

Magellan Attention Deficit/Hyperactivity

Attention Deficit/Hyperactivity Disorder (ADHD) affects 5 to 8 percent of school-aged children — with 60 percent of the cases experiencing symptoms persisting into adulthood. Since 2006, 4.5 million children between the ages of 5 and 17 received a diagnosis of ADHD.¹ A national epidemiological study found the prevalence of ADHD with the predominantly inattentive type at 8.7 percent, 2.2 percent combined, and 2 percent predominantly hyperactive-impulsive type.²

Classifications

DSM IV classifies ADHD in the following ways:

- **Predominantly Inattentive Type:** It is hard for the individual to organize or finish a task, to pay attention to details, or to follow instructions or conversations. The person easily is distracted or forgets details of daily routines.
- **Predominantly Hyperactive-Impulsive Type:** The person fidgets and talks a lot. It is hard for the individual to sit still for long (e.g., for a meal or while doing homework). Smaller children may run, jump, or climb constantly. The individual feels restless and has trouble with impulsivity.
- **Combined Type:** Symptoms of the above two types are equally present in the person.³

Possible symptoms

The American Psychiatric Association's DSM IV manual lists possible symptoms of ADHD as follows:

- has difficulty paying attention
- does not listen
- easily distracted
- forgetful
- unable to stay seated
- squirms or fidgets
- talks excessively
- not able to play quietly
- acts and speaks without thinking
- has trouble taking turns
- interrupts others

Diagnosis

There is no single test to diagnose ADHD. Consequently, the ADHD diagnostic process requires obtaining information from multiple sources including school, parents, and an individual evaluation of the child. A medical evaluation also should be completed as part of the evaluation process. The American Academy of Pediatrics issued practice guidelines related to ADHD assessment and treatment.⁴

There are several screening tools for evaluating ADHD.

- The Connor's Rating Scale uses observer ratings and self-report ratings to help assess ADHD and evaluate problem behavior in children and adolescents. There are three versions — parent, teacher, and adolescent selfreport — all of which have a short and long form available.

The Vanderbilt ADHD Diagnostic Parent and Teacher Rating Scales are used to rate symptoms and impairments in academic and behavioral performance.

Adapted for use by Independence Blue Cross from the Magellan Behavioral Health Substance-Use Disorders Tip Sheet

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Magellan Behavioral Health, Inc. is an independent company contracted by Independence Blue Cross and its affiliates (IBC) to manage and provide a provider network for behavioral health (mental health/substance abuse) benefits for the majority of benefit plans offered and administered by IBC.

Co-morbidities

Two-thirds of children with ADHD have at least one of the following coexisting conditions: disruptive behavior, mood abnormality, anxiety disorders, tics, Tourette Syndrome, and learning disabilities. Studies identify an increased risk for early nicotine use followed by alcohol and drug abuse (Molina and Pelham, 2003). Current research demonstrates the rate of cocaine and stimulant abuse is not higher among individuals with ADHD who were previously treated with ADHD medication as a child.

Treatments

Available treatments for ADHD include combining medication with behavioral or educational therapy. Close monitoring and follow-up also is part of the treatment plan.

A study in the American Psychological Association showed when children are treated with behavioral interventions, along with their parents being trained how to manage the child's behavior, that medication is used less often (Munsey, 2008).

NCQA HEDIS® adherence measures

Performance related to care and service can be measured by Health Plan Employer Data and Information Set (HEDIS) results. HEDIS results can be used to identify where to focus improvement efforts in quality of care and service. Follow-up care for children prescribed ADHD medication is a HEDIS measure for commercial and Medicaid populations.

- **Initiation phase:** Percentage of patients ages 6 to 12 taking ADHD medication, and had a follow-up visit with a prescribing practitioner within a month of receiving their first prescription.
- **Continuation and maintenance phase:** Percentage of children 6 to 12 years of age who remained on ADHD medication for at least 210 days, and had at least two follow-up visits in nine months after the initiation phase.

ADHD medications

Non-stimulant

- Intuniv Oral (guanfacine)
- Strattera Oral (atomoxetine)
- Kapvay (clonidine hydrochloride)

Stimulant

- Adderall (amphetamine/dextroamphetamine)
- Ritalin Oral (methylphenidate HCl)
- Concerta Oral (methylphenidate)
- Vyvanse Oral⁵ (lisdexamfetamine dimesylate)

Medication monitoring

- Check height/weight/BP/pulse and complete centile chart for growth.
- Check if medication side effects are present, and administer an ECG if there is a family history of cardiac arrhythmia and early death.

Taking ADHD medication during vacations

An article from the American Psychiatric Association show teens with ADHD on ADHD medication have fewer accidents compared to adolescents not taking medication (Rosack, 2004). An article in Health Central⁶ indicates ADHD medication has little long term impact on a child's growth and weight. Therefore, many practitioners feel it is not necessary for a child to take a vacation from ADHD medication during school breaks or the summer months.

Questions a parent should ask when determining if his or her child should take a vacation from medication.

- Are the child's social skills impacted in a negative way without medication?
- Will hyperactivity, impulsivity, or being distracted interfere with the child's success in summer camp?

ADHD medication and substance use

In 2003, Biederman compared medicated and non-medicated adolescents age 15 and older diagnosed with ADHD for substance use: 75 percent not taking medication reported using illegal substances compared to 25 percent of the adolescents on medication, and 20 percent from the control group.⁷ It is important for parents to monitor their child's medication as a rising problem with teen ADHD stimulant-medication abuse was identified (Setlik, Bond, & Ho, 2009). A study in the American Academy of Pediatrics showed ADHD medication abuse increased by 76 percent from 1998 to 2005.

1. Bloom B, Cohen RA. Summary Health Statistics for U.S. Children: National Health Interview Survey, 2006. National Center for Health Statistics. Vital Health Stat 10(234). 2007
2. Langberg, Joshua M, et al. "Assessing children with ADHD in primary care settings." Expert Review of Neurotherapeutics 8.4 (2008)
3. <http://www.cdc.gov/ncbddd/adhd/facts.html>
4. American Academy of Pediatrics. Clinical practice guideline: diagnosis and evaluation of the child with attention deficit/hyperactivity disorder. Pediatrics 105, 1158-1170 (2000).
5. <http://www.nimh.nih.gov/health/publications/attention-deficit-hyperactivity-disorder/medications.shtml>
6. <http://www.healthcentral.com/adhd/drug-information.html>
7. Biederman, J. (2003). Pharmacotherapy of attention-deficit/hyperactivity disorder reduces risk for substance use disorder. Journal of Clinical Psychiatry, 64(11), 3-8. Molina, B.S., & Pelham, WE. (2003). Childhood predictors of adolescent substance use in a longitudinal study of children with ADHD. Journal of abnormal psychology, 112, 497-507. Rosack, J. (2004). Adhd medication helps teens drive safely. American Psychiatric Association, 39(9), 44. Setlik, J, Bond, R, & Ho,M. (2009). Adolescent prescription adhd medication abuse is rising along with prescriptions for these medications. Journal for the American Academy of Pediatrics, 10.1542(124), 875-880. Munsey, C. (2008). New insights on ADHD treatment. American Psychological Association, 39(9), 11.

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