Measurement of Metabolic Monitoring in Youth and Adult Medicaid Recipients Prescribed Antipsychotics

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ABSTRACT

BACKGROUND: Individuals being treated with first- and second-generation antipsychotics (FGAs and SGAs) are at risk for a variety of adverse cardiometabolic effects. Although consensus guidelines that recommend metabolic monitoring for patients receiving SGAs have been in place since 2004, the rate of monitoring remains low, especially in the pediatric population.

OBJECTIVES: To (a) examine differences in rates of laboratory monitoring for glucose and lipids for adults and youth prescribed FGAs and SGAs; (b) look at factors associated with the likelihood of metabolic testing; and (c) describe cohort effects that may have had an impact on the rates of laboratory testing.

METHODS: This is a retrospective study examining the rates of glucose and lipid testing for 3 separate cohorts of Medicaid recipients who were prescribed antipsychotics during 3 measurement periods—2008, 2010, and 2012—using paid Medicaid pharmacy and laboratory claims data. The sample included adults aged 18 years and older and children aged 17 years and younger. For each measurement period, we identified the rate of metabolic monitoring and the demographic characteristics for each individual, including race, age, and gender. The proportion of laboratory monitoring was assessed using chi square tests for each of the outcomes. Logistic regression models for each time point were used to determine the characteristics of individuals who were more likely to receive monitoring.

RESULTS: The proportion of individuals receiving glucose and lipid tests increased for both age groups across all measurement periods. For individuals aged 18 years and over, glucose monitoring increased from 56.6%-72.6%. Testing for lipids remained constant, ranging from 38.3%-41.2% for each of the 3 measurement periods. During the first measurement period, in 2008, females were 41% and 15% more likely to receive glucose and lipid laboratory monitoring, respectively, compared with males. Females continued to be more likely to receive glucose monitoring during the measurement periods in 2010 and 2012, although there was no significant difference between females and males for lipid monitoring during these time periods. Individuals aged 17 years and younger were 59%-68% less likely to receive glucose monitoring than adults (aged ≥ 18 years) for all time points. Across all measurement periods, individuals aged ≤ 17 years were also 44%-58% less likely to receive lipid monitoring compared with adults (aged ≥ 18 years). While there was no significant difference between Caucasians and non-Caucasians in the first measurement period, Caucasians were about 30% less likely to receive glucose monitoring and about 50% less likely to receive lipid monitoring during the measurement periods covering 2010 and 2012.

CONCLUSIONS: Metabolic monitoring in adults improved substantially over the time periods studied; however, rates remained suboptimal, especially in the pediatric population. This finding suggests that interventions to increase metabolic monitoring in adults and children using FGAs and SGAs are necessary.

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What is already known about this subject

- Comorbidity of medical conditions is high for individuals with mental health diagnoses, and the potential cardiometabolic adverse effects from antipsychotic medications may be exacerbated in the presence of other risk factors.
- Guidelines for metabolic monitoring focus on individuals with prescriptions for second-generation antipsychotics (SGAs). Less attention is given to the metabolic effects of first-generation antipsychotics (FGAs).
- Despite the existence of guideline consensus recommendations for metabolic monitoring of SGAs, screening rates for glucose and lipids remain suboptimal for adults and children whose treatment services are funded by Medicaid.

What this study adds

- The proportion of adults receiving glucose testing significantly increased with each successive measurement period, with 56% of adults receiving tests in 2008 and 79% in 2012. The change in the proportion of adults receiving lipid testing for each measurement period was not significant.
- The proportion of youth receiving glucose testing increased significantly with each successive measurement period, with 30% of youth receiving tests in 2008 and 50% in 2012. The rate for youth receiving lipid testing showed a significant increase, from 19% in 2008 to 28% in 2012.
- During the study period, there were cohort effects, including a change in the prior authorization policies for antipsychotics for those enrolled in Medicaid fee-for-service plans, as well as educational interventions developed by the public behavioral health managed care organization that targeted prescribers and members, that may have had a positive impact on rates of testing for glucose and lipids.

Second-generation antipsychotics (SGAs) have increasingly been prescribed for children and adults for a variety of psychiatric disorders.¹⁻³ When the time period 1993-1998 was compared with that of 2005-2009, office-based antipsychotic visits for children increased from 0.024 per 100 to 1.83 per 100; for adolescents from 0.78 per 100 to 3.76 per 100; and for adults from 3.25 per 100 to 6.18 per 100.¹ National trends data examining office-based visits for youth found that

children were 6 times more likely to receive prescriptions for antipsychotics in 2010 than in 1995 (odds ratio=6.0, 95% confidence interval=3.90-9.26).² While SGAs have clinical efficacy for a number of conditions, they also carry the risk of adverse effects, including cardiometabolic, endocrine, and neurologic side effects.⁴⁻⁸ Although the use of first-generation antipsychotics (FGAs) is not as prevalent as SGAs, FGAs are still used in treatment and have been associated with weight gain, hyperglycemia, and insulin resistance.⁹

The U.S. Food and Drug Administration mandated a class warning for all SGAs in 2003 that required all product labeling to reference the risk of hyperglycemia and diabetes mellitus, as well as the potential for extreme hyperglycemia associated with ketoacidosis, hyperosmolar coma, or death.⁵ In early 2004, the American Diabetes Association (ADA), the American Psychiatric Association (APA), the North American Association of the Study of Obesity, and the American Association of Clinical Endocrinologists issued a consensus recommendation for metabolic monitoring for individuals who have been prescribed SGAs.⁶ At the time that the consensus recommendations were issued, there were limited data regarding the risks of diabetes in children and adolescents taking SGAs.

Given the shortened life expectancy of individuals with serious mental illness, chiefly due to cardiovascular disease,¹⁰ the potential for adverse effects from psychotropic medication may be exacerbated when combined with other risk factors such as obesity, unhealthy lifestyle, and exposure to adverse childhood experiences. An association between schizophrenia and metabolic abnormalities has been noted prior to treatment with antipsychotics, and multiple studies have found that the rates of metabolic monitoring at baseline and follow-up for those prescribed SGAs remain low and fall short of recommended guidelines.¹⁰⁻¹³

Haupt et al. (2009) examined a large managed care database that measured lipid and glucose testing before and after the release of the ADA/APA guidelines and found improvements after implementation of the guidelines; however, rates remained low and those for the pediatric population were lowest.¹⁴ A study of commercially insured patients found similar results, with only 13% of patients being given glucose and lipid tests within 6 months of beginning treatment with SGAs.¹⁵ Raebel et al. (2014) utilized a national electronic health care database for youth newly starting SGAs and found that only 11% had been given glucose assessment between 90 days before and 30 days after first dispensing, with some variation depending on the medication used, the site, the age group, and gender.¹⁶

FGAs are included in the data reported here because these medications are also implicated in cardiometabolic side effects. The METEOR study, a cross-sectional study that looked at the prevalence of metabolic disorders and hypertension in patients with schizophrenia, compared the prevalence of these disorders in patients being treated with FGAs and SGAs.¹⁷ Patients

were stratified by the type of antipsychotic they were receiving (FGAs or SGAs), and data collection was done at 1 point in time. The investigators found no difference in the prevalence of glycemic disorders, dyslipidemia, or metabolic syndrome for patients with schizophrenia between the group taking FGAs and the group taking SGAs. The prevalence of hypertension was higher in those treated with FGAs. The proportion of females (but not males) who were overweight or obese was higher in the group treated with SGAs.¹⁷

A historic cohort study that compared the incidence of metabolic syndrome in first-episode patients with schizophrenia treated with either FGAs or SGAs found the rates of metabolic syndrome over the course of 3 years increased for both groups; however, the incidence was 3 times higher for those taking SGAs compared with those taking FGAs.¹⁸ While, as a class, SGAs are recognized as increasing the risk of metabolic abnormalities, there is considerable variation in the adverse effects on metabolic indices among the various SGAs. In this cohort study, when patients being treated with clozapine and olanzapine—SGAs that are associated with a significantly negative impact on metabolic indicators—were excluded from the results, the difference between the 2 groups was no longer significant.¹⁸

Community Care Behavioral Health Organization, a non-profit recovery-oriented behavioral health managed care organization and part of the University of Pittsburgh Medical Center Insurance Division, identified metabolic monitoring as a quality improvement priority and began measuring the rates of metabolic monitoring in its membership in 2007. In this study, we describe trends in metabolic monitoring for adult and pediatric Medicaid recipients who have been prescribed FGAs or SGAs. We compared the rates of laboratory monitoring for glucose and lipids at 3 measurement times for adults (aged ≥ 18 years) and youth (aged ≤ 17 years). We also examined the change in monitoring rates across 3 time periods, controlling for confounding variables. We described the demographic characteristics of individuals who were least likely to receive laboratory monitoring. The difference in monitoring rates between those prescribed FGAs and SGAs was also examined across all measurement periods.

Methods

Design

This is a retrospective study that examined the rates of glucose and lipid testing for 3 separate cohorts of Medicaid recipients prescribed antipsychotics during 2008, 2010, and 2012 using paid Medicaid pharmacy and laboratory claims data. This study was conducted as part of a quality improvement initiative, consistent with the National Committee for Quality Assurance guidelines. The Institutional Review Board determined that this study did not need to undergo review.

FIGURE 1 Sample Selection

Rx = prescription.

Study Population

The population included adults (defined as aged 18 years and older) and youth (defined as aged 17 years and younger) who were Medicaid recipients. Members with Medicare or commercial primary insurance were excluded from the analysis. The study population reflected 3 separate measurement periods: measurement period 1 (2008), measurement period 2 (2010), and measurement period 3 (2012). For each measurement period, the denominator was the number of Medicaid recipients enrolled in a public behavioral health managed care organization who filled an antipsychotic prescription during a 3- or 4-month time period. The time frame used to identify Medicaid recipients was increased from 3 months for the analysis in 2008 to 4 months for the analyses in 2010 and 2012. This change was made to ensure that individuals filling a 90-day supply of medication were included in the study.

The numerator was the count of all members who met denominator criteria and who received a glucose or lipids test during the 18- or 19-month time period that was used to capture laboratory information. The time period measuring laboratory monitoring was extended from 12 months to 18 or 19 months to give a generous time frame that would allow for the capture of all laboratory claims. The final sample for each measurement period had to have met Medicaid eligibility for 12 of the 18- or 19-month period. For 2008, 12,044 Medicaid members had an antipsychotic prescribed dur-

ing the 3-month period, with 8,754 meeting all eligibility criteria. In 2010, 22,155 Medicaid members had an antipsychotic prescribed during a 4-month period, with 17,251 members meeting all eligibility criteria. In 2012, 23,245 Medicaid members had an antipsychotic prescribed during a 4-month period, with 18,033 members meeting all eligibility criteria (Figure 1).

Measurements

The top 5 diagnoses were obtained utilizing the *International Classification of Diseases, Ninth Revision, Clinical Modification* (ICD-9-CM) by grouping codes into broad diagnostic categories. The crosswalk between the ICD-9-CM codes and the broader diagnosis categories is shown in the Appendix (available in online article). The top 5 behavioral health diagnoses represent the most commonly assigned diagnoses for adults and children for each of the 3 cohorts in 2008, 2010, and 2012. These diagnoses are included here to provide some clinical context for the study population. These diagnostic categories were assigned during all the service visits that occurred during the measurement time periods. The diagnosis category that was most commonly assigned was considered the final diagnosis for the individual. Once each individual was assigned a single diagnosis in this manner, a count of unique individuals by diagnosis was generated for the diagnosis distribution (Tables 1 and 2).

TABLE 1 Distribution of Primary Diagnoses for Children (Aged ≤ 17 Years) During Specified Measurement Period (Top 5 Diagnoses Only)

Diagnosis	2008		2010		2012	
	n	%	n	%	n	%
ADHD	818	32.15	1,541	34.26	1,350	31.45
Autism	223	8.77	466	10.36	534	12.44
Bipolar	178	7.00	275	6.11	292	6.80
Dysthymia/depression NOS	212	8.33	432	9.60	450	10.48
ODD	201	7.90	443	9.85	425	9.90

ADHD = attention-deficit/hyperactivity disorder; NOS = not otherwise specified; ODD = oppositional defiance disorder.

TABLE 2 Distribution of Primary Diagnoses for Adults (Aged ≥ 18 Years) During Specified Measurement Period (Top 5 Diagnoses Only)

Diagnosis	2008		2010		2012	
	n	%	n	%	n	%
Bipolar	813	13.09	2,130	16.70	2,468	17.96
Dysthymia/depression NOS	430	6.92	1,147	8.99	1,263	9.19
Major depression	780	12.56	1,744	13.68	1,999	14.55
Schizophrenia	846	13.62	1,258	9.86	1,230	8.95
Schizoaffective	662	10.66	1,020	8.00	1,043	7.59

NOS = not otherwise specified.

Descriptive statistics summarized the study population's characteristics (gender, age group, and race). Two dependent variables—rates of lipids test and rates of glucose test—were created to assess rates of laboratory claims during the 3 measurement periods. A dichotomous variable for lipid tests was coded “1” if an individual received a lipids test within the specified measurement times and “0” if the individual did not receive a lipids test within the specified measurement period. The glucose test outcome was a dichotomous variable coded “1” if the individual received a glucose test within the specified measurement period and “0” if the individual did not receive a glucose test within the specified measurement period. Independent variables were gender, age group, race, and antipsychotic type. Antipsychotic type was coded “1” for FGA and “0” for SGA. The FGA group included individuals prescribed only FGAs during the study period. The SGA group included those prescribed either only SGAs or FGAs and SGAs during the study period.

Differences in proportions of laboratory monitoring over the 3 time periods were assessed using separate chi square tests of association for each of the outcomes. Logistic regression models were created for each measurement period and for each outcome in order to determine characteristics of individuals who were more likely to receive laboratory tests. All statistical analyses were performed using SAS, version 9.4 (SAS Institute, Inc., Cary, NC), with a significance level of 0.05.

