

# Measure Submission Summary

**Measure Name**

Metabolic Monitoring for Children and Adolescents on Antipsychotics

**Measure Number:**

0150

**NQF ID:**

NA

**Collection:**

NA

**Set:**

Safe and Judicious Use of Antipsychotics in Children and Adolescents

**Subset:**

NA

**Composite:**

NA

**Denominator:**

Children and adolescents age 1 to 20 years old who have had two or more antipsychotic medications dispensed on separate dates of service during the measurement year.

Age Stratification: 1-5 years, 6-11 years, 12-17 years, 18-20 years

Continuous Eligibility: At least 12 months

Benefit: Medical and Pharmacy

**Numerator:**

At least one test for blood glucose or HbA1c AND at least one test for LDL-C or cholesterol during the measurement year.

**Data Sources:**

Administrative Data (e.g claims data),

**Numerator Exclusions:**

None

**Denominator Exclusions:**

None

**Measure Owner:**

The measure owner is the National Committee for Quality Assurance (NCQA).

**Description:**

The percentage of children and adolescents 1 to 20 years of age with two or more antipsychotic prescriptions who had metabolic monitoring during the measurement year.

*Note: A higher rate indicates better performance.*

**Summary Statement:**

This measure assesses whether children and adolescents who are taking antipsychotic medications received metabolic monitoring. Antipsychotics are associated with potentially adverse metabolic impacts that include weight gain, diabetes and cardiovascular concerns. Given the potential negative effects of these issues on children's developmental trajectory, it is critical to continuously monitor metabolic indices to ensure appropriate management of side-effects. The measure is part of a set that assesses the safe and judicious use of antipsychotics in children and adolescents; the set also includes a measure that separately assesses whether youth received a baseline metabolic screening when they are first prescribed antipsychotics.

This measure is specified for administrative claims and is intended for use by states and health plans. Testing results suggest the measure is highly feasible, valid and reliable at both the state- and health-plan levels. Testing also showed poor performance among both plans and states, suggesting room for improvement. Extensive feedback from multiple and varied stakeholders found the measure to be understandable and meaningful. Targeted feedback from stakeholders with a particular interest in antipsychotics, including state Medicaid directors and those working within the foster care system, indicated the measure is a high priority in the youth population.

**Evidence of General Importance:**

Antipsychotic medication use is an important area of interest for pediatric measures development given the growing use in children and adolescents. While antipsychotics offer the potential for effective treatment of psychiatric disorders in children, these medications are associated with a number of potentially adverse impacts, including weight gain (Correll et al., 2009), diabetes (Andrade et al. 2011; Bobo et al., 2013) and cardiovascular problems (Srinivasan et al., 2002; Baker et al., 2007). Due to the potential negative health consequences associated with cardiometabolic side effects from an antipsychotic, it is important to both establish a baseline and continuously monitor metabolic indices to ensure appropriate management. **Thus, this measure assesses whether youth who have ongoing use of antipsychotics received metabolic monitoring.** The measure is part of a set that assesses the safe and judicious use of antipsychotics in children and adolescents. The set includes a measure that assesses whether youth with a new prescription of antipsychotics received baseline metabolic screening.

**Prevalence of Antipsychotic Prescribing and Health Impact**

Antipsychotic prescribing for children has increased rapidly in recent decades, driven both by new

prescriptions as well as longer duration of use. The frequency of prescribing antipsychotics among youth increased almost fivefold from 1996 to 2002, from 8.6 per 1000 children to 39.4 per 1000. Antipsychotics are associated with metabolic concerns. For example, a multi-year study of youth enrolled in three health maintenance organizations found that exposure to atypical antipsychotics was associated with a fourfold risk of diabetes in the following year, compared with children not prescribed a psychotropic medication, the broader class of medications under which antipsychotics fall (Andrade et al., 2011). Another study of youth enrolled in a state Medicaid plan found that those starting an antipsychotic had three times the risk of developing diabetes, compared with youth starting other psychotropic medications (Bobo, 2013). The association of atypical antipsychotics with diabetes has been found to be greater among children and adolescents than among adults (Hammerman et al., 2008). Research also suggests that metabolic problems in childhood and adolescence are associated with poor cardiometabolic outcomes (Srinivasan et al., 2002). Long-term consequences of pediatric obesity and other metabolic disturbances include higher risk of heart disease in adulthood (Baker et al., 2007).

### **Fiscal Burden**

Although there is little research available on the fiscal burden associated with adverse effects of antipsychotic use among children and adolescents, one study of Medicaid-enrolled youth on antipsychotics found that health care costs for patients who developed cardiometabolic side effects were 34 percent higher than those who did not (Jerrell, 2009). Further, diabetes is one of the most expensive chronic conditions in children (Imperatore et al., 2012). Proper screening and monitoring can contribute to early detection and management of cardiometabolic side effects and thus reduce long-term costs.

### **Opportunity for Improvement**

Despite publication of guidelines by the American Diabetes Association and American Psychiatric Association that recommend metabolic screening and monitoring for individuals prescribed atypical antipsychotics regardless of age, screening rates for children and adolescents are lower than those of adults. For example, a study of Medicaid-enrolled children in three states found that only a third of youth starting an atypical antipsychotic received a glucose test, and only 14 percent received a lipid test—far lower than rates reported for adults (Morrato et al., 2010). The association of atypical antipsychotics with diabetes has been found to be greater among children and adolescents than adults (Hammerman et al., 2008).

### **Health Care Disparities**

There is little research on potential disparities in metabolic monitoring for youth prescribed antipsychotics. One study found that race/ethnicity was not associated with glucose or lipid screening rates (Morrato et al., 2010). However, among adults, in general, minority groups are at much greater risk for diabetes than whites (Centers for Disease Control and Prevention, 2011).

The CHIPRA Pediatric Quality Measures Program (PQMP) Candidate Measure Submission Form (CPCF)

was approved by the Office of Management and Budget (OMB) in accordance with the Paperwork Reduction Act.

The OMB Control Number is 0935-0205 and the Expiration Date is December 31, 2015.