

# Youth Behavioral Health Financial Map

## Process and Lessons Learned from Developing a Financial Map

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**Presented by Carelon Behavioral Health CT**

**July 23, 2025**



Connecticut BHP  
Supporting Health and Recovery



Chapter

# 01

# Background

# Disclaimer

- The purpose of this presentation is to discuss the process of developing a financial map and the lessons learned.
  - The focus of the following presentation is on process, not interpretation of specific data points and/or operational definitions.
- The data used in this presentation is outdated and spans SFY'15 – SFY'18.
- This presentation is a subset of information presented in the full report posted to the [Plan4Children.org](https://www.plan4children.org) website
- The analysis and reporting were conducted by the CT BHP Administrative Services Organization (ASO), known at the time as Beacon Health Options CT. The organization is now called Carelon Behavioral Health CT.

# Vision & Goal of Financial Mapping

- **Vision**: To align and integrate Connecticut's resources to provide quality services for children and families with behavioral health needs.
- **Goal**: To operationalize, collect, and develop a financial mapping analysis that specifies expenditures on the behavioral health network of care for children and families in Connecticut.
- **SAMHSA Requirement**: Financial Mapping activity for both CONNECT & ASSERT grants

## FINANCIAL MAPPING LOGIC MODEL: CONNECT (last updated 1/3/18)

**Vision:** To align and integrate Connecticut's resources to provide quality services for children and families with behavioral health needs.

**Goal:** To operationalize, collect, and develop a financial mapping analysis that specifies expenditures on the behavioral health network of care for children and families in Connecticut.

CONTEXT	ACTIVITIES/STRATEGIES	OUTPUTS	OUTCOMES
<p>There is little publicly available behavioral health service expenditure data and analysis across service sectors and CT State Depts. Fragmented financing for BH delivery system.</p>	<p><b>System Organization, Financing and Accountability</b> Develop methodology and financial map template to identify, categorize, and collect children's behavioral health expenditures</p> <p>Identify &amp; assemble 13-178 BH Workgroup to build consensus on methodology and buy-in from identified partners</p> <p>Identify BH Partners to provide expenditure data and primary contact person to collect financial data.</p> <p>Provide ongoing technical assistance to identified BH Partners to ensure accurate and complete reporting.</p> <p>Synthesize and aggregate data in identified categories; revise categorization as new data becomes available.</p> <p>Continue to engage previously identified and new BH partners to continue collecting expenditure data over time</p> <p>Assist 13-178 BH Workgroup &amp; BH Partners in interpreting findings and making recommendations on how to better align, identify strengths, challenges, and barriers.</p>	<p><b>System Organization, Financing and Accountability</b> Mutually agreed upon methodology for categorizing expenditure</p> <p># of BH Partners identified</p> <p>#/% of BH Partners providing expenditure data</p> <p># hours/days of technical assistance &amp; support provided</p> <p># of people in attendance at 13-178 BH Workgroup meetings</p> <p># of BH Partners collaborating to pool resources to support children's behavioral health services</p> <p>#/% of BH Partners that complete financial map template</p> <p># of financial maps created</p> <p># of financial maps publicly shared</p> <p># and type of recommended changes to service delivery system based upon financial map data</p>	<p><b>System Organization, Financing and Accountability</b> <b>Short-term</b> Increased number of partners participating in 13-178 BH Workgroup Increased number of BH Partners providing annual expenditure data for children's behavioral health services Increased interagency collaboration to support alignment of resources</p> <p><b>Intermediate</b> Increased number of financial maps created Increased collaboration to pool resources across agencies Increased transparency of sharing expenditure data for public consumption</p> <p><b>Long-term</b> Increased number family members as decision-makers in health-related governance Decreased fragmented service system Increased alignment of resources Fully funded service system</p>

# 1<sup>st</sup> Iteration of Financial Map

- 1<sup>st</sup> iteration of Financial Map
- 12 State Agencies participated
- Valuable information
- Time intensive in collecting data
- Limited types of data
- Limited time period SFY'15-'16
- 1 categorization system
- Disparate data systems

Department	Type of Data	Submitted?
CID	FTE estimate	Yes
CSDE	Select Programs and Services	Yes
CSSD	Select Programs and Services	Yes
CWCS	FTE Total	Yes
DCF	All Programs and Services	Yes
DDS	Select Programs and Services	Yes
DMHAS	Select Programs and Services	Yes
DPH	Select Programs and Services	Yes
DSS	Select Programs and Services	Yes
Medicaid	Paid claims data	Yes
OCA	FTE estimate	Yes
OEC	All Program and Services	Yes
OHA	FTE estimate	Yes

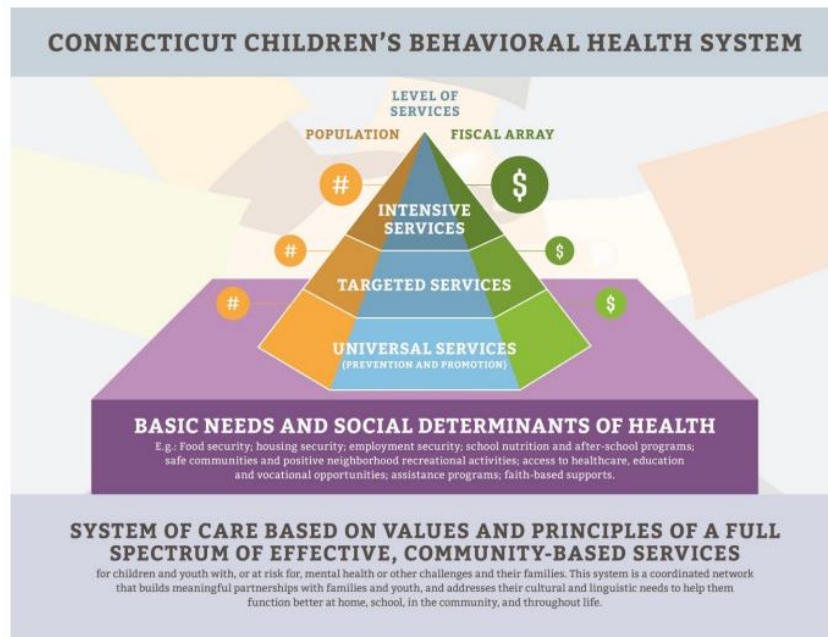
# 2<sup>nd</sup> Iteration of Financial Map (Current)

