

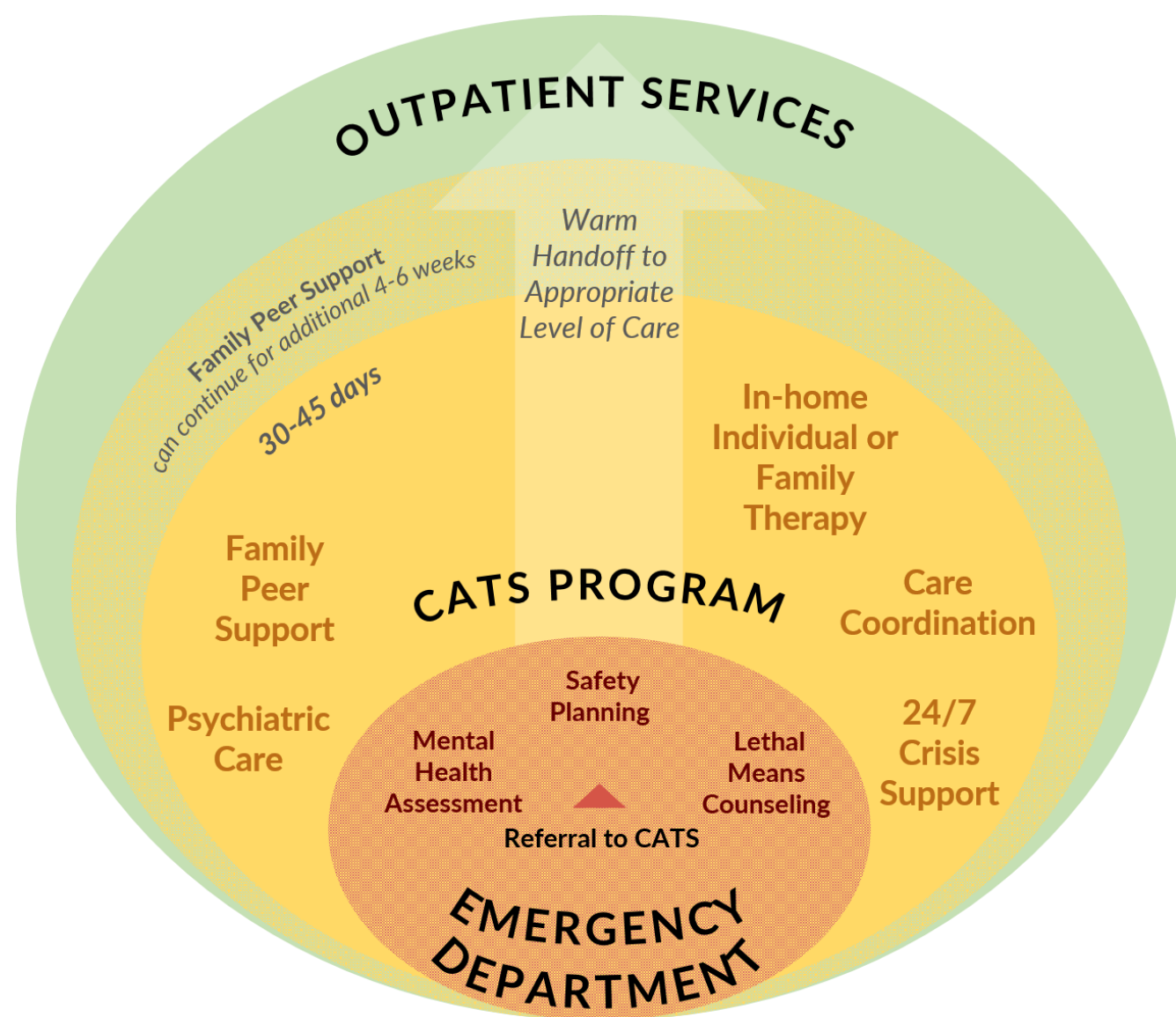
An Evolution in Oregon's Youth Mental Health System: from CATS to MRSS

Amanda Ribbers, MS • Ilana Freeman, MS • Sophia Nguyen, BS • Julie Magers, BA, CFSS • Rebecca Marshall, MD, MPH

Crisis and Transition Services (CATS)

CATS launched in 2015 in Oregon as a state-funded, community-based stabilization service for youth discharging from emergency departments (EDs) following a suicide attempt or other mental health crisis. CATS provided intensive bridging support while longer-term care was arranged.

