

GNYHA-PSYCKES Quality Collaborative

**Reducing the Use of Antipsychotics with
High or Moderate Risk of Metabolic Side Effects
in Individuals with Cardiometabolic Conditions**

Quarterly Report
Period Ended Sept. 1, 2011

**Table 1: GNYHA-PSYCKES Collaborative
Cardiometabolic Indicator (CMI) Prevalence Over Time**

REPORT DATE	Collaborative Hospital-based Clinics			Non-participating Clinics			p-Value
	Denominator*	High Risk**	%	Denominator*	High Risk**	%	
6/1/2010	4075	1972	48.39	8959	4396	49.07	ns
7/1/2010	4002	1924	48.08	8935	4331	48.47	ns
8/1/2010	3917	1910	48.76	8701	4244	48.78	ns
9/1/2010	4293	2062	48.03	9415	4549	48.32	ns
10/1/2010	4721	2285	48.40	9036	4376	48.43	ns
11/1/2010	4726	2253	47.67	9044	4335	47.93	ns
12/1/2010	4893	2348	47.99	10416	4905	47.09	ns
1/1/2011	4888	2273	46.50	9666	4459	46.13	ns
2/1/2011	4617	2219	48.06	9115	4323	47.43	ns
3/1/2011	4543	2203	48.49	9346	4527	48.44	ns
4/1/2011	4592	2130	46.39	9724	4574	47.04	ns
5/1/2011	4454	2032	45.62	9450	4532	47.96	0.01
6/1/2011	4465	1968	44.08	9531	4539	47.62	0.0001
7/1/2011	4257	1808	42.47	9375	4350	46.40	0.0001
8/1/2011	4186	1736	41.47	8857	4082	46.09	0.0001
9/1/2011	4215	1742	41.33	8900	4180	46.97	0.0001

* Medicaid enrollees with evidence of one or more of the qualifying cardiometabolic conditions (diagnosis of hypertension, cardiovascular disease, hyperlipidemia, obesity, or diabetes/pre-diabetes) who are prescribed ANY antipsychotic medication.

** Medicaid enrollees with evidence of one or more of the qualifying cardiometabolic conditions who are prescribed a moderate- to high-risk antipsychotic (see Appendix A - Methods).

