

Appendix 1. Guidelines and Measure-Specific Testing Results Follow-Up Visit for Children and Adolescents on Antipsychotics

Guidelines Supporting Follow-Up Visits for Children and Adolescents on Antipsychotics

Organization (Year)	Population	Recommendation	Grade*
American Academy of Child and Adolescent Psychiatry (2009)	Children and adolescents	Practice Parameter on the Use of Psychotropic Medication in Children and Adolescents, Principle 5, "The prescriber develops a plan to monitor the patient, short and long term," states that "the frequency of visits is determined by the need for dose titration, by the timing of onset of side effects, and to maintain the doctor-family-patient relationship."	Not specified – "Best practice principles"
American Academy of Child and Adolescent Psychiatry (2011)	Children and adolescents	AACAP Practice Parameters for the Use of Atypical Antipsychotic Medications in Children and Adolescents, three recommendations rated as a "Clinical Standard" call for follow-up care for all youth on atypical antipsychotics agents (AAA): Recommendation 11. "BMI should be obtained at baseline and monitored at regular intervals. Recommendation 12. "Careful attention should be given to the increased risk of developing diabetes with the use of AAAs, and blood glucose levels and other parameters should be obtained at baseline and monitored at regular intervals." Recommendation 14. "Measurements of movement disorders utilizing structured measures, such as the Abnormal Involuntary Movement Scale, should be done at baseline and at regular intervals during the treatment and during tapering of the AAA."	Clinical Standard (rigorous empirical evidence and/or overwhelming clinical consensus)
		Recommendation 10. "The acute and long-term safety of these medications [atypical antipsychotics] has not been fully evaluated and therefore careful and frequent monitoring of side effects should be performed." Under this recommendation the American Diabetes Association/ American Psychiatric Association monitoring recommendations are endorsed. The most frequent metabolic monitoring is recommended for weight/ BMI: monthly for the first 3 months, then quarterly.	Clinical guideline (based on strong empirical evidence and/or strong clinical consensus)
American Academy of Child and Adolescent Psychiatry (2001)	Children and adolescents	Practice Parameter for the Assessment and Treatment of Children and Adolescents with Schizophrenia: Psychopharmacological recommendations rated as Minimum Standards (MS) "Antipsychotic agents are recommended for the treatment of the psychotic symptoms associated with schizophrenia" (MS) "The use of antipsychotic agents require: (MS) ... 3.Documentation of any required baseline and follow-up laboratory monitoring, dependent upon agent being used. 4.Documentation of treatment response. 5.Documentation of suspected side-effects (e.g. extrapyramidal side effects, weight gain, ...) 7.Long term monitoring to reassess dosage needs, dependent upon the stage of illness.	Minimum Standard (substantial empirical evidence, or overwhelming clinical consensus)

Organization (Year)	Population	Recommendation	Grade*
		Practice Parameter for the Assessment and Treatment of Children and Adolescents with Schizophrenia: Under Literature Review (statements are not rated; literature review supports recommendations) "During the acute psychotic phase, either frequent outpatient visits or hospitalization is needed ... Once the patient is stabilized, the monitoring should first occur at least weekly ... with the frequency then decreasing as clinically indicated." Under Literature Review: Treatment - Recovery/Residual Phase "Physician contact, however, should be maintained ... (at least monthly) to adequately monitor symptom course, side effects, and compliance, while also directing any necessary psychosocial interventions."	Not specified – included in summary of Literature
American Academy of Child and Adolescent Psychiatry (2007)	Children and adolescents	Practice Parameter for the Assessment and Treatment of Children and Adolescents with Bipolar Disorder: "Recommendation 8: Psychopharmacological interventions require baseline and follow-up symptom, side-effect (including patients' weight) and laboratory monitoring as indicated. The atypical antipsychotics as a class are associated with significant weight gain and other metabolic problems (e.g. type 2 diabetes, hyperlipidemia). Thus the American Diabetic Association's recommendations for managing weight gain for patients taking antipsychotics should be followed.....The body mass index should be followed monthly for 3 months and then quarterly."	Minimal Standard (rigorous empirical evidence and/or overwhelming clinical consensus)
AACAP sponsored	Very young children	Psychopharmacological Treatment for the Very Young Children: Contexts and Guidelines Disruptive Behavior Disorder (DBD) Algorithm: "Stage 2: (If) DBD is causing severe persistent impairment and symptoms (then) Risperidone x 6 weeks. (If Risperidone leads to improvement) Continue Risperidone for 6 month trial <i>with regular monitoring of symptoms and adverse effects</i> " Explanatory comment (unrated): "Before initiating medication, structured measures should be used to identify baseline symptomatology and these should be <i>administered at least monthly during treatment.</i> "	Children and Adolescents: A (RCTs, large meta-analyses, or overwhelming clinical consensus) Preschool children: C (single case reports or no reports, recommendation developed by PWG based on clinical and research experiences)
TX Department of Family and Protective Services (2010)	Children in foster care (no age specified)	General Principles section includes the statement, "The frequency of clinician follow-up with the patient should be appropriate for the severity of the child's condition and adequate to monitor response to treatment including: symptoms, behavior, function, and potential medication side effects."	Not specified

