



THE TA NETWORK
the technical assistance network for children's behavioral health

Financing Tools for Systems of Care: A Series of Practical Guides

**TECHNICAL
ASSISTANCE TOOL**

Analyzing Aggregate Child and Adolescent Service Use and Expenditures Across Systems

SEPTEMBER 2015

Sheila A. Pires, M.P.A.
Human Service Collaborative

Acknowledgments

The strategies outlined in this document are based on technical assistance with states and communities that have been working collaboratively to expand the system of care approach. Thanks are due to Dr. Gary Blau, Chief of the Child, Adolescent, and Family Branch of the Center for Mental Health Services, Substance Abuse and Mental Health Services Administration. His commitment to applying learning from the field to inform federal system of care efforts led to this and other analyses to improve service systems for children and youth with behavioral health challenges and their families.

Suggested Citation

Pires, S. A. (2015). Analyzing aggregate child and adolescent service use and expenditures across systems. Baltimore, MD: The Technical Assistance Network for Children's Behavioral Health.

ABOUT THE TECHNICAL ASSISTANCE NETWORK FOR CHILDREN'S BEHAVIORAL HEALTH

The [Technical Assistance Network for Children's Behavioral Health](#) (TA Network), funded by the Substance Abuse and Mental Health Services Administration, Child, Adolescent and Family Branch, partners with states and communities to develop the most effective and sustainable systems of care possible for the benefit of children and youth with behavioral health needs and their families. We provide technical assistance and support across the nation to state and local agencies, including youth and family leadership and organizations.

This document was prepared for the Technical Assistance Network for Children's Behavioral Health under contract with the U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Contract #HHSS280201300002C. However, these contents do not necessarily represent the policy of the U.S. Department of Health and Human Services, and you should not assume endorsement by the Federal Government.

Table of Contents

Introduction	1
Initial Steps and Decisions	3
Relevant Public Agencies.....	4
Identification of the Types of Behavioral Health Services and Supports Covered by Each Funding Stream/State or Local Agency	5
Identification of Behavioral Health Expenditures by Funding Streams	6
Identification of the Types of Dollars Used.....	8
Identification of Number, Demographics, and Severity of Children and Youth Served by Funding Stream/Public Agency	9
Identification of Service Utilization Patterns by Funding Stream/Public Agency	9
Additional Useful Data	9
Examples.....	10
Caveats About Data	15
References	15
Appendix A: Glossary of Children’s Behavioral Health Services	16

Introduction

The landscape for the organization and financing of behavioral health (mental health and substance use disorder) services for children, youth and young adults is rapidly shifting due to a number of factors: state and local budgetary pressures; large-scale Medicaid redesign initiatives in states; and changes related to national health reform and mental health parity laws. Increased attention to the importance of behavioral health care within the larger health care arena and among other child-serving systems, such as child welfare and juvenile justice, is also having a substantial impact. Since the mid-1980s, the federal Substance Abuse and Mental Health Services Administration (SAMHSA) has invested resources in the development of systems of care, with the intent of improving the quality and outcomes of children’s behavioral health services. With national evaluation data and other studies showing the quality and cost effectiveness of systems of care, SAMHSA has made a commitment to take systems of care to scale (SAMHSA, 2015). This guide is part of a series providing tools to policymakers on various aspects of financing behavioral health services and supports for children, youth, and young adults and analyzing the return on investment (ROI) of system of care approaches.

This guide describes methods for analyzing aggregate child behavioral health service utilization and expenditures across child-serving systems. The term, “aggregate,” refers to the whole formed by combining several (typically disparate) elements. In the world of child behavioral health financing, the disparate elements are multiple funding streams controlled by multiple child-serving agencies. To form an aggregate picture of the services children with behavioral health challenges use and how much is spent on them across systems, data must be collected and analyzed on service use and expenditures from each system and then analyzed across systems to form a whole picture of what the state or locality is spending and what services children are receiving.

This type of analysis is critical for several reasons. It will help to identify areas of strength, gaps, duplication, and inefficiency within the context of system of care goals. For example, the analysis will show the extent to which dollars are being invested in home- and community-based services, a core goal of systems of care. The analysis will show the extent to which dollars are being used for more restrictive and costly placements, such as detention, psychiatric inpatient hospitalization, residential treatment and group care and, thus, point to

System of Care Definition

*“A spectrum of **effective community-based services and supports** for children, youth, and young adults with or at risk for mental health and related challenges and their families that is organized into a **coordinated network**, builds meaningful **partnerships with families and youth**, and addresses their **cultural and linguistic needs** in order to help them **function better** at home, in school, in the community, and throughout life” (Stroul, Blau, & Friedman, 2010).*

System of Care Philosophy

Values:

- Community Based
- Family Driven, Youth Guided
- Culturally and Linguistically Competent

Principles:

- Broad Array of Effective Services and Supports
- Individualized, Wraparound Practice Approach
- Least Restrictive Setting
- Family and Youth Partnerships
- Service Coordination
- Cross-Agency Collaboration
- Services for Young Children
- Services for Youth and Young Adults in Transition to Adulthood
- Linkage with Promotion, Prevention, and Early Identification
- Accountability

areas for re-directing spending (that is, using existing dollars in more effective ways). Because service use and expenditure data usually can be broken down by race/ethnicity, age, gender, and region, the analysis can shed light on disparities and disproportionality in service use and spending. Some data, such as Medicaid data, also can be broken down by diagnosis, which can shed light on the extent to which states or counties are investing in certain populations, such as adolescents with substance use disorders. In addition, the analysis can show where there are opportunities to increase federal matching funds through Medicaid and/or Title IV-E. For example, if the child welfare system is spending general revenue dollars on services that could be covered by Medicaid, those dollars might be spent more wisely by using them as Medicaid match to draw down the federal share (thus, at a minimum, doubling the amount of dollars available).

This type of analysis also can be used to support studies of cost effectiveness and ROI from system of care implementation. For example, if the analysis is conducted periodically over time, it is possible to track whether service use patterns and expenditures shift toward increased use of home- and community-based services and less use of costly out-of-home care with net cost savings. Or, if the analysis is being conducted in one county implementing system of care approaches, service use patterns and expenditures of the system of care county can be compared with those of other counties in the state. The data also can be used to document the approximate “total cost of care” for children in a system of care, which is necessary for policy decisions about taking systems of care to scale.

There are many challenges to analyzing public sector spending for children with behavioral health challenges, regardless of the state or community in question. There are multiple funding sources involved, which are controlled by multiple federal, state and local systems, each of which has its own regulations and requirements. Many key funding sources, such as Medicaid, have federal, state and, sometimes, county-level parameters. Different funding streams may support different providers, or, alternatively, support the same providers but with different contracting and reporting requirements. Data are collected across these funding streams in different formats and for different purposes and may not even disaggregate into a category called, “child/adolescent mental health or substance abuse disorder spending and utilization.” Obviously, the more data that can be provided for this type of analysis, the better, but often, the resources involved to extract the right data from larger databases are not available or the cost or time involved in doing so is prohibitive. The goal is to create as full a picture as possible as to what is being spent, by which systems, for how many children, and for what services and supports. *Ultimately, this analysis helps policymakers to use dollars more effectively and efficiently by supporting the development of cross-agency (or aggregate) strategic financing approaches for children, youth, and young adults with behavioral health challenges and their families.*

Initial Steps and Decisions

- **Populations and Objectives** - Stakeholders engaged in building systems of care can undertake a strategic analysis of service use and expenditures once they have made preliminary decisions about what they want to finance on behalf of which populations of children and families, i.e., identified the population(s) of focus and system objectives. These decisions enable stakeholders to identify which public agencies spend dollars on the populations of focus and/or have dollars available for the types of services, supports and infrastructure needed to support system of care goals for the population(s) of focus.
- **Types of Expenditures** - It also is important to clarify that the analysis will examine all expenditures for children with behavioral health challenges, not only expenditures for behavioral health services *per se*. For example, state and/or county child welfare funds may be paying for the room and board costs of therapeutic out-of-home placements, such as residential treatment centers or therapeutic foster care, while state Medicaid dollars are paying for the treatment costs. Both are important to capture. Similarly, the education system may be paying for the education costs of day treatment or specialized classrooms for children with serious emotional challenges while the mental health agency may be paying for mental health-related costs in these programs. Typically, all expenditures are important to capture because systems of care have a goal of providing holistic services and supports across life domains that are coordinated across systems.
- **State and/or Local Expenditures** - A decision must be made as to whether the analysis of service use and expense is examining state-level expenditures only, or both state and local. Financial mapping across public agencies can be challenging because each agency has its own data system and captures expenditures and service utilization in different ways. Tackling both state and local level expenditures at once adds to the challenge.
- **Fiscal Year** - A decision also is needed as to what fiscal year or years to include for the analysis. Different systems may have data from different fiscal years available. Usually, there is a trade-off to be made between taking the most recent data each system has available, recognizing that these data may encompass different fiscal years across the agencies, or deciding on a single fiscal year across agencies, recognizing that this approach may not include the most recent data.
- **Commitment of Agencies** - Undertaking a mapping of expenditures and service use requires the commitment of multiple individuals to support the collection and analysis of the data. There needs to be a commitment across agencies to share expenditure and utilization data and a willingness to identify a point person within each department to obtain and help interpret the data.

Relevant Public Agencies

The following is a listing of state (and local) agency types that typically spend dollars on children with behavioral health challenges. It is not an exhaustive list, but offers a starting point for determining which systems have service use and expenditure data relevant to the population(s) of focus.

