

# Insurance Status, Clinical Severity, and Unmet Mental Health Treatment Needs for Youth with Complex Behavioral Health Care Needs

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## Abstract

**Data Sources:** Analysis drew upon the National Survey of Children with Special Healthcare Needs, 2009 to 2010 and supplemental state-level data.

**Study Design:** Using multilevel models, nesting individuals within states, logistic regression analysis assessed the relationship between youths' type of health coverage (public, private, both public and private, or uninsured) and their reported unmet mental health care needs and experience with cost-barriers to accessing mental health treatment.

**Principal Findings:** Public insurance reduces the odds over private insurance coverage of encountering cost barriers to care by almost 30%, and by almost 50% for youth with significant clinical needs.

**Conclusions:** Public health coverage for children with SED can help to reduce unmet need due to financial obstacles but does not solve all problems related to service accessibility. Additional barriers to treatment access must be identified at the individual, organizational and policy levels for children with all levels of clinical need.





## Home and Community-Based Services (HCBS)

Severe Emotional Disturbance (SED) is a legal term denoting functional impairment

- 8 to 12% of all youth in the U.S. can be labeled SED (Costello, He, Sampson, Kessler, & Merikangas, 2014; Kessler et al., 2005)
- 5-6% of youth are SED with significant impairment (Williams, et al., 2017)
- Only 25% of these youth receive any mental health care (Costello et al., 2005, 2014)
- Financial barriers include costs of services and access to insurance (Owens et al., 2002; Rowan, McAlpine, & Blewett, 2013).
- Youth with most impaired functioning are at risk for out of home placement (JJA, CW or PRTFs)

Home and Community-Based Services (HCBS) can help (Barbot, et al., 2015)

- Case management, in-home therapy, respite care, behavioral support services, family and youth peer support, wraparound





## The Role of Medicaid and Insurance Status

- Medicaid is the largest funder of mental health care in the U.S. and provides coverage for HCBS
- Private insurance and many CHIP programs' coverage for HCBS is minimal to non-existent
- 44% of youth with Medicaid coverage access mental health care, compared to 18% of youth with private insurance, 10% with no insurance (Howell, 2004)
- One-third of children with SED are covered by Medicaid, while 30 to 40% are covered by private insurance (Mark & Buck, 2006)

## The Current Study

Compared with families with Medicaid—families with private coverage for a child with SED are unable to afford needed mental health care. Given their need for a wide array of more intensive services and supports, this may be particularly true for youth with more complex symptoms and functional impairments. This study addresses the following questions:

- 1) Do mentally ill, functionally impaired youth with public health insurance coverage have lower odds of having unmet treatment needs and of encountering cost barriers to care than similar privately insured youth?
- 2) Are reductions in unmet need and cost barriers greater than those for less functionally impaired children?





**Data:** National Survey of Children with Special Healthcare Needs (NSCSHN 2009/2010)

- National Center for Health Statistics at the Centers for Disease Control and Prevention under the direction and sponsorship of the federal Maternal and Child Health Bureau
- Telephone Survey (SLAITS), Independent random samples taken in all 50 states and the District of Columbia
- A total of 40,242 detailed CSHCN interviews were collected during 2009-2010; at least 750 interviews were conducted in EACH state and the District of Columbia

**Predictor Variable:** Insurance Type (Public, Private, Dual & Uninsured)

**Individual Response Variables:**

- Unmet mental health care needs (In the past 12 months, any time when the family needed mental health care and did not receive *all* the mental health care needed = 1)
- Challenges in obtaining mental health care due to cost (Binary: In the past 12 months, any difficulty or delay in accessing care because of issues related to costs=1)





## Control Variables:

### **Family Level Demographics**

- Poverty Level: (Categorical) 0-99% FPL; 100-199% FPL; 200-399% FPL; 400% FPL or more
- Parent Education Level: (Categorical) Less than high school; high school graduate; more than high school

