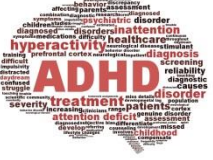


WASHINGTON STATE MEDICAL HOME PARTNERSHIPS PROJECT CHILD HEALTH NOTES – May 2020

Promoting early identification and partnerships between families, primary health care providers & the community.

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Attention-Deficit/Hyperactivity Disorder (ADHD)



Attention-Deficit/Hyperactivity Disorder (ADHD) is the most common neurodevelopmental disorder in the pediatric population, with an estimated prevalence of 7-8%. The median age at diagnosis is 7 years. ADHD is more than twice as likely to be diagnosed in males than in females. Additionally, 6 in 10 children with ADHD have “complex ADHD”, characterized as ADHD plus one or more other identified medical, psychiatric, developmental/learning co-occurring conditions that adversely affect their functioning at home, school, with peers, and in the community. Two clinical practice guidelines are now available to guide primary care and subspecialty clinicians in identifying, diagnosing, and managing ADHD and complex ADHD, including an [updated ADHD guideline](#) by the American Academy of Pediatrics (AAP) published in October 2019, and a complementary [Complex ADHD guideline](#) by the Society for Developmental & Behavioral Pediatrics (SDBP) published in February 2020.

What’s New in the Updated Clinical Practice Guidelines?

The AAP diagnosis and management recommendations are similar to those of its previous guideline version, published in 2011. However, the new AAP guideline highlights the **most common co-occurring conditions** and **emphasizes screening** for them. Many of these conditions share ADHD symptoms, which can make them difficult to detect and diagnose. Because the management for ADHD differs from the management for these conditions, it is crucial to screen at the time of initial evaluation and periodically thereafter. The SDBP *Complex ADHD* guideline provides more specific direction. Co-occurring examples include:

- *emotional or behavioral conditions* (e.g., anxiety, depression, oppositional defiant disorder, conduct disorders, substance use, history of trauma, and toxic stress)
- *developmental conditions* (e.g., learning and language disorders, autism spectrum disorders)
- *physical conditions* (e.g., tics, sleep apnea)

Spotlight on Equity: Racial and Ethnic Health Disparities

- ADHD prevalence appears to be the same across ethnic groups, yet African-American and Latinx children are less likely to be diagnosed than non-Latinx white children.
- The response to pharmacologic treatment also appears to be the same for African-American, Latinx, and non-Latinx white children. However, African-American and Latinx children are less likely to receive ADHD treatment.
- Some of the influencing factors to these disparities are: financial and language barriers, cultural views regarding ADHD behaviors, and parental views and practices.
- Primary care providers (PCPs) must understand these disparities and approach families with [cultural humility](#) in providing care. The [Cultural Formulation Interview \(CFI\)](#) is a clinical tool available to help clinicians diagnose and treat individuals using person-centered, culturally respectful communication.

What to Consider in Your Practice

Who should be evaluated?

Any child or adolescent **age 4 to 18 years** who presents with 1) **academic or behavioral problems** and 2) symptoms of **inattention, hyperactivity, or impulsivity**. Children under 4 or over 12 years who first present with symptoms may have *Complex ADHD* and require special consideration. ADHD runs in families, therefore, particular early and frequent attention to children with a family history of ADHD is warranted. Genetics is a big *part* of the story, but not the whole story. For example, among identical twins, when one twin has ADHD, then there is a 55-90% chance that the other twin does too. The child of a parent with ADHD has a 25% chance of having ADHD as well.

Criteria and Diagnosis

- Diagnosis is based on [DSM-5 criteria](#) requiring a persistent pattern of inattention and/or hyperactivity–impulsivity that interferes with functioning or development.
- There are 4 dimensions/subtypes of ADHD identified in the DSM-5:

ADHD/I: primarily inattentive presentation	ADHD/HI: primarily hyperactive-impulsive presentation
ADHD/C: combined (inattentive + hyperactive-impulsive) presentation	ADHD other specified and unspecified ADHD

- Clinical Presentation—frequent patterns:
 - **Preschool age:** hyperactive; impulsive; inflexible; may be aggressive with peers
 - **Elementary school age:** struggles with listening in class; poor organizational skills; struggles with social interaction; difficulty functioning independently
 - **Adolescence:** struggles with learning, attention, and executive functioning; may find academic demands overwhelming
- The symptoms must occur in at least 2 settings (e.g., home, school, daycare). Information can be obtained from reports from parents/guardians, the child (if developmentally appropriate), teachers, other school personnel, and mental health clinicians who are involved in the child’s or adolescent’s care.
- A descriptive summary list of ADHD rating scales can be found at [CHADD’s Clinical Practice Tools](#). The NICHQ Vanderbilt Assessment Scale can be downloaded from the [AAP ADHD Resource Toolkit](#).

Sleep and ADHD

- Poor sleep quality or an inadequate amount of sleep can manifest as inattention, impulsiveness, hyperactivity, and oppositional behaviors in children without ADHD.
- Sleep problems also commonly occur in children with ADHD. One study revealed that children with ADHD have higher rates of daytime sleepiness compared to children without ADHD. Another study found that 50% of children with ADHD had signs of sleep-disordered breathing, compared to 22% of children without ADHD.
- It’s essential to evaluate for sleep behaviors when evaluating for ADHD and when providing ADHD management.

Treatment

Children ages 4-6 years

The **first line** of ADHD treatment is parent training in behavior management. If available, school-based behavioral interventions may also be implemented. When behavioral interventions do not provide significant improvement and the child continues to have serious problems, methylphenidate may be used.

Children and adolescents ages 6-18 years

The primary treatments include FDA-approved medications for ADHD along with parent training in behavior management and/or behavioral classroom interventions.

School-based behavioral interventions are typically designed and monitored through an Individualized Education Program (IEP) and/or a Section 504 plan.

SPECIAL NEEDS INFORMATION AND RESOURCES

Regional:	Advancing Integrated Mental Health Solutions (AIMS) Center	https://aims.uw.edu/targeted-condition/adhd
	WithinReach Family Health Hotline	1-800-322-2588, 1-800-833-6388 TTD http://www.parenthelp123.org/ Spanish: http://www.parenthelp123.org/es/
	Parent to Parent Support Programs of Washington	1-800-821-5927 https://arcwa.org/index.php/getsupport/parent_to_parent_p2p_programs
National:	Understood.org - Understanding ADHD in Your Child	https://www.understood.org/en/learning-thinking-differences/child-learning-disabilities/add-adhd/adhd-in-children
	AAP ADHD Resource Toolkit for Clinicians	https://www.aap.org/en-us/pubserv/adhd2/Pages/kit/data/assessdxframe.html
	U.S. Department of Education: Teaching Children With Attention Deficit Hyperactivity Disorder: Instructional Strategies and Practices	https://www2.ed.gov/rschstat/research/pubs/adhd/adhd-teaching_pg4.html
	Centers for Disease Control and Prevention (CDC) ADHD	https://www.cdc.gov/ncbddd/adhd/index.html
	Children and Adults with Attention-Deficit/Hyperactivity Disorder (CHADD)	https://chadd.org/ (general website) https://chadd.org/for-professionals/clinical-practice-tools/ (clinical practice tools)

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