- Revisions Included
  - Re-coded to allow for an integrated substance use and mental health financial map
  - Limited to two state agencies (DCF and Medicaid)
  - Categorized map according to previous categorization system (i.e., CT Children's Behavioral Health Plan)
  - Re-categorized map according to new categorization system (i.e., Children's BH Rating Workgroup)
  - Expanded the reporting time period to include SFY15-SFY18 data
  - Revised the Medicaid claims coding to provide greater behavioral health level of care specificity
  - Created a primary diagnosis categorization system to include mental health, substance use, co-occurring, and co-morbid categorization
  - Included gender, age, race, and Hispanic origin for all Medicaid expenditures
  - Included gender, age, race and Hispanic origin for selected DCF programs
    - Care Coordination, Mobile Crisis, OPCC, ACRA, MST, MST-FIT, MST-EA, MST-PSB, MDFT
  - Expanded the age parameters from 3 – 21 years old for Medicaid expenditure
  - Applied Gross Domestic Product (GDP) adjustment to paid claims to adjust for inflation



# 2<sup>nd</sup> Iteration of Financial Map

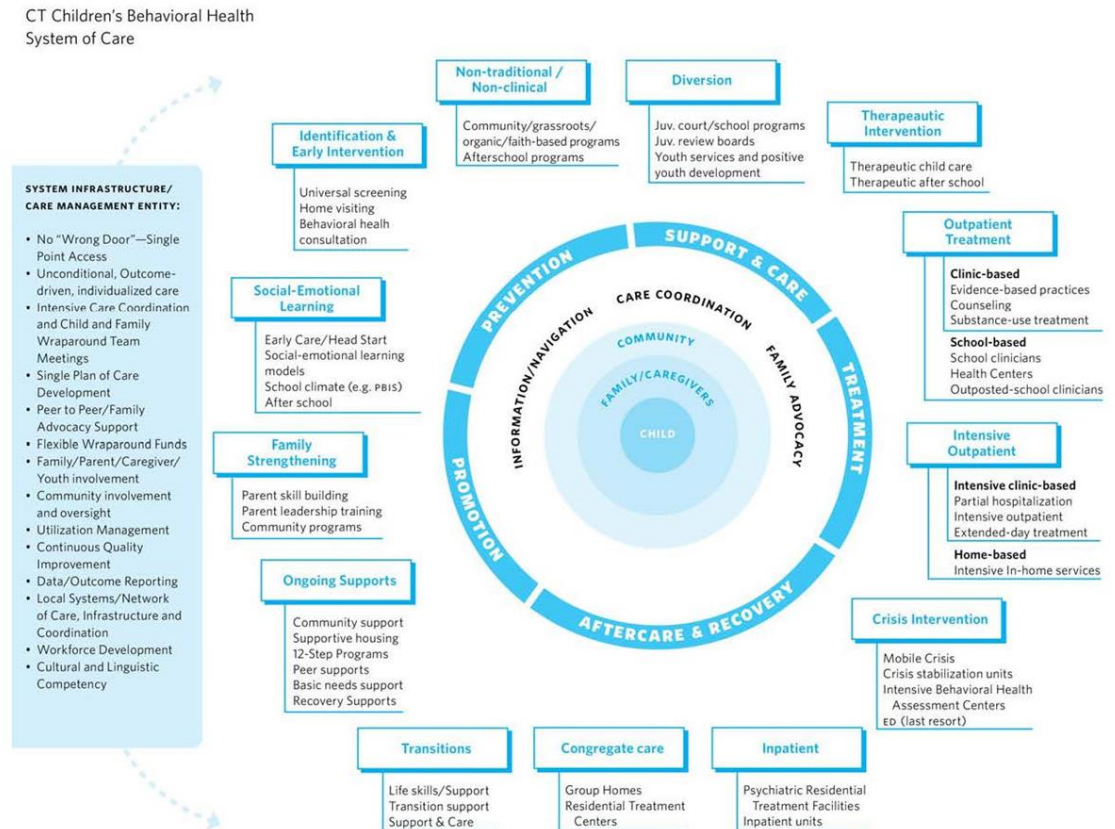
- Two categorization systems
  - Children's BH Plan
  - Children's BH Rating Workgroup



Connecticut Children's Behavioral Health Plan

October 2014

Figure III.2. Array of Services and Supports in the Connecticut Behavioral Health System of Care





# Challenges of 2<sup>nd</sup> Iteration

- Integration of disparate data sources
  - Merging DCF financial records to DCF program details; time intensive data cleaning
  - Over 1,600 lines of code and integration of 11 different Excel files
    - Created a reference table of provider names to have a uniform coding
    - Created a reference table of service categorization to have a uniform coding
    - Revised reference table to include 2 different categorization systems
    - Created a GDP reference table based upon SFY to apply an adjustment to expenditures

