



Faces of Medicaid Data Analysis:

Identifying Opportunities to Improve Children's Behavioral Health

November 20, 2013

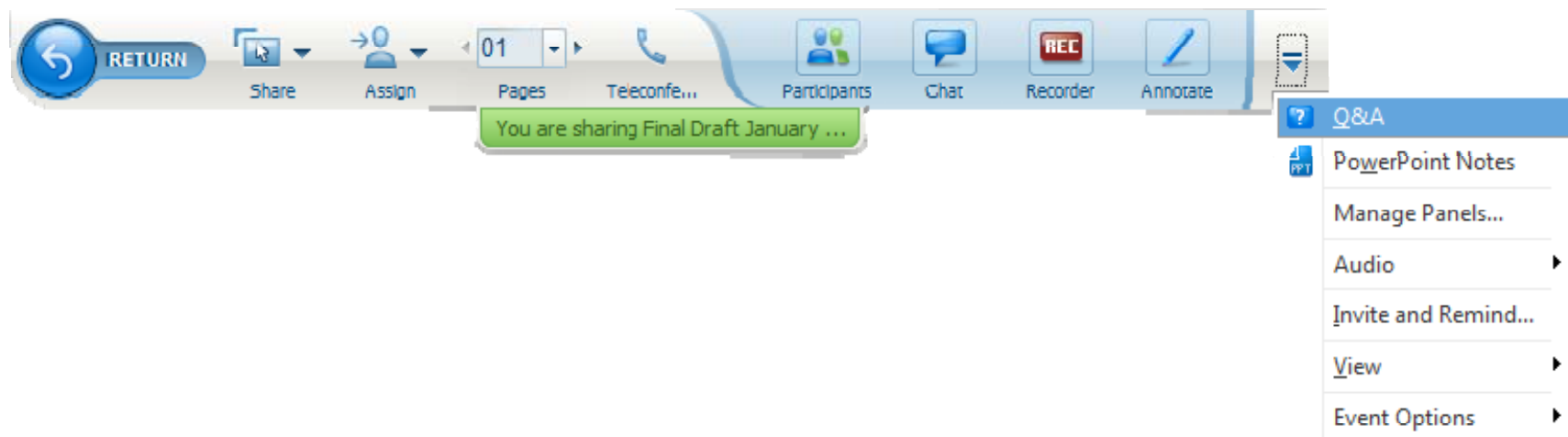
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*Made possible by the Annie E. Casey Foundation,
with additional support from the Substance Abuse and Mental Health Services Administration and
The Commonwealth Fund*

Questions?

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Speakers for Today's Webinar

- **Kamala Allen**, MHS, Director of Child Health Quality, Center for Health Care Strategies (CHCS)
- **Sheila A. Pires**, MPA, Partner, Human Service Collaborative
- **Katherine E. Grimes**, MD, MPH, Director, Children's Health Initiative, Cambridge Health Alliance
- **Wendy White Tiegreen**, MSW, Director of Medicaid Coordination & Health Systems Innovation, Georgia Department of Behavioral Health and Developmental Disabilities
- **Michelle Zabel**, MSS, Director & Clinical Instructor, The Institute for Innovation & Implementation, Project Director, TA Network, University of Maryland School of Social Work

Agenda

- I. Welcome
- II. Context for Children's Faces analysis: Kamala Allen
- III. Key Data Findings and Policy Implications: Sheila A. Pires and Katherine E. Grimes
- IV. Q & A
- V. Perspectives from States: Wendy Tiegreen (GA) and Michelle Zabel (MD)
- VI. Q & A

CHCS

Center for Health
Care Strategies, Inc.

A non-profit health policy resource center dedicated to improving services for Americans receiving publicly financed care

- ▶ **Priorities:** (1) enhancing access to coverage and services; (2) advancing quality and delivery system reform; (3) integrating care for people with complex needs; and (4) building Medicaid leadership and capacity.
- ▶ **Provides:** technical assistance for stakeholders of publicly financed care, including states, health plans, providers, and consumer groups; and informs federal and state policymakers regarding payment and delivery system improvement.
- ▶ **Funding:** philanthropy and the U.S. Department of Health and Human Services.

Context for *Children's Faces* Analysis

- Questions emerged as we were conceptualizing a new national initiative, “Using Data to Drive Quality”
- Medicaid is a key funder of children’s behavioral health services
- No central, comprehensive data source regarding Medicaid-financed behavioral health services and expense for children and youth
- First foray into an exclusively child-focused analysis in CHCS’ “Faces of Medicaid” series

Collaborative Process for *Children's Faces*

- Engaged research partners at the University of California, San Diego, Dr. Richard Kronick and Dr. Todd Gilmer
- Critical partnership with senior policy consultant, Sheila Pires, and clinical consultant, Dr. Katherine Grimes
- Essential contributions from in-house research associate, Roopa Mahadevan

Core Study Questions for *Children's Faces* Analysis

- How many children receive Medicaid-financed behavioral health services?
- What is the variance across demographic and eligibility groups?
- What types of behavioral health services do these children receive?
- What are the expenditures associated with the behavioral health services received?
- To what extent do these children also receive services for chronic physical health conditions, and what is the related expense?
- Do the patterns of use and expense differ significantly for children in foster care or with developmental disabilities?