Results

The final study samples for the 3 measurement periods were as follows: (a) measurement period 1 (2008) consisted of 8,754 Medicaid recipients (6,210 adults, 2,544 youth); (b) measurement period 2 (2010) consisted of 17,251 Medicaid recipients (12,753 adults, 4,498 youth); and (c) measurement period 3 (2012) consisted of 18,033 Medicaid recipients (13,740 adults, 4,293 youth). The sample was mostly Caucasian, ranging from nearly 61% in 2008 to about 74% in 2010 and 2012. Gender distribution was even throughout the 3 measurement periods (Table 3).

The proportion of individuals receiving glucose and lipid tests was significantly different between the age groups during each measurement period (Table 4). The proportion of youth receiving glucose testing was 30% in 2008, 41% in 2010, and 50% in 2012. The proportion of youth receiving lipid testing was 20% in 2008, 22% in 2010, and 28% in 2012. The proportion of adults receiving lipid testing was 38% in 2008, 40% in 2010, and 41% in 2012. The proportion of adults receiving glucose testing was 57% in 2008, 70% in 2010, and 73% in 2012.

The results of the logistic regression models for each measurement period are displayed in Table 5. During measurement period 1, the odds of females receiving glucose and lipid tests were 41% and 15% higher, respectively, compared with males. Females continued to be more likely to receive glucose monitoring through measurement periods 2 and 3 (Table 5); however, there was no significant difference between females and

TABLE 3 Demographics

	Measurement 1 (2008) n = 8,754		Measurement 2 (2010) n = 17,251		Measurement 3 (2012) n = 18,033	
	n	%	n	%	n	%
Age group						
0-17	2,544	29.06	4,498	26.07	4,293	23.81
18-64	6,210	70.94	12,753	73.93	13,740	76.19
Race						
African American	2,148	25.07	2,707	15.69	2,746	15.23
Other	1,248	14.26	1,044	10.69	1,894	10.50
Caucasian	5,311	60.67	12,700	73.62	13,393	74.27
Gender						
Female	4,265	48.72	8,446	48.96	8,831	48.97
Male	4,489	51.28	8,805	51.04	9,202	51.03

males for lipid monitoring during measurement periods 2 or 3. The odds of individuals aged 17 years and younger receiving glucose tests were 59%-62% lower compared with adults aged 18 years and over for each measurement period.

Similarly, for all measurement periods, the odds of individuals aged 17 years and younger receiving lipid labs were 44%-58% lower compared with adults aged 18 years and over. While there was no significant difference between Caucasians and non-Caucasians during measurement period 1, Caucasians were about 30% less likely to receive glucose testing and about 50% less likely to receive lipid testing for measurement periods 2 and 3. During measurement period 2, individuals using FGAs were 29% more likely to receive glucose monitoring and 22% more likely to received lipid monitoring.

Discussion

SGAs are widely used for a variety of psychiatric conditions, and FGAs are also still in use, largely for the treatment of schizophrenia.¹⁹ Both types of medication carry significant risks for cardiometabolic side effects, and metabolic monitoring is suggested for people utilizing these antipsychotics. However, this monitoring is often neglected, putting these individuals at risk for life-threatening complications. We studied the demographics of those receiving laboratory monitoring over a

period of 6 years to determine who was least likely to receive monitoring.

In our study, we found that rates of metabolic laboratory monitoring increased for children and adults over time. During measurement period 2, the rates were higher for glucose testing (70%) than for lipid testing (40%), a finding similar to that reported in other studies.^{11,14,15,20} There was a significant increase in the rate of laboratory monitoring over time in our Medicaid population, unlike the results reported in the 3-state study by Morrato et al. (2010).¹² While these increases were statistically significant, a noteworthy proportion of the population was still not receiving the recommended testing by the end of the study.

Females were more likely to receive testing for glucose during all measurement periods. There is limited literature addressing differences between the genders in adherence to medical recommendations. A study of adult type 2 diabetic patients found ethnic and gender differences in social support, acceptance of diabetes, quality of life, and adherence behaviors.²¹ Raebel et al.'s 2014 study of pediatric patients newly begun on SGAs found that females were more likely to receive glucose testing at baseline.¹⁶

While there was no difference between Caucasians and non-Caucasians during measurement period 1 in our study, Caucasians were less likely to receive laboratory testing in the 2 subsequent cohorts. Youth were less likely than adults to receive monitoring for glucose and lipids during the 3 measurement periods. Measurement period 2 was the only period where the likelihood of receiving glucose and lipid monitoring was affected by the type of antipsychotic drug being used. During measurement period 2, those patients prescribed FGAs were significantly more likely to receive laboratory testing than those prescribed SGAs only or SGAs with FGAs.

There are several factors that could explain the lower rates of monitoring in youth. Unlike adults, children and adolescents depend on their guardians to implement monitoring recommendations. Guardians may be reluctant to expose children and adolescents to blood draws. The likelihood of metabolic monitoring increases with age, which may make it less likely that individuals aged 17 years and under will be monitored.^{15,22}

TABLE 4 Laboratory Test Distributions and Comparisons by Age Group from 2008 to 2012

Laboratory Test	Aged ≤17 Years					Aged ≥18 Years				
	2008 (n = 2,544)	2010 (n = 4,498)	2012 (n = 4,293)	χ^2 (df = 2)	P Value	2008 (n = 6,210)	2010 (n = 12,753)	2012 (n = 13,740)	χ^2 (df = 2)	P Value
	n (%)					n (%)				
Glucose	781 (30.70)	1,847 (41.06)	2,145 (49.97)	246.56	<0.0001	3,515 (56.60)	8,904 (69.82)	9,980 (72.63)	526.47	<0.0001
Lipid	499 (19.61)	1,011 (22.48)	1,222 (28.46)	79.17	<0.0001	2,380 (38.33)	5,076 (39.80)	5,666 (41.24)	15.99	0.0003

df = degree of freedom; χ^2 = Pearson's chi square test.

TABLE 5 Logistic Regression Results

Laboratory Test		β			Standard Error			χ^2			OR (95% CI)		
		M1	M2	M3	M1	M2	M3	M1	M2	M3	M1	M2	M3
Glucose	Intercept	-0.05	0.93	1.03	0.07	0.06	0.06	0.47	276.97 ^a	328.42 ^a			
	Gender (female = 1, male = 0)	0.34	0.29	0.44	0.05	0.03	0.03	57.34 ^a	75.16 ^a	168.41 ^a	1.41 (1.29-1.54)	1.34 (1.25-1.43)	1.55 (1.45-1.65)
	Race (white = 1, other = 0)	0.12	-0.34	-0.33	0.07	0.05	0.06	3.40	37.91 ^a	34.98 ^a	1.13 (0.99-1.29)	0.71 (0.64-0.80)	0.72 (0.65-0.80)
	Race (black = 1, other = 0)	0.15	-0.06	-0.18	0.07	0.07	0.07	4.27 ^b	0.71	10.19 ^b	1.17 (1.01-1.35)	0.95 (0.83-1.08)	0.84 (0.73-0.96)
	Age (< 18 = 1, ≥ 18 = 0)	-0.97	-1.13	-0.89	0.05	0.04	0.04	352.28	922.24 ^a	559.67 ^a	0.38 (0.34-0.42)	0.32 (0.30-0.35)	0.41 (0.38-0.44)
	Antipsychotic type (FGA = 1, SGA = 0)	0.10	0.26	-0.07	0.15	0.11	0.07	0.45	5.94 ^b	0.95	1.10 (0.83-1.47)	1.29 (1.05-1.59)	0.93 (0.81-1.08)
Lipids	Intercept	-0.66	0.05	0.15	0.07	0.05	0.05	82.46 ^a	0.87	9.02 ^b			
	Gender (female = 1, male = 0)	0.14	-0.02	0.03	0.05	0.03	0.03	8.33 ^b	0.35	0.62	1.15 (1.05-1.26)	0.98 (0.92-1.05)	1.03 (0.96-1.09)
	Race (white = 1, other = 0)	0.10	-0.64	-0.70	0.07	0.05	0.05	2.16	151.71 ^a	196.98 ^a	1.11 (0.97-1.28)	0.53 (0.48-0.58)	0.50 (0.45-0.55)
	Race (black = 1, other = 0)	0.15	0.06	-0.02	0.08	0.06	0.06	3.40	0.92	0.10	1.16 (0.99-1.35)	1.06 (0.94-1.20)	0.98 (0.87-1.10)
	Age (< 18 = 1, ≥ 18 = 0)	-0.88	-0.85	-0.58	0.06	0.04	0.04	227.26 ^a	416.21 ^a	211.42 ^a	0.42 (0.37-0.47)	0.43 (0.39-0.46)	0.56 (0.52-0.61)
	Antipsychotic type (FGA = 1, SGA = 0)	0.19	0.20	-0.02	0.15	0.09	0.07	1.74	4.37 ^b	0.12	1.21 (0.91-1.62)	1.22 (1.01-1.47)	0.98 (0.85-1.12)

^aP<0.0001.

^b0.0001 ≤ P < 0.05.

 β = beta, the regression coefficient; CI = confidence interval; FGA = first-generation antipsychotic; M1 = measurement period 1; M2 = measurement period 2; M3 = measurement period 3; OR = odds ratio; SGA = second-generation antipsychotic; χ^2 = Pearson's chi square test.

Morrato et al. (2010) have shown that children with serious or multiple psychiatric diagnoses who use health care services more intensively were more likely to receive metabolic screening.¹³ A study of the determinants of metabolic testing in a Medicaid population prescribed antipsychotics found that, for children and adults, comorbid diabetes and dyslipidemia were predictors for glucose and lipid testing.²³

While the association between SGA use and type 2 diabetes in children is now known, the prevalence of these disorders in youth compared with adults has not yet been determined. Since our claims data were restricted to psychiatric diagnoses, we could not examine the impact of diabetes or lipid disorders on testing for youth or adults in our study. In the literature, there has been far less attention paid to laboratory monitoring in children using antipsychotics than monitoring in adults using antipsychotics. There are currently no pediatric guidelines for metabolic monitoring when prescribing antipsychotics in the United States. Pringsheim et al. (2011) have published guidelines specific to pediatric treatment in Canada.²⁴

Adults who are non-Caucasian, older, and/or who have pre-existing diagnoses of diabetes, dyslipidemia, and hypertension have a greater likelihood of undergoing general glucose and lipid monitoring.^{14,25-27} In 1 study of metabolic monitoring rates for Medicaid recipients diagnosed with schizophrenia, younger

individuals (aged 18-30 years) and males were less likely to be tested for glucose levels.²⁸ The same study found a higher likelihood of testing for lipids was associated with urban residence as well as comorbid diabetes and dyslipidemia.²⁸ Since African Americans are considered more at risk for metabolic abnormalities, there is a possibility that during the study period, these individuals were already being closely monitored. The population of African Americans in our study is clustered in 1 county that has access to an academic institution and a high level of care, which may explain their higher levels of testing.

Cohort effects may have had an impact on rates of metabolic monitoring during our study period. Notably, there were changes in the Pennsylvania Department of Public Welfare prior authorizations for fee-for-service programs regarding antipsychotic medication in youth. In September 2009, clinical prior authorization was required for all antipsychotic medication prescribed to children aged under 6 years, and this policy was progressively expanded to cover all youth under the age 18 years by November 2012. By January 2012, clinical prior authorization required documentation of ongoing laboratory, blood pressure, and involuntary movement disorder monitoring in children. Some managed care organizations developed prior authorization policies that were consistent with the state Medicaid fee-for-service prior authorization policies. A study

comparing the effects of prior authorization policies on children from Pennsylvania with those from another mid-Atlantic state enrolled in Medicaid found that prior authorization policies had a modest but statistically significant effect on antipsychotic use, decreasing use in children aged 6-12 years but having no impact on younger children.²⁹ Our study did not examine the impact of prior authorizations on laboratory monitoring for metabolic syndrome.

During our study period, Community Care Behavioral Health Organization implemented several educational interventions with providers. These interventions included letters to prescribers that gave details on metabolic monitoring rates for members in their geographic regions, recommendations for metabolic monitoring, and a free webinar focused on health management when prescribing antipsychotics. Provider alerts that incorporated the ADA/APA consensus guidelines and delineated expectations for providers regarding follow-up and interventions were issued in October 2011 and January 2012.⁶ Members enrolled in the schizophrenia disease management program received educational outreach regarding the risk of developing metabolic syndrome provided by care managers. Members received written material recommending a discussion with their behavioral health providers and primary care doctors about blood tests and weight monitoring while on such medication.

Barriers to management of physical health conditions and consistent laboratory monitoring in individuals with serious mental illness include physician-related factors such as poor communication with the patient or difficulty maintaining communication between mental health providers and primary care providers. Physicians also do not always accept established guidelines. Service-related factors also play a role; a lack of clearly designated responsibility for recognizing and managing physical health problems and lack of integrated services can affect monitoring rates.³⁰ A study of Australian mental health services found that 69% of mental health center staff members were unsure about which care providers should follow up on abnormal cardiometabolic screening results.³¹ A lack of communication between behavioral health care providers and physical health care providers regarding the member's treatment can result in negative health consequences associated with inadequate laboratory monitoring.

Guidelines often do not provide clarity on which provider should assume responsibility for metabolic monitoring and interventions based on the results of the monitoring. A survey of psychiatrists found that the majority were aware of the need for metabolic monitoring.³⁰ Psychiatrists who completed their residencies prior to the 2004 ADA/APA guidelines, and those who had a minority of patients with diagnoses of schizophrenia or bipolar disorder were more likely to agree that monitoring is the role of psychiatrists only if patients did not have primary care providers.^{32,33} Haupt et al. found that a higher number of primary care visits increased the rate of monitoring, indicat-

ing the benefit of assigning a clinician to follow up on general physical health in individuals being treated with SGAs.¹⁴

From a managed care perspective, we have observed that there is limited information sharing across treatment settings, which may make it difficult to track metabolic monitoring across all levels of care. Primary care providers may not have access to the laboratory studies obtained in psychiatric inpatient settings; residential, drug, and alcohol treatment settings; or in outpatient services. While electronic health records can provide such information, access to these records may be limited to a particular level of care or a specific provider or health system. Efforts to further integrate behavioral health and physical health care could include mechanisms for sharing data that would facilitate the coordination and accountability of tracking metabolic monitoring for those treated with antipsychotic medication. A reluctance to expose youth and adults to repeated testing and concerns about the cost of obtaining testing could be mitigated to some extent if there were full access for all parties to laboratory testing results obtained in different settings.