# Challenges of 2<sup>nd</sup> Iteration

- Integration of Demographic Information
  - DCF's financial data is at program level and the demographic data is at an episode level
  - In Medicaid, given FFS model, allows for identification expenditure at youth level
  - Integration of demographic data from both sources proved difficult to prevent double counting
    - Keep demographics separate for interpretability
- Integration of Disparate Data Sources
  - Differentiating between MH and SUD
    - Medicaid based upon first four diagnostic positions on a claim (sometimes no diagnosis)
    - DCF based upon treatment/intervention and targeted population
  - Service type descriptions in DCF expenditure data
    - Need detail /additional information in order to classify the type of expenditure
    - Need consistent spellings of provider names in order to merge/join across programs and SFY

Chapter

# 03

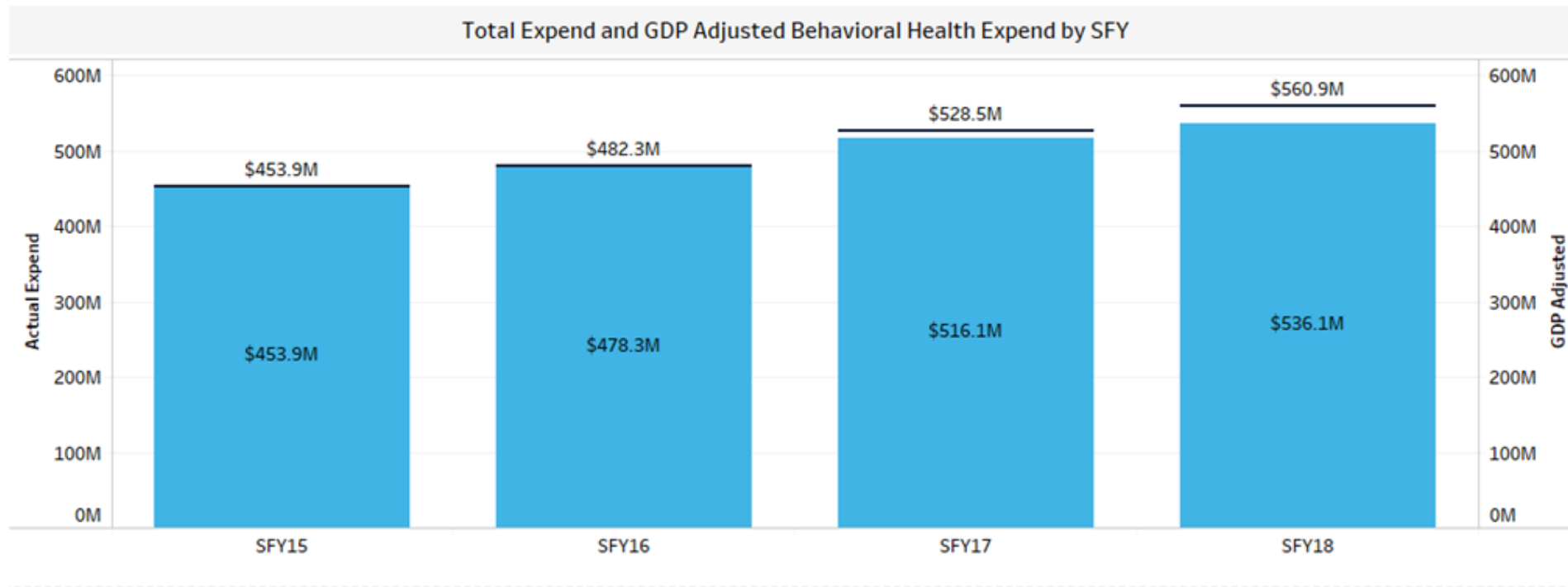
# Results

# Results Overview

- Section 1. Total Expenditure by Source and SFY
- Section 2. Total Expenditure by Source, SFY, and Categorization System
- Section 3. Medicaid Behavioral Health Treatment Expenditure by SFY, Level of Care, and Demographics [Non-Unique Youth]
- Section 4. Medicaid Behavioral Health Treatment Expenditure by SFY, Race and Hispanic Origin [Non-Unique Youth]
- Section 5. Medicaid Behavioral Health Treatment Expenditure by SFY, and Demographics per Unique [Unique Youth]
- Section 6. Medicaid Behavioral Health Treatment Expenditure by SFY, Race, and Hispanic Origin [Unique Youth]
- Section 7. Selected DCF Services Total Expenditure by Service Type and SFY [Non-Unique Youth]