Presenters: Key Data Findings and Policy Implications of *Children's Faces*

Sheila A. Pires, MPA

Partner

Human Service Collaborative

Katherine E. Grimes, MD, MPH

Director, Children's Health Initiative

Cambridge Health Alliance

Study Design of *Children's Faces*

- Data source: 2005 Medicaid Analytic eXtract (MAX) person-level data from all states was used for demographics and eligibility analyses
- Fee-for-service (FFS) claims and managed care encounters were used to capture utilization
- Mean expense/per child, for physical and behavioral health services, was based on FFS claims data (available on 60% of the study population)
- Total behavioral health expenditures represented children in FFS and children in managed care – with non-FFS dollars imputed from FFS expense data

**Overall sample includes all U.S. children, ages 0-19,
covered by Medicaid in 2005
N = 29,050,305**

**Identification of sub-sample of children and adolescent with BH care claims,
defined as: Psychiatric Diagnosis; Behavioral Health Service Code or Provider
Type; Behavioral Health Place of Service; Psychotropic Medication
N = 2,787,919**

**Children with indeterminate
services, plus psychotropic
medications
N = 338,651**

**Children receiving
behavioral health
services
N = 1,958,908**

**Children receiving only
psychotropic meds and
physical health services
N = 490,360**

**Children using behavioral
health services *without*
psychotropic medications
N = 1, 101,532**

**Children using behavioral
health services *with*
psychotropic medications
N = 857,376**

Children in Medicaid: Behavioral Health Penetration and Total Expense

- Children in Medicaid using behavioral health care:
 - ▶ Represented under 10% of children enrolled in Medicaid, but accounted for an estimated 38% of total Medicaid child expenditures (\$19.3b)
 - 9.6% of Medicaid children used behavioral health care
 - 6.7% used behavioral health services (with or without psychotropic meds)
 - 5.8% used psychotropic medications (with or without behavioral health services)
 - 0.8% of Medicaid children used substance use disorder services

▶ SOURCE: S. Pires, K. Grimes, et al. *Identifying Opportunities to Improve Children's Behavioral Health Care: An Analysis of Medicaid Utilization and Expenditures*. Center for Health Care Strategies, Forthcoming December 2013.

Children in Medicaid Using Behavioral Health Care Are an Expensive Population

- Mean Medicaid expenditures (physical and behavioral health care) are \$8,520 per year – nearly 5x higher than for Medicaid children in general (\$1,729 per year*)
 - ▶ TANF-enrolled children – nearly 3x higher
 - ▶ Foster care – 7x higher
 - ▶ SSI/Disabled – nearly 9x higher
- Expenditures driven more by behavioral -- rather, than physical - - health service use, except for children on SSI/disability who have slightly higher physical health expense
- Children in the top 10% of BH expense are 28x more expensive than Medicaid children in general

*As estimated in Center for Medicaid and State Operations: Statistical Report on Medical Care: Eligibles, Recipients, Payments, and Services (HCFA 2082), MSIS. 2008 Statistical Supplement.

Mean Health Expenditures for Children in Medicaid Using Behavioral Health Services*

	All Children Using Behavioral Health Services	TANF	Foster Care	SSI/Disabled**	Top 10% Most Expensive Children Using Behavioral Health Services***
Physical Health Services	\$3,652	\$2,053	\$4,036	\$7,895	\$20,121
Behavioral Health Services	\$4,868	\$3,028	\$8,094	\$7,264	\$28,669
Total Health Services	\$8,520	\$5,081	\$12,130	\$15,123	\$48,790

* Includes children using behavioral health services who are not enrolled in a comprehensive HMO, n = 1,213,201

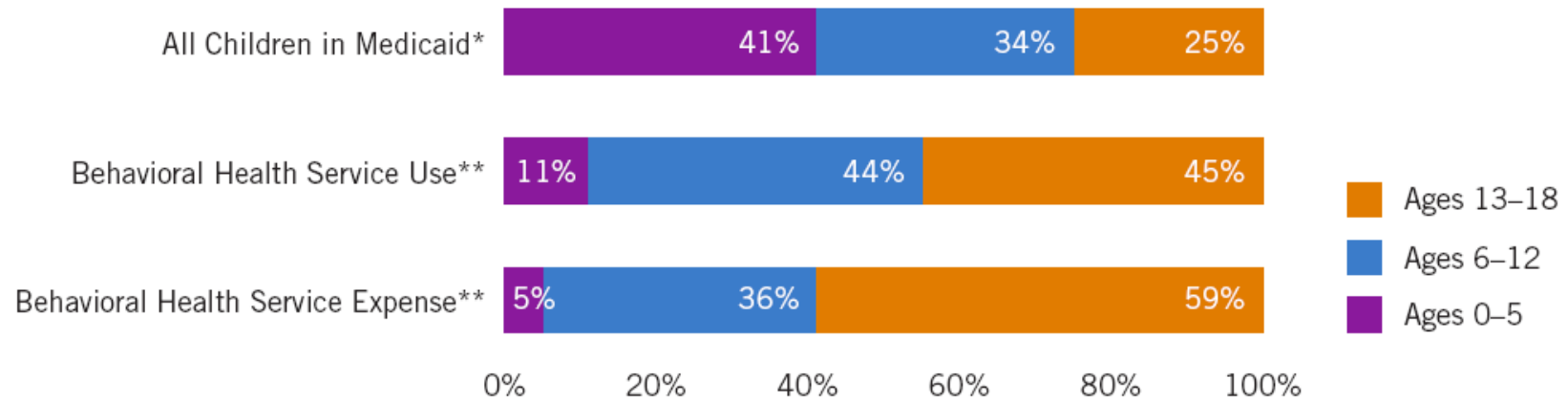
** Includes all children determined to be disabled by SSI or state criteria (all disabilities, including mental health disabilities)