Limitations

There are some limitations to this study. First, claims data do not capture pharmacy or laboratory data on individuals receiving inpatient psychiatric services, and this study was limited to individuals in the majority of counties in a Mid-Atlantic state that were enrolled in Medicaid. Second, the monitoring rates presented here may be overestimated in reference to ADA/APA guidelines, which specify that fasting plasma glucose and lipid measures be taken at baseline and thereafter quarterly for the first year, with glucose measurements repeated annually after the first year and lipid measurements repeated every 5 years.⁶ Our tests were obtained within 18-19 months rather than the 12 months recommended by the ADA/APA guidelines. We chose this time frame because it is likely that, in our population, many individuals were continuing on antipsychotics and were not new starts, in which case the 12-month monitoring interval recommended by the ADA/APA would not reflect the time frame of psychopharmacologic interventions for our population. In addition, we were aware of the barriers to obtaining blood work in a timely manner and so examined the rates of obtaining metabolic measurements within a more generous time window. Third, our focus was on laboratory testing and not on other components of metabolic monitoring, such as physical measures (i.e., body mass index, waist circumference, and blood pressure) or personal or family histories. As discussed earlier, we did not have access to physical health diagnoses claims data, so we could not examine the impact of comorbidities on the rate of laboratory testing. Finally, our use of cohorts in 3 time periods limited the possibility of generalizing the finding of an effect over time.

Conclusions

The current findings suggest that, for adults and children receiving FGAs and SGAs, interventions are needed to encourage monitoring of glucose and lipid levels. This is particularly important in the pediatric population, where monitoring was lowest in our study and in the literature. As in other studies, our study found that African Americans were more likely to be monitored. However, as mentioned previously, our result may be due to a population of African Americans in a specific county where health care resources were more available than elsewhere. Managed care organizations do have a role to play in promoting metabolic monitoring. Interventions could address (a) ways in which members and their providers could work more closely to ensure that monitoring lab work is obtained; (b) enhancing access to information for patients receiving antipsychotic medications; (c) increasing integration of behavioral and physical health care; and (d) educating providers about the need for metabolic monitoring in any patient receiving antipsychotic medication. Our findings also support the need for future longitudinal investigations of laboratory monitoring.

Authors

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DISCLOSURES

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Parthasarathy, Edelson, and Schuster designed the study. Parthasarathy collected the data and shared in data interpretation, along with Edelson, Terhorst, and Kaspov. Edelson wrote and revised the manuscript with the assistance of Terhorst and Karpov.

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APPENDIX Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA Categories Used by Community Care Behavioral Health Organization

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
290	Senile And Presenile Organic Psychotic Conditions	Organic psychotic conditions	MH	Organic Mental Disorders				Dementia
290.0	Senile Dementia Uncomp	Organic psychotic conditions	MH	Organic Mental Disorders				Dementia
290.10	Presenile Dementia	Organic psychotic conditions	MH	Organic Mental Disorders				Dementia
290.11	Presenile Delirium	Organic psychotic conditions	MH	Organic Mental Disorders				Dementia
290.12	Presenile Delusion	Organic psychotic conditions	MH	Organic Mental Disorders				Dementia
290.13	Presenile Depression	Organic psychotic conditions	MH	Organic Mental Disorders				Dementia
290.2	Senile Dementia With Delusional Or Depressive Features	Organic psychotic conditions	MH	Organic Mental Disorders				Dementia
290.20	Senile Delusion	Organic psychotic conditions	MH	Organic Mental Disorders				Dementia
290.21	Senile Depressive	Organic psychotic conditions	MH	Organic Mental Disorders				Dementia
290.3	Senile Delirium	Organic psychotic conditions	MH	Organic Mental Disorders				Dementia
290.40	Arterioscler Dement Nos	Organic psychotic conditions	MH	Organic Mental Disorders	Vascular Dementia, Uncomplicated			Dementia
290.41	Arterioscler Delirium	Organic psychotic conditions	MH	Organic Mental Disorders	Vascular Dementia, with Delirium			Dementia
290.42	Arterioscler Delusion	Organic psychotic conditions	MH	Organic Mental Disorders	Vascular Dementia, with Delusions			Dementia
290.43	Arterioscler Depressive	Organic psychotic conditions	MH	Organic Mental Disorders	Vascular Dementia, with Depressed Mood			Dementia
290.8	Senile Psychosis Nec	Organic psychotic conditions	MH	Organic Mental Disorders				Dementia
290.9	Senile Psychot Cond Nos	Organic psychotic conditions	MH	Organic Mental Disorders				Dementia
291	Alcoholic Psychoses	Organic psychotic conditions	SA	Other Substance Related Disorders			Alcohol	Alcohol Related Disorders
291.0	Delirium Tremens	Organic psychotic conditions	SA	Other Substance Related Disorders	Alcohol [Intoxication/Withdrawal] Delirium		Alcohol	Alcohol Related Disorders
291.1	Alcohol Amnestic Synd	Organic psychotic conditions	SA	Other Substance Related Disorders	Alcohol-Induced Persisting Amnestic Disorder		Alcohol	Alcohol Related Disorders
291.2	Alcoholic Dementia Nec	Organic psychotic conditions	SA	Other Substance Related Disorders	Alcohol-Induced Persisting Dementia		Alcohol	Alcohol Related Disorders
291.3	Alcohol Hallucinosi	Organic psychotic conditions	SA	Other Substance Related Disorders	Alcohol-Induced Persisting Disorder, with Hallucinations		Alcohol	Alcohol Related Disorders
291.4	Pathologic Alcohol Intox	Organic psychotic conditions	SA	Other Substance Related Disorders			Alcohol	Alcohol Related Disorders
291.5	Alcoholic Jealousy	Organic psychotic conditions	SA	Other Substance Related Disorders	Alcohol-Induced Persisting Disorder, with Delusions		Alcohol	Alcohol Related Disorders
291.8	Other Specified Alcoholic Psychosis	Organic psychotic conditions	SA	Other Substance Related Disorders			Alcohol	Alcohol Related Disorders

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APPENDIX

Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
291.80								Alcohol Related Disorders
291.81	Alcohol Withdrawal	Organic psychotic conditions	SA	Other Substance Related Disorders	Alcohol Withdrawal		Alcohol	Alcohol Related Disorders
291.89	Alcoholic Psychosis Nec	Organic psychotic conditions	SA	Other Substance Related Disorders	Alcohol-Induced [Anxiety Disorder/Mood Disorder/Sexual Dysfunction/Sleep Disorder]		Alcohol	Alcohol Related Disorders
291.9	Alcoholic Psychosis Nos	Organic psychotic conditions	SA	Other Substance Related Disorders	Alcohol-Related Disorder NOS		Alcohol	Alcohol Related Disorders
292	Drug Psychoses	Organic psychotic conditions	SA	Substance Induced Disorders			Drug	Drug Related Disorders
292.0	Drug Withdrawal Syndrome	Organic psychotic conditions	SA	Substance Induced Disorders	[Amphetamine/Cocaine/Nicotine/Opioid/Other (or Unknown) Substance/Sedative, Hypnotic, or Anxiolytic] Withdrawal		Drug	Drug Related Disorders
292.1	Paranoid And/Or Hallucinatory States Induced By Drugs	Organic psychotic conditions	SA	Substance Induced Disorders			Drug	Drug Related Disorders
292.11	Drug Paranoid State	Organic psychotic conditions	SA	Substance Induced Disorders	[Amphetamine/Cannabis/Cocaine/Hallucinogen/Inhalant/Opioid/Other (or Unknown) Substance/Phencyclidine/Sedative, Hypnotic, or Anxiolytic]-Induced Psychotic Disorder, with Delusions		Drug	Drug Related Disorders
292.12	Drug Hallucinosi	Organic psychotic conditions	SA	Substance Induced Disorders	[Amphetamine/Cannabis/Cocaine/Hallucinogen/Inhalant/Opioid/Other (or Unknown) Substance/Phencyclidine/Sedative, Hypnotic, or Anxiolytic]-Induced Psychotic Disorder, with Hallucinations		Drug	Drug Related Disorders
292.2	Pathologic Drug Intox	Organic psychotic conditions	SA	Substance Induced Disorders			Drug	Drug Related Disorders
292.81	Drug-Induced Delirium	Organic psychotic conditions	SA	Substance Induced Disorders	[Amphetamine/Cannabis/Cocaine/Hallucinogen/Inhalant/Opioid/Other (or Unknown) Substance/Phencyclidine/Sedative, Hypnotic, or Anxiolytic] Intoxication/Withdrawal Delirium		Drug	Drug Related Disorders

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APPENDIX

Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
292.82	Drug-Induced Dementia	Organic psychotic conditions	SA	Substance Induced Disorders	[Inhalant/Other (or Unknown Substance/Sedative, Hypnotic, or Anxiolytic)-Induced Persisting Dementia		Drug	Drug Related Disorders
292.83	Drug Amnestic Syndrome	Organic psychotic conditions	SA	Substance Induced Disorders	[Other (or Unknown Substance/Sedative, Hypnotic, or Anxiolytic)-Induced Persisting Amnestic Disorder		Drug	Drug Related Disorders
292.84	Drug Depressive Syndrome	Organic psychotic conditions	SA	Substance Induced Disorders	[Amphetamine/Cocaine/Hallucinogen/Inhalant/Opioid/Other (or Unknown) Substance/Phencyclidine/Sedative, Hypnotic, or Anxiolytic]-Induced Mood Disorder		Drug	Drug Related Disorders
292.89	Drug Mental Disorder Nec	Organic psychotic conditions	SA	Substance Induced Disorders	[Amphetamine/Caffeine/Cannabis/Cocaine/Hallucinogen/Inhalant/Opioid/Other (or Unknown) Substance/Phencyclidine/Sedative, Hypnotic, or Anxiolytic] [Anxiety or Sleep Disorder/Sexual Dysfunction/Intoxication		Drug	Drug Related Disorders
292.9	Drug Mental Disorder Nos	Organic psychotic conditions	SA	Substance Induced Disorders	[Amphetamine/Caffeine/Cannabis/Cocaine/Hallucinogen/Inhalant/Nicotine/Opioid/Other (or Unknown) Substance/Phencyclidine/Sedative, Hypnotic, or Anxiolytic]-Related Disorder NOS		Drug	Drug Related Disorders
293	Transient Organic Psychotic Conditions	Organic psychotic conditions	MH	Organic Mental Disorders				Organic Mental Disorders
293.0	Acute Delirium	Organic psychotic conditions	MH	Organic Mental Disorders	Delirium Due to ... [Indicate the General Medical Condition]			Organic Mental Disorders
293.1	Subacute Delirium	Organic psychotic conditions	MH	Organic Mental Disorders				Organic Mental Disorders
293.8	Other Specified Transient Organic Mental Disorders	Organic psychotic conditions	MH	Organic Mental Disorders				Organic Mental Disorders

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APPENDIX

Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA
Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
293.81	Organic Delusional Synd	Organic psychotic conditions	MH	Organic Mental Disorders	Psychotic Disorder Due to ... [Indicate the General Medical Condition], With Delusions			Organic Mental Disorders
293.82	Organic Hallucinosi Syn	Organic psychotic conditions	MH	Organic Mental Disorders	Psychotic Disorder Due to ... [Indicate the General Medical Condition], With Hallucinations			Organic Mental Disorders
293.83	Organic Affective Synd	Organic psychotic conditions	MH	Organic Mental Disorders	Mood Disorder Due to ... [Indicate the General Medical Condition]			Organic Mental Disorders
293.84	Organic Anxiety Syndrome	Organic psychotic conditions	MH	Organic Mental Disorders	Anxiety Disorder Due to ... [Indicate the General Medical Condition]			Organic Mental Disorders
293.89	Transient Org Mental Nec	Organic psychotic conditions	MH	Organic Mental Disorders	Catatonic Disorder Due to ... [Indicate the General Medical Condition]			Organic Mental Disorders
293.9	Transient Org Mental Nos	Organic psychotic conditions	MH	Organic Mental Disorders	Mental Disorder NOS Due to ... [Indicate the General Medical Condition]			Organic Mental Disorders
294	Other Organic Psychotic Conditions (Chronic)	Organic psychotic conditions	MH	Organic Mental Disorders				Dementia
294.0	Amnestic Syndrome	Organic psychotic conditions	MH	Organic Mental Disorders	Amnestic Disorder Due to ... [Indicate the General Medical Condition]			Dementia
294.1	Dementia In Conditions Classified Elsewhere	Organic psychotic conditions	MH	Organic Mental Disorders				Dementia
294.10	Dementia W O Behav Dist	Organic psychotic conditions	MH	Organic Mental Disorders	[Dementia Due to ... [Indicate the General Medical Condition], Without Behavioral Disturbance]/[Dementia of the Alzheimer's Type, With [Early/Late] Onset, Without Behavioral Disturbance]			Dementia
294.11	Dementia W Behavior Dist	Organic psychotic conditions	MH	Organic Mental Disorders	[Dementia Due to ... [Indicate the General Medical Condition], With Behavioral Disturbance]/[Dementia of the Alzheimer's Type, With [Early/Late] Onset, With Behavioral Disturbance]			Dementia