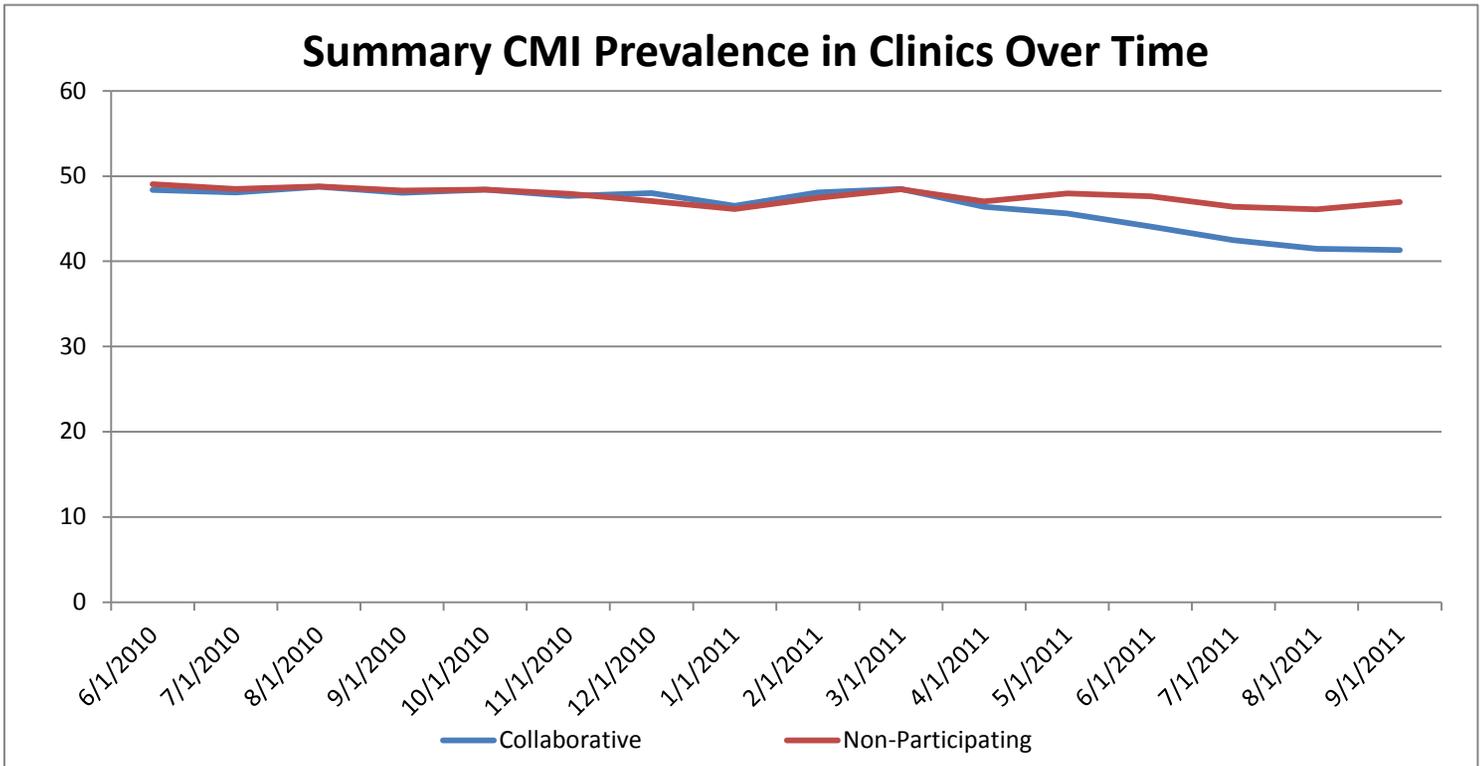
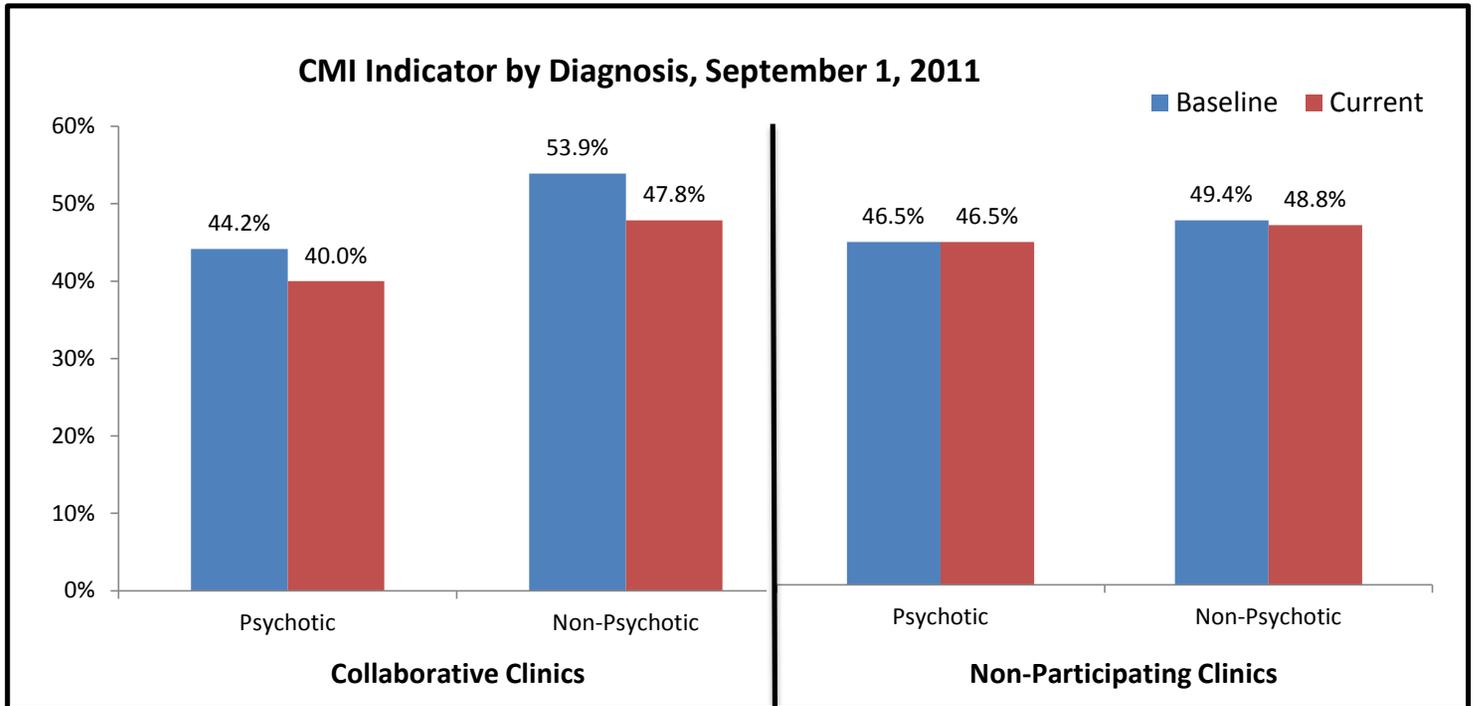