***Represents the top 10% of child behavioral health users with the highest mean expenditures, n = 121,323

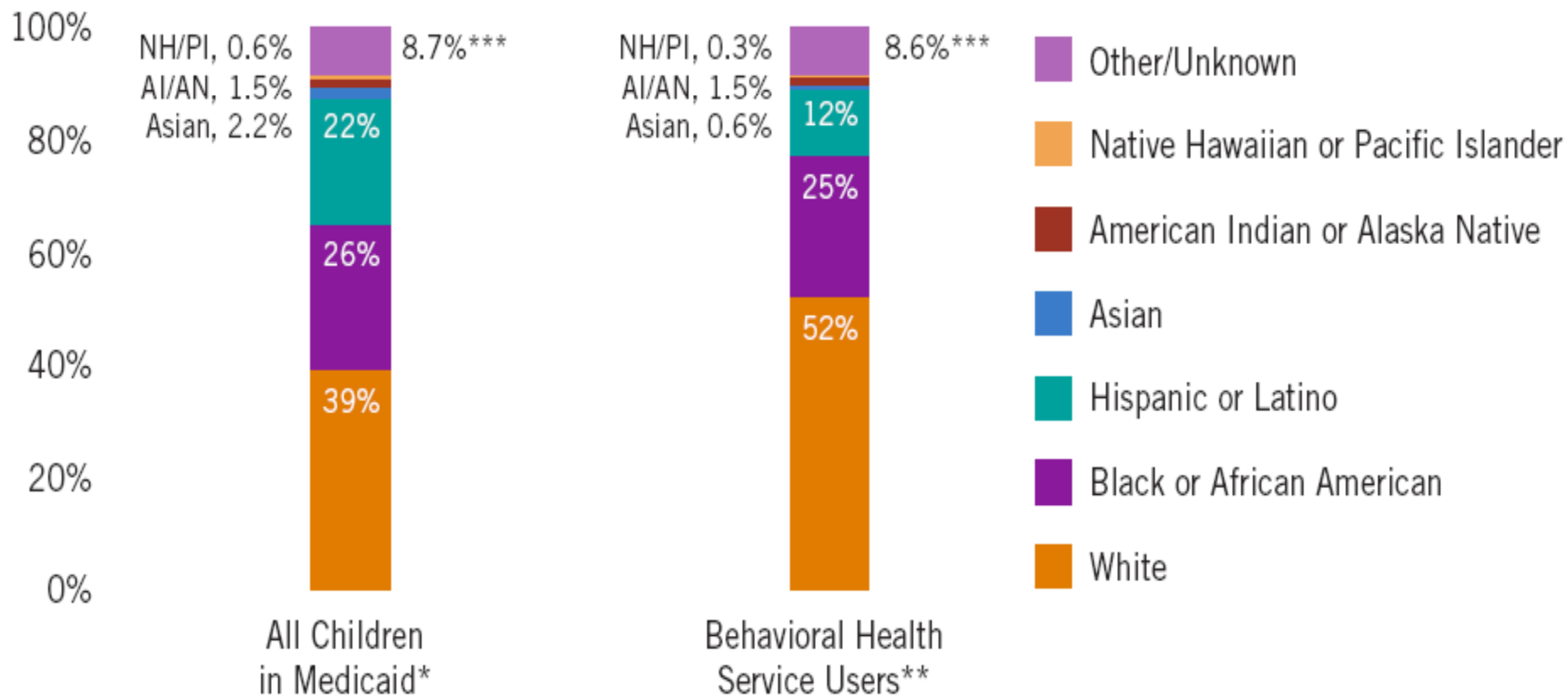
Highest Expenditure Services for Children in Medicaid Using Behavioral Health Services

1. Residential treatment and therapeutic group homes accounted for 19.2% of all expenditures and 3.6% of children using behavioral health services
2. Outpatient treatment accounted for 16.5% of all expenditures and 53.1% of children using behavioral health services
3. Psychotropic medications accounted for 13.5% of all expenditures and 43.8% of children using behavioral health services, without including expenditures for medication management

Medicaid Enrollment, Child Behavioral Health Service Use and Expense by Age Group



Medicaid Enrollment and Child Behavioral Health Service Use by Race/Ethnicity



* All children in Medicaid, N = 29,050,305.