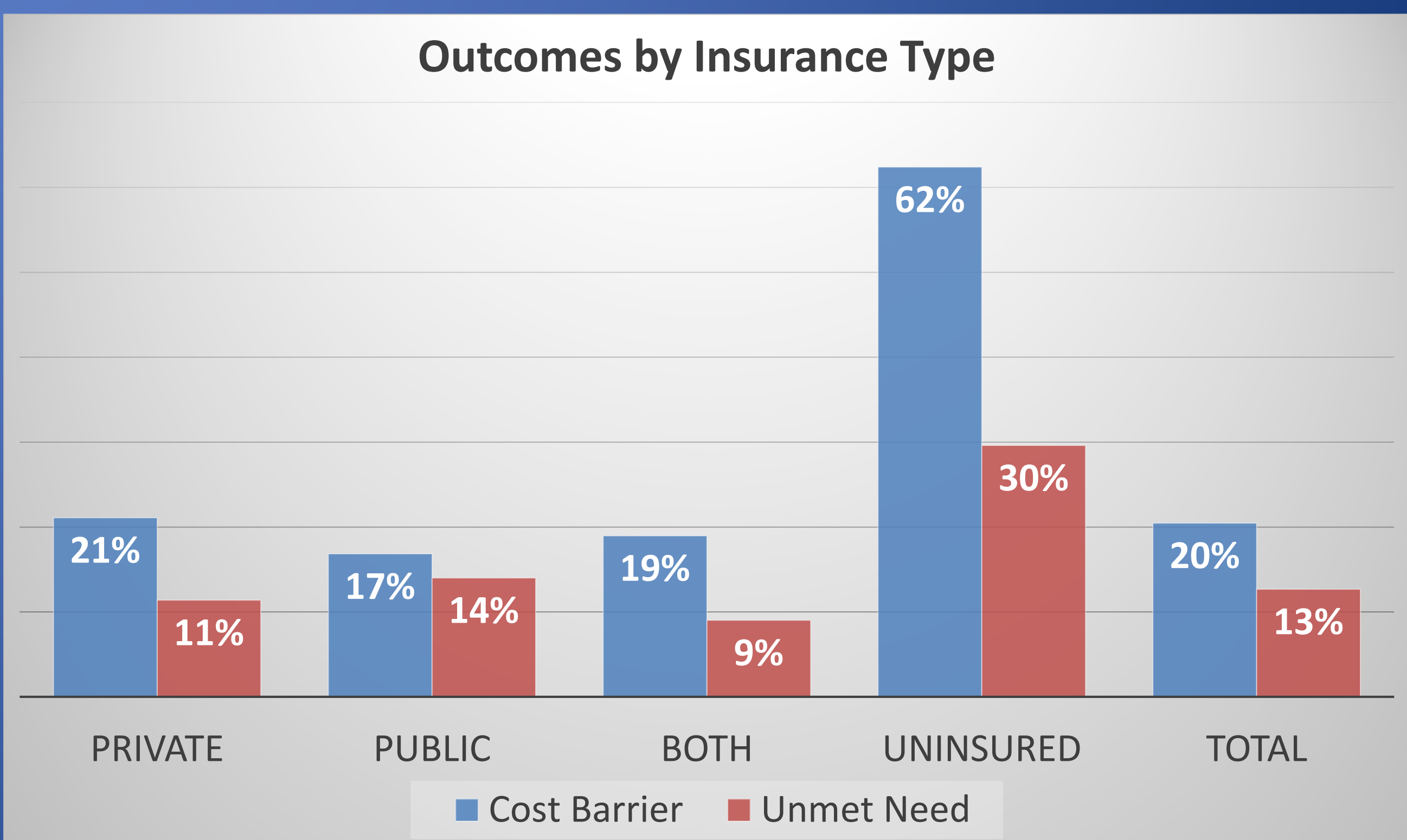
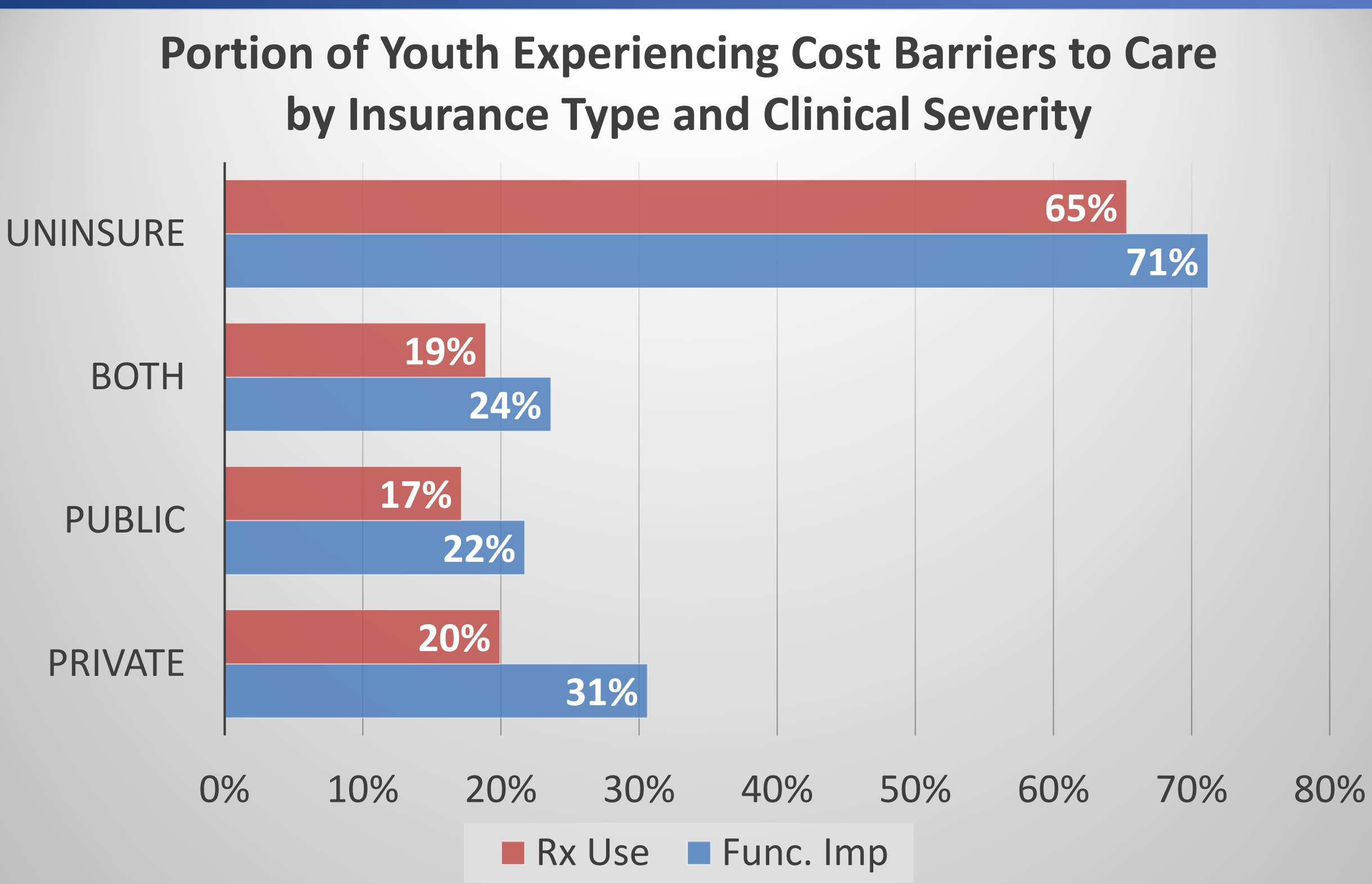