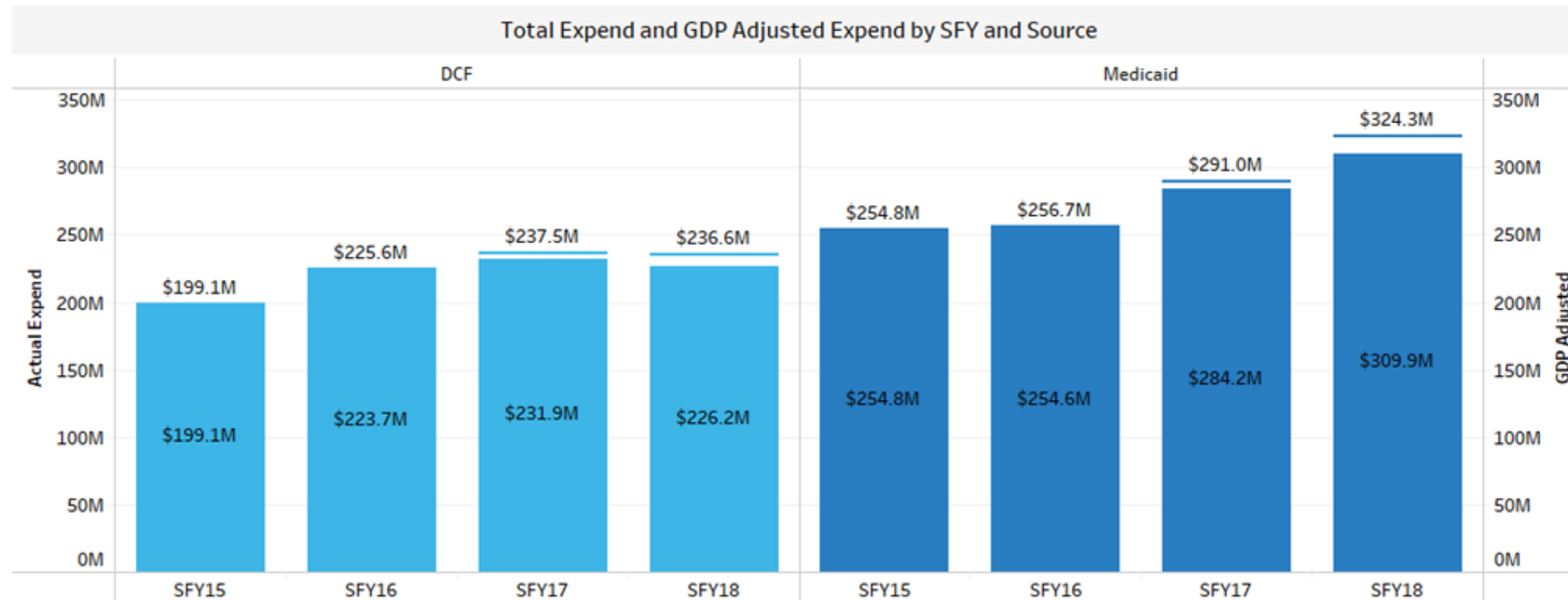
# Total Expenditure by Source & SFY

- Between SFY'15 and SFY'18, there was an overall increase in behavioral health spending for youth and young adults; absolute spending increased from \$453.9M to \$536.1M, a difference of \$82.2M and an increase of \$107.0M, when adjusted for inflation.



# Total Expenditure by Source & SFY

- When split out by funding source, there was a greater total adjusted percent increase in expenditure from Medicaid (from SFY'15 – SFY'18, increase of \$69.5M, adjusted, 27.3% adjusted increase) compared to DCF (from SFY'15 – SFY'18, increase of \$37.5M, adjusted, 18.8% adjusted increase).



## Expenditure by Source & SFY & Category

- Medicaid accounted for a larger total percent of behavioral health expenditures across all four years, with SFY'18 being the highest (57.8% of total expenditure examined, compared to 42.2% from DCF).
- DCF paid for a more diverse number of services and supports including system infrastructure, prevention, promotion, and support & care.

Source	Categorization System	SFY			
		SFY15	SFY16	SFY17	SFY18
DCF	Treatment	\$131.7M (29.0%)	\$152.1M (31.5%)	\$159.7M (30.2%)	\$159.4M (28.4%)
	Support & Care	\$44.6M (9.8%)	\$48.0M (10.0%)	\$48.4M (9.2%)	\$49.5M (8.8%)
	System Infrastructure	\$17.2M (3.8%)	\$19.6M (4.1%)	\$23.3M (4.4%)	\$21.4M (3.8%)
	Prevention	\$5.4M (1.2%)	\$5.6M (1.2%)	\$5.4M (1.0%)	\$6.0M (1.1%)
	Promotion	\$0.2M (0.0%)	\$0.3M (0.1%)	\$0.6M (0.1%)	\$0.4M (0.1%)
	Total	\$199.1M (43.9%)	\$225.6M (46.8%)	\$237.5M (44.9%)	\$236.6M (42.2%)
Medicaid	Treatment	\$251.9M (55.5%)	\$253.4M (52.5%)	\$287.6M (54.4%)	\$320.6M (57.2%)
	System Infrastructure	\$3.0M (0.7%)	\$3.3M (0.7%)	\$3.4M (0.6%)	\$3.7M (0.7%)
	Total	\$254.8M (56.1%)	\$256.7M (53.2%)	\$291.0M (55.1%)	\$324.3M (57.8%)



