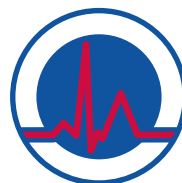


2016-2017

Florida Best Practice Psychotherapeutic Medication Guidelines for Children and Adolescents



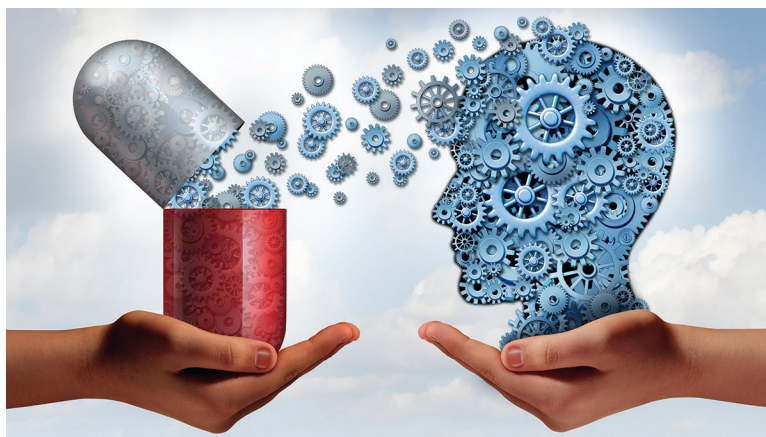
FLORIDA
MEDICAID DRUG
THERAPY MANAGEMENT
PROGRAM FOR
BEHAVIORAL HEALTH



AGENCY FOR
HEALTH CARE
ADMINISTRATION

medicaidmentalhealth.org

Please visit our website to view:



- Electronic versions of our guidelines can be downloaded in full or partial
- News and announcements
- Video presentations
- Staff publications
- Alerts of recent publications and related literature
- Resources and tools
- Current projects

www.medicaidmentalhealth.org

These guidelines are available in the public domain and do not require permission from the authors for use. However, we request when using any of its content that the publication is cited as follows:

2016-2017 Florida Best Practice Psychotherapeutic Medication Guidelines for Children and Adolescents (2017). The University of South Florida, Florida Medicaid Drug Therapy Management Program sponsored by the Florida Agency for Health Care Administration (AHCA).

© January 2017

[medicaidmentalhealth.org](http://www.medicaidmentalhealth.org)

TABLE OF CONTENTS

Introduction.....	3
Principles of Practice Regarding the Use of Psychotropic Medication in Children under Age 6	6
Principles of Practice Regarding the Use of Psychotropic Medication in Children and Adolescents 6 to 17 Years Old	9
General Procedures for Monitoring Side Effects of Antipsychotic Medication in Children and Adolescents.....	11
Attention Deficit Hyperactivity Disorder (ADHD) in Children under Age 6	14
Attention Deficit Hyperactivity Disorder (ADHD) in Children and Adolescents Ages 6 to 17 Years Old.....	16
Aggression (Severe) in Children under Age 6.....	24
Aggression (Chronic, Impulsive) in Children and Adolescents Ages 6 to 17 Years Old.....	25
Anxiety Disorders in Children under Age 6.....	30
Anxiety Disorders in Children and Adolescents Ages 6 to 17 Years Old.....	31
Bipolar Disorder in Children and Adolescents Ages 6 to 17 Years Old	36
Recommendations on Disruptive Mood Dysregulation Disorder (DMDD) in Children and Adolescents Ages 6 to 17 Years Old.....	40
Insomnia Disorder in Children and Adolescents	43
Major Depressive Disorder (MDD) in Children under Age 6.....	46
Major Depressive Disorder (MDD) in Children and Adolescents Ages 6 to 17 Years Old.....	47
Obsessive Compulsive Disorder (OCD) in Children and Adolescents Ages 6 to 17 Years Old	51
Post-Traumatic Stress Disorder (PTSD) in Children and Adolescents	54
Schizophrenia (Early Onset).....	57
Tic Disorders in Children and Adolescents Ages 6 to 17 Years Old	60

TABLES

Table 1.	Antipsychotic Dosing in Children under Age 6.....	8
Table 2.	American Diabetic Association/American Psychiatric Association Recommendations for Metabolic Monitoring	12
Table 3.	What A1c Results Say About Blood Glucose, Diabetes, and Health Risk	13
Table 4.	ADHD Medication Treatment in Children under Age 6.....	15
Table 5.	FDA Approved ADHD Medications in Children and Adolescents Ages 6 to 17 Years Old (Methylphenidate Preparations)	17
Table 6.	FDA Approved ADHD Medications in Children and Adolescents Ages 6 to 17 Years Old (Amphetamine Preparations).....	19
Table 7.	FDA Approved ADHD Medications in Children and Adolescents Ages 6 to 17 Years Old (SNRI, Alpha-adrenergic agonist)	21
Table 8.	ADHD Medications Not FDA Approved in Children and Adolescents Ages 6 to 17 Years Old (Alpha-adrenergic agonists, antidepressants)	22
Table 9.	Medications for the Treatment of Aggression in Children and Adolescents: Levels of Evidence and Dosing Recommendations	28
Table 10.	Medications for the Treatment of Anxiety Disorders	33
Table 11.	Dosing Recommendations for Atypical Antipsychotics and Mood Stabilizers in Bipolar Disorder in Children and Adolescents Ages 6 to 17 Years Old	38
Table 12.	Medications for the Treatment of Insomnia in Children and Adolescents.....	44
Table 13.	Medications for the Treatment of OCD.....	52
Table 14.	Medications for the Treatment of Tics: Levels of Evidence and Dosing Recommendations.....	61

Introduction, Purpose, and Process for Creating the Guidelines

INTRODUCTION

It is reported that one in five children has a diagnosable behavioral health condition, and that nearly two-thirds get little help or treatment. The consequences of children not receiving timely mental health care are far-reaching and include school failure, involvement in the criminal justice system and suicide. This reality poses a great burden on children, their families and society at large.

Since childhood is a period of rapid growth and development, the diagnosis and treatment of mental health disorders must be approached with these developmental changes in mind. While some problems that children experience are temporary and will not require extensive or long-term treatment, other problems that begin in childhood are very serious and disabling, with life-long implications. The treatment of children and adolescents with behavioral health conditions can be challenging to clinicians since empirically supported treatments are not always readily available. These challenges can be especially frustrating to the clinician in the absence of clear and robust treatment recommendations.

PURPOSE

The goal of the **2016-2017 Florida Best Practice Psychotherapeutic Medication Guidelines for Children and Adolescents** is to provide a guide to clinicians in using psychotherapeutic medications to treat children and adolescents with behavioral health conditions. The guidelines are intended as a starting point and provide rational approaches to help address some very challenging conditions. As always, *the clinician and patient partnership prevails in the choice of treatment*.

The guidelines cover a range of conditions that providers may encounter in their clinical practice, including: attention-deficit hyperactivity disorder (ADHD), severe or chronic impulsive aggression, anxiety disorders, bipolar disorder and major depressive disorder (MDD). The guidelines also include treatment of insomnia, obsessive compulsive disorder (OCD), post-traumatic stress disorder (PTSD), early-onset schizophrenia and tic disorders. This year, we have updated the guidelines to include the new DSM-5 diagnosis of disruptive mood dysregulation disorder (DMDD).

PROCESS FOR CREATING THE GUIDELINES

Every two years, the Florida Medicaid Drug Therapy Management Program brings together a diverse array of stakeholders to update the *Florida Psychotherapeutic Medication Guidelines for Children and Adolescents*. This year's group of stakeholders known as the Florida Expert Panel was composed of nationally recognized experts, academicians, medical directors of Florida Medicaid health plans and community mental health centers (CMHCs), child and adolescent psychiatrists—including Florida child psychiatrists in private practice and/or working at CMHCs—pediatricians, primary care providers, and pharmacists.

The 2016 Florida Expert Panel met in Tampa, Florida on October 21-22, 2016 to review and update the *Florida Psychotherapeutic Medication Guidelines for Children and Adolescents* published in 2015 after the consensus meeting in December 2014. For each disorder, a child and adolescent psychiatrist who is a nationally recognized content expert conducted a full literature review, presented the findings to the expert panel and made suggestions to the panel on revising the guidelines based on the state of the scientific evidence. The panel then discussed the guidelines, proposed revisions and reached a consensus about whether or not to revise and adopt a particular set of guideline recommendations. Thus, the final guidelines are a product of an in-depth review of

Organization and Disclaimer

the literature with an emphasis on the highest level of clinical evidence (e.g., randomized controlled trials, systematic reviews), expert consensus on the strength of the evidence, and consideration of safety and efficacy. The names of the meeting attendees and meeting presentations are available on the program website at <http://medicaidmentalhealth.org>. Financial disclosures are available upon request.

We are grateful to our dedicated panel of experts who have provided their expertise, editorial comments, and invaluable advice. We also would like to thank all external reviewers who took the time to make comments and point out areas needing clarity. The Florida Agency for Healthcare Administration (AHCA) is to be commended for its pursuit of providing evidence-based treatment recommendations.

ORGANIZATION

The **2016-2017 Florida Best Practice Psychotherapeutic Medication Guidelines for Children and Adolescents** are based on a thorough review of the research literature by the expert panel. When the scientific literature is absent or findings are mixed, the guidelines note and explain the absence of clear findings, and advise caution in treatment. Clinical tools recommended in these guidelines are available at <http://www.medicicaidmentalhealth.org>. Recommended clinical rating scales are available in the public domain; those that are not are specifically noted.

The guidelines are organized by “levels” of treatment recommendations, beginning with Level 0, which involves a thorough clinical assessment. Subsequent levels (Levels 1, 2, 3, etc.) are based on the strength of the scientific evidence and expert consensus regarding a particular agent or treatment option. The expert panel considered both safety and efficacy when assigning a treatment option to a level. Thus, a Level 1 treatment option has the strongest clinical and scientific evidence and safety profile compared to subsequent levels.

The clinician is encouraged to begin treatment at Level 1. However, in some cases (eg. severe symptoms), the clinician may choose to initiate treatment at a different level as appropriate based on clinical judgment in conjunction with the best evidence and guideline recommendations. Any decision regarding treatment should be based on clinical judgment that takes into account patient symptoms/needs and family treatment preferences.

DISCLAIMER

The **2016-2017 Florida Best Practice Psychotherapeutic Medication Guidelines for Children and Adolescents** are based on current scientific knowledge and clinical consensus at the time of publication. The guidelines are reviewed and updated every two years to incorporate the latest scientific evidence on psychopharmacological treatment and management of behavioral health disorders in children. In addition, these guidelines may not apply to all children. Therefore, the guidelines should be adapted and tailored to the individual characteristics and needs of the child, as well as the treatment preferences of the family.

The use of these guidelines in whole or in part is entirely the responsibility of the clinician. The authors and panel members bear no responsibility for treatment decisions and outcomes based on the use of these guidelines.

Using These Guidelines

TO THE GENERAL PEDIATRICIAN, PRIMARY CARE PHYSICIAN OR OTHER HEALTH PROFESSIONAL INTERESTED IN USING THESE GUIDELINES

Integration of primary care and mental health services has become a major topic of focus due to the disparity between demand for and accessibility to mental health services. In order to help bridge this gap, primary care physicians, including pediatricians, are playing an increasingly important role in identifying and treating mental health conditions. The **2016-2017 Florida Best Practice Psychotherapeutic Medication Guidelines for Children and Adolescents** were developed and updated to provide evidence and best-practice based guidelines for practitioners who choose to treat mental health conditions in keeping with the goal of providing accessible, quality care to children and adolescents who receive these services through the Florida Medicaid program.

The **2016-2017 Florida Best Practice Psychotherapeutic Medication Guidelines for Children and Adolescents** in the Florida Medicaid program were developed by child psychiatrists who are experts in their specialties, academicians, community-based providers, pharmacists, pediatricians, family practitioners and other knowledgeable clinicians using the best available literature and evidence base at the time of publication, along with their own extensive patient care experience. As there are not enough child psychiatrists available to treat the many children with mental health disorders, however, the guidelines may also be used by other health professionals who want to treat these children. Many neurologists and developmental pediatricians are using these guidelines, but there are still more children and families in Florida communities who have difficulty obtaining services in a timely fashion. These families are turning to their general pediatricians and other primary care providers for help.

A workgroup of general and developmental pediatricians reviewed these guidelines with the goal of determining which ones may be most appropriate for use by clinicians who are not trained in the field of child psychiatry. The workgroup members agreed that certain diagnoses, such as schizophrenia, bipolar disorder, obsessive compulsive disorder, and others, are outside the purview of most general pediatricians. Other disorders, such as attention deficit disorder, insomnia, and anxiety disorders may be within the comfort zone of general pediatricians who have additional experience with these children and medications. We encourage pediatricians who feel they have the comfort and knowledge to treat these children to use these guidelines. We would also like to remind pediatricians that in addition to consulting a child psychiatrist in your area, there is a **Child Psychiatry Access Line available to give guidance: 1-866-487-9507**. All calls will be answered on non-holiday weekdays between 8:30 a.m. and 4:30 p.m.

Many pediatricians may not want to use these guidelines at all for reasons such as lack of training or lack of comfort with treating psychiatric conditions. That is understandable, and the hope is that more support and training will be made available over time to increase the mental health services available to children in Florida. Meanwhile, we hope these guidelines will give you some initial resources to improve their mental health of children enrolled in the Florida Medicaid program.

Jennifer Takagishi, MD

Pediatrician Contributor (2016) and 2014 Expert Panel Member

Principles of Practice Regarding the Use of Psychotropic Medications in Children under Age 6

Level 0

Conduct comprehensive multi-informant, multi-modal, multi-disciplinary assessment for those with positive screen. Rule out medical, social, and cognitive causes of behavioral symptoms.

Use validated measures to assess and track psychiatric symptoms and impairment in young children.

Recommended measures of early childhood symptoms include:

- ◆ Ages 16–30 months: Modified Checklist for Autism in Toddlers (M-CHAT)
- ◆ Ages 2–4 years and 4–11 years: Strengths and Difficulties Questionnaire (SDQ)
- ◆ Ages 3–21 years: The Child/Adolescent Psychiatry Screen (CAPS)
- ◆ Ages 4–11 years: Home Situations Questionnaire (HSQ)

Links to measures listed above are available at: <http://medicaidmentalhealth.org/>.



A comprehensive mental health assessment includes:

- ◆ A comprehensive assessment of the full range of psychiatric symptoms and disorders, as well as impairment from these symptoms and disorders.
- ◆ A full developmental assessment.
- ◆ A full medical history, including a sleep history.
- ◆ A relevant medical work-up, physical examination and nutritional status evaluation.
- ◆ If relevant, an assessment of school functioning including academic, behavioral and social aspects.
- ◆ An assessment of family psychiatric history which includes past and current history of parental psychiatric illnesses, substance abuse and treatment history of parents, parent figures (e.g., step-parent) siblings and other relatives.
- ◆ An assessment of family structure and functioning, parent-child relationship and interaction.
- ◆ An assessment of environmental risk factors and stressors including any history of abuse (physical, sexual) or neglect, traumatic life events, domestic violence, economic instability, etc.

Notes:

- Effort should be made to communicate between primary care providers, psychiatrists, case workers, and other team members to ensure integrated care.
- Prior to initiating any intervention (e.g., psychosocial, medication), assess and document the risks/benefits of treatment. Education of children should be age-appropriate and targeted to the condition.
- Children and parents/legal guardians should be educated about the risks and benefits of treatment, including review of boxed warnings.
- Written informed consent should be obtained from the parents/legal guardian (i.e., the individual legally able to consent to medical interventions) and documented in the chart.

Principles of Practice Regarding the Use of Psychotropic Medications in Children under Age 6 *(continued)*

	<p>Level 1</p> <p>Start with evidence-based psychosocial treatment (e.g., parent training). Parental involvement is essential with involvement by other caregivers or school-based interventions as needed.</p> <ul style="list-style-type: none"> ◆ Monitor response to treatment using reliable and valid measures of changes in the target symptoms. ◆ In mild cases, attempt a course of at least 12 weeks of psychosocial interventions before considering medication. ◆ In moderate to severe cases, a higher level of intervention may be appropriate. ◆ Treatment should be individualized.
	<p>Level 2</p> <p>If medications are being considered, first reassess the diagnosis and diagnostic formulation.</p> <p>Weigh the risks and benefits of initiating treatment with psychotropic medications. The long-term effects of antipsychotic medication use in children is not well studied.</p> <p>If a decision is made to initiate medication:</p> <ul style="list-style-type: none"> ◆ Initiate with monotherapy. Start low, go slow. Take into consideration the pharmacokinetics of the medication (i.e., absorption, distribution, metabolism, excretion). ◆ Except in rare cases, use monotherapy. ◆ Continue psychosocial treatment during treatment with medication. ◆ If possible, monitor effectiveness of interventions with pertinent rating scales. ◆ Use the lowest effective medication dose. ◆ Monitor for adverse effects of medications. ◆ After 6 to 9 months of stabilization, plan down titration trial (i.e., taper or discontinuation trial) to determine whether or not the medication is still needed and effective. ◆ Continue psychosocial treatment during treatment with medication. ◆ Use of psychotherapeutic medication in children under the age of 24 months is not recommended unless there are rare and extenuating circumstances.

Dosing Recommendations Regarding the Use of Antipsychotic Medication in Children under Age 6

The use of antipsychotic medications in preschoolers (children under 6 years of age) is generally “off-label”, not recommended and should only be considered under the most extraordinary circumstances. Disruptive aggression in autism is one such circumstance.

Adequately powered studies have not been conducted in children under age 6.

Before considering pharmacological treatment for children under age 6, the following guidelines are strongly recommended:

1. Patient has developmentally appropriate, comprehensive psychiatric assessment with diagnoses, impairments, treatment target and treatment plans clearly identified and documented.
2. Patient assessment must include evaluation of parental psychopathology and treatment needs, as well as family functioning.
3. Patient’s psychosocial treatments should precede the use of psychotropic medications and should continue if medications are prescribed.

Antipsychotic Dosing Information for Children under Age 6 (Should only be used under rare circumstances).

The dosing information is based on expert opinion and therefore is Level C evidence

Table 1.

Antipsychotic Dosing in Children Under Age 6		
Drug Name	Dose	
Risperidone	Starting dose:	0.125 mg/day
	Maximum dose:	1.5 mg/day
Aripiprazole	Starting dose:	1 mg/day
	Maximum dose:	7.5 mg/day

Principles of Practice Regarding the Use of Psychotropic Medications in Children Ages 6 to 17 Years Old

Level 0

Conduct comprehensive multi-informant, multi-modal, multi-disciplinary assessment for those with positive screen. Rule out medical, social, and cognitive causes of behavioral symptoms.

Use validated measures to assess and track psychiatric symptoms and impairment in young children.

Recommended measures of symptoms in children and adolescents include:

- ◆ Ages 4–11 years: Strengths and Difficulties Questionnaire (SDQ)
- ◆ Ages 3–21 years: The Child/Adolescent Psychiatry Screen (CAPS)
- ◆ Ages 4–11 years: Home Situations Questionnaire (HSQ)

Links to measures listed above are available at: <http://medicaidmentalhealth.org/>.



A comprehensive mental health assessment includes:

- ◆ A comprehensive assessment of the full range of psychiatric symptoms and disorders, as well as impairment from these symptoms and disorders.
- ◆ A full developmental assessment.
- ◆ A full medical history, including a sleep history.
- ◆ A relevant medical work-up, physical examination and nutritional status evaluation.
- ◆ An assessment of school functioning including academic, behavioral and social aspects.
- ◆ An assessment of family psychiatric history which includes past and current history of parental psychiatric illnesses, substance abuse and treatment history of parents, parent figures (e.g., step-parent) siblings and other relatives.
- ◆ An assessment of family structure and functioning, parent-child relationship and interaction.
- ◆ An assessment of environmental risk factors and stressors including history of abuse (physical, sexual) or neglect, traumatic life events, domestic violence, economic instability, etc.

Notes:

- Effort should be made to communicate between primary care providers, psychiatrists, case workers, and other team members to ensure integrated care.
- Prior to initiating any intervention (e.g., psychosocial, medication), assess the risks/benefits of treatment. Education of children should be age-appropriate and targeted to the condition.
- Children/adolescents and parents/legal guardians should be educated about the risks and benefits of treatment, including review of boxed warnings.
- Written informed consent should be obtained from the parents/legal guardian (i.e., the individual legally able to consent to medical interventions) and documented in the chart.

Principles of Practice Regarding the Use of Psychotropic Medications in Children Ages 6 to 17 Years Old *(continued)*

	<p>Level 1</p> <p>Start with psychosocial treatment. Parental involvement is essential, with involvement of other caregivers or school-based interventions as needed.</p> <ul style="list-style-type: none"> ◆ Monitor response to treatment using reliable and valid measures of changes in the target symptoms. ◆ In mild cases, attempt a course of at least 12 weeks of psychosocial interventions before considering medication. In moderate to severe cases, a higher level of intervention may be appropriate as the initial step.
	<p>Level 2</p> <p>If medications are being considered, first reassess the diagnosis and diagnostic formulation. Weigh the risks and benefits of initiating treatment with psychotropic medications.</p> <p>If a decision is made to initiate medication:</p> <ul style="list-style-type: none"> ◆ Initiate with monotherapy. Start low, go slow. ◆ Except in rare cases, use monotherapy. ◆ Continue psychosocial treatment during treatment with medication. ◆ Monitor for suicidality. ◆ Monitor for adverse effects of medications. ◆ The use of antipsychotics should be restricted to the diagnoses of schizophrenia (rare in children), mania/bipolar disorder, psychotic depression, drug induced psychosis, Tourette's syndrome and tic disorders, and in some cases, severe aggression as a target symptom. ◆ On rare occasions, antipsychotics may be used in obsessive compulsive disorder (OCD) after extensive cognitive behavioral therapy (CBT) or failure of two adequate selective serotonin reuptake inhibitor (SSRI) trials. ◆ Antipsychotics should not be used primarily to target ADHD symptoms or as sedatives in children. ◆ There may be instances where antipsychotics are used for parasuicidal and severe self-injurious behaviors.

General Procedures for Monitoring Side Effects of Antipsychotic Medication in Children and Adolescents

Conduct side effect and metabolic assessments and laboratory tests that are clinically relevant, comprehensive and based on established guidelines.

Provide accessible information to parents and families about identifying and managing side effects, including lifestyle and nutritional changes, monitoring labs, etc.

EXTRAPYRAMIDAL SIDE EFFECTS:

- Monitor for extrapyramidal side effects (EPS) associated with antipsychotic use. Scales for assessing for EPS:
 - ◆ The Abnormal Involuntary Movement Scale (AIMS)
 - ◆ The Extrapyramidal Symptom Rating Scale (ESRS)
 - ◆ Dyskinesia Identification System: Condensed User Scale (DISCUS)

Links to measures listed above are available at <http://medicaidmentalhealth.org/>.

METABOLIC SYNDROME AND TYPE 2 DIABETES MELLITUS:

- Monitor for metabolic syndrome criteria and Type 2 Diabetes Mellitus (DM) when prescribing atypical antipsychotics (Silveira, et al., 2013).
- Metabolic Syndrome Diagnosis:

Children ≤10 years

- ◆ In children ≤10 years old, metabolic syndrome cannot be diagnosed because cut-offs for blood pressure, fasting blood sugar, triglycerides, and fasting lipids are not well defined.
- ◆ Child is at risk for metabolic syndrome if child has central obesity waist circumference is >90th percentile).

Children/Adolescents >10 years

- ◆ Metabolic syndrome is present if the child has central obesity greater than 90th percentile for age (or adult cut-off if lower) plus *any two* of the following four risk factors:
 - ◇ Blood pressure (BP): ≥130 millimeters of mercury (mmHg) systolic, ≥85 mmHg diastolic or treatment of previously diagnosed hypertension
 - ◇ Fasting blood glucose >100 milligrams per deciliter (mg/dL)
 - ◇ Fasting triglycerides ≥150 mg/dL
 - ◇ HDL <40 mg/dL
- Monitor for metabolic syndrome and Type 2 Diabetes Mellitus (DM) in all children <18 years who are overweight and have *two or more* of the following risk factors:
 - ◆ Family history of metabolic syndrome or Type 2 DM
 - ◆ Native American, African American, Latino, Asian American or Pacific Islander descent

General Procedures for Monitoring Side Effects of Antipsychotic Medication in Children and Adolescents (continued)

- ◆ Signs of insulin resistance or conditions associated with insulin resistance (e.g., acanthosis nigricans, hypertension, cardiovascular disease, dyslipidemia, polycystic ovarian syndrome)
- ◆ Maternal history of diabetes or gestational DM during the child's gestation
 - ✧ Further assessments should be done if children <10 years old have central obesity (waist circumference >90th percentile) or family history of metabolic syndrome, Type 2 DM, dyslipidemia, cardiovascular disease, hypertension, or obesity.

Notes:

- Overweight is defined as BMI >85th percentile for age and sex, weight for height >85th percentile or weight >120% of ideal weight.
- The American Diabetic Association recommends testing hemoglobin A1c every 3 years beginning at age 10 or onset of puberty in children who are overweight and have two or more risk factors for metabolic syndrome or Type 2 DM.
- For individuals receiving antipsychotic medications, the American Diabetic Association and American Psychiatric Association recommend metabolic monitoring as noted in Table 2 below.
- If metabolic abnormalities are present, refer to the primary care physician for further evaluation/treatment and integrate care.

Table 2.

