

ADHD—Diagnose, Treat, and Monitor

Potential Barriers and Suggested Ideas for Change

Key Activity: Diagnose		
Potential Barriers	Suggested Ideas for Change	Still Not Seeing Results?
<p>Rationale: ADHD is a chronic neurodevelopmental disorder with onset during childhood. Children and adolescents with ADHD experience impairment in multiple aspects of their life, which often follows them into adulthood. The primary care clinician (PCC) should initiate an assessment for any child aged 4–18 who presents with academic or behavioral problems and ADHD should be considered when there are symptoms of inattention, hyperactivity, and/or impulsivity. Following current AAP guideline recommendations, the evaluation for ADHD includes assessments to identify or rule out conditions that mimic or are comorbid with ADHD. Inaccurate or incomplete diagnosis of ADHD and its coexisting issues may result in inappropriate labeling or treatment, or conversely, lack of appropriate treatment. Some coexisting conditions that put the patient’s health at risk (eg, depression with suicidal ideation and substance use) require treatment prioritization over ADHD treatment and frequent assessment.</p>		
<p>Gap: <i>The diagnostic evaluation for ADHD not based on these current guideline recommendations: 1) Patient met DSM-5 criteria; 2) patient’s symptoms and impairment assessed using information obtained from DSM-based ADHD rating scales from 2 or more major settings</i></p>		
<p>Clinicians and/or staff may not be up to date on current ADHD guideline recommendations for a diagnostic evaluation of ADHD. Or, they do not recognize the importance of using reliable and valid indications of ADHD diagnoses.</p>	<ul style="list-style-type: none"> Review current AAP recommendations regarding high-quality, evidence-based ADHD care: <ul style="list-style-type: none"> ✓ The AAP 2019 ADHD Guideline, Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder (ADHD) in Children and Adolescents. Use the tab provided to view the supplemental documents: <ul style="list-style-type: none"> – The ADHD PoC Algorithm, A Process of Care (PoC) Algorithm for the Diagnosis and Treatment of Children and Adolescents with ADHD – The ADHD Systemic Barriers document, <i>Systematic Barriers to the Care of Children and Adolescents with ADHD</i> Pay specific attention to Key Action Statement 2 (KAS 2): <p>KAS 2. To make a diagnosis of ADHD, the primary care clinician should determine that <i>Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)</i> criteria have been met, including documentation of symptoms and impairment in more than 1 major setting (ie, social, academic, or occupational), with information obtained primarily from reports from parents or guardians, teachers, other school personnel, and mental health clinicians who are involved in the child or adolescent’s care. The primary care clinician should also rule out any alternative cause.</p> Also see Caring for Children with ADHD: A Practical Resource Toolkit for Clinicians, 3rd Edition featuring a comprehensive collection of resources (most new for this edition) to help clinicians become comfortable with providing a medical home for children with ADHD. The tools, forms, templates, scales, and 	<ul style="list-style-type: none"> Recognize that patients in whom ADHD goes undiagnosed may be labeled inappropriately or they may not receive treatments that benefit them. Treatments available have good evidence of efficacy, and a lack of treatment has the risk of impaired outcomes. Invite a guest speaker (perhaps from within the practice, community, or local AAP Chapter) to present new guideline recommendations and how they affect patients and practice processes and procedures. Review the book by Gephart HR. ADHD Complex: Practicing Mental Health in Primary Care. St. Louis, MO: Elsevier; 2018, which reviews key subjects of importance to help PCCs assess, diagnose, treat, and manage patient populations with ADHD.

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	coding references complement the new AAP Clinical Practice Guidelines. (Available with Toolkit purchase or Pediatric Care Online subscription.)	
The evaluation process used by the practice to diagnose ADHD does not specifically identify DSM-5 criteria .	<ul style="list-style-type: none"> Consult the <i>Diagnostic and Statistical Manual of Mental Disorders, 5th Edition</i> handbook, or DSM-5, which describes the core symptoms and dimensions of ADHD. A summary of DSM-5 criteria for ADHD is included in the Appendix of this document. Use DSM-based ADHD rating scales as described in the next row. 	<ul style="list-style-type: none"> Consider customizing your electronic health record (EHR) to include diagnostic tool questions and rating scales along with DSM-5 criteria prompts with space to type or write information regarding patient/family needs. Perhaps link to the ADHD questionnaires used to elicit information or scan the questionnaires into the EHR.
DSM-based ADHD rating scales are not used to guide the ADHD diagnostic evaluation, perhaps because the practice is unsure which rating scales to use.	<ul style="list-style-type: none"> Become familiar with DSM-based ADHD rating scales that consider the age of the patient and help identify DSM-5 criteria, as described in the Appendix and the ADHD PoC Algorithm. (Use the tab provided to view supplemental files.) 	<ul style="list-style-type: none"> Review DSM-based ADHD rating scales on the CHADD Web site—Clinical Practice Tools page at https://chadd.org/for-professionals/clinical-practice-tools/.
Information about the patient’s symptoms and impairment are not gathered from 2 or more major settings .	<ul style="list-style-type: none"> Recognize that symptoms and impairments are exhibited in multiple settings. Gathering data from several adults who regularly interact with the patient in different settings provides rich information for the diagnostic evaluation and an opportunity to investigate differences in reporting and inconsistencies. Develop system processes that include creating and disseminating an ADHD evaluation package for the home, school, and other major settings. Put checks and balances in place to ensure information is returned in a timely fashion. See Recommendations to Address Challenges in Practice Organization from the ADHD Systemic Barriers document. Appoint a staff person to be the ADHD coordinator to facilitate the dissemination and gathering of ADHD rating scales information. 	<ul style="list-style-type: none"> If the patient/family’s language or literacy level is a barrier to collecting information, consider the following: <ul style="list-style-type: none"> ✓ Consult the local AAP Chapter or area hospitals to see if there are DSM-based ADHD rating scales available that meet the language and literacy level of your patient population. ✓ Consider engaging a certified medical interpreter or other family member to ask the questions.
Rating scales are provided for multiple settings but are not returned.	<ul style="list-style-type: none"> Consider the following: <ul style="list-style-type: none"> ✓ Alternative methods for collecting information: by mail, telephone, in person, or via secure fax/e-mail or patient portal Web site. ✓ Online ADHD information exchange sources such as myADHD.com, mehealth.com, trivoxhealth.com or CHADIS.com using secure lines and following HIPPA and HERPA regulations to obtain information. See 	<ul style="list-style-type: none"> Reach out to other school personnel when teachers do not respond (eg, school guidance counselor, nurse, or school administrator) to help obtain information.