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APPENDIX

Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
294.8	Organic Brain Synd Nec	Organic psychotic conditions	MH	Organic Mental Disorders	[Amnestic Disorder/Dementia] NOS			Dementia
294.9	Organic Brain Synd Nos	Organic psychotic conditions	MH	Organic Mental Disorders	Cognitive Disorder NOS			Dementia
295	Schizophrenic Disorders	Other psychoses	MH	Schizophrenia				Schizophrenia
295.0	Simple Type Schizophrenia Simplex	Other psychoses	MH	Schizophrenia				Schizophrenia
295.00	Simpl Schizophren-Unspec	Other psychoses	MH	Schizophrenia				Schizophrenia
295.01	Simpl Schizophren-Subchr	Other psychoses	MH	Schizophrenia				Schizophrenia
295.02	Simple Schizophren-Chr	Other psychoses	MH	Schizophrenia				Schizophrenia
295.03	Simp Schiz-Subchr Exacer	Other psychoses	MH	Schizophrenia				Schizophrenia
295.04	Simpl Schizo-Chr Exacerb	Other psychoses	MH	Schizophrenia				Schizophrenia
295.05	Simpl Schizophren-Remiss	Other psychoses	MH	Schizophrenia				Schizophrenia
295.1	Disorganized Type Hebephrenia	Other psychoses	MH	Schizophrenia				Schizophrenia
295.10	Hebephrenia-Unspec	Other psychoses	MH	Schizophrenia	Schizophrenia, Disorganized Type			Schizophrenia
295.11	Hebephrenia-Subchronic	Other psychoses	MH	Schizophrenia				Schizophrenia
295.12	Hebephrenia-Chronic	Other psychoses	MH	Schizophrenia				Schizophrenia
295.13	Hebephren-Subchr Exacerb	Other psychoses	MH	Schizophrenia				Schizophrenia
295.14	Hebephrenia-Chr Exacerb	Other psychoses	MH	Schizophrenia				Schizophrenia
295.15	Hebephrenia-Remission	Other psychoses	MH	Schizophrenia				Schizophrenia
295.2	Catatonic (Schizophrenia)	Other psychoses	MH	Schizophrenia				Schizophrenia
295.20	Catatonia-Unspec	Other psychoses	MH	Schizophrenia	Schizophrenia, Catatonic Type			Schizophrenia
295.21	Catatonia-Subchronic	Other psychoses	MH	Schizophrenia				Schizophrenia
295.22	Catatonia-Chronic	Other psychoses	MH	Schizophrenia				Schizophrenia
295.23	Catatonia-Subchr Exacerb	Other psychoses	MH	Schizophrenia				Schizophrenia
295.24	Catatonia-Chr Exacerb	Other psychoses	MH	Schizophrenia				Schizophrenia
295.25	Catatonia-Remission	Other psychoses	MH	Schizophrenia				Schizophrenia
295.3	Paranoid Type Paraphrenic Schizophrenia	Other psychoses	MH	Schizophrenia				Schizophrenia
295.30	Paranoid Schizo-Unspec	Other psychoses	MH	Schizophrenia	Schizophrenia, Paranoid Type			Schizophrenia
295.31	Paranoid Schizo-Subchr	Other psychoses	MH	Schizophrenia				Schizophrenia
295.32	Paranoid Schizo-Chronic	Other psychoses	MH	Schizophrenia				Schizophrenia
295.33	Paran Schizo-Subchr Exac	Other psychoses	MH	Schizophrenia				Schizophrenia
295.34	Paran Schizo-Chr Exacerb	Other psychoses	MH	Schizophrenia				Schizophrenia
295.35	Paranoid Schizo-Remiss	Other psychoses	MH	Schizophrenia				Schizophrenia
295.4	Acute Schizophrenic Episode Oneirophrenia Schizophreniform	Other psychoses	MH	Schizophrenia				Schizophrenia
295.40	Ac Schizophrenia-Unspec	Other psychoses	MH	Schizophrenia	Schizophreniform Disorder			Schizophrenia
295.41	Ac Schizophrenia-Subchr	Other psychoses	MH	Schizophrenia				Schizophrenia
295.42	Ac Schizophrenia-Chr	Other psychoses	MH	Schizophrenia				Schizophrenia
295.43	Ac Schizo-Subchr Exacerb	Other psychoses	MH	Schizophrenia				Schizophrenia
295.44	Ac Schizophr-Chr Exacerb	Other psychoses	MH	Schizophrenia				Schizophrenia
295.45	Ac Schizophrenia-Remiss	Other psychoses	MH	Schizophrenia				Schizophrenia
295.5	Latent Schizophrenia	Other psychoses	MH	Schizophrenia				Schizophrenia
295.50	Latent Schizophren-Unsp	Other psychoses	MH	Schizophrenia				Schizophrenia
295.51	Lat Schizophren-Subchr	Other psychoses	MH	Schizophrenia				Schizophrenia

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Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
295.52	Latent Schizophren-Chr	Other psychoses	MH	Schizophrenia				Schizophrenia
295.53	Lat Schizo-Subchr Exacer	Other psychoses	MH	Schizophrenia				Schizophrenia
295.54	Latent Schizo-Chr Exacer	Other psychoses	MH	Schizophrenia				Schizophrenia
295.55	Lat Schizophren-Remiss	Other psychoses	MH	Schizophrenia				Schizophrenia
295.6	Residual Schizophrenia	Other psychoses	MH	Schizophrenia				Schizophrenia
295.60	Resid Schizophren-Unsp	Other psychoses	MH	Schizophrenia	Schizophrenia, Residual Type			Schizophrenia
295.61	Resid Schizophren-Subchr	Other psychoses	MH	Schizophrenia				Schizophrenia
295.62	Residual Schizophren-Chr	Other psychoses	MH	Schizophrenia				Schizophrenia
295.63	Resid Schizo-Subchr Exac	Other psychoses	MH	Schizophrenia				Schizophrenia
295.64	Resid Schizo-Chr Exacerb	Other psychoses	MH	Schizophrenia				Schizophrenia
295.65	Resid Schizophren-Remiss	Other psychoses	MH	Schizophrenia				Schizophrenia
295.7	Schizo-Affective Type	Other psychoses	MH	Schizophrenia				Schizoaffective
295.70	Schizoaffective-Unspec	Other psychoses	MH	Schizophrenia	Schizoaffective Disorder			Schizoaffective
295.71	Schizoaffective-Subchr	Other psychoses	MH	Schizophrenia				Schizoaffective
295.72	Schizoaffective-Chronic	Other psychoses	MH	Schizophrenia				Schizoaffective
295.73	Schizoaffect-Subchr Exacer	Other psychoses	MH	Schizophrenia				Schizoaffective
295.74	Schizoaffect-Chr Exacer	Other psychoses	MH	Schizophrenia				Schizoaffective
295.75	Schizoaffective-Remiss	Other psychoses	MH	Schizophrenia				Schizoaffective
295.8	Other Specified Types Of Schizophrenia Acute	Other psychoses	MH	Schizophrenia				Schizophrenia
295.80	Schizophrenia Nec-Unspec	Other psychoses	MH	Schizophrenia				Schizophrenia
295.81	Schizophrenia Nec-Subchr	Other psychoses	MH	Schizophrenia				Schizophrenia
295.82	Schizophrenia Nec-Chr	Other psychoses	MH	Schizophrenia				Schizophrenia
295.83	Schizo Nec-Subchr Exacer	Other psychoses	MH	Schizophrenia				Schizophrenia
295.84	Schizo Nec-Chr Exacerb	Other psychoses	MH	Schizophrenia				Schizophrenia
295.85	Schizophrenia Nec-Remiss	Other psychoses	MH	Schizophrenia				Schizophrenia
295.9	Unspecified Schizophrenia	Other psychoses	MH	Schizophrenia				Schizophrenia
295.90	Schizophrenia Nos-Unspec	Other psychoses	MH	Schizophrenia	Schizophrenia, Undifferentiated Type			Schizophrenia
295.91	Schizophrenia Nos-Subchr	Other psychoses	MH	Schizophrenia				Schizophrenia
295.92	Schizophrenia Nos-Chr	Other psychoses	MH	Schizophrenia				Schizophrenia
295.93	Schizo Nos-Subchr Exacer	Other psychoses	MH	Schizophrenia				Schizophrenia
295.94	Schizo Nos-Chr Exacerb	Other psychoses	MH	Schizophrenia				Schizophrenia
295.95	Schizophrenia Nos-Remiss	Other psychoses	MH	Schizophrenia				Schizophrenia
296	Affective Psychoses	Other psychoses	MH	Bipolar Disorder				Bipolar
296.0	Manic Disorder, Single Episode Hypomania	Other psychoses	MH	Bipolar Disorder				Bipolar
296.00	Manic Disorder-Unspec	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Single Manic Episode, Unspecified			Bipolar
296.01	Manic Disorder-Mild	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Single Manic Episode, Mild			Bipolar
296.02	Manic Disorder-Mod	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Single Manic Episode, Moderate			Bipolar

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Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
296.03	Manic Disorder-Severe	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Single Manic Episode, Severe Without Psychotic Features			Bipolar
296.04	Manic Dis-Severe W Psych	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Single Manic Episode, Severe With Psychotic Features			Bipolar
296.05	Manic Dis-Partial Remiss	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Single Manic Episode, In Partial Remission			Bipolar
296.06	Manic Dis-Full Remission	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Single Manic Episode, In Full Remission			Bipolar
296.1	Manic Disorder, Recurrent Episode	Other psychoses	MH	Bipolar Disorder				Bipolar
296.10	Recur Manic Dis-Unspec	Other psychoses	MH	Bipolar Disorder				Bipolar
296.11	Recur Manic Dis-Mild	Other psychoses	MH	Bipolar Disorder				Bipolar
296.12	Recur Manic Dis-Mod	Other psychoses	MH	Bipolar Disorder				Bipolar
296.13	Recur Manic Dis-Severe	Other psychoses	MH	Bipolar Disorder				Bipolar
296.14	Recur Manic-Sev W Psycho	Other psychoses	MH	Bipolar Disorder				Bipolar
296.15	Recur Manic-Part Remiss	Other psychoses	MH	Bipolar Disorder				Bipolar
296.16	Recur Manic-Full Remiss	Other psychoses	MH	Bipolar Disorder				Bipolar
296.2	Major Depressive Disorder, Single Episode	Other psychoses	MH	Major Depression				Major Depression
296.20	Depress Psychosis-Unspec	Other psychoses	MH	Major Depression	Major Depressive Disorder, Single Episode, Unspecified			Major Depression
296.21	Depress Psychosis-Mild	Other psychoses	MH	Major Depression	Major Depressive Disorder, Single Episode, Mild			Major Depression
296.22	Depressive Psychosis-Mod	Other psychoses	MH	Major Depression	Major Depressive Disorder, Single Episode, Moderate			Major Depression
296.23	Depress Psychosis-Severe	Other psychoses	MH	Major Depression	Major Depressive Disorder, Single Episode, Severe Without Psychotic Features			Major Depression
296.24	Depr Psychos-Sev W Psych	Other psychoses	MH	Major Depression	Major Depressive Disorder, Single Episode, Severe With Psychotic Features			Major Depression
296.25	Depr Psychos-Part Remiss	Other psychoses	MH	Major Depression	Major Depressive Disorder, Single Episode, In Partial Remission			Major Depression
296.26	Depr Psychos-Full Remiss	Other psychoses	MH	Major Depression	Major Depressive Disorder, Single Episode, In Full Remission			Major Depression

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APPENDIX

Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
296.3	Major Depressive Disorder, Recurrent Episode	Other psychoses	MH	Major Depression				Major Depression
296.30	Recurr Depr Psychos-Unsp	Other psychoses	MH	Major Depression	Major Depressive Disorder, Recurrent, Unspecified			Major Depression
296.31	Recurr Depr Psychos-Mild	Other psychoses	MH	Major Depression	Major Depressive Disorder, Recurrent, Mild			Major Depression
296.32	Recurr Depr Psychos-Mod	Other psychoses	MH	Major Depression	Major Depressive Disorder, Recurrent, Moderate			Major Depression
296.33	Recur Depr Psych-Severe	Other psychoses	MH	Major Depression	Major Depressive Disorder, Recurrent, Severe Without Psychotic Features			Major Depression
296.34	Rec Depr Psych-Psychotic	Other psychoses	MH	Major Depression	Major Depressive Disorder, Recurrent, Severe With Psychotic Features			Major Depression
296.35	Recur Depr Psyc-Part Rem	Other psychoses	MH	Major Depression	Major Depressive Disorder, Recurrent, In Partial Remission			Major Depression
296.36	Recur Depr Psyc-Full Rem	Other psychoses	MH	Major Depression	Major Depressive Disorder, Recurrent, In Full Remission			Major Depression
296.4	Bipolar Affective Disorder, Manic Bipolar Disorder, Now Manic Manic-Depressive Psychosis, Circular T	Other psychoses	MH	Bipolar Disorder				Bipolar
296.40	Bipol Aff, Manic-Unspec	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Most Recent Episode (Hypomanic/Manic, Unspecified)			Bipolar
296.41	Bipolar Aff, Manic-Mild	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Most Recent Episode Manic, Mild			Bipolar
296.42	Bipolar Affec, Manic-Mod	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Most Recent Episode Manic, Moderate			Bipolar
296.43	Bipol Aff, Manic-Severe	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Most Recent Episode Manic, Severe Without Psychotic Features			Bipolar
296.44	Bipol Manic-Sev W Psych	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Most Recent Episode Manic, Severe With Psychotic Features			Bipolar
296.45	Bipol Aff Manic-Part Rem	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Most Recent Episode Manic, In Partial Remission			Bipolar

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APPENDIX

Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
296.46	Bipol Aff Manic-Full Rem	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Most Recent Episode Manic, In Full Remission			Bipolar
296.5	Bipolar Affective Disorder, Depressed Bipolar Disorder, Now Depressed Manic-Depressive Psychosis, CI	Other psychoses	MH	Bipolar Disorder				Bipolar
296.50	Bipolar Aff, Depr-Unspec	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Most Recent Episode Depressed, Unspecified			Bipolar
296.51	Bipolar Affec, Depr-Mild	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Most Recent Episode Depressed, Mild			Bipolar
296.52	Bipolar Affec, Depr-Mod	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Most Recent Episode Depressed, Moderate			Bipolar
296.53	Bipol Aff, Depr-Severe	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Most Recent Episode Depressed, Severe Without Psychotic Features			Bipolar
296.54	Bipol Depr-Sev W Psych	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Most Recent Episode Depressed, Severe With Psychotic Features			Bipolar
296.55	Bipol Aff Depr-Part Rem	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Most Recent Episode Depressed, In Partial Remission			Bipolar
296.56	Bipol Aff Depr-Full Rem	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Most Recent Episode Depressed, In Full Remission			Bipolar
296.6	Bipolar Affective Disorder, Mixed Manic-Depressive Psychosis, Circular Type, Mixed	Other psychoses	MH	Bipolar Disorder				Bipolar
296.60	Bipol Aff, Mixed-Unspec	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Most Recent Episode Mixed, Unspecified			Bipolar
296.61	Bipolar Aff, Mixed-Mild	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Most Recent Episode Mixed, Mild			Bipolar
296.62	Bipolar Affec, Mixed-Mod	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Most Recent Episode Mixed, Moderate			Bipolar
296.63	Bipol Aff, Mixed-Severe	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Most Recent Episode Mixed, Severe Without Psychotic Features			Bipolar