American Diabetic Association/American Psychiatric Association Guidelines for Metabolic Monitoring in Recipients of Antipsychotic Medications							
	Monitoring Frequency						
Parameter	Baseline	Week 4	Week 8	Week 12	Quarterly	Annually	Every 5 years
Medical history*	X					X	
Weight (BMI)	X	X	X	X	X		
Waist circumference	X					X	
Blood pressure	X			X		X	
Fasting glucose or hemoglobin A1c	X			X		X	
Fasting lipids (HDL, LDL, triglycerides, total cholesterol)	X			X			X

*Notes: Medical history includes personal and family history of obesity, diabetes, hypertension and cardiovascular disease. More frequent assessments may be warranted based on clinical status.

General Procedures for Monitoring Side Effects of Antipsychotic Medication in Children and Adolescents (continued)

Table 3.

American Diabetes Association. What A1c Results Say About Blood Glucose, Diabetes Control, and Health Risk			
A1c (%)	Average blood glucose (mg/dL)	Degree of control	Health risk
≤6	135 mg/dL	Very excellent	Very low
7	170 mg/dL	Excellent	Low
8	205 mg/dL	Good	Good
9	240 mg/dL	Fair	Medium
10	275 mg/dL	Poor	High
11	310 mg/dL	Very Poor	Very High
≥12	345 mg/dL	Extremely Poor	Extremely High

PROLACTIN MONITORING:

- There is a relationship between prolactin elevation and atypical antipsychotics. Although evidence does not support need for routine monitoring of prolactin levels in asymptomatic youths, surveillance for signs/symptoms of prolactin elevation (e.g., gynecomastia, galactorrhea, irregular menses) is recommended.
- When symptoms of elevated prolactin develop, consider decreasing the dose of the atypical antipsychotic, switching to a different atypical antipsychotic or discontinuing medication.

For a full list of references, visit <http://medicaidmentalhealth.org/>.

Attention Deficit Hyperactivity Disorder (ADHD) in Children under Age 6

Level 0

Conduct comprehensive assessment and provide psychoeducation about ADHD, including clearly defined treatment expectations. Consider co-morbid developmental language disorder, Specific Learning Disorder or Autism Spectrum Disorder (ASD).

Facilitate family engagement, psychoeducation about ADHD (evidence-based behavioral interventions, educational interventions and medication treatments), and treatment preference assessment. Treatment response should be monitored using rating scales and appropriate health (vital signs, height, weight) and safety assessments. Refer to *General Principles of Practice Regarding the Use of Psychotropic Medications in Children under Age 6* on pg. 6.



Level 1

Provide parent management/skills training or other behavioral intervention at home and/or school for a minimum of 12 weeks.



Level 2

Initiate monotherapy with methylphenidate formulation.



Level 3

If methylphenidate is unsuccessful, could consider monotherapy with atomoxetine (caution: child must be able to swallow medication whole).



Level 4

Consider amphetamine formulations which have FDA indication for ages 3 to 5 years old, but limited clinical trial evidence base. May also consider alpha-2 agonists, but no published data are available.

- ◆ After 6 months of any sustained improvement on any effective medication treatment, taper in order to determine the lowest effective dose and possibility of discontinuation.

Not Recommended:

- ◆ Antipsychotic medication to treat core symptoms of ADHD.
- ◆ Concurrent use of two or more alpha-2 agonists.

Attention Deficit Hyperactivity Disorder (ADHD) in Children under Age 6 (*continued*)

Table 4.

ADHD Medication Treatment for Children under Age 6	
Drug Name	Starting Dose Recommendation
Methylphenidate and Amphetamine preparations	
Short-acting	
Methylphenidate¹: Short Acting: Ritalin®, Methylin®, Methylin® Chewable Tablets, Methylin® Oral Solution	1.25 mg tid – titrate as needed to doses not exceeding 1 mg/kg/day. <i>Recommendations extrapolated from the Preschool ADHD Treatment Study (PATs).</i>
Amphetamine³: Short Acting: Mixed amphetamine salts (Adderall®), D-amphetamine (Zenzedi®, ProCentra® Oral Solution). D- & L-amphetamine (Evekeo®)	2.5 mg/day – titrate as needed to doses not exceeding 0.5 mg/kg/day. <i>Amphetamine target dose is generally one- half to two-thirds of methylphenidate dose.</i>
Selective norepinephrine inhibitor	
Atomoxetine (Strattera®) ²	10mg/day – titrate as needed to doses not to exceed 1.4 mg/kg/day. <i>Recommendations extrapolated from the Kratochvil et al. 2011 study.</i>
Alpha-2 Agonists⁴	
Alpha-2 Agonists⁴: Clonidine (Catapres®, KAPVAY®) Guanfacine (Tenex®, Intuniv®)	Starting dose not to exceed: 0.05 mg/day (<i>clonidine</i>) 0.5 mg/day (<i>guanfacine</i>) Monitor carefully for excessive sedation, increased irritability. <i>Recommendations based on expert opinion.</i>

Notes:

¹ No FDA indication for children younger than 6 years old; based on Preschool ADHD Treatment Study results (Greenhill et al., 2006).

² No FDA indication for children younger than 6 years old; based on Kratochvil, C.J., B.S. Vaughan, et al. (2011). A double-blind, placebo controlled study of atomoxetine in young children with ADHD. *Pediatrics* 127(4):e862-868.

³ FDA indication for ADHD treatment of children 3-5 years old, but no clinical trial study results available.

⁴ No FDA indication for ADHD except guanfacine extended-release (Intuniv®) and clonidine extended-release (KAPVAY®) in children 6 years and older; no clinical trial study results available for alpha-2 agonist use for ADHD in children below age 6 years old.

There is no new data on extended release stimulants in preschoolers, but the 2007 American Academy of Child and Adolescent Psychiatry guideline algorithm included extended-release formulations to address compliance concerns (Pliszka et al., 2007).

Attention Deficit Hyperactivity Disorder (ADHD) in Children and Adolescents Ages 6 to 17 Years Old

Level 0

Comprehensive assessment including a detailed developmental and symptom history.

- ◆ ADHD Rating Scale-IV.
- ◆ Vanderbilt ADHD Diagnostic Parent and Teacher Rating Scales

Links to rating scales available at <http://medicaidmentalhealth.org/>.

Facilitate family engagement, psychoeducation about ADHD (evidence-based behavior and medication treatments, and educational interventions), and treatment preference assessment.

Ensure that treatment response is monitored using rating scales and appropriate health (vital signs, height and weight) and safety assessments.



Level 1

- ◆ Psychostimulant monotherapy (methylphenidate class or amphetamine class, either short or long-acting). If first choice is ineffective, try monotherapy with another stimulant (Refer to Tables 5 and 6 of ADHD medications on pgs. 17–20. If supplementation of long-acting with short-acting psychostimulant required for sufficient coverage, stay within same drug class.
- OR
- ◆ Extended-release alpha-2 agonist monotherapy.



Level 2

- ◆ Combination of extended-release alpha-2 agonist with psychostimulant.
- OR
- ◆ Atomoxetine.



Level 3

Immediate-release alpha-2 agonist (as monotherapy or combination with other ADHD medication classes).



Level 4

Diagnostic reconsideration if none of the above agents result in satisfactory treatment. Consider bupropion or tricyclic antidepressant. Despite limited evidence, these medications may be considered. Desipramine is not recommended due to safety concerns.

Not Recommended:

- ◆ Antipsychotic medication to treat core symptoms of ADHD.
- ◆ Concurrent use of two or more alpha-2 agonists.
- ◆ Concurrent use of two different stimulant classes.
- ◆ Desipramine due to safety concerns.

Attention Deficit Hyperactivity Disorder (ADHD) in Children and Adolescents Ages 6 to 17 Years Old *(continued)*

Table 5.

FDA Approved ADHD Medications in Children and Adolescents Ages 6 to 17 Years Old				
Generic Class/ Brand Name	Typical Starting Dose	FDA Max Dose/Day	Off-Label Max Dose/Day	Comments
Methylphenidate preparations				
Short-acting				Short-acting stimulants often used as initial treatment in children (<16 kg), have disadvantage of bid – tid dosing to control symptoms throughout the day.
Focalin® (dexmethylphenidate hcl tablet)	2.5 mg bid	20 mg	50 mg	
Methylin® (methylphenidate hcl tablet)	5 mg bid	60 mg	>50 kg: 100 mg	
Methylin® Solution (methylphenidate hcl oral solution)	5 mg bid	60 mg	>50 kg: 100 mg	
Methylin® Chewable (methylphenidate hcl chewable tablet)	5 mg bid	60 mg	>50 kg: 100 mg	
Ritalin® (methylphenidate hcl tablet)	5 mg bid	60 mg	>50 kg: 100 mg	
Intermediate-acting				Longer acting stimulants offer greater convenience, confidentiality, and compliance with single daily dosing but may have greater problematic effects on evening appetite and sleep.
Metadate ER® (methylphenidate hcl extended-release tablets)	10 mg qam	60 mg	>50 kg: 100 mg	
Metadate CD® (methyphaidate hcl extended-release capsule)	20 mg qam	60 mg	>50 kg: 100 mg	
Methylin ER® (methylphenidate hcl extended-release tablet)	10 mg qam	60 mg	>50 kg: 100 mg	
Ritalin LA® (methylphenidate hcl extended-release tablet)	20 mg qam	60 mg	>50 kg: 100 mg	
Ritalin SR® (methylphenidate hcl sustained-release tablet)	10 mg qam	60 mg	>50 kg: 100 mg	

Attention Deficit Hyperactivity Disorder (ADHD) in Children and Adolescents Ages 6 to 17 Years Old *(continued)*

Table 5 (continued).

FDA Approved ADHD Medications in Children and Adolescents Ages 6 to 17 Years Old				
Generic Class/ Brand Name	Typical Starting Dose	FDA Max Dose/Day	Off-Label Max Dose/Day	Comments
Long-acting				<p>Aptensio XR®, Metadate CD®, Ritalin LA® and Focalin XR® capsules may be opened and sprinkled on soft food for immediate consumption. Beads should not be crushed or chewed.</p> <p>Concerta® should not be crushed, chewed, or broken. Swallow whole with liquids. Non-absorbable tablet shell does not dissolve and may be seen in stool. This is normal.</p> <p>Quillivant XR® is an extended release once-daily suspension.</p> <p>QuilliChew ER® can be broken in half.</p>
Aptensio XR® (methylphenidate hcl extended-release capsule)	Begin with 10 mg qam then titrate by 10 mg at weekly intervals	60 mg	>50 kg: 100 mg	
Concerta® (methylphenidate extended-release tablet)	18 mg qam	72 mg	>50 kg: 108 mg	
Daytrana® patch (methylphenidate transdermal system)	Begin with 10 mg patch qd, then titrate up by patch strength 5 mg qam	30 mg	Not yet known	
Focalin XR® (dexmethylphenidate hcl extended-release capsule)	5 mg qam	30 mg	50 mg	
Quillivant XR® (methylphenidate hcl extended-release oral suspension)	Begin with 20 mg qam, then titrate up by 10-20 mg at weekly intervals	60 mg	>50 kg: 100 mg	
QuilliChew ER® (methylphenidate hcl extended-release chewable tablet)	Begin with 20 mg qam then titrate in increments of 10mg, 15mg or 20mg at weekly intervals	60 mg	>50 kg: 100 mg	

Attention Deficit Hyperactivity Disorder (ADHD) in Children and Adolescents Ages 6 to 17 Years Old *(continued)*

Table 6.

FDA Approved ADHD Medications in Children and Adolescents Ages 6 to 17 Years Old				
Generic Class/ Brand Name	Typical Starting Dose	FDA Max Dose/Day	Off-Label Max Dose/Day	Comments
Amphetamine preparations				
Short-acting				Short-acting stimulants often used as initial treatment in children (<16 kg), but have disadvantage of bid – tid dosing to control symptoms throughout the day. Note that Adderall®, Procentra Oral Solution®, Evekeo® and Zenzedi® have the same dosing recommendations
Adderall® (amphetamine mixed salts tablet)	5 mg qd – bid	40 mg	>50 kg: 60 mg	
Procentra Oral Solution® (d-amphetamine oral solution)	5 mg qd – bid	40 mg	>50 kg: 60 mg	
Evekeo® (d & l amphetamine tablet)	5 mg qd – bid	40 mg	>50 kg: 60 mg	
Zenzedi® (d-amphetamine tablet)	5 mg qd – bid	40 mg	>50 kg: 60 mg	

Attention Deficit Hyperactivity Disorder (ADHD) in Children and Adolescents Ages 6 to 17 Years Old *(continued)*

Table 6 (continued).

FDA Approved ADHD Medications in Children and Adolescents Ages 6 to 17 Years Old				
Generic Class/ Brand Name	Typical Starting Dose	FDA Max Dose/Day	Off-Label Max Dose/Day	Comments
Long-acting				<p>Longer acting stimulants offer greater convenience, confidentiality, and compliance with single daily dosing but may have greater problematic effects on evening appetite and sleep.</p> <p>Adderall XR® capsule may be opened and sprinkled on soft foods.</p> <p>Vyvanse® capsule can be opened and mixed with yogurt, water or orange juice.</p> <p>For Dyanavel XR® do not substitute for other amphetamine products on mg-per-mg basis.</p> <p>For Adzenys®, do not substitute for other amphetamine products on mg-per-mg basis. For children and adolescents on Adderall XR®, specific starting doses corresponding to Adderall XR® doses are recommended, ranging from 3.1 mg (for those on 5mg of Adderall XR®) to 18.8 mg (for those on 30mg Adderall XR®).</p>
Dexedrine Spansule® (dextroamphetamine sulfate extended-release capsule)	5–10 mg qd – bid	40 mg	Not yet known	
Adderall XR® (amphetamine extended-release mixed salts capsule)	10 mg qd	6–12 years: 30 mg 13–17 years: 20 mg	>50 kg: 60 mg	
Vyvanse® (lisdexamfetamine capsule)	20–30 mg qd	70 mg	Not yet known	
Dyanavel XR® 2.5mg/mL (amphetamine extended-release oral suspension)	2.5 to 5 mg qd	20 mg	Not yet known	
Adzenys XR-ODT® (amphetamine extended-release orally disintegrating tablet)	6.3 mg qam unless switched from Adderall XR (Refer to conversion schedule)	6–12 years: 18.8 mg 13–17 years: 12.5 mg	Not yet known	

Attention Deficit Hyperactivity Disorder (ADHD) in Children and Adolescents Ages 6 to 17 Years Old *(continued)*

Table 7.

FDA Approved ADHD Medications in Children and Adolescents Ages 6 to 17 Years Old				
Generic Class/ Brand Name	Typical Starting Dose	FDA Max Dose/Day	Off-Label Max Dose/Day	Comments
Selective norepinephrine reuptake inhibitor				
Strattera® (atomoxetine)	< 70 kg: 0.5 mg/ kg/day for 4 days; then 1 mg/kg/ day for 4 days; then 1.2 mg/kg/ day	Lesser of 1.4 mg/kg or 100 mg	Lesser of 1.8 mg/kg or 100 mg	Not a Schedule II medication. Consider if active substance abuse or severe side effects of stimulants (mood lability, tics). Give qam or divided doses bid (for effects on late evening behavior). Do not open capsule; must be swallowed whole. Monitor closely for suicidal thinking and behavior, clinical worsening, or unusual changes in behavior.
Alpha- adrenergic agonists				
Intuniv® (guanfacine ER)	1 mg qd then titrate up by 1 mg increments once per week	Lesser of 0.12 mg/kg or 4 mg qd (6-12 years) 7 mg q.d. (13-17 years)	Lesser of 0.17 mg/kg or 4 mg qd (6-12 years) 7 mg q.d. (13-17 years)	Not a Schedule II medication. Sedation, somnolence and fatigue are common and tend to decline over time. Consider baseline electrocardiogram (EKG) before starting. Tablets should not be crushed, chewed or broken before swallowing because this will increase the rate of release.
KAPVAY® (clonidine ER)	0.1 mg/day at bed time	0.4 mg/day in divided dose of 0.2 mg bid	0.4 mg/day	Do not administer with high fat meals due to increased exposure. May not see effects for 4-6 weeks. Review personal and family cardiovascular history. Do not abruptly discontinue. Taper the daily dose of Intuniv by no more than 1 mg, and that of Kapvay® by no more than 0.1 mg every 3 to 7 days to avoid rebound hypertension.

Attention Deficit Hyperactivity Disorder (ADHD) in Children and Adolescents Ages 6 to 17 Years Old *(continued)*

Table 8.

ADHD Medications NOT FDA APPROVED in Children and Adolescents Ages 6 to 17 Years Old			
Generic Class/ Brand Name	Typical Starting Dose	Max Dose/Day	Comments
Alpha- adrenergic agonists			
Catapres® (clonidine)	<p><45 kg: 0.05 mg nightly, titrate in 0.05 mg increments two times per day, three times per day, or four times per day.</p> <p>>45 kg: 0.1 mg nightly; titrate in 1mg increments two times per day, three times per day, or four times per day.</p>	<p>27–40.5 kg: 0.2 mg;</p> <p>40.5–45 kg: 0.3 mg;</p> <p>>45 kg: 0.4 mg</p>	<p>The following applies to both alpha-2 adrenergic agonists:</p> <p>May be used alone or as adjuvant to another medication class for ADHD.</p> <p>Do not combine different alpha-2-adrenergic agents with each other</p> <p>Effective for inattention, impulsivity and hyperactivity; modulating mood level; tics worsening from stimulants; sleep disturbances.</p> <p>Taper the daily dose of Clonidine by no more than 0.1 mg every 3 to 7 days to avoid rebound hypertension.</p>
Tenex® (guanfacine)	<p>< 45 kg: 0.5 mg nightly; titrate in 0.5 mg increments two times per day, three times per day, or four times per day.</p> <p>>45 kg: 1 mg nightly, titrate in 1 mg increments. May dose increments two times per day, three times per day, or four times per day.</p>	<p>27–40.5 kg: 2 mg;</p> <p>40.5.–45 kg: 3 mg;</p> <p>>45 kg: 4 mg</p>	<p>May not see effects for 4–6 weeks. Review personal and family cardiovascular history.</p> <p>Consider pre-treatment EKG.</p> <p>Taper the daily dose of guanfacine by no more than 1 mg every 3 to 7 days to avoid rebound hypertension.</p>

Attention Deficit Hyperactivity Disorder (ADHD) in Children and Adolescents Ages 6 to 17 Years Old *(continued)*

Table 8 (continued).





ADHD Medications NOT FDA APPROVED in Children and Adolescents Ages 6 to 17 Years Old			
Generic Class/ Brand Name	Typical Starting Dose	Max Dose/Day	Comments
Antidepressants			
Wellbutrin®† (bupropion)	Lesser of 3 mg/kg/day or 150 mg/day as 75 mg bid	Lesser of 6 mg/kg or 300 mg/day. Dose should not exceed 150 mg per dose.	Lowers seizure threshold; contraindicated if current seizure disorder, anorexia nervosa or bulimia nervosa. Usually given in divided doses, bid or tid for children and adolescents, for both safety and efficacy.
Wellbutrin SR®† (bupropion SR)	Same as above	150 mg per dose or 400 mg/day	Same as above
Wellbutrin XL®† (bupropion XL)	Not recommended	Not recommended	Not recommended
Tofranil® (imipramine)	1 mg/kg/day	Lesser of 4 mg/kg or 200 mg	Obtain baseline EKG before starting imipramine.
Pamelor® Aventil® (nortriptyline)	0.5 mg/kg/day	Lesser of 2 mg/kg or 100 mg	Obtain baseline EKG before starting nortriptyline.

***Note:** Long-acting formulations of clonidine (Kapvay) and guanfacine (Intuniv) are FDA-approved ADHD medications in children and adolescents 6-17 years old, but short-acting formulations of clonidine (Catapres) and guanfacine (Tenex) are not FDA-approved for ADHD.

†Bupropion and bupropion SR have more data on off-label use than bupropion XL. Bupropion XL is not recommended in children and adolescents as the safety and efficacy have not been well established in this population.

For a full list of references, visit <http://medicaidmentalhealth.org/>.

Aggression (Severe) in Children under Age 6

Level 0 Comprehensive diagnostic assessments. Refer to <i>Principles of Practice</i> on page 6. Evaluate and treat comorbid conditions (i.e. medical, other psychiatric conditions).	
	Level 1 Psychosocial intervention. <ul style="list-style-type: none"> ◆ Evidence-based psychotherapeutic interventions such as Parent Management Training (PMT) or Parent-Child Interaction therapy (PCIT) is the first line treatment for 3 to 6 months. ◆ Multimodal intervention such as Multisystemic therapy (MST), used in school age children may be tried (Rosato et al., 2012). ◆ Behavioral therapy such as token economies and contingency management, and Applied Behavioral Analysis (ABA therapy) may be tried (as useful in aggression in Autism Spectrum population).
	Level 2 Initial medication treatment should target the underlying disorder(s) (when available, follow evidence-based guidelines for primary disorder). <ul style="list-style-type: none"> ◆ Always treat primary disorder fully first before addressing aggression with other pharmacologic agents. ◆ Treat comorbid ADHD per guideline. Refer to page 14. ◆ Treat comorbid Anxiety Disorders per guidelines. Refer to page 30. ◆ Treat comorbid Mood Disorders per guidelines. Refer to page 46 for Major Depressive Disorder.
	Level 3 Only in cases of severe impairment, severe aggression, or failure of psychosocial treatment: <ul style="list-style-type: none"> ◆ Monotherapy with methylphenidate formulation, then amphetamine formulation or low dose alpha-2 agonists, then atomoxetine. ◆ Consider combination therapy of stimulant with alpha-2 agonists.
	Level 4 If failure to respond to Level 2 and/or 3, or insufficient response consider: <ul style="list-style-type: none"> ◆ Low dose risperidone, aripiprazole <ul style="list-style-type: none"> ◇ Discontinuation trial after 6 months of any effective medication treatment.
Not Recommended: <ul style="list-style-type: none"> ◆ Use of medication without a trial of concurrent psychosocial treatment. 	

Aggression (Chronic, Impulsive) in Children and Adolescents Ages 6 to 17 Years Old

Level 0

Comprehensive diagnostic assessment. Refer to *Principles of Practice* on page 9. Evaluate and treat comorbid conditions (i.e. medical, other psychiatric conditions).

- ◆ Consider screening tools:
 - ◇ Ages 3 to 21 years old: Child /Adolescent Psychiatry Screen (CAPS)
 - ◇ Ages 4 to 17 years old: Strengths and Difficulties Questionnaire (SDQ) for parents and teachers

Links to screening tools available at <http://medicaidmentalhealth.org/>.

- ◆ Assess treatment effects and outcomes with standardized measures, such as the Modified Overt Aggression Scale (MOAS) is highly encouraged.
- ◆ When acute aggression is present, conduct a risk assessment and, if necessary, consider referral to a psychiatrist or an emergency department for evaluation.
- ◆ Continuously track and re-assess aggression problems and triggers.
- ◆ Obtain additional collateral information as needed and obtain a relevant medical workup, physical examination, and nutritional status evaluation.
- ◆ Provide psychoeducation for patients and families.
- ◆ Develop an appropriate treatment plan with the patient/family and obtain buy-in.
- ◆ Help the family establish community supports.






Level 1


Engage the child and family in taking an active role in implementing psychosocial strategies and help them to maintain consistency with psychosocial, psychoeducational, and other evidence-based treatments interventions:

- ◆ Parent Management Training (PMT), Parent-Child Interaction therapy (PCIT), behavioral therapies such as ABA therapy and behavioral modification and contingency management
- ◆ Multimodal interventions: Multisystemic therapy
- ◆ Cognitive behavioral therapy (anger management)
- ◆ Family therapy

Aggression (Chronic, Impulsive) in Children and Adolescents Ages 6 to 17 Years Old *(continued)*

	<p>Level 2</p> <p>If Level 1 interventions are not successful, re-assess:</p> <p>Initial medication treatment should target the underlying disorder(s) (when available, follow evidence-based guidelines for primary disorder).</p> <ul style="list-style-type: none"> ◆ Always treat primary disorder fully first before addressing aggression with other pharmacologic agents. ◆ Treat comorbid ADHD per guidelines. Refer to page 16. ◆ Treat comorbid Anxiety Disorders per guidelines. Refer to page 31. ◆ Treat comorbid Mood Disorders per guidelines. Refer to page 36 for Bipolar Disorder and page 47 for Major Depressive Disorder. ◆ Consider monotherapy with methylphenidate formulation, then amphetamine formulation or alpha-2 agonist, then atomoxetine. ◆ May want to consider combination therapy of stimulant with an alpha-2 agonist. ◆ For affective aggression, if benefits outweigh risks, consider starting with low-dose risperidone or aripiprazole (most robust evidence for use at the time of publication).
	<p>Level 3</p> <p>If Level 2 interventions are not successful, re-assess:</p> <ul style="list-style-type: none"> ◆ Consider switching to or adding an antipsychotic medication to ongoing psychosocial and/or pharmacological treatments (after an adequate trial), taking into account the latest evidence on efficacy and safety of individual agents. <ul style="list-style-type: none"> ◇ Risperidone or aripiprazole are recommended at low doses. Titrate to appropriate dose to target symptoms given level of impairment. ◆ Use recommended titration schedules and deliver medication trial at adequate dose and duration before changing or adding medication. Refer to Table 9 on page 28. Before changing, make sure that medications have been administered for an appropriate dose and duration and that adequate psychosocial interventions addressing adherence have been implemented. Monitor and manage adverse effects and non-response.
	<p>Level 4</p> <p>If failure to respond to Level 3 or insufficient response, switch to a different antipsychotic (either risperidone or aripiprazole).</p>

Aggression (Chronic, Impulsive) in Children and Adolescents Ages 6 to 17 Years Old (*continued*)

	<p>Level 5</p> <p>If failure to respond to risperidone or aripiprazole, consider other antipsychotics for which less evidence exists. Refer to Table 9 on page 28.</p> <p>OR</p> <p>Combination of a mood stabilizer with atypical antipsychotic, but not of two antipsychotics (unless during cross-titration or plateau switch).</p> <ul style="list-style-type: none">◆ When patient responds only partially to a first-line antipsychotic medication, first reassess the diagnosis, adequacy of behavioral interventions, pharmacotherapy for any identified primary or comorbid disorder, and dose/duration of the medication trial. Then, it may be appropriate to consider adding a mood stabilizer: Most evidence exists for lithium.
<p>Not Recommended:</p> <ul style="list-style-type: none">◆ Use of Long Acting Intramuscular (IM) formulations of antipsychotics to treat aggression (lack of evidence in the pediatric population).	