Guideline References

- American Academy of Child and Adolescent Psychiatry. Sep 2009. Practice parameter on the use of psychotropic medication in children and adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*. 48(9):961–73.
- American Academy of Child and Adolescent Psychiatry. Practice Parameter for the Use of Atypical Antipsychotic Medications in Children and Adolescents. 2011. http://www.aacap.org/App_Themes/AACAP/docs/practice_parameters/Atypical_Antipsychotic_Medications_Web.pdf (Accessed Jul 12, 2012)
- American Academy of Child and Adolescent Psychiatry. July 2001. Practice parameter for the assessment and treatment of children and adolescents with schizophrenia. *Journal of the American Academy of Child and Adolescent Psychiatry*. 40(7 Suppl):4S–23S.
- Gleason, M.M., H.L. Egger, G.J. Emslie, et al. December 2007. Psychopharmacological treatment for very young children: contexts and guidelines. *Journal of the American Academy of Child and Adolescent Psychiatry*. 46(12):1532–72.

McClellan J., R. Kowatch, R.L. Findling. Jan 2007. Practice parameter for the assessment and treatment of children and adolescents with bipolar disorder. Journal of the American Academy of Child and Adolescent Psychiatry.46(1):107–25.

Texas Department of Family and Protective Services and University of Texas at Austin College of Pharmacy. 2013. Psychotropic Medication Utilization Parameters for Foster Children. http://www.dfps.state.tx.us/documents/Child_Protection/pdf/TxFosterCareParameters-September2013.pdf (Accessed Oct 22, 2013)

Measure-Specific Testing Results

Table 1. Proportion of Children/Adolescents who Received a Follow-up Visit with a Prescriber by Race/Ethnicity among General and Foster Care Populations

RACE/ETHNICITY	General Population (%)	Foster Care Population (%)
White Non-Hispanic	70.5	75.3
Black Non-Hispanic	65.6	69.1
Hispanic	75.6	72.4
Other	69.0	71.9
Unknown	74.6	68.3

Table 2. Average State Performance by Population

	General Population (%)	Foster Care Population (%)
Follow-Up Visit for Children and Adolescents on Antipsychotics	72.8	75.3

Table 3. Proportion of Children/Adolescents who Received a Follow-up Visit with a Prescriber by Rurality/Urbanicity among General and Foster Care Populations

Urbanicity at the County Level	General Population (%)	Foster Care Population (%)
METROPOLITAN	68.9	72.0
NON-METROPOLITAN	72.7	75.9
RURAL	76.4	73.0

Table 4. Follow-up Visit for Children and Adolescents on Antipsychotics by State

STATE	General Population			Foster Care Population		
	%	Denominator	Numerator	%	Denominator	Numerator
AZ	78.2	2,362	1,815	86.9	237	204
GA	71.3	3,856	2723	77.3	651	497
IN	60.2	5,607	3329	67.4	481	314
KS	75.0	1,633	1200	76.2	478	357
KY	76.4	3,490	2630	78.3	451	345
MI	69.0	6,196	4265	59.2	929	549

STATE	General Population			Foster Care Population		
	%	Denominator	Numerator	%	Denominator	Numerator
MO	68.7	4,249	2804	77.9	855	616
NM	81.2	1,164	941	83.2	113	94
RI	74.9	510	358	71.0	100	62
Min	60.2	510	358	59.2	100	62
25 th	69.0	1,601	1,200	71.3	233	204
Median	74.9	3,490	2,630	77.3	478	345
Mean	72.8	3,180	2,229	75.3	465	338
75 th	76.4	4,100	2,804	77.9	645	497
Max	81.2	6,196	4,265	86.9	929	616

Data source: MAX 2008

Note: California and New York were excluded due to data quality issues in the MAX 2008 data.

Table 5. Follow-up Visit for Children and Adolescents on Antipsychotics by Health Plan

PLAN	%	Denominator	Numerator
Plan 1	82.1	626	514
Plan 2	80.5	1371	1104
Plan 3	71.0	441	313
Plan 4	78.7	592	466
Plan 5	80.0	1719	1375
Plan 6	83.5	960	802
Plan 7	85.3	177	151
Plan 8	81.1	1357	1101
Plan 9	81.8	325	266
Plan 10	78.9	123	97
Plan 11	74.4	164	122
Plan 12	77.2	939	725
Plan 13	70.4	736	518
Plan 14	98.7	155	153
Plan 15	80.9	638	516
Plan 16	78.8	66	52
Plan 17	86.7	256	222
Min	70.4	66	52
25 th	78.7	177	153

PLAN	%	Denominator	Numerator
Median	80.5	592.0	466.0
Mean	80.6	626.2	499.8
75 th	82.1	939	725
Max	98.7	1719	1375

Data Source: NYS Medicaid Managed Care Plan Data, 2010

Note: Continuous eligibility with the plan is defined as 4 months prior and 1 month following a new script. Cohort excludes dual eligibles.