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	<p><i>Fragmentation of Care and Resulting Communication</i> in the ADHD Systems Barriers document for more information.</p> <ul style="list-style-type: none"> ✓ See the Initial Triage Patient Intake: Completion Checklist from the AAP ADHD Toolkit to help track which rating scales to provide, and to whom and when forms should be returned. 	
Gap: Conditions that mimic or are comorbid with ADHD not assessed as part of the ADHD diagnostic process		
<p>Clinicians and/or staff may not recognize the importance of assessing for conditions that mimic or are comorbid with ADHD or do not know which conditions to consider.</p>	<ul style="list-style-type: none"> • Recognize PCC responsibilities to assess for conditions that mimic or are comorbid with ADHD as part of the ADHD diagnostic evaluation, as described in Key Action Statement (KAS) 3 of the guidelines and supporting documents: <p>KAS 3. In the evaluation of a child or adolescent for ADHD, the primary care clinician should include a process to at least screen for comorbid conditions, including emotional or behavioral conditions (eg, anxiety, depression, oppositional defiant disorder, conduct disorders, substance use), developmental conditions (eg, learning and language disorders, autism spectrum disorders), and physical conditions (eg, tics, sleep apnea).</p> <p>Also become familiar with additional AAP guidelines, initiatives, and practical tools for mental health screening and treatment in the primary care setting:</p> <ul style="list-style-type: none"> ✓ Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents, 4th Edition 2017 ✓ AAP Mental Health Initiatives – Primary Care Tools Web page ✓ Algorithm from the AAP’s Mental Health Toolkit, Addressing Mental Health Concerns in Primary Care: A Clinician’s Toolkit ✓ The Mental Health Screening and Assessment Tools for Primary Care table, which provides a listing of free and proprietary mental health screening and assessment tools, summarizing their psychometric testing properties, cultural considerations, costs, and key references ✓ Guidelines for Adolescent Depression in Primary Care (GLAD-PC): Part I. Practice Preparation, Identification, Assessment, and Initial Management ✓ 2012 New Guidelines for the Treatment of Maladaptive Aggression in Youth (T-MAY), available on the Agency for Healthcare Research and Quality Web page 	<ul style="list-style-type: none"> • Recognize that most children and adolescents with ADHD have at least 1 condition that mimics or is comorbid with ADHD. Most children with ADHD (67%) had at least 1 other comorbidity, and 18% had 3 or more comorbidities, such as mental health disorders and/or learning disorders. These comorbidities increase the complexity of the diagnostic and treatment process.¹ <p>¹Larson K, Russ SA, Kahn RS, Halfon H. Patterns of comorbidity, functioning and service use for US children with ADHD, 2007. <i>Pediatrics</i>. 2011;127(3):462-470</p>
<p>Clinicians and/or staff do not know which conditions to consider and/or which tools to use to identify the possibility of ADHD comorbid conditions.</p>	<ul style="list-style-type: none"> • Become familiar with Conditions That Mimic or Are Comorbid With ADHD by reviewing the information in the Appendix as well as the ADHD guidelines and accompanying documents outlined in Row 1 of this grid. • See Tools to Assess for Common ADHD Comorbid Conditions in the Appendix, containing links to the tools listed. 	<ul style="list-style-type: none"> • See AAP ADHD Toolkit sections (included with the Pediatric Care Online subscription or available for purchase at https://shop.aap.org/adhdtoolkit/):


