral Health to guide these efforts.[lxxiii]

In accordance with the framework and the findings of this scan, CHCS recommends that Missouri expand the youth and family peer supports as they can also be preventive, reevaluate requirements for non-clinical positions, and increase multidisciplinary collaboration. Missouri may also consider using remote supervision of professionals in rural areas to increase workforce capacity.[100]

Missouri can develop a workforce to engage and expose more young people to the field of behavioral health through internships and scholarships.[lxxiv] To address immediate staffing shortages, state agencies can develop a budget for direct payments to providers through grants for recruitment and retention efforts.[lxxv]

To support providers and increase accessibility of services for youth and families, Missouri's Medicaid office can routinely recalibrate Medicaid reimbursement rates for behavioral health providers to reflect market-based rates and the cost-of-service delivery and create clear processes for future rate adjustments.[lxxvi]

[lxxi] For more information, visit https://dss.mo.gov/notice-of-proposed-class-action-settlement.htm

[lxxii] To review the review processes in place, visit https://dssmanuals.mo.gov/wp-content/uploads/2020/04/CD20-18.pdf

[lxxiii] For more information visit https://annapoliscoalition.org/about-us/framework/

[lxxiv] For more information on California's internship programs, visit https://www.workforce.buildingcalhhs.com/grant-programs/the-mentored-internship-program/
For more information on South Dakota's scholarship programs, visit https://listen.sdpb.org/healthcare/2023-02-03/behavioral-health-scholarship-bill-advances

[lxxv] For more information, visit https://www.hca.wa.gov/assets/program/hb1504-factsheet-2023.pdf

[lxxvi] For more information visit https://www.nber.org/bh-20193/increased-medicaid-reimbursement-rates-expand-access-care and https://www.maine.gov/dhhs/oms/about-us/projects-initiatives/mainecare-rate-system-reform

11. Invest in school-based mental health services.

The Centers for Medicare and Medicaid Services (CMS) has expanded the use of Medicaid to provide school-based services, noting "Schools are a key but often overlooked setting for health access and equity."[101] Missouri legislation has approved funding for a dedicated position to coordinate school-based services statewide. While MHD funds some behavioral health services in schools, state agencies can also offer funds to create student advisory boards to inform decisions and support schools in rolling out and maintaining services for students. [lxxvii] Schools are a trusted partner for many families and a logical access point to access behavioral health care for school age children.[102] Accessing Medicaid funding, including CMS grant opportunities that become available,[lxxviii] will support investment in communities to expand access to care.

12. Leverage Medicaid to prevent and identify behavioral health conditions.

Prevention and early identification of health conditions is a key component of Early and Periodic Screening, Diagnostic and Treatment (EPSDT), a required benefit for Medicaid eligible youth under 21. [103] "Early detection of mental health and substance use issues is crucial to the overall health of children and youth and may reduce or eliminate the effects of a condition if detected and treated early. This makes routine screenings, early identification, and engagement in treatment as early as possible critical for children and youth. **States are encouraged to avoid requiring a behavioral health diagnosis for the provision of EPSDT services.** States can determine that some services are medically necessary for children and youth without a diagnosed behavioral health condition."[104] The goal of EPSDT is to assure that children get the health care they need when they need it — at the intensity and frequency they need at the right time in the right setting.

13. Leverage Center for Excellence

Center for Excellence can be situated with a university partner to provide training, technical assistance, and coaching to all child serving partners at the local and state level, and alongside families and youth. Opportunities for professional development and training keeps all stakeholders up to date and engaged on changes in practice, ensures use of common language across child serving systems to improve communication to meet the needs of youth and families more effectively. Missouri state agencies can strengthen their partnership with the University of Missouri Center for Excellence in Child Wellbeing and leverage their expertise as they work to expand the continuum of care for children across the state.

[lxxvii] For more information on New York's Youth Mental Health Advisory Board and funding for school based services, visit https://www.governor.ny.gov/news/governor-hochul-launches-expansion-school-based-mental-health-clinics-combat-youth-mental

[lxxviii] For more information, visit https://www.cms.gov/newsroom/press-releases/cms-announces-50-million-grants-deliver-critical-school-based-health-services-children

Conclusion

Missouri has a strong commitment to improving services; however, there are several key gaps in the system that leave children and families without access to needed care.