Aggression (Chronic, Impulsive) in Children and Adolescents Ages 6 to 17 Years Old (*continued*)

Table 9.

Treatment of Aggression in Children and Adolescents Ages 6 to 17: Level of Evidence and Dosing Recommendations ^o			
Level of Evidence ¹	Medication	Child (>6 years)	Adolescents (13-17 years)
B+	[†] Methylphenidate/ Amphetamines	See ADHD guidelines, pg 14.	See ADHD guidelines, pg 16.
B	[†] Clonidine, Guanfacine, Guanfacine ER	See ADHD guidelines, pg 14.	See ADHD guidelines, pg 16.
B-	[†] Atomoxetine	Starting dose: See ADHD guidelines, pg 14. Max dose: 1.8 mg/kg for children over 8 years old	Starting dose: See ADHD guidelines, pg 16. Max dose: 1.8 mg/kg for children over 8 years old
A	Risperidone <i>*Not recommended first line due to side effect profile</i>	Starting dose: 0.1 to 0.25 mg/ day Max dose: 2 mg/day	Starting dose: 0.50 mg/day Max dose: 4 mg/day
	Aripiprazole <i>*Not recommended first line due to side effect profile</i>	Starting dose: 1 to 2.5 mg/day Max dose: 10 mg/day	Starting dose: 1 to 2.5 mg/day Max dose: 15 mg/day
	Lithium <i>*Not recommended first line due to side effect profile</i>	Blood level: 0.6 mEq/L Max blood level should be 1.2 mEq/L	Blood level: 0.6 mEq/L Max blood level should be 1.2 mEq/L
A-	Haloperidol <i>*Not recommended first line due to side effect profile</i>	Starting dose: 0.25 to 0.5 mg/ day Max dose: 4 to 6 mg/day	Starting dose: 0.5 mg/day Max dose: 6 to 10 mg/day
	Chlorpromazine <i>*Not recommended first line due to side effect profile</i>	Starting dose: 25 mg/day Max dose: 200 mg/day	Starting dose: 25 to 50 mg/ day Max dose: 400 mg/day
B+	Valproate <i>*Use caution in female population due to side effect profile</i>	10-15 mg/kg/day in divided doses Blood level: 80-125 mcg/mL Dose determined by blood level. Max blood level should be 125 mcg/mL	10-15 mg/kg/day in divided doses Blood level: 80-125 mcg/mL Dose determined by blood level. Max blood level should be 125 mcg/mL
B	Olanzapine <i>*Not recommended first or second line due to metabolic SE and/or in pts with BMI ≥ 85%</i>	Starting dose: 1.25 to 2.5 mg/ day Max dose: 15 mg/day	Starting dose: 2.5 to 5.0 mg/ day Max dose: 20 mg/day
	Quetiapine <i>*Not recommended first line in patients with BMI ≥ 85%</i>	Starting dose: 12.5 mg po twice per day Max dose: 400 mg/day	Starting dose: 25 mg po twice per day Max dose: 600 mg/day
B-	Ziprasidone <i>*Requires cardiac monitoring</i>	Starting dose: 20 mg/day Max dose: 40-60 mg/day	Starting dose: 20 mg/day Max dose: 40-60 mg/day

Aggression (Chronic, Impulsive) in Children and Adolescents Ages 6 to 17 Years Old *(continued)*

Table 9 (continued).

Treatment of Aggression in Children and Adolescents Ages 6 to 17: Level of Evidence and Dosing Recommendations ^o			
Level of Evidence ¹	Medication	Child (>6 years)	Adolescents (13-17 years)
C+	Paliperidone <i>*Limited data below age 12</i>	Starting dose: 1.5 mg/day Max dose: 6 mg/day	Starting dose: 1.5 to 3 mg/day Max dose: 12 mg/day
C	Carbamazepine	Not recommended due to adverse effects.	Not recommended due to adverse effects.
D	Asenapine	Not recommended under 10 years old. Can be given to children and adolescents 10-17 years old. Starting dose: 2.5 mg SL twice per day Max dose: 20 mg/day	Can be given to children and adolescents 10-17 years old. Starting dose: 2.5 mg SL twice per day Max dose: 20 mg/day
D-	Lurasidone	Not FDA approved in children and adolescents Starting dose: 20 mg/day Suggested dosing: 20 to 80 mg/day Max dose (6-9 years old): 100 mg/day	Not FDA approved in children and adolescents Suggested dosing: 20 mg to 80 mg/day Starting dose: 20 mg/day Max dose: 120 mg/day

^omg = milligrams; mEq/L = milliequivalents per liter; mcg/L = micrograms per milliliter

¹Ratings based on extrapolation from ADHD, ASD or irritability studies, aggression, and disruptive behavior studies.

[†]Note: Methylphenidate, amphetamines, alpha agonists (clonidine, guanfacine), and atomoxetine are recommended prior to other treatment regimens due to better side-effect profile in combination with evidence for use.

Level of Evidence:

A = 2RCTs or more

B = Small RCT or more than one open label study

C = Open label or case series

D = Pediatric trials assessing tolerability

For a full list of references, visit <http://medicaidmentalhealth.org/>.

Anxiety Disorders in Children under Age 6

Level 0

Comprehensive assessment that includes history of stressors, trauma, parental anxiety, and observation of child-parent interactions. Refer to *Principles of Practice* on page 6.

- ◆ Rating scales specifically for young children with anxiety symptoms are limited, but the Preschool Anxiety Scale (parent report) is available at <http://medicaidmentalhealth.org/>.
- ◆ Child and parent rating of anxiety symptom severity and impairment with feelings thermometer or faces barometer.



Level 1

Start with psychotherapy for at least 12 weeks that includes the parents and exposure-based cognitive behavioral therapy (CBT) adapted to young children.

- ◆ Assess primary caregivers for anxiety disorders and referral for treatment if impacting child's treatment progress.
- ◆ Address parental accommodation to child's symptoms of anxiety.



Level 2

If poor or partial response to psychosocial treatment after at least 12 weeks, consider combination treatment with fluoxetine and concurrent psychotherapy for children 4 to 5 years old.

- ◆ Review black-box warning with parents and monitor for suicidality.
- ◆ 8 to 10-week trial of fluoxetine if well tolerated starting at 1 to 2mg/day.
- ◆ Maximum dosing of fluoxetine: 5 to 10 mg/day.
- ◆ Increased risk of behavioral activation (e.g., difficulty falling asleep, increased motor activity, increased talkativeness) in young children.
- ◆ Discontinuation trial after 6 to 9 months of effective medication treatment with gradual downward titration.

Less than 4 years old, refer to *Principles of Practice in Children under Age 6* on pg. 6.



Level 3

If fluoxetine is not successful, consider sertraline in combination with concurrent psychotherapy. Start with low dosing and monitor closely

Not Recommended for Children Under Age 6 with Anxiety Disorders:

- ◆ The use of medication without psychosocial treatment.
- ◆ Use of tricyclic antidepressants (TCAs) or alpha-agonists.
- ◆ Ongoing use of benzodiazepines. May be used short-term for severe anxiety with medical or dental procedures.

The data for treating anxiety disorders with psychopharmacologic medication in young children is limited. Thus, exercise caution in prescribing pharmacological treatment below age 6.

Note: For dosing recommendations, refer to Table 10 on page 33.

Anxiety Disorders in Children and Adolescents Ages 6 to 17 Years Old

Level 0

A comprehensive assessment includes evaluation of:

- ◆ Risk factors including: stressors, trauma, bullying, social support systems, coping skills, learning disorders, and school issues.
- ◆ Family coping skills, parenting styles (overprotective or over-controlling), and family accommodations that support child's symptoms.
- ◆ Medical conditions and comorbid psychiatric disorders.
- ◆ Parental and family history of anxiety disorders and psychiatric treatment.
- ◆ Severity of anxiety symptoms and impairment from anxiety disorder.
 - ◇ Screening and monitoring for anxiety symptoms with multi-informant, validated rating scales for childhood anxiety (parent and child report) such as Self-Report for Childhood Anxiety Related Disorders (SCARED) and Spence Children's Anxiety Scale (SCAS). Available at <http://www.medicaidmentalhealth.org/>.
- ◆ Baseline somatic symptoms prior to medication trials.

Note: The Anxiety Disorders Interview Schedule for Children (ADIS-C) may assist clinicians to differentiate the specific anxiety disorders (Silverman and Albano, 1996). The ADIS-C is not available on the public domain.






Level 1

If mild to moderate anxiety disorder:

- ◆ **1a.** Provide family with psychoeducation regarding anxiety disorders and cognitive behavioral therapy (CBT).
 - ◇ Initiate treatment with exposure-based cognitive behavioral therapy.
- ◆ **1b.** If CBT is not available, first consider evidence-based psychosocial interventions.
 - ◇ Provide family with psychoeducation regarding anxiety disorders and CBT.
 - ◇ Train parents to monitor child's anxiety symptoms (e.g. feelings thermometer or faces barometer) and set up behavioral program with positive reinforcement for child's efforts and progress in addressing anxiety symptoms and decreasing avoidance.
 - ◇ If parental anxiety disorders interfere with treatment progress, provide referral for parent.

Anxiety Disorders

in Children and Adolescents Ages 6 to 17 Years Old *(continued)*

	<p>Level 2</p> <p>If moderate to severe anxiety disorder or inadequate response to CBT alone:</p> <ul style="list-style-type: none"> ◆ 2a. Initiate treatment with fluoxetine or sertraline alone or in combination with CBT. <ul style="list-style-type: none"> ✧ Combination therapy with CBT has been shown to be more effective than medication alone. ✧ Review boxed warnings with family and monitor for treatment emergent suicidality and behavioral activation (eg. difficulty falling asleep, increased motor activity, increased talkativeness). ◆ 2b. If first SSRI trial with fluoxetine or sertraline is not effective and/or there are treatment-limiting side-effects, switch to the other SSRI not used in Level 2a (fluoxetine or sertraline) and initiate/continue CBT.
	<p>Level 3</p> <p>If moderate to severe anxiety disorder and Levels 1 and 2 are not successful:</p> <ul style="list-style-type: none"> ◆ 3a. Duloxetine alone or in combination with CBT. Monitor height, weight, blood pressure and pulse with duloxetine. ◆ 3b. Consider fluvoxamine alone or in combination with CBT. <ul style="list-style-type: none"> ✧ Monitor for treatment emergent suicidality and behavioral activation for either duloxetine or fluvoxamine (see above).
	<p>Level 4</p> <p>If Levels 1, 2 and 3 are not successful, then re-assess diagnosis or refer to a specialist.</p> <p>If Level 3 is not successful may consider escitalopram, citalopram or venlafaxine in combination with CBT. Monitor for treatment emergent suicidality and behavioral activation. For venlafaxine, monitor height, weight, blood pressure and pulse.</p>
<p>Not Recommended:</p> <ul style="list-style-type: none"> ◆ Paroxetine as first or second line treatment (concern about increased adverse effects, eg. insomnia, behavioral activation, decreased appetite, vomiting, discontinuation symptoms, suicidal ideation). ◆ Benzodiazepines (BZD) as first-line monotherapy for long-term treatment of childhood anxiety disorders. 	

Notes:

Despite limited evidence, may consider monotherapy or augmentation with other medications if partial or poor response with SSRIs, duloxetine or venlafaxine. Potential agents include: buspirone, alpha-2 agonist, clomipramine, and low dose benzodiazepine. If prescribed, benzodiazepines should be reserved for short-term use only.

For dosing recommendations, refer to Table 10 on page 33.

Medications for the Treatment of Anxiety Disorders

Clinicians should realize that data below age 6 for treating anxiety disorders is limited and caution in using pharmacological treatment below age 6 is warranted.

Table 10.

Medications for the Treatment of Anxiety Disorders			
Drug Name	Young Child (4 – 6 Years)	Child (6 – 12 Years)	Adolescent
*Fluoxetine			
Starting Dose:	1-2 mg/day	2.5–5 mg/day	5–10 mg/day
Maximum Dose:	5-10 mg/day (limited data)	20–40 mg/day	40–60 mg/day
*Sertraline			
Starting Dose:	5-10 mg/day	10–12.5 mg/day	25 mg/day
Maximum Dose:	50-75 mg/day (limited data)	100–150 mg/day	150–200 mg/day
*Fluvoxamine			
Starting Dose:	5 mg/day	12.5–25 mg/day	25 mg/day
Maximum Dose:	50-75 mg/day (limited data)	100–200 mg/day	150–300 mg/day
Escitalopram			
Starting Dose:	1-2 mg/day	2.5 mg/day	5 mg/day
Maximum Dose:	5 -10 mg (limited data)	10–20 mg/day	20–30 mg/day
Citalopram			
Starting Dose:	No data	5 mg/day	10 mg/day
Maximum Dose:		20–40 mg/day	40 mg/day (check EKG above 40 mg for QTc prolongation)
*Duloxetine			
Starting Dose:	No data	20–30 mg/day	30 mg/day
Maximum Dose:		60 mg/day	60 mg/day
*Venlafaxine			
Starting Dose:	No data	37.5 mg/day	37.5 mg/day
Maximum Dose:		75–112.5 mg/day (25-39 kg)	150 mg/day (40–49 kg) 225 mg/day (>50 kg)

**Indicates placebo-controlled studies in children 6 to 17 years with anxiety disorders.*

Note: The FDA does not currently provide any dosing guidelines for venlafaxine in children or adolescents and does not recommend its use in this population due to mixed results in efficacy trials.

ADDITIONAL CLINICAL INFORMATION

- ◆ May titrate to lowest therapeutic dose once weekly.
- ◆ After reaching the lowest therapeutic dose, can increase SSRI or SNRI dose after one month if well tolerated and significant symptoms remain.
- ◆ If switching medications, in the absence of side effects, it is preferable to cross-titrate with an overlap of the two medications rather than titrating off one medication before starting the next medication.
- ◆ Can consider discontinuation trial of SSRI or SNRI after 12 months of effective medication treatment, during low stress period, and with gradual taper. Monitor for relapse.

ANXIETY DISORDERS AND COMORBID DISORDERS

■ ADHD:

- ◆ Stimulant medications can be combined with SSRIs for comorbid ADHD.
- ◆ Non-stimulant medication may be helpful for children with co-morbid anxiety or who cannot tolerate stimulants.

■ Depression and bipolar disorder:

- ◆ Fluoxetine is first-line medication for comorbid unipolar depression.
- ◆ For children with comorbid bipolar disorder:
 - ✧ The bipolar disorder should be stabilized first. Adding an SSRI or SNRI needs to be considered cautiously after CBT for the anxiety disorder has been tried.
 - ✧ Alternatives to SSRI medications for anxiety disorder symptoms may be considered early in treatment, such as guanfacine for autonomic symptoms.
- ◆ Use benzodiazepines with caution as they can increase disinhibition, mood lability, irritability, or aggression and may have potential for abuse.

■ Substance use disorder (SUD):

- ◆ Both anxiety disorders and SUD can be treated at the same time. Some substances increase anxiety & panic symptoms complicating treatment.
- ◆ Use caution with benzodiazepines in presence of SUD, especially those with short half-life and increased risk for abuse and dependence.
- ◆ Integrate additional psychotherapy components: Motivational strategies and CBT to identify triggers for cravings, develop alternative coping skills to reduce substance use.

■ Autism spectrum disorders (ASD) and developmental disorders (DD):

- ◆ Can modify CBT for anxiety disorders with ASD and/or DD.
- ◆ SSRIs may be used for anxiety/irritability and obsessive-compulsive behaviors distressing to the child, but not all ritualized or repetitive behaviors. Consider when obsessive features, rigidity of thought, perseveration, rituals, anxiety, depression, and/or irritability are impairing.
- ◆ For co-morbid ADHD symptoms, atomoxetine may reduce ADHD and anxiety symptom severity.

RESOURCES

■ Children

- ◆ What To Do When You Worry Too Much (Huebner, 2005)
- ◆ A Boy and a Bear: The Children's Relaxation Book (Lite, 2003)
- ◆ What To Do When You Dread Your Bed: A Kid's Guide to Overcoming Problems with Sleep (Huebner, 2008)

■ Adolescents

- ◆ My Anxious Mind: A Teen's Guide to Managing Anxiety and Panic (Tompkins and Martinez, 2009)
- ◆ Riding the Wave Workbook for Adolescents with Panic Disorder (Pincus, Ehrenreich and Spiegel, 2008)
- ◆ Smartphone applications for youth and their parents that provide access to tools taught in CBT sessions (eg. Mayo Clinic Anxiety Coach)

■ Parents/caregivers

- ◆ Helping Your Anxious Child (Rapee, Wignall, Spense, Cobham and Lyneham, 2008)
- ◆ Keys to Parenting Your Anxious Child (Manassis, 2008)
- ◆ Freeing Your Child from Anxiety (Chansky, 2014)
- ◆ Helping Your Child with Selective Mutism (McHolm, Cunningham, Vanier and Rapee, 2005)
- ◆ The Selective Mutism Treatment Guide: Manuals for Parents, Teachers and Therapists (Perdnick, 2012)
- ◆ When Children Refuse School: A CBT Approach Parent Workbook (Kearney and Albano, 2007)
- ◆ Parent training, educational materials and resources at <https://www.anxietybc.com/> and <http://www.copingcatparents.com/>

■ Relevant websites

- ◆ American Academy of Child and Adolescent Psychiatry (AACAP), <http://www.aacap.org> (Facts for Families)
- ◆ Anxiety and Depression Association of America (ADAA), <https://www.adaa.org/>
- ◆ Selective Mutism Group-Child Anxiety Network, <http://www.selectivemutism.org/>
- ◆ Association for Behavioral and Cognitive Therapies, <http://www.abct.org/Home/>
- ◆ Computer-based CBT treatments (cCBT) for youth with anxiety disorders: The BRAVE Program, BRAVE-Online and Camp Cope-A-Lot

Note: Above resources and website links were updated at the time of publication.

For a full list of references, visit <http://medicaidmentalhealth.org/>.

Bipolar Disorder (Acute Mania or Mixed Episodes) in Children and Adolescents Ages 6 to 17 Years Old

Level 0

Comprehensive assessment. Use systematic interview covering mania and depression symptoms, family history of psychopathology including depression and mania, and information from teachers if possible to establish duration of manic symptoms over the day.

- ◆ Classic bipolar disorder has clear episodes representing a change from usual behavior; DSM-5 symptoms consist of elevated and/or irritable mood and increased energy occurring most of the day, every day; co-occurring symptoms include grandiosity, decreased need for sleep, rapid speech and flight of ideas (no current validity under age 6).
- ◆ If ADHD is comorbid with bipolar I or II disorder, symptoms should intensify with the episode. If it is truly comorbid, mania should be treated and stabilized before treating ADHD.
- ◆ If the diagnosis of mania cannot be distinguished from ADHD, and especially combined ADHD and Oppositional Defiant Disorder, ADHD should be treated first with discussion with family members about advantages and disadvantages. Refer to ADHD guidelines on pg. 16.
- ◆ If rage outbursts are the primary focus of treatment, track the frequency, intensity, number and duration of episodes. Rule out Disruptive Mood Dysregulation Disorder (DMDD).
- ◆ If DMDD is present, refer to those guidelines on pg. 40; otherwise, treat the primary disorder first and then treat the aggression, referring to the aggression treatment guidelines.



Level 1

Monotherapy with one of these four agents (FDA approved for youth between the ages of 10-17):

- ◆ Aripiprazole
- ◆ Risperidone
- ◆ Quetiapine
- ◆ Asenapine
- ◇ For euphoric mania in adolescents, consider lithium.

Bipolar Disorder (Acute Mania or Mixed Episodes) in Children and Adolescents Ages 6 to 17 Years Old *(continued)*

➔	<p>Level 2</p> <p>If there is partial response to a single atypical antipsychotic, augment with a mood stabilizer (lithium, VPA/divalproex).</p> <p>If monotherapy with atypical antipsychotic listed in Level 1 is not effective:</p> <ul style="list-style-type: none"> ◆ 2a. Switch to another antipsychotic listed in Level 1 or olanzapine. ◆ 2b. Switch to a mood stabilizer (lithium, VPA/divalproex).
➔	<p>Level 3</p> <p>Monotherapy with antipsychotic (except clozapine) not listed in Level 1 or 2, or combination with mood stabilizer(s).</p>
➔	<p>Level 4</p> <p>Re-assess the diagnosis. Consider clozapine or ECT in adolescents.</p>
<p>Not Recommended: Two antipsychotics.</p>	



Dosing Recommendations for Atypical Antipsychotics in Bipolar Disorder in Children and Adolescents Ages 6 to 17 Years Old*

Clinicians should realize that data below age 10 for treating mania and mixed states are limited and caution in using pharmacological treatment below age 10 is warranted.

Table 11.

Dosing Recommendations for Atypical Antipsychotics and Mood Stabilizers in Bipolar Disorder			
Drug Name	Starting Dose	Maximum Dose	FDA Approved Age Range
Citalopram			
Lithium	300–600 mg/day Goal: acute mania: Blood level 0.8 – 1.2 mEq/L Goal maintenance: Blood level 0.6 – 1 mEq/L	Blood level: 1.2 mEq/L	12–17 years old
Valproate	10–15 mg/kg/day in divided dose Goal: 80 –125 mcg/mL	Dose determined by blood level. Max blood level should be 125 mcg/mL	Not approved in children or adolescents
First generation (typical) antipsychotics			
Haloperidol	Children: 0.25–0.5 mg/day Adolescents: 0.5–1 mg/day	Children: 4 mg/day Adolescents: 10 mg/day	Not approved for pediatric mania
Chlorpromazine	Children: 25–50 mg/day Adolescents: 25–100 mg/day	Children (under 12): 200 mg/day Adolescents: 500 mg/day	Not approved for pediatric mania
Second generation (atypical) antipsychotics			
Aripiprazole	2-5 mg/day	30 mg/day	10–17 years old
Risperidone	Children: 0.25 mg/day Adolescents: 0.5–1 mg bid	Children: 4 mg/day Adolescents: 6 mg/day	10–17 years old
Quetiapine	Children: 12.5 mg bid Adolescents: 25 mg bid	Children: 400 mg/day Adolescents: 600 mg/day	10–17 years old
Asenapine	2.5 mg sublingually twice a day After 3 days, may increase to 5 mg sublingually twice daily, and after an additional 3 days up to 10 mg twice a day, as needed and as tolerated. Avoid food and liquids for at least 10 minutes before and after administration.	10 mg twice a day	10–17 years old
Olanzapine	2.5–5 mg once daily Weekly titration by 2.5–5 mg increments	20 mg/day	13–17 years old

Dosing Recommendations for Atypical Antipsychotics in Bipolar Disorder in Children and Adolescents Ages 6 to 17 Years Old*

MINIMIZING SIDE EFFECTS WHEN SWITCHING PSYCHOTROPIC MEDICATIONS:

- Start low. Go slow. Stop slowly. Avoid abrupt stopping, starting, and/or switching to reduce risk of rebound and withdrawal phenomena.
- Do not switch until the primary disorder has been treated according to target disorder guidelines at adequate dose and duration.
- Only stop and/or switch abruptly if a serious adverse effect necessitates it (i.e., severe neutropenia, agranulocytosis, diabetic ketoacidosis, neuroleptic malignant syndrome, acute pancreatitis, lithium toxicity, Stevens-Johnson syndrome, etc.).
- Slow switch using cross-titration is the preferred method; an even slower switch can be done using the plateau-cross titration method, with therapeutic dose overlap of medications (when switching to a less sedating cholinergic medication, or one with a much longer half-life).
- If time permits, do not reduce the first medication by more than 25–50% per 5 half-lives.

ADDITIONAL CONSIDERATIONS:

- When switching medications, the more different the binding affinity for the same receptor (between the two drugs), the greater risk for side effects and rebound and withdrawal phenomena (especially sedating; anti-cholinergic; dopaminergic).
- The more different the half-life of the medications with the same physiological effect (desired or undesired), the greater the risk for rebound and withdrawal phenomena. Withdrawal and rebound phenomena are most likely when discontinuing from a short half-life medication.
- Withdrawal and rebound phenomena are most likely to occur when switching from a strongly antihistaminergic (sedating) or anti-cholinergic medication (i.e., clozapine, olanzapine, quetiapine), to a less strongly binding medication (i.e., haloperidol, molindone, paliperidone, aripiprazole, ziprasidone); or from a strongly binding anti-dopaminergic (i.e., FGA AR risperidone, paliperidone) to a less strongly binding antipsychotic (i.e., clozapine, quetiapine, clozapine); or a full antagonist, to a partial agonist (aripiprazole).
- Insufficient efficacy or increased side effects may occur during a switch when medications metabolized by cytochrome P450 liver enzymes are paired with a medication that affects that same enzyme.
- Never discontinue lithium or clozapine abruptly to avoid potentially severe rebound of mania or psychoses.
- Quetiapine and mirtazapine can lead to more sedation at lower doses (below 250–300 mg for quetiapine and below 15 mg for mirtazapine) because of its high affinity for histamine receptors. This is offset by increased alpha adrenergic activity at higher doses that counteract this.