Table 2: GNYHA-PSYCKES Collaborative CMI Prevalence (September 1, 2011)

	Psychotic Dx*			Non-Psychotic Dx		
	High Risk	Denominator	%	High Risk	Denominator	%
Collaborative Hospital-based Clinics*	1398	3496	40.0%	344	719	47.8%
Non-participating Clinics	3291	7077	46.5%	889	1823	48.8%

* Schizophrenia, Schizophreniform Disorder, Schizoaffective Disorder, Bipolar Disorder, Major Depressive Disorders Severe with/without Psychotic Features (29614, 29623, 29624, 29633, 29634, 29682), Substance Abuse Disorders with Psychotic Features (29211, 29212, 29281), Delusional Disorder, Other Psychotic Disorder, Autism and pervasive developmental disorder.



**Table 3: Collaborative Hospital Ranking by Percent Change in CMI Prevalence Rate
Baseline (1-Dec-10) 1-Sep-11**

RANK*	Hospital ID	% Change**	Non-			Non-			Joinpoint Average Annual Percent Change (95% CI)
			CMI Summary	Psychotic Dx	Psychotic Dx	CMI Summary	Psychotic Dx	Psychotic Dx	
1	106	-37.65%	52.86%	52.14%	56.52%	32.95%	34.2%	26.2%	-47 (-53.1, -40.1)
2	112	-27.08%	65.67%	66.33%	63.89%	47.89%	51.0%	39.5%	-34.2 (-59.2, 6.1)
3	103	-25.82%	45.70%	43.55%	55.94%	33.90%	33.2%	37.8%	-32.1 (-36.8, -27)
4	109	-25.80%	48.58%	46.86%	56.52%	36.05%	35.4%	39.3%	-32.8 (-43.2, -20.6)
5	102	-18.79%	45.53%	41.27%	59.65%	36.97%	32.3%	56.5%	-22.2 (-68.2, 90.2)
6	104	-17.92%	50.28%	50.00%	51.85%	41.27%	40.5%	46.7%	-23.7 (-66.8, 75.1)
7	105	-15.56%	52.63%	60.00%	50.00%	44.44%	50.0%	41.7%	-10.3 (-25.6, 8.1)
8	107	-13.71%	42.80%	43.06%	40.74%	36.93%	37.7%	28.6%	-20.2 (-27.8, -11.8)
9	118	-13.15%	45.63%	43.94%	51.95%	39.63%	38.2%	47.1%	-20.1 (-26.8, -12.9)
10	101	-7.50%	49.65%	44.56%	60.44%	45.92%	40.3%	58.1%	-11.9 (-27.9, 7.7)
11	114	-7.20%	44.29%	43.94%	50.00%	41.10%	38.2%	80.0%	-8.7 (-18.9, 2.9)
12	120	-4.97%	41.42%	39.23%	53.06%	39.37%	35.7%	57.7%	-11.7 (-22.4, 0.6)
13	111	-3.99%	57.44%	57.07%	59.32%	55.15%	55.3%	54.3%	-4 (-33.7, 39)
14	110	2.25%	33.11%	28.81%	48.48%	33.86%	27.8%	53.3%	-1.3 (-7.8, 5.7)
15	117	4.35%	40.94%	34.81%	63.89%	42.72%	37.2%	61.8%	-1 (-4.3, 2.5)
16	116	5.43%	47.43%	44.97%	62.75%	50.00%	49.6%	52.4%	-2.2 (-6.7, 2.6)
17	113	8.64%	54.55%	57.89%	50.00%	59.26%	63.2%	50.0%	8.1 (-4.3, 22.1)
18	108	NA	0.00%	0.00%	0.00%	50.00%	66.7%	0.0%	NA
Collaborative Clinics		-13.94%	47.99%	45.90%	56.80%	41.3%	40.0%	47.8%	-19.4 (-23.9, -14.5)
Non-Participating Clinics		-0.53%	47.09%	46.80%	48.10%	46.9%	46.5%	48.8%	-3.5 (-5.4, -1.6)

* Ranking is based on the percent change.

