Optima Health

Attention Deficit Hyperactivity Disorder (ADHD) Guideline

Guideline History

Date Approved	01/06, 01/08 (M), 03/08
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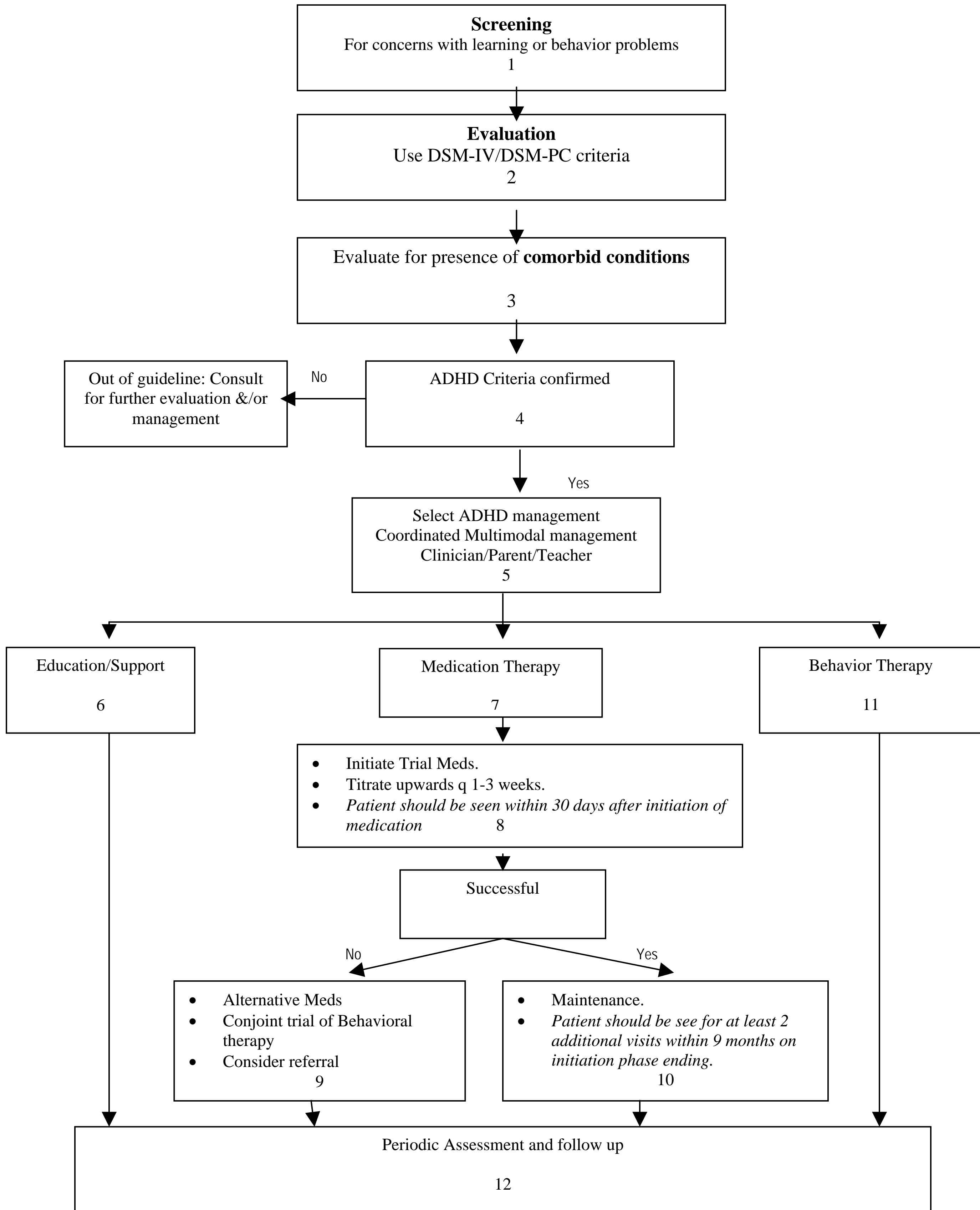
ADHD



Adapted from International Guidelines Center (2007). Managing: Attention Deficit/Hyperactivity Disorder. Version 3.0. The American Academy of Child & Adolescent Psychiatry.
Adapted from ICSI (2007). ADHD. Retrieved from http://www.icsi.org/adhd/adhd_2300.html

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ADHD

Annotations

1. An evaluation for ADHD should include a family and school assessment. This can take place through parent interviews, and review of school records (academic and disciplinary).