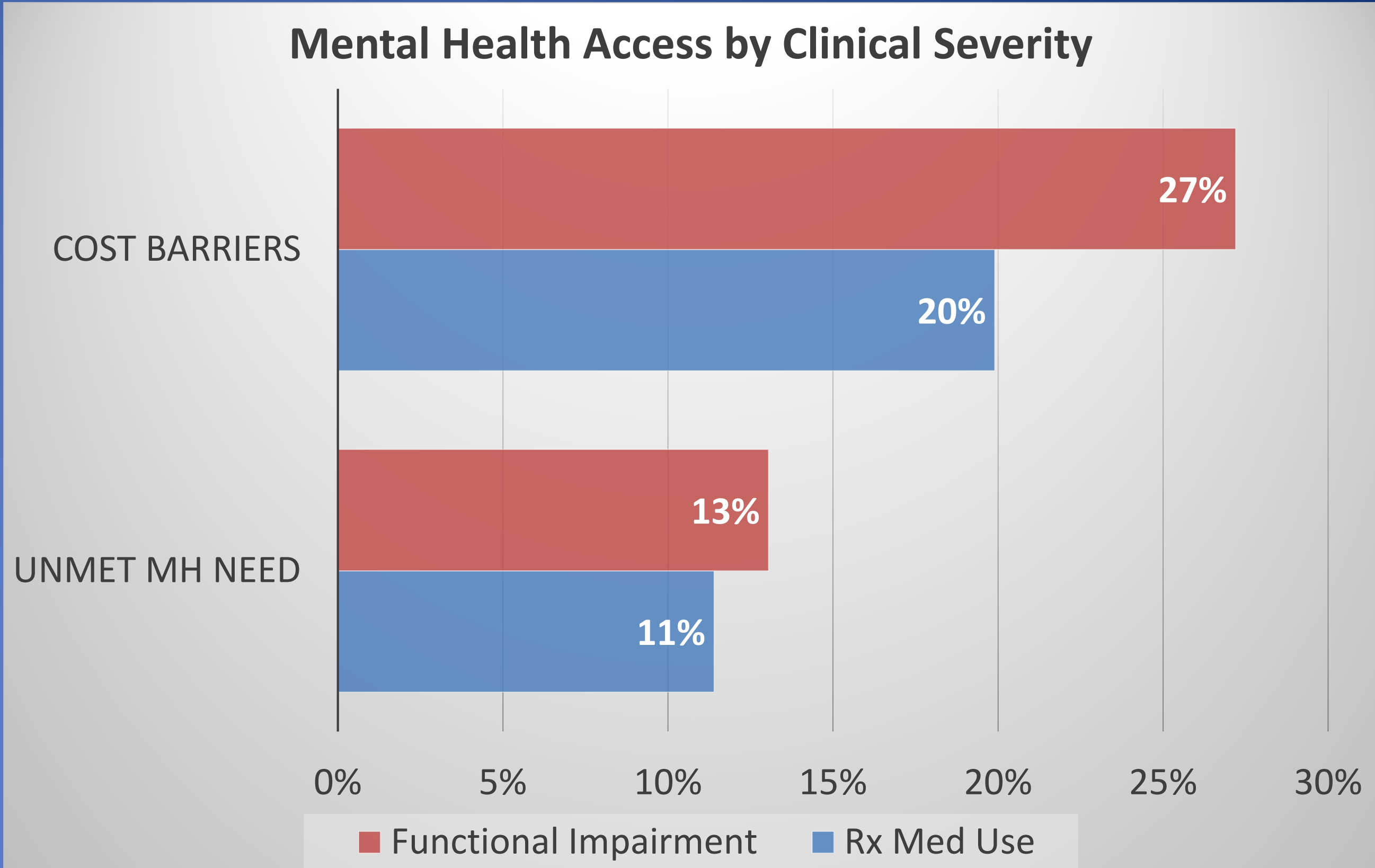
