

# ADHD DSM Criteria and Evidence-based Treatments

# **DSM-5 Criteria for ADHD**

A. A persistent pattern of inattention and/or hyperactivity-impulsivity that interferes With functioning or development, as characterized by (1) and/or (2):

## Inattention:

Six (or more) of the following symptoms have persisted for at least 6 months to a degree that is inconsistent with developmental level and that negatively impacts directly on social and academic/occupational activities:

**Note:** The symptoms are not solely a manifestation of oppositional behavior, defiance, hostility, or failure to understand tasks or instructions. For older adolescents and adults (age 17 and older), at least five symptoms are required.

a) Often fails to give close attention to details or makes careless mistakes in schoolwork, at work, or during other activities (e.g., overlooks or misses details, work is inaccurate).

b) Often has difficulty sustaining attention in tasks or play activities (e.g., has difficulty remaining focused during lectures, conversations, or lengthy reading).

c) Often does not seem to listen when spoken to directly (e.g., mind seems elsewhere, even in the absence of any obvious distraction).

d) Often does not follow through on instructions and fails to finish schoolwork, chores or duties in the workplace (e.g., starts tasks but quickly loses focus and easily sidetracked).

e) Often has difficulty organizing sequential tasks and activities (e.g., difficulty managing tasks; difficulty keeping materials and belongings in order; messy, disorganized work; has poor time management; fails to meet deadlines).

f) Often avoids, dislikes, or is reluctant to engage in tasks that require sustained effort (e.g., schoolwork or homework; for older adolescents and adults, preparing reports, completing forms, reviewing lengthy papers).

g) Often loses things necessary for tasks or activities (e.g., school materials, pencils, books, wallets, keys, paperwork, eyeglasses, mobile telephones).

h) Is often easily distracted by extraneous stimuli (for older adolescents and may include unrelated thoughts).

i) Is often forgetful in daily activities (e.g., doing chores, running errands; for older and adults, returning calls, paying bills, keeping appointments).



# **DSM V Criteria for ADHD**

## Hyperactivity-impulsivity:

Six (or more) of the following symptoms have persisted for at least 6 months to a degree that is inconsistent with developmental level and that negatively impacts directly on social and academic/occupational activities:

**Note:** The symptoms are not solely a manifestation of oppositional behavior, defiance, hostility, or a failure to understand tasks or instructions. For older adolescents and adults (age 17 and older), at least five symptoms are required.

a. Often fidgets with or taps hands or feet or squirms in seat.

b. Often leaves seat in situations when remaining seated is expected (e.g., leaves his or her place in the classroom, in the office or other workplace, or in other situations that require remaining in place).

c. Often runs about or climbs in situations where it is inappropriate. (Note: In adolescents or adults, may be limited to feeling restless.)

d. Often unable to play or engage in leisure activities quietly.

e. Is often "on the go," acting as if "driven by a motor" (e.g., is unable to be or uncomfortable being still for extended time;" as in restaurants, meetings; may be experienced by others as being restless or difficult to keep up with).

f. Often talks excessively.

g. Often blurts out an answer before a question has been completed (e.g., completes people's sentences; cannot wait for turn in conversation).

h. Often has difficulty waiting his or her turn (e.g., while waiting in line).

i. Often interrupts or intrudes on others (e.g., butts into conversations, games, or activities; may start using other people's things without asking or receiving permission; for adolescents and adults, may intrude into or take over what others are doing).

B. Several inattentive or hyperactive-impulsive symptoms were present prior to age 12 years.

C. Several inattentive or hyperactive-impulsive symptoms are present in two or more settings (e.g., at home, school, or work; with friends or relatives; in other activities).

D. There is clear evidence that the symptoms interfere with, or reduce the quality of, social, academic, or occupational functioning.



## **DSM V Criteria for ADHD**

#### **Specify whether:**

**314.01 (F90.2)** Combined presentation: If both Criterion A1 (inattention) and Criterion A2 (hyperactivity-impulsivity) are met for the past 6 months.

**314.00 (F90.0)** Predominantly inattentive presentation: If Criterion A1 (inattention)

is met but Criterion A2 (hyperactivity-impulsivity) is not met for the past 6 months.

