



## Clinical Practice Guideline: Attention Deficit Hyperactivity Disorder

<b>INTRODUCTION</b>
Attention Deficit Hyperactivity Disorder (ADHD) is a psychiatric disorder of children, adolescents, and adults manifested by a persistent pattern of inattention and/or hyperactivity that is in excess of that displayed in individuals of comparable levels of development. Symptoms producing impairment must have been present before age 12, although many cases have delayed diagnosis.
<b>SYMPTOM CLUSTERS</b>
<ul style="list-style-type: none"> <li>• Inattention</li> <li>• Hyperactivity</li> <li>• Impulsivity</li> </ul>
<b>SUBTYPES OF ADHD</b>
<ul style="list-style-type: none"> <li>• Attention-Deficit/Hyperactivity Disorder, Combined Type</li> <li>• Attention-Deficit/Hyperactivity Disorder, Predominantly Inattentive Type</li> <li>• Attention-Deficit/Hyperactivity Disorder, Predominantly Hyperactive-Impulsive Type</li> <li>• Attention-Deficit/Hyperactivity Disorder, Not Otherwise Specified</li> </ul>
<b>COMORBIDITIES OF ADHD</b>
ADHD comorbidities include learning disabilities, speech and language disorders, depression, bipolar affective disorder, tic disorder, obsessive-compulsive disorder, and other anxiety disorders and disruptive behavior disorders. There is a higher incidence of substance abuse in adolescents and adults with ADHD.
<b>EVALUATION OF ADHD</b>
<p>The American Academy of Pediatrics recommends that diagnosis and treatment be extended to preschool-aged children and adolescents, ranging from age 4 to 18 years. The primary care clinician should initiate an evaluation for any child within this age range who shows academic or behavioral problems and symptoms of inattention, hyperactivity, or impulsivity.</p> <p>To make a diagnosis of ADHD, the primary care clinician should determine that <i>Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition</i>, criteria have been met (including documentation of impairment in more than one major setting). Information should be obtained primarily from reports from parents or guardians, teachers and other school and mental health clinicians involved in the child’s care. The primary care clinician should also rule out any alternative cause.</p> <p>In the evaluation of a child for ADHD, the primary care clinician should include assessment for other conditions that might coexist with ADHD, including emotional or behavioral conditions (e.g., anxiety, depressive, oppositional defiant, and conduct disorders), developmental (e.g., learning and language disorders or other neurodevelopmental disorders), and physical (e.g., tics, sleep apnea) conditions</p>

All member care and related decisions are the sole responsibility of the provider. This information does not dictate nor control your clinical decisions regarding the appropriate care of members. Guidelines are subject to state regulations, benefits and formulary.

The primary care clinician should recognize ADHD as a chronic condition and therefore consider children and adolescents with ADHD as children and youth with special health care needs. Management of children and youth with special health care needs should follow the principles of the chronic care model and the medical home.

## **TREATMENT OF ADHD**

### **General treatment guidelines**

Recommendations for treatment of children and youth with ADHD vary depending on the patient's age:

For preschool-aged children (4-5 years old), the primary care clinician should prescribe evidence-based parent- and/or teacher-administered behavior therapy as the first line of treatment, and may prescribe methylphenidate, if the behavior interventions do not provide significant improvement and there is moderate-to-severe continuing disturbance in the child's function. In areas where evidence-based behavioral treatments are not available, the clinician needs to weigh the risks of starting medication at an early age against the harm of delaying diagnosis and treatment. Evidence suggests that the rate of metabolizing stimulant medication is slower in children 4 and 5 years old. They should be given a lower dose to start, and that dose may be increased in small increments.

For elementary school-aged children (6-11 years old), the primary care clinician should prescribe US Food and Drug Administration (FDA)-approved medications for ADHD and/or evidence-based parent- and/or teacher-administered behavior therapy as treatment for ADHD, preferably both. The evidence is particularly strong and sufficient for stimulant medications but less strong for atomoxetine, extended-release guanfacine and extended-release clonidine (in that order). The school environment, program, or placement is a part of any treatment plan.

For adolescents (12-18 years old), the primary care clinician should prescribe FDA-approved medications for ADHD with the assent of the adolescent and may prescribe behavior therapy as treatment for ADHD, preferably both. Clinicians should assess adolescent patients with newly diagnosed ADHD for symptoms and signs of substance abuse. If these signs and symptoms are found, evaluation and treatment for addiction should precede treatment for ADHD, if possible.

The primary care clinician should titrate doses of medication for ADHD to achieve maximum benefit with minimum adverse effects.