** Behavioral health service users, N = 1,958,908.

*** Other category includes: 2.9%, Hispanic or Latino, plus one or more races; 0.3%, more than one race; and 5.6%, unknown.

Children in Foster Care Are a High-Cost Medicaid Population

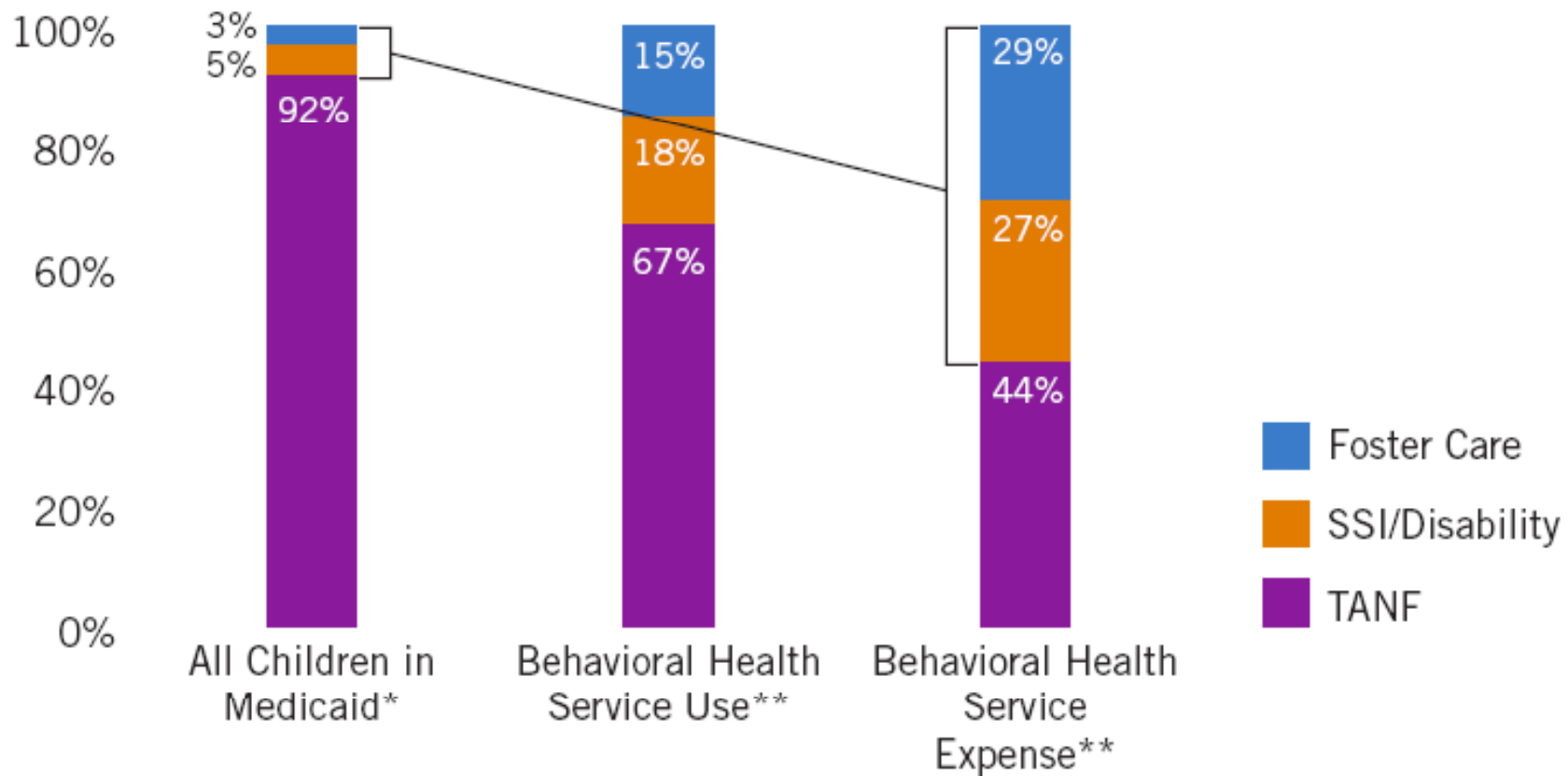
- Represent 3.2% of children in Medicaid, but 15% of children using behavioral health services
- 32% of foster care children use behavioral health services, compared to 26% of children on SSI, and 4.9% TANF
- Mean behavioral health expenditure is \$8,094 per foster child, compared to \$7,264 for children on SSI
- Have overall (physical and behavioral health care) mean expenditure of \$12,130 per child – costs are driven by behavioral health care
- Children in foster care who use behavioral health services have costs that are 7x higher than for Medicaid children in general

SOURCE: S. Pires, K. Grimes, et al. *Identifying Opportunities to Improve Children's Behavioral Health Care: An Analysis of Medicaid Utilization and Expenditures*. Center for Health Care Strategies, Forthcoming December 2013.