Relevant Public Agencies	
Medicaid	In some states, counties may be providing Medicaid match dollars as well as the state. Analyses should explore both Medicaid and State Children’s Health Insurance expenditures and service use. If Medicaid dollars are in a capitated managed care arrangement, it will undoubtedly only be possible to capture utilization data, not expenditures. If Medicaid fee-for-service (FFS) expenditures are available, FFS expenditures can be extrapolated to managed care spending, but must include the caveat that this extrapolation may overstate managed care spending (which, in general, tends to be lower than FFS spending). Child behavioral health utilization and expenditure data can be extracted from Medicaid databases using a combination of diagnosis, provider type, and place of service.
Mental Health, Intellectual Disabilities, and Addictive Diseases	The state behavioral health agency typically controls block grant and state general revenue dollars for mental health and substance use disorder services and prevention. Depending on the state, the behavioral health agency may also have responsibility for Medicaid mental health and/or substance use expenditures. If this is the case, then the state behavioral health agency is spending a significantly larger amount of dollars on children’s behavioral health care than if it is only spending block grant and general revenue monies that are not matched to Medicaid. In some states, counties may also spend local monies on mental health and substance use disorder services. In some states, there are separate mental health and substance use disorder agencies.
Child Welfare	Behavioral health expenditures in child welfare are sometimes difficult to identify because they may be embedded in larger service contracts or are part of the responsibilities of in-house staff, such as child welfare workers, who have other responsibilities. Look at contract expenditures and staff responsibilities and make educated guesses. It is also important to note that, in some states, the child welfare system’s budget includes Medicaid match dollars for behavioral health services, including residential treatment expenditures, among others. In some states, counties spend local monies through the child welfare system on behavioral health services.
Public Health: Rural and Community Health	Increasingly, rural health clinics and federally qualified health centers (FQHCs) are spending dollars on behavioral health care that might not be entirely captured through Medicaid spending. State and/or local public health agencies may have relevant data.
Public Health: Maternal and Child Health	These programs are serving children with special health care needs and often encompass early intervention programs for infants and young children as well.
Public Health: Prevention	The public health system may have behavioral health promotion and prevention dollars.
Juvenile Justice	Juvenile justice systems may be expending dollars for behavioral health care both through contracted services and through in-house staff. In addition, it is useful to account for detention expenditures in general (not just those for behavioral health), because by diverting youth with behavioral health challenges from detention to home- and community-based services, costs often can be saved in detention, with savings invested in home- and community-based behavioral health services with better outcomes for youth.
Education	It is often difficult to obtain education system expenditures for behavioral health services and supports because there are typically many independent school districts, and state departments of education may be accounting for only some of this spending. Usually, expenditures on special education for students with emotional and behavioral disorders can be tracked at the state level because of federal reporting requirements for these data.

	Expenditures on alternative schools outside of the special education system may be difficult to capture, but are important as these schools typically are serving youth with behavioral health challenges not necessarily enrolled in special education.
Early Intervention Programs	States organize their early intervention programs for children ages birth to 5 years in diverse ways. For example, the Part C program may be part of the department of education, or the department of mental health, or developmental disabilities, or maternal and child health, or some other arrangement.
Labor	Departments of labor or employment services may include relevant expenditures through vocational rehabilitation and supported employment for youth and young adults with behavioral health problems.
Public Welfare	Departments of public welfare, human services, or social services may be spending Temporary Assistance to Needy Families (TANF) dollars related to children’s behavioral health, such as screening for mental health, substance use disorder or domestic violence concerns, or transportation assistance.
Other	There are other potential funding sources, as well, such as housing supports through housing agencies, and, at a local level, recreation, police and safety programs, and the like.

The service use and expenditure analysis needs to identify the following from each relevant public agency:

- How much is spent on the system of care’s population(s) of focus and on which services and supports;
- The types of dollars used (e.g., federal entitlement dollars, such as Medicaid, federal block grants, state general revenue), broken down by service type;
- How many children are served and their demographics (e.g., age, race/ethnicity, gender, and region/county), in total and by service type, and, if available, average lengths of stay by service type; and
- Any available outcome data associated with these expenditures.

Identification of the Types of Behavioral Health Services and Supports Covered by Each Funding Stream/State or Local Agency

Stakeholders must develop a comprehensive list of behavioral health services and supports to use as a guide for determining which public agencies are spending dollars on which services and supports. It is also important to crosswalk the Medicaid agency’s list of covered services with your list, as different terminology may be used for the same service types. Appendix A includes a list of services and supports that can be adapted.

The analysis will focus on identifying the amount and types of relevant behavioral health services being purchased or provided in-house by the relevant state agencies or their designees (e.g., regional offices) and local agencies if the analysis is including local expenditures. It is also useful to identify the providers (private or public) that public agencies are supporting to provide behavioral health services for children and youth, to guide analysis of overlap across child-serving systems and opportunities for efficiencies such as collaborative training or purchasing.

Identification of Behavioral Health Expenditures by Funding Streams

Below is a chart showing the typical universe of funding streams that support services and supports for children with behavioral health challenges and their families in the public sector. Again, it is not an exhaustive list, and, on the other hand, not all states use all of these funding streams for behavioral health services for children. However, the chart provides a general framework for identifying expenditures. Some of these funding streams are controlled at the state level, some at the local level, and some jointly (and there are unique funding streams controlled by tribal authorities).