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	<ul style="list-style-type: none"> Recognize that screening tools and rating scales are not diagnostic; they are instruments used to identify the possible presence of a condition. Additional information/tests will be required to confirm or rule out a diagnosis. 	<ul style="list-style-type: none"> ✓ Available Comorbidity Assessment Tools— Reviewing, Selecting, and Implementing in the AAP ADHD Toolkit. ✓ Screening for Related Diagnoses: The Differential Diagnosis and Comorbid Conditions
<p>Clinicians and/or staff may not feel equipped to assess/treat mental health conditions.</p>	<ul style="list-style-type: none"> Recognize important factors that make it essential for pediatricians to diagnose, treat, and coordinate ADHD and related care: <ul style="list-style-type: none"> ✓ Pediatricians have a long-standing relationship with the patient/family, in which they have earned the confidence and trust in their ability to provide health care. ✓ There is an insufficient workforce of developmental-behavioral and mental health care providers. ✓ Early identification of some severe mental health problems can save lives. Develop relationships with allied behavioral and mental health professions who can provide guidance and on-call consultation. When resources are scarce, seek out behavioral health consultation teams such as: <ul style="list-style-type: none"> ✓ Massachusetts Child Psychiatry Access Program (MCPAP) ✓ New York State Department of Mental Health’s “Project Teach Initiative” ✓ Project ECHO (Extension for Community Healthcare Outcomes) Review Addressing Mental Health Concerns in Primary Care: The Clinician’s Toolkit, which provides screening and assessment instruments, quick reference care management advice, step-by-step care plans, time-saving documentation and referral tools, coding aids, billing and payment tips, parent handouts, community resource guides, and much more. The toolkit has been organized according to the chronic care principles and has 5 sections: <ol style="list-style-type: none"> Community Resources Health Care Financing Support for Children and Families Clinical Information Systems/Delivery System Redesign Decision Support for Clinicians 	<ul style="list-style-type: none"> Explore training curriculums, videos, and other educational resources to improve competency in the assessment/management of behavioral health services for pediatric patients such as: <ul style="list-style-type: none"> ✓ Resources available on the AAP Mental Health Initiatives: Implementing Mental Health Priorities in Practice Web page. ✓ REACH training, originating from the REsource for Advancing Children’s Health, which teaches PCCs to deliver evidence-based mental health screening, diagnosis, and treatment in the primary care setting. ✓ The Resources tab of this EQIPP for a full list of resources for this course. Apply techniques gleaned from these materials to role-play exercises, and when comfortable, to patients.
<p>Clinicians and/or staff are unaware of available mental</p>	<ul style="list-style-type: none"> Acquire or develop and maintain a mental health community resource guide using Connected Kids or Bright Futures Community Resources. 	<ul style="list-style-type: none"> Consult the local AAP Chapter for mental health community resource ideas.

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<p>health community resources for families.</p>		<ul style="list-style-type: none"> • Access service navigation programs such as Help me Grow, Aunt Bertha, or Sooner SUCCESS (for Oklahoma) for help with service gaps and critical areas of unmet need.
<p>Gap: Education regarding ADHD (conversation, print or Web-based materials) not offered to the patient/family upon diagnosis</p>		
<p>There is not enough time in the visit to cover ADHD education during the visit.</p> <p>Or, the responsibility for ADHD education within the practice is not clearly defined.</p>	<ul style="list-style-type: none"> • Recognize the importance of equipping families with information about the causes, deficits, and outcomes that are associated with ADHD. Shared decision-making and a collaborative partnership can help ensure the best outcomes for children and families affected by ADHD. • Designate and train staff member(s) to offer ADHD educational materials and/or provide education. • Tap into print-based, online, and community educational materials and resources for patients/families, using this list to get started: <ul style="list-style-type: none"> ✓ AAP materials: <ul style="list-style-type: none"> – ADHD: What Every Parent Needs to Know, 3rd edition, 2019 – Understanding ADHD Brochure, 3rd edition, 2019, available in English and Spanish – AAP HealthyChildren.org ADHD articles ✓ CHADD Web page for parents and caregivers ✓ Center for Disease Control (CDC) ADHD resources ✓ National Resource Center for ADHD ✓ ADD Warehouse to purchase books, training programs and assessment products • Consider providing access to educational resources on your practice portal, giving patients/families 24/7 access. Or, consider creating a library of books and videos on ADHD that parents can check out and return. • Consider Recommendations to Address Challenges in Practice Organization from the ADHD Systems Barriers document. 	<ul style="list-style-type: none"> • See <i>Getting Family Buy-In, Part 2: Communication and Networking Strategies</i>, a resource from the AAP ADHD Toolkit included with the Pediatric Care Online subscription or available for purchase. • Consider group sessions on parent education, benefits/risks of medication, behavior management, advocacy, and other topics of interest to your patient population. See Tips for Developing Effective ADHD Education in Your Practice and ADHD Educational Topics/Resources for Patients/Families in the Appendix. • Arrange for guest speakers from within the practice, community, or the AAP chapter to deliver educational messages on various topics.
<p>The practice does not have educational materials readily available at the time of the visit.</p>	<ul style="list-style-type: none"> • Consider as a first step the development of packets of ADHD materials that describe your practice’s process for ADHD evaluation, and include educational resources for families and teachers, and rating scales. • Recognize that education is an ongoing process that can, and should be, provided over time. Consider setting up a series of educational topics that are 	<ul style="list-style-type: none"> • Designate and train a specific staff member to identify/develop/maintain/provide ADHD educational materials and resources.

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	<p>delivered in a set schedule to keep all patients/families in the loop. See the list of ADHD Educational Topics/Resources for Patients/Families in the Appendix.</p>  <p>Be sure to routinely update educational resources and confirm that they are appropriate for the language and literacy needs of your patient population.</p>	<ul style="list-style-type: none"> • Continue to provide education at all follow-up visits. Allow families to give input regarding areas where they need more information. • Use a variety of educational delivery methods, e-learning, discussion, print, group seminars, and self-discovery using recommended materials on Internet.
<p>The practice has concerns about not being compensated for time spent on education.</p>	<ul style="list-style-type: none"> • Review Coding at the AAP for tips on to accurately capture services and ensure timely payment, ultimately improving the quality of care for children. <ul style="list-style-type: none"> ✓ ADHD Coding Fact Sheet for Primary Care Pediatricians ✓ Medical Home Coding Fact Sheet ✓ Coding and Financial Feasibility: Making ADHD Management Work for Your Practice from the AAP ADHD Toolkit • Review and revise payment systems to reflect the time and effort required to diagnose, treat, and manage pediatric ADHD as described in the ADHD Systems Barriers document. See Recommendations to Address Inadequate Payment for Needed Services and Payor Coverage Limitations for Needed Medications, an excerpt from the aforementioned Barriers document in the Appendix. 	<ul style="list-style-type: none"> • Consult with other practices or the AAP Chapter for compensation ideas to incorporate into your practice.