### **Specific pharmacotherapy interventions**

If a stimulant is indicated (unless allergic, pregnant, lactating or has specific contraindication), select from the short-acting, intermediate or long-acting formulary based on the member's history, response to previous pharmacotherapy, and side effects profile for both patient and medication.

New generic options for ADHD treatment include amphetamines, mixed amphetamine salts, and stimulants. One may also consider alpha agonists for augmentation. Other options include non-stimulants and antidepressants. Selective use of these additional medications may be useful in patients with tics, substance abuse, severe anxiety, persistent hyperactivity, mild

aggression, or insomnia.

Diversion of ADHD medication is a particular concern for adolescents. Clinicians should monitor symptoms and prescription refill requests for signs of misuse or diversion of ADHD medication. Consider prescribing medications with little or no abuse potential over ones with higher abuse potential.

If treating with a long-acting stimulant, it may be appropriate to use a short-acting preparation of the same stimulant in the late afternoon. College students and adults who drive and those with unusual work hours require careful balancing of dosing duration and sleep schedules.

When using tricyclic antidepressants, obtain a baseline EKG and an EKG after each dosage increase. A blood level should be obtained at all but the lowest doses.

Medication doses should be titrated for maximum benefit and minimum adverse effects.

Information about FDA approval of medications for different age groups with ADHD is available. There is often significant clinical data to support off-label use with respect to age. Clinical judgment considering all these factors and the response to treatment, along with side-effect burden, creates a specific treatment plan for the individual patient with ADHD. If none of the FDA-approved agents result in an adequate response, consider using a non-FDA-approved medication for the treatment of ADHD.

#### **Psychosocial interventions for ADHD**

Psychoeducation is indicated for all patients/families. Social skills training and parenting training may be utilized as indicated. Tutoring by a specific ADHD coach can be very useful for college students and adults. Other comorbidities may be treated with psychotherapy as indicated.

Academic performance should be assessed at each visit for all students. It is appropriate to encourage an Individualized Education Program (IEP) or to support informal school modifications. Appropriate documentation is required from the health care provider to the school system. Document crucial details.

#### **SUGGESTED REFERRAL TO BEHAVIORAL HEALTH**

Suggested referrals to behavioral health include:

- Preschool children
- Patient for whom the diagnosis is uncertain (psychiatric disorder, parent and child interaction problem)
- Patient not responding to treatment or treatment-intolerant because of medication's side effects
- Patient with psychiatric comorbidities requiring specialized treatment

#### **MEASUREMENT OF COMPLIANCE**

The following Medical Record Review measurements will be used to assess compliance with this guideline:

##### **\*\* Appropriate Diagnosis/Assessment\*\***

- 1 - Developmental History completed(must be documented at minimum of normal or Abnormal)
- 2 - History/Physical completed( must have a minimum of vitals, height and weight)

3 - Rating scale received and used to confirm diagnosis if the diagnosis was made within the prior year).

4 - Co-existing emotional and behavioral conditions assessed

**\*\*Parent/Patient Education & Risk Factor Assessment\*\***

5 - Developed management plan with the parent/member

6 - Parent educated on how to recognize the triggers for inattention, impulsivity & hyperactivity

7 - Parent educated on how to implement behavior management strategies

8 - Parent educated on the importance of follow up visit within 30 days of when the first ADHD medication was prescribed

**\*\*Appropriate Medications/Adherence\*\***

9- Documentation of response of effectiveness of medication

**\*\*Practitioner follows CPG that allows drug holiday\*\*** (Please note: Providers will not be rated on this component. It is for DCH's informational purposes only)

**PSYCHO-EDUCATION REFERENCES**

Identifying and Treating Attention Deficit Hyperactivity Disorder

<http://www2.ed.gov/teachers/needs/speced/adhd/adhd-resource-pt1.pdf>

Children and Adults with Attention-Deficit/Hyperactivity Disorder (CHADD) Parent to Parent (P2P) Program

[http://www.chadd.org/Content/CHADD/Conferences\\_Training/ParenttoParentProgram/P2PResources/default.htm](http://www.chadd.org/Content/CHADD/Conferences_Training/ParenttoParentProgram/P2PResources/default.htm)

Section 504 Plan

<http://www.help4adhd.org/en/education/rights/504>

**Evaluation of ADHD**

<http://www.cdc.gov/ncbddd/adhd/guidelines.html>

**REFERENCES FOR HEALTH CARE PROVIDERS**

American Academy of Pediatrics (2011) *ADHD: Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder in Children and Adolescents*

<http://pediatrics.aappublications.org/content/128/5/1007.full.pdf>

<http://pediatrics.aappublications.org/content/early/2011/10/14/peds.2011-2654>

To see a flow sheet for ADHD, please reference the attached ADHD Flow Sheet from the American Academy of Pediatrics (AAP).