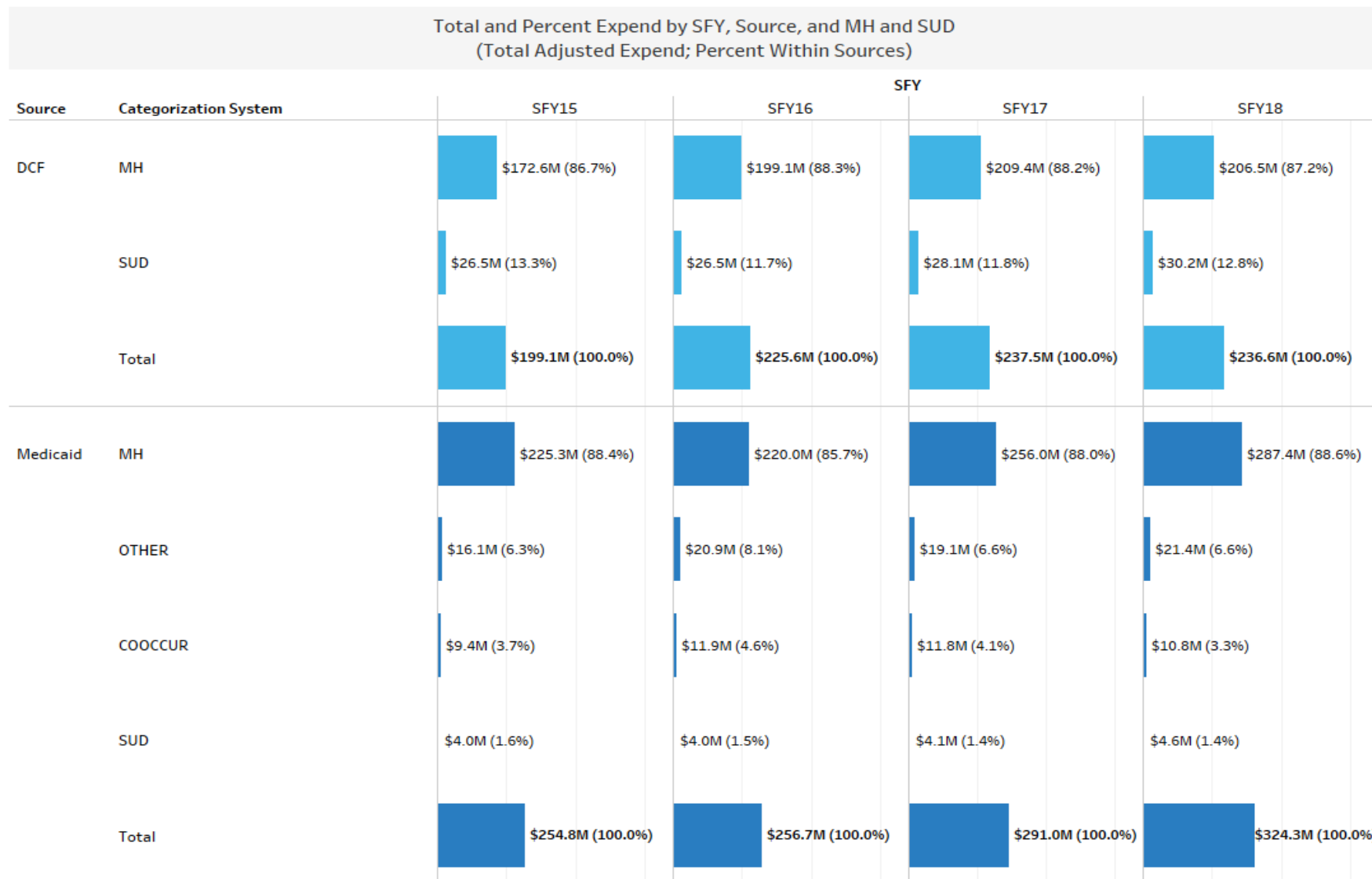
## Expenditure by Source & SFY & Category

- Similarly, in using the Connecticut Children's Behavioral Health System categorization system, 93.5% of all expenditures, across both Medicaid and DCF were for Targeted or Intensive services and supports.

Source	Categorization System	SFY			
		SFY15	SFY16	SFY17	SFY18
DCF	Targeted	\$126.5M (27.9%)	\$130.1M (27.0%)	\$137.6M (26.0%)	\$138.6M (24.7%)
	Intensive	\$47.4M (10.4%)	\$67.3M (13.9%)	\$68.9M (13.0%)	\$68.4M (12.2%)
	Targeted, general administrative	\$4.7M (1.0%)	\$7.6M (1.6%)	\$9.4M (1.8%)	\$9.5M (1.7%)
	Targeted, infrastructure loosely connected..	\$7.8M (1.7%)	\$7.7M (1.6%)	\$7.9M (1.5%)	\$7.2M (1.3%)
	Targeted, infrastructure connected to trea..	\$6.5M (1.4%)	\$6.3M (1.3%)	\$7.4M (1.4%)	\$7.0M (1.2%)
	Universal	\$2.8M (0.6%)	\$3.2M (0.7%)	\$2.6M (0.5%)	\$2.7M (0.5%)
	Intensive, Targeted, Universal	\$1.0M (0.2%)	\$1.5M (0.3%)	\$1.6M (0.3%)	\$1.6M (0.3%)
	Intensive, Targeted, general administrative	\$0.7M (0.2%)	\$0.6M (0.1%)	\$0.6M (0.1%)	\$0.4M (0.1%)
	Universal, general administrative	\$0.1M (0.0%)	\$0.3M (0.1%)	\$0.3M (0.1%)	\$0.4M (0.1%)
	Targeted, Universal, general administrative	\$0.3M (0.1%)	\$0.3M (0.1%)	\$0.3M (0.1%)	\$0.3M (0.1%)
	Intensive, Targeted, Universal, general ad..	\$0.4M (0.1%)	\$0.1M (0.0%)	\$0.4M (0.1%)	\$0.3M (0.0%)
	Universal, infrastructure loosely connecte..	\$0.1M (0.0%)	\$0.2M (0.0%)	\$0.2M (0.0%)	\$0.1M (0.0%)
	Targeted, Universal, infrastructure loosely..	\$0.0M (0.0%)	\$0.0M (0.0%)	\$0.0M (0.0%)	\$0.1M (0.0%)
	Targeted, Universal, infrastructure connec..	\$0.0M (0.0%)	\$0.0M (0.0%)	\$0.0M (0.0%)	\$0.0M (0.0%)
	Intensive, infrastructure connected to trea..	\$0.0M (0.0%)	\$0.0M (0.0%)	\$0.0M (0.0%)	\$0.0M (0.0%)
	Intensive, general administrative	\$0.6M (0.1%)	\$0.3M (0.1%)	\$0.0M (0.0%)	\$0.0M (0.0%)
	Intensive, infrastructure loosely connected..	\$0.0M (0.0%)	\$0.0M (0.0%)	\$0.0M (0.0%)	\$0.0M (0.0%)
	Universal, Targeted, infrastructure loosely..	\$0.2M (0.0%)	\$0.1M (0.0%)	\$0.0M (0.0%)	()
	Total	\$199.1M (43.9%)	\$225.6M (46.8%)	\$237.5M (44.9%)	\$236.6M (42.2%)
Medicaid	Targeted	\$153.3M (33.8%)	\$168.0M (34.8%)	\$175.5M (33.2%)	\$192.9M (34.4%)
	Intensive	\$94.3M (20.8%)	\$81.0M (16.8%)	\$108.6M (20.5%)	\$124.4M (22.2%)
	Targeted, infrastructure connected to trea..	\$5.4M (1.2%)	\$5.4M (1.1%)	\$4.8M (0.9%)	\$4.6M (0.8%)
	Targeted, general administrative	\$1.5M (0.3%)	\$2.0M (0.4%)	\$2.1M (0.4%)	\$2.3M (0.4%)
	Intensive, infrastructure connected to trea..	\$0.3M (0.1%)	\$0.3M (0.1%)	\$0.0M (0.0%)	\$0.1M (0.0%)
	Total	\$254.8M (56.1%)	\$256.7M (53.2%)	\$291.0M (55.1%)	\$324.3M (57.8%)