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Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
296.64	Bipol Mixed-Sev W Psych	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Most Recent Episode Mixed, Severe With Psychotic Features			Bipolar
296.65	Bipol Aff, Mix-Part Rem	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Most Recent Episode Mixed, In Partial Remission			Bipolar
296.66	Bipol Aff, Mix-Full Rem	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Most Recent Episode Mixed, In Full Remission			Bipolar
296.7	Bipolar Affective Nos	Other psychoses	MH	Bipolar Disorder	Bipolar I Disorder, Most Recent Episode Unspecified			Bipolar
296.70	Invalid Code - 296.7 = Bipolar Affective Nos	Other psychoses	MH	Bipolar Disorder				Bipolar
296.8	Manic-Depressive Psychosis, Other And Unspecified	Other psychoses	MH	Bipolar Disorder				Bipolar
296.80	Manic-Depressive Nos	Other psychoses	MH	Bipolar Disorder	Bipolar Disorder NOS			Bipolar
296.81	Atypical Manic Disorder	Other psychoses	MH	Bipolar Disorder				Bipolar
296.82	Atypical Depressive Dis	Other psychoses	MH	Bipolar Disorder				Bipolar
296.89	Manic-Depressive Nec	Other psychoses	MH	Bipolar Disorder	Bipolar II Disorder			Bipolar
296.9	Other And Unspecified Affective Psychoses	Other psychoses	MH	Major Depression				Dysthymia/Depression NOS
296.90	Affective Psychosis Nos	Other psychoses	MH	Major Depression	Mood Disorder NOS			Dysthymia/Depression NOS
296.99	Affective Psychoses Nec	Other psychoses	MH	Major Depression				Dysthymia/Depression NOS
297	Paranoid States	Other psychoses	MH	Paranoid States				Paranoid States
297.0	Paranoid State, Simple	Other psychoses	MH	Paranoid States				Paranoid States
297.1	Paranoia	Other psychoses	MH	Paranoid States	Delusional Disorder			Paranoid States
297.2	Paraphrenia	Other psychoses	MH	Paranoid States				Paranoid States
297.3	Shared Paranoid Disorder	Other psychoses	MH	Paranoid States	Shared Psychotic Disorder			Paranoid States
297.8	Paranoid States Nec	Other psychoses	MH	Paranoid States				Paranoid States
297.9	Paranoid State Nos	Other psychoses	MH	Paranoid States				Paranoid States
298	Other Nonorganic Psychoses	Other psychoses	MH	Other Nonorganic Psychoses				Other Nonorganic Psychoses
298.0	React Depress Psychosis	Other psychoses	MH	Other Nonorganic Psychoses				Other Nonorganic Psychoses
298.1	Excitativ Type Psychosis	Other psychoses	MH	Other Nonorganic Psychoses				Other Nonorganic Psychoses
298.2	Reactive Confusion	Other psychoses	MH	Other Nonorganic Psychoses				Other Nonorganic Psychoses
298.3	Acute Paranoid Reaction	Other psychoses	MH	Other Nonorganic Psychoses				Other Nonorganic Psychoses
298.4	Psychogen Paranoid Psych	Other psychoses	MH	Other Nonorganic Psychoses				Other Nonorganic Psychoses
298.8	React Psychosis Nec Nos	Other psychoses	MH	Other Nonorganic Psychoses	Brief Psychotic Disorder			Other Nonorganic Psychoses

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APPENDIX

Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
298.80	Invalid Code - 298.8 = React Psychosis Nec Nos	Other psychoses	MH	Other Nonorganic Psychoses				Other Nonorganic Psychoses
298.9	Psychosis Nos	Other psychoses	MH	Unspecified Psychoses	Psychotic Disorder NOS			Other Nonorganic Psychoses
298.90	Invalid Code - 298.9 = Psychosis Nos	Other psychoses	MH	Unspecified Psychoses				Other Nonorganic Psychoses
299	Psychoses With Origin Specific To Childhood	Other psychoses	MH	Psychosis w/Childhood Origin				Autism
299.0	Infantile Autism	Other psychoses	MH	Psychosis w/Childhood Origin				Autism
299.00	Infantile Autism-Active	Other psychoses	MH	Psychosis w/Childhood Origin	Autistic Disorder			Autism
299.01	Infantile Autism-Resid	Other psychoses	MH	Psychosis w/Childhood Origin				Autism
299.1	Disintegrative Psychosis (Heller'S Syndrome)	Other psychoses	MH	Psychosis w/Childhood Origin				Autism
299.10	Disintegr Psych-Active	Other psychoses	MH	Psychosis w/Childhood Origin	Childhood Disintegrative Disorder			Autism
299.11	Disintegr Psych-Residual	Other psychoses	MH	Psychosis w/Childhood Origin				Autism
299.8	Other Specified Early Childhood Psychoses	Other psychoses	MH	Psychosis w/Childhood Origin				Autism
299.80	Child Psychos Nec-Active	Other psychoses	MH	Psychosis w/Childhood Origin	[Asperger's Disorder/Pervasive Developmental Disorder NOS/Rett's Disorder]			Autism
299.81	Child Psychos Nec-Resid	Other psychoses	MH	Psychosis w/Childhood Origin				Autism
299.9	Schizophrenic Syndrome Of Childhood Nos	Other psychoses	MH	Psychosis w/Childhood Origin				Autism
299.90	Child Psychos Nos-Active	Other psychoses	MH	Psychosis w/Childhood Origin				Autism
299.91	Child Psychos Nos-Resid	Other psychoses	MH	Psychosis w/Childhood Origin				Autism
300	Neurotic Disorders	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders				Anxiety
300.0	Anxiety States	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders				Anxiety
300.00	Anxiety State Nos	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders	Anxiety Disorder NOS			Anxiety
300.01	Panic Disorder	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders	Panic Disorder without Agoraphobia			Anxiety
300.02	Generalized Anxiety Dis	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders	Generalized Anxiety Disorder			Anxiety
300.09	Anxiety State Nec	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders				Anxiety
300.1	Hysteria	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders				Somatoform
300.10	Hysteria Nos	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders				Somatoform

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APPENDIX

Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
300.11	Conversion Disorder	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders	Conversion Disorder			Somatoform
300.12	Psychogenic Amnesia	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders	Dissociative Amnesia			Dissociative Disorders
300.13	Psychogenic Fugue	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders	Dissociative Fugue			Dissociative Disorders
300.14	Multiple Personality	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders	Dissociative Identity Disorder			Dissociative Disorders
300.15	Dissociative React Nos	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders	Dissociative Disorder NOS			Dissociative Disorders
300.16	Factitious Ill W Symptom	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders	Factitious Disorder with Predominantly Psychological Signs and Symptoms			Factitious
300.19	Factitious Ill Nec Nos	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders	Factitious Disorder [NOS/with Combined Psychological and Physical Signs and Symptoms/with Predominantly Physical Signs and Symptoms]			Factitious
300.2	Phobic Disorders	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders				Anxiety
300.20	Phobia Nos	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders				Anxiety
300.21	Agoraphobia With Panic	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders	Panic Disorder with Agoraphobia			Anxiety
300.22	Agoraphobia W O Panic	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders	Agoraphobia without History of Panic Disorder			Anxiety
300.23	Social Phobia	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders	Social Phobia			Anxiety
300.29	Isolated Phobias Nec	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders	Specific Phobia			Anxiety
300.3	Obsessive-Compulsive Dis	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders	Obsessive-Compulsive Disorder			Anxiety
300.4	Neurotic Depression-Dysthymic Disorder	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders	Dysthymic Disorder			Dysthymia/Depression NOS
300.40	Invalid code - 300.4 = Neurotic Depression-Dysthymic Disorder	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders				Dysthymia/Depression NOS
300.5	Neurasthenia	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders				Dysthymia/Depression NOS
300.6	Depersonalization Synd	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders	Depersonalization Disorder			Dissociative Disorders
300.7	Hypochondriasis	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders	[Body Dysmorphic Disorder/Hypochondriasis]			Somatoform
300.8	Other Neurotic Disorders	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders				Anxiety

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Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
300.81	Somatization Disorder	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders	Somatization Disorder			Somatoform
300.82	Undiff Somatoform Disrdr	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders	[Somatoform Disorder NOS/Undifferentiated Somatoform Disorder]			Somatoform
300.89	Neurotic Disorders Nec	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders				Anxiety
300.9	Neurotic Disorder Nos	Neurotic disorders, personality disorders, and oth	MH	Neurotic Disorders	Unspecified Mental Disorder (nonpsychotic)			Anxiety
300.99	UNKNOWN	UNKNOWN	MH	Neurotic Disorders				Anxiety
301	Personality Disorders	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Personality
301.0	Paranoid Personality	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Paranoid Personality Disorder			Personality
301.1	Affective Personality Disorder	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Personality
301.10	Affectiv Personality Nos	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Personality
301.11	Chronic Hypomanic Person	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Personality
301.12	Chr Depressive Person	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Personality
301.13	Cyclothymic Disorder	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Cyclothymic Disorder			Bipolar
301.2	Schizoid Personality Disorder	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Personality
301.20	Schizoid Personality Nos	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Schizoid Personality Disorder			Personality
301.21	Introverted Personality	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Personality
301.22	Schizotypal Personality	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Schizotypal Personality Disorder			Personality
301.3	Explosive Personality	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Personality
301.4	Compulsive Personality	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Obsessive-Compulsive Personality Disorder			Personality

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APPENDIX Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
301.5	Histrionic Personality Disorder	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Personality
301.50	Histrionic Person Nos	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Histrionic Personality Disorder			Personality
301.51	Chr Factitious Illness	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Factitious
301.59	Histrionic Person Nec	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Personality
301.6	Dependent Personality	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Dependent Personality Disorder			Personality
301.7	Antisocial Personality	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Antisocial Personality Disorder			Personality
301.8	Other Personality Disorders	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Personality
301.81	Narcissistic Personality	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Narcissistic Personality Disorder			Personality
301.82	Avoidant Personality	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Avoidant Personality Disorder			Personality
301.83	Borderline Personality	Neurotic disorders, personality disorders, and oth	MH	Borderline Personality Disorder	Borderline Personality Disorder			Personality
301.84	Passive-Aggressiv Person	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Personality
301.89	Personality Disorder Nec	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Personality
301.9	Personality Disorder Nos	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Personality Disorder NOS			Personality
302	Sexual Deviations And Disorders	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Sexual
302.0	Ego-Dystonic Homosexlty	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Sexual
302.1	Zoophilia	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Sexual
302.2	Pedophilia	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Pedophilia			Sexual

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APPENDIX Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
302.20	Invalid Code - 302.2 = Pedophilia	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Sexual
302.3	Transvestism	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Transvestic Fetishism			Sexual
302.4	Exhibitionism	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Exhibitionism			Sexual
302.50	Trans-Sexualism Nos	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Sexual
302.51	Trans-Sexualism, Asexual	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Sexual
302.52	Trans-Sexual, Homosexual	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Sexual
302.53	Trans-Sex, Heterosexual	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Sexual
302.6	Psychosex Identity Dis	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Gender Identity Disorder [in Children/NOS]			Sexual
302.7	Psychosexual Dysfunction	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Sexual
302.70	Psychosexual Dysfunc Nos	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Sexual Dysfunction NOS			Sexual
302.71	Inhibited Sexual Desire	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Hypoactive Sexual Desire Disorder [Female Sexual Arousal/Male Erectile] Disorder			Sexual
302.72	Inhibited Sex Excitement	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Sexual
302.73	Inhibited Female Orgasm	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Female Orgasmic Disorder			Sexual
302.74	Inhibited Male Orgasm	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Male Orgasmic Disorder			Sexual
302.75	Premature Ejaculation	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Premature Ejaculation			Sexual
302.76	Functional Dyspareunia	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Dyspareunia (Not due to a general medical condition)			Sexual

Measurement of Metabolic Monitoring in Youth and Adult Medicaid Recipients Prescribed Antipsychotics

APPENDIX

Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
302.79	Psychosexual Dysfunc Nec	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Sexual Aversion Disorder			Sexual
302.8	Other Specified Psychosexual Disorders	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Sexual
302.81	Fetishism	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Fetishism			Sexual
302.82	Voyeurism	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Voyeurism			Sexual
302.83	Sexual Masochism	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Sexual Masochism			Sexual
302.84	Sexual Sadism	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Sexual Sadism			Sexual
302.85	Gend Iden Dis,Adol Adult	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Gender Identity Disorder in Adolescents or Adults			Sexual
302.89	Psychosexual Dis Nec	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Frotteurism			Sexual
302.9	Psychosexual Dis Nos	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	[Paraphilia/Sexual Disorder] NOS			Sexual
302.90	Invalid Code - 302.9 = Psychosexual Dis Nos	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Sexual
303	Alcohol Dependence Syndrome	Neurotic disorders, personality disorders, and oth	SA	Other Substance Related Disorders			Alcohol	Alcohol Related Disorders
303.0	Acute Alcoholic Intoxication	Neurotic disorders, personality disorders, and oth	SA	Other Substance Related Disorders			Alcohol	Alcohol Related Disorders
303.00	Ac Alcohol Intox-Unspec	Neurotic disorders, personality disorders, and oth	SA	Other Substance Related Disorders	Alcohol Intoxication		Alcohol	Alcohol Related Disorders
303.01	Ac Alcohol Intox-Contin	Neurotic disorders, personality disorders, and oth	SA	Other Substance Related Disorders			Alcohol	Alcohol Related Disorders
303.02	Ac Alcohol Intox-Episod	Neurotic disorders, personality disorders, and oth	SA	Other Substance Related Disorders			Alcohol	Alcohol Related Disorders
303.03	Ac Alcohol Intox-Remiss	Neurotic disorders, personality disorders, and oth	SA	Other Substance Related Disorders			Alcohol	Alcohol Related Disorders
303.9	Other And Unspecified Alcohol Dependence Chronic Alcoholism Dipsomania	Neurotic disorders, personality disorders, and oth	SA	Alcohol Dependency		Dependence	Alcohol	Alcohol Related Disorders
303.90	Alcoh Dep Nec Nos-Unspec	Neurotic disorders, personality disorders, and oth	SA	Alcohol Dependency	Alcohol Dependence	Dependence	Alcohol	Alcohol Related Disorders
303.91	Alcoh Dep Nec Nos-Contin	Neurotic disorders, personality disorders, and oth	SA	Alcohol Dependency		Dependence	Alcohol	Alcohol Related Disorders