** % change reflects the change in prevalence for Summary CMI from baseline to the most recent Report date (Sept. 1, 2011).

Collaborative Hospital Ranking by Percent Change in CMI Prevalence Rate

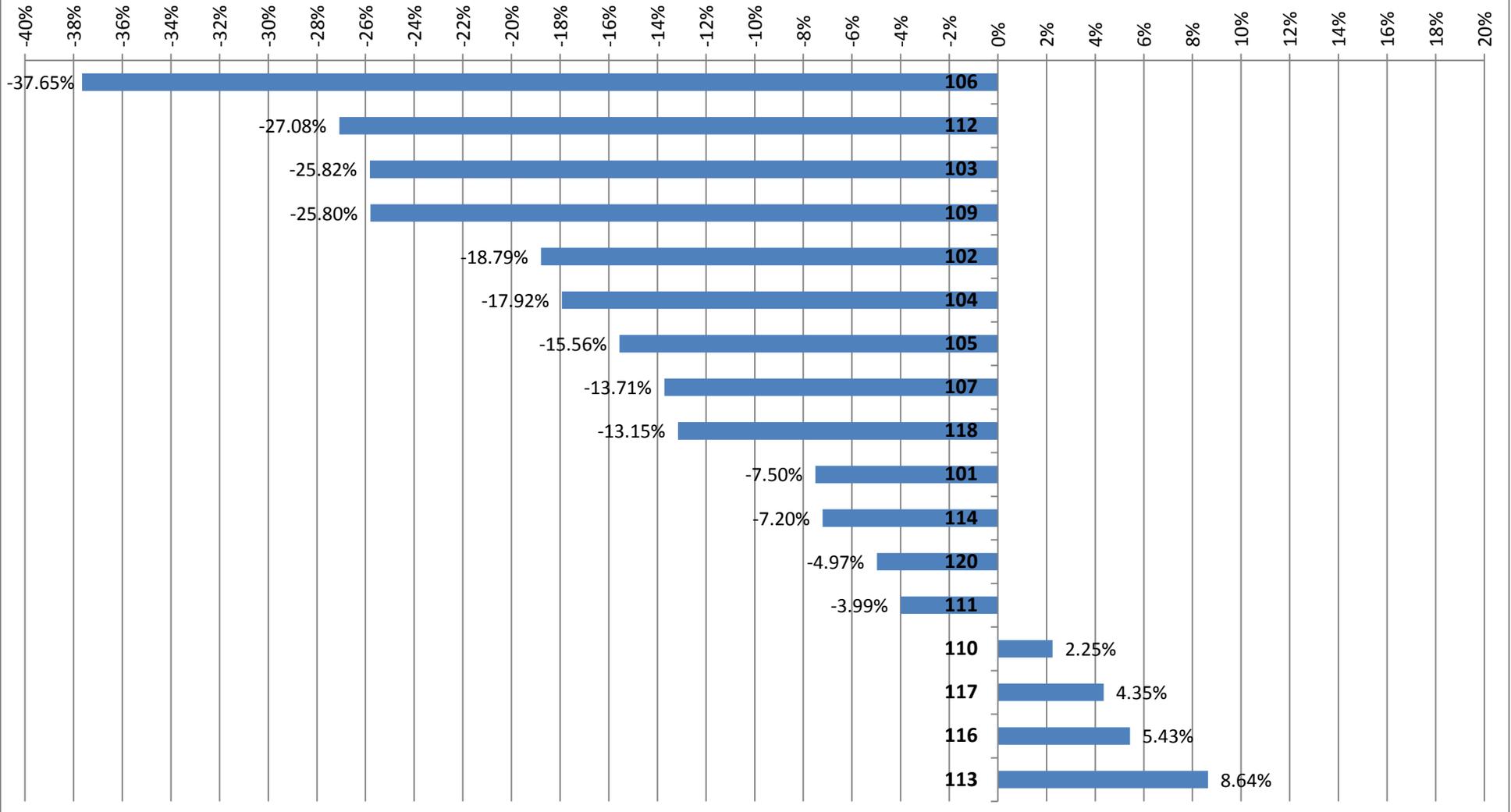


Table 4: Collaborative Hospitals CMI Prevalence, New Starts and AP Discontinued, by Diagnosis