## Expenditure by Source & SFY & Category

- Paid mental health services and supports are significantly higher than exclusive (i.e., excludes co-occur and other) substance use disorder services and support for both DCF (87.2% compared to 12.8%) and Medicaid (88.6% compared to 1.4%) in SFY'18. This finding was consistent in other SFY, too.



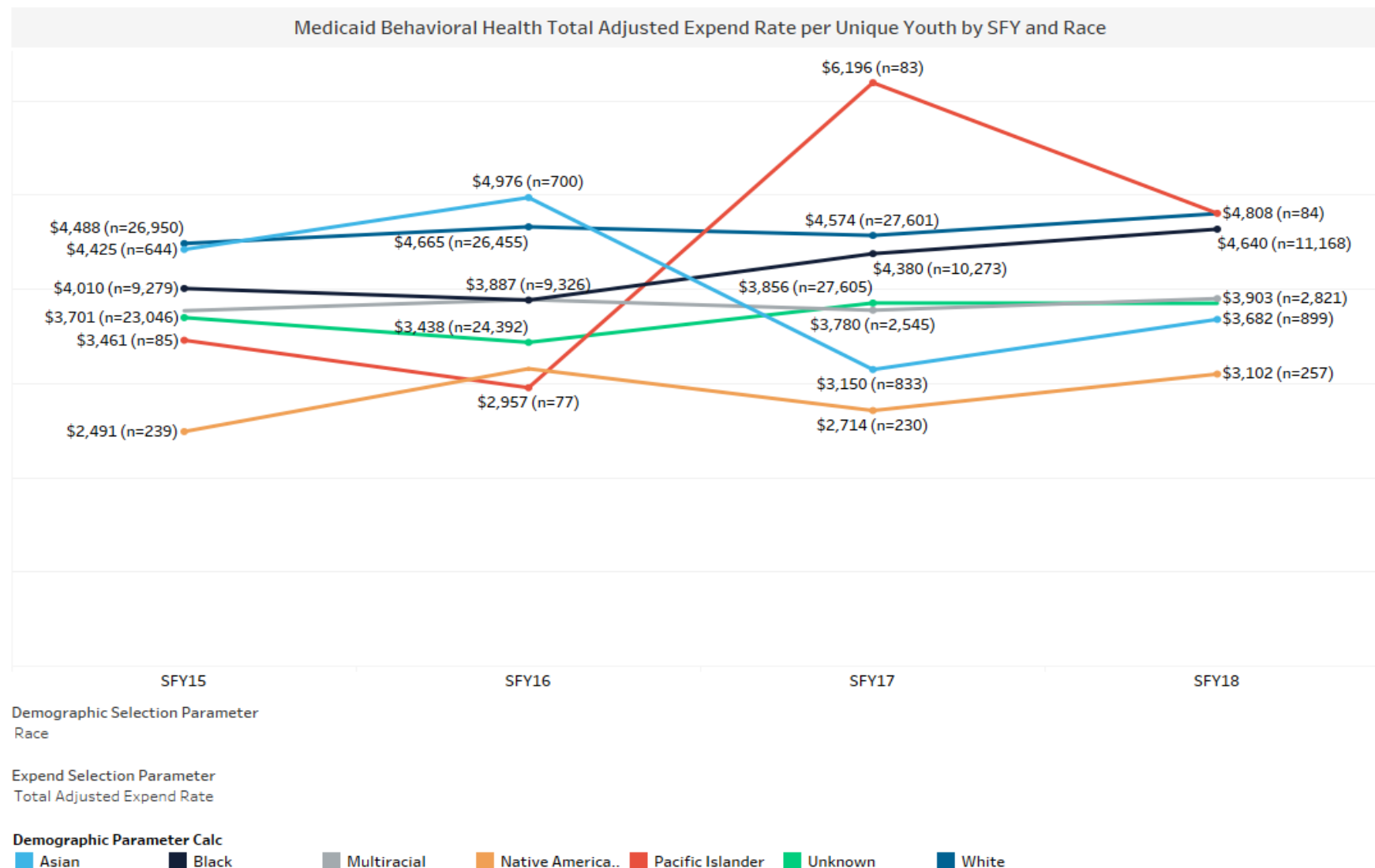
## Medicaid Treatment Expenditure by SFY & Level of Care

- For Medicaid treatment expenditures, outpatient behavioral health services was the highest absolute and adjusted expenditure across all four years. In SFY'18, outpatient behavioral health accounted for 25.8% of all behavioral health treatment expenditures.
- After outpatient behavioral health, the next three highest levels of care expenditures were inpatient psychiatric acute (11.0%), psychiatric residential treatment facility (PRTF; 10.4%) and inpatient psychiatric state (10.4%) in SFY'18.