**314.01 (F90.1)** Predominantly hyperactive/impulsive presentation: If Criterion A2 (hyperactivity-impulsivity) is met and Criterion A1 (inattention) is not met for the past 6 months.

#### **Specify current severity:**

**Mild:** Few, if any, symptoms in excess of those required to make the diagnosis are present, and symptoms result in no more than minor impairments in social or occupational functioning.

**Moderate:** Symptoms or functional impairment between "mild" and "severe" are present.

**Severe:** Many symptoms in excess of those required to make the diagnosis, or several symptoms that are particularly severe, are present, or the symptoms result in marked impairment in social or occupational functioning.

#### Specify if:

In partial remission: When full criteria were previously met, fewer than the full criteria have been met for the past 6 months, and the symptoms still result in impairment in social, academic, or occupational functioning.

#### Code based on type:

314.01 Attention-Deficit/Hyperactivity Disorder, Combined Type: if both Criteria A1 and A2 are met for the past 6 months.

314.00 Attention-Deficit/Hyperactivity Disorder, Predominantly Inattentive Type: if Criterion A1 is met but Criterion A2 is not met for the past 6 months.

314.01 Attention-Deficit/Hyperactivity Disorder, Predominantly Hyperactive-Impulsive Type: if Criterion A2 is met but Criterion A1 is not met for the past 6 months.

**Coding note:** For individuals (especially adolescents and adults) who currently have symptoms that no longer meet full criteria, "In Partial Remission" should be specified.



## **Medication Management**

#### Recommendation 1

Primary care clinicians should establish a management program that recognizes ADHD as a chronic condition.

#### Recommendation **7**

The treating clinician, parents, and the child, in collaboration with school personnel, should specify appropriate target outcomes to guide.

#### Recommendation 3

The clinician should recommend stimulant medication and/or behavior therapy, as appropriate, to improve target outcomes in children with ADHD.

#### Recommendation 3a:

For children on stimulants, if one stimulant does not work at the highest feasible dose, the clinician should recommend another.

#### Recommendation 4

When the selected management for a child with ADHD has not met target outcomes, clinicians should evaluate the original diagnosis, use of all appropriate treatments, adherence to the treatment plan, and presence of coexisting conditions<sup>1</sup>

# Recommendations for treatment of children and youth with ADHD vary depending on the patient's age<sup>2</sup>

**a.** For preschool-aged children (4–5 years of age), the primary care clinician should prescribe evidence-based parentand/or teacher-administered behavior therapy as the first line of treatment and may prescribe approved stimulant 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.

**b.** For elementary school–aged children (6–11 years of age), the primary care clinician should prescribe US Food and Drug Administration–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 for stimulant medications and sufficient but less strong for atomoxetine, extended-release guanfacine, and extended-release clonidine. The school environment, program, or placement is a part of any treatment plan.

**c.** For adolescents (12–18 years of age), the primary care clinician should prescribe Food and Drug Administration–approved medications for ADHD with the assent of the adolescent and may also prescribe behavior therapy.

#### SEE ALSO

1. Texas Chidren's Medication Algorithm Project (CMAP) ADHD Algorithm

2. Implementing the Key Action Statements: An Algorithm and Explanation for Process of Care for the Evaluation, Diagnosis, Treatment, and Monitoring of ADHD in Children and Adolescents.

3. Caring for Children with ADHD: A Resource Toolkit for Clinicians, 2nd Edition.

SOURCES: 1.PEDIATRICS Vol. 108; Pg. 1033, No. 4 October 2001 http://pediatrics.aappublications.org/content/108/4/1033.full.pdf

2.ADHD: Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder in Children and Adolescents. <u>PEDIATRICS Volume 128, Number 5, November 2011.</u>



## **Evidence-Based Psychosocial Therapies**

### WHAT WORKS<sup>1</sup>

**Behavior therapy** may be recommended as an initial treatment if the patient's ADHD symptoms are mild with minimal impairment, the diagnosis of ADHD is uncertain, parents have an adversion to medication treatment, or there is marked disagreement about the diagnosis between parents or between parents and teachers. Preference of the family should also be taken into account.

In general, parents are involved in 10 to 20 sessions of 1 to 2 hours in which they:

(1) are given information about the nature of ADHD,

(2) learn to attend more carefully to their child's misbehavior and to when their child complies,

- (3) establish a home token economy,
- (4) use time out effectively,
- (5) manage noncompliant behaviors in public settings,
- (6) use a daily school report card, and
- (7) anticipate future misconduct.