For a full list of references, visit <http://medicaidmentalhealth.org/>.

Disruptive Mood Dysregulation Disorder (DMDD) in Children and Adolescents Ages 6 to 17 Years Old: Recommendations

Note: Disruptive Mood Dysregulation Disorder (DMDD) is a new diagnosis in DSM-5 characterized by irritability and explosive outbursts. Due to an increase in the use of this diagnosis since its introduction to the DSM-5, the expert panel determined it appropriate to provide recommendations on the diagnosis and treatment of this condition.

Due to the current lack of evidence-based specific and suitable pharmacological treatment options for Disruptive Mood Dysregulation Disorder, clinical judgment is paramount in the choice of medications, dose, length of treatment, and measurement of treatment response. Medications are only part of the treatment plan and are provided in combination with psychosocial interventions which may include parent training, anger management, social skills, care managers, in-home services, psychiatric hospitalization, residential treatment and other supports determined on a case by case basis.

Level 0

Comprehensive assessment:

- ◆ Systematic interview covering other psychiatric conditions in which irritability may be a presenting symptom:
 - ◇ ADHD
 - ◇ ODD and/or conduct disorder
 - ◇ Bipolar disorder (mania)
 - ◇ Depressive disorders
 - ◇ Anxiety disorders (including obsessive-compulsive disorder)
 - ◇ PTSD and trauma related conditions
 - ◇ Autism Spectrum Disorder
 - ◇ Intermittent explosive disorder
 - ◇ Psychosis
 - ◇ Drug/alcohol use/abuse
- ◆ Family history of psychopathology including depressive disorders, anxiety disorders and bipolar disorder (with specific assessment for mania).
- ◆ Information from collateral sources (eg. teachers, caregivers) to establish duration of symptoms.

Use rating scales to assess for psychiatric conditions as noted above. Refer to relevant sections in these *Practice Guidelines*.

- ◆ Assess for other medical conditions or medications that may be contributing to symptoms.
 - ◇ If other medical conditions are present, make appropriate referrals to primary care or specialists to ensure conditions are treated adequately.
 - ◇ If symptoms are medication-induced, consider tapering or stopping the offending agent.
- ◆ Assess for psychosocial stressors (eg. conflict at home, classroom situation, bullying) that may be contributing to the child's symptoms (i.e. irritability, anger, temper outbursts disproportionate to the situation and more severe than the typical reaction of same-aged peers).

Disruptive Mood Dysregulation Disorder (DMDD) in Children and Adolescents Ages 6 to 17 Years Old: Recommendations *(continued)*

Level 0 *(continued)*

- ◆ Assess for and rule out other DSM-5 diagnoses as noted above (eg. ADHD, ODD, bipolar disorder, etc.).
- ◆ Assess and document the severity of symptoms (frequency, intensity, number and duration of outbursts and irritability) using rating scales.

◇ *Recommended rating scales for irritability:*

- Affective Reactivity Index (quick assessment, focuses on frequency of irritability only)
- Child Behavior Checklist (comprehensive scale that includes irritability sub-scale)
- Aberrant Behavior Checklist (used in children with developmental disorders, has irritability sub-scale).

Note: The Child Behavior Checklist and Aberrant Behavior Checklist are not available in the public domain.

◇ *Recommended scales for aggression and outbursts:*

- Overt Aggression Scale-Modified (measures nature and severity of aggression)
- Irritability Inventory (assesses triggers, behaviors, duration of outbursts and how the child feels after the outburst).

Note: The Irritability Inventory has not been widely used, and it is not available on the public domain.

For available clinical rating scales, refer to <http://www.medicaidmentalhealth.org/>.

- ◆ Assess and document degree of impairment, which is based on the severity, frequency, and duration of outbursts.

Note: Once other medical and psychiatric conditions have been assessed or/ruled out, and treatment has been optimized for known conditions (medical, psychiatric) in which irritability and aggression may be presenting symptoms and for which there are evidence based treatments, if DSM-5 criteria are met for Disruptive Mood Dysregulation Disorder, that diagnosis may be made.



Level 1

The core symptoms of Disruptive Mood Dysregulation Disorder are irritability, anger, aggression, and temper outbursts (verbal or behavioral/physical) that are disproportionate to the situation and significantly more severe than the typical reaction of same-aged peers. Irritability and aggression are distinct symptoms. Irritability is defined as becoming extremely angry with what most would feel is minor provocation (Copeland, et al., 2015). Aggression refers to hostile, injurious, or destructive behaviors.

- ◆ **1a.** Address psychosocial stressors that are directly contributing to or worsening the child's symptoms (eg. irritability, anger, aggression, temper outbursts).
- ◆ **1b.** Address the severity of the child's symptoms.
 - ◇ If symptoms are mild, implement psychosocial interventions (eg. targeted case management, crisis intervention programs, parent training).
 - ◇ If symptoms are moderate to severe (eg. child is removed from school, has been seen in emergency room or psychiatrically hospitalized), psychosocial interventions alone are unlikely to suffice. Consider interventions in Level 2.

Disruptive Mood Dysregulation Disorder (DMDD) in Children and Adolescents Ages 6 to 17 Years Old: Recommendations *(continued)*



Level 2

Currently, limited scientific evidence exists for the use of medications for Disruptive Mood Dysregulation Disorder.

If irritability and outbursts continue to cause impairment after co-morbid disorders have been treated optimally, re-assess the diagnosis.

If symptoms persist, may consider use of treatments targeted toward aggression including atypical antipsychotics, mood stabilizers, alpha agonists, or antidepressants in conjunction with psychotherapeutic and psychosocial interventions. Refer to Table 9 on pg. 28 for dosing recommendations for aggression.

Not Recommended: Use of medications alone.

For a full list of references, visit <http://medicaidmentalhealth.org/>.



Insomnia Disorder in Children and Adolescents

Level 0

Comprehensive assessment

- ◆ Sleep disorders are prevalent in children with neurodevelopmental problems and other psychiatric conditions. Refer to neurodevelopmental guidelines for comprehensive assessment and treatment of sleep problems in this population.
- ◆ Sleep practices (e.g., electronic use, caffeine, napping)
- ◆ Primary sleep disorders (Obstructive sleep apnea (OSA), Restless leg syndrome (RLS), circadian rhythm disorders)
- ◆ Medical, psychiatric and neurodevelopmental co-morbidities
- ◆ Concomitant medications, especially psychotherapeutic medication
 - ◇ Direct effects on sleep
 - ◇ Exacerbation primary sleep disorders
- ◆ Caregiver role
- ◆ Presentation: sleep onset/maintenance

The BEARS Sleep Screening Algorithm that screens for major sleep disorders for ages 2 to 18 years of age. Refer to <http://www.medicaidmentalhealth.org/> for the BEARS Sleep Screening Algorithm and for updated links to sleep diaries.

Additional considerations:

- ◆ Consider chronic sleep loss and primary sleep disorders (OSA, RLS, and narcolepsy) as potential causes of psychiatric symptoms.
- ◆ Consider comorbid chronic sleep loss and primary sleep disorders as potential contributors to psychiatric symptoms.
- ◆ Applies to all psychiatric disorders but particularly ADHD and depression.

Note: Polysomnography (sleep study) is best suited to diagnosing a primary sleep disorder such as OSA and should not be used to evaluate primary insomnia.



Level 1

Behavioral interventions

- ◆ Healthy sleep practices
 - ◇ Regular sleep schedule and bedtime routine, stimulus control (e.g. cool, quiet, dark sleep environment, avoiding bright light), avoidance of electronic devices (eg. TV, computers, tablet devices, phones, etc.), limit caffeine, age appropriate napping, sleep restriction
- ◆ Caregiver-based for younger children
 - ◇ Sleep training, bedtime fading, bedtime pass
- ◆ Cognitive Behavioral Therapy for Insomnia (CBT-I) for older children and adolescents
 - ◇ Stimulus control, sleep restriction

Insomnia Disorder in Children and Adolescents (*continued*)


	<p>Level 2</p> <p>No data for children under 2 years old. Melatonin is administered from 30 min to 60 min prior to the desired bedtime. Refer to Table 12 below for dosing. <i>Consider recommending the use of pharmaceutical grade melatonin; refer to US Pharmacopeia available online.</i> Although several meta-analyses have not identified significant long-term side effects of melatonin in the pediatric population, concerns based on animal studies about possible effects on pubertal development in humans with long-term use have been raised.</p>
---	--



Table 12.

Medications for the Treatment of Insomnia in Children and Adolescents			
Medication*	Starting Dose	Titration	Discontinuation
Melatonin	<p><i>Note on typical hypnotic dose of melatonin:</i></p> <p>Children <2: No data available</p> <p>Children 2 years and older: 0.5 to 1 mg po nightly</p> <p>Adolescents: 1 to 3 mg po nightly</p>	<p>Up to 3.0 mg po nightly in children</p> <p>Up to 9 to 10 mg po nightly in adolescents</p>	As clinically appropriate
Clonidine	0.05 mg po nightly	0.05 mg per week up to 0.3 mg nightly	0.05 mg every 3 days

* Melatonin is considered a dietary supplement and is not regulated by the FDA. Clonidine is NOT FDA-Approved for treatment of insomnia in children and adolescents. Evidence exists supporting the use of clonidine in certain clinical populations with comorbid insomnia (neurodevelopmental disorders and ADHD).

Caution: Inadequate dose of sleep aids may result in night-time awakening. Too high a dose can result in over-sedation.

Insomnia Disorder in Children and Adolescents (*continued*)

	<p>Level 3</p> <p>Pharmacotherapy should only be considered for short-term use if:</p> <ul style="list-style-type: none">◆ Insomnia results in significant impairments in child and/or caregiver daytime functioning.◆ Behavioral interventions alone are ineffective OR caregivers unable to implement. <p>Pharmacotherapy with behavioral treatment may be appropriate for:</p> <ul style="list-style-type: none">◆ Short-term crisis intervention.◆ Insomnia with comorbid high risk psychiatric (ADHD, MDD) or neurodevelopmental conditions (ASD).◆ Insomnia exacerbates psychiatric, medical conditions <p>Clonidine 0.025–0.3 mg nightly</p>
	<p>Level 4</p> <p>Appropriate psychotropic medications for patients with psychiatric comorbidities. Refer to relevant sections in these <i>Practice Guidelines</i> for dosing recommendations.</p>
<p>Not Recommended:</p> <p>Use of sedating psychotropic medication in the absence of other psychiatric disorder.</p> <p>Chloral hydrate; zolpidem; first/second generation antipsychotics (e.g., quetiapine); doxylamine</p>	

For a full list of references, visit <http://medicaidmentalhealth.org/>.

Major Depressive Disorder (MDD) in Children under Age 6

Level 0

Comprehensive assessment. Refer to *Principles of Practice* on page 6.



Level 1

Psychotherapeutic intervention (e.g., dyadic therapy) for 6 to 9 months; assessment of parent/guardian depression and referral for treatment if present.



Level 2

If poor response to psychosocial treatment after 6 to 9 months, re-assess diagnosis, primary care giver response to treatment, and/or consider switching to a different or more intensive psychosocial treatment. Consider child psychiatric consultation or second opinion.

Under 3 years, refer to *Principles of Practice* on page 6.



Level 3

If depression is severe, or there is continued poor response to psychosocial treatment alone, consider combination treatment with fluoxetine and concurrent psychosocial treatment.

- ◆ Fluoxetine — 4 to 5 years old
 - ◇ Maximum dose: 5 mg/day
 - ◇ Discontinuation trial after 6 months of any effective medication treatment with gradual downward taper.
 - ◇ **Monitor for behavioral disinhibition and suicidality.** Behavioral disinhibition is defined as impulsive, sensation seeking behaviors and lack of self-regulation.

Not Recommended:

- ◆ The use of medication without psychosocial treatment.
- ◆ Use of tricyclic antidepressants (TCAs) or paroxetine.

Note: In preschool children, MDD is very rare (point prevalence is thought to be 0.5%).

Major Depressive Disorder (MDD) in Children and Adolescents Ages 6 to 17 Years Old

Level 0

Assessment

- ◆ Screening using multi-informant, validated rating scales that include depression and screening for comorbidity (other psychiatric and medical conditions):
 - ◇ Center for Epidemiological Studies Depression Scale for Children Patient Health Questionnaire (CES-DC)
 - ◇ Patient Health Questionnaire-9 (PHQ-9)
 - ◇ Pediatric Symptom Checklist (PSC)

Note: The above scales are available at <http://medicaidmentalhealth.org/>.
- ◆ Specific screen for harm to self or others and access to firearms, knives/sharps, and other lethal means such as alcohol, prescription and non-prescription medications.
- ◆ Evaluate sleep hygiene, diet, and exercise.
- ◆ Address environmental stressors such as abuse, bullying, conflict, functioning at school, peer relationships, and caregiver depression.
- ◆ Specific screen for harm to self/others.
- ◆ **Establish a safety plan:**
 - ◇ Removal of firearms, knives/sharps, and other lethal means such as alcohol, prescription and non-prescription medications.
 - ◇ **Develop an emergency action plan:**
 - Provide adolescents with mutually agreeable and available emergency numbers and contacts.
 - Engage a concerned third party familiar with the adolescent.
- ◆ Positive screen: DSM-5 - based interview evaluation.
- ◆ Consider medical reason for depression (e.g., hypothyroidism, B12/folate deficiency, anemia, malnutrition (with or without eating disorder), chronic disorder (diabetes, asthma, inflammatory bowel disease, juvenile rheumatoid disease, infectious mononucleosis, etc.).
- ◆ Rule out iatrogenic etiology of depression (i.e., medication side effects/interactions).
- ◆ Evaluate past psychiatric and medical history, previous treatment, family conflict and current depression of family and caregivers, bullying, abuse, peer conflict, school issues and substance abuse.
- ◆ Consider and rule out presence of bipolar depression. Pointers: Prior (hypo)mania, family history of bipolar disorder, atypical depression with reverse neurovegetative signs, seasonal affective component, brief and recurrent episodes, and melancholic depression in prepubertal child.

Major Depressive Disorder (MDD) in Children and Adolescents Ages 6 to 17 Years Old *(continued)*

Level 0 (continued)

- ◆ Track outcomes using empirically validated tools. Refer to DSM-5 Severity Measure for Depression, Child Age 11–17 available and Child Depression Inventory (CDI) available at <http://www.medicaidmentalhealth.org/>.

Note: The Child Depression Inventory is not available in the public domain.

Always monitor for:

- ◆ Emergence or exacerbation of suicidality and balance the risk–benefit profile of antidepressants during the acute treatment phase.
- ◆ Behavioral activation (eg. difficulty falling asleep, increased motor activity, increased talkativeness)
- ◆ Adverse events
- ◆ Treatment adherence
- ◆ Treatment or inherently emergent comorbidity
- ◆ Potential development of (hypo)mania






Level 1


Initial treatment plan

- ◆ Active support: 6 week trial (if mild symptoms).
 - ✧ Components of active support must include psychosocial interventions and psychoeducation and may include: Self-help materials, active listening/relationship building, school involvement, mood monitoring, pleasant activities, cognitive restructuring, family conflict reduction, sleep hygiene, and exercise.

Major Depressive Disorder (MDD) in Children and Adolescents Ages 6 to 17 Years Old *(continued)*

	<p>Level 2</p> <p>Reassess diagnosis first (e.g., bipolar disorder), rule out psychostimulant or substance abuse related psychosis. Targeted treatments if symptoms are moderate to severe, impairment continues, and/or no response to active support. Start with cognitive behavioral therapy (CBT), Interpersonal therapy (IPT), depression-specific behavioral family therapy.</p> <ul style="list-style-type: none"> ◆ 2a. Fluoxetine or combination of CBT or IPT psychotherapy with fluoxetine (COMB). ◆ 2b. May consider use of escitalopram for age 12 and above. <p>Qualifiers:</p> <ul style="list-style-type: none"> ◆ Mild: Psychosocial interventions only. ◆ Moderate/Severe: COMB. ◆ Psychosis: SSRIs (fluoxetine, escitalopram) plus antipsychotic. ◆ Comorbidity: COMB, treat comorbidity. ◆ Suicidality: intensify surveillance and follow-up; COMB if on antidepressant only or remove antidepressant if otherwise ineffective; if chronic, consider lithium augmentation.
	<p>Level 3</p> <p>Inadequate response</p> <ul style="list-style-type: none"> ◆ If no clinical response to the medication utilized in Level 2, switch to another medication listed above.
	<p>Level 4</p> <p>Poor or non-response</p> <ul style="list-style-type: none"> ◆ Refer to mental health specialist. ◆ Re-assess diagnosis (bipolar disorder, substance use disorder, anxiety disorders, PTSD), rule out medical condition (e.g., hypothyroidism), or medication side effects. ◆ Increase psychosocial intervention and medication dose if tolerated. ◆ Augment with alternate psychosocial intervention (either CBT or IPT). ◆ Consider change in level of care (treatment setting and interventions based on severity of illness). ◆ For milder form and/or seasonal affective symptoms with light sensitivity, consider bright light therapy.

Major Depressive Disorder (MDD) in Children and Adolescents Ages 6 to 17 Years Old *(continued)*

	<p>Level 5</p> <p>If poor or non-response to Level 4 interventions</p> <ul style="list-style-type: none"> ◆ Switch previously used SSRIs to sertraline, citalopram, bupropion or venlafaxine, especially in those who do not have access to psychotherapy or have not responded to non-pharmacological interventions. ◆ Consider augmentation of SSRI with bupropion, thyroxine, lithium, buspirone, mirtazapine, aripiprazole, quetiapine, or risperidone (adult data only). ◆ If psychotic/severe: ECT (for adolescents). <p>Notes:</p> <ul style="list-style-type: none"> ◆ Factors favoring maintenance treatment (at any Level): <ul style="list-style-type: none"> ◇ Partial response ◇ Prior relapse ◇ Suicidality ◇ Comorbidity risk for relapse ◇ Environmental risk for relapse ◇ Family history of relapsing/recurrent major depression ◇ Lack of return to full premorbid functioning ◆ Maintenance treatment: 9 to 12 months. ◆ After maintenance treatment: If stable, at level of premorbid functioning, and no anticipated increase in stressors, consider discontinuation trial over 3 to 4 months. <p><i>Note on pharmacogenomic testing: The current evidence does not support pharmacogenomic testing in routine psychiatric clinical practice.</i></p>
---	---

For a full list of references, visit <http://medicaidmentalhealth.org/>.

Obsessive Compulsive Disorder (OCD) in Children and Adolescents Ages 6 to 17 Years Old

Level 0

Comprehensive assessment that includes screening for OCD symptoms and medical causes.

A comprehensive assessment before initiating treatment includes:

- ◆ Duration, type of course (e.g. episodic), and severity
- ◆ Family history (for OCD, tics, autoimmunity)
- ◆ Physical examination: Movements (tics or chorea), red hands, dysmorphology, inflamed throat
- ◆ If new and sudden onset, examine for clinical and subclinical infections, especially group A streptococcus and mycoplasma pneumonia and treat
- ◆ Review for most common comorbid presentations: ADHD, tics, separation anxiety, and ASD
- ◆ Specialty referral as appropriate, e.g., child psychiatry or for cognitive behavioral therapy (CBT)

Associated conditions:

- ◆ Health status: Infections, endocrine disorder, autoimmune
- ◆ Genetic disorder: Velocardiofacial Syndrome (VCFS), Wilson's, CNV's associated with OCD/tics
- ◆ Secondary to a medication or substance: Stimulants, atypical antipsychotics, montelukast, lamotrigine, etc.
- ◆ Trauma: physical, emotional, and sexual

Level 1

- ◆ **1a.** If mild to moderate OCD, start with CBT plus exposure response prevention (ERP) with qualified therapist.
- ◆ **1b.** If moderate to severe OCD, start with combination of behavioral therapy (CBT + ERP) and approved SSRI such as sertraline, fluoxetine or fluvoxamine.

Level 2

If inadequate response to CBT alone (at least 15 sessions) and mild to moderate OCD, add an approved SSRI (sertraline, fluoxetine, or fluvoxamine). If inadequate response to combination therapy after 10 to 12 weeks of optimized SSRI dosing and moderate to severe OCD, switch to another approved SSRI.

Level 3

- ◆ **3a.** If inadequate response after 10 to 12 weeks of optimized SSRI dosing, utilize another approved SSRI or consider clomipramine.
- ◆ **3b.** Consider other non-FDA approved SSRI (e.g., escitalopram).

Level 4

If treatment resistant to behavior therapy and/or SSRI, augment with low dose aripiprazole (0.5 to 3 mg/day) or clomipramine (10 to 50 mg/day).

Obsessive Compulsive Disorder (OCD) in Children and Adolescents Ages 6 to 17 Years Old *(continued)*

Table 13.

Medications for the Treatment of OCD				
Drug Name	Starting Dose (mg/day)		Max Dose (mg/day)	
	Pre-Adolescent	Adolescent	Pre-Adolescent	Adolescent
Fluoxetine ^a	2.5–5 mg/day	10–20 mg/day	40 mg/day	80 mg/day
Sertraline	12.5–25 mg/day	25–50 mg/day	150 mg/day	200 mg/day
Fluvoxamine	12.5–25 mg/day	25–50 mg/day	150 mg/day	300 mg/day
Clomipramine ^a	6.25–12.5 mg/day	25 mg/day	150 mg/day	200 mg/day
*Escitalopram	2.5–5 mg/day	5–10 mg/day	20 mg/day	30 mg/day
**Citalopram ^a	2.5–10 mg/day	10–20 mg/day	40 mg/day	60 mg/day
**Paroxetine ^b	2.5–10 mg/day	10 mg/day	40 mg/day	60 mg/day

^aNo FDA approval for OCD in children.

^{**}No FDA approval for children.

^cConsider EKG monitoring especially if polypharmacy or higher doses.

^bSlow taper upon discontinuation.

OCD TREATMENT CONSIDERATIONS:

- A standard course of CBT with ERP is 10 to 15 sessions, 20 sessions if treatment refractory.
- OCD medication — time to full effect may be long (8-12 weeks) and incomplete (50% response).
- SSRI efficacy much less when in the context of comorbid conditions (especially tics and oppositional defiant disorder).

SSRIs AND DOPAMINE-2 BLOCKERS IN PATIENTS WITH TICS AND OCD:

- In many patients with tics and OCD, combination pharmacotherapy is required (e.g., D2 blockers and SSRIs).
- There are almost no combination therapy trials in children with OCD/tics.
- Most data exist for risperidone and aripiprazole (low doses, i.e., much lower than those used in psychotic or bipolar disorders).

Obsessive Compulsive Disorder (OCD) in Children and Adolescents Ages 6 to 17 Years Old *(continued)*

RESOURCES

■ Children/adolescents

- ◆ Obsessive-Compulsive Disorder: The Ultimate Teen Guide (Rompella, 2009)
- ◆ Breaking Free from OCD: A CBT Guide for Young People and Their Families (Derisley, et al., 2008)

■ Parents/caregivers

- ◆ Talking Back to OCD: The Program that Helps Kids and Teens Say “No Way” and Parents Say “Way to Go” (March, 2007)
- ◆ What To Do When Your Child Has Obsessive Compulsive Disorder: Strategies and Solutions (Wagner, 2002)
- ◆ Freeing Your Child from Obsessive Compulsive Disorder (Chansky, 2001)

■ Clinicians

- ◆ Family-Based Treatment for Young Children with OCD: Therapist Guide (Freeman and Marrs Garcia, 2008)
- ◆ Obsessive-Compulsive Disorder and Its Spectrum: A Life-Span Approach (Storch and McKay, 2008)

■ Relevant websites

- ◆ International OCD Foundation, <https://kids.iocdf.org/>
- ◆ Association for Behavioral and Cognitive Therapies, <http://www.abct.org>
- ◆ PANDAS Network, <http://www.pandasnetwork.org/>
- ◆ Beyond OCD, <http://beyondocd.org/>
- ◆ Developmental-Behavioral Pediatrics, www.dbpediatrics.org
- ◆ Teaching the Tiger – A Handbook for Educators, <http://www.hopepress.com>

Note: Above resources and website links were updated at the time of publication.

For a full list of references, visit <http://medicaidmentalhealth.org/>.

Post-Traumatic Stress Disorder (PTSD) in Children and Adolescents

Level 0

Comprehensive assessment includes:



- ◆ Use of standardized measures:
 - ◇ Juvenile Victimization Questionnaire (JVQ)
 - ◇ Trauma History component of the University of California at Los Angeles Posttraumatic Stress Disorder Reaction Index (UCLA-PTSD RI)
- ◆ For specific PTSD symptoms, clinicians may use self-report and parent report measures:
 - ◇ University of California at Los Angeles Posttraumatic Stress Disorder Reaction index for DSM-5.
 - ◇ Child PTSD Symptom Scale for DSM 5

Note: The UCLA-PTSD RI is not available in the public domain. The JVQ is available with permission.


Links to the measures are available at <http://medicaidmentalhealth.org/>.