Measurement of Metabolic Monitoring in Youth and Adult Medicaid Recipients Prescribed Antipsychotics

APPENDIX Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
303.92	Alcoh Dep Nec Nos-Episod	Neurotic disorders, personality disorders, and oth	SA	Alcohol Dependency		Dependence	Alcohol	Alcohol Related Disorders
303.93	Alcoh Dep Nec Nos-Remiss	Neurotic disorders, personality disorders, and oth	SA	Alcohol Dependency		Dependence	Alcohol	Alcohol Related Disorders
304	Drug Dependence	Neurotic disorders, personality disorders, and oth	SA	Other Substance Related Disorders		Dependence	Drug	Drug Related Disorders
304.0	Opioid Type Dependence	Neurotic disorders, personality disorders, and oth	SA	Opioid, Dependency		Dependence	Drug	Opioid Related Disorders
304.00	Opioid Dependence-Unspec	Neurotic disorders, personality disorders, and oth	SA	Opioid, Dependency	Opioid Dependence	Dependence	Drug	Opioid Related Disorders
304.01	Opioid Dependence-Contin	Neurotic disorders, personality disorders, and oth	SA	Opioid, Dependency		Dependence	Drug	Opioid Related Disorders
304.02	Opioid Dependence-Episod	Neurotic disorders, personality disorders, and oth	SA	Opioid, Dependency		Dependence	Drug	Opioid Related Disorders
304.03	Opioid Dependence-Remiss	Neurotic disorders, personality disorders, and oth	SA	Opioid, Dependency		Dependence	Drug	Opioid Related Disorders
304.1	Barbiturate And Similarly Acting Sedative Or Hypnotic Dependence	Neurotic disorders, personality disorders, and oth	SA	Sedat., Hypnotic, Anxiolytic, Dependency		Dependence	Drug	Hypnotic Related Disorders
304.10	Barbiturat Depend-Unspec	Neurotic disorders, personality disorders, and oth	SA	Sedat., Hypnotic, Anxiolytic, Dependency	Sedative, Hypnotic, or Anxiolytic Dependence	Dependence	Drug	Hypnotic Related Disorders
304.11	Barbiturat Depend-Contin	Neurotic disorders, personality disorders, and oth	SA	Sedat., Hypnotic, Anxiolytic, Dependency		Dependence	Drug	Hypnotic Related Disorders
304.12	Barbiturat Depend-Episod	Neurotic disorders, personality disorders, and oth	SA	Sedat., Hypnotic, Anxiolytic, Dependency		Dependence	Drug	Hypnotic Related Disorders
304.13	Barbiturat Depend-Remiss	Neurotic disorders, personality disorders, and oth	SA	Sedat., Hypnotic, Anxiolytic, Dependency		Dependence	Drug	Hypnotic Related Disorders
304.2	Cocaine Dependence	Neurotic disorders, personality disorders, and oth	SA	Cocaine/Crack, Dependency		Dependence	Drug	Cocaine Related Disorders
304.20	Cocaine Depend-Unspec	Neurotic disorders, personality disorders, and oth	SA	Cocaine/Crack, Dependency	Cocaine Dependence	Dependence	Drug	Cocaine Related Disorders
304.21	Cocaine Depend-Contin	Neurotic disorders, personality disorders, and oth	SA	Cocaine/Crack, Dependency		Dependence	Drug	Cocaine Related Disorders
304.22	Cocaine Depend-Episodic	Neurotic disorders, personality disorders, and oth	SA	Cocaine/Crack, Dependency		Dependence	Drug	Cocaine Related Disorders
304.23	Cocaine Depend-Remiss	Neurotic disorders, personality disorders, and oth	SA	Cocaine/Crack, Dependency		Dependence	Drug	Cocaine Related Disorders
304.3	Cannabis Dependence	Neurotic disorders, personality disorders, and oth	SA	Cannabis, Dependency		Dependence	Drug	Cannabis Related Disorders
304.30	Cannabis Depend-Unspec	Neurotic disorders, personality disorders, and oth	SA	Cannabis, Dependency	Cannabis Dependence	Dependence	Drug	Cannabis Related Disorders
304.31	Cannabis Depend-Contin	Neurotic disorders, personality disorders, and oth	SA	Cannabis, Dependency		Dependence	Drug	Cannabis Related Disorders
304.32	Cannabis Depend-Episodic	Neurotic disorders, personality disorders, and oth	SA	Cannabis, Dependency		Dependence	Drug	Cannabis Related Disorders
304.33	Cannabis Depend-Remiss	Neurotic disorders, personality disorders, and oth	SA	Cannabis, Dependency		Dependence	Drug	Cannabis Related Disorders
304.4	Amphetamine And Other Psychostimulant Dependence	Neurotic disorders, personality disorders, and oth	SA	Amphetamine, Dependency		Dependence	Drug	Amphetamine Related Disorders
304.40	Amphetamin Depend-Unspec	Neurotic disorders, personality disorders, and oth	SA	Amphetamine, Dependency	Amphetamine Dependence	Dependence	Drug	Amphetamine Related Disorders

Measurement of Metabolic Monitoring in Youth and Adult Medicaid Recipients Prescribed Antipsychotics

APPENDIX

Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
304.41	Amphetamin Depend-Contin	Neurotic disorders, personality disorders, and oth	SA	Amphetamine, Dependency		Dependence	Drug	Amphetamine Related Disorders
304.42	Amphetamin Depend-Episod	Neurotic disorders, personality disorders, and oth	SA	Amphetamine, Dependency		Dependence	Drug	Amphetamine Related Disorders
304.43	Amphetamin Depend-Remiss	Neurotic disorders, personality disorders, and oth	SA	Amphetamine, Dependency		Dependence	Drug	Amphetamine Related Disorders
304.5	Hallucinogen Dependence	Neurotic disorders, personality disorders, and oth	SA	Hallucinogen, Dependency		Dependence	Drug	Hallucinogen Related Disorders
304.50	Hallucinogen Dep-Unspec	Neurotic disorders, personality disorders, and oth	SA	Hallucinogen, Dependency	Hallucinogen Dependence	Dependence	Drug	Hallucinogen Related Disorders
304.51	Hallucinogen Dep-Contin	Neurotic disorders, personality disorders, and oth	SA	Hallucinogen, Dependency		Dependence	Drug	Hallucinogen Related Disorders
304.52	Hallucinogen Dep-Episod	Neurotic disorders, personality disorders, and oth	SA	Hallucinogen, Dependency		Dependence	Drug	Hallucinogen Related Disorders
304.53	Hallucinogen Dep-Remiss	Neurotic disorders, personality disorders, and oth	SA	Hallucinogen, Dependency		Dependence	Drug	Hallucinogen Related Disorders
304.6	Other Specified Drug Dependence	Neurotic disorders, personality disorders, and oth	SA	Inhalant, Dependency		Dependence	Drug	Inhalant Related Disorders
304.60	Drug Depend Nec-Unspec	Neurotic disorders, personality disorders, and oth	SA	Inhalant, Dependency	[Inhalant/Phencyclidine] Dependence	Dependence	Drug	Inhalant Related Disorders
304.61	Drug Depend Nec-Contin	Neurotic disorders, personality disorders, and oth	SA	Inhalant, Dependency		Dependence	Drug	Inhalant Related Disorders
304.62	Drug Depend Nec-Episodic	Neurotic disorders, personality disorders, and oth	SA	Inhalant, Dependency		Dependence	Drug	Inhalant Related Disorders
304.63	Drug Depend Nec-In Rem	Neurotic disorders, personality disorders, and oth	SA	Inhalant, Dependency		Dependence	Drug	Inhalant Related Disorders
304.7	Combinations Of Opioid Type Drug With Any Other	Neurotic disorders, personality disorders, and oth	SA	Other Substance Related Disorders		Dependence	Drug	Opioid Related Disorders
304.70	Opioid Other Dep-Unspec	Neurotic disorders, personality disorders, and oth	SA	Other Substance Related Disorders		Dependence	Drug	Opioid Related Disorders
304.71	Opioid Other Dep-Contin	Neurotic disorders, personality disorders, and oth	SA	Other Substance Related Disorders		Dependence	Drug	Opioid Related Disorders
304.72	Opioid Other Dep-Episod	Neurotic disorders, personality disorders, and oth	SA	Other Substance Related Disorders		Dependence	Drug	Opioid Related Disorders
304.73	Opioid Other Dep-Remiss	Neurotic disorders, personality disorders, and oth	SA	Other Substance Related Disorders		Dependence	Drug	Opioid Related Disorders
304.8	Combinations Of Drug Dependence Excluding Opioid Type Drug	Neurotic disorders, personality disorders, and oth	SA	Other Substance Related Disorders		Dependence	Drug	Drug Related Disorders
304.80	Comb Drug Dep Nec-Unspec	Neurotic disorders, personality disorders, and oth	SA	Other Substance Related Disorders	Polysubstance Dependence	Dependence	Drug	Drug Related Disorders
304.81	Comb Drug Dep Nec-Contin	Neurotic disorders, personality disorders, and oth	SA	Other Substance Related Disorders		Dependence	Drug	Drug Related Disorders
304.82	Comb Drug Dep Nec-Episod	Neurotic disorders, personality disorders, and oth	SA	Other Substance Related Disorders		Dependence	Drug	Drug Related Disorders
304.83	Comb Drug Dep Nec-Remiss	Neurotic disorders, personality disorders, and oth	SA	Other Substance Related Disorders		Dependence	Drug	Drug Related Disorders
304.9	Drug Addiction Nos	Neurotic disorders, personality disorders, and oth	SA	PCP or Polysubstance, Dependency		Dependence	Drug	Drug Related Disorders

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APPENDIX

Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
304.90	Drug Depend Nos-Unspec	Neurotic disorders, personality disorders, and oth	SA	PCP or Polysubstance, Dependency	Other (or Unknown) Substance Dependence	Dependence	Drug	Drug Related Disorders
304.91	Drug Depend Nos-Contin	Neurotic disorders, personality disorders, and oth	SA	PCP or Polysubstance, Dependency		Dependence	Drug	Drug Related Disorders
304.92	Drug Depend Nos-Episodic	Neurotic disorders, personality disorders, and oth	SA	PCP or Polysubstance, Dependency		Dependence	Drug	Drug Related Disorders
304.93	Drug Depend Nos-Remiss	Neurotic disorders, personality disorders, and oth	SA	PCP or Polysubstance, Dependency		Dependence	Drug	Drug Related Disorders
305	Nondependent Abuse Of Drugs	Neurotic disorders, personality disorders, and oth	SA	Other Substance Related Disorders		Abuse	Drug	Drug Related Disorders
305.0	Alcohol Abuse	Neurotic disorders, personality disorders, and oth	SA	Alcohol Abuse		Abuse	Alcohol	Alcohol Related Disorders
305.00	Alcohol Abuse-Unspec	Neurotic disorders, personality disorders, and oth	SA	Alcohol Abuse	Alcohol Abuse	Abuse	Alcohol	Alcohol Related Disorders
305.01	Alcohol Abuse-Continuous	Neurotic disorders, personality disorders, and oth	SA	Alcohol Abuse		Abuse	Alcohol	Alcohol Related Disorders
305.02	Alcohol Abuse-Episodic	Neurotic disorders, personality disorders, and oth	SA	Alcohol Abuse		Abuse	Alcohol	Alcohol Related Disorders
305.03	Alcohol Abuse-In Remiss	Neurotic disorders, personality disorders, and oth	SA	Alcohol Abuse		Abuse	Alcohol	Alcohol Related Disorders
305.1	Tobacco Use Disorder	Neurotic disorders, personality disorders, and oth	SA	Other Substance Related Disorders	Nicotine Dependence			Tobacco Related Disorders
305.10	Invalid Code - 305.1 = Tobacco Use Disorder	Neurotic disorders, personality disorders, and oth	SA	Other Substance Related Disorders				Tobacco Related Disorders
305.12	Invalid Code - 305.1 = Tobacco Use Disorder	Neurotic disorders, personality disorders, and oth	SA	Other Substance Related Disorders				Tobacco Related Disorders
305.13	Invalid Code - 305.1 = Tobacco Use Disorder	Mental Disorders	SA	Other Substance Related Disorders				Tobacco Related Disorders
305.2	Cannabis Abuse	Neurotic disorders, personality disorders, and oth	SA	Cannabis, Abuse		Abuse	Drug	Cannabis Related Disorders
305.20	Cannabis Abuse-Unspec	Neurotic disorders, personality disorders, and oth	SA	Cannabis, Abuse	Cannabis Abuse	Abuse	Drug	Cannabis Related Disorders
305.21	Cannabis Abuse-Contin	Neurotic disorders, personality disorders, and oth	SA	Cannabis, Abuse		Abuse	Drug	Cannabis Related Disorders
305.22	Cannabis Abuse-Episodic	Neurotic disorders, personality disorders, and oth	SA	Cannabis, Abuse		Abuse	Drug	Cannabis Related Disorders
305.23	Cannabis Abuse-In Remiss	Neurotic disorders, personality disorders, and oth	SA	Cannabis, Abuse		Abuse	Drug	Cannabis Related Disorders
305.3	Hallucinogen Abuse	Neurotic disorders, personality disorders, and oth	SA	Hallucinogen, Abuse		Abuse	Drug	Hallucinogen Related Disorders
305.30	Hallucinog Abuse-Unspec	Neurotic disorders, personality disorders, and oth	SA	Hallucinogen, Abuse	Hallucinogen Abuse	Abuse	Drug	Hallucinogen Related Disorders
305.31	Hallucinog Abuse-Contin	Neurotic disorders, personality disorders, and oth	SA	Hallucinogen, Abuse		Abuse	Drug	Hallucinogen Related Disorders
305.32	Hallucinog Abuse-Episod	Neurotic disorders, personality disorders, and oth	SA	Hallucinogen, Abuse		Abuse	Drug	Hallucinogen Related Disorders
305.33	Hallucinog Abuse-Remiss	Neurotic disorders, personality disorders, and oth	SA	Hallucinogen, Abuse		Abuse	Drug	Hallucinogen Related Disorders
305.4	Barbiturate And Similarly Acting Sedative Or Hypnotic Abuse	Neurotic disorders, personality disorders, and oth	SA	Sedat., Hypnotic, Anxiolytic, Abuse		Abuse	Drug	Hypnotic Related Disorder