Currently, a comprehensive and accessible behavioral health care system does not exist for youth and families in Missouri. Some communities and providers are seeing success, but this is not statewide, leading to inequitable access, and variability in both availability and quality of services. Missouri has an opportunity to design and implement a responsive, statewide system that supports children, youth and their families. It is recommended that the state leverage its statute to seek funding and resources, and partner with families and youth in its design and implementation.

Building on the strengths of the Comprehensive Children's Mental Health Service System will address the main gaps at the state level infrastructure to support county level efforts and standardization of services and supports (i.e. level the playing field across the state to ensure service array is available to all children, youth and their families, and not dependent on their county or demographics). Addressing this gap will also reduce burdens on systems that are not designed to nor have the expertise to address behavioral health needs of children, youth and families.

ENDNOTES

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Appendix A. Agencies and Organizations Interviewed

Missouri State Agencies

Department of Mental Health (DMH)

- Division of Behavioral Health
- Division of Developmental Disabilities
- Children's Office

Department of Social Services (DSS)

- Children's Division
- Division of Finance and Administrative Services
- Division of Youth Services
- MO HealthNet

Department of Elementary and Secondary Education

- Office of Early Childhood
- School-Based Services

Judicial Branch

- Missouri Courts

Community Based Organizations, Providers, and Provider Associations

- Beacon Mental Health
- Compass Health Network
- The Flourish Initiative
- Hawthorn Children's Psychiatric Hospital
- Marygrove
- Missouri Alliance for Children and Families
- Missouri Behavioral Health Council
- Missouri Coalition for Children
- SSM Hospital
- Ozark Center

Medicaid Managed Care Organizations

- Healthy Blue MO
- Home State Health
- Home State Health- Show Me Healthy Kids
- United Healthcare

Family-Run Organization

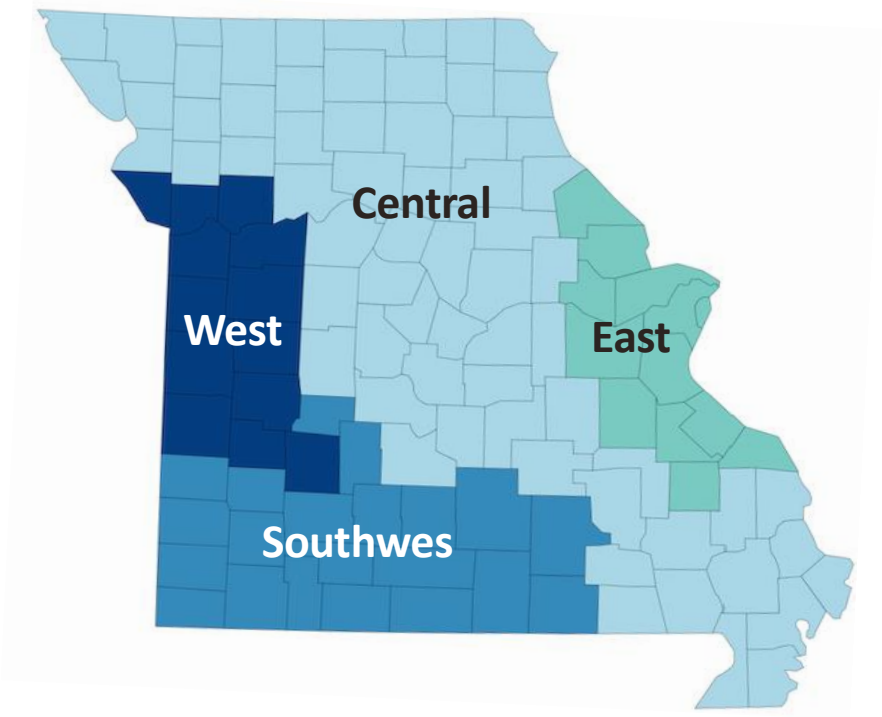
- Missouri Families 4 Families

Other

- Children's Trust Fund
- Missouri School Board Association
- St Louis County Children's Services Fund
- University of Missouri Center for Excellence
- YouthMOVE Boone County
- Youth and caregivers with experience accessing children's behavioral health services