	SFY			
	SFY15	SFY16	SFY17	SFY18
Outpatient BH Services	\$54.7M (21.7%,n=67,156)	\$62.6M (24.7%,n=70,173)	\$70.3M (24.4%,n=72,298)	\$82.7M (25.8%,n=79,128)
Inpatient Psychiatric Acute	\$30.0M (11.9%,n=2,638)	\$30.4M (12.0%,n=2,486)	\$33.6M (11.7%,n=2,580)	\$35.2M (11.0%,n=2,638)
PRTF State	\$41.0M (16.3%,n=229)	\$29.1M (11.5%,n=191)	\$29.6M (10.3%,n=148)	\$33.4M (10.4%,n=170)
Inpatient Psychiatric State	\$3.0M (1.2%,n=17)	\$3.1M (1.2%,n=18)	\$25.1M (8.7%,n=132)	\$33.4M (10.4%,n=189)
Waiver	\$39.3M (15.6%,n=2,648)	\$44.8M (17.7%,n=2,613)	\$36.2M (12.6%,n=2,471)	\$31.3M (9.8%,n=2,137)
IICAPS	\$22.3M (8.8%,n=3,617)	\$21.3M (8.4%,n=3,496)	\$22.8M (7.9%,n=3,398)	\$22.7M (7.1%,n=3,518)
Autism Services	\$0.8M (0.3%,n=177)	\$3.0M (1.2%,n=664)	\$7.8M (2.7%,n=1,341)	\$15.2M (4.7%,n=2,012)
School Based BH Services	\$12.4M (4.9%,n=13,785)	\$12.0M (4.7%,n=15,127)	\$12.3M (4.3%,n=17,659)	\$14.5M (4.5%,n=20,287)
Other Services BH Primar..	\$6.2M (2.5%,n=29,482)	\$7.0M (2.8%,n=30,999)	\$8.9M (3.1%,n=31,212)	\$9.5M (3.0%,n=33,680)
PRTF Community	\$6.7M (2.7%,n=173)	\$6.4M (2.5%,n=185)	\$7.1M (2.5%,n=167)	\$7.2M (2.2%,n=163)
PHP EDT	\$6.4M (2.5%,n=2,489)	\$5.9M (2.3%,n=2,266)	\$6.2M (2.1%,n=2,259)	\$6.3M (2.0%,n=2,247)
ED Non-BH Services	\$1.8M (0.7%,n=7,510)	\$1.9M (0.7%,n=7,949)	\$5.1M (1.8%,n=10,085)	\$6.1M (1.9%,n=10,755)
IOP	\$5.6M (2.2%,n=2,725)	\$5.6M (2.2%,n=2,693)	\$5.3M (1.8%,n=2,455)	\$5.3M (1.7%,n=2,508)
Home Health	\$5.4M (2.2%,n=806)	\$5.4M (2.1%,n=949)	\$4.8M (1.7%,n=811)	\$4.6M (1.4%,n=740)
PNMI	\$7.3M (2.9%,n=518)	\$6.1M (2.4%,n=419)	\$3.5M (1.2%,n=248)	\$4.1M (1.3%,n=282)
Other Home Based Services	\$3.5M (1.4%,n=2,264)	\$3.6M (1.4%,n=2,374)	\$3.7M (1.3%,n=2,341)	\$3.3M (1.0%,n=2,340)
Inpatient Medical Non-BH ..	\$0.8M (0.3%,n=1,644)	\$1.4M (0.5%,n=2,170)	\$1.8M (0.6%,n=2,735)	\$2.1M (0.7%,n=2,917)
Inpatient Medical BH Serv..	\$2.0M (0.8%,n=841)	\$1.5M (0.6%,n=676)	\$1.3M (0.4%,n=349)	\$1.5M (0.5%,n=378)
Residential Rehab	\$0.9M (0.3%,n=139)	\$0.7M (0.3%,n=124)	\$0.8M (0.3%,n=135)	\$0.8M (0.2%,n=119)
Extended Stay Facility	\$0.1M (0.1%,n=2)	\$0.3M (0.1%,n=3)	\$0.6M (0.2%,n=4)	\$0.4M (0.1%,n=2)
Methadone Maintenance	\$0.4M (0.2%,n=232)	\$0.4M (0.2%,n=253)	\$0.4M (0.1%,n=239)	\$0.3M (0.1%,n=182)
Detoxification Inpatient F..	\$0.3M (0.1%,n=200)	\$0.3M (0.1%,n=217)	\$0.4M (0.1%,n=191)	\$0.3M (0.1%,n=147)
Community First Choice			\$0.1M (0.0%,n=12)	\$0.2M (0.1%,n=24)
ED BH Services	\$0.1M (0.0%,n=660)	\$0.1M (0.1%,n=738)	\$0.0M (0.0%,n=433)	\$0.1M (0.0%,n=1,030)
Observation	\$0.3M (0.1%,n=320)	\$0.3M (0.1%,n=464)	\$0.0M (0.0%,n=453)	\$0.1M (0.0%,n=551)
Assisted Living Facility	\$0.1M (0.0%,n=89)	\$0.0M (0.0%,n=42)	\$0.0M (0.0%,n=21)	\$0.0M (0.0%,n=35)
Birth to Three Services	\$0.0M (0.0%,n=2)	\$0.0M (0.0%,n=1)	\$0.0M (0.0%,n=3)	\$0.0M (0.0%,n=3)
Skilled Nursing Facility	\$0.1M (0.0%,n=24)	\$0.1M (0.1%,n=23)	\$0.0M (0.0%,n=24)	\$0.0M (0.0%,n=12)
Detoxification Ambulatory	\$0.0M (0.0%,n=22)	\$0.0M (0.0%,n=10)	\$0.0M (0.0%,n=3)	\$0.0M (0.0%,n=2)
Detoxification Inpatient ..	\$0.0M (0.0%,n=2)	\$0.0M (0.0%,n=2)		\$0.0M (0.0%,n=1)
Group Home		\$0.0M (0.0%,n=2)	\$0.0M (0.0%,n=1)	\$0.0M (0.0%,n=3)
Intermediate Care Facility	\$0.3M (0.1%,n=8)	\$0.0M (0.0%,n=2)		
Detoxification Residential	\$0.0M (0.0%,n=38)	\$0.0M (0.0%,n=13)		