Children in Foster Care Use More Restrictive, More Expensive Services in Medicaid

- More likely to use: inpatient psychiatric services, residential treatment and therapeutic group care, emergency room services, and psychotropic medications
- Children in foster care were only one-fifth the size of the TANF population, but:
 - ▶ Represented nearly the same amount of dollars for residential and group care and emergency room visits
 - ▶ Represented 3.5 times more of the dollars for therapeutic foster care

Medicaid Enrollment, Behavioral Health Service Use, and Expense by Aid Category



* All children in Medicaid, N=29,050,305.

** Behavioral Health service use and expense, N=1,958,908.

Behavioral Health Services Most Likely to be Used

- Children in Medicaid are most likely to receive the following:*
 - ▶ Outpatient therapy (primarily individual therapy)
 - ▶ Psychotropic medications
 - ▶ Screening and assessment
 - ▶ Medication management
- Only 1% of children used services that have an existing/emerging evidence base such as: wraparound, therapeutic foster care, respite, peer services, Multisystemic Therapy (1% is overstated if service coded to psychosocial rehab, used by 12% of children)

* Services received by more than 20% of children with behavioral health service utilization.

Differences in Child Behavioral Health Penetration Rates and Mean Expense by State Management and Payment Arrangement

Payment/ Delivery Structure	Average Penetration Rate	Penetration Range	Mean Expenditure	Mean Expenditure Range
All FFS	10.4%	2.5% - 17.3%	\$5,542	\$2,099 to \$14,803
Primarily FFS	7.5%	0.3% - 10.4%	\$4,709	\$1,862 to \$9,172
Primarily Capitated*	5.1%	1.6% - 8.9%	\$3,684	\$1,193 to \$9,377

*May understate utilization depending on completeness of encounter data submitted to state agencies.
May overstate expenditures, which are extrapolated from FFS expenditures.

Children in Medicaid Receiving Psychotropic Medications

- 1.7 million children in Medicaid received psychotropic medications (6% of all children in Medicaid)
- This group overlaps with, but differs from, the 1.9 million youth who are getting behavioral health treatment either alone or with medication
- Only 51% of children prescribed psychotropic medications in 2005 received any behavioral health services
- 50% of psychotropic medication recipients were 6-12 years old; 60% were White; 27% were covered by SSI; 23% foster care

Distribution of Psychiatric Diagnosis among Children in Medicaid Receiving Behavioral Health Services

<u>Diagnosis</u>	<u>%</u>	<u>N</u>
ADHD	54.9%	654,863
Mood	26.2%	312,642
Anxiety	22.7%	270,721
COD	22.8%	272,288
DD	5.8%	69,541
Psychosis	4.3%	51,323
Other DX	1.4%	16,259
No Dx		766,325

Notes:

- 1) N's are not unduplicated counts (children may have more than one diagnosis).
- 2) Total unduplicated N = 1,958,908 = all children receiving behavioral health services in Medicaid in 2005. Sixty percent have a psychiatric diagnosis.
- 2) Percentages are among children with at least one psychiatric diagnosis.

Distribution of Psychotropic Medication Type by Psychiatric Diagnosis

	ADHD	Mood	Anxiety	COD	DD	Psychosis	Other DX	No DX
Antipsychotics	24.6%	60.9%	41.0%	51.6%	63.5%	81.1%	53.6%	28.5%
Mood Stabilizers	6.3%	23.3%	11.1%	15.6%	13.1%	21.7%	12.9%	8.0%
Lithium	1.4%	8.0%	3.3%	4.1%	3.2%	8.6%	4.9%	1.3%
Antidepressants	23.0%	62.9%	67.2%	42.1%	40.5%	52.1%	51.5%	49.4%
ADHD/ stimulants	93.3%	48.0%	47.0%	65.3%	54.9%	42.8%	55.8%	49.4%
Anxiety	1.8%	5.1%	9.1%	4.0%	9.4%	7.0%	6.5%	6.4%
N = 1,686,387 (Children in Medicaid receiving psychotropic medications, 2005)								

Use of Antipsychotic Medication

- The overall frequency of antipsychotic prescription (26%) is concerning, due to established risks from adverse effects
- Harm from long-term use is especially a concern for the 22.7% of children 0-5 years old, receiving psychotropic medications, who were given antipsychotics
- Rate of prescription is at odds with the very low prevalence of the diagnosis (4.3%); this suggests “off-label” use
- Sedation side-effect used as chemical restraint

Frequency of Concurrent Prescription in Psychotropic Medication Use

- 20% of children who received psychotropic medications but *no other behavioral health services* were prescribed ≥ 2 psychotropic medications
- Overall, 33% of children in Medicaid receiving psychotropic medications were prescribed ≥ 2 medications, with 11% prescribed ≥ 3 medications
- Notably, 49% of foster care children - and 47% of children on SSI/disability - receiving psychotropic medications were prescribed ≥ 2 medications
- 40% of all adolescents (ages 13 – 18) receiving psychotropic medications, were prescribed ≥ 2 concurrent medications

Children in Foster Care Have High Rates of Psychotropic Medication Use

- 23% of children in foster care are prescribed psychotropic medications vs. SSI (27%) and TANF (4%)
- Children in foster care are more likely to receive 2 or more concurrent psychotropic medications than any other aid category (49%) vs. SSI (46%) and TANF (26%)
- Among children receiving anti-psychotics, 42% are in foster care
- Children in foster care represent 13% of all children prescribed psychotropic medication (but only 3% of all children in Medicaid)