#### WHAT DOESN'T WORK1

The 1997 practice parameter (American Academy of Child and Adolescent Psychiatry, 1997) extensively reviewed a variety of nonpharmacological interventions for ADHD other than behavior therapy.

There is no compelling evidence to support other nonpharmacological interventions for ADHD (including cognitive-behavioral therapy and dietary modification).

Although there has been aggressive marketing of its use, the efficacy of EEG feedback, either as a primary treatment for ADHD or as an adjunct to medication treatment, has not been established (Loo, 2003).

Formal social skills training for children with ADHD has not been shown to be effective (Antshel and Remer, 2003).

## **BEHAVIOR THERAPY**<sup>2</sup>

Behavior therapy usually is implemented by training parents in specific techniques that improve their abilities to modify and shape their child's behavior and to improve the child's ability to regulate his or her own behavior.

The training involves techniques to more effectively provide rewards when their child demonstrates the desired behavior (eg, positive reinforcement), learn what behaviors can be reduced or eliminated by using planned ignoring as an active strategy (or using praising and ignoring in combination), or provide appropriate consequences or punishments when their child fails to meet the goals.

There is a need to consistently apply rewards and consequences as tasks are achieved and then to gradually increase the expectations for each task as they are mastered to shape behaviors. Although behavior therapy shares a set of principles, individual programs introduce different techniques and strategies to achieve the same ends.



# **Evidence-Based Psychosocial Therapies**

Table 1 lists the major behavioral intervention approaches that have been demonstrated to be evidence based for the management of ADHD in 3 different types of settings.

Intervention Type	Description	Typical Outcome(s)	Median Effect Size <sup>1</sup>
Behavioral parent training (BPT)	Behavior-modification principles provided to parents for implementation in home settings	Improved compliance with parental commands; improved parental understanding of behavioral principles; high levels of parental satisfaction with treatment	0.55
Behavioral classroom management	Behavior-modification principles provided to teachers for implementation in classroom settings	Improved attention to instruction; improved compliance with classroom rules; decreased disruptive behavior; improved work productivity	0.16
Behavioral peer interventions (BPI) <sup>2</sup>	Interventions focused on peer interactions/ relationships; these are often group based interventions provided weekly and include clinic-based social-skills training used either alone or concurrently with behavioral parent training and/or medication	Office-based interventions have produced minimal effects; interventions have been of questionable social validity; some studies of BPI combined with clinic-based BPT found positive effects on parent ratings of ADHD symptoms; no differences on social functioning or parent ratings of social behavior have been revealed	

## **TABLE 1 Evidence-Based Behavioral Treatments for ADHD**

1 Effect size = (treatment median - control median)/control SD.

2 The effect size for behavioral peer interventions is not reported, because the effect sizes for these studies represent outcomes associated with combined interventions. A lower effect size means that they have less of an effect. The effect sizes found are considered moderate. Adapted from Pelham W, Fabiano GA. J Clin Child Adolesc Psychol. 2008;37(1):184–214.

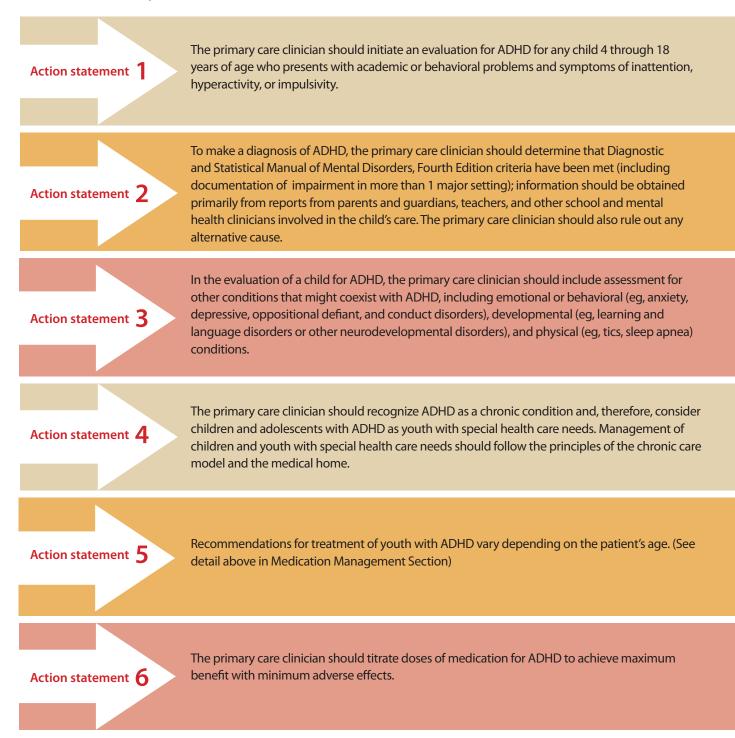
SOURCE: 1.American Academy of Child and Adolescent Psychiatry, Journal of the American Academy of Child and Adolescent Psychiatry, 46:7, 894-921, 2007. http://www.aacap.org/galleries/PracticeParameters/JAACAP\_ADHD\_2007.pdf