Appendix B. Missouri Medicaid, Child Welfare, Juvenile Justice, and Mental Health Regions

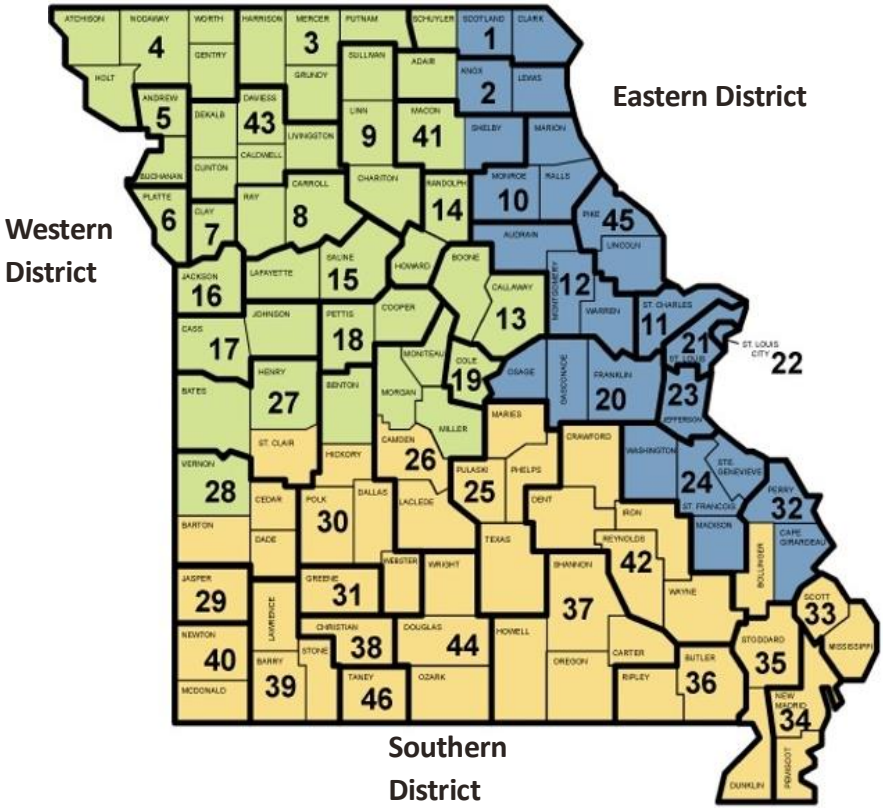
Missouri Managed Care Regions



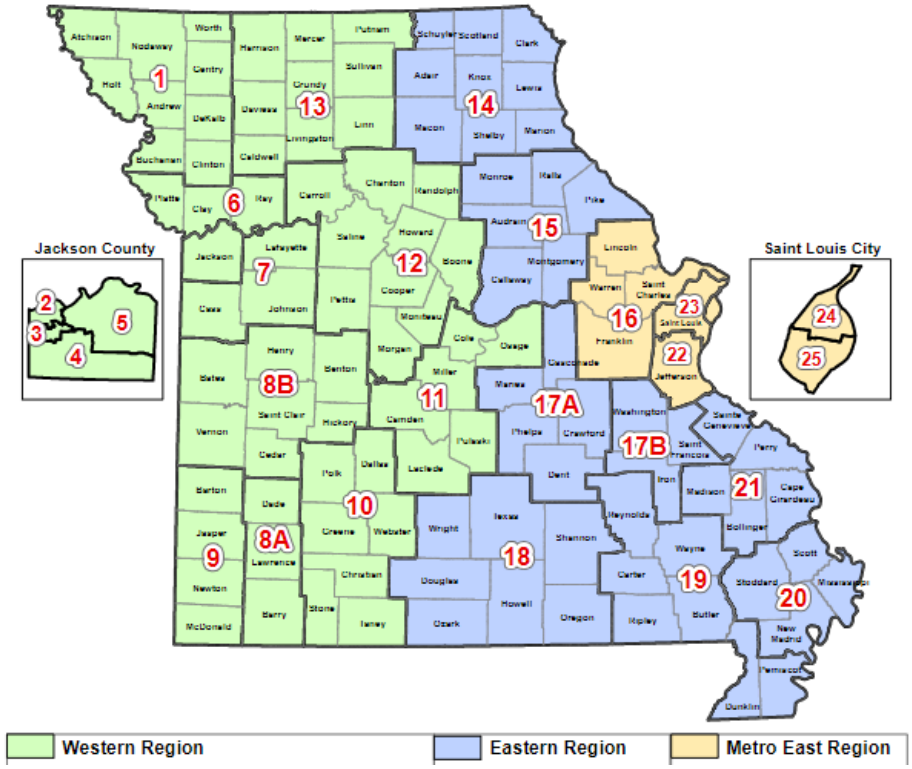
Missouri Children's Division Regions