2. The Diagnostic and Statistical Manual 4th edition (DSM IV) provides specific criteria, which can be used in the diagnosis of ADHD. (See **Attachment 1**, which was adapted from the DSM IV.)

3. An evaluation for ADHD should also include an assessment of other coexisting conditions. Common symptoms of ADHD (i.e. hyperactivity, inattention, school problems) can be caused by other psychiatric conditions. Coexisting psychiatric conditions may include but are not limited to Learning/Language Disorders, Oppositional Defiant Disorder, Conduct Disorder, Anxiety, Depression, Substance Abuse, and other conditions. Symptoms associated with these disorders may include, but are not limited to:

   A. Learning/Language Disorders
   - Difficulty completing and organizing tasks
   - Fails to give close attention to details
   - Difficulty following instructions
   - Disorganized speech
   - Trouble retaining verbal information

   B. Oppositional Defiant Disorder
   - Loses temper, argues with adults
   - Defies or refuses to comply with adult's request
   - Blames others for his/her mistakes or misbehavior
   - Easily annoyed by others
   - Angry and resentful
   - Spiteful or vindictive

   C. Conduct Disorder
   - Aggression to people or animals
   - Destruction of property
   - Deceitfulness or theft
   - Serious violations of rules

   D. Anxiety Disorder
   - Excessive worry about events, activities, or situations
   - Restlessness
   - Easily fatigued
   - Difficulty concentrating
   - Irritability
   - Somatic complaints (i.e. stomachaches, headaches)
   - Sleep disturbance

   E. Depression
   - Depressed or irritable mood most of the day for at least 2 weeks
   - Diminished interest or pleasure in all or almost all activities.
   - Significant changes in weight and appetite
   - Sleep disturbance
   - Fatigue
   - Feelings of worthlessness
   - Difficulty concentrating, decrease school performance
   - Suicidal ideation without a plan or recurrent thoughts of death.

   F. Substance Abuse
   - Aggressive behavior
   - Academic Difficulties

ADHD

Annotations Continued…

4. **Diagnostic Criteria Confirmed**: If further evaluation is needed please refer to specialist.
5. Select **treatment management**. Requires management across multimodal settings. It should include clinicians, educators, and parents.
6. Education/Support**.** Parents and patient should be educated on:
   a. What is ADHD
   b. Treatment options
   c. It's impact on learning, behavior, developmental challenges, & family functioning
   d. Provide advice and available resources and community support groups **(See Attachment 2)**
   e. Medication side effects (including cardiovascular) and safety (potential for abuse).

7. **Medication Therapy**. Medications are an effective treatment for ADHD. Selection of a medication should be a collaborated decision based on benefits, potential risks, & the patient's co-morbidities.
8. **Initiate trial dose of medication**. Titrate up. Patient should be seen within 30 days after initiation of medication
9. If trial dose does not work at the maximum therapeutic dose, there are unwanted side effects, or symptoms do not subside, then consider an alternative medication.
10. Successful Medication Treatment. Continue **maintenance** treatment plan. Patient should be see for at least 2 additional visits within 9 months on initiation phase ending. One of the two visits (during days 31–300) may be a telephone visit with practitioner.
11. **Behavior Therapy.** Can assist the child in coping, compensating, problem solve, & promote self-control.
12. **Periodic Assessment**. The frequency of monitoring can depend on the severity of symptoms, complications & compliance to treatment.

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Medications Used to Treat ADHD (alphabetical by class)

*Some medications may require a step-edit or prior authorization.