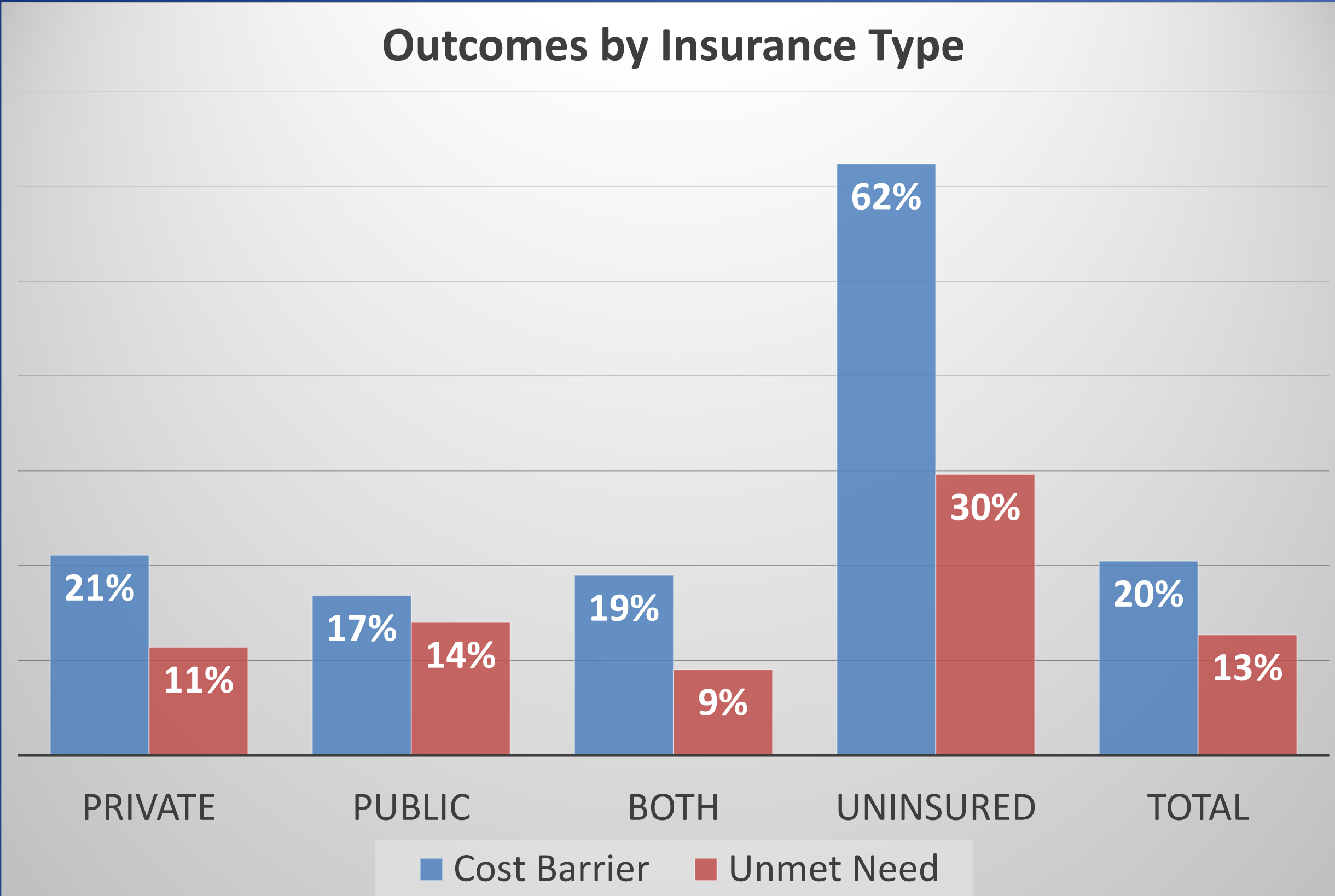
### **Individual Demographics**