For each funding stream, the analysis will identify:

1. Whether the funding stream is used to pay for services/supports for children with behavioral health challenges;
2. Which state (or local) agency controls the funding stream (“controls” refers to responsibility for how the dollars are spent); and,
3. The amount of spending on behavioral health services for children within each funding stream.

Sources of Funding for Children/Youth With Behavioral Health Needs in the Public Sector

- Medicaid Inpatient
- Medicaid Outpatient
- Medicaid Rehab. Services Option
- Medicaid Early Periodic Screening, Diagnosis and Treatment (EPSDT)
- Targeted Case Management
- Medicaid Waivers
- TEFRA Option
- ACA options

Medicaid



- MH General Revenue
- MH Medicaid Match
- MH Block Grant

Mental Health



- JJ General Revenue
- JJ Medicaid Match
- JJ Federal Grants

Juvenile Justice



- SA General Revenue
- SA Medicaid Match
- SA Block Grant

Substance Abuse



- ED General Revenue
- ED Medicaid Match
- Student Services

Education



- CW General Revenue
- CW Medicaid Match
- IV-E (Foster Care and Adoption Assistance)
- IV-B (Child Welfare Services)
- Family Preservation/Family Support

Child Welfare



- TANF
- Children's Medical Services/Title V—Maternal and Child Health
- Developmental Disabilities
- Title XXI-State Children's Health Insurance Program (SCHIP)
- Vocational Rehabilitation
- Supplemental Security Income (SSI)
- Local Funds

Other



Identification of the Types of Dollars Used

It is useful to identify the types of funding being used to support services and supports for the population(s) of focus, as there are pros and cons to each type and different opportunities and challenges for maximizing each type. The major funding types are described below.

Entitlement Spending: Entitlement funding is also referred to as mandatory spending as these funds support programs that establish certain eligibility criteria, and anyone fitting the criteria may receive its benefits. For children with behavioral health challenges, the most relevant entitlement expenditures are Medicaid, the Individuals with Disabilities Education Act (IDEA), and Title IV-E (Foster Care and Adoption Assistance). Medicaid, in particular, constitutes the largest type of funding for children's behavioral health care. There are any number of ways to maximize Medicaid funding for children with behavioral health challenges, for example: 1) increase the number of children eligible for Medicaid by changing eligibility requirements (requires federal approval); 2) enroll a higher percentage of eligible children (nationally, about 25% of eligible Medicaid populations are not actually enrolled in Medicaid); 3) cover additional services, such as home- and community-based services; 4) improve access to covered services by, for example, increasing screening rates and referrals; 5) expand the types of providers who can provide Medicaid-covered services; or, 6) increase rates to incentivize providers to provide services.

Formula Grants: Formula grant programs provide noncompetitive funds based on a predetermined formula that includes such factors as population size, proportion of the population below the poverty level, and the like. Title IV B (Child Welfare Services) and the non-entitlement sections of the Individuals with Disabilities Education Act (special education) are examples of federal programs that allocate funds to the states on a formula grant basis. States may also allocate state funds to counties through formula grants. Unlike entitlement dollars, formula grants are not open-ended, and the size of the funds is generally much smaller than entitlement funding.

Block Grants: These are, in effect, a consolidated grant to states of federal funds that were formerly allocated for specific purposes and which allow states more discretion as to their use than either formula grants or entitlement programs. However, there are multiple demands on block grant funding for both adult and child populations, and the funds are limited. Examples relevant to children's behavioral health include the Community Mental Health Services Block Grant, the Substance Abuse Prevention and Treatment Block Grant, and the Social Services Block Grant.

Discretionary Grants: Funds that are awarded based on a competitive process, made at the discretion of the funder, and are typically time-limited, for example, federal System of Care Expansion Grants and foundation grants. Discretionary grants that support systems of care are best used as "venture capital" to provide critical start-up funding and underwrite development of reforms but not as the operating capital beyond a start-up period.

State and Local General Revenue: Revenue derived primarily from taxes, charges and fees over which, typically, states or localities have significant discretion. However, there are many competing demands for these dollars and, in some cases, constraints on how certain revenue can be used.

Identification of Number, Demographics, and Severity of Children and Youth Served by Funding Stream/Public Agency

This part of the analysis involves identifying the characteristics of children within the population(s) of focus that are served by each funding stream within each relevant public agency, including:

- **Numbers** - Numbers of children served by each funding stream
- **Demographics** - age, gender, race/ethnicity, geographic location (and aid category in the case of Medicaid data, i.e., low income, foster care, or Supplemental Security Income (SSI)/State disability criteria).
- **Severity** - level of clinical/functional impairment, system involvement, average lengths of stay in services (ALOS), particularly in out-of-home placements such as residential treatment and psychiatric inpatient hospitalization.