Generic Class Brand Name	Typical Starting Dose	FDA Max/day	Titration & Timing of Doses	Predominant Adverse Effects	Comments
Amphetamine Preparations					
Short-acting					• Short-acting stimulants often used as initial treatment in small children but have disadvantage of B.I.D. to T.I.D. dosing to control symptoms throughout the day. • Longer-acting stimulants offer greater convenience, confidentiality, and compliance with single daily dosing but may have greater problematic effects on evening appetite and sleep • Adderall XR cap may be opened and sprinkled on soft food
Adderall	3-5 yr: 2.5 mg qd 6+: 5mg qd-bid	40 mg	Increase by 2.5mg increments	Decreased appetite, insomnia, headaches, increased heart rate	
Dexedrine DextroStat	3-5 yr: 2.5mg qd 6+: 5-10mg qd		Increase weekly with 2.5-5 mg tab/dose; am & noon; add 4pm dose as needed		
Long-acting					
Adderall XR	6+: 10mg qd	30 mg	May be increased 10 mg daily at weekly intervals.	Decreased appetite, insomnia, headaches, increased heart rate	
Dexedrine Spansule	6+: 5mg qd-bid	40 mg	Increased by 5 mg spansule in am only or add 5mg tablets to am dose	Decreased appetite, insomnia, headaches, increased heart rate	
Vyvanse	30 mg qd	70 mg	May be increased by 10-20mg at weekly intervals	Upper abdominal pain, decreased appetite, dizziness, dry mouth	
Methylphenidate Preparations					
Short-acting					• Short-acting stimulants often used as initial treatment in small children but have disadvantage of B.I.D. to T.I.D. dosing to control symptoms throughout the day. • Methylin is available in chewable tablets and oral solutions. • 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 CD, ritalin LA and Focalin XR may be opened and • Sprinkled on soft food • Concerta tab should be swallowed whole with liquids • Concerta non-absorbable tab may be seen in stool
Focalin	2.5mg bid	20 mg	Adjust in increments of 2.5-5 mg weekly	Headache, decreased appetite, restlessness, abdominal pain, increased heart rate	
Methylin Ritalin	5 mg bid	60 mg	Increase by 2.5-5 mg/dose (depending on wt) am & noon; add 4pm dose as needed	Decreased appetite, insomnia, headaches, increased heart rate	
Intermediate-acting					
Metadate ER Methylin ER Ritalin SR	10mg q am	60 mg	Add 5mg-10mg tablet in am and/or at 4pm	Decreased appetite, insomnia, headaches, increased heart rate	
Metadate CD Ritalin LA	20 mg q am	60 mg	May be increased 10mg daily at weekly intervals		
Long-acting					
Concerta	18mg q am	72 mg	May be increased 18 mg daily at weekly intervals, approved up to 72 mg for adolescents	Decreased appetite, insomnia, headaches, increased heart rate	
Daytrana (transdermal system)	Begin with 10 mg patch qd, then titrate up weekly by patch strength	30 mg	May increase to next transdermal patch size no more frequently than every week	Decreased appetite, insomnia, headaches, increased heart rate, allergic contact dermatitis	
Focalin XR	5 mg q am	30 mg	Children 6+: adjust in increments of 5 mg weekly	Headache, decreased appetite, restlessness, abdominal pain, increased heart rate	

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Medications Used to Treat ADHD (alphabetical by class) continued…

Selective Norepinephrine Reuptake Inhibitor					
Atomoxetine Strattera	0.5 mg/kg/d for 4 d; then 1 mg/kg/d for 4d; then 1.2 mg/kg/d	Lesser of 1.4 mg/kg or 100 mg	Children and Adolescents weighing up to 70 kg: After 3 days of dosing, increase 1.2mg/kg/day. Give once daily or may be evenly divided into 2 doses, in morning and evening Patients weighing more than 70 kg: After 3 days of dosing, increase to 80 mg daily or may be evenly divided into 2 doses, in morning and evening	Nausea, vomiting, GI pain, anorexia, dizziness, somnolence, skin rash, pruritis Increased heart rate or blood pressure, urinary retention, rare severe liver injury Capsule should not be opened as atomoxetine is an ocular and mucous membrane irritant	• Not a Schedule II medication • Consider if active substance abuse or severe side effects of stimulants (mood lability, tics) • Monitor closely for suicidal thinking and behavior, clinical worsening, or unusual changes in behavior • The full effect may not be appreciated for up to 4 weeks on a given target dose

Adapted from:

Institutes for Clinical Systems Improvement (ICSI) (2007). Health Care Guidelines: Diagnosis and Management of Attention Deficit and Hyperactivity Disorder in Primary Care for School-Age Children & Adolescents (March 2007). Retrieved December 31, 2007 from http://www.icsi.org/adhd/adhd_2300.html

American Academy of Child and Adolescent Psychiatry Official Position. *Practice Parameter for the Assessment and Treatment of Children and Adolescents With Attention-Deficit/Hyperactivity Disorder*. Published J. Am. Acad. Child Adolesc. Psychiatry, 46:7, July 2007.www.aacap.org

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Attachment 1

Diagnostic Criteria* for
Attention-Deficit/Hyperactivity Disorder

Name ____**Date** ______________________________

For a diagnosis of ADHD: 1) Symptoms must be present before age 7 years; 2) Symptoms must be present in 2 or more settings (e.g. at school and at home); 3) There must be evidence of clinically significant impairment in social, academic or occupational functioning; 4) Symptoms must not be better accounted for by a Pervasive Developmental Disorder, Schizophrenia, Psychotic Disorder or, another mental disorder.

Circle the applicable symptoms in each section.