Division of Youth Services Regions

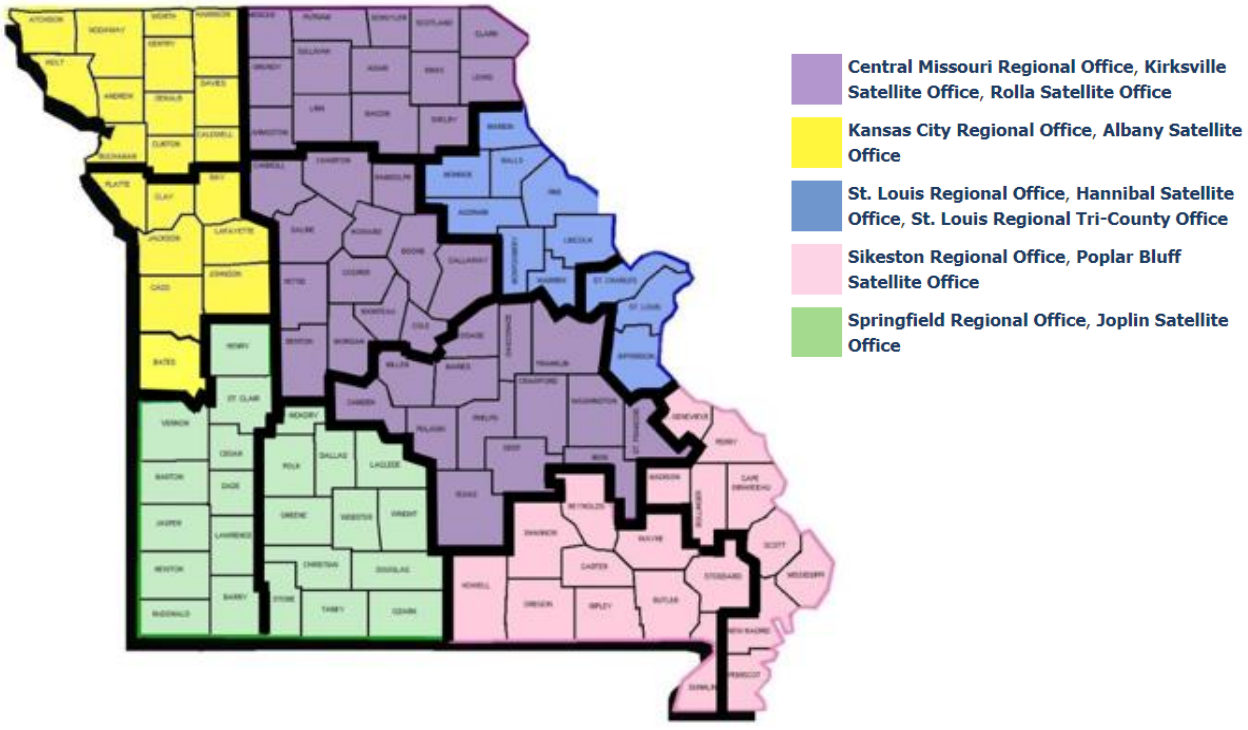
Missouri Judicial Circuits



Missouri Department of Mental Health Division of Behavioral Health Regions



Missouri Department of Mental Health Division of Developmental Disabilities Regions