- ◆ Assessment of ongoing trauma in the context of the environment including history of abuse (physical, sexual, neglect), traumatic life events, domestic violence, economic instability, court involvement, etc.
- ◆ Address all safety concerns (i.e., child abuse), report to the appropriate agencies and/or make any mandated reports based on history.
- ◆ A comprehensive assessment of psychiatric symptoms and co-morbidities, as well as impairment from these symptoms and disorders.
- ◆ Thorough assessment of developmental, medical history, family structure, and parent-child relationship.
- ◆ An assessment of family psychiatric history, including: past and current history of parental psychiatric illnesses, substance abuse and treatment history of parents, parental figures (e.g., step parent), siblings, and other relatives.

Post-Traumatic Stress Disorder (PTSD) in Children and Adolescents *(continued)*

	<p>Level 1</p> <p>The greatest level of evidence supports exposure-based therapies, of which Trauma-Focused CBT (TF-CBT) has the most data and is the most widely used.</p> <p>In children under 6, may consider TF-CBT (4 months) or Child Parent Psychotherapy (CPP) (6 months) as first line treatment.</p>
	<p>Level 2</p> <p>Where TF-CBT is not readily available or after inadequate response to TF-CBT (or CPP in younger children), other psychosocial interventions include:</p> <ul style="list-style-type: none"> ◆ Prolonged Exposure therapy ◆ Cognitive behavioral therapy for PTSD ◆ Eye Movement Desensitization and Reprocessing (EMDR) therapy ◆ KIDNET (A child friendly version of Narrative Exposure Therapy or NET) ◆ Trauma and Grief Components Therapy for Adolescents ◆ Child and Family Traumatic Stress Intervention (Brief PTSD prevention therapy for recent trauma exposure) <p>When oppositional behavior (in younger children) or emotional dysregulation and/or self-harm and suicidal behavior (in adolescents) are prominent and debilitating, consider the following prior to or in conjunction with trauma specific therapies:</p> <ul style="list-style-type: none"> ◆ Young children - Parent Child Interaction Therapy (PCIT) ◆ Adolescents - Dialectical Behavior Therapy (DBT)

Post-Traumatic Stress Disorder (PTSD) in Children and Adolescents (*continued*)

	<p>Level 3</p> <p>Re-evaluate and reassess for new or ongoing safety concerns. Refer to <i>Principles of Practice</i> on page 6 for under age 6 and page 9 for 6–17 years old.</p> <ul style="list-style-type: none"> ◆ There no empirical evidence to support the use of psychotropic medications in children 6 years or younger. ◆ For PTSD symptoms that impair sleep (eg. nightmares, night-time hyperarousal), may consider psychotherapy augmentation at night with prazosin. Start prazosin at 1 mg nightly and titrate by 1 mg every week until target symptoms improve or intolerable side effects emerge, up to a maximum dose of 5 mg nightly. ◆ For persistent intrusive symptoms or increased arousal/reactivity, may consider psychotherapy augmentation with clonidine or guanfacine. ◆ Re-assess diagnosis and refer to specialist if not already done for persistent trauma exposure. ◆ Assess that family has received supportive treatment.
<p>Not Recommended:</p> <ul style="list-style-type: none"> ◆ SSRIs because of several negative trials ◆ Benzodiazepines ◆ Second generation (i.e. atypical) antipsychotics (SGAs) ◆ Two or more agents that reduce sympathetic arousal concurrently (prazosin, guanfacine, clonidine) ◆ Use of medications to prevent PTSD in children, due to lack of evidence 	

Notes:

1. Not every trauma results in PTSD.

2. No FDA approved medications listed in Level 3. Limited evidence of efficacy for agents listed in Level 3.

For a full list of references, visit <http://medicaidmentalhealth.org/>.

Schizophrenia (Early Onset)

Level 0

Comprehensive assessment

- ◆ Diagnosis based on
 - ◇ Symptom presentation
 - ◇ Mental status examination findings (e.g., responding to internal stimuli, bizarre beliefs, disorganized speech)
 - ◇ Course of illness, especially a decline in function or failure to progress
- ◆ Assess potential confounding factors, including any history of significant developmental problems, mood disorders, trauma or substance abuse.

Helpful clinical tools include:

Structured diagnostic interviews



- ◆ Kiddie-SADS-Present and Lifetime Version (K-SADS-PL)
- ◆ Structured Clinical Interview for DSM, Childhood Version (KID SCID)

Symptom questionnaires





- ◆ Positive and Negative Syndrome Scale (PANSS)
- ◆ Brief Psychiatric Rating Scale for Children (BPRS-C)

Links to clinical tools listed above are available at <http://medicaidmentalhealth.org/>.

Schizophrenia (Early Onset) (continued)

	<p>Level 1</p> <p>Monotherapy with an antipsychotic agent FDA-approved to treat schizophrenia in adolescents:</p> <ul style="list-style-type: none"> ◆ Risperidone, aripiprazole, quetiapine (ages 13 years and older) ◆ Paliperidone (ages 12 years and older) ◆ Haloperidol, perphenazine, thiothixene, molindone (ages 12 years and older) <p>First-line medication choice is based on side effect profile, patient/family preference and cost.</p> <p>For all antipsychotic trials, monitor side effects systematically, including:</p> <ul style="list-style-type: none"> ◆ Extrapyramidal side effects ◆ Metabolic monitoring per ADA guidelines <p><i>Note: Adjunctive agents may be indicated to treat/prevent EPS or metabolic side effects.</i></p> <p>A therapeutic trial is generally defined as 4 to 6 weeks with doses up to FDA- approved dosages in adults (with allowances for children < 13 years of age), as tolerated.</p> <p>If there is no response after two weeks at a therapeutic dose, consider changing to a different agent (see Level 2).</p> <p>Youth with schizophrenia and their families also need intensive support and case management services, including:</p> <ul style="list-style-type: none"> ◆ Psychoeducational therapies addressing treatment options ◆ Safety planning ◆ Relapse prevention and adherence challenges ◆ Special education and/or vocational programs. <p><u>Notes:</u></p> <ol style="list-style-type: none"> 1. Olanzapine is FDA approved to treat schizophrenia in adolescents (ages 13 years and older). However, given the risk of metabolic side effects, olanzapine is not recommended as a first-line treatment. 2. Although the traditional neuroleptics, e.g., haloperidol, perphenazine and thiothixene are FDA approved for use in adolescents, they have not been as well studied as the newer second generation medications in the pediatric population. 3. Paliperidone is a metabolite of risperidone and more expensive. 4. Molindone is now available in the marketplace.
	<p>Level 2</p> <p>Monotherapy with alternative drug FDA approved to treat schizophrenia in adolescents (from Level 1 above, or olanzapine) if the first agent tried is not effective or poorly tolerated.</p>

Schizophrenia (Early Onset) (continued)

	<p>Level 3</p> <p>Monotherapy with alternative drug FDA approved to treat schizophrenia in adolescents (from Level 1 above or olanzapine), or with an antipsychotic FDA approved for adults*, but not approved for children and adolescents.</p> <p><u>Notes:</u></p> <ol style="list-style-type: none"> 1. For nonresponses to second generation agents, consider trial of first generation agent. 2. Ziprasidone (Findling et al., 2013) and asenapine (Findling et al., 2015) were not found to be statistically superior to placebo for treating adolescent schizophrenia, and therefore are not recommended for treating schizophrenia in this age group. 3. Clozapine is reserved for treatment refractory cases (Refer to Level 5). <p>For patients with treatment failure characterized by ongoing psychotic symptoms exacerbated by noncompliance, psychosocial strategies should be enhanced to address adherence, including developing strategies to better monitor medication administration.</p> <p>Treatment with a long-acting depot antipsychotic agent may also be considered.</p> <p>Available long-acting agents include risperidone microspheres, paliperidone palmitate, aripiprazole extended-release injectable suspension, haloperidol decanoate, fluphenazine decanoate. None of these agents are FDA approved for use in youth.</p> <p><i>Note: Olanzapine pamoate (Zyprexa Relprevv) is a long-acting agent that has been linked with a potentially life-threatening post injection syndrome. Use with children and adolescents is not FDA approved and is NOT recommended. For more information, visit http://www.fda.gov/Safety/MedWatch/SafetyInformation/SafetyAlertsforHumanMedicalProducts/ucm357601.htm.</i></p> <p><i>Above website link was updated at the time of publication.</i></p>
	<p>Level 4</p> <p>In combination with antipsychotic monotherapy, adjunctive treatment with a mood stabilizer or an antidepressant may be considered to target comorbid mood symptoms, aggression or negative symptoms.</p>
	<p>Level 5</p> <p>Clozapine trial for treatment refractory schizophrenia.</p> <p><u>Notes:</u></p> <ol style="list-style-type: none"> 1. Treatment refractory defined as failing at least two therapeutic trials of an antipsychotic agent. 2. Clozapine can only be prescribed through the Clozapine Risk Evaluation and Mitigation Strategy (REMS) program. www.clozapinerems.com
	<p>Level 6</p> <p>For patients that have failed to respond to multiple different antipsychotics, diagnostic reevaluation and consultation are indicated. Electroconvulsive therapy (ECT) may be considered for adolescents with schizophrenia who do not adequately respond to, or cannot tolerate, antipsychotic medications; or those suffering from catatonia.</p>

For a full list of references, visit <http://medicaidmentalhealth.org/>.

medicaidmentalhealth.org

Tic Disorders in Children and Adolescents Ages 6 to 17 Years Old

Level 0

Comprehensive assessment. Assess course (age of onset, types of tics, tic frequency, alleviating and aggravating factors), duration, and severity. Careful assessment that attends to issues of social (bullying), educational (reading impairment), physical impairment (pain due to tics) as well as complicating comorbidity. Review for most common comorbid presentations: ADHD, separation anxiety, OCD, ASD. Health status: Infections (especially group A streptococcus, Mycoplasma, Influenza, Cytomegalovirus), endocrine disorders, autoimmune disorders and genetic disorders associated with OCD/tics; Secondary to substances or medications: stimulants, SSRIs lamotrigine. Family history (for OCD, tics, autoimmunity).

- ◆ If tics are not causing impairment or pain, educate but no treatment is necessary.
- ◆ Specialty referral as appropriate—child psychiatry, developmental pediatrics or neurology or, for therapy: habit reversal therapy (HRT) or comprehensive behavioral intervention for tics (CBIT).



Level 1

Mild-moderate impairment, secondary to tics, use HRT or CBIT if possible (check www.tourette.org for trained therapists).



Level 2

- ◆ **2a.** If ADHD is present, consider alpha-2 agonist (clonidine or guanfacine).
- ◆ **2b.** If no-comorbid ADHD, aripiprazole or risperidone in low doses.



Level 3

Trial of medication not already used at Level 1 or Level 2 such as haloperidol, pimozide (there are dosing, drug interaction safety, and QTc concerns with this agent), topiramate, or fluphenazine.



Level 4

Antipsychotic in combination with SSRI, clonazepam, alpha-2 agonists, or topiramate depending on target symptoms. Severity of illness should drive the use of one or two agents. For dangerous tics (eg. whiplash tic) refer to psychiatry or neurology for consideration of Botulinum toxin A treatment.

Tic Disorders

in Children and Adolescents Ages 6 to 17 Years Old *(continued)*

Table 14.

Medications Used in the Treatment of Tics: Level of Evidence and Dosing Recommendations			
Level of Evidence	Drug Name	Starting Dose (mg)	Usual Dose (mg/day)
A	Clonidine ¹	0.025–0.05 mg	0.05–0.40 mg/day
	Guanfacine ¹	0.5–1.0 mg	1.0–4.0 mg/day
	Risperidone	0.125–0.50 mg	0.75–3.0 mg/day
	*Aripiprazole	1.0–2.5 mg	2–5 mg/day
	*Haloperidol	0.25–0.5 mg	1–4 mg/day
	*Pimozide ^{2, 3}	0.5–1.0 mg	2–8 mg/day
B	Ziprasidone ²	20 mg	20–40 mg/day
	Olanzapine	2.5–5.0 mg	2.5–12.5 mg/day
	Quetiapine	25 mg	25–200 mg/day
	Fluphenazine	0.5–1.0 mg	1.5–10 mg/day
C	Topiramate	12.5 mg	12.5–150 mg/day

**FDA approval for Tourette’s syndrome*

¹Likely most efficacious when used in ADHD+tics

²EKG monitoring

³CYP2D6 testing for doses above 0.05mg/kg/day (or 4mg)

HIERARCHICAL APPROACH IN PHARMACOTHERAPY FOR TICS

- Mild tics: No medication treatment
- Moderate tics: Alpha-2 agonists, Atypical neuroleptics (e.g., aripiprazole, risperidone)
- Severe tics: Atypical neuroleptics, Typical neuroleptics (e.g., pimozide, haloperidol, fluphenazine)

PATIENT CHARACTERISTICS BEST SUITED FOR TIC BEHAVIORAL THERAPY

- No severe ADHD
- No substance abuse
- No severe oppositionality
- Stable family environment
- No severe anxiety or mood disturbance
- Age ≥ 9 years (but some success with motivated younger patients)

Tic Disorders

in Children and Adolescents Ages 6 to 17 Years Old (*continued*)

TIC DISORDERS AND ADHD:

- Treat the ADHD conservatively
- Tics are not universally worse on stimulant (Bloch et al. 2009; Pringsheim and Steeves 2011; Cohen et al 2015)
- Alpha-2 agonists show better improvement in tic severity if ADHD is comorbid (Bloch et al. 2009)

RESOURCES

- Children
 - ◆ Matthew and the Tics – A Story for Young Children, available at: <https://www.tourette.org/resource/matthew-tics-story-young-children/>
 - ◆ Teens and Tourette's syndrome, available at: <https://www.tourette.org/about-tourette/overview/living-tourette-syndrome/teens-13-19/>
- Parents/caregivers
 - ◆ Managing Tourette Syndrome: A Behavioral Intervention Workbook, Parent Workbook (Woods, et al. 2008)
 - ◆ A Family's Guide to Tourette Syndrome (edited by Walkup, et al. 2012)
- Clinicians
 - ◆ Treating Tourette Syndrome and Tic Disorders: A Guide for Practitioners (edited by Woods, Piacentini and Walkup, 2007)
 - ◆ Managing Tourette Syndrome: A Behavioral Intervention for Children and Adults, Therapist Guide (Woods, et al. 2008)
- Relevant websites
 - ◆ Tourette Association of America, <https://www.tourette.org/>
 - ◆ American Academy of Child and Adolescent Psychiatry (AACAP) Tic Practice Parameters: [http://www.jaacap.com/article/S0890-8567\(13\)00695-3/pdf](http://www.jaacap.com/article/S0890-8567(13)00695-3/pdf)
 - ◆ Association for Behavioral and Cognitive Therapies, <http://www.abct.org/Home/>
 - ◆ Pediatric Autoimmune Neuropsychiatric Disorders (PANDAS) Network, <http://www.pandasnetwork.org/>
 - ◆ Developmental-Behavioral Pediatrics, www.dbped.org
 - ◆ Teaching the Tiger – A Handbook for Educators, <http://www.hopepress.com>

Note: Above resources and website links were updated at the time of publication.

For a full list of references, visit <http://medicaidmentalhealth.org/>.

References

References for General Procedures for Monitoring Side Effects of Antipsychotic Medication in Children and Adolescents:

- American Diabetes Association. Standards of medical care in diabetes—2016. *Diabetes Care*. 2016; 39(suppl 1): S1-106. Available from: http://care.diabetesjournals.org/content/39/Supplement_1.
- American Diabetes Association. Your A1c results: what do they mean? *Clinical Diabetes*. 2006 Jan; 24(1): 9-9. Available from: <http://dx.doi.org/10.2337/diaclin.24.1.9>.
- American Diabetes Association, American Psychiatric Association, American Association of Clinical Endocrinologists and North American Association for the Study of Obesity. Consensus development conference on antipsychotic drugs and obesity and diabetes. *Diabetes Care*. 2004 Feb; 27(2): 596-601.
- Cohn T. Metabolic Monitoring for Patients on Antipsychotic Medications. *Psychiatric Times* [Internet]. 2013 Dec [cited 2016 Nov 15]. Available from: <http://www.psychiatrictimes.com/cme/metabolic-monitoring-patients-antipsychotic-medications/page/0/3>.
- Findling RL, Drury SS, Jensen PS, Rapoport JL and the American Academy of Child and Adolescent Psychiatry (AACAP) Committee on Quality Issues. Practice parameter for the use of atypical antipsychotic medications in children and adolescents [Internet]. 2011 Aug [cited 2016 Nov 18]. Available from: https://www.aacap.org/App_Themes/AACAP/docs/practice_parameters/Atypical_Antipsychotic_Medications_Web.pdf.
- International Diabetes Federation. The IDF consensus worldwide definition of the metabolic syndrome [Internet]. 2015 [cited 2016 Dec 1]. Available from: http://www.idf.org/webdata/docs/Mets_definition_children.pdf.
- Mancini MC. Metabolic syndrome in children and adolescents – criteria for diagnosis . *Diabetology and Metabolic Syndrome* [Internet]. 2009 Oct [cited 2016 Dec 1]; 1:20. Available from: doi 10.1186/1758-5996-1-20.
- Nielsen RE, Laursen MF, Vernal DL, Bisgaard C, Jakobsen H, Steinhausen, HC, et al. Risk of diabetes in children and adolescents exposed to antipsychotics: A nationwide 12-year case-control study. *J Am Acad Child and Adolesc Psychiatry*. 2014 Sep; 53(9): 971-79.e6.
- Pringsheim T, Constadina P, Davidson J, Ho J and The Canadian Alliance for Monitoring Effectiveness and Safety of Antipsychotics in Children (CAMESA) Guideline Project. Evidence-Based Recommendations for Monitoring Safety of Second Generation Antipsychotics in Children and Youth. *J Can Acad Child Adolesc Psychiatry*. 2011 Aug; 20(3): 218-33.
- Schreiber J and Flint A. Strategies to address the metabolic side effects of second-generation antipsychotics in youth. *JAACAP Connect*. 2014 Summer; 1(1): 6-9.
- Silveira LS, Buonani C, Monteiro PA, Antunes BM, and Júnior, IF. Metabolic syndrome: Criteria for diagnosing in children and adolescents. *Endocrinol Metab Syndr* [Internet]. 2013 [Cited 2016 Nov 1]; 2(3): 118. Available from: doi10.4172/2161-1017.1000118.

References for ADHD (Children under Age 6 and Children and Adolescents Ages 6 to 17 Years Old):

- American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 5th ed. Arlington, VA: American Psychiatric Publishing; 2013.
- Aman MG, Bukstein OG, Gadow KD, Arnold E, Molina BS, McNamara N, et al. What does risperidone add to stimulant and parent training for severe aggression in child Attention-Deficit/Hyperactivity Disorder? *J Am Acad Child Adolesc Psychiatry*. 2014 Jan; 53(1): 47-60.e1. Available from: doi 10.1016/j.jaac.2013.09.022.
- Arnold LE, Gadow KD, Farmer CA, Findling RL, Bukstein O, Molina BS, et al. Comorbid anxiety and social avoidance in treatment of severe childhood aggression: response to adding risperidone to stimulant and parent training; mediation of disruptive system response. *J Child Adolesc Psychopharmacol*. 2015; 25(3): 203-12. Available from: doi 10.1089/cap.2014.0104.
- Banaschewski T, Johnson M, Lecendreux M, Zuddas A, Adeyi B, Hodgkins P, et al. Health-related quality of life and functional outcomes from a randomized-withdrawal study of long-term lisdexamfetamine dimesylate treatment in children and adolescents with attention-deficit/hyperactivity disorder. *CNS Drugs*. 2014; 28: 1191-1203. Available from: doi 10.1007/s40263-014-0193-z.
- Coghill DR, Banaschewski T, Lecendreux M, Johnson M, Zuddas A, Anderson CS, et al. maintenance of efficacy of lisdexamfetamine dimesylate in children and adolescents with attention-deficit/hyperactivity disorder: Randomized withdrawal study design. *J Am Acad Child Adolesc Psychiatry*. 2014 Jun; 53(6): 647-657.e1.
- Cutler AJ, Brams M, Bukstein O, Mattingly G, McBurnett K, Whilte C, et al. Response/remission with guanfacine extended-release and psychostimulants in children and adolescents with attention deficit/hyperactivity disorder. *J Am Acad Child Adolesc Psychiatry*. 2014 Oct; 53(10): 1092-1101.
- Daughton JM and Kratochvil CJ. Review of ADHD pharmacotherapies: advantages, disadvantages, and clinical pearls. *J Am Acad Child Adolesc Psychiatry*. 2009 Mar; 48(3): 240-8.
- Dittmann RW, Cardo E, Nagy P, Anderson CS, Adeyi B, Caballero B, et al. Treatment response and remission in a double-blind, randomized, head-to-head study of lisdexamfetamine dimesylate and atomoxetine in children and adolescents with attention-deficit hyperactivity disorder. *CNS Drugs*. 2014; 28: 1059-69. Available from: doi 10.1007/s40263-014-0188-9.
- Findling RL, McBurnett K, White C and Youcha S. Guanfacine extended release adjunctive to a psychostimulant in the treatment of comorbid oppositional symptoms in children and adolescents with attention-deficit/hyperactivity disorder. *J Child Adolesc Psychopharmacol*. 2014; 24(5): 245-52. Available from: doi 10.1089/cap.2013.0103.
- Gadow KD, Arnold LE, Molina BS, Findling RL, Bukstein OG and Brown NV. Risperidone added to parent training and stimulant medication: effects on attention-deficit/hyperactivity disorder, oppositional defiant disorder, conduct disorder, and peer aggression. *J Am Acad Child Adolesc Psychiatry*. 2014 Sep; 53(9): 948-59.e1. Available from: doi 10.1016/j.jaac.2014.05.008.
- Greenhill L, Kollins S, Abikoff H, McCracken J, Riddle M, Swanson J, et al. Efficacy and safety of immediate-release methylphenidate treatment for preschoolers with ADHD. *J Am Acad Child Adolesc Psychiatry*. 2006 Nov; 45(11): 1284-93.

- Hervas A, Huss M, Johnson M, McNicholas F, van Stralen J, Sreckovic S, et al. Efficacy and safety of extended-release guanfacine hydrochloride in children and adolescents with attention-deficit/hyperactivity disorder: a randomized, controlled, phase III trial. *European Neuropsychopharm.* 2014; 24(12): 1861-72. Available from: <http://dx.doi.org/10.1016/j.euroneuro.2014.09.014>
- Kratochvil CJ, Vaughan BS, Stoner JA, Daughton JM, Lubberstedt BD, Murray, DW, et al. A double-blind, placebo-controlled study of atomoxetine in young children with ADHD. *Pediatrics.* 2011 Apr; 127(4): e862-8. Available from: 10.1542/peds.2010-0825.
- Li Y, Gao J, He S, Zhang Y and Wang Q. An evaluation on the efficacy and safety of treatments for attention deficit hyperactivity disorder in children and adolescents: a comparison of multiple treatments. *Mol Neurobiol* [Internet]. 2016 Oct [Cited 2016 Nov 1]; Available from: doi 10.1007/s12035-016-0179-6.
- McCracken JT, McGough JJ, Loo SK, Levitt J, Del'Homme M, Cowen J, et al. Combined stimulant and guanfacine administration in attention-deficit/hyperactivity disorder: a controlled, comparative study. *J Am Acad Child Adolesc Psychiatry.* 2016 Aug; 55(8): 657-666.e1.
- Molina BS, Hinshaw SP, Swanson JM, Arnold LE, Vitiello B, Jensen PS et al. The MTA at 8 years: prospective follow-up of children treated for combined-type ADHD in a multisite study. *J Am Acad Child Adolesc Psychiatry.* 2009 May; 48(5): 484-500.
- Newcorn JH, Stein MA, Childress AC, Youcha S, White C, Enright G, et al. Randomized, double-blind trial of guanfacine extended release in children with attention-deficit/hyperactivity disorder: morning or evening administration. *J Am Acad Child Adolesc Psychiatry.* 2013 Sep; 52(9): 921-30. Available from: doi 10.1016/j.jaac.2013.06.006.
- Otasowie J, Castells X, Ehimare UP, Smith CH. Tricyclic antidepressants for attention deficit hyperactivity disorder (ADHD) in children and adolescents. *Cochrane Database Syst Rev* [Internet]. 2014 Sept 19 [Cited 2016 Nov 1]; (9): CD006997. Available from: doi 10.1002/14651858.CD006997.pub2.
- Pliszka S and the American Academy of Child and Adolescent Psychiatry (AACAP) Work Group on Quality Issues. Practice parameter for the assessment and treatment of children and adolescents with attention-deficit/hyperactivity disorder. *J Am Acad Child Adolesc Psychiatry.* 2007 July; 46(7): 894-921.
- Punja S, Shamseer L, Hartling L, Urichuk L, Vandermeer B, Nikles J, Vohra S. Amphetamines for attention deficit hyperactivity disorder (ADHD) in children and adolescents (Review). *Cochrane Database Syst Rev* [Internet]. 2016 [Cited 2016 Nov 1]; (2): CD009996. Available from: doi 10.1002/14651858.CD009996.pub2.
- Riddle MA, Yershova K, Lazzaretto D, Paykina N, Yenokyan G, Greenhill L, et al. The preschool attention-deficit/hyperactivity disorder treatment study (PATs) 6-year follow-up. *J Am Acad Child Adolesc Psychiatry.* 2013 Mar; 52(3): 264-78.
- Ruggiero S, Clavenna A, Reale L, Capuano A, Rossi F and Bonati M. Guanfacine for attention deficit and hyperactivity disorder in pediatrics: a systematic review and meta-analysis. *Eur Neuropsychopharmacol.* 2014 Aug; 24: 1578-90.
- Stein MA, Sikirica V, Weiss MD, Robertson B, Lyne A and Newcorn JH. Does guanfacine extended release impact functional impairment in children with attention-deficit/hyperactivity disorder? Results from a randomized controlled trial. *CNS Drugs.* 2015 Nov; 29(11): 953-62. Available from: 10.1007/s40263-015-0291-6.