The program was piloted in four counties with subsequent expansion into 11 counties. The OHSU DAETA team collected clinical and outcomes data for each youth enrolled from 2018-2022.

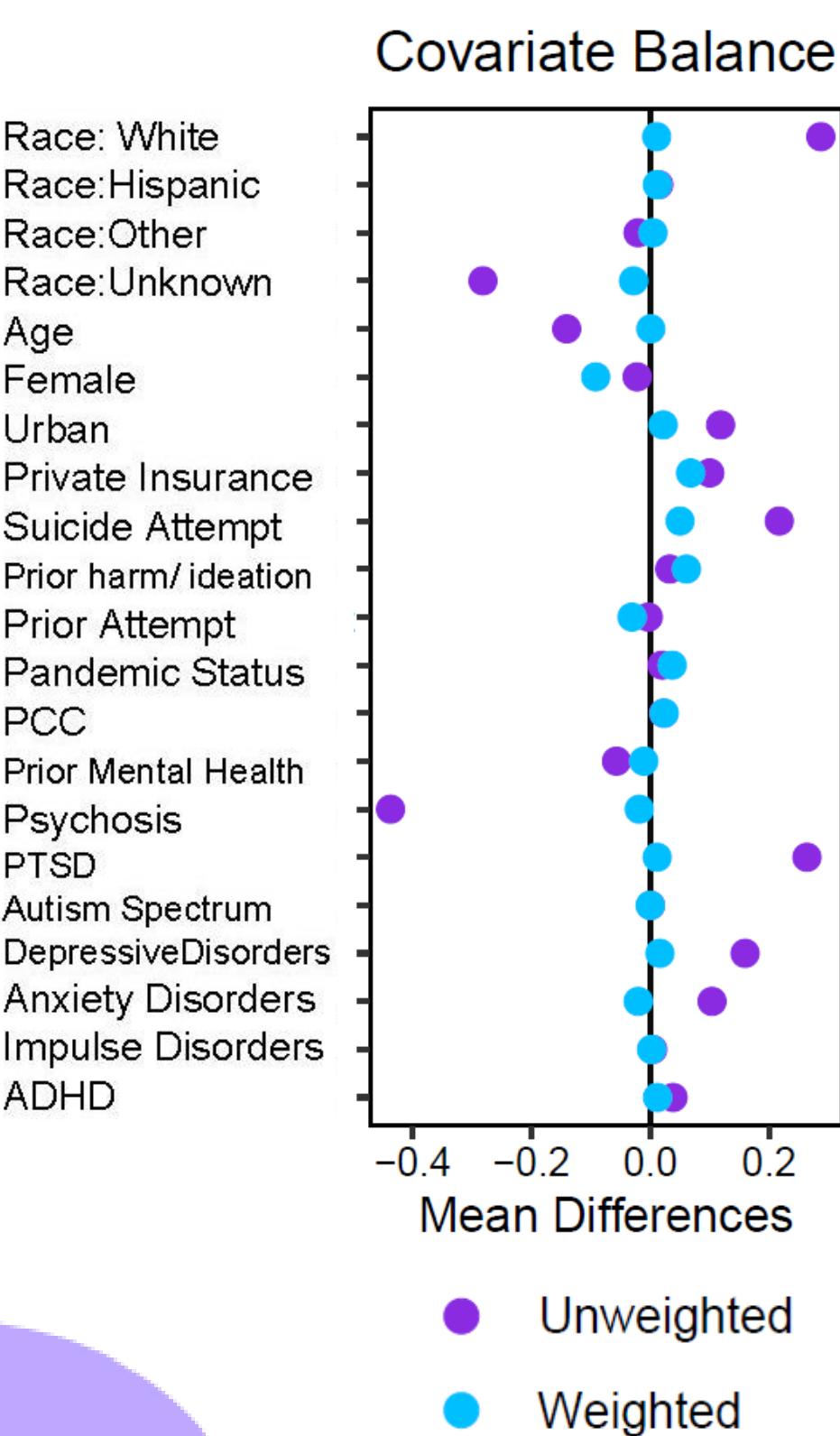


Methods

This analysis uses state All-Payers All-Claims data to compare youth who presented to EDs with suicidality and received CATS services on discharge with those who did not receive CATS. We hypothesize that those who received CATS would have decreased recidivism to EDs or inpatient units.