Hospital Id	Baseline (1-Dec-10)									1-Sep-11								
	Psychotic				Non-Psychotic				AP D/C**	Psychotic				Non-Psychotic				AP D/C**
	New Starts*	High Risk	On Any AP	%	New Starts*	High Risk	On Any AP	%		New Starts*	High Risk	On Any AP	%	New Starts*	High Risk	On Any AP	%	
101	3 (3.5%)	86	193	44.6%	2 (3.6%)	55	91	60.4%	8 (5.7%)	2 (3.1%)	64	159	40.3%	3 (7.0%)	43	74	58.1%	13 (12.1%)
102	6 (7.7%)	78	189	41.3%	3 (8.8%)	34	57	59.6%	9 (8.0%)	4 (12.9%)	31	96	32.3%	0 (0.0%)	13	23	56.5%	8 (18.2%)
103	12 (4.0%)	297	682	43.5%	10 (12.5%)	80	143	55.9%	17 (4.5%)	9 (4.1%)	219	659	33.2%	2 (4.8%)	42	111	37.8%	23 (8.8%)
104	3 (4.0%)	75	150	50.0%	2 (14.3%)	14	27	51.9%	6 (6.7%)	0 (0.0%)	45	111	40.5%	0 (0.0%)	7	15	46.7%	3 (5.8%)
105	0	3	5	60.0%	2 (28.6%)	7	14	50.0%	1 (10.0%)	0 (0.0%)	3	6	50.0%	0 (0.0%)	5	12	41.7%	0 (0.0%)
106	14 (11.5%)	122	234	52.1%	1 (3.8%)	26	46	56.5%	6 (4.1%)	5 (6.6%)	76	222	34.2%	0 (0.0%)	11	42	26.2%	9 (10.3%)
107	6 (6.5%)	93	216	43.1%	0	11	27	40.7%	7 (6.7%)	3 (3.6%)	83	220	37.7%	1 (16.7%)	6	21	28.6%	5 (5.6%)
108	0	0	1	0.0%	0	0	0	0.0%		0 (0.0%)	2	3	66.7%	0 (0.0%)	0	1	0.0%	0 (0.0%)
109	10 (6.7%)	149	318	46.9%	7 (17.9%)	39	69	56.5%	16 (8.5%)	3 (2.9%)	102	288	35.4%	0 (0.0%)	22	56	39.3%	12 (9.7%)
110	2 (5.9%)	34	118	28.8%	1 (6.3%)	16	33	48.5%	3 (6.0%)	0 (0.0%)	27	97	27.8%	0 (0.0%)	16	30	53.3%	4 (9.3%)
111	17 (5.0%)	343	601	57.1%	6 (8.6%)	70	118	59.3%	19 (4.6%)	11 (3.4%)	325	588	55.3%	0 (0.0%)	50	92	54.3%	49 (13.1%)
112	3 (4.6%)	65	98	66.3%	0	23	36	63.9%	3 (3.4%)	4 (7.5%)	53	104	51.0%	0 (0.0%)	15	38	39.5%	3 (4.4%)
113	0	11	19	57.9%	2 (28.6%)	7	14	50.0%	1 (5.6%)	2 (16.7%)	12	19	63.2%	0 (0.0%)	4	8	50.0%	2 (12.5%)
114	0	29	66	43.9%	0	2	4	50.0%	4 (12.9%)	0 (0.0%)	26	68	38.2%	0 (0.0%)	4	5	80.0%	2 (6.7%)
116	7 (4.9%)	143	318	45.0%	3 (9.4%)	32	51	62.7%	15 (8.6%)	4 (6.9%)	58	117	49.6%	0 (0.0%)	11	21	52.4%	3 (4.3%)
117	6 (6.4%)	94	270	34.8%	4 (8.7%)	46	72	63.9%	6 (4.3%)	3 (3.4%)	87	234	37.2%	4 (9.5%)	42	68	61.8%	14 (10.9%)
118	5 (3.9%)	127	289	43.9%	2 (5.0%)	40	77	51.9%	15 (9.0%)	3 (2.9%)	104	272	38.2%	1 (4.2%)	24	51	47.1%	11 (8.6%)
120	5 (4.9%)	102	260	39.2%	1 (3.8%)	26	49	53.1%	8 (6.3%)	4 (4.3%)	94	263	35.7%	2 (6.7%)	30	52	57.7%	6 (4.8%)
Collaborative Clinics	97 (5.3%)	1823	3969	45.9%	46 (8.8%)	525	924	56.8%	142 (6.0%)	57 (4.1%)	1398	3496	40.0%	13 (3.8%)	344	719	47.8%	166 (9.5%)
Total Non-Participating	227 (6.0%)	3798	8116	46.8%	93 (8.4%)	1107	2300	48.1%	409 (8.3%)	175 (5.3%)	3291	7077	46.5%	71 (8.0%)	889	1823	48.8%	390 (9.3%)