- Storebø, OJ, Ramstad, E, Krogh, HB, Nilausen TD, Skoog M, Holmskov M, et al. Methylphenidate for children and adolescents with attention-deficit hyperactivity disorder. *Cochrane Database Syst Rev* [Internet]. 2015 [Cited 2016 Nov 1]; (11): CD009885. Available from: <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD009885.pub2/epdf>.
- Stuhec M, Munda B, Svab V, Locatelli I. Comparative Efficacy and acceptability of atomoxetine, lisdexamfetamine, bupropion and methylphenidate in treatment of attention deficit hyperactivity disorder in children and adolescents: a meta-analysis with focus on bupropion. *J Affect Disord*. 2015; 178: 149-59. Available from: <http://dx.doi.org/10.1016/j.jad.2015.03.006>.
- Subcommittee on Attention-Deficit/Hyperactivity Disorder, Steering Committee on Quality Improvement and Management, Wolraich M, Brown L, Brown RT, DuPaul G, Earls M, Feldman HM, et al. ADHD: Clinical practice guideline for the diagnosis, evaluation, and treatment of attention-deficit/hyperactivity disorder in children and adolescents. *Pediatrics*. 2011 Nov; 128(5): 1007-22. Available from doi10.1542/peds.2011-2654.
- Vaughan BS, March JS and Kratochvil CJ. The evidence-based pharmacological treatment of paediatric ADHD. *Int J Neuropsychopharmacol*. 2012; 15: 27-39. Available from: doi10.1017/S1461145711000095.
- Wilens TE, Bukstein O, Brams M, Cutler AJ, Childress A, Rugino T, Lyne A, et al. A controlled trial of extended-release guanfacine and psychostimulants for attention-deficit/hyperactivity disorder. *J Am Acad Child Adolesc Psychiatry*. 2012 Jan; 51(1): 74-85.e2. Available from: doi 10.1016/j.jaac.2011.10.012.
- Wilens TE, Robertson B, Sikirica V, Harper L, Young J, Bloomfield R, et al. A randomized, placebo-controlled trial of guanfacine extended release in adolescents with attention-deficit/hyperactivity disorder. *J Am Acad Child Adolesc Psychiatry*. 2015 Nov; 54(11): 916-925.e2.
- Young J, Rugino T, Dammerman R, Lyne A and Newcorn JH. Efficacy of guanfacine extended release assessed during the morning, afternoon, and evening using a modified Conners' parent rating scale-revised: Short Form. *J Child Adolesc Psychopharmacol*. 2014 Oct; 24(8): 435-41. Available from: 10.1089/cap.2013.0134.

References for Aggression (Severe) under Age 6 and Aggression (Chronic, Impulsive) Ages 6-17 Years Old:

- American Psychiatric Association. *Diagnostic and statistical manual of mental disorders*. 5th ed. Arlington, VA: American Psychiatric Publishing; 2013.
- Arman M, Rettiganti M, Nagaraja HN, Holloway JA, McCracken J, McDougale CJ, et al. Tolerability, safety and benefits of risperidone in children and adolescents with autism: 21-month follow-up after 9-week placebo-controlled trial. *J Child Adolesc Psychopharmacol*. 2015 Aug; 25(6): 482-93. Available from: doi 10.1089/cap.2015.0005.
- Barzman DH, DelBello MP, Adler CM, Stanford KE and Strakowski SM. The efficacy and tolerability of quetiapine versus divalproex for the treatment of impulsivity and reactive aggression in adolescents with co-occurring bipolar disorder and disruptive behavior disorder(s). *J Child Adolesc Psychopharmacol*. 2006; 16(6): 665-70.
- Bastiaens, L. A non-randomized, open study with aripiprazole and ziprasidone for the treatment of aggressive behavior in youth in a community clinic. *Comm Ment Health J*. 2009; 45: 73-7. Available from: doi 10.1007/s10597-008-9154-7.

- Bélanger SA, Vanasse M, Spahis S, Sylvestre MP, Lippé S, l'Heureux F, et al. Omega-3 fatty acid treatment of children with attention-deficit hyperactivity disorder: A randomized, double-blind, placebo-controlled study. *Paediatr Child Health*. 2009 Feb; 14(2): 89-98.
- Blader JC, Schooler NR, Jensen PS, Pliszka SR and Kafantaris V. Adjunctive divalproex versus placebo for children with ADHD and aggression refractory to stimulant monotherapy. *Am J Psychiatry*. 2009 Dec; 166(12): 1392-1401. Available from: doi 10.1176/appi.ajp.2009.09020233.
- Burcu M, Zito JM, Ibe A and Safer DJ. Atypical antipsychotic use among Medicaid-insured children and adolescents: duration, safety, and monitoring implications. *J Child Adolesc Psychopharmacol*. 2014 Apr; 24(3): 112-9. Available from: doi 10.1089/cap.2013.0094.
- Caccia S. Safety and pharmacokinetics of atypical antipsychotics in children and adolescents. *Pediatr Drugs*. 2013; 15: 217-33. Available from: doi 10.1007/s40272-013-0024-6.
- Calarge CA, Ivins SD, Motyl KJ, Shibli-Rahhal AA, Bliziotis MM and Schlechte JA. Possible mechanisms for the skeletal effects of antipsychotics in children and adolescents. *Ther Adv Psychopharmacol*. 2013; 3(5): 278-93. Available from: doi 10.1177/ 2045125313487548.
- Centerwatch. FDA approved drugs for psychiatry/psychology [Internet]. Boston, MA: CenterWatch; 1995-2016. [Cited 2016 Nov 3]. Available from: <https://www.centerwatch.com/drug-information/fda-approved-drugs/therapeutic-area/17/psychiatry-psychology>.
- Correll CU. Antipsychotic use in children and adolescents: minimizing adverse effects to maximize outcomes. *J Am Acad Child Adolesc Psychiatry*. 2008; 47: 9-20.
- Correll CU and Carlson HE. Endocrine and metabolic adverse effects of psychotropic medications in children and adolescents. *J Am Acad Child Adolesc Psychiatry*. 2006 Jul; 45(7): 771-91. Available from: doi 10.1097/01.chi.0000220851.94392.30.
- Deb S, Farmah BK, Arshad E, Deb T, Roy M and Unwin GL. The effectiveness of aripiprazole in the management of problem behavior in people with intellectual disabilities, developmental disabilities and/or autism spectrum disorder – a systematic review. *Res Dev Disabil*. 2014; 35: 711-25.
- De Hert M, Detraux J, van Winkel R, Yu W and Correll CU. Metabolic and cardiovascular adverse effects associated with antipsychotic drugs. *Nat Rev Endocrinol*. 2011 Oct; 8(2): 114-26.
- Dittmann RW, Schacht A, Helsberg K, Schneider-Fresenius C, Lehmann M, Lehmkuhl G, et al. Atomoxetine versus placebo in children and adolescents with attention deficit/hyperactivity disorder and comorbid oppositional defiant disorder: a double-blind, randomized, multicenter trial in Germany. *J Child Adolesc Psychopharmacol*. 2011; 21(2): 97-110. Available from: 10.1089/cap.2009.0111.
- Doyle CA and McDougale CJ. Pharmacologic treatments for the behavioral symptoms associated with autism spectrum disorders across the lifespan. *Dialogues Clin Neurosci*. 2012; 14(3): 263-79.
- Elbe D and Lalani Z. Review of the pharmacotherapy of irritability of autism. *J Can Acad Child Adolesc Psychiatry*. 2012 May; 21(2): 130-46.
- El-Mallakh RS and McKenzie C. The dopamine D4/D2 receptor antagonist affinity ratio as a predictor of anti-aggression medication efficacy. *Med Hypotheses*. 2013; 80: 530-33. Available from: <http://dx.doi.org/10.1016/j.mehy.2012.10.014>.
- Epocrates online [Internet]. San Francisco, CA: Athena Health; 2016. [Cited on 2016 Nov 3]. Available from: <http://www.epocrates.com/>.

- Epstein R, Fennesbeck C, Williamson E, Kuhn T, Lindegren ML, Rizzone K, et al. Psychosocial and pharmacologic interventions for disruptive behavior in children and adolescents. AHRQ comparative effectiveness reviews [Internet]. Rockville (MD): Agency for Healthcare Research and Quality (US); 2015 Oct [Cited 2016 Nov 2]. Report No: 15(16)-EHC019-EF.
- Farmer CA, Arnold LE, Gukstein OG, Findling RL, Gadow KD, Li X, et al. The treatment of severe child aggression (TOSCA) study: design challenges. *Child Adolesc Psychiatry Ment Health* [Internet]. 2011 Nov [Cited 2016 Nov 3]; 5(36). Available from: doi 10.1186/1753-2000-5-36.
- Farmer CA, Brown NV, Gadow KD, Arnold E, Kolko DG, Findling RL, et al. Comorbid symptomatology moderates response to risperidone, stimulant, and parent training in children with severe aggression, disruptive behavior disorder, and attention-deficit/hyperactivity disorder. *J Child Adolesc Psychopharmacol*. 2015 Apr; 25(3): 213-24. Available from: doi 10.1089/cap.2014.0109.
- Fernández-Mayoralas DM, Fernández-Jaén A, Muñoz-Jareño N, Calleja-Pérez B, Fernández-Perrone AL and Arribas S. Treatment with paliperidone in children with behavior disorders previously treated with risperidone: an open-label trial. *Clin Neuropharmacol*. 2012; 35(5): 227-30.
- Findling RL, McNamara NK, Branicky LA, Schluchter MD, Lemon E and Blumer, JL. A double-blind pilot study of risperidone in the treatment of conduct disorder. *J Am Acad Child Adolesc Psychiatry*. 2000 Apr; 39(4): 509-16.
- Findling RL, Goldman R, Chiu YY, Silva R, Jin F, Pikalov A, et al. Pharmacokinetics and tolerability of lurasidone in children and adolescents with psychiatric disorders. *Clinical Therapeutics*. 2015 Dec; 37(12): 2788-97. Available from: <http://dx.doi.org/10.1016/j.clinthera.2015.11.001>.
- Findling RL, Landbloom RP, Mackle M, Pallozzi W, Braat S, Hundt C, et al. Safety and efficacy from an 8 week double-blind trial and a 26 week open-label extension of asenapine in adolescents with schizophrenia. *J Child Adolesc Psychopharmacol*. 2015 Jun; 25(5): 384-96. Available from: doi 10.1089/cap.2015.0027.
- Findling RL, Landbloom RL, Szegedi A, Koppenhaver J, Braat S, Mackle M, et al. Asenapine for the acute treatment of pediatric manic or mixed episode of bipolar I disorder. *J Am Acad Child Adolesc Psychiatry*. 2015; 54(12): 1032-41.
- Findling RL, McBurnett K, White C and Youcha S. Guanfacine extended release adjunctive to a psychostimulant in the treatment of comorbid oppositional symptoms in children and adolescents with attention-deficit/hyperactivity disorder. *J Child Adolesc Psychopharmacol*. 2014; 24(5): 245-52. Available from: doi 10.1089/cap.2013.0103.
- Gadow KD, Arnold LE, Molina BS, Findling RL, Bukstein OG, Brown NV, et al. Risperidone added to parent training and stimulant medication: effects on attention-deficit/hyperactivity disorder, oppositional defiant disorder, conduct disorder, and peer aggression. *J Am Acad Child Adolesc Psychiatry*. 2015 Sep; 53(9): 948-959.e1.
- Gadow KD, Brown NV, Arnold LE, Buchan-Page KA, Bukstein OG, Butter E, et al. Severely aggressive children receiving stimulant medication versus stimulant and risperidone: 12-month follow-up of the TOSCA trial. *J Am Acad Child Adolesc Psychiatry*. 2016 Jun; 55(6): 469-78. Available from: doi 10.1016/j.jaac.2016.03.014.
- Gathright MM and Tyler LH. Disruptive behaviors in children and adolescents. University of Arkansas for Medical Sciences Psychiatric Research Institute [Internet]. 2014 [Cited 2016 Nov 2]. Available from: <http://psychiatry.uams.edu/files/2015/02/disruptive.pdf>.

- Gaudino MP, Smith MJ and Matthews DT. Use of oxcarbazepine for treatment-resistant aggression. *Psychiatr Serv.* 2003 Aug; 54(8): 166-7. Available from: 10.1176/appi.ps.54.8.1166.
- Gorman DA, Gardner DM, Murphy AL, Feldman M, Bélanger SA, Steele MM, et al. Canadian guidelines on pharmacotherapy for disruptive and aggressive behaviour in children and adolescents with attention-deficit hyperactivity disorder, oppositional defiant disorder, or conduct disorder. *Can J Psychiatry.* 2015 Feb; 60(2): 62-76.
- Green WH. Chapter 8, Mood stabilizers. In: Mitchell CW, editor. *Child and adolescent clinical psychopharmacology*. 4th Edition. New York: Lippincott Williams and Wilkins; 2007. p. 286.
- Hagerman RJ, Berry-Kravis E, Kaufmann WE, Ono MY, Tartaglia N, Lachiewicz A, et al. Advances in the treatment of Fragile X syndrome. *Pediatrics.* 2009 Jan; 123(1): 378-90. Available from: doi 10.1542/peds.2008-0317.
- Hamilton SS and Armando J. Oppositional defiant disorder. *Am Fam Physician.* 2008 Oct; 78(7): 861-66.
- Hazell PL and Stuart JE. A randomized controlled trial of clonidine added to psychostimulant medication for hyperactive and aggressive children. *J Am Acad Child Adolesc Psychiatry.* 2003 Aug; 42(8): 886-94.
- Ho J, Panagiotopoulos C, McCrindle B, Grisaru S, Pringsheim T, The Canadian Alliance for Monitoring Effectiveness and Safety of Antipsychotics in Children (CAMESA) Guideline Group. Management recommendations for metabolic complications associated with second generation antipsychotic use in children and youth. *Paediatr Child Health.* 2011 Nov; 16(9): 757-80.
- Hollander E, Kolevzon A and Coyle J, editors. *Textbook of autism spectrum disorders*. Washington, DC: American Psychiatric Publishing; 2011. 627 p.
- Huband N, Ferriter M, Nathan R and Jones H. Antiepileptics for aggression and associated impulsivity. *Cochrane Database Syst Rev.* 2014; 17(2): CD003499. Available from: doi 10.1002/14651858.CD003499.pub3.
- Itomura M, Hamazaki K, Sawazaki S, Kobayashi M, Terasawa K, Watanabe S, et al. The effect of fish oil on physical aggression in schoolchildren—a randomized, double-blind, placebo-controlled trial. *J Nutr Biochem.* 2005; 16: 163-71. Available from: doi 10.1016/j.jnutbio.2004.10.009.
- Ji NY and Findling RL. Pharmacotherapy for mental health problems in people with intellectual disability. *Curr Opin Psychiatry.* 2016 Mar; 29(2): 103-25. Available from: doi 10.1097/YCO.0000000000000233.
- Joshi G, Petty C, Wozniak J, Faraone SV, Spencer AE, Woodworth KY, et al. A prospective open-label trial of paliperidone monotherapy for the treatment of bipolar spectrum disorders in children and adolescents. *Psychopharmacology.* 2013; 227: 449-58. Available from: doi 10.1007/s00213-013-2970-7.
- Kendall DL, Amin R and Clayton PE. Metformin in the treatment of obese children and adolescents at risk of type 2 diabetes. *Pediatr Drugs.* 2014; 16(13): 13-20. Available from: doi 10.1007/s40272-013-0045-1.
- Kim E and Bijlani M. A Pilot Study of Quetiapine Treatment of aggression due to traumatic brain injury. *J Neuropsychiatry Clin Neurosci.* 2006; 18(4): 547-9.

- Knapp P, Chait A, Pappadopulos E, Crystal S, Jensen P and T-MAY Steering Group: Treatment of maladaptive aggression in youth: CERT guidelines I. Engagement, assessment and management. *Pediatrics* [Internet]. 2012 [Cited 2016 Nov 3]; 129: e1562-76. Available from: doi 10.1542/peds.2010-1360.
- Heller JL, Zieve D, Ogilvie I and the A.D.A.M. Editorial Team, editors. *MedlinePlus*. Lead poisoning [Internet]. Bethesda, MD: US National Library of Medicine, US Department of Health and Human Services, National Institutes of Health. 2016 Nov [updated 2016 Nov 1; cited 2016 Nov 3]. Available from: <https://medlineplus.gov/ency/article/002473.htm>.
- Levine SZ, Kodesh A, Goldberg Y, Reichenberg A, Furukawa TA, Kolevzon A, et al. Initial severity and efficacy of risperidone in autism: results from the RUPP trial. *Eur Psychiatry*. 2016 Feb; 32: 16-20. Available from: doi 10.1016/j.eurpsy.2015.11.004.
- Liu J, Raine A, Venables PH and Mednick SA. Malnutrition at age 3 years and externalizing behavior problems at ages 8, 11, and 17 Years. *Am J Psychiatry*. 2004 Nov; 161(11): 2005-13. Available from: doi 10.1176/appi.ajp.161.11.2005.
- Lohr DW, Chowning RT, Stevenson MD and Williams PG. Trends in atypical antipsychotics prescribed to children six years of age or less on Medicaid in Kentucky. *J Child Adolesc Psychopharmacol*. 2015; 25(5): 440-3. Available from: doi 10.1089/cap.2014.0057.
- Loy JH, Merry SN, Hetrick SE and Stasiak K. Atypical antipsychotics for disruptive behavior disorders in children and adolescents (Review). *Cochrane Database Syst Rev* [Internet]. 2012 [Cited 2016 Nov 1]. Available from: doi 10.1002/14651858.CD008559.pub2.
- Masi G, Milone A, Manfredi A, Brovedani P, Pisano S and Muratori P. Combined pharmacotherapy-multimodal psychotherapy in children with disruptive behavior disorders. *Psychiatry Research*. 2016; 238: 8-13.
- Masi G, Milone A, Stawinoga A, Veltri S and Pisano S. Efficacy and safety of risperidone and quetiapine in adolescents with bipolar II disorder comorbid with conduct disorder. *J Clin Psychopharmacol*. 2015 Oct; 35(5): 587-90. Available from: doi 10.1097/JCP.0000000000000371.
- Masi G, Milone A, Veltri S, Iuliano R, Pfanner C, Pisano S. Use of quetiapine in children and adolescents. *Paediatr Drugs*. 2015 Apr; 17(2): 125-40. Available from: doi 10.1007/s40272-015-0119-3.
- Matson JL and Jang J. Treating aggression in persons with autism spectrum disorders: A Review. *Res Dev Disabil*. 2014 Dec; 35(12): 3386-91. Available from: doi 10.1016/j.ridd.2014.08.025.
- McGuire K, Fung LK, Hagopian L, Vasa RA, Mahajan R, Bernal P, Silberman AE, Wolfe A, Coury DL, Hardan AY, Veenstra-VanderWeele J, Whitaker AH. Irritability and problem behavior in autism spectrum disorder: A practice pathway for pediatric primary care. *Pediatrics*. 2016 Feb; 137 Suppl 2: S136-48. Available from: doi 10.1542/peds.2015-2851L.
- Merikangas KR, Nakamura EF and Kessler RC. Epidemiology of mental disorders in children and adolescents. *Dialogues Clin Neurosci*. 2009 Mar; 11(1): 7-20.
- Mubarak A, Fadel W, Said S and Abu Hammar M. Profile of behavior and IQ in anemic children. *CNS Spectr*. 2010 Dec; 15(12): 631-8. Available from: doi 10.1017/S1092852912000089.
- Newcorn JH, Spencer TJ, Biederman J, Milton D and Michelson D. Atomoxetine treatment in children and adolescents with attention-deficit/hyperactivity disorder and comorbid oppositional defiant disorder. *J Am Acad Child Adolesc Psychiatry*. 2005 Mar; 44(3): 240-8.

- Nielsen RE, Laursen MF, Vernal DL, Bisgaard C, Jakobsen H, Steinhausen, HC, et al. Risk of diabetes in children and adolescents exposed to antipsychotics: a nationwide 12-year case-control study. *J Am Acad Child and Adolesc Psychiatry*. 2014 Sep; 53(9): 971-79.e6.
- Pappadopulos E, Rosato NS, Correll CU, Findling RL, Lucas J, Crystal S, et al. Experts' recommendations for treating maladaptive aggression in youth. *J Child Adolesc Psychopharmacol*. 2011; 21(6): 505-15.
- Pappadopulos E, Woolston S, Chait A, Perkins M, Connor DR and Jensen PS. Pharmacotherapy of aggression in children and adolescents: efficacy and effect size. *J Cdn Acad Child Adolesc Psychiatry*. 2006 Feb; 15(1): 27-39.
- Patel BD and Barzman DH. Pharmacology and pharmacogenetics of pediatric ADHD with associated aggression: a review. *Psychiatr Q*. 2013; 84: 407-15. Available from: doi 10.1007/s11126-013-9253-7.
- Pavlovic ZM. Lamotrigine for the treatment of impulsive aggression and affective symptoms in a patient with borderline personality disorder comorbid with body dysmorphic disorder. *J of Neuropsychiatry Clin Neurosci*. 2008; 20: 121-2.
- Penckofer S, Kouba J, Byrn M and Ferrans CE. Vitamin D and depression: where is all the sunshine? *Issues Ment Health Nurs*. 2010 Jun; 31(6): 385-93. Available from: doi 10.3109/01612840903437657.
- Peruzzolo TL, Tramontina S, Rohde LA and Zeni CP. Pharmacotherapy of bipolar disorder in children and adolescents: an update. *Revista Brasileira de Psiquiatria*. 2013; 35: 393-405. Available from: <http://dx.doi.org/10.1590/1516-4446-2012-0999>.
- Peuskens J, Pani L, Detraux J and De Hert M. The effects of novel and newly approved antipsychotics on serum prolactin levels: a comprehensive review. *CNS Drugs*. 2014; 28: 421-53. Available from: doi 10.1007/s40263-014-0157-3.
- Politte LC and McDougale CJ. Atypical antipsychotics in the treatment of children and adolescents with pervasive developmental disorders. *Psychopharmacology*. 2014; 231(6): 1023-36. Available from: doi 10.1007/s00213-013-3068-y.
- Pringsheim T, Hirsch L, Gardner D and Gorman DA. The pharmacological management of oppositional behavior, conduct problems, and aggression in children and adolescents with attention-deficit hyperactivity disorder, oppositional defiant disorder, and conduct disorder: a systematic review and meta-analysis. Part 1: psychostimulants, alpha-2 agonists and atomoxetine. *Can J Psychiatry* 2015; 60(2): 42-51.
- Pringsheim T, Hirsch L, Gardner D and Gorman DA. The pharmacological management of oppositional behavior, conduct problems, and aggression in children and adolescents with attention-deficit hyperactivity disorder, oppositional defiant disorder, and conduct disorder: a systematic review and meta-analysis. Part 2: antipsychotics and traditional mood Stabilizers. *Can J Psychiatry* 2015; 60(2): 52-61.
- Quy K and Stringaris A. Chapter D.2, Oppositional defiant disorder. In: Rey JM, editor. *IACAPAP e-Textbook of Child and Adolescent Mental Health* [Internet]. Geneva: International Association for Child and Adolescent Psychiatry and Allied Professions; 2012. [Cited 2016 Nov 3]. Available from: <http://iacapap.org/wp-content/uploads/D.2-ODD-072012.pdf>.
- Raine A, Portnoy J, Liu J, Mahoomed T and Hibbeln J. Reduction in behavior problems with omega-3 supplementation in children aged 8-16 years: A randomized, double-blind, placebo-controlled, stratified, parallel-group trial. *J Child Psychol Psychiatry*. 2015 May; 56(5): 509-20. Available from: doi 10.1111/jcpp.12314.

