

## Supplemental Information

**SUPPLEMENTAL TABLE 5** ICD-9-CM Codes of MH and Physical Health Comorbidities

Condition	ICD-9-CM Code
MH comorbidity	
Depressive disorder	296.2, 296.3, 300.4, 311
Conduct disorder/oppositional defiant disorder (CD/ODD)	312.81, 312.82, 312.89, 313.81, 312.9
Anxiety disorder	300.0–300.3, 300.5–300.9
Bipolar disorder	296.0–296.1, 296.4–296.9
Schizophrenia/other psychotic disorder	295, 297.0–297.3, 297.8–298.4, 298.8–298.9
Other MH disorder	291–294, 299, 301, 306–310, 312 excluding CD/ODD, 313, 315–316
Physical health comorbidity	
Asthma	493
Other chronic medical condition	
Cerebral palsy	343
Cystic fibrosis	277
Diabetes	250, 251
Spina bifida	741
Seizure disorder	345
Congenital heart disease	745–747.49
Sickle cell disease	282.6
Malignant neoplasms	140–208

**SUPPLEMENTAL TABLE 6** Regression Results Examining Racial/Ethnic Differences in Adequate Follow-up Care and Combined Treatment With Psychotherapy Services Among Medicaid-Enrolled Children Who Initiated ADHD Medication

	Adequate Follow-up Care			Combined Treatment With Psychotherapy			
	Initiation Phase <sup>a</sup>	C&M Phase <sup>b</sup>	Any Therapy Visit <sup>b</sup>	ME (SE) <sup>d</sup>	ME (SE) <sup>d</sup>	No. Therapy Visits Conditional on Any Visit <sup>c</sup>	ME (SE) <sup>e</sup>
Race/ethnicity							
White	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)
African American	-5.7***	-2.2**	(0.6)	4.4***	(0.7)	0.1	(0.2)
Hispanic	0.7	4.5***	(0.7)	3.8*	(1.6)	-0.2	(0.4)
Other	-1.7	1.1	(1.5)	-1.7	(2.3)	2.8*	(1.1)
Unknown	-1.5*	1.4	(0.6)	2.8***	(0.8)	0.2	(0.3)
Demographics							
Age, y	-0.6***	-0.3***	(0.1)	0.5***	(0.1)	0.2***	(0.04)
Girl (versus boy)	1.7***	1.5***	(0.2)	0.6	(0.4)	0.3*	(0.1)
Plan type							
Fee-for-service only	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)
Any behavioral health care carve-out plan	0.4	0.2	(2.3)	-8.1*	(3.7)	-0.5	(0.5)
Comprehensive managed care plan (no carve-out)	7.9***	10.2***	(0.9)	3.0**	(1.1)	0.2	(0.3)
Primary care case management (no carve-out)	7.7***	8.6***	(1.1)	8.3***	(1.5)	1.2**	(0.4)
More than 1 type of plan	4.9***	6.1***	(0.9)	2.5	(1.3)	0.02	(0.3)
Eligibility type							
Blind/disabled	9.1***	7.9***	(0.9)	14.7***	(1.1)	4.4***	(0.3)
Foster care	0.4	1.7	(0.7)	1.0	(0.8)	-0.4	(0.2)
Other eligibility type							
Physical health comorbidity							
Asthma	5.7***	6.9***	(0.3)	-0.2	(0.5)	-0.1	(0.2)
Any other chronic condition	3.2***	2.9**	(0.7)	-4.3***	(0.9)	0.3	(0.3)
MH comorbidity							
Depressive disorder	7.8***	6.0***	(0.5)	14.7***	(0.8)	1.8***	(0.2)
Conduct disorder/oppositional defiant disorder	12.3***	12.0***	(0.5)	17.1***	(0.7)	1.9***	(0.2)
Anxiety disorder	8.2***	8.9***	(0.6)	14.8***	(0.8)	1.1***	(0.2)
Bipolar disorder	7.8***	8.8***	(0.6)	13.8***	(0.7)	1.4***	(0.2)
Schizophrenia/other psychotic disorder	0.7	0.8	(1.4)	-0.1	(2.0)	0.1	(0.5)
Other MH disorder	8.1***	8.6***	(0.3)	15.7***	(0.5)	2.4***	(0.2)
County-level characteristics							
Percentage living in urban area <sup>f</sup>	0.05	0.2	(0.5)	1.7*	(0.7)	0.1	(0.2)
Percentage living in poverty <sup>g</sup>	2.0***	2.5***	(0.4)	1.1*	(0.5)	-0.4***	(0.1)
Outpatient MH facilities per 100K <sup>h</sup>	0.3	0.5	(0.3)	0.4	(0.3)	-0.1	(0.1)
Community health centers per 100K <sup>i</sup>	-2.6***	-0.5	(0.4)	-0.6	(0.4)	-0.1	(0.1)
Primary care physicians per 100K <sup>j</sup>	0.1	-0.1	(0.4)	0.04	(0.5)	-0.1	(0.2)
Psychologists per 100K <sup>k</sup>	-0.7	-1.2	(0.5)	0.8	(0.7)	0.4	(0.2)
Intercept				61.1	36.6		8.6