- SED Status (Binary)
- Functional Impairment (Binary)
- Insurance Status x Functional Impairment (Categorical x Binary)
- Rx Medication Use (Binary)
- *Race not Included*

### State Level Control Variables

- State Total State Mental Health Authority Expenditures and Ambulatory Revenues (Unified Reporting System, Substance Abuse and Mental Health Administration, 2009)
- Number of mental health facilities that serve youth and accept public health insurance (Substance Abuse and Mental Health Data Archive's (SAMHDA) National Mental Health Services Survey (N-MHSS) conducted in 2010)
- Total State Population: US Census, 2010
- Total State Child Population Living Below 400% of the FPL: US Census, 2010
- State Political Ideology: Civil Libertarianism, State and Local Public Policies Database, 2011 (Sorens et al., 2008)
- State Religiosity: Religious Congregations and Membership Study of 2010 total adherence rate (per 1,000 pop)
- Total State Medicaid Expenditures per Child: Kaiser Family Foundation, 2017







# Results



	<u>Cost Barriers</u>			<u>Unmet Mental Health Need</u>		
	OR	95% CI		OR	95% CI	
<b><u>Insurance Type</u></b>						
Public Insurance	0.67***	0.57	0.79	1.21*	1.01	1.45
Dual Insurance	0.68**	0.52	0.88	0.91	0.68	1.22
Uninsured	5.94***	4.49	7.86	3.31***	2.44	4.49
Functional Impairment	2.17***	1.89	2.48	1.29**	1.08	1.54
<b><u>Insurance Type &amp; Functional Impairment</u></b>						
Public Insurance and Functional Impairment	0.82	0.67	1.01	0.76*	0.60	0.98
Dual Insurance and Functional Impairment	1.03	0.75	1.43	0.63*	0.41	0.95
Uninsured and Functional Impairment	0.85	0.53	1.37	0.71	0.43	1.17
Poverty Level	0.80***	0.76	0.85	0.84***	0.78	0.90
Education	1.37***	1.25	1.51	1.27***	1.15	1.42
Rx Medication Use	0.89*	0.81	0.98	0.79***	0.70	0.88
Mental Health Facilities	1.00	1.00	1.00	1.00	1.00	1.00
Total MH Expenditures	1.00	1.00	1.00	1.00	1.00	1.00
Total MH Ambulatory Revenues	1.00	1.00	1.00	1.00*	1.00	1.00
Total State Population	1.00	0.99	1.01	0.99	0.98	1.00
No. Children below 400% FPL	1.00	1.00	1.00	1	1.00	1.00
Political Ideology	0.99	0.95	1.02	0.99	0.94	1.03
Religiosity	1.00	1.00	1.00	1.00	1.00	1.00
Medicaid Expenditures per Child	1.00	1.00	1.00	1.00	1.00	1.00
Intercept	0.25***	0.14	0.42	0.14***	0.07	0.26