- Rezaei V, Mohammadi MR, Ghanizadeh A, Sahraian A, Tabrizi M, Rezazadeh SA, et al. Double-blind, placebo-controlled trial of risperidone plus topiramate in children with autistic disorder. *Prog Neuropsychopharmacol Biol Psychiatry*. 2010 Oct; 34(7): 1269-72. Available from: doi 10.1016/j.pnpbp.2010.07.005.
- Ripoll LH, Triebwasser JT and Siever LJ. Evidence-based pharmacotherapy for personality disorders. *Personal Disord*. 2013 Spring; 11(2): 225-48. Available from: <http://dx.doi.org/10.1176/appi.focus.11.2.225>.
- Rosato NS, Correll CU, Pappadopulos E, Chait A, Crystal S and Jensen PS. Treatment of maladaptive aggression in youth: CERT guidelines II. Treatments and ongoing management. *Pediatrics*. 2012 Jun; 129(6): e1577-86. Available from: doi 10.1542/peds.2010-1361.
- Roy AK, Lopes V and Klein RG. Disruptive mood dysregulation disorder: a new diagnostic approach to chronic irritability in youth. *Am J Psychiatry*. 2014; 171: 918-24. Available from: 10.1176/appi.ajp.2014.13101301.
- Rundberg-Rivera EV, Townsend LD, Schneider J, Farmer CA, Molina BB, Findling RL, et al. Participant satisfaction in a study of stimulant, parent training and risperidone in children with severe physical aggression. *J Child Adolesc Psychopharmacol*. 2015; 25(3): 225-33. Available from: doi 10.1089/cap.2014.0097.
- Saxena K, Howe M, Simeonova D, Steiner H and Chang K. Divalproex sodium reduces overall aggression in youth at high risk for bipolar disorder. *J Child Adolesc Psychopharmacol*. 2006 Jun; 16(3): 252-9.
- Saxena K, Mora L, Torres E, Hall R, Delizonna L, Torres A, et al. Divalproex sodium –ER in outpatients with disruptive behavior disorders: a three month open label study. *Child Psychiatry Hum Dev*. 2010; 41: 274-84. Available from: doi 10.1007/s10578-009-0167-4.
- Saylor KE and Amann BH. Impulsive aggression as a comorbidity of attention-deficit/hyperactivity disorder in children and adolescents. *J Child Adolesc Psychopharmacol*. 2016; 26(1): 19-25. Available from: doi 10.1089/cap.2015.0126.
- Schmidt do Prado-Lima PA. Pharmacological treatment of impulsivity and aggressive behavior. *Rev Bras Psiquiatr*. 2009; 31 (suppl III): S58-65.
- Schreiber J and Flint A. Strategies to address the metabolic side effects of second-generation antipsychotics in youth. *J Am Acad Child Adolesc Psychiatry Connect*. 2014 Summer; 1(1): 6-9.
- Seida JC, Schouten JR, Boylan K, Newton AS, Mousavi SS, Beaith A, et al. Antipsychotics for children and young adults: a comparative effectiveness review. *Pediatrics*. 2012 Nov; 129(3): e771-84. Available from: doi 10.1542/peds.2011-2158.
- Sharma T, Guski LS, Freund N and Gøtzsche PC. Suicidality and aggression during antidepressant treatment: systematic review and meta-analyses based on clinical study reports. *BMJ [Internet]*. 2016 Jan [Cited 2016 Nov 1]. 352: i65. Available from: doi 10.1136/bmj.i65.
- Siegel M and Beaulieu AA. Psychotropic medications in children with autism spectrum disorders: a systematic review and synthesis for evidence-based practice. *J Autism Dev Disord*. 2012; 42: 1592-1605. Available from: doi 10.1007/s10803-011-1399-2.
- Sinn N, Milte C and Howe PR. Oiling the brain: a review of randomized controlled trials of omega-3 fatty acids in psychopathology across the lifespan. *Nutrients*. 2010; 2: 128-70. Available from: doi 10.3390/nu2020128.

- Steiner H, Remsing L and the Work Group on Quality Issues. Practice parameter for the assessment and treatment of children and adolescents with oppositional defiant disorder. *J Am Acad Child Adolesc Psychiatry*. 2007; 46(1): 126-41. Available from: <http://dx.doi.org/10.1097/01.chi.0000246060.62706.af>.
- Stigler KA, Mullett JE, Erickson CA, Posey DJ and McDougale CJ. Paliperidone for irritability in adolescents and young adults with autistic disorder. *Psychopharmacology*. 2012; 223: 237-45. Available from: doi 10.1007/s00213-012-2711-3.
- Stutzman D and Dopheide J. Acetylcysteine for Treatment of Autism Spectrum Disorder Symptoms. *Am J Health Syst Pharm*. 2015 Nov; 72(22): 1956-9. Available from: doi 10.2146/ajhp150072.
- Thomas CR. Chapter 11, Oppositional defiant disorder and conduct disorder. In: Dulcan MK, editor. *Dulcan's Textbook of Child and Adolescent Psychiatry*. 2nd Edition. Arlington, VA: American Psychiatric Publishing, 2016. p.195-218.
- Timour Q, Frassati D, Descotes J, Chevalier P, Christé G and Chahine M. Desaphy J and Moro BA, editors. Sudden Death of Cardiac Origin and Psychotropic Drugs. *Front Pharmacol* [Internet]. 2012 May [Cited 2016 Nov 3]; 3: Article 76. Available from: doi 10.3389/fphar.2012.00076.
- Tran AR, Zito JM, Safer DJ and Hundley SD. National trends in pediatric use of anticonvulsants. *Psychiatr Serv*. 2012 Nov; 63(11): 1095-1101. Available from: doi 10.1176/appi.ps.201100547.
- Treuer T, Gau SS, Méndez L, Montgomery W, Monk JA, Altin M, et al. A systematic review of combination therapy with stimulants and atomoxetine for attention deficit/hyperactivity disorder, including patient characteristics, treatment strategies, effectiveness and tolerability. *J Child Adolesc Psychopharmacol*. 2013 Apr; 23(3): 179-93. Available from: doi 10.1089/cap.2012.0093.
- Vitiello B. Chapter A.7, Principles in using psychotropic medication in children and adolescents. In: Rey, editor. *IACAPAP e-Textbook of Child and Adolescent Mental Health* [Internet]. Geneva: International Association for Child and Adolescent Psychiatry and Allied Professions; 2012 [Cited 2016 Nov 3]. Available from: <http://iacapap.org/wp-content/uploads/A.7-PSYCHOPHARMACOLOGY-072012.pdf>.
- Vitiello B, Lazzaretto D, Yershova K, Abikoff H, Paykina N, McCracken JT, et al. Pharmacotherapy of the preschool ADHD treatment study (PATS) in children growing up. *J Am Acad Child Adolesc Psychiatry*. 2015; 54(7): 550-6.
- West AE, Weinstein SM, Celio CI, Henry D and Pavuluri MN. Co-morbid disruptive behavior disorder and aggression predict functional outcomes and differential response to risperidone versus divalproex in pharmacotherapy for pediatric bipolar disorder. *J Child Adolesc Psychopharmacol*. 2011 Dec; 21(6): 545-53. Available from: 10.1089/cap.2010.0140.
- Wise J. Antidepressants may double risk of suicide and aggression in children, study finds. *BMJ*. 2016 Jan 28; 352: i545. Available from: doi 10.1136/bmj.i545.

References for Anxiety Disorders (Children under Age 6 and Children and Adolescents Ages 6 to 17 Years):

- Beidel DC, Turner SM, Sallee FR, Ammerman RT, Crosby LA and Pathak S. SET-C versus fluoxetine in the treatment of childhood social phobia. *J Am Acad Child Adolesc Psychiatry*. 2007 Dec; 46(12): 1622-32.
- Ginsburg GS. The child anxiety prevention study: intervention model and primary outcomes. *J Consult Clin Psychol*. 2009 Jun; 77(3): 580-7. Available from: doi 10.1037/a0014486.

- Hudson JL, Keers R, Roberts S, Coleman JR, Breen G, Arendt K, et al. Clinical predictors of response to cognitive-behavioral therapy in pediatric anxiety disorders: the genes for treatment (GxT) study. *J Am Acad of Child and Adolesc Psychiatry*. 2016 June; 54(6): 454-63.
- Hussain RS, Dobson ET and Strawn JR. Pharmacologic treatment of pediatric anxiety disorders. *Curr Treat Options Psych*. 2016; 3: 151-60. Available from: 10.1007/s40501-016-0076-7.
- Ipsen JC, Stein DJ, Hawkrigde S and Hoppe L. Pharmacotherapy for anxiety disorders in children and adolescents (Review). *Cochrane Database Syst Rev [Internet]*. 2009 [Cited 2016 Nov 3]; (3): CD005170. Available from doi 10.1002/14651858.CD005170.pub2.
- Melton TH, Croarkin P, Strawn JR and McClintock SM. Comorbid anxiety and depressive symptoms in children and adolescents: A systematic review and analysis. *J Psychiatr Pract*. 2016 Mar; 22(2): 84-98.
- Naftolin ED. Identification and treatment of generalized anxiety disorder in children in primary care [Internet]. *Pediatr Ann*. 2016 [cited 2016 Nov 3]; 45(10): e349-55. Available from: doi 10.3928/19382359-20160913-01.
- Newman MG, Shin KE and Zullig AR. Developmental risk factors in generalized anxiety disorder and panic disorder. *J Affect Disord*. 2016; 206: 94-102.
- Peruzzolo TL, Tramontina S, Rohde LA and Zeni CP. Pharmacotherapy of bipolar disorder in children and adolescents: an update. *Revista Brasileira de Psiquiatria*. 2013; 35: 393-405. Available from: <http://dx.doi.org/10.1590/1516-4446-2012-0999>.
- Rynn MA, Riddle MA, Yeung PP and Kunz NR. Efficacy and safety of extended-release venlafaxine in the treatment of generalized anxiety disorder in children and adolescents: two placebo-controlled trials. *Am J Psychiatry* 2007; 164: 290-300.
- Rynn MA, Walkup JT, Compton SN, Sakolsky DJ, Sherrill JT, Shen, S, et al. Child/adolescent anxiety multimodal study: evaluating safety. *J Am Acad Child Adolesc Psychiatry*. 2015 Mar; 54(3): 180-90. Available from: doi 10.1016/j.jaac.2014.12.015.
- Silverman W and Albano AM. The anxiety disorders interview schedule for children (ADIS-C/P). San Antonio, TX: Psychological Corporation; 1996.
- Strawn JR, Dominick KC, Patino LR, Doyle CD, Picard LS and Phan KL. Neurobiology of pediatric anxiety disorders. *Curr Behav Neurosci Rep*. 2014 Sep; 1(3): 154-60. Available from: doi 10.1007/s40473-014-0014-1.
- Strawn JR, Prakash A, Zhang Q, Pangallo BA, Stroud CE, Cai N, et al. A randomized, placebo-controlled study of duloxetine for the treatment of children and adolescents with generalized anxiety disorder. *J Am Acad Child Adolesc Psychiatry*. 2015; 54(4): 283-93.
- Vasa RA, Carroll LM, Nozzolillo AA, Mahajan R, Mazurek MO, Bennett AE, et al. A systematic review of treatments for anxiety in youth with autism spectrum disorders. *J Autism Dev Disord*. 2014; 44: 3215-29. Available from: doi 10.1007/s10803-014-2184-9.
- Wagner KD, Berard R, Stein MB, Wetherhold E, Carpenter DJ, Perera P, et al. A multi-center, randomized, double-blind placebo-controlled trial of paroxetine in children and adolescents with social anxiety disorder. *Arch Gen Psychiatry*. 2004; 61: 1153-62.
- Walkup JT, Albano AM, Piacentini J, Birmaher B, Compton SN, Sherrill JT, et al. Cognitive behavioral therapy, sertraline or a combination in childhood anxiety. *N Engl J Med*. 2008 Dec; 359(26): 2753-66.

Wehry AM, Baum-Beesdo K, Hennelly MM, Connolly SD and Strawn JR. Assessment and treatment of anxiety disorders in children and adolescents. *Curr Psychiatry Rep* [Internet]. 2015 Jul [Cited 2016 Nov 3]; 17(7): 591. Available from: 10.1007/s11920-015-0591-z.

References on Resources for Anxiety Disorders:

Children:

Huebner D and Matthews B. What to do when you dread your bed: a kid's guide to overcoming problems with sleep. Washington, DC: Magination Press; 2008. 96 p.

Huebner D and Matthews B. What to do when you worry too much: a kid's guide to overcoming anxiety. Washington, DC: Magination Press; 2005. 80 p.

Lite L. A Boy and a bear: the children's relaxation book. Plantation, Florida: Specialty Press, Inc; 2003. 32 p.

Adolescents:

Pincus DB, Ehrenreich JT and Spiegel DA. Riding the wave workbook. New York, NY: Oxford University Press, Inc; 2008. 112 p.

Tompkins MA and Martinez KA. My anxious mind: a teen's guide to managing anxiety and panic. Washington, DC: Magination Press; 2009. 196 p.

Parents/Caregivers:

Chansky T. Freeing your child from anxiety, revised and updated edition: practical strategies to overcome fears, worries, and phobias and be prepared for life—from toddlers to teens. New York: Harmony Books; 2014. 482 p.

Kearney CA and Albano AM. When children refuse school: a cognitive-behavioral therapy approach, parent workbook. 2nd ed. New York, NY: Oxford University Press, Inc; 2007. 216 p.

Manassis K. Keys to parenting your anxious child. Hauppauge, NY: Barron's Educational Series, Inc; 2008. 208 p.

McHolm AE, Cunningham CE, Vanier MK and Rapee R. Helping your child with selective mutism: practical steps to overcome a fear of speaking. Oakland, CA: New Harbinger Publications; 2005. 184 p.

Perednik R. The selective mutism treatment guide: manuals for parents, teachers and therapists. Jerusalem: Oaklands; 2012. 144 p.

Rapee RM, Wignall A, Spense SH, Cobham V and Lyneham H. Helping your anxious child. 2nd ed. Oakland, CA: New Harbinger Publications; 2008. 232 p.

References for Bipolar Disorder (Acute Mania or Mixed Episodes) in Children and Adolescents Ages 6 to 17 Years Old:

American Psychiatric Association. Diagnostic and statistical manual of mental disorders. 5th ed. Arlington, VA: American Psychiatric Publishing; 2013.

Brown R, Taylor MJ and Geddes J. Aripiprazole alone or in combination for acute mania (Review). *Cochrane Database Syst Rev* [Internet]. 2013 [Cited 2016 Nov 3]; (12): CD005000. Available from: doi 10.1002/14651858.CD005000.pub2.

Findling RL, Frazier JA, Kafantaris V, Kowatch R, McClellan J, Pavuluri M, et al. The collaborative lithium trials (CoLT): specific aims, methods and implementation. *Child Adolesc Psychiatry Ment Health* [Internet]. 2008 Aug [Cited 2016 Nov 3]; 2(21). Available from: doi:10.1186/1753-2000-2-21.

- Buckley PF, Correll CU. Strategies for dosing and switching antipsychotics for optimal clinical management. *J Clin Psychiatry*. 2008;69 Suppl 1: 4-17
- Correll CU. From receptor pharmacology to improved outcomes: individualizing the selection, dosing, and switching of antipsychotics. *Eur Psychiatry*. 2010 Jun; 25 Suppl 2:S12-21
- Correll CU, Sheridan EM, DelBello MP. Antipsychotic and mood stabilizer efficacy and tolerability in pediatric and adult patients with bipolar I mania: a comparative analysis of acute, randomized, placebo-controlled trials. *Bipolar Disord*. 2010 Mar; 12(2): 116-41
- Findling RL, Landbloom RL, Szegedi A, Koppenhaver J, Braat S, Zhu Q, et al. Asenapine for the acute treatment of pediatric manic or mixed episode of bipolar I disorder. *J Am Acad Child Adolesc Psychiatry*. 2015 Dec; 54(12): 1032-41.
- Findling RL, Nyilas M, Forbes RA, McQuade RD, Jin N, Iwamoto T, et al. Acute treatment of pediatric bipolar I disorder, manic or mixed episode, with aripiprazole: randomized, double-blind placebo controlled study. *J Clin Psychiatry*. 2009; 70(10): 1441-51.
- Hass M, DelBello MP, Pandina G, Sushner S, Van Hove I, Augustyns I, et al. Risperidone for the treatment of acute mania in children and adolescents with bipolar disorder: a randomized, double-blind placebo-controlled study. *Bipolar Disord*. 2009; 11: 687-700.
- Lytle SM, Moratschek SK and Findling RL. Bipolar disorder in youth: presentation, treatment and neurobiology. New York: Oxford University Press, Inc; 2014. Chapter 8, Medical Treatment Strategies for Young People with Bipolar Disorder; p. 156-87.
- Pataki C and Carlson GA. The comorbidity of ADHD and bipolar disorders: any less confusion? *Curr Psychiatry Rep [Internet]*. 2013 Jul [Cited 2016 Nov 8]; 15(7): 372. Available from: doi 10.1007/s11920-013-0372-5.
- Peruzzolo TL, Tramontina S, Rohde LA and Zeni CP. Pharmacotherapy of bipolar disorder in children and adolescents: an update. *Revista Brasileira de Psiquiatria*. 2013; 35: 393-405. Available from: <http://dx.doi.org/10.1590/1516-4446-2012-0999>.
- Seida JC, Schouten JR, Boylan K, Newton AS, Mousavi SS, Beaith A, et al. Antipsychotics for children and young adults: a comparative effectiveness review. *Pediatrics*. 2012 Nov; 129(3): e771-84. Available from: doi 10.1542/peds.2011-2158.
- Tohen M, Kryzhanovskaya L, Carlson G, Wozniak J, Kowatch R, Wagner K, et al. Olanzapine versus placebo in the treatment of adolescents with bipolar mania. *Am J Psychiatry*. 2007; 164: 1547-56.
- Tramontina S, Zeni CP, Ketzer CR, Pheula GF, Narvaez J and Rohde LA. Aripiprazole in children and adolescents with bipolar disorder comorbid with attention-deficit/hyperactivity disorder: A pilot randomized clinical trial. *J Clin Psychiatry*. 2009 May; 70(5): 756-64.

References for DMDD in Children and Adolescents Ages 6 to 17 Years Old:

- Achenbach, TM. The Achenbach system of empirically based assessment (ASEBA): developmental findings, theory, and applications. Burlington, VT: University of Vermont Research Center for Children, Youth, & Families; 2009.
- Aebi M, Plattner B, Metzke CW, Bessler C, Steinhausen HC. Parent- and self-reported dimensions of oppositionality in youth: construct validity, concurrent validity, and the prediction of criminal outcomes in adulthood. *J Child Psychol Psychiatry*. 2013 Sep; 54(9): 941-9.
- Aman MG, Singh N, Stewart AW, Field CJ: The aberrant behavior checklist: a behavior rating scale for the assessment of treatment effects. *Am J Ment Defic*. 1985; 89(5): 485-91.

- Carlson GA, Danzig AP, Dougherty LR, Bufferd SJ, Klein DN. Loss of temper and irritability: the relationship to tantrums in a community and clinical sample. *J Child Adolesc Psychopharmacol*. 2016 Mar; 26(2): 114-22.
- Coccaro EF, Berman ME, Kavoussi RJ. Assessment of life history of aggression: development and psychometric characteristics. *Psychiatry Res*. 1997 Dec; 73(3): 147-57.
- Gorman DA, Gardner DM, Murphy AL, Feldman M, Bélanger SA, Steele MM, et al. Canadian guidelines on pharmacotherapy for disruptive and aggressive behaviour in children and adolescents with attention-deficit hyperactivity disorder, oppositional defiant disorder, or conduct disorder. *Can J Psychiatry*. 2015; 60(2): 62-76.
- Stringaris A, Goodman R, Ferdinando S, Razdan V, Muhrer E, Leibenluft E, Brotman MA. The affective reactivity index: a concise irritability scale for clinical and research settings. *J Child Psychol Psychiatry*. 2012 Nov; 53(11):1109-17.
- Tourian L, LeBoeuf A, Breton JJ, Cohen D, Gignac M and Labelle R. Treatment options for the cardinal symptoms of disruptive mood dysregulation disorder. *J Can Acad Child Adolesc Psychiatry*. 2015 Winter; 24(1): 41-54.

References for Insomnia Disorder in Children and Adolescents:

- Armour A, Gottschlich MM, Khoury J, Warden GD and Kagan RJ. A randomized, controlled prospective trial of zolpidem and haloperidol for use as sleeping agents in pediatric burn patients. *J Burn Care Res*. 2008; 29(1): 238-47. Available from: 10.1097/BCR.0b013e31815f384e.
- Blumer J, Findling RL, Shih WJ, Soubrane C and Reed MD. Controlled clinical trial of zolpidem for the treatment of insomnia associated with attention-deficit/hyperactivity disorder in children 6 to 17 years of age. *Pediatrics* [Internet]. 2009 May [Cited 2016 Nov 4]; 123(5): e770-6. Available from: doi 10.1542/peds.2008-2945.
- Cronin DS, Gottschlich MM, Gose LM and Kagan RJ. Zolpidem and sleep in pediatric burn patients with attention deficit/hyperactivity disorder. *Pediatr Nurs*. 2015 May-Jun; 41(3): 132-4, 140.
- Cummings C. Melatonin for the management of sleep disorders in children and adolescents. *Pediatr Child Health* 2012; 17(6): 331-3.
- Efron D, Lycett K and Sciberras E. Use of sleep medication in children with ADHD. *Sleep Med*. 2014 Apr; 15(4): 472-5. Available from: doi 10.1016/j.sleep.2013.10.018.
- Ingrassia A and Turk J. The Use of clonidine for severe and intractable sleep problems in children with neurodevelopmental disorders: a case series. *Eur Child Adolesc Psychiatry*. 2005; 14: 34-40. Available from: doi 10.1007/s00787-005-0424-4.
- Kawabe K, Horiuchi F, Oka Y and Ueno S. The melatonin receptor agonist ramelteon effectively treats insomnia and behavioral symptoms in autistic disorder. *Case Rep Psychiatry* [Internet]. 2014 [Cited 2016 Nov 4]; 2014: 561071. Available from: doi 10.1155/2014/561071.
- Kennaway DJ. Potential safety issues in the use of the hormone melatonin in paediatrics. *J Paediatr Child Health*. 2015; 51: 584-9. Available from: doi 10.1111/jpc.12840.
- Merenstein D, Diener-West M, Halbower AC, Krist A and Rubin HR. The trial of infant response to diphenhydramine: the TIRED study—a randomized, controlled, patient-oriented trial. *Arch Pediatr Adolesc Med*. 2006 Jul; 160(7): 707-12.
- Ming X, Gordon E, Kang N and Wagner GC. Use of clonidine in children with autism spectrum disorders. *Brain Dev*. 2008; 20: 454-60. Available from: doi 10.1016/j.braindev.2007.12.007.

- Owens JA, Babcock D, Blumer J, Chervin R, Ferber R, Goetting M, et al. The use of pharmacotherapy in the treatment of pediatric insomnia in primary care: rational approaches. A consensus meeting summary. *J Clin Sleep Med*. 2005 Jan; 1(1): 49-59.
- Owens JA, Rosen CL, Mindell JA and Kirchner HL. Use of pharmacotherapy for insomnia in child psychiatry practice: a national survey. *Sleep Med*. 2010 Aug; 11(7): 692-700. Available from: doi 10.1016/j.sleep.2009.11.015.
- Paul IM, Yoder KE, Crowell KR, Shaffer ML, McMillan HS, Carlson LC, et al. Effect of dextromethorphan, diphenhydramine, and placebo on nocturnal cough and sleep quality for coughing children and their parents. *Pediatrics* [Internet]. 2004 Jul [Cited 2016 Nov 4]; 114(1): e85-90. Available from: <http://www.pediatrics.org/cgi/content/full/114/1/e85>.
- Prince JB, Wilens TE, Biederman J, Spencer TJ and Wozniak JR. Clonidine for sleep disturbances associated with attention-deficit hyperactivity disorder: a systematic chart review of 62 cases. *J Am Acad Child Adolesc Psychiatry*. 1996 May; 35(5): 599-605.
- Russo RM, Gururaj VJ and Allen JE. The effectiveness of diphenhydramine hcl in pediatric sleep disorders. *J Clin Pharmacol*. 1976 May-Jun; 16(5-6): 284-8.
- Saxvig IW, Wilhelmsen-Langeland A, Pallesen S, Vedaa Ø, Nordhus IH and Bjorvatn B. A randomized controlled trial with bright light and melatonin for delayed sleep phase disorder: effects on subjective and objective sleep. *Chronobiol Int*. 2014; 31(1): 72-86. Available from: doi 10.3109/07420528.2013.823200.
- Smits MG, Nagtegaal EE, van der Heijden J, Coenen AM and Kerkhof GA. Melatonin for chronic sleep onset insomnia in children: a randomized placebo-controlled trial. *J Child Neurol*. 2001; 16(2): 86-92. Available from: doi 10.1177/088307380101600204.
- Smits MG, van Stel HF, van der Heijden K, Meijer AM, Coenen AM and Kerkhof GA. Melatonin improves health status and sleep in children with idiopathic chronic sleep-onset insomnia: A randomized placebo-controlled trial. *J Am Acad Child Adolesc Psychiatry*. 2003 Nov; 42(11): 1286-93. Available from: doi 10.1097/01.chi.0000085756.71002.86.
- Stigler KA, Posey DJ and McDougale CJ. Ramelteon for insomnia in two youths with autistic disorder. *J Child Adolesc Psychopharmacol*. 2006 Oct; 16(5): 631-6. Available from: doi:10.1089/cap.2006.16.631.
- Van Geijlswijk IM, van der Heijden KB, Egberts AC, Korzilius HP and Smits MG. Dose finding of melatonin for chronic idiopathic sleep onset insomnia: a randomized controlled trial. *Psychopharmacology*. 2010; 212: 379-91. Available from: doi 10.1007/s00213-010-1962-0.
- Wilhelmsen-Langeland A, Saxvig IW, Pallesen S, Nordhus IH, Vedaa Ø, Lundervold AJ, et al. A randomized controlled trial with bright light and melatonin for the treatment of delayed sleep phase disorder: effects on subjective and objective sleepiness and cognitive function. *J Biol Rhythms*. 2013 Oct; 28(5): 206-21. Available from: doi 10.1177/0748730413500126.

References for Major Depressive Disorder (Children under Age 6 and Children 6-17 Years Old):

- Atkinson SD, Prakash A, Zhang Q, Pangallo BA, Bangs ME, Emslie GJ, et al. A double-blind efficacy and safety study of duloxetine flexible dosing in children and adolescents with major depressive disorder. *J Child Adolesc Psychopharmacol*. 2014 May; 24(4): 180-9. Available from: 10.1089/cap.2013.0146.