Medicaid Expenditure for Children Receiving Psychotropic Medication

- Total Medicaid expense for child and adolescent psychotropic medication use in 2005 was \$1.6 billion, with 42% of expense represented by anti-psychotic use
- Mean expense by aid category, was:
 - ▶ \$934 per child, in foster care
 - ▶ \$916 per child, for those with SSI
 - ▶ \$475 per child, for children covered by TANF
- \$85 million dollars spent in 2005 on psychotropic meds for children with no psychiatric diagnosis

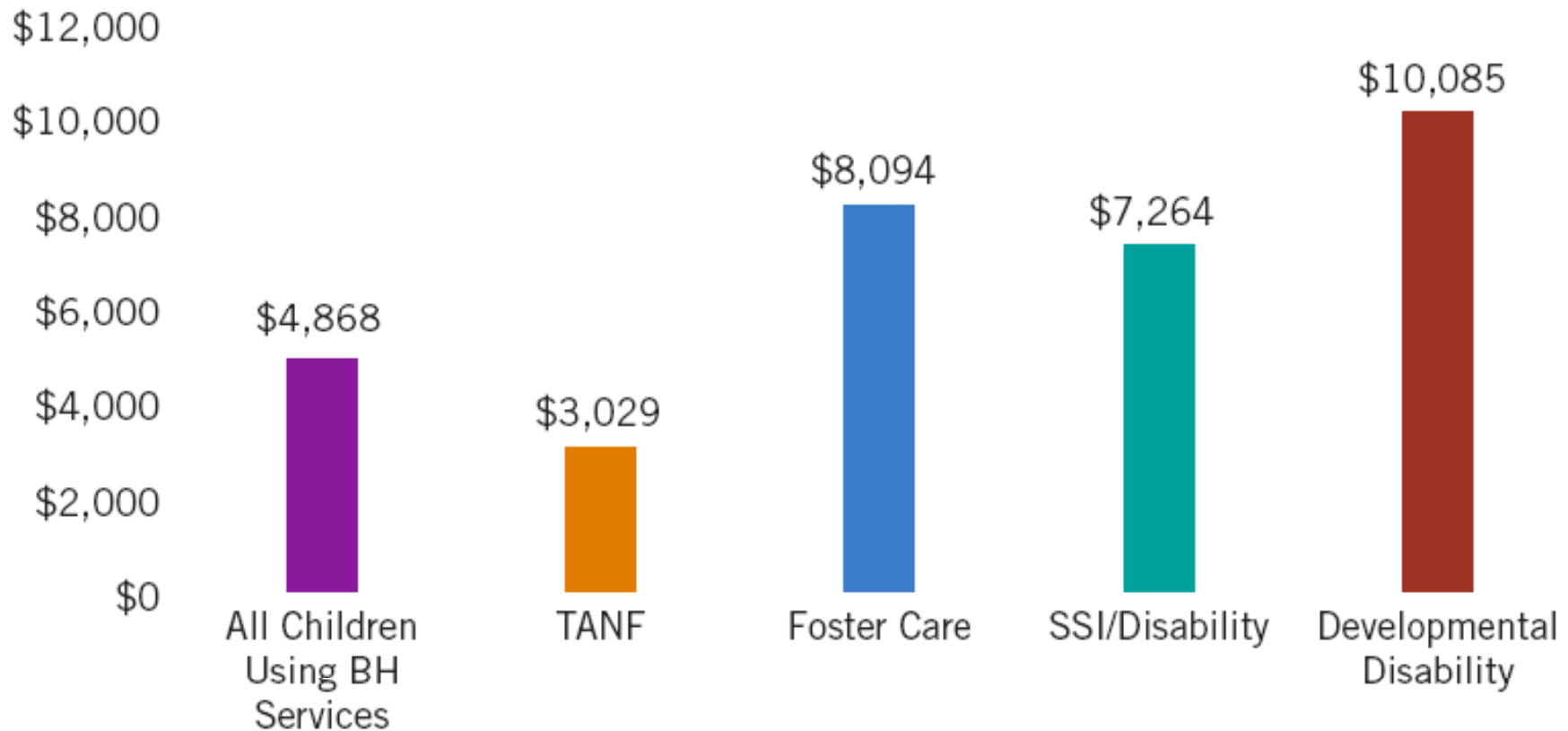
Chronic Physical Health Conditions Among Children in Medicaid Using Behavioral Health Services

- 38% of children with BH claims also had claims for at least one chronic medical condition (identified via CDPS)
- Children in foster care incurred 20% greater expense for chronic physical health conditions than did children with SSI, and 2.5 times the expense as children in TANF
- Pulmonary diseases were the most common physical health condition (overall mean expense of \$1,091)
- Cancer was near the bottom in frequency, but had an overall mean expense of \$19,065