Appendix C. Medicaid Service Utilization of Children and Youth by Age

TYPE OF SERVICE	Total Service Utilization: # (%) of Children and Youth Using Service	Service Utilization Rates* by Age		Service Representation** by Age	
		0-17	18-26	0-17	18-26
Emergency Room	52,467 (37.0%)	40,227 (35.0%)	12,240 (45.6%)	76.7%	23.3%
Outpatient Counseling	49,091 (34.7%)	41,068 (35.8%)	8,023 (29.9%)	83.7%	16.3%
Screening, Assessment, Evaluation	47,756 (33.7%)	39,477 (34.4%)	8,279 (30.9%)	82.7%	17.3%
Psychosocial Rehabilitation	26,164 (18.5%)	21,199 (18.5%)	4,965 (18.5%)	81.0%	19.0%
Case Management	15,356 (10.8%)	9,134 (8.0%)	6,222 (23.2%)	59.5%	40.5%
Inpatient Psychiatric Hospital	13,198 (9.3%)	8,951 (7.8%)	4,247 (15.8%)	67.8%	32.2%
Psychological Testing	9,246 (6.5%)	8,710 (7.6%)	536 (2.0%)	94.2%	5.8%
Family Therapy/Family Education and Training	9,220 (6.5%)	8,709 (7.6%)	511 (1.9%)	94.5%	5.5%
Initial Service Planning	6,248 (4.4%)	5,385 (4.7%)	863 (3.2%)	86.2%	13.8%
Group Therapy	5,520 (3.9%)	4,968 (4.3%)	552 (2.1%)	90.0%	10%
Peer Services	3,914 (2.8%)	3,251 (2.8%)	663 (2.5%)	83.1%	16.9%
Medication Management	3,708 (2.6%)	2,522 (2.2%)	1,186 (4.4%)	68.0%	32.0%
Residential Treatment and Therapeutic Group Homes	2,031 (1.4%)	1,589 (1.4%)	442 (1.6%)	78.2%	21.8%
Behavior Management Consultation and Training	1,976 (1.4%)	1,518 (1.3%)	458 (1.7%)	76.8%	23.2%
Substance Abuse Outpatient	1,052 (0.7%)	589 (0.5%)	463 (1.7%)	56.0%	44.0%
Partial Hospital/Day Treatment ***	1,050 (0.7%)	794 (0.7%)	175 (0.7%)	75.6%	16.7%
Substance Abuse Screening and Assessment	654 (0.5%)	320 (0.3%)	334 (1.2%)	48.9%	51.1%
Wraparound ****	400 (0.3%)	-	-	-	-
Crisis Intervention and Stabilization (non-ER) ****	322 (0.2%)	-	-	-	-
Substance Abuse Residential ***	315 (0.2%)	199 (0.2%)	69 (0.3%)	63.2%	21.9%
Treatment Behavioral Support ****	289 (0.2%)	-	-	-	-
Targeted Case Management ****	165 (0.1%)	-	-	-	-
Respite *****	79 (0.1%)	20 (0.02%)	46 (0.2%)	25.3%	58.2%
Transportation	-	-	-	-	-
Consultation/Collateral	N ≤10	N ≤10	-	N ≤10	-
Supported Housing	N ≤10	-	N ≤10	-	N ≤10
Total	141,667 (100%)	114,833 (100%)	26,834 (100%)	81.1%	18.9%

Note: Cell counts of 10 or less not available; any percentages based on these counts could not be computed and are reported as N ≤10. A dash (-) indicates data was not provided for the service category.

*Service utilization rate refers to the percentage of children in each age cohort who use a particular service out of all children in that age cohort who use services. Note that percentages may not total to 100% as children may use more than one service.

**Service Representation reflects the age composition of all children receiving each service type. Note due to data repression or aggregation some service categories may not total to 100%.

*** Data for the youth receiving this service through a fee-for-service arrangement could not be disaggregated by age.

****Data could not be disaggregated by age for this service category.

*****Data for the managed care population receiving this service could not be disaggregated by age.