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Appendix

Conditions That Mimic or are Comorbid With ADHD

A 2007 study by the National Survey of Children’s Health (NSCH) found that most children with ADHD (67%) have at least 1 other comorbid condition, and 18% have 3 or more comorbidities such as mental health disorders and/or learning disorders.¹ These comorbidities increase the complexity of the diagnostic and treatment process.

It is important that the PCC determine if symptoms are due to alternative causes before confirming the diagnosis of ADHD. It is also necessary to determine if the patient has an additional condition or conditions. If other conditions are suspected or detected during the diagnostic evaluation, an assessment of the urgency of these conditions and their impact on the ADHD treatment plan should be made.

Examples of conditions that mimic, are comorbid with ADHD, or contribute to the cause of ADHD include but are not limited to the following:

Type	Examples
Medical	Vision/hearing, anemia, medicine side effects, thyroid disorders, seizures, sleep apnea, and restless leg syndrome are examples of medical conditions that should be treated first to see if the treatment addresses the ADHD symptoms. Sequelae of central nervous system hypoxia, prematurity, intrauterine growth restriction (IUGR), and small for gestational age (SGA) syndromes, medical syndromes (Fetal Alcohol Spectrum Disorder [FASD], Fragile X, etc), traumatic brain injury, central nervous system infections, and near-drowning are examples of medical issues that should be treated along with ADHD.
Developmental	Autism, speech/language and specific learning disorders, intellectual deficits, tic disorders, developmental coordination disorders, motor delays, sensory processing disorders
Behavioral/emotional	Anxiety, depression, oppositional defiant disorder, conduct disorder, bipolar disorder, reactive attachment disorder, disruptive mood dysregulation disorder, post-traumatic stress disorder, obsessive-compulsive disorder
Family/environmental	Family separation, divorce, death, adverse events, exposure to violence, physical abuse/neglect, sexual abuse In the school environment: bullying, poor school or teacher fit, giftedness
Substance use	Alcohol, marijuana, and other illicit substances or misuse of prescription medication

Of Special Importance

- Urgent conditions that put the patient’s health at risk (eg, depression with suicidal ideation, high-risk behaviors, and substance use) need to be addressed immediately with providers capable of handling them. Frequent, ongoing assessment is essential, and the impact of such conditions on the ADHD treatment plan should be considered.
- If symptoms arise suddenly without prior history, it is important to consider other conditions, including but not limited to the following: mood or anxiety disorders; substance use; head trauma; physical or sexual abuse; neurodegenerative disorders; sleep disorders (including sleep apnea); or a major psychological stress in the family, community (eg violence), or school (eg bullying).

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- The PCC may evaluate and treat the comorbid disorder if it is within the PCC’s expertise. If the advice of another subspecialist is required, the PCC should carefully consider when to initiate treatment for ADHD. In some cases, it may be advisable to delay the start of medication until the full care team is established/consulted.
- The evaluation, diagnosis, and treatment of ADHD and its comorbid conditions are a continuous process. PCCs should be aware of the need for reassessment at every visit.

¹Larson K, Russ SA, Kahn RS, Halfon H. [Patterns of comorbidity, functioning and service use for US children with ADHD, 2007](#). *Pediatrics*. 2011;127(3): 462-470

DSM-5 Criteria

The Diagnostic and Statistical Manual of Mental Disorders, 5th Edition handbook, or DSM-5*, is the authoritative guide to the diagnosis of mental disorders, including ADHD, in the United States and other parts of the world. It defines the following dimensions, or presentations of ADHD:

1. ADHD primarily of the **Inattentive** presentation
2. ADHD primarily of the **Hyperactive-Impulsive** presentation
3. ADHD **Combined** presentation
4. ADHD **Other Specified, and Unspecified** ADHD

The diagnosis of ADHD must establish that 6 or more (5 or more if the adolescent is aged 17 or older) core symptoms are present in either or both the Inattention Dimension and/or the Hyperactivity-Impulsivity Dimension presentations and occur inappropriately often. The core symptoms and dimensions are presented in the table below. Note that symptoms may present differently at different ages.

Table 1. Core Symptoms of ADHD Adapted from the DSM-5

Inattention Dimension	Hyperactivity-Impulsivity Dimension	
	Hyperactivity	Impulsivity
<ul style="list-style-type: none"> • Careless mistakes • Difficulty sustaining attention • Seems not to listen • Fails to finish tasks • Difficulty organizing • Avoids tasks requiring sustained attention • Loses things • Easily distracted • Forgetful 	<ul style="list-style-type: none"> • Fidgeting • Unable to stay seated • Moving excessively (restless) • Difficulty engaging in leisure activities quietly • “On the go” • Talking excessively 	<ul style="list-style-type: none"> • Blurting answers before questions completed • Difficulty awaiting turn • Interrupting/intruding upon others

Source: ADHD PoC Algorithm, taken from the [AAP 2019 ADHD Guideline: Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder \(ADHD\) in Children and Adolescents](#), as adapted from the **DSM 5 Diagnostic and Statistical Manual of Mental Disorders, 5th Edition*.

Following are the DSM-5 criteria by dimension. Behaviors must persist 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:

- **ADHD/I:** Having at least 6 of 9 *Inattention* behaviors, and less than 6 *Hyperactive-Impulsive* behaviors.