Inverse Propensity Weighted Loveplot

Using r-package "Cobalt"



Multivariable inverse propensity weighted stratified Cox proportional hazard models were used to determine how those who received CATS treatment would have done had they received the standard of care.

We compared CATS recipients with the control group, which consisted of all insured Oregon youth who presented to an ED for suicidality in counties without CATS programs. The primary outcome measure was 365-day recidivism for chief complaints of mental health, self-harm, suicidal ideation, and suicide attempt.

DAETA Team

DATA, EVALUATION, AND TECHNICAL ASSISTANCE TEAM AT OHSU

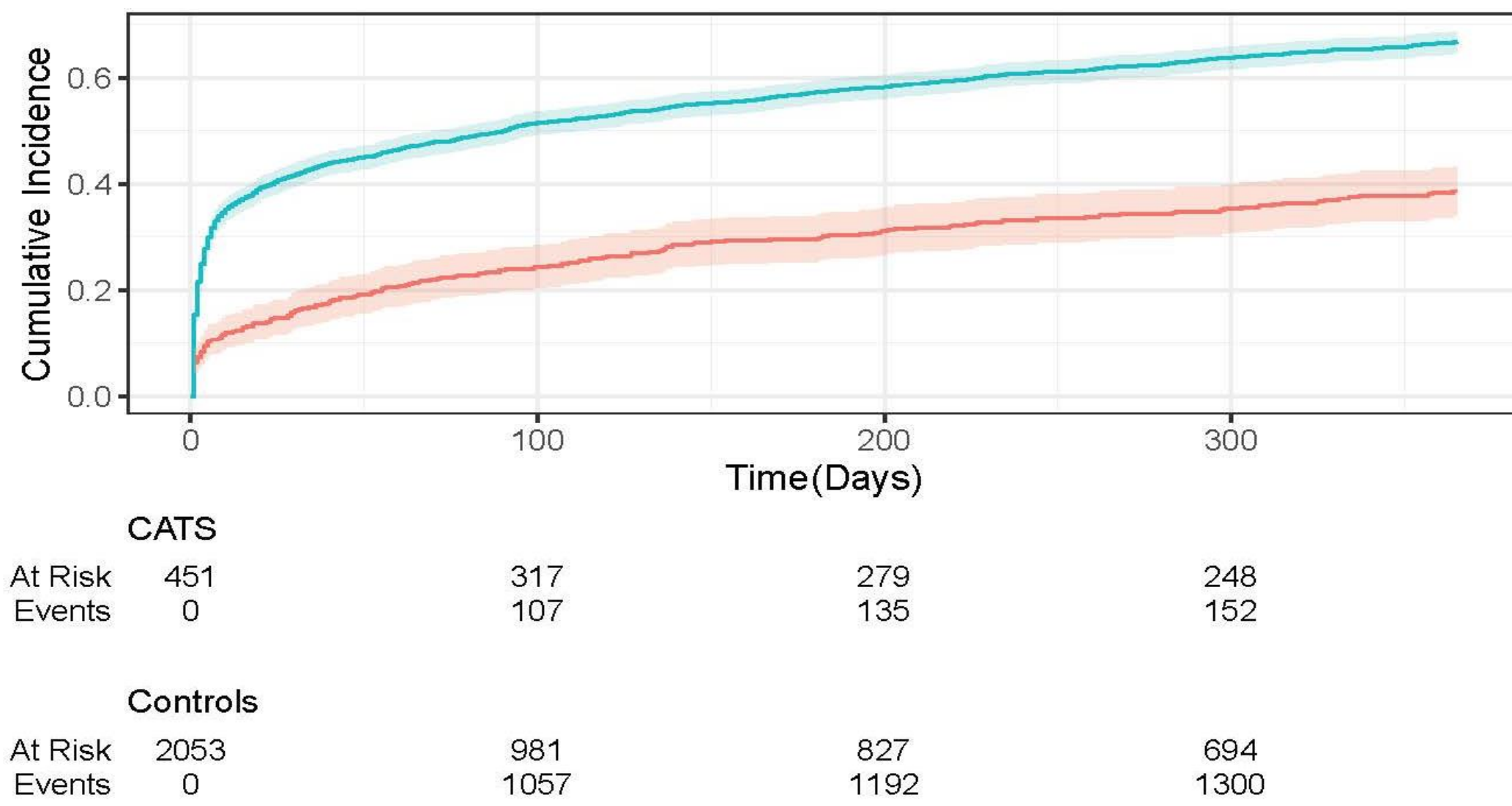
VISIT OUR WEBSITE FOR MORE INFORMATION



When comparing claims data between **CATS youth** (n = 451) and the **control group** (n = 2053), the adjusted hazard of recidivism to an ED or inpatient unit for youth in CATS compared to the control was:

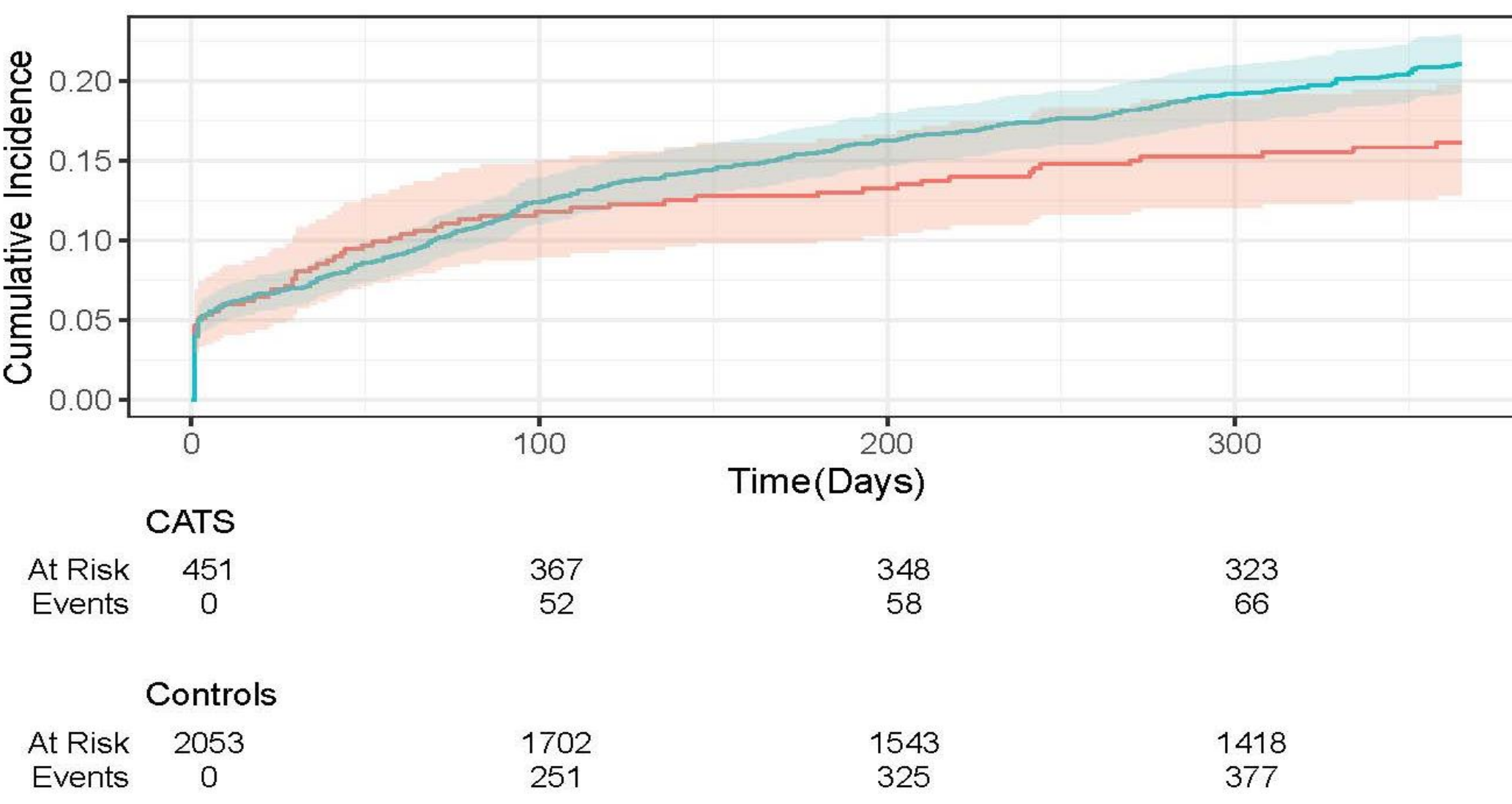
0.35 times lower for a mental health complaint