Children in Medicaid with Developmental Disabilities

- Higher rate of behavioral health service use and psychotropic medication use (high use of antipsychotics)
- Mean BH expense 2x higher than overall population of children in Medicaid using BH care
- Highest expenditure services:
 - ▶ Psychosocial rehab
 - ▶ Psychotropic meds
 - ▶ Residential/therapeutic group home
- Most likely to receive (incl. 20% or more children):
psychotropic medications; screening/assessment; outpatient (primarily individual therapy); targeted case management; and psychosocial rehabilitation

Medicaid Behavioral Health Spending Per Enrollee*



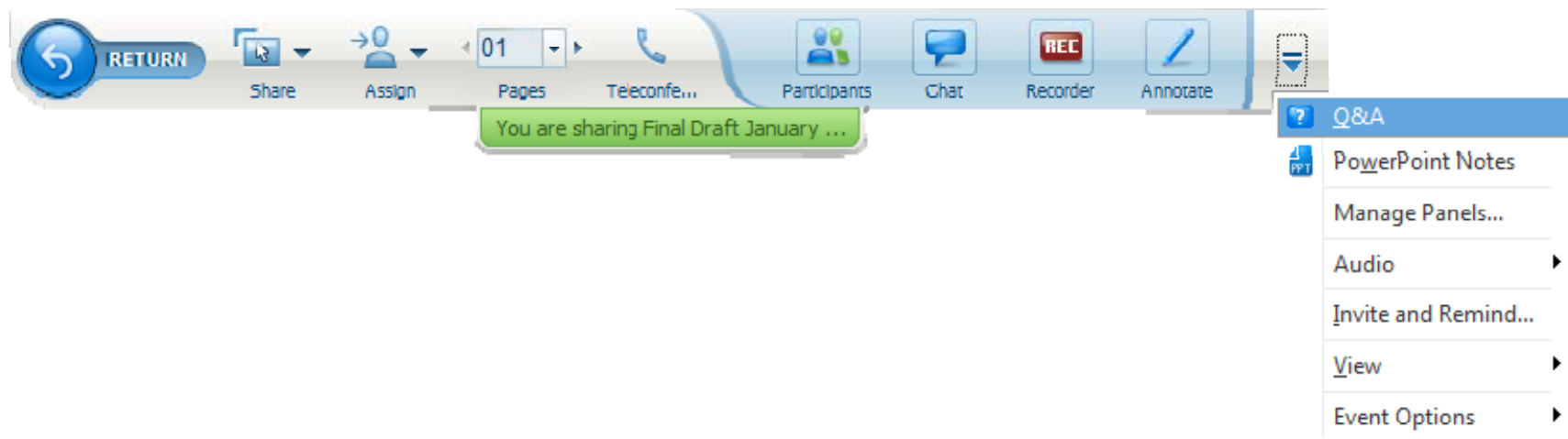
* Only includes children in Medicaid using behavioral health services with or without concomitant psychotropic medication use, who are not enrolled in a comprehensive managed care organization; All Children Using behavioral health services, N = 1,213,201; TANF, N = 730,764; Foster Care, N = 227,688; SSI/Disability, N = 254,749; Developmental Disability, N = 52,151.

Recommendations for State Medicaid Agencies

- **Expand – and reduce disparities – in access to appropriate and effective behavioral health care**, particularly therapeutic interventions with an existing or emerging evidence base, and home- and community-based services
- **Invest in care coordination** models with an emerging evidence base such as Wraparound and a flexible benefit to improve the quality and reduce cost of care
- **Ensure collaboration across child-serving systems** to improve timely and accurate diagnosis, service coordination and improved treatment oversight, including closer monitoring of psychotropic medication use

Questions?

Ask a Question Online: Click the **Q&A** icon located in the hidden toolbar at the top of your screen.



Perspectives on *Children's Faces* from States: Discussion with Georgia and Maryland

Wendy White Tiegreen, MSW

Director of Medicaid Coordination & Health Systems
Innovation

Georgia Department of Behavioral Health and
Developmental Disabilities

Michelle Zabel, MSS

Director & Clinical Instructor

The Institute for Innovation & Implementation
Project Director, TA Network

University of Maryland School of Social Work

Discussion Questions for State Presenters

- Why was it useful to you to have the Faces data?
- How have you used it to inform/advance internal or external policy decisions?
- What additional study questions would you have liked to have answered, that were not?

A State Perspective: Georgia



Wendy White Tiegreen, MSW

Director of Medicaid Coordination & Health Systems Innovation
Georgia Department of Behavioral Health and Developmental Disabilities

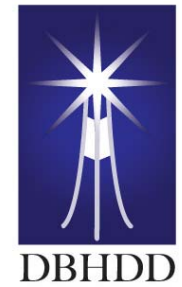
Georgia Dept. of Behavioral Health and Developmental Disabilities



- State agency which is the authority for policies, programs, and services for mental health, substance abuse, and developmental /intellectual disabilities
- Specific to youth, DBHDD is the purchaser of behavioral health services for:
 - ▶ Uninsured youth
 - ▶ Youth in foster care*
 - ▶ Medicaid “Aged, Blind, Disabled” youth
 - ▶ Emerging adults