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APPENDIX

Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
305.40	Barbiturate Abuse-Unspec	Neurotic disorders, personality disorders, and oth	SA	Sedat., Hypnotic, Anxiolytic, Abuse	Sedative, Hypnotic, or Anxiolytic Abuse	Abuse	Drug	Hypnotic Related Disorder
305.41	Barbiturate Abuse-Contin	Neurotic disorders, personality disorders, and oth	SA	Sedat., Hypnotic, Anxiolytic, Abuse		Abuse	Drug	Hypnotic Related Disorder
305.42	Barbiturate Abuse-Episod	Neurotic disorders, personality disorders, and oth	SA	Sedat., Hypnotic, Anxiolytic, Abuse		Abuse	Drug	Hypnotic Related Disorder
305.43	Barbiturate Abuse-Remiss	Neurotic disorders, personality disorders, and oth	SA	Sedat., Hypnotic, Anxiolytic, Abuse		Abuse	Drug	Hypnotic Related Disorder
305.5	Opioid Abuse	Neurotic disorders, personality disorders, and oth	SA	Opioid, Abuse		Abuse	Drug	Opioid Related Disorders
305.50	Opioid Abuse-Unspec	Neurotic disorders, personality disorders, and oth	SA	Opioid, Abuse	Opioid Abuse	Abuse	Drug	Opioid Related Disorders
305.51	Opioid Abuse-Continuous	Neurotic disorders, personality disorders, and oth	SA	Opioid, Abuse		Abuse	Drug	Opioid Related Disorders
305.52	Opioid Abuse-Episodic	Neurotic disorders, personality disorders, and oth	SA	Opioid, Abuse		Abuse	Drug	Opioid Related Disorders
305.53	Opioid Abuse-In Remiss	Neurotic disorders, personality disorders, and oth	SA	Opioid, Abuse		Abuse	Drug	Opioid Related Disorders
305.6	Cocaine Abuse	Neurotic disorders, personality disorders, and oth	SA	Cocaine/Crack, Abuse		Abuse	Drug	Cocaine Related Disorders
305.60	Cocaine Abuse-Unspec	Neurotic disorders, personality disorders, and oth	SA	Cocaine/Crack, Abuse	Cocaine Abuse	Abuse	Drug	Cocaine Related Disorders
305.61	Cocaine Abuse-Continuous	Neurotic disorders, personality disorders, and oth	SA	Cocaine/Crack, Abuse		Abuse	Drug	Cocaine Related Disorders
305.62	Cocaine Abuse-Episodic	Neurotic disorders, personality disorders, and oth	SA	Cocaine/Crack, Abuse		Abuse	Drug	Cocaine Related Disorders
305.63	Cocaine Abuse-In Remiss	Neurotic disorders, personality disorders, and oth	SA	Cocaine/Crack, Abuse		Abuse	Drug	Cocaine Related Disorders
305.7	Invalid Code - 305.70 = Amphetamine Abuse-Unspec	Neurotic disorders, personality disorders, and oth	SA	Amphetamine, Abuse		Abuse	Drug	Amphetamine Related Disorders
305.70	Amphetamine Abuse-Unspec	Neurotic disorders, personality disorders, and oth	SA	Amphetamine, Abuse	Amphetamine Abuse	Abuse	Drug	Amphetamine Related Disorders
305.71	Amphetamine Abuse-Contin	Neurotic disorders, personality disorders, and oth	SA	Amphetamine, Abuse		Abuse	Drug	Amphetamine Related Disorders
305.72	Amphetamine Abuse-Episod	Neurotic disorders, personality disorders, and oth	SA	Amphetamine, Abuse		Abuse	Drug	Amphetamine Related Disorders
305.73	Amphetamine Abuse-Remiss	Neurotic disorders, personality disorders, and oth	SA	Amphetamine, Abuse		Abuse	Drug	Amphetamine Related Disorders
305.8	Antidepressant Type Abuse	Neurotic disorders, personality disorders, and oth	SA	Other Substance Related Disorders		Abuse	Drug	Antidepressant Abuse
305.80	Antidepress Abuse-Unspec	Neurotic disorders, personality disorders, and oth	SA	Other Substance Related Disorders		Abuse	Drug	Drug Related Disorders
305.81	Antidepress Abuse-Contin	Neurotic disorders, personality disorders, and oth	SA	Other Substance Related Disorders		Abuse	Drug	Drug Related Disorders
305.82	Antidepress Abuse-Episod	Neurotic disorders, personality disorders, and oth	SA	Other Substance Related Disorders		Abuse	Drug	Drug Related Disorders
305.83	Antidepress Abuse-Remiss	Neurotic disorders, personality disorders, and oth	SA	Other Substance Related Disorders		Abuse	Drug	Drug Related Disorders
305.9	Other, Mixed, Or Unspecified Drug Abuse	Neurotic disorders, personality disorders, and oth	SA	Inhalant, Abuse		Abuse	Drug	Drug Related Disorders

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APPENDIX

Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA
Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
305.90	Drug Abuse Nec-Unspec	Neurotic disorders, personality disorders, and oth	SA	Inhalant, Abuse	[Caffeine Intoxication/Inhalant Abuse/Other (or Unknown) Substance Abuse/Phencyclidine Abuse]	Abuse	Drug	Drug Related Disorders
305.91	Drug Abuse Nec-Contin	Neurotic disorders, personality disorders, and oth	SA	Inhalant, Abuse		Abuse	Drug	Drug Related Disorders
305.92	Drug Abuse Nec-Episodic	Neurotic disorders, personality disorders, and oth	SA	Inhalant, Abuse		Abuse	Drug	Drug Related Disorders
305.93	Drug Abuse Nec-In Remiss	Neurotic disorders, personality disorders, and oth	SA	Inhalant, Abuse		Abuse	Drug	Drug Related Disorders
306	Physiological Malfunction Arising From Mental Factors	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Somatoform
306.0	Psychogen Musculskel Dis	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Somatoform
306.1	Psychogenic Respir Dis	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Somatoform
306.2	Psychogen Cardiovasc Dis	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Somatoform
306.3	Psychogenic Skin Disease	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Somatoform
306.4	Psychogenic Gi Disease	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Somatoform
306.50	Psychogenic Gu Dis Nos	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Somatoform
306.51	Psychogenic Vaginismus	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Vaginismus (Not Due to a General Medical Condition)			Somatoform
306.52	Psychogenic Dysmenorrhea	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Somatoform
306.53	Psychogenic Dysuria	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Somatoform
306.59	Psychogenic Gu Dis Nec	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Somatoform
306.6	Psychogen Endocrine Dis	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Somatoform

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APPENDIX Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
306.7	Psychogenic Sensory Dis	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Somatoform
306.8	Psychogenic Disorder Nec	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Somatoform
306.9	Psychogenic Disorder Nos	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				Somatoform
307	Special Symptoms Or Syndromes, Not Elsewhere Classified	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified				Neurologic
307.0	Stammering Stuttering	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified	Stuttering			Neurologic
307.1	Anorexia Nervosa	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified	Anorexia Nervosa			Eating Disorder
307.2	Tics	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified				Neurologic
307.20	Tic Disorder Nos	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified	Tic Disorder NOS			Neurologic
307.21	Transient Tic, Childhood	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified	Transient Tic Disorder			Neurologic
307.22	Chronic Motor Tic Dis	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified	Chronic Motor or Vocal Tic Disorder			Neurologic
307.23	Gilles Tourette Disorder	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified	Tourette's Disorder			Neurologic
307.3	Stereotyped Movements	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified	Stereotypic Movement Disorder			Neurologic
307.4	Specific Disorders Of Sleep Of Nonorganic Origin	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified				Sleep Disorders
307.40	Nonorganic Sleep Dis Nos	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified				Sleep Disorders
307.41	Transient Insomnia	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified				Sleep Disorders
307.42	Persistent Insomnia	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified	[Insomnia Related to...[Indicate the Axis I or Axis II Disorder]/Primary Insomnia]			Sleep Disorders

Measurement of Metabolic Monitoring in Youth and Adult Medicaid Recipients Prescribed Antipsychotics

APPENDIX

Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
307.43	Transient Hypersomnia	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified				Sleep Disorders
307.44	Persistent Hypersomnia	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified	[Hypersomnia Related to...[Indicate the Axis I or Axis II Disorder]/Primary Hypersomnia]			Sleep Disorders
307.45	Disrupt Sleep-Wake Cycle	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified	Circadian Rhythm Sleep Disorder			Sleep Disorders
307.46	Somnambulism Ngth Terror	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified	[Sleep Terror Disorder/Sleepwalking Disorder]			Sleep Disorders
307.47	Sleep Stage Dysfunc Nec	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified	[Dyssomnia NOS/Nightmare Disorder/Parasomnia NOS]			Sleep Disorders
307.48	Repetit Sleep Intrusion	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified				Sleep Disorders
307.49	Nonorganic Sleep Dis Nec	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified				Sleep Disorders
307.5	Other And Unspecified Disorders Of Eating	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified				Eating Disorder
307.50	Eating Disorder Nos	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified	Eating Disorder NOS			Eating Disorder
307.51	Bulimia	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified	Bulimia Nervosa			Eating Disorder
307.52	Pica	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified	Pica			Eating Disorder
307.53	Psychogenic Rumination	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified	Rumination Disorder			Eating Disorder
307.54	Psychogenic Vomiting	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified				Eating Disorder
307.59	Eating Disorder Nec	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified	Feeding Disorder of Infancy or Early Childhood			Eating Disorder
307.6	Enuresis	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified	Enuresis (Not Due to a General Medical Condition)			Childhood Disorder

Measurement of Metabolic Monitoring in Youth and Adult Medicaid Recipients Prescribed Antipsychotics

APPENDIX Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
307.7	Encopresis	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified	Encopresis, Without Constipation and Overflow Incontinence			Childhood Disorder
307.8	Psychalgia	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified				Somatoform
307.80	Psychogenic Pain Nos	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified	Pain Disorder Associated with Psychological Factors			Somatoform
307.81	Tension Headache	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified				Somatoform
307.89	Psychogenic Pain Nec	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified	Pain Disorder Associated with Both Psychological Factors and a General Medical Condition			Somatoform
307.9	Special Symptom Nec Nos	Neurotic disorders, personality disorders, and oth	MH	Special Symptoms or Syndromes, not elsewhere classified	Communication Disorder NOS			Developmental Delays
308	Acute Reaction To Stress	Neurotic disorders, personality disorders, and oth	MH	Acute Reaction to Stress				Anxiety
308.0	Stress React, Emotional	Neurotic disorders, personality disorders, and oth	MH	Acute Reaction to Stress				Anxiety
308.1	Stress Reaction, Fugue	Neurotic disorders, personality disorders, and oth	MH	Acute Reaction to Stress				Anxiety
308.2	Stress React, Psychomot	Neurotic disorders, personality disorders, and oth	MH	Acute Reaction to Stress				Anxiety
308.3	Acute Stress React Nec	Neurotic disorders, personality disorders, and oth	MH	Acute Reaction to Stress	Acute Stress Disorder			Anxiety
308.4	Stress React, Mixed Dis	Neurotic disorders, personality disorders, and oth	MH	Acute Reaction to Stress				Anxiety
308.9	Acute Stress React Nos	Neurotic disorders, personality disorders, and oth	MH	Acute Reaction to Stress				Anxiety
309	Adjustment Reaction	Neurotic disorders, personality disorders, and oth	MH	Adjustment Reaction				Adjustment
309.0	Brief Depressive React	Neurotic disorders, personality disorders, and oth	MH	Adjustment Reaction	Adjustment Disorder with Depressed Mood			Adjustment
309.00	Invalid Code - 309.0 = Brief Depressive React	Neurotic disorders, personality disorders, and oth	MH	Adjustment Reaction				Adjustment
309.1	Prolong Depressive React	Neurotic disorders, personality disorders, and oth	MH	Adjustment Reaction				Adjustment
309.2	With Predominant Disturbance Of Other Emotions	Neurotic disorders, personality disorders, and oth	MH	Adjustment Reaction				Adjustment
309.21	Separation Anxiety	Neurotic disorders, personality disorders, and oth	MH	Adjustment Reaction	Separation Anxiety Disorder			Adjustment
309.22	Emancipation Disorder	Neurotic disorders, personality disorders, and oth	MH	Adjustment Reaction				Adjustment
309.23	Academic Work Inhibition	Neurotic disorders, personality disorders, and oth	MH	Adjustment Reaction				Adjustment