* New Starts defined as recipients not observed on a high risk AP in the past 6 months. Values in parentheses are percent of High Risk.

** AP discontinued defined as no AP in the past 35 days, among clients who previously met criteria in the month before the report date. Values in parentheses are percent of High Risk.

Appendix A: Methods

Moderate to High Risk Antipsychotics

Antipsychotic medications with a moderate to high risk for cardiometabolic disorders for ages 18 and over: chlorpromazine (Thorazine); olanzapine (Zyprexa); quetiapine (Seroquel); thioridazine (Mellaril) **Antipsychotic medications with a moderate to high risk for cardiometabolic disorders for ages under 18:** chlorpromazine (Thorazine); clozapine (Clozaril); fluphenazine (Prolixin); haloperidol (Haldol); loxapine (Loxitane); olanzapine (Zyprexa); paliperidone (Invega); perphenazine (Trilafon); pimozide (Orap); prochlorperazine (Compazine); quetiapine (Seroquel); risperidone (Risperdal); thioridazine (Mellaril); thiothixene (Navane); trifluoperazine (Stelazine);triflupromazine (Vesprin)

Prevalence

The prevalence for the cardiometabolic indicator (as well as split by psychiatric diagnosis) was calculated using Medicaid claims data for both participating and non-participating clinics for a sixteen month period: June 2010 to Sept. 2011. The numerator (column titled "High Risk" in reports) includes individuals with an active high to moderate risk antipsychotic, among those individuals on an antipsychotic with evidence of Diabetes, Hyperlipidemia, Hypertension, Obesity, and/or IVD/AMI (column titled 'Total' or the denominator).

Percent Change

The percent change was calculated as the (current prevalence minus the baseline prevalence) divided by the baseline prevalence. In all cases the baseline prevalence is considered to be December 1, 2010.

Joinpoint Regression Average Annual Percent Change (AAPC)

The Joinpoint software was created by the National Cancer Institute to improve the ability to monitor trends in cancer incidence and prevalence over time (see <http://srab.cancer.gov/joinpoint/>). The program uses prevalence/incidence data over time to fit the simplest model possible and identify "joinpoints" or identify when a trend begins to shift. The program starts with the simplest model (no "joinpoints" or shifts in the trend, in other words, a straight line) and compares it to up to 4 potential shifts in the trend, using a Monte Carlo Permutation method. Overall, identified joinpoints indicate that a significant shift in the trend has occurred. Further, the software calculates the average percent change for each segment of the line identified by the joinpoints, as well as the average annual/monthly percent change. The average annual/monthly percent change is calculated by averaging the percent change/slope for the period since baseline (December 2010 to the last report date in the quarter), weighting the averages by the number of observations in each joinpoint segment. The advantage in using the joinpoint average annual/monthly percent change is that it does not assume a linear trajectory and allows for the comparison of trends across rare and more common proportions (it is a relative measure of change) for a standard period of time.

New Starts

Newly identified clients on a high to moderate risk antipsychotic with evidence of a cardiometabolic condition who had not met criteria for the cardiometabolic indicator in the past six months.

D/c (Discontinuations)

The number of clients that had met criteria for the indicator in the past month, but were not observed to be on a high to moderate risk antipsychotic in the current month.

Psychiatric Diagnosis Appropriate for Antipsychotic Use

Client had one or more paid claims in the past year with a Schizophrenia, Schizophreniform Disorder, Schizoaffective Disorder, Delusional Disorder, Other Psychotic Disorder, Bipolar Disorder, Substance Abuse with Psychotic Disorder (29211, 29212, 29281), Major Depressive Severe/Recurrent with and without Psychotic Features (29614, 29623, 29624, 29633, 29634, 29682), and/or Autism and pervasive developmental disorder diagnosis.