



## TREATMENT OF ATTENTION-DEFICIT/HYPERACTIVITY DISORDER (ADHD) FOR CHILDREN AND ADOLESCENTS

The following guideline recommends treatment procedures for attention-deficit/hyperactivity disorder.

Eligible Population	Key Components	Recommendation and Level of Evidence
Children and adolescents to age 18 with a confirmed diagnosis of ADHD  See MQIC <a href="#">Diagnosis of ADHD for Children and Adolescents</a> guideline	Age-specific general recommendations	<p>Make sure diagnosis is correct and co-morbid diagnoses are also treated.</p> <p>ADHD is a chronic condition, and therefore, its management should follow the principles of the chronic care model and medical home. <b>[B]</b></p> <ul style="list-style-type: none"> <li>◆ ADHD is undertreated in Asian, African American and Latinx children.</li> <li>◆ Treatment includes addressing co-morbid conditions, including substance use. <b>[B]</b> Consider referral to a specialist in complex presentations.</li> </ul> <p><b>Recommendations vary by age:</b></p> <p><b>Age &lt; 4 years old</b>, refer to a specialist for consultation and/or parent training in behavior management.</p> <p><b>4-5 years old</b>: Preferred treatment: evidence-based parent- and/or teacher-administered behavior therapy. <b>[A]</b> Medication should only be prescribed if moderate to severe symptoms persist or if behavior interventions are not available and harm of not prescribing outweighs the risks of starting medication at an early age. <b>[B]</b></p> <p><b>6-11 years old</b>: First-line treatment: FDA-approved medication for ADHD <b>[A]</b> and/or behavioral therapy (see below), preferably both. <b>[B]</b></p> <p><b>12-18 years old</b>: First-line treatment: FDA-approved medication for ADHD <b>[A]</b> with adolescent's assent and/or behavior therapy <b>[C]</b>, preferably both. Educate patient and parents about supervision of proper medication use and risks of misuse, diversion and abuse.</p>
	Non-pharmacological treatment and education	<p>Behavior therapy: parent training in behavior management combined with teacher-administered classroom interventions <b>[A]</b></p> <p>Co-interventions which could ameliorate psychosocial, family or academic co-morbidities of ADHD: family and patient education<sup>1</sup> including environmental modifications, negative impact of excessive electronic media and poor sleep hygiene; training in anger management and impulse control; cognitive training; school programming and supports; support groups and organizations, i.e. Children and Adults with Attention-Deficit/Hyperactivity Disorder (CHADD)</p>
	Pharmacotherapy <sup>2</sup>	<p>Combination of drug and behavioral therapy may improve targeted behaviors at lower drug doses.</p> <p>For patients in whom pharmacotherapy is indicated, consider trial of psychostimulants starting with a low dose of a preparation with a short half-life and increasing weekly or biweekly. <b>[B]</b> Titrate to clinical improvement or stabilization at the lowest dose necessary.</p> <p>Follow-up with the prescriber within 2-3 weeks after starting a psychostimulant and at least two more times within the first 9 months of treatment. Monitor symptom reduction and functional improvement; monitor for side effects, including but not limited to: weight loss, growth deceleration, adverse cardiovascular effects, insomnia, depression, psychosis, or tics.</p> <p>After effective dose is known, transition to a longer-acting agent may occur if desired. Response to one psychostimulant does not predict response to another. <b>[A]</b> For patients who do not have desired response after adequate trial or have significant side effects, evaluate adherence, consider second-line non-stimulant medications, reconsider diagnosis and comorbid conditions or refer to specialist.</p> <p>Re-evaluate need for ongoing medication. Long-term use of stimulants can have unintended consequences including dependence, misuse or diversion. Monitor weight, vital signs and behavior at each visit. Screen for both medication benefit and side effects routinely. Reassess at age 18 and when issues arise.</p> <p>If suspicious of misuse and/or diversion, consider obtaining a MAPS<sup>3</sup> report or urine drug screen.</p>

<sup>1</sup>The American Academy of Pediatrics recommends using its [ADHD toolkit](#) and stocking the office with questionnaires, diagnostic checklists, and patient education materials. Other AAP guideline supplemental documents include the [AAP Process of Care Algorithm \(PoCA\)](#) and [AAP Systematic Barriers To the Care of Children and Adolescents with ADHD](#).

<sup>2</sup>AAP-Recommended FDA-Approved medication for ADHD: <http://www.adhdmedicationguide.com/>

<sup>3</sup>[Michigan Automated Prescription System \(MAPS\)](#)

**Levels of evidence for the most significant recommendations:** A = randomized controlled trials; B = controlled trials, no randomization; C = observational studies; D = opinion of expert panel

This guideline lists core management steps. It is based on The American Academy of Pediatrics Clinical Practice Guideline for the Diagnosis, Evaluation and Treatment of Attention Deficit/Hyperactivity Disorder in Children and Adolescents, Subcommittee on Attention-Deficit/Hyperactivity Disorder, Pediatrics October 2019, 144 (4). Individual patient considerations and advances in medical science may supersede or modify these recommendations.