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APPENDIX Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
309.24	Adj React-Anxious Mood	Neurotic disorders, personality disorders, and oth	MH	Adjustment Reaction	Adjustment Disorder with Anxiety			Adjustment
309.28	Adj React-Mixed Emotion	Neurotic disorders, personality disorders, and oth	MH	Adjustment Reaction	Adjustment Disorder with Mixed Anxiety and Depressed Mood			Adjustment
309.29	Adj React-Emotion Nec	Neurotic disorders, personality disorders, and oth	MH	Adjustment Reaction				Adjustment
309.3	Adjust React-Conduct Dis	Neurotic disorders, personality disorders, and oth	MH	Adjustment Reaction	Adjustment Disorder with Disturbance of Conduct			Adjustment
309.30	Invalid Code - 309.3 = Adjust React-Conduct Dis	Neurotic disorders, personality disorders, and oth	MH	Adjustment Reaction				Adjustment
309.4	Adj React-Emotion Conduc	Neurotic disorders, personality disorders, and oth	MH	Adjustment Reaction	Adjustment Disorder with Mixed Disturbance of Emotions and Conduct			Adjustment
309.40	Invalid Code - 309.4 = Adj React-Emotion Conduc	Neurotic disorders, personality disorders, and oth	MH	Adjustment Reaction				Adjustment
309.8	Other Specified Adjustment Reactions	Neurotic disorders, personality disorders, and oth	MH	Adjustment Reaction				Adjustment
309.81	Prolong Posttraum Stress	Neurotic disorders, personality disorders, and oth	MH	Adjustment Reaction	Posttraumatic Stress Disorder			PTSD
309.82	Adjust React-Phys Sympt	Neurotic disorders, personality disorders, and oth	MH	Adjustment Reaction				Adjustment
309.83	Adjust React-Withdrawal	Neurotic disorders, personality disorders, and oth	MH	Adjustment Reaction				Adjustment
309.89	Adjustment Reaction Nec	Neurotic disorders, personality disorders, and oth	MH	Adjustment Reaction				Adjustment
309.9	Adjustment Reaction Nos	Neurotic disorders, personality disorders, and oth	MH	Adjustment Reaction	Adjustment Disorder Unspecified			Adjustment
310	Specific Nonpsychotic Mental Disorders Due To Organic Brain Damage	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				General Medical Condition
310.0	Frontal Lobe Syndrome	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				General Medical Condition
310.1	Organic Personality Synd	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders	Personality Change Due to ... [Indicate the General Medical Condition]			General Medical Condition
310.2	Postconcussion Syndrome	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				General Medical Condition
310.8	Nonpsychot Brain Syn Nec	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				General Medical Condition
310.9	Nonpsychot Brain Syn Nos	Neurotic disorders, personality disorders, and oth	MH	Other Neurotic and Nonpsychotic Mental Disorders				General Medical Condition

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APPENDIX Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
311	Depressive Disorder Nec	Neurotic disorders, personality disorders, and oth	MH	Depressive Disorder, NOS	Depressive Disorder NOS			Dysthymia/Depression NOS
311.0	Invalid Code - 311 = Depressive Disorder Nec	Neurotic disorders, personality disorders, and oth	MH	Depressive Disorder, NOS				Dysthymia/Depression NOS
311.00	Invalid Code - 311 = Depressive Disorder Nec	Neurotic disorders, personality disorders, and oth	MH	Depressive Disorder, NOS				Dysthymia/Depression NOS
312	Disturbance Of Conduct, Not Elsewhere Classified	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified				Conduct
312.0	Undersocialized Conduct Disorder, Aggressive Type	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified				Conduct
312.00	Unsocial Aggress-Unspec	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified				Conduct
312.01	Unsocial Aggression-Mild	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified				Conduct
312.02	Unsocial Aggression-Mod	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified				Conduct
312.03	Unsocial Aggress-Severe	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified				Conduct
312.1	Undersocialized Conduct Disorder, Unaggressive Type	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified				Conduct
312.10	Unsocial Unaggress-Unsp	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified				Conduct
312.11	Unsocial Unaggress-Mild	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified				Conduct
312.12	Unsocial Unaggress-Mod	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified				Conduct
312.13	Unsocial Unaggr-Severe	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified				Conduct
312.2	Socialized Conduct Disorder	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified				Conduct
312.20	Social Conduct Dis-Unsp	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified				Conduct
312.21	Social Conduct Dis-Mild	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified				Conduct
312.22	Social Conduct Dis-Mod	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified				Conduct
312.23	Social Conduct Dis-Sev	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified				Conduct
312.3	Disorders Of Impulse Control, Not Elsewhere Classified	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified				Impulse
312.30	Impulse Control Dis Nos	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified	Impulse-Control Disorder NOS			Impulse
312.31	Pathological Gambling	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified	Pathological Gambling			Impulse
312.32	Kleptomania	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified	Kleptomania			Impulse
312.33	Pyromania	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified	Pyromania			Impulse
312.34	Intermitt Explosive Dis	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified	Intermittent Explosive Disorder			Impulse

Measurement of Metabolic Monitoring in Youth and Adult Medicaid Recipients Prescribed Antipsychotics

APPENDIX

Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
312.35	Isolated Explosive Dis	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified				Impulse
312.39	Impulse Control Dis Nec	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified	Trichotillomania			Impulse
312.4	Mix Dis Conduct Emotion	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified				Conduct
312.40	Invalid Code - 312.4 = Mix Dis Conduct Emotion	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified				Conduct
312.8	Other Specified Disturbances Of Conduct, Not Elsewhere Classified	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified				Conduct
312.81	Cndct Dsrdr Chldhd Onst	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified	Conduct Disorder, Childhood-Onset Type			Conduct
312.82	Cndct Dsrdr Adlscnt Onst	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified	Conduct Disorder, Adolescent-Onset Type			Conduct
312.89	Other Conduct Disorder	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified	Conduct Disorder, Unspecified Onset			Conduct
312.9	Conduct Disturbance Nos	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified	Disruptive Behavior Disorder NOS			Conduct
312.90	Invalid Code - 312.9 = Conduct Disturbance Nos	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Conduct, not elsewhere classified				Conduct
313	Disturbance Of Emotions Specific To Childhood And Adolescence	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Emotions Specific to Childhood & Adolescence				Childhood Disorder
313.0	Overanxious Disorder	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Emotions Specific to Childhood & Adolescence				Childhood Disorder
313.1	Misery Unhappiness Dis	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Emotions Specific to Childhood & Adolescence				Childhood Disorder
313.2	Sensitivity, Shyness, And Social Withdrawal Disorder	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Emotions Specific to Childhood & Adolescence				Childhood Disorder
313.21	Shyness Disorder-Child	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Emotions Specific to Childhood & Adolescence				Childhood Disorder
313.22	Introverted Dis-Child	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Emotions Specific to Childhood & Adolescence				Childhood Disorder
313.23	Elective Mutism	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Emotions Specific to Childhood & Adolescence	Selective Mutism			Childhood Disorder
313.3	Relationship Problems	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Emotions Specific to Childhood & Adolescence				Childhood Disorder
313.8	Other Or Mixed Emotional Disturbances Of Childhood Or Adolescence	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Emotions Specific to Childhood & Adolescence				Childhood Disorder
313.81	Oppositional Disorder	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Emotions Specific to Childhood & Adolescence	Oppositional Defiant Disorder			ODD

Measurement of Metabolic Monitoring in Youth and Adult Medicaid Recipients Prescribed Antipsychotics

APPENDIX

Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
313.82	Identity Disorder	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Emotions Specific to Childhood & Adolescence	Identity Problem			Childhood Disorder
313.83	Academic Underachievement	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Emotions Specific to Childhood & Adolescence				Childhood Disorder
313.89	Emotional Dis Child Nec	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Emotions Specific to Childhood & Adolescence	Reactive Attachment Disorder of Infancy or Early Childhood			Childhood Disorder
313.9	Emotional Dis Child Nos	Neurotic disorders, personality disorders, and oth	MH	Disturbance of Emotions Specific to Childhood & Adolescence	Disorder of Infancy, Childhood, or Adolescence NOS			Childhood Disorder
314	Hyperkinetic Syndrome Of Childhood	Neurotic disorders, personality disorders, and oth	MH	Hyperkinetic Syndrome of Childhood				ADHD
314.0	Attention Deficit Disorder	Neurotic disorders, personality disorders, and oth	MH	Hyperkinetic Syndrome of Childhood				ADHD
314.00	Attn Defic Nonhyperact	Neurotic disorders, personality disorders, and oth	MH	Hyperkinetic Syndrome of Childhood	Attention-Deficit/Hyperactivity Disorder, Predominantly Inattentive Type			ADHD
314.01	Attn Deficit W Hyperact	Neurotic disorders, personality disorders, and oth	MH	Hyperkinetic Syndrome of Childhood	Attention-Deficit/Hyperactivity Disorder [Combined Type/ Predominantly Hyperactive-Impulsive Type]			ADHD
314.1	Hyperkinet W Devel Delay	Neurotic disorders, personality disorders, and oth	MH	Hyperkinetic Syndrome of Childhood				ADHD
314.2	Hyperkinetic Conduct Dis	Neurotic disorders, personality disorders, and oth	MH	Hyperkinetic Syndrome of Childhood				ADHD
314.8	Other Hyperkinetic Synd	Neurotic disorders, personality disorders, and oth	MH	Hyperkinetic Syndrome of Childhood				ADHD
314.9	Hyperkinetic Synd Nos	Neurotic disorders, personality disorders, and oth	MH	Hyperkinetic Syndrome of Childhood	Attention-Deficit/Hyperactivity Disorder NOS			ADHD
314.90	Invalid Code - 314.9 = Hyperkinetic Synd Nos	Neurotic disorders, personality disorders, and oth	MH	Hyperkinetic Syndrome of Childhood				ADHD
315	Specific Delays In Development	Neurotic disorders, personality disorders, and oth	MH	Specific Delays in Development				Developmental Delays
315.0	Invalid Code - 315 = Specific Delays In Development	Neurotic disorders, personality disorders, and oth	MH	Specific Delays in Development				Developmental Delays
315.00	Reading Disorder Nos	Neurotic disorders, personality disorders, and oth	MH	Specific Delays in Development	Reading Disorder			Developmental Delays
315.01	Alexia	Neurotic disorders, personality disorders, and oth	MH	Specific Delays in Development				Developmental Delays
315.02	Developmental Dyslexia	Neurotic disorders, personality disorders, and oth	MH	Specific Delays in Development				Developmental Delays
315.09	Reading Disorder Nec	Neurotic disorders, personality disorders, and oth	MH	Specific Delays in Development				Developmental Delays

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APPENDIX Crosswalk of Diagnostic Categories Between State Categories (DPW) to DSM-IV-TR to Research-IA Categories Used by Community Care Behavioral Health Organization (continued)

diagn1	Description	Subclass	MH SA	DPW_Diagcat	DSM_IV_TR	Abuse Dependency	Alcohol Drug	Research_1A
315.1	Arithmetical Disorder	Neurotic disorders, personality disorders, and oth	MH	Specific Delays in Development	Mathematics Disorder			Developmental Delays
315.2	Oth Learning Difficulty	Neurotic disorders, personality disorders, and oth	MH	Specific Delays in Development	Disorder of Written Expression			Developmental Delays
315.3	UNKNOWN	Neurotic disorders, personality disorders, and oth	MH	Specific Delays in Development				Developmental Delays
315.31	Development Language Dis	Neurotic disorders, personality disorders, and oth	MH	Specific Delays in Development	Expressive Language Disorder			Developmental Delays
315.32	Receptive Language Disrd	Neurotic disorders, personality disorders, and oth	MH	Specific Delays in Development	Mixed Receptive-Expressive Language Disorder			Developmental Delays
315.39	Speech Language Dis Nec	Neurotic disorders, personality disorders, and oth	MH	Specific Delays in Development	Phonological Disorder			Developmental Delays
315.4	Coordination Disorder	Neurotic disorders, personality disorders, and oth	MH	Specific Delays in Development	Developmental Coordination Disorder			Developmental Delays
315.5	Mixed Development Dis	Neurotic disorders, personality disorders, and oth	MH	Specific Delays in Development				Developmental Delays
315.8	Development Delays Nec	Neurotic disorders, personality disorders, and oth	MH	Specific Delays in Development				Developmental Delays
315.9	Development Delay Nos	Neurotic disorders, personality disorders, and oth	MH	Specific Delays in Development	Learning Disorder NOS			Developmental Delays
315.90	Invalid Code - 315.9 = Development Delay Nos	Neurotic disorders, personality disorders, and oth	MH	Specific Delays in Development				Developmental Delays
316	Psychic Factor W Oth Dis	Neurotic disorders, personality disorders, and oth	MH	Personality Disorders	...[Specified Psychological Factor] Affecting...[Indicate the General Medical Condition]			Psychological Factors Affecting Medical Conditions
317	Mild Mental Retardation	Mental retardation	MH	Mental Retardation	Mild Mental Retardation			Mental Retardation
317.0	Invalid Code - 317 = Mild Mental Retardation	Mental retardation	MH	Mental Retardation				Mental Retardation
318	Other Specified Mental Retardation	Mental retardation	MH	Mental Retardation				Mental Retardation
318.0	Mod Mental Retardation	Mental retardation	MH	Mental Retardation	Moderate Mental Retardation			Mental Retardation
318.1	Severe Mental Retardat	Mental retardation	MH	Mental Retardation	Severe Mental Retardation			Mental Retardation
318.10	Invalid Code - 318.1 = Severe Mental Retardat	Mental retardation	MH	Mental Retardation				Mental Retardation
318.2	Profound Mental Retardat	Mental retardation	MH	Mental Retardation	Profound Mental Retardation			Mental Retardation
319	Mental Retardation Nos	Mental retardation	MH	Mental Retardation	Mental Retardation, Severity Unspecified			Mental Retardation

diagn = diagnosis; DPW_Diagcat = Pennsylvania Department of Public Welfare diagnostic categories; DSM-IV-TR = Diagnostic and Statistical Manual, Fourth Edition, Text Revision; MH = mental health; Research_1A = diagnostic categories used for research by Community Care Behavioral Health; SA = substance abuse.