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- **ADHD/HI:** Having at least 6 of 9 *Hyperactive-Impulsive* behaviors, and less than 6 *Inattention* behaviors.
- **ADHD/C:** Having at least 6 of 9 behaviors in both the *Inattention* and *Hyperactive-Impulsive* dimensions.
- **ADHD Other Specified, and Unspecified ADHD:** These categories are meant for children who meet many of the criteria for ADHD but not the full criteria, and who have significant impairment. ADHD Other Specified is used if the PCC specifies those criteria that have not been met; Unspecified ADHD is used if the PCC does not specify these criteria.

Following is a recap of the conditions that must be met:

- Symptoms occur in 2 or more settings, such as home, school, and social situations, and cause some impairment.
- In a child 4 to under 17 years of age, 6 or more symptoms in at least 1 dimension are identified.
- In a child aged 17 years and older, 5 or more symptoms in at least 1 dimension are identified.
- Symptoms significantly impair the child's ability to function in some of the activities of daily life, such as schoolwork, relationships with family, relationships with friends, or the ability to function in groups such as sports teams.
- Symptoms start before the child reaches 12 years of age. However, these may not be recognized as ADHD symptoms until a child is older.
- Symptoms have continued for more than 6 months.

Note: Because symptoms can change over time, the presentation may change over time as well.

Reference: [AAP 2019 ADHD Guideline](#): *Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder (ADHD) in Children and Adolescents*, as adapted from **DSM-5 Diagnostic and Statistical Manual of Mental Disorders, 5th Edition*.

**Diagnostic and Statistical Manual of Mental Disorders: DSM-5*. 5th ed. Washington, DC: American Psychiatric Association; 2013. Available at: <https://dsm.psychiatryonline.org/doi/10.1176/appi.books.9780890425596.Introduction>. Accessed August 29, 2019 (Login and subscription required.)

DSM-based ADHD Rating Scales

DSM-based rating scales are designed to focus on ADHD symptoms (inattentive, hyperactive-impulsive) to help determine the possible presence of core symptoms of ADHD as defined by DSM-5 criteria for ADHD.* The AAP recommends the use of DSM-based ADHD rating scales when evaluating ADHD:

1. For the initial diagnosis of a child with ADHD
2. For the assessment of conditions that mimic or are comorbid with ADHD
3. For monitoring the treatment strategy that has been put in place

DSM-based rating scales should be completed for 2 or more major settings. The rating scales may be completed by the parent or other family members, teachers, clinicians, or other professional observers who have opportunities to observe the child's behavior to help determine which ADHD symptoms and co-occurring conditions are present in the patient, in which environments (home, school, work, social), and over what time period. **NOTE: Be aware that screening tools and rating scales are not diagnostic; they are instruments used to help clinicians identify the possible presence of a condition. Additional information/tests are required to confirm or rule out a diagnosis.**

For purposes of this EQIPP course, some recommended age-specific rating scales/scoring interpretations include, but are not limited to, the following:

Age	Recommended Rating Scales	Scoring Interpretation
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<p>Preschool children, ages 4–5</p>	<p>ADHD Rating Scale IV—Preschool Version*</p> <p>Note: Currently validated for DSM-4. There are some wording variations to make the DSM criteria more applicable to preschool children, but symptom criteria are the same as on the other rating scales.</p> <p>Also see the Vanderbilt Assessment Scales below, which can be applicable to preschoolers.</p>	<p>Proprietary. Rating Scales and scoring information as described in McGoey KE, DuPaul GJ, Haley E, Shelton TL. Parent and teacher ratings of attention-deficit/hyperactivity disorder in preschool: the ADHD rating scale-IV preschool version. <i>J Psychopathol Behav Assess</i>. 2007;29(4):269-276</p>
<p>School-age children and adolescents, ages 6–18</p>	<p>Vanderbilt Assessment Scale: ADHD Toolkit Parent-Informant Form</p> <p>Vanderbilt Assessment Scale, Follow-up: ADHD Toolkit Parent-Informant Form</p> <p>Vanderbilt Assessment Scale: ADHD Toolkit Teacher-Informant Form</p> <p>Vanderbilt Assessment Scale, Follow-up: ADHD Toolkit Teacher-Informant Form</p> <p>Note: Vanderbilt Scales are updated to DSM-5 but only validated for DSM-4. Originally designed for the 6- to 12-year-old age group, they are applicable to other age groups, including preschoolers and adolescents.</p>	<p>Use the gray boxes to tally positive scores in the right margin at the end of each section. The Vanderbilt Assessment Scales Scoring Instructions provides scoring information for diagnostic purposes and for monitoring symptom and performance improvement. The instructions help correlate totals to DSM-5 criteria.</p>
	<p>ADHD Rating Scale–5, (ADHD RS-5) Home Version ADHD Rating Scale–5, (ADHD RS-5) School Version</p> <p>Note: Available in Child Form (ages 5–10) and Adolescent Form (ages 11–17); both updated and validated for DSM-5.</p>	<p>Proprietary. Rating scales and scoring sheets may be purchased from Guilford Press.</p>
	<p>Conners Rating Scales (Conners 3)</p> <p>6–18 years. Parent and Teacher Scales</p> <p>8–18 years. Self-Report Scale</p> <p>Note: All scales updated to DSM-5 but validated only for DSM-4.</p>	<p>Proprietary. Forms and scoring sheets may be purchased through MHS Assessments.</p>

***Note:** The fifth edition of the DSM-5 does not include significant changes to ADHD-related recommendations from the DSM-4 publication. Therefore, rating scales based on DSM-4 criteria are sufficient for purposes of this EQIPP quality improvement activity. Notable changes from DSM-4 to DSM-5 include: 1) Permission now granted to diagnose ADHD and autistic spectrum disorder as coexisting diagnoses; 2) ADHD symptoms must be seen before age 12; and 3) adolescents age 17 may qualify for an ADHD diagnosis if 5 of 9 symptoms of inattention and/or hyperactivity/impulsivity are noted.