# Conclusions

- For youth with SED with mild to moderate needs, having public health coverage is associated with reduced cost barriers to services, but does not relate to unmet mental health needs.
- For youth with SED, having significant functional impairment is associated with increased odds of unmet mental health treatment needs and cost-related barriers to accessing needed services, compared to similar youth with no functional limitations.
- Public insurance may reduce these odds. Compared to similar youth with private insurance, public health coverage is associated with reduced odds of unmet mental health care needs and cost barriers to care for children with SED with functional impairments.

## Practice and Research Implications

- Many other barriers to care exist, particularly for youth with functional impairments.
- Next steps:
  - Identify mental health service gaps and barriers across all public health programs across all states, and in general revenue states
  - Identify service gaps and barriers for youth with and without functional impairments
  - Address findings from a policy and service planning perspective





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## Abstract

- Drawing upon data from the National Survey of Children with Special Healthcare Needs (2009 to 2010), this study used multilevel models, nesting individuals within states, logistic regression analysis assessed the relationship between youths' type of health coverage (public, private, both public and private, or uninsured) and their reported unmet mental health care needs and experience with cost-barriers to accessing mental health treatment.
- Public insurance reduces the odds over private insurance coverage of encountering cost barriers to care by almost 30%, and by almost 50% for youth with significant clinical needs.
- Public health coverage for children with SED can help to reduce unmet need due to financial obstacles but does not solve all problems related to service accessibility. Additional barriers to treatment access must be identified at the individual, organizational and policy levels for children with all levels of clinical need.

## Introduction

Youth with complex MH needs are at risk for out of home placement but Home and Community-Based Services (HCBS) can help (Barbot, et al., 2015) . Medicaid provides coverage for HCBS, while private insurance and many CHIP programs' coverage for HCBS is minimal to non-existent. One-third of children with SED are covered by Medicaid, while 30 to 40% are covered by private insurance (Mark & Buck, 2006).

Compared with families with Medicaid—families with private coverage for a child with SED are unable to afford needed HCBS mental health care. Given their need for a wide array of more intensive services and supports, this may be particularly true for youth with more complex symptoms and functional impairments.

This study assesses the impact of public insurance coverage on its own and in conjunction with private coverage, compares more and less disabled children, and it controls for family income, parental education levels, and key state level factors that might also account for higher rates of public coverage and affordable mental health treatment for this population.

## Methods

- Data:**
- National Survey of Children with Special Healthcare Needs (NSCSHN 2009/2010)
- Predictor Variable:**
- Insurance Type
- Individual Response Variables:**
- Unmet mental health care needs (Binary) & Challenges in obtaining mental health care due to cost (Binary)
- Sample Preparation:**
- Dropped all observations in which SED=0
  - Dropped non-response states
  - Total remaining sample= 11,215
- Analytic Approach**
- Random intercept logistic regression models
  - Families nested in states