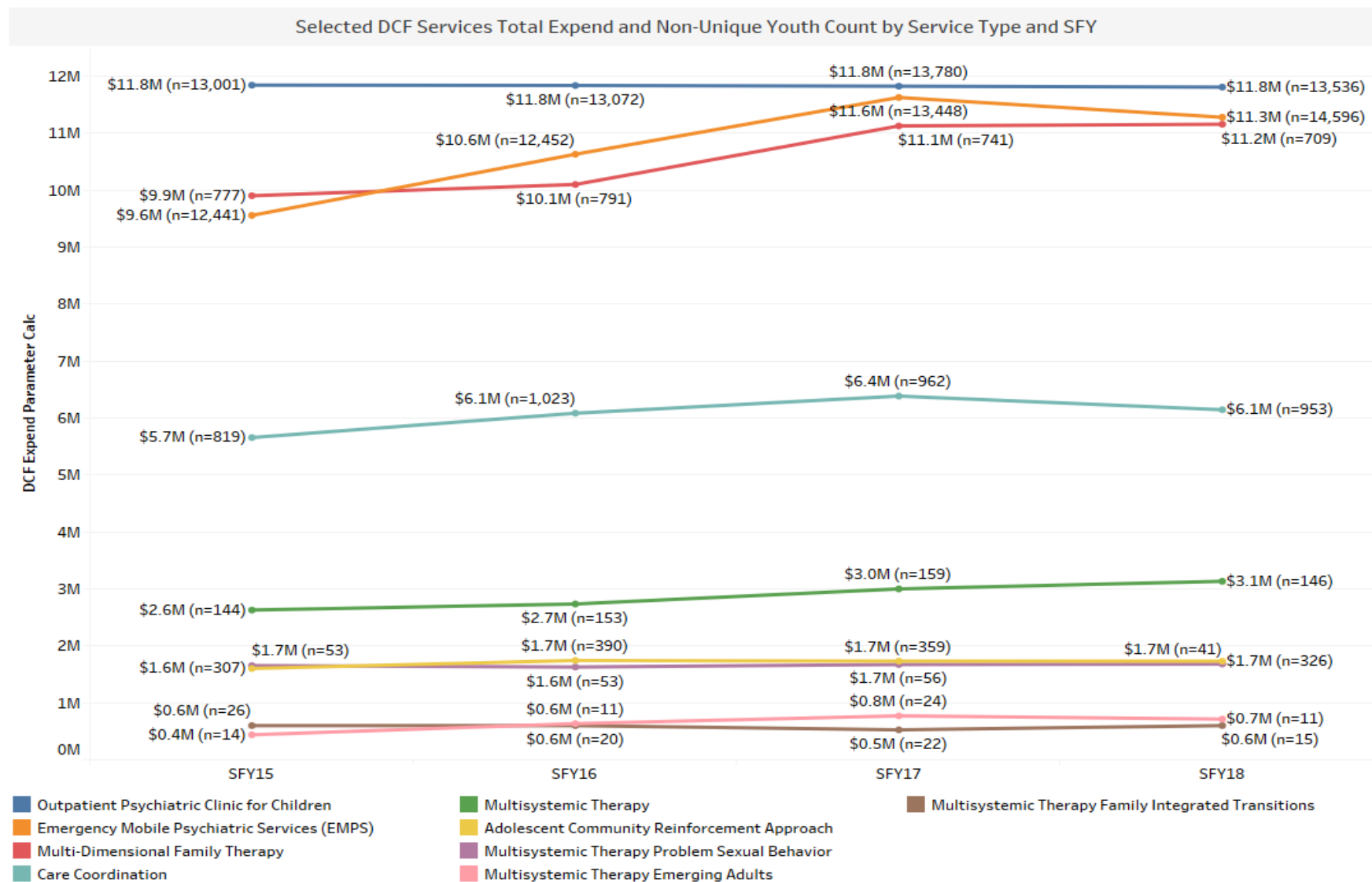
## Medicaid Behavioral Health Treatment Expenditure by SFY, and Demographics per Unique [Unique Youth]

- White and Black youth had a similar rate of Medicaid behavioral health treatment expenditure, per unique youth, \$4,805 and \$4,640, respectively.
- Native American/Alaskan Natives and Asian youth had the lowest rate (\$3,102 and \$3,682, respectively).



## Selected DCF Services Total Expenditure by Service Type and SFY [Unique Youth]

- Of the selected DCF programs, OPCC had the highest expenditures across all years with flat funding [unadjusted] and an increase in the number of non-unique youth served (low of 13,001 youth in SFY'15 and a high in SFY'17 of 13,780 youth).
- Mobile Crisis had an increase in expenditures [unadjusted] between SFY'15 to SFY'17 and then a decrease in SFY'18 and a continuous increase in the number of youth served (SFY'15 n=12,441, SFY'18 n=14,596).



# Summary

- Methods
  - Many advancements and innovations with this iteration of financial map
  - See final report for detailed methodology
- Results
  - Only a handful of selected results shown here
  - See final report for 60+ cuts of the data
- Challenges & Limitations
  - See [final report](#) for discussion of limitations
  - One key takeaway: integrating disparate and non-uniform datasets is challenging and time consuming

# Thank You

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**Questions?**



# Contact



**Carrie Bourdon, LCSW**

Chief Executive Officer  
CT BHP Division

[Carol.Bourdon@Carelton.com](mailto:Carol.Bourdon@Carelton.com)



**Bonni Hopkins, PhD**

SVP, Quality, Analytics &  
Innovation

[Bonni.Hopkins@Carelton.com](mailto:Bonni.Hopkins@Carelton.com)