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Tools to Assess Common ADHD Comorbid Conditions

The AAP recommends the use of validated tools and rating scales when evaluating conditions that mimic or are comorbid with ADHD.

Condition	Validated Screening Tool or Rating Scale
Anxiety	Screen for Child Anxiety-Related Emotional Disorders (SCARED)—Child, Parent and Child, and Adult versions (in English and other languages) with scoring information available on the Resources-Instruments page of the University of Pittsburg Web site available at: https://www.pediatricbipolar.pitt.edu/resources/instruments .
Aggression	Modified Overt Aggression Scale (MOAS) available in many languages using the Translate Page tab on the ProjectTEACH Resources Clinical Rating Scales Web page available at: https://projectteachny.org/rating-scales .
Depression	Patient Health Questionnaires (PHQs) including PHQ-9 and PHQ-A modified for adolescents to screen for depression available in many languages with accompanying instruction manual including information on scoring the PHQ-9 available at: https://www.phqscreeners.com .
Internalizing and Externalizing Issues and Inattention	Pediatric Symptom Checklist-17 as a general screen when specific symptoms have not been expressed. It is available with scoring instructions and in many languages available at: https://www.massgeneral.org/psychiatry/services/treatmentprograms.aspx?id=2088&display=forms .
Substance Use	See Example Substance Use Screening and Assessment Tools (S2BI and CRAFFT) later in this Appendix. (Also see the EQIPP course, Substance Use—Screening, Brief Intervention, and Referral to Treatment.)
Suicidal Ideation	Adolescent Suicidal Questionnaire (ASQ) and Toolkit available with informational materials and many translations on the National Institute of Mental Health (NIH) Web site at: https://www.nimh.nih.gov/research/research-conducted-at-nimh/asq-toolkit-materials/index.shtml .
Trauma	Child and Adolescent Trauma Screen (CATS) reports available at: https://depts.washington.edu/hcsats/PDF/TF-%20CBT/pages/assessment.html . Also available in Spanish. <ul style="list-style-type: none"> • Child and Adolescent Trauma Screen (CATS) Caregiver Report (Ages 3–6) • Child and Adolescent Trauma Screen (CATS) Caregiver Report (Ages 7–17) • Child and Adolescent Trauma Screen (CATS) Youth Self Report (Ages 7–17)

Be aware that screening tools and rating scales are not diagnostic. Rather, they help identify the possible presence of a condition. Additional information and/or tests may be necessary to confirm or rule out a diagnosis.

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Also, see the [Mental Health Screening and Assessment Tools for Primary Care table](#) from the AAP Mental Health Toolkit, which provides a more comprehensive listing of mental health screening and assessment tools, summarizing their psychometric testing properties, cultural considerations, costs, and key references. It includes tools that are proprietary and those that are freely accessible.

Major Settings

The child with ADHD demonstrates inattentive or hyperactive-impulsive symptoms and impairment in 2 or more environments, including but not limited to home, school, childcare, preschool, community, sport teams, and social and group settings.

Family

Today, the term family is used to describe a unit that may comprise a married nuclear family; cohabiting family; single-parent, blended, or stepfamily; grandparent-headed household; single-gender parents; commuter or long-distance family; foster family; or a larger community family with several individuals who share the caregiving and parenting responsibilities. Each of these family constellations presents unique challenges to child-rearing for parents as well as children.

Reference: Hagan JF, Shaw JS, Duncan PM, eds. *Bright Futures: [Guidelines for Health Supervision of Infants, Children, and Adolescents](#)*. 4th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2017

Recommendations to Address Challenges in Practice Organization

Clinician-Focused Implementation Strategies

- Develop ADHD-specific office workflows, as detailed in the “preparing the practice” section of the PoCA (see supplemental information).
- Ensure that the practice is welcoming and inclusive to patients and families of all backgrounds and cultures.
- Enable office systems to support communication with parents, education professionals, and mental health specialists, possibly through electronic communication systems (discussed below).
- Consider office certification as a patient- and family-centered medical home.
- If certification as a patient- and family-centered medical home is not feasible, implement medical home policies and procedures, including care conferences and management. Explore care management opportunities, including adequate resourcing and payment, with third-party payers.
- Identify and establish relationships with mental health consultation and referral sources in the community and within the region, if available, and investigate integration of services as well as the resources to support them.
- Promote communication between ADHD care team members by integrating health and mental health services and using collaborative care model treatments when possible.
- Be aware of the community mental health crisis providers’ referral processes, and be prepared to educate families about evidence-based psychosocial treatments for ADHD across the lifespan.

Policy-Oriented Suggested Strategies

- Encourage efforts to support the development and maintenance of patient- and family-centered medical homes or related systems to enable patients with chronic complex disorders to receive comprehensive care.

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- Support streamlined, coordinated ADHD care across systems by providing incentives for the integration of health and mental health services and collaborative care models.

Source: The AAP 2019 ADHD Guideline supplemental Systemic Barriers document, *Systematic Barriers to the Care of Children and Adolescents With ADHD Systematic Barriers to the Care of Children and Adolescents with ADHD*, taken from the [AAP 2019 ADHD Guideline: Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder \(ADHD\) in Children and Adolescents](#), as adapted from the *DSM 5 Diagnostic and Statistical Manual of Mental Disorders, 5th Edition*.