- Cipriani A, Zhou X, Giovane CD, Hetrick SE, Quin B, Whittington C, et al. Comparative efficacy and tolerability of antidepressants for major depressive disorder in children and adolescents: a network meta-analysis. *Lancet* 2016; 388: 881-90.
- Daviss WB, Bentivoglio P, Racusin R, Brown KM, Bostic JQ, Wiley L. Bupropion sustained release in adolescents with comorbid attention-deficit/hyperactivity disorder and depression. *J Am Acad Child Adolesc Psychiatry*. 2001 Mar; 40(3): 307-14.
- DelBello MP, Hochadel TJ, Protland KB, Axxaro AJ, Katic A, Khan A, et al. A double-blind, placebo-controlled study of selegiline transdermal system in depressed adolescents. *J Child Adolesc Psychopharmacol*. 2014 Aug; 24(6): 311-7. Available from: doi 10.1089/cap.2013.0138.
- Emslie GJ, Findling RL, Yeung PP, Kunz NR and Li Y. Venlafaxine ER for the treatment of pediatric subjects with depression: results of two placebo-controlled trials. *J Am Acad Child Adolesc Psychiatry*. 2007 Apr; 46(4): 479-88. Available from: doi 10.1097/chi.0b013e31802f5f03.
- Emslie GJ, Heiligenstein JH, Wagner KD, Hoog SL, Ernest DE, Brown E, et al. Fluoxetine for acute treatment of depression in children and adolescents: a placebo-controlled randomized clinical trial. *J Am Acad Child Adolesc Psychiatry*. 2002 Oct; 41(10): 1205-15.
- Emslie GJ, Kennard BD, Mayes TL, Nakonezy PA, Moore J, Jones JM, et al. Continued effectiveness of relapse prevention cognitive-behavioral therapy following fluoxetine treatment in youth with major depressive disorder. *J Am Acad Child Adolesc Psychiatry*. 2015 Dec; 54(12): 991-8. Available from: doi 10.1016/j.jaac.2015.09.014.
- Emslie GJ, Prakash A, Zhang Q, Pangallo BA, Bangs ME and March JS. A double-blind efficacy and safety study of duloxetine fixed doses in children and adolescents with major depressive disorder. *J Child Adolesc Psychopharmacol*. 2014 May; 24(4): 170-9. Available from: doi 10.1089/cap.2013.0096.
- Emslie GJ, Rush AJ, Weinberg WA, Sowatch RA, Hughes CW, Carmondy T, et al. A double-blind, randomized, placebo-controlled trial of fluoxetine in children and adolescents with depression. *Arch Gen Psychiatry*. 1997 Nov; 54(11): 1031-7.
- Emslie GJ, Ventura D, Korotzer A and Tourkodimitris S. Escitalopram in the treatment of adolescent depression: a randomized placebo-controlled multisite trial. *J Am Acad Child Adolesc Psychiatry*. 2009 Jul; 48(7): 721-9. Available from: doi 10.1097/CHI.0b013e3181a2b304.
- Findling RL, Groark J, Chiles D, Ramaker S, Yang L and Tourian KA. Safety and tolerability of desvenlafaxine in children and adolescents with major depressive disorder. *J Child Adolesc Psychopharmacol*. 2014 May; 24(4): 201-9. Available from: doi 10.1089/cap.2012.0126.
- Findling RL, Robb A and Bose A. Escitalopram in the treatment of adolescent depression: A randomized, double-blind, placebo-controlled extension trial. *J Child Adolesc Psychopharmacol*. 2013 Sep; 23(7): 468-80. Available from: doi 10.1089/cap.2012.0023.
- Geller B, Cooper TB, Graham DL, Marsteller FA and Bryant DM. Double-blind placebo-controlled study of nortriptyline in depressed adolescents using a "fixed plasma level" design. *Psychopharmacol Bull*. 1990; 26(1): 85-90.
- Glod CA, Lynch A, Flynn E, Berkowitz C and Baldessarini RJ. Open trial of bupropion SR in adolescent major depression. *J Child Adolesc Psychiatr Nurs*. 2003 Jul-Sep; 16(3): 123-30. Available from: doi 10.1111/j.1744-6171.2003.00123.x.
- Kashani JH, Shekim WO and Reid JC. Amitriptyline in children with major depressive disorder: a double-blind crossover pilot study. *J Am Acad Child Psychiatry*. 1984 May; 23(3): 348-51.

- Keller MB, Ryan ND, Strober M, Klein RG, Kutcher SP, Birmaher B, et al. Efficacy of paroxetine in the treatment of adolescent major depression: a randomized, controlled trial. *J Am Acad Child Adolesc Psychiatry*. 2001 Jul; 40(7): 762-72.
- Kim HH and Ahn SJ. How does neighborhood quality moderate the association between online video game play and depression? A population-level analysis of Korean students. *Cyberpsychol Behav Soc Netw*. 2016 Oct; 19(10): 623-34.
- Kramer AD and Feiguine RJ. Clinical effects of amitriptyline in adolescent depression. A pilot study. *J Am Acad Child Psychiatry*. 1981 Summer; 20(3): 636-44.
- Kutcher S, Boulos C, Ward B, Marton P, Simeon J, Ferguson HB, et al. Response to desipramine treatment in adolescent depression: a fixed-dose, placebo-controlled trial. *J Am Acad Child Adolesc Psychiatry*. 1994 Jun; 33(5): 686-94.
- Kye CH, Waterman GS, Ryan ND, Birmaher B, Williamson DE, Iyengar S, et al. A randomized, controlled trial of amitriptyline in the acute treatment of adolescent major depression. *J Am Acad Child Adolesc Psychiatry*. 1996 Sep; 35(9): 1139-44. Available from: <https://dx.doi.org/10.1097/00004583-199609000-00011>.
- Luby JL, Gaffrey MS, Tillman R, April LM and Belden AC. Trajectories of preschool disorders to full DSM depression at school age and early adolescence: continuity of preschool depression. *Am J Psychiatry*. 2015 Jul; 171(7) 768-76. Available from: doi 10.1176/appi.ajp.2014.13091198.
- March JS, Silva S, Petrycky S, Curry J, Wells K, Fairbank J. The treatment for adolescents with depression study (TADS): long-term effectiveness and safety outcomes. *Arch Gen Psychiatry*. 2007 Oct; 64(10): 1132-43.
- Melvin GA, Tonge BJ, King NJ, Heyne D, Gordon MS and Klimkeit E. A comparison of cognitive-behavioral therapy, sertraline, and their combination for adolescent depression. *J Am Acad Child Adolesc Psychiatry*. 2006 Oct; 45(10): 1151-61.
- Milin RP, Simeon J, Spent W. Double-blind study of paroxetine in adolescents with unipolar major depression. In: 46th Annual Meeting of the American Academy of Child and Adolescent Psychiatry. Washington, DC, AACAP 1999 Oct 19.
- Preskorn SH, Weller EB, Hughes CW, Weller RA and Bolte K. Depression in prepubertal children: dexamethasone nonsuppression predicts differential response to imipramine vs. placebo. *Psychopharmacol Bull*. 1987; 23(1): 128-33.
- Puig-Antich J, Perel JM, Lupatkin W, Chambers WJ, Tabrizi MA, King J, et al. Imipramine in prepubertal major depressive disorders. *Arch Gen Psychiatry*. 1987 Jan; 44(1): 81-9.
- Von Knorring AL, Olsson GI, Thompsen PH, Lemming OM and Hultén A. A randomized, double-blind, placebo-controlled study of citalopram in adolescents with major depressive disorder. *J Clin Psychopharmacol*. 2006 Jun; 26(3): 311-5.
- Wagner KD, Ambrosini P, Rynn M, Wohlberg C, Yang R, Greenbaum MS, et al. Efficacy of sertraline in the treatment of children and adolescents with major depressive disorder: two randomized controlled trials. *JAMA*. 2003 Aug; 290(8): 1033-41.
- Wagner KD, Findling RL, Jun J, Gutierrez MM and Hydorn WE. A randomized, placebo-controlled trial of citalopram for the treatment of major depression in children and adolescents. *Am J Psychiatry*. 2004 Jun; 161(6): 1079-83.
- Wilson S. Preschool-onset depression predicts major depressive disorder and other psychiatric disorders in later childhood and early adolescence. *Evid Based Ment Health*. 2015 May; 18(2): 47. Available at: doi 0.1136/eb-2014-101974.

References for Obsessive Compulsive Disorder in Children and Adolescents Ages 6 to 17 Years Old:

Geller DA, March J, and the AACAP Committee on Quality Issues. Practice parameter for the assessment and treatment of children and adolescents with obsessive-compulsive disorder. *J Am Acad Child Adolesc Psychiatry*. 2012; 51(1): 98-113. Available from: doi <http://dx.doi.org/10.1016/j.jaac.2011.09.019>.

Murphy TK, Gerardi DM and Leckman JF. Pediatric acute-onset neuropsychiatric syndrome. *Psychiatr Clin North Am*. 2014 Sep; 37(3): 353-74. Available from: doi [10.1016/j.psc.2014.06.001](https://doi.org/10.1016/j.psc.2014.06.001).

References on Resources for Anxiety Disorders:

Children:

Derisley J, Heyman I, Robinson S and Turner C. *Breaking free from OCD: a CBT guide for young people and their families*. London, UK: Jessica Kingsley Publishers; 2008. 224 p.

Rompella N. *Obsessive-compulsive disorder: the ultimate teen guide*. Plymouth, UK: Scarecrow Press, Inc; 2009. 192 p.

Adolescents:

Chansky TE. *Freeing your child from obsessive-compulsive disorder*. New York, NY: Harmony; 2001. 368p.

March JS and Benton CM. *Talking back to OCD: The program that helps kids and teens say "No way" – and parents say "Way to go."* New York, NY: Guilford Press; 2007. 276 p.

Wagner AP. *What to do when your child has obsessive-compulsive disorder: strategies and solutions*. Mobile, AL: Lighthouse Press; 2002. 444p.

Parents/Caregivers:

Freeman JB and Garcia AM. *Family-based treatment for young children with OCD: therapist guide*. New York, NY: Oxford University Press, 2008. 208 p.

Storch EA and McKay D. *Obsessive-compulsive disorder and its spectrum: a life-span approach*. Washington: American Psychological Association; 2008. 418 p.

References for Post-Traumatic Stress Disorder in Children and Adolescents:

Cohen JA, Mannarino AP, Perel JM and Staron V. A pilot randomized controlled trial of combined trauma-focused CBT and sertraline for childhood PTSD symptoms. *J Am Acad Child Adolesc Psychiatry*. 2007 Jul; 46(7): 811-9.

Connor DF, Grasso DJ, Slivinsky MD, Pearson GS and Banga A. An Open-Label Study of Guanfacine extended release for traumatic stress related symptoms in children and adolescents. *J Child Adolesc Psychopharmacol*. 2013 May; 23(4): 244-51. Available from: doi [10.1089/cap.2012.0119](https://doi.org/10.1089/cap.2012.0119).

Hafstad GS, Dyb G, Jensen TK, Steinberg AM and Pynoos RS. PTSD Prevalence and symptom structure of DSM-5 criteria in adolescents and young adults surviving the 2011 shooting in Norway. *J Affect Disord*. 2014 Dec; 169: 40-6. Available from: doi [10.1016/j.jad.2014.06.055](https://doi.org/10.1016/j.jad.2014.06.055).

Keeshin B, et al. Prazosin in youth with PTSD. In: 63rd Annual Meeting of the American Academy of Child and Adolescent Psychiatry. 2016 Oct; New York, NY.

Keeshin BR and Strawn JR. Psychological and pharmacologic treatment of youth with posttraumatic stress disorder: an evidence-based review. *Child Adolesc Psychiatr Clin N Am*. 2014 Apr; 23(2): 399-411, x. Available from: doi [10.1016/j.chc.2013.12.002](https://doi.org/10.1016/j.chc.2013.12.002).

- Kreider AR, Matone M, Bellonci C, dosReis S, Feudtner C, Huang YS, et al. Growth in the concurrent use of antipsychotics with other psychotropic medications in Medicaid-enrolled children. *J Am Acad Child Adolesc Psychiatry*. 2014 Sep; 53(9): 960-70.e2. Available from: doi 10.1016/j.jaac.2014.05.010.
- Matone M, Localio R, Huang YS, dosReis S, Feudtner C and Rubin D. The relationship between mental health diagnosis and treatment with second-generation antipsychotics over time: a national study of U.S. Medicaid-enrolled children. *Health Serv Res [Internet]*. 2012 Oct [Cited 2016 Nov 7]; 47(5): 1036-60. Available from: doi 10.1111/j.1475-6773.2012.01461.x.
- Morina N, Koerssen R and Pollet TV. Interventions for children and adolescents with posttraumatic stress disorder: a meta-analysis of comparative outcome studies. *Clin Psychol Rev*. 2016 Jul; 47: 41-54. Available from: 10.1016/j.cpr.2016.05.006.
- Pervanidou P, Kolaitis G, Charitaki S, Lazaropoulou C, Papassotiriou I, Hindmarsh P, et al. The natural history of neuroendocrine changes in pediatric posttraumatic stress disorder (PTSD) after motor vehicle accidents: progressive divergence of noradrenaline and cortisol concentrations over time. *Biol Psychiatry*. 2007 Nov; 62(10): 1095-102. Available from: 10.1016/j.biopsych.2007.02.008.
- Raghavan R, Allaire BP, Garfield LD and Murray R. Medicaid expenditures on psychotropic medications for maltreated children: a study of 36 states. *Psychiatr Serv*. 2014 Dec; 65(12): 1445-51. Available from: doi 10.1176/appi.ps.201400028.
- Robb AS, Cueva JE, Sporn J, Yang R and Vanderburg DG. Sertraline treatment of children and adolescents with posttraumatic stress disorder: a double-blind placebo-controlled trial. *J Child Adolesc Psychopharmacol*. 2010 Dec; 20(6): 463-71. Available from: doi 10.1089/cap.2009.0115.
- Strawn JR, Keeshin BR, DelBello MP, Geraciotti TD and Putnam FW. Psychopharmacologic treatment of posttraumatic stress disorder in children and adolescents: a review. *J Clin Psychiatry [Internet]*. 2010 [Cited 2016 Nov 7]; e1-10. Available from: doi 10.4088/JCP.09r05446blu.

References for Schizophrenia (Early Onset):

- Findling RL, Çavuş I, Pappadopulos E, Vanderburg DG, Schwartz JH, Gundapaneni BK, et al. Ziprasidone in adolescents with schizophrenia: results from a placebo-controlled efficacy and long-term open-extension study. *J Child Adolesc Psychopharmacol*. 2013 Oct; 23(8): 531-44. Available from: doi 10.1089/cap.2012.0068.
- Findling RL, Johnson JL, McClellan J, Frazier JA, Vitiello B, Hamer RM, et al. Double-blind maintenance safety and effectiveness findings from the treatment of early-onset schizophrenia spectrum (TEOSS) study. *J Am Acad Child Adolesc Psychiatry*. 2010 Jun; 49(6): 583-94.
- Findling RL, Landbloom RP, Mackle M, Pallozzi W, Braat S, Hundt C, et al. Safety and efficacy from an 8 week double-blind trial and a 26 week open-label extension of asenapine in adolescents with schizophrenia. *J Child Adolesc Psychopharmacol*. 2015 Jun; 25(5): 384-96. Available from: doi 10.1089/cap.2015.0027.
- Lambert M, Schottle D, Sengutta M, Ruppelt F, Rohenkohl A, Luedecke D, et al. Early detection and integrated care for adolescents and young adults with severe psychotic disorders: rationales and design of the integrated care in early psychosis study (ACCESS III). *Early Interv Psychiatry [Internet]*. 2016 [Cited 2016 Nov 7]; Epub ahead of print. Available from: doi 10.1111/eip.12361.

Lynch S, McFarlane WR, Joly B, Adelsheim S, Auther A, Cornblatt BA, et al. Early detection, intervention and prevention of psychosis program: community outreach and early identification at six U.S. sites. *Psychiatr Serv*. 2016 May; 67(5): 510-6. Available from: doi 10.1176/appi.ps.201300236.

McClellan J, Stock S and the AACAP Committee on Quality Issues. Practice parameter for the assessment and treatment of children and adolescents with schizophrenia. *J Am Acad Child Adolesc Psychiatry*. 2013 Sep; 52(9): 976-90.

McFarlane WR, Levin B, Travis L, Lucas FL, Lynch S, Verdi M, et al. Clinical and functional outcomes after 2 years in the early detection and intervention for the prevention of psychosis multisite effectiveness trial. *Schizophr Bull*. 2015 Jan; 41(1): 30-43. Available from: doi 10.1093/schbul/sbu108.

Sikich L, Frazier JA, McClellan J, Findling RL, Vitiello B, Ritz L, et al. Double-blind comparison of first- and second-generation antipsychotics in early-onset schizophrenia and schizoaffective disorder: findings from the treatment of early-onset schizophrenia spectrum disorders (TEOSS) study. *Am J Psychiatry*. 2008 Nov; 165(11): 1420-31.

References for Tic Disorders in Children and Adolescents Ages 6 to 17 Years Old

Bloch MH, Panza KE, Landeros-Weisenberger A and Leckman JF. Meta-analysis: treatment of attention-deficit/hyperactivity disorder in children with comorbid tic disorders. *J Am Acad Child Adolesc Psychiatry*. 2009 Sep; 48(9): 884-93. Available from: doi 10.1097/CHI.0b013e3181b26e9f.

Cath DC, Hedderly T, Ludolph AG, Stern JS, Murphy T, Hartmann A, et al. European clinical guidelines for tourette syndrome and other tic disorders. Part I: assessment. *Eur Child Adolesc Psychiatry*. 2011 Apr; 20(4): 155-71. Available from: 10.1007/s00787-011-0164-6.

Cohen SC, Mulqueen JM, Ferracioli-Oda E, Stuckelman ZD, Coughlin CG, Leckman JF, et al. Meta-Analysis: Risk of tics associated with psychostimulant use in randomized, placebo-controlled trials. *J Am Acad Child Adolesc Psychiatry*. 2015 Sep; 54(9): 728-36. Available from: doi 10.1016/j.jaac.2015.06.011.

Cuenca J, Glazebrook C, Kendall T, Hedderly T, Heyman I, Heyman I, et al. Perceptions of treatment for tics among young people with Tourette syndrome and their parents: a mixed methods study. *BMC Psychiatry* [Internet]. 2015 Mar [Cited 2106 Nov 11]; 15: 46. Available from: doi 10.1186/s12888-015-0430-0.

Murphy TK, Lewin AB, Storch EA, Stock S and AACAP Committee on Quality Issues (CQI). Practice parameter for the assessment and treatment of children and adolescents with tic disorders. *J Am Acad Child Adolesc Psychiatry*. 2013 Dec; 52(12): 1341-59.

Pringsheim T, Doja A, Gorman D, McKinlay D, Day L, Billingshurst L, et al. Canadian guidelines for the evidence-based treatment of tic disorders: pharmacotherapy. *Can J Psychiatry*. 2012 Mar; 57(3): 133-43.

Pringsheim T and Steeves T. Pharmacological treatment for attention deficit hyperactivity disorder (ADHD) in children with comorbid tic disorders. *Cochrane Database Syst Rev*. 2011 Apr 13; (4): CD007990. Available from: doi 10.1002/14651858.CD007990.pub2.

References on Resources for Tic Disorders in Children and Adolescents Ages 6 to 17 Years Old:

Parents/caregivers

Walkup JT, Mink JW, McNaught, KS, editors. A family's guide to Tourette syndrome. Bayside, NY: Tourette Syndrome Association, Inc; 2012. 292 p.

Woods DW, Piacentini J, Chang S, Deckersbach T, Ginsburg G, Peterson A, et al. Managing Tourette syndrome: a behavioral intervention workbook, parent workbook. New York, NY: Oxford University Press; 2008. 96p.

Clinicians

Woods DW, Piacentini JC, Chang SW, Deckersbach T, Ginsburg GS, Peterson AL, et al. Managing Tourette Syndrome: A behavioral intervention for children and adults, therapist guide. New York, NY: Oxford University Press; 2008. 144 p.

Woods DW, Piacentini J and Walkup JT, editors. Treating Tourette syndrome and Tic disorders: A guide for practitioners. New York, NY: The Guilford Press; 2007. 287 p.



Florida Pediatric Psychiatry Hotline

1-866-487-9507

The Florida Pediatric Psychiatry Hotline is a program operated by the University of South Florida Division of Child and Adolescent Psychiatry in the Department of Pediatrics, Rothman Center for Neuropsychiatry in St. Petersburg, Florida, for the past 4 years. Tanya Murphy, MD., Maurice A. and Thelma P. Rothman Chair of Developmental Pediatrics and Professor in the Departments of Pediatrics and Psychiatry, University of South Florida oversees the operations of the hotline and provides many of the consultations.

The program:

- Provides timely telephonic psychiatric and clinical guidance to primary care clinicians treating children with psychosocial and mental health conditions
- Enables primary care clinicians to get assistance for any child under their care and
- Is highly rated by those using the service

The goals of the program are to:

- Provide consultation about psychotropic medications for children with psychosocial and behavioral health conditions.
- Facilitate a referral to a child psychiatrist or psychiatric ARNP when possible.
- Promote a collaborative relationship between primary care clinicians and child psychiatrists.

The Florida Pediatric Psychiatry Hotline is funded by the Florida Medicaid Drug Therapy Management Program for Behavioral Health through a contract with the Florida Agency for Healthcare Administration.

Key information about the Florida Pediatric Consultation Hotline

The service is:

- Free
- Mostly related to consultation about medication management.
- Duration of the call is limited to a maximum of 20- minutes per telephone consultation
- A trained administrative person schedules appointment times for the child psychiatrist to connect with the primary care clinician. Most calls will be answered within 1 to 4 hours.
- Information shared is limited to the patient's age, gender, weight, and other information that might be relevant to a discussion of medications. No patient names or other unique identifying information will be shared during the consultation.
- The calls will be answered on non-holiday weekdays between 8:30 am and 4:30 pm.



FLORIDA
MEDICAID DRUG
THERAPY MANAGEMENT
PROGRAM FOR
BEHAVIORAL HEALTH



AGENCY FOR
HEALTH CARE
ADMINISTRATION

Florida Medicaid Drug Therapy Management Program for Behavioral Health

Working with Medicaid providers to:

- Improve behavioral health prescribing practices
- Improve patient adherence to medication
- Reduce clinical risks and medication side effects
- Improve behavioral and physical health outcomes

The following treatment guidelines are available on our website at medicaidmentalhealth.org.

- Autism Spectrum Disorder & Intellectual Disability Disorder: Psychotropic Medication Recommendations for Target Symptoms in Children and Adolescents
- Best Practice Psychotherapeutic Medication Guidelines for Adults
- Monitoring Physical Health and Side-Effects of Psychotherapeutic Medications in Adults and Children: An Integrated Approach
- Best Practice Psychotherapeutic Medication Guidelines for Children and Adolescents

The **Florida Clozapine Hotline** and **The Florida Pediatric Psychiatry Hotline** are free services that provide consultation about medication management.

Florida Clozapine Hotline

1-727-562-6762

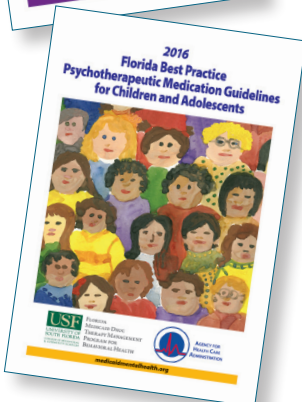
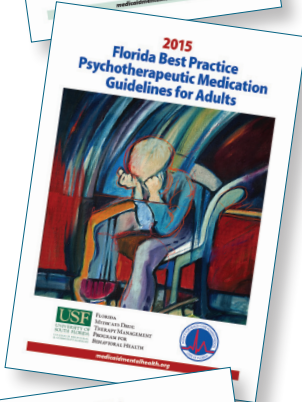
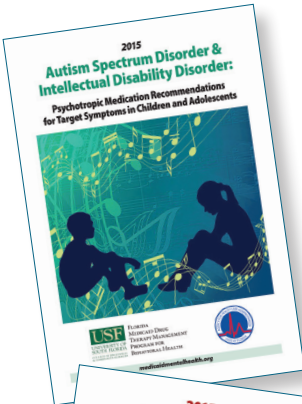
Florida Pediatric Psychiatry Hotline

1-866-487-9507



FLORIDA
MEDICAID DRUG
THERAPY MANAGEMENT
PROGRAM FOR
BEHAVIORAL HEALTH

For more information, visit us at
medicaidmentalhealth.org



NOTES:

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

medicaidmentalhealth.org

PLEASE VISIT OUR WEBSITE TO VIEW:

Electronic versions of our guidelines can be downloaded in full or partial

News and announcements

Video presentations

Alerts of recent publications and related literature

Staff publications

Resources and tools

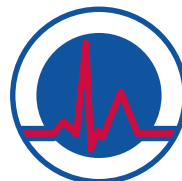
Current projects

CONTACT INFORMATION

Marie A. McPherson, Director
Florida Medicaid Drug Therapy
Management Program for Behavioral Health
Email: mmcpherson@usf.edu
tel: 813-974-5378 | fax: 813- 974-9327
or visit medicaidmentalhealth.org



FLORIDA
MEDICAID DRUG
THERAPY MANAGEMENT
PROGRAM FOR
BEHAVIORAL HEALTH



AGENCY FOR
HEALTH CARE
ADMINISTRATION

medicaidmentalhealth.org