All MEs were estimated at the reference of race/ethnicity (ie, white youth) and the observed value of other covariates.

<sup>a</sup>  $N = 172\,322$ .

<sup>b</sup>  $N = 62\,263$ .

<sup>c</sup>  $N = 23\,780$ .

<sup>d</sup> Results estimated with logistic regressions that included all covariates listed in the table and state indicators.

<sup>e</sup> Results estimated with zero truncated negative binomial regression model that included all covariates listed in the table and state indicators.

<sup>f</sup> Continuous variable was standardized so that a 1 unit increase corresponds to a 1 SD increase above its mean value.

\*  $P < .05$ .

\*\*  $P < .01$ .

\*\*\*  $P < .001$ .

SUPPLEMENTAL TABLE 7 Regression Results Examining Racial/Ethnic Differences in Treatment Disengagement Among Medicaid-Enrolled Children That Initiated ADHD Medication

	Discontinued Medication <sup>a</sup>	No Therapy Visit (of Those Who Discontinued) <sup>b</sup>	Discontinued Medication and No Therapy Visit <sup>a</sup>	Less than 4 Therapy Visits (of Those Who Discontinued) <sup>b</sup>	Discontinued Medication and <4 Therapy Visits <sup>a</sup>
	ME (SE) <sup>c</sup>	ME (SE) <sup>c</sup>	ME (SE) <sup>c</sup>	ME (SE) <sup>c</sup>	ME (SE) <sup>c</sup>
Race/ethnicity					
White	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)
African American	22.4*** (0.5)	-2.6*** (0.7)	13.1*** (0.6)	-0.4 (0.6)	17.7*** (0.6)
Hispanic	16.7*** (0.7)	-2.6 (1.4)	9.4*** (1.1)	-0.8 (0.7)	12.9*** (0.7)
Other	12.9*** (1.7)	2.4 (2.4)	10.7*** (2.3)	1.4 (2.3)	11.8*** (2.5)
Unknown	10.3*** (0.8)	-3.0*** (0.7)	5.8*** (0.6)	-1.7** (0.6)	7.8*** (0.7)
Demographics					
Age, y	3.5*** (0.1)	-0.4*** (0.1)	1.9*** (0.1)	-0.4*** (0.1)	2.4*** (0.1)
Girl (versus boy)	0.8** (0.3)	-0.7** (0.3)	-0.1 (0.2)	-0.5* (0.2)	0.2 (0.3)
Plan type					
Fee-for-service only	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)
Any behavioral health care carve-out plan	2.4 (1.3)	9.5* (4.3)	6.3** (2.4)	4.0 (2.3)	3.3* (1.5)
Comprehensive managed care plan (no carve-out)	0.2 (1.1)	0.8 (0.8)	0.7 (0.8)	-1.2 (0.6)	-0.7 (1.0)
Primary care case management (no carve-out)	-0.1 (1.0)	-3.8** (1.4)	-2.7** (0.8)	-4.1*** (0.7)	-3.1*** (0.9)