Recommendations to Address Inadequate Payment for Needed Services and Payor Coverage Limitations for Needed Medications

Policy-Oriented Strategies

- Revise payment systems to reflect the time and cognitive effort required by primary care, developmental-behavioral, and mental health clinicians to diagnose, treat, and manage pediatric ADHD—and compensate these services at levels that incentivize and support their use.
- Support innovative partnerships between payers and clinicians to facilitate high-quality ADHD care. As new payment models are proposed, include input from practicing clinicians to inform insurance plans’ understanding of the resources needed to provide comprehensive ADHD care.
- Require that payers’ medical directors who review pediatric ADHD protocols and medication formularies either have pediatric expertise or seek such expertise before making decisions that affect the management of pediatric patients with ADHD.
- Advocate that health care payers’ rules for approval of developmental-behavioral and mental health care services and medications is consistent with best practice recommendations based on scientific evidence such as the AAP ADHD guideline. Payers should not use arbitrary step-based medication approval practices or force changes to a patient’s stable and effective medication plans because of cost-based formulary changes.
- Advocate for better monitoring by the US Food and Drug Administration (FDA) of ADHD medication generic formulations in order to verify their equivalency to brand-name preparations in terms of potency and delivery.
- Partner with CHADD (Children and Adults with Attention-Deficit/Hyperactivity Disorder) and other parent support groups to help advocate for positive changes in payers’ rules; these organizations provide a strong voice from families who face the challenges on a day-to-day basis.

Source: The AAP 2019 ADHD Guideline supplemental Systemic Barriers document, *Systematic Barriers to the Care of Children and Adolescents With ADHD*, taken from the [AAP 2019 ADHD Guideline: Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder \(ADHD\) in Children and Adolescents](#), as adapted from the *DSM 5 Diagnostic and Statistical Manual of Mental Disorders, 5th Edition*.

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Example Substance Use Screening and Assessment Tool(s)

Following are the Screening to Brief Intervention (S2BI) and Car, Relax, Alone, Forget, Friends, Trouble (CRAFT) screening tools:

TABLE 3 S2BI Screen for Substance Use Risk Level

The following questions will ask about your use, if any, of alcohol, tobacco, and other drugs. Please answer every question by clicking on the box next to your choice.

In the past year, how many times have you used ...

Tobacco?

- Never
- Once or twice
- Monthly
- Weekly or more

Alcohol?

- Never
- Once or twice
- Monthly
- Weekly or more

Marijuana?

- Never
- Once or twice
- Monthly
- Weekly or more

STOP if answers to all previous questions are "never." Otherwise, continue with the following questions.

In the past year, how many times have you used...

Prescription drugs that were not prescribed for you (such as pain medication or Adderall)?

- Never
- Once or twice
- Monthly
- Weekly or more

Illegal drugs (such as cocaine or Ecstasy)?

- Never
- Once or twice
- Monthly
- Weekly or more

Inhalants (such as nitrous oxide)?

- Never
- Once or twice
- Monthly
- Weekly or more

Herbs or synthetic drugs (such as salvia, "K2," or bath salts)?

- Never
- Once or twice
- Monthly
- Weekly or more

Source: Levy SH, Williams JF; Committee on Substance Use and Prevention. Substance use screening, brief intervention, and referral to treatment. *Pediatrics*. 2016;138(1):e20161211. Available at: <https://doi.org/10.1542/peds.2016-1211>. Accessed August 29, 2019

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Box 1. The CRAFFT Screening Interview

Begin: "I'm going to ask you a few questions that I ask all my patients. Please be honest. I will keep your answers confidential."

Part A

During the PAST 12 MONTHS, did you:

	No	Yes
1. Drink any alcohol (more than a few sips)? (Do not count sips of alcohol taken during family or religious events.)	<input type="checkbox"/>	<input type="checkbox"/>
2. Smoke any marijuana or hashish?	<input type="checkbox"/>	<input type="checkbox"/>
3. Use <i>anything else</i> to get high? (“anything else” includes illegal drugs, over the counter and prescription drugs, and things that you sniff or “huff”)	<input type="checkbox"/>	<input type="checkbox"/>

For clinic use only: Did the patient answer “yes” to any questions in Part A?

No Yes
 ↓ ↓
Ask CAR question only, then stop Ask all 6 CRAFFT questions in Part B

Part B

	No	Yes
1. Have you ever ridden in a CAR driven by someone (including yourself) who was “high” or had been using alcohol or drugs?	<input type="checkbox"/>	<input type="checkbox"/>
2. Do you ever use alcohol or drugs to RELAX , feel better about yourself, or fit in?	<input type="checkbox"/>	<input type="checkbox"/>
3. Do you ever use alcohol or drugs while you are by yourself, or ALONE ?	<input type="checkbox"/>	<input type="checkbox"/>
4. Do you ever FORGET things you did while using alcohol or drugs?	<input type="checkbox"/>	<input type="checkbox"/>
5. Do your FAMILY or FRIENDS ever tell you that you should cut down on your drinking or drug use?	<input type="checkbox"/>	<input type="checkbox"/>
6. Have you ever gotten into TROUBLE while you were using alcohol or drugs?	<input type="checkbox"/>	<input type="checkbox"/>

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Source: Knight J, Roberts T, Gabrielli, Hook SV. [Adolescent alcohol and substance use and abuse](#). In: *Performing Preventative Services: A Bright Futures Handbook*. Elk Grove Village, IL: American Academy of Pediatrics; 2017:3

Tips for Developing Effective ADHD Education in Your Practice

1. Recognize that education is an ongoing process that can, and should be, provided over time. Consider setting up a series of educational topics that are delivered on a set schedule to keep all patients/families in the loop. Educational topics may need to be repeated and tailored to the changing needs of

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- the child as he or she enters a new stage of development (eg, adolescence) or school setting (eg, middle school, high school). Consider the list of ADHD Educational Topics/Resources for Patients/Families provided next.
2. Provide education in a variety of formats, including discussion, print, video, or Web-based. Group sessions and guest speakers can also be effective educational delivery options.
 3. Ensure that educational messages meet the cultural, language, and literacy needs of your patient population.
 4. Continue to provide education at all follow-up visits. Allow families to give input regarding areas where they need more information. Adjust over time to address the specific needs of adolescents as they develop more autonomy and independence.
 5. Review educational resources regularly to ensure they are current and relevant.