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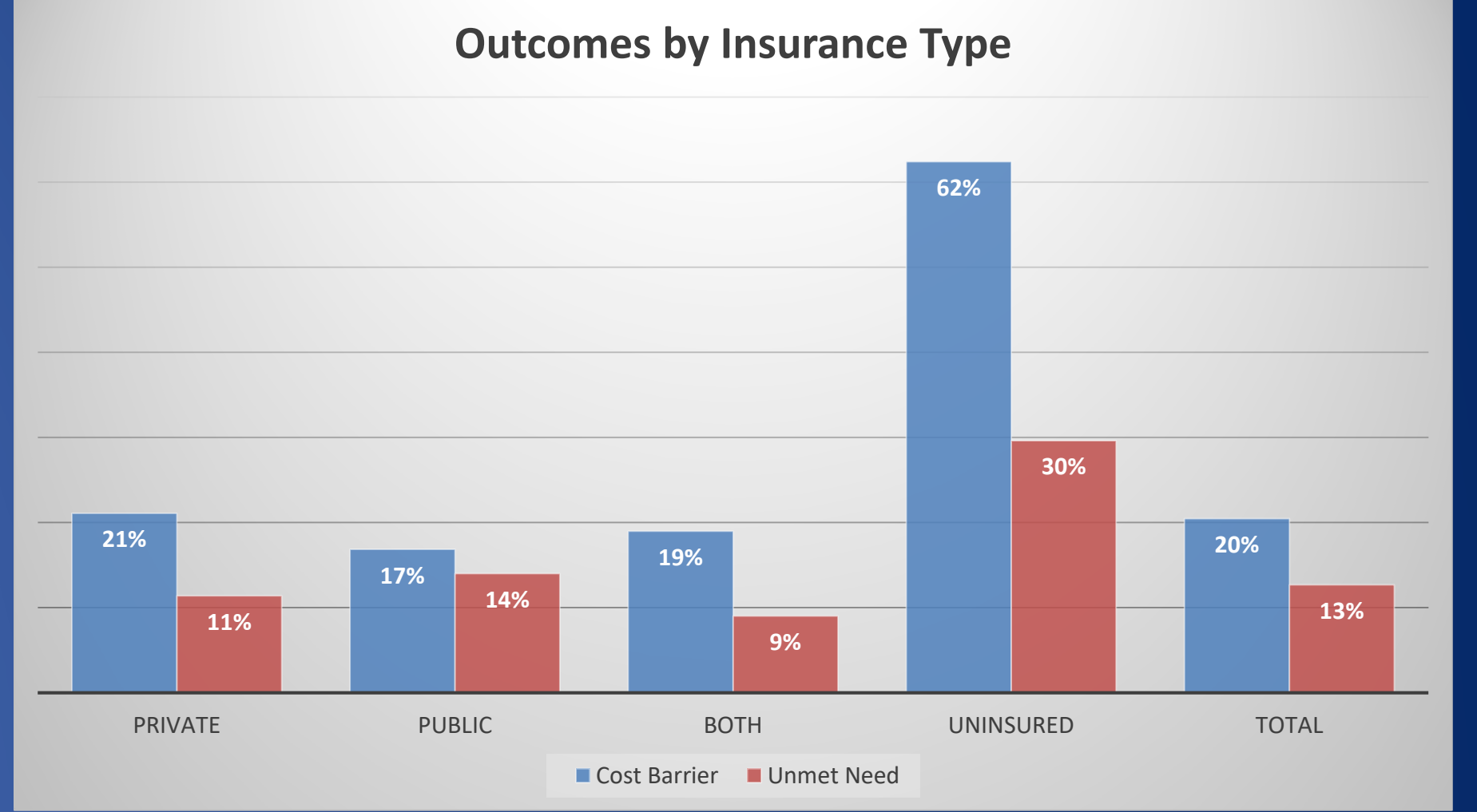
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## Figures/Graphs



## Results

Youth with SED who have public insurance only or public insurance in conjunction with private insurance are estimated to have over 30% lower odds of encountering cost barriers to mental health care compared to similar youth with private insurance.

Youth with SED who have public insurance are estimated to have over 21% higher odds of having unmet mental health care needs, compared to similar youth with private insurance.

For youth with SED with functional impairments, their odds have having unmet mental health care needs are almost 10% lower than similar youth with private insurance.

These odds are over 40% lower for these youth if they have both private and public insurance, compared to similar youth with only private insurance.

## Conclusions

Functional impairment is associated with increased odds of unmet mental health treatment needs and cost-related barriers to accessing needed services, compared to similar youth with no functional limitations.

Public insurance may reduce these odds.

For youth without functional impairments, public insurance is associated with increases in unmet mental health care needs. Additional barriers to service access, besides cost-related concerns, need to be identified and addressed.

## References