Part of this exercise is to identify the extent to which each funding stream/state or local agency is supporting children with serious disorders, children at risk for serious disorders, and children with brief, short-term needs, as well as children involved in multiple systems. In addition, this information can help to shed light on disparities or disproportionality associated with service use and expenditures. For example, are children in rural counties more likely to be placed in residential treatment centers? Are racially diverse youth less likely than white youth to receive substance use disorder treatment?

Identification of Service Utilization Patterns by Funding Stream/Public Agency

The analysis will want to capture not only the total number of children within the population(s) of focus served by each relevant public agency, but also the number of children served by service type. For example, how many children used residential treatment paid for by the child welfare system using general revenue and Title IV-E funds? How many children used intensive in-home services paid for by the state Medicaid agency using Medicaid funds? Information about ALOS by service type, particularly in more expensive services such as residential or day treatment, is also important to help inform opportunities for potential redirection; for example, reducing the amount of dollars spent on high-end services by reducing admissions and/or lengths of stay can lead to the availability of funds for expanding home- and community-based services.

Additional Useful Data

The following are some additional data items to consider.

1. **Outcomes** - Data on any documented outcomes related to each funding stream or public agency expenditures that are relevant to children and youth with behavioral

health disorders and their families. This may include outcomes being tracked by particular systems or recent studies or reports associated with particular funding streams that discuss outcomes relevant to children’s behavioral health.

2. **Mandates** - Information on any legislative or administrative mandates relevant to children and youth with behavioral health disorders; for example, interagency agreements related to pooled funds.
3. **Demographics** - Basic demographic data on children and youth in the state (or county, if a local analysis), including:
 - Total child/adolescent population, ages birth-21;
 - Socioeconomic characteristics;
 - Geographic distribution of children at risk (as determined by such risk factors as poverty, minority status, school lunch eligibility, etc.);
 - Total numbers of children involved in the following systems (annual and point in time): mental health, substance abuse, child welfare, juvenile justice, special education, and Medicaid;
 - Number of children and youth in out of home placements (annual and point in time), including regular foster care, specialized foster care, regular group home, therapeutic group home, residential treatment facility, inpatient psychiatric hospital, and secure detention; and
 - Placement disruption rates in child welfare, which often are associated with behavioral health challenges.

Examples

The following tables provide examples of analyses:

- **Table 1** shows an example of a service use and expenditure analysis across systems at two points in time (three fiscal years apart). It shows aggregate service use and expenditures across four key public agencies over this time period. Note how important the side notes are in the analysis to explain factors that contributed to service use or expenditure growth or decreases over time, and the notes at the bottom of the table, which indicate which data are used. With the explanations, determinations can be made as to which changes may be due to changes in federal, as opposed to state, policies. For example, in Table 1, there were decreases in Targeted Case Management (TCM) use and expense, which were primarily attributable to changes in federal policy as to allowable activities/costs under TCM in this time period.
- **Table 2** shows service use and expenditures over the same time period for community-based services only.
- **Table 3** shows spending by one state agency (the Department of Mental Health) on restrictive services over a three-year period in which the state began to pay for psychiatric residential treatment facilities (PRTFs) and the increasing percent of total dollars absorbed by restrictive services with this change.

- **Table 4** shows Department of Juvenile Justice spending in general (i.e., not only for youth with behavioral health challenges) over a three-year period.
- **Table 5** shows the racial and ethnic breakdown of children in the state enrolled in special education, as well as the subset of children enrolled for reasons of emotional and behavioral challenges, with the final column showing the percent of children in the overall school population broken down by race/ethnicity.

These examples illustrate just some of the ways that utilization and expenditure data can help system of care stakeholders to better understand what is occurring in their systems and to identify opportunities for reform.

Table 1. Summary: Total Child Behavioral Health Spending and Number of Youth Served: FY 06 -09 (1) Comparison							
Agency	Amount Spent		Percent of Increase/Decrease	Number of Youth Served		Percent of Increase/Decrease	Explanation
	FY 06	FY 09 (1)		FY 06	FY 09		
Dept. of Education (DOE) (2)	\$1.2b	\$1.4b	17%	N/A	N/A		Spending increase includes increase in education costs for youth in PRTFS, among other increases.
Dept. of Mental Health, Developmental Disabilities and Addictive Diseases	\$130m	\$121.3m	(-7%)	54,844	28,396	(-48%)	Decrease in expenditures and utilization may be overstated due to differences in how the Dept. captured data in 06 and 09. Decrease in utilization also partly due to transfer of state BH match funding responsibility for most Medicaid children to Medicaid agency (DOH). Decrease also due to decrease in community-based services expenditures and utilization.
Dept. of Juvenile Justice (DJJ) (3)	\$61.8m	\$54.8m	(-11%)	18,486	19,466	5%	Spending decrease due to reduced use of residential placements and lengths of stay, reduced expenditures on Targeted Case Management, and transfer of state-match funding responsibility to Medicaid agency for most Medicaid youth
Division of Child and Family Services (Child Welfare) (4)	\$300.4m	\$193.5m(4)	(-36%)	N/A	N/A		Spending decrease due to reduced spending on residential placements with unbundling and transfer of match funding and service responsibility to Medicaid agency (DOH), decreased spending on Targeted Case Management, and small decrease in community-based services expenditures. Decrease also due to fewer children in foster care.
Dept. of Health (State Medicaid Agency) (5)	\$194.2m	\$343.8m	77%	320,000	320,000	-	Spending increase due to transfer of behavioral health match funding and service responsibility from other child systems to DOH for most Medicaid children and increase in spending per youth served.
TOTAL without DOE	\$686.4m	\$713.4m	4%	393,330	367,862	(-6%)	