* transferring to a managed care arrangement in CY 2014

Opportunities to Use *Children's Faces Data*



- Dialogue platform
 - ▶ Georgia's managed foster care implementation
 - ▶ Behavioral health/general health integration (“whole health”)
- Planning platform
 - ▶ Service gaps
 - ▶ Promoting behavioral health expert areas as solutions (Systems of Care strategies, intensive customized care coordination, and high-fidelity wraparound)

Opportunities to Use *Children's Faces Data*



- Practice platform
- Customized and targeted approaches
 - Focusing attention of traditional medical providers on behavioral health evidence and emerging best practices
 - Co-occurring issues between:
 - Health and behavioral health
 - Mental health and addiction
 - Mental health and developmental disabilities



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Children's Behavioral Health Care Use in Medicaid: **Implications for Maryland**

Michelle Zabel, MSS, Director & Clinical Instructor

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We have used the *Faces* data to:

- Provide context when state-level data are not readily available
- Provide context when state-level data *are* available

Data Help to Inform and Support


- Supported recommendations for behavioral health (BH/SA) integration
 - Move to a risk-based carve-out for behavioral health services
 - Reinvestment of savings from children's services back into the children's system
 - Increased customization for children's services
- Justified aspects of health home and 1915(i) State Plan Amendment development
 - Rates for care coordination
 - Consultation with primary care professionals
 - Mobile crisis and intensive in-home services

Data Help to Propel Local Initiatives Forward

- Informing activities under the SAMHSA-funded System of Care Grants
 - MD CARES, Rural CARES, Planning Grant, LIFT
- Grounding the work of the Centers for Medicare & Medicaid Services-funded Children's Health Insurance Program Reauthorization Act (CHIPRA) Quality Demonstration Grant
- Justifying service delivery redesign work

From Data to Action in MD

- Informing adaptations to technical assistance and training activities
 - Web-based oral health care training modules
 - Wraparound Practitioner Certificate Program being modified to include Early and Periodic Screening, Diagnostic, and Treatment (EPSDT), health, and wellness components
 - Workforce development support for evidence-based practices and promising practices
- Incorporating data into national and local presentations to a variety of audiences
- Providing technical assistance to Congress on necessary behavioral health services, supports, and financing for children and youth with intensive needs
 - <https://theinstitute.umaryland.edu/topics/soc/docs/Institute%20Comment.pdf>



What additional study questions would you like to have answered?

- Urban vs. rural utilization trends
- Focused analysis of high-end utilizers (top 10% most expensive children using behavioral health care)

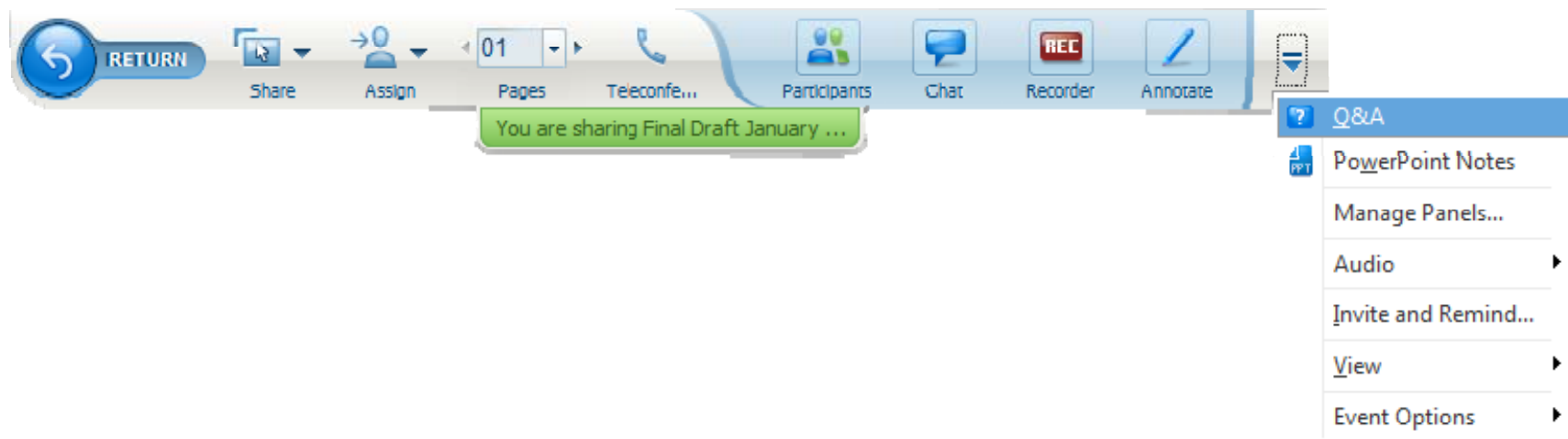


“Statistics is the science of finding relationships and actionable insights from data.” —Nate Silver

We look forward to continuing to find relationships and take action based on what we know today and what we hope to learn tomorrow.

Questions?

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Questions about *Children's Faces*?

- Please email Kamala Allen at kallen@chcs.org or Roopa Mahadevan at rmahadevan@chcs.org.
- Look for December 2013 release of *Children's Faces of Medicaid* analyses
 - ▶ Full Analytic Report
 - ▶ Summary Issue Brief
 - ▶ Topical Issue Briefs (Spring 2014)

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