95% CI 0.25-0.48
p < .0001



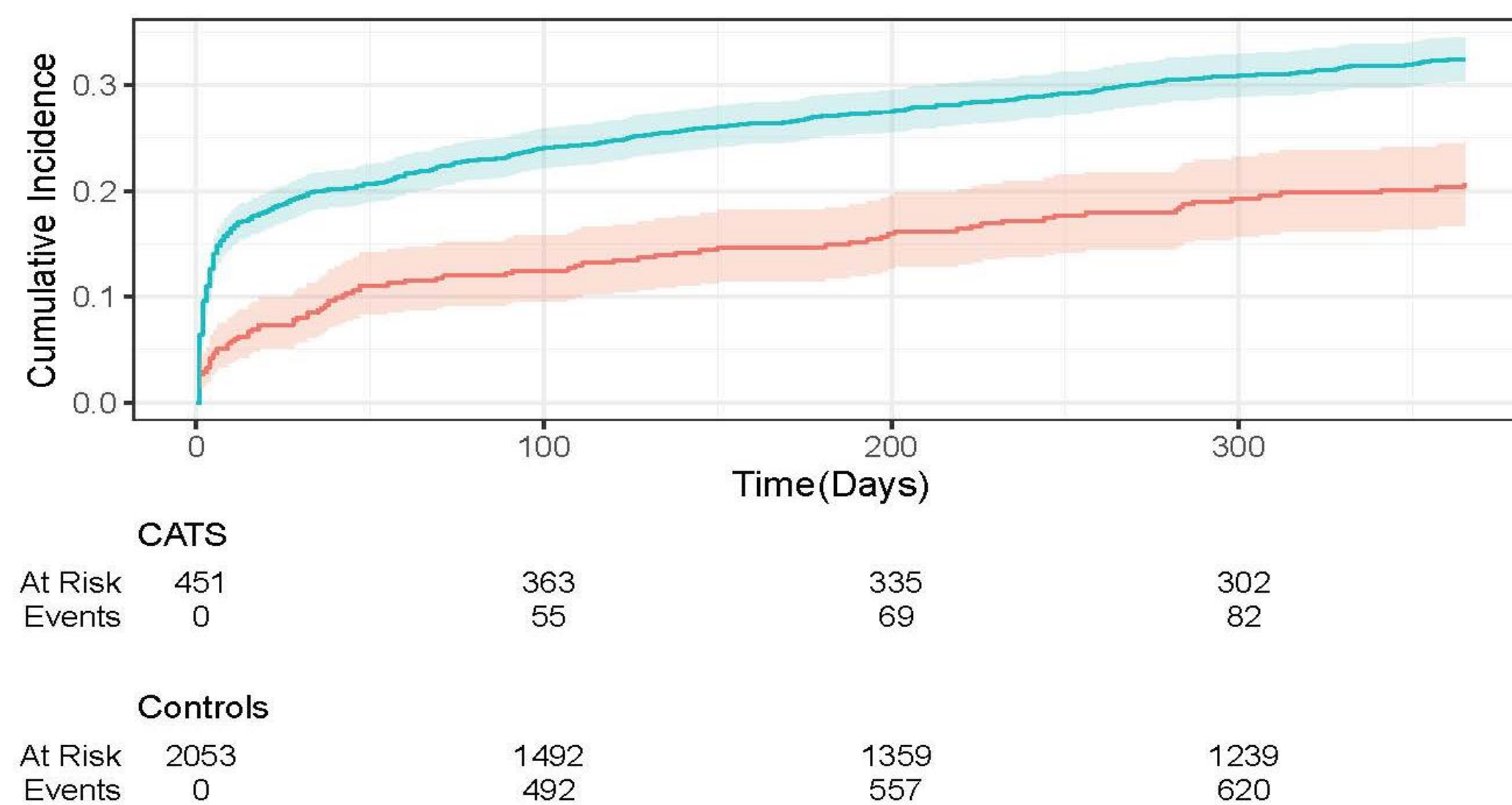
0.57 times lower for self-harm

95% CI 0.37-0.88
p = 0.01



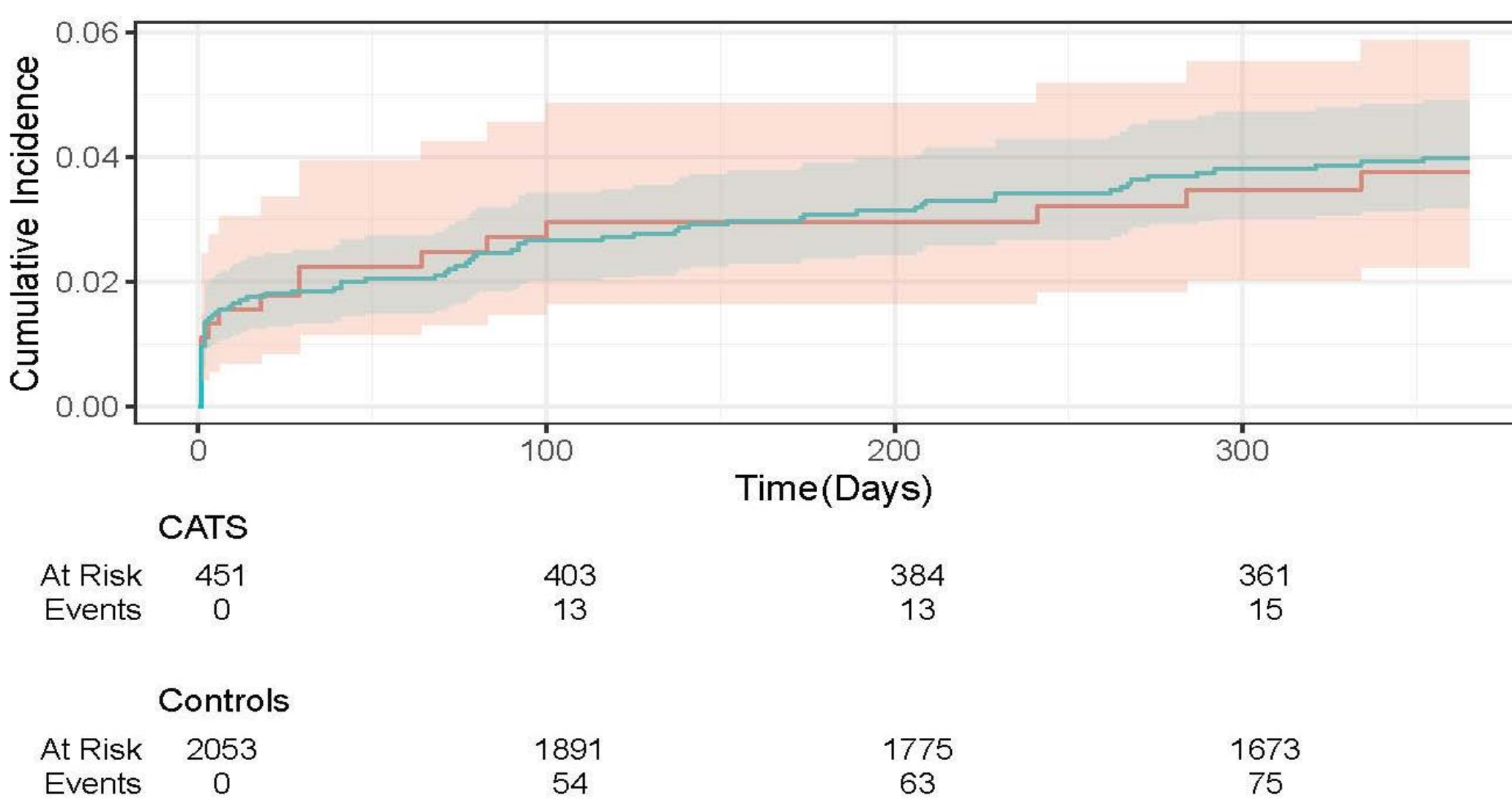
0.51 times lower for suicidal ideation

95% CI 0.33-0.79
p = 0.002



not different for suicide attempts

HR 0.6494
95% CI 0.31-1.38
p = 0.62



Results

	CATS N=451	Controls N=2053	Overall N=2504
Age			
Mean (SD)	14.5 (1.67)	14.8 (1.69)	14.7 (1.69)
Median [Min, Max]	15.0 [10.0, 17.0]	15.0 [11.0, 17.0]	15.0 [10.0, 17.0]
Gender			
Male	145 (32.2%)	615 (30.0%)	760 (30.4%)
Female	306 (67.8%)	1438 (70.0%)	1744 (69.6%)
Race			
White	318 (70.5%)	858 (41.8%)	1176 (47.0%)
Hispanic	61 (13.5%)	248 (12.1%)	309 (12.3%)
Other	33 (7.3%)	192 (9.4%)	225 (9.0%)
Unknown	39 (8.6%)	755 (36.8%)	794 (31.7%)
Rurality			
Rural	124 (27.5%)	808 (39.4%)	932 (37.2%)
Urban	327 (72.5%)	1245 (60.6%)	1572 (62.8%)
Insurance Type			
Public	270 (59.9%)	1435 (69.9%)	1705 (68.1%)
Private	181 (40.1%)	618 (30.1%)	799 (31.9%)