(1) FY 08 data are used where FY 09 data are not available
 (2) Selected expenditures, primarily special education-related
 (3) Based on FY 06 and FY 08 data; does not include expenditures for in-house behavioral health units in DJJ facilities
 (4) FY 08 expenditures
 (5) Includes physical and behavioral health costs for youth with primary or secondary behavioral health diagnoses and duplicated counts of youth.

Table 2. Summary of Community-Based Child Behavioral Health Spending and Number of Youth Served – FY 06 -09 Comparison							
Agency	Amount Spent		Percent of Increase/Decrease	Number of Youth Served		Percent of Increase/Decrease	Explanation
	FY 06	FY 09 (1)		FY 06	FY 09		
Dept. of Mental Health, Developmental Disabilities and Addictive Diseases	\$118m	\$76.4m	(-35%)	52,983	26,714	(-50%)	Decrease in expenditures and utilization may be overstated due to differences in how the Dept. captured data in 06 and 09. Decrease in utilization also partly due to transfer of BH match responsibility for most Medicaid children to DOH. Decrease also due to decrease in community-based services expenditures and utilization.
Dept. of Juvenile Justice (DJJ) (3)	\$.3m	\$5.5m	173%	N/A	N/A		Spending increase for community-based behavioral health services for youth in the community, including evidence-based practices such as MST
Department of Child and Family Services (Child Welfare) (4)	\$17.1m	\$15.6m(4)	(-9%)	N/A	N/A		Spending decrease due to transfer of state BH match responsibility to DOH and small decrease in community-based services expenditures. Decrease also due to fewer children in foster care.
Dept. of Health (5)	\$32m	\$61m	91%	49,745	60,861	22%	Spending and utilization increase due to transfer of behavioral health responsibility from other child serving agencies to DOH for most Medicaid children
TOTAL without DOE	\$167.4m	\$158.5m	(-5%)	102,728	87,575	(-15%)	
<p>(1) FY 08 data are used where FY 09 data are not available. To avoid duplication of data, in instances where a state agency/division provides state matching funds for Medicaid expenditures, the total expenditures are included in the agency/division that provides the state match funds.</p> <p>(2) Selected expenditures, primarily special education-related</p> <p>(3) Based on FY 06 and FY 08 data</p> <p>(4) FY 08 expenditures</p> <p>(5) Includes expenditures for community mental health and psychological services for youth with a primary or secondary behavioral health diagnosis and includes duplicated count of youth</p>							

Table 3. FY 07 – FY 09 DMH Spending and Utilization Related to Restrictive (Out-of-Home) Services

Program Category	FY 07			FY 08			FY 09		
	Amount Spent	Number Youth Served	Spending Per Youth Served	Amount Spent	Number Youth Served	Spending Per Youth Served	Amount Spent	Number Youth Served	Spending Per Youth Served
PRTFs	N/A	N/A	N/A	\$32.1m	633	\$50,711	\$34.3m	676	\$50,693
Residential Services*	\$11.8m	N/A	N/A	\$10.1m	195	\$51,795	\$6.3m	125	\$50,400
State Hospital	\$6m	1,313	\$4,547	\$9m	1,187	\$7,598	\$6.7m	877	\$7,640
State Outdoor Camp	\$4.6m	180	\$25,438	\$4.9m	171	\$28,873	\$3.9m	129	\$30,233
Total Spent on Restrictive Services	\$22.4m			\$56.1m	2,186	\$25,663	\$51.2m	1,807	\$28,334
	<i>(27% of total DMH Child BH expenditures)</i>			<i>(48% of total DMH Child BH expenditures)</i>			<i>(42% of total DMH Child BH expenditures)</i>		

*Therapeutic costs in residential facilities that are not PRTFs (e.g., crisis stabilization programs, and therapeutic group homes)