More than 1 type of plan	4.2** (1.0)	1.0 (1.0)	2.9** (0.7)	-0.7 (0.7)	2.4** (0.8)
Eligibility type					
Blind/disabled	(Ref)	(Ref)	(Ref)	(Ref)	(Ref)
Foster care	-20.5*** (0.8)	-13.1*** (1.0)	-21.3*** (0.9)	-12.8*** (0.8)	-25.4*** (0.8)
Other eligibility type	1.2 (0.6)	-1.1 (0.7)	0.3 (0.7)	-0.9 (0.5)	0.6 (0.6)
Physical health comorbidity					
Asthma	-0.7* (0.3)	0.01 (0.4)	-0.5 (0.3)	-0.3 (0.3)	-0.8* (0.3)
Any other chronic condition	-1.6* (0.7)	3.5*** (0.9)	1.3 (0.7)	2.0** (0.7)	0.3 (0.7)
MH comorbidity					
Depressive disorder	-2.7*** (0.6)	-13.2*** (0.7)	-12.7*** (0.7)	-8.0*** (0.5)	-10.1*** (0.6)
Conduct disorder/oppositional defiant disorder	-4.8*** (0.4)	-15.9*** (0.6)	-14.2*** (0.6)	-10.3*** (0.5)	-11.6*** (0.5)
Anxiety disorder	-4.0*** (0.6)	-15.9*** (0.6)	-14.4*** (0.7)	-8.9*** (0.5)	-10.7*** (0.6)
Bipolar disorder	-6.1*** (0.6)	-11.5*** (0.7)	-13.0*** (0.7)	-6.3*** (0.5)	-10.6*** (0.6)
Schizophrenia/other psychotic disorder	-2.0 (1.4)	-2.4 (1.7)	-4.1* (1.7)	-1.7 (1.1)	-4.3** (1.5)
Other MH disorder	-3.7*** (0.3)	-13.9*** (0.5)	-11.5*** (0.4)	-9.9*** (0.4)	-9.8*** (0.3)
County-level characteristics					
Percentage living in urban area <sup>d</sup>	0.7* (0.3)	-1.8** (0.6)	-0.8 (0.4)	-1.1* (0.5)	-0.2 (0.4)
Percentage living in poverty <sup>d</sup>	2.2*** (0.3)	-0.5 (0.5)	0.8* (0.4)	-0.1 (0.3)	1.6*** (0.3)
Outpatient MH facilities per 100K <sup>d</sup>	-0.2 (0.2)	-0.3 (0.3)	-0.3 (0.2)	-0.2 (0.2)	-0.3 (0.2)
Community health centers per 100K <sup>d</sup>	0.5* (0.2)	0.6 (0.4)	0.7** (0.3)	0.5 (0.3)	0.6* (0.2)
Primary care physicians per 100K <sup>d</sup>	-0.03 (0.3)	-0.02 (0.6)	0.2 (0.4)	0.003 (0.4)	0.1 (0.4)
Psychologists per 100K <sup>d</sup>	0.4 (0.4)	-0.6 (0.8)	-0.4 (0.6)	-0.6 (0.6)	-0.4 (0.6)
Intercept	51.0	71.9	56.4	84.3	42.7

<sup>a</sup> N = 157 449.<sup>b</sup> N = 95 186.<sup>c</sup> Results estimated with logistic regressions that included all covariates listed in the table and state indicators. All MEs were estimated at the reference of race/ethnicity (ie, white youth) and the observed value of other covariates.<sup>d</sup> Continuous variable was standardized so that a 1 unit increase corresponds to a 1 SD increase above its mean value.

\* P &lt; .05.

\*\* P &lt; .01.

\*\*\* P &lt; .001.