2. ADHD: Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder in Children and Adolescents. <u>PEDIATRICS Volume 128, Number 5, November 2011.</u>



# **Practice Guidelines**

## American Academy of Pediatrics<sup>1</sup>



SOURCES: 1. ADHD: Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder in Children and Adolescents. <u>PEDIATRICS Volume 128, Number 5, November 2011.</u>



# **Practice Guidelines**

## American Academy of Child & Adolescent Psychiatry<sup>2</sup>

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	1. Screening for ADHD Should Be Part of Every Patient's Mental Health Assessment.
Phase 1	2. Evaluation of the Preschooler, Child, or Adolescent for ADHD Should Consist of Clinical Interviews With the Parent and Patient, Obtaining Information About the Patient's School or Day Care Functioning, Evaluation for Comorbid Psychiatric Disorders, and Review of the Patient's Medical, Social, and Family Histories.
	3. If the Patient's Medical History Is Unremarkable, Laboratory or Neurological Testing Is Not Indicated.
	4. Psychological and Neuropsychological Tests Are Not Mandatory for the Diagnosis for ADHD, but Should Be Performed if the Patient's History Suggests Low General Cognitive Ability or Low Achievement in Language or Mathematics Relative to the Patient's Intellectual Ability.
	5. The Clinician Must Evaluate the Patient With ADHD for the Presence of Comorbid Psychiatric Disorders.
	6. A Well-Thought-Out and Comprehensive Treatment Plan Should Be Developed for the Patient With ADHD.
Phase 2	7. The Initial Psychopharmacological Treatment of ADHD Should Be a Trial With an Agent Approved by the Food and Drug Administration for the Treatment of ADHD.
	8. If None of the Above Agents Result in Satisfactory Treatment of the Patient With ADHD, the Clinician Should Undertake a Careful Review of the Diagnosis and Then Consider Behavior Therapy and/or the Use of Medications Not Approved by the FDA for the Treatment of ADHD.
	9. During a Psychopharmacological Intervention for ADHD, the Patient Should Be Monitored for Treatment-Emergent Side Effects.
Phase 3	10. If a Patient With ADHD Has a Robust Response to Psychopharmacological Treatment and Subsequently Shows Normative Functioning in Academic, Family, and Social Functioning, Then Psychopharmacological Treatment of the ADHD Alone Is Satisfactory.
	11. If a Patient With ADHD Has a Less Than Optimal Response to Medication, Has a Comorbid Disorder, or Experiences Stressors in Family Life, Then Psychosocial Treatment in Conjunction With Medication Treatment Is Often Beneficial.
	10. Patients Should Be Assessed Periodically to Determine Whether There Is Continued Need for Treatment or If Symptoms Have Remitted. Treatment of ADHD Should Continue as Long as
Ongoing	Symptoms Remain Present and Cause Impairment. 11. Patients Treated With Medication for ADHD Should Have Their Height and Weight Monitored Throughout Treatment.

SOURCES: 2.American Academy of Child and Adolescent Psychiatry, Journal of the American Academy of Child and Adolescent Psychiatry, 46:7, 894-921, 2007. http://www.aacap.org/galleries/PracticeParameters/JAACAP\_ADHD\_2007.pdf.