Table 4. Department of Juvenile Justice FY 06 – FY 08

Program Category	FY 06	FY 07	FY 08	
Facility Expenditures	\$181.4m. (60%)	\$186.9m. (60%)	\$200.9m. (61%)	Increase due to increase in number of youth and in average daily cost.
Non-Secure Out-of-Home Placement Expenditures (e.g., group homes, RTC)	\$41.7m. (14%)	\$39m. (13%)	\$34.3m. (10%)	Decrease due to decrease in utilization (primarily reduced length of stay) of group homes, specialized residential treatment centers and wilderness camps, and transfer of BH state match to DOH.
Non-Secure Non-Residential (Home & Community-Based) Services Expenditures	\$9.4m. (3%)	\$12.4m. (4%)	\$13m. (4.5%)	Increase due to increase in MST, Wraparound, and community monitoring.
Community Supervision (e.g., Probation)	\$40.7m. (13%)	\$43.9m. (14%)	\$51.3m. (16%)	Increase due to increase in number of youth and in average daily court assessments.
Administration/Training	\$28.5m. (9%)	\$28.8m. (9%)	\$29m. (9%)	
Total	\$301.7m. (100%)	\$311m. (100%)	\$329m. (100%)	

Table 5. Department of Education Special Education Racial/Ethnic Breakdown Fiscal Year 08			
	<i>Percentage of Special Education Enrollment</i>	<i>Percentage of EBD Enrollment</i>	<i>Percentage of Total Public School Enrollment</i>
Asian	1%	.5%	3%
Black	40%	49%	38%
Hispanic	8%	3%	10%
American Indian	0.2%	.08%	0.2%
Multi-Racial	3%	3%	3%
White	48%	45%	46%

Caveats About Data

Some of the data needed for analyzing child behavioral health service use and expenditures may not be available or may be too time-consuming to find. As noted earlier, public agencies may have data available from different fiscal years, so there may be inconsistency in reporting periods. Don't let perfection be the enemy of the good. Whatever data each public agency can provide for a complete fiscal year should be collected, trying, optimally, for common fiscal year(s), but recognizing that perfect commonality may not be doable. Once as much data as can be reasonably obtained is collected, the analysis should try to make sense of the data as a whole, with appropriate caveats noted. Financial mapping and analysis should be viewed as the beginning of an ongoing process, which should become better and easier over time, to account for and improve child behavioral health care spending and utilization.

References

The Substance Abuse and Mental Health Services Administration [SAMSHA]. (2015). Request for Applications (RFA) No. SM-15-2009: System of Care Expansion and Sustainability Cooperative Agreements. Rockville, MD: Author.

Appendix A: Glossary of Children’s Behavioral Health Services

Activity Therapy: Adjunctive therapies, such as recreation, music and art therapy, to assist children to develop interpersonal relationships, to socialize effectively, and to develop the confidence needed to participate in group activities

Behavior Management Consultation and Training: Includes assessment of a child’s behavior, antecedents of behavior, and identification of motivators; development of a specific behavior plan; supervision and coordination of behavioral interventions; and training of others, such as family members, to address specific behavior objectives and performance goals.

Case Management: Assists children and their families to access needed services and supports and includes assessment, care plan development, referral,, monitoring, and follow-up.

Crisis Intervention and Stabilization: Includes 24-hour, seven days a week, toll-free telephone hotline services, mobile crisis services, mobile stabilization services, crisis stabilization units, crisis respite beds, and medically monitored crisis detoxification units to alleviate or prevent a crisis, help the child return to his or her baseline level of functioning, and prevent the need for an inpatient or residential admission.

Emergency Room: Services provided in a hospital area especially equipped and staffed for emergency care.

Family Therapy/Family Education and Training: Family therapy is a type of psychotherapy that involves all members of a child’s family and, in some cases, members of the extended family (e.g., grandparents) in which a therapist or team of therapists conducts multiple sessions to help families deal with important issues that may interfere with the functioning of the family and the home environment.; Family education and training are information and supports provided to the family members/caregivers of a child with a behavioral health challenge to better understand the child’s disorder, service and support options, and intervention strategies.

Group Therapy: A form of psychosocial treatment where a small group of youth meet regularly to talk, interact, and discuss problems with each other and the group leader (therapist).

Home-Based (In-Home) Services: Interventions provided in the home typically to enable a child to remain in the home, including crisis intervention, individual and family counseling, behavior management and skills training, and case management.

Inpatient Psychiatric Hospital: Inpatient hospital services provided in a psychiatric hospital or in a psychiatric unit of a general hospital.

Medication Management: Facilitation of safe and effective use of prescription and over-the-counter medications to help patients achieve the targeted outcomes from medication.

Mental Health Consultation: Any interaction between two or more health care professionals related to a specific issue of mental health or between a professional consultant with mental health expertise and one or more individuals with other areas of expertise, for example, child care center staff, with the purpose of problem-solving or capacity building.

Multisystemic Therapy (MST): A time-limited, goal-directed, home-based, team-based and intensive family treatment program that addresses the multiple determinants of serious anti-social behavior in youth and the factors associated with such behavior across the youth's key settings or systems (e.g., family, peers, school, neighborhood), and builds on the strengths of each system to foster positive change.

Outpatient Counseling: Primarily individual outpatient therapy that is provided in a therapist's office.