Suicidality at Index			
Attempt	145 (32.2%)	214 (10.4%)	359 (14.3%)
Ideation	306 (67.8%)	1839 (89.6%)	2145 (85.7%)
Prev. ED/IP Visit for Suicide Attempt	14 (3.1%)	70 (3.4%)	84 (3.4%)
Previous ED/IP Visit for Mental Health	177 (39.2%)	922 (44.9%)	1099 (43.9%)
Previous ED/IP Visit for Self-Harm or SI	166 (36.8%)	688 (33.5%)	854 (34.1%)
≥ 1 Pediatric Chronic Condition	25 (5.5%)	161 (7.8%)	186 (7.4%)
ASD	10 (2.2%)	44 (2.1%)	54 (2.2%)
Anxiety Disorder	112 (24.8%)	296 (14.4%)	408 (16.3%)
ADHD	42 (9.3%)	112 (5.5%)	154 (6.2%)
Depressive Disorder	297 (65.9%)	1024 (49.9%)	1321 (52.8%)
Psychoses**	15 (3.3%)	965 (47.0%)	980 (39.1%)
Trauma and Stressor Related Disorder	137 (30.4%)	82 (4.0%)	219 (8.7%)
Pandemic Status**	79 (17.5%)	318 (15.5%)	397 (15.9%)

*Guided by DRG 885, includes Bipolar Disorders, Schizophrenia, and other Psychotic Disorders.

**Index visit date after the COVID-19 Emergency Mandate (Executive Order 20-03) on March 8, 2020

Shaping the Children's Crisis System

Longitudinal data collected from 2018-2022 has demonstrated the CATS program's value within the children's mental health system. In January 2023, CATS officially ended, but the model expanded into a new statewide program, Mobile Response and Stabilization Services (MRSS). This analysis, while completed after the CATS>MRSS transition, provides additional evidence that CATS was an effective program. Many CATS program elements have been maintained in MRSS, which will be available in all 36 counties in Oregon and will help improve access to crisis and stabilization services for youth and families across the state.

AAS '23

PORTLAND, OR

Handout

- General intro to DAETA team
 - How we harness data and information to improve mental health systems
 - DAETA Team is not a provider, contracted to support effective statewide clinical services through the use of data, training, and technical assistance.
- Links
- Summary of poster
 - More methods