INATTENTION

1 Often does not give close attention to details or makes careless mistakes in schoolwork, work or other activities

2 Often has difficulty sustaining attention in tasks or play activities

3 Often does not seem to listen when spoken to directly

4 Often does not follow through on instruction and fails to finish schoolwork, chores or duties (not due to oppositional behavior or failure to understand instructions)

5 Often has difficulty organizing tasks and activities

6 Often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (such as school work or homework)

7 Often loses things necessary for task and activities, such as toys, assignments, books, or tools

8 Is often easily distracted by extraneous stimuli

9 Is often forgetful in daily activities

____ **Total number of attention items circled**

HYPERACTIVITY

1 Often fidgets with hands or feet or squirms in seat

2 Often leaves seat in classroom or in other situations in which remaining seated is expected

3 Often runs about or climbs excessively in situations in which it is inappropriate (adolescents or adults may have feelings of restlessness)

4 Often has difficulty playing or engaging in leisure activities quietly

5 Is often “on the go” or often acts as if “driven by a motor”

6 Often talks excessively

____ **Total number of hyperactivity items circled**

IMPULSIVITY

7 Often blurts out answers before questions are completed

8 Often has difficulty awaiting turn

9 Often interrupts or intrudes on others, such as butting into conversations or games

_____ **Total number of impulsivity items circled**

If 6 or more of the following symptoms of inattention or hyperactivity-impulsively have persisted for at least 6 months to a degree that is maladaptive and inconsistent with developmental level, the patient should be evaluated.

*Adapted from DSM IV™ Diagnostic Criteria for Attention-Deficit/Hyperactivity Disorder: *Diagnostic and Statistical Manual of Mental Disorders*. 4th ed. Washington, DC: American Psychiatric Association; 1994.

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Attention Deficit Hyperactivity Disorder (ADHD) Resources/Community Support Groups

The American Academy of Child and Adolescent Psychiatry www.aacap.org

Attention Deficit Disorder Association http://www.add.org/

Attention Deficit Information Network www.addinfonetwork.org

Children and Adults with ADD (CHADD) http://www.chadd.org/

National Center for Learning Disabilities www.ld.org

National Information Center and Youth with Disabilities (NICHCY) www.nichcy.org

National Institute of Mental Health http://www.nimh.nih.gov/health/publications/adhd/complete-publication.shtml

National Institute of Neurological Disorders http://www.ninds.nih.gov/disorders/adhd/adhd.htm

National Resource Center on AD/HD http://www.help4adhd.org/

United States Department of Education www.ed.gov

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Attention Deficit Hyperactivity Disorder (ADHD)

Resources

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American Academy of Pediatrics. Subcommittee on Attention-Deficit/Hyperactivity Disorder, Committee on Quality Improvement. "*Clinical Practice Guideline: Treatment of the School-Aged Child With Attention-Deficit/Hyperactivity Disorder*". Published in PEDIATRICS Vol. 108 No. 4 October 2001.

American Psychiatric Association (2000). Diagnostic & Statistical Manual of Mental Disorders, 4th Ed. , Text Revision. Washington, D.C.: American Psychiatric Press, Inc.

DSM IV Diagnostic Criteria for Attention-Deficit/Hyperactivity Disorder*: Diagnostic and Statistical Manual of Mental Disorders*. 4th ed. Washington, DC: American Psychiatric Association; 1994.

Institutes for Clinical Systems Improvement (ICSI) (2007). Health Care Guidelines: Diagnosis and Management of Attention Deficit and Hyperactivity Disorder in Primary Care for School-Age Children & Adolescents (March 2007). Retrieved December 31, 2007 from http://www.icsi.org/adhd/adhd_2300.html

International Guidelines Center (2007). Guidelines Pocketcard. American Academy of Child & Adolescent Psychiatry: Managing: Attention Deficit/Hyperactivity Disorder. Version 3.0. www.myguidelinescenter.com

The MTA Cooperative Group. *A 14-Month Randomized Clinical Trial of Treatment Strategies of Attention Deficit Hyperactivity Disorder*. Archives of General Psychiatry 1999; 56: 1073-1086.

The MTA Cooperative Group. *Moderators and Mediators of Treatment Response for Children With Attention Deficit Hyperactivity Disorder*. Archives of General Psychiatry 1999; 56: 1088-1096.

National Committee for Quality Assurance (NCQA) (2007). HEDIS 2008. Follow-Up Care for Children Prescribed ADHD Medication (ADD). HEDIS 2008, Vol. 2 pp. 159-163. Washington, D.C.: NCQA.

Newcorn, Jeffrey H., MD. *Update on Approaches to ADHD Management*. Managed Care Consultant. Vol. 6, No. 2. July 2007.

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