Partial Hospitalization/Day Treatment: Partial hospitalization is a nonresidential, highly structured day program that may or may not be hospital-based. The program provides diagnostic and treatment services on a level of intensity similar to an inpatient program, but on less than a 24-hour basis. These services typically include therapeutic milieu; nursing; psychiatric evaluation; medication management; and group, individual and family therapy. Day treatment is a community-based, nonresidential day program that is intensive but allows a child to remain in his/her home. The program lasts at least four hours per day and typically provides special education, counseling, parent training, vocational training, skill building, crisis intervention, and recreational therapy

Peer Services: Include both family peer support and youth peer support and are non-clinical, peer-based activities that engage, educate, and support families who have children with behavioral health challenges or youth themselves. They are provided by trained families or youth who have lived experience of the behavioral health system and are based on principles of respect, shared responsibility, and mutual agreement of what is helpful.

Psychological Testing: Written, visual, or verbal evaluations administered to assess the cognitive and emotional functioning of children.

Psychosocial Rehabilitation: Includes an array of services that are provided in the child's home, in the location where behavioral challenges are most likely to occur such as school, or in community settings. These services teach the child and his/her family about emotional management, emotional regulation, positive coping mechanisms, and others. Interventions include skills training that can include but are not limited to: vocational, social, educational, organizational, or personal care.

Psychotropic Medication: Chemicals that affect the central nervous system, altering psychological processes (e.g., mood, thoughts, perception, emotions, behavior).

Residential Treatment and Therapeutic Group Homes: Residential treatment is mental health and/or substance use disorder treatment in a licensed, highly structured, usually secure out-of-home program providing continuous 24-hour observation and supervision, with typically a full complement of in-house programs including education. Therapeutic group homes provide 24-hour out-of-home mental health and/or substance abuse services in a licensed, non-secure facility, with children typically involved in community-based activities such as school, work or recreation.

Respite: Provides temporary direct care and supervision for the child/youth in the child's home or a community setting with the primary purpose of providing relief to families/caregivers of a child with a serious emotional disturbance or relief to the child, helping to de-escalate stressful situations and provide a therapeutic outlet for the child. Respite may be either planned or provided on an emergency basis.

Screening, Assessment, Evaluation: Distinct processes with different but related purposes. Screening includes activities to identify children who may need further assessment to determine the existence of a behavioral health disorder. Assessment is a process of gathering data from multiple sources to create a comprehensive picture of a child's strengths, challenges and needs, and evaluation is a more intensive, in- depth study in a particular area to provide additional data and recommendations.

Service Planning: The process of making decisions about which services and supports are provided to individual children; informed by screening, assessment, and evaluation data.

Substance Abuse Inpatient: Hospital-based detoxification services and substance abuse rehabilitation counseling.

Substance Use Disorder Outpatient: Regularly scheduled individual, group and/or family counseling in a licensed outpatient substance use disorder program.

Substance Use Disorder Intensive Outpatient Program - Programs that provide a higher intensity of outpatient services over a longer period of time, supporting the daily application of what is learned in therapy, as well as outpatient detoxification services.

Substance Use Disorder Screening and Assessment: Screening includes activities to identify youth who may need further assessment to determine the existence of a substance use disorder. Assessment is a process of gathering data from multiple sources to create a comprehensive picture of a youth's strengths, challenges, and needs.

Supported Housing: The combination of affordable housing with services and supports that help youth and young adults of transition age live more stable, productive lives.

Targeted Case Management: Intended for children with serious behavioral health challenges and ensures that service systems and community supports are maximally responsive to the specific, multiple, and changing needs of children and their families. The case manager has

limited, small caseloads and a flexible schedule to assist children and their families to access needed services, coordinate care, ensure services are responsive to needs as they change over time and ensure services match the needs of children and their families.

Telehealth: The use of telecommunications and information technology to provide access to behavioral health assessment, diagnosis, interventions, consultation, supervision, education, and information.

Therapeutic Behavioral Support: Structured one-to-one support, coaching and training provided by a therapeutic mentor or behavioral aide in the home, school, or other community location to help a child achieve age-appropriate behavior, interpersonal communication, problem-solving, conflict resolution, peer interaction, etc.. It is typically delivered by a paraprofessional supervised by the supervising practitioner and included as part of the child's treatment plan.

Therapeutic Foster Care: Provides a safe, secure, and nurturing environment in a private home with licensed foster parents who have received specialized training in the care of children and adolescents with emotional or substance use disorders. Treatment foster parents typically provide care for one child only and perform behavioral interventions and life skills training in addition to ensuring that the child receives needed mental health and substance abuse services, medical care, and education.

Transportation: Transport support for providers to travel to children needing services or for children to access services.

Intensive Care Coordination Using Wraparound: A definable, individualized, and strengths-based planning and care coordination process that incorporates a child and family team and results in a unique set of services and supports for a child and family, with the plan closely monitored to achieve a positive set of outcomes.