ADHD Educational Topics/Resources for Patients/Families

Educational Topic	Resources
<ul style="list-style-type: none"> • ADHD causes and symptoms • Diagnostic evaluation process • Conditions that mimic or are comorbid with ADHD • Treatment options including potential benefits and adverse effects • Long-term sequelae 	<ul style="list-style-type: none"> • ADHD: What Every Parent Needs to Know, 3rd Edition, AAP • Diagnosing ADHD in Children: Guidelines & Information for Parents at www.healthychildren.org • The CHADD Information and Resource Guide to ADHD, 2nd Ed., available at: www.chadd.org (for parents of children with ADHD) • ADHD Shared Decision-Making Tools available at: https://www.cincinnatichildrens.org/service/j/anderson-center/evidence-based-care/decision-aids <p>Web sites with information for families on these and other ADHD topics:</p> <ul style="list-style-type: none"> • www.aap.org—Search ADHD • www.chadd.org—See for Parents & Caregivers tab • www.understood.org—See Your Parent Toolkit tab • www.sandrarium.com—See Educational Teaching Methods for ADHD Children • www.mayoclinic.org—Search ADHD
<ul style="list-style-type: none"> • Helping the child or adolescent understand ADHD 	<p>Books and other resources that can be read by or to children to help them understand ADHD:</p> <ul style="list-style-type: none"> • <i>Eukee the Jumpy Jumpy Elephant</i> (ages 5–7 years) • <i>Slam Dunk: A Young Boy's Struggle With Attention Deficit Disorder</i> (ages 8–12 years)

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	<ul style="list-style-type: none"> • <i>Some Kids Just Can't Sit Still!</i> (ages 4–9 years) • <i>Making the Grade</i> (ages 9–14 years) • www.ADDitudemag.com—Search for teens • Video: “How to ADHD,” available at: https://www.youtube.com/channel/UC-nPM1_kSZf91ZGkcgY_95Q
<ul style="list-style-type: none"> • Parenting the child with ADHD 	<ul style="list-style-type: none"> • Triple P (Positive Parenting Program) at www.triplep.net • Parent-Child Interaction Therapy* at www.pcit.org • The Incredible Years Parenting Program at www.incredibleyears.com
<ul style="list-style-type: none"> • Specialized educational services, including how parents can partner with schools to develop IEP/504 	<ul style="list-style-type: none"> • www.additudemag.com—search for IEP 504 • www.understood.org—search for IEP 504 • ADHD Parent-Pediatrician Letters to the School; A Family-Centered Medical Home Tool to Improve Collaboration, Grades, and Behavior, available at: https://doi.org/10.1177/2333794X15574284
<ul style="list-style-type: none"> • Anticipatory guidance 	Performing Preventative Services: A Bright Futures Handbook (See section on Anticipatory Guidance)
<ul style="list-style-type: none"> • Transition of adolescents towards self-management • Transition to adult care 	<ul style="list-style-type: none"> • Nadeau K. <i>Survival Guide for College Students With ADHD or LD</i>. 2nd Ed. 2010 • www.chadd.org—Search for transition to adult and self management • www.ADDitudemag.com—search for teens
<ul style="list-style-type: none"> • Advocacy 	<ul style="list-style-type: none"> • Matthew Cohen. <i>A Guide to Special Education Advocacy</i>. 2009 • Peter Jensen. <i>Making the System Work for Your Child with ADHD</i>. 2004. Guilford Press • Robert Brooks and Sam Goldstein. <i>Raising Resilient Children</i>. McGraw Hill • Russell Barkley. <i>Taking Charge of ADHD</i>. 3rd Ed. 2013 • Video: “Advocating for Your Child”: https://www.understood.org/en/school-learning/partnering-with-childs-school/working-with-childs-teacher/10-ways-to-be-an-effective-advocate-for-your-child-at-school

Potential Barriers and Suggested Ideas for Change

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Key Clinical Activity: Treat

Rationale: ADHD is a treatable yet potentially serious chronic condition, affecting up to 11% of all children, ages 4 to 17 years. A comprehensive, multimodal approach to ADHD treatment includes evidence-based behavioral/training interventions, [FDA-approved medications](#) for ADHD, school services and classroom interventions, and patient/[family](#) education at key developmental and treatment phases; periodic screening and additional treatment for [conditions that mimic or are comorbid with ADHD](#); and close monitoring of the child’s response to treatment, adjusting as needed along the way. Continuous collaborative, bidirectional communication with families, teachers, therapists, and other adults involved in the child’s life is critical for informing the treatment plan. For children 6–12 years of age, the preferred treatment approach includes both Parent Training in Behavior Management (PTBM) (including training for both the patient and family) and medication. For adolescents (12–18 years of age), behavioral therapy or training interventions and medication are recommended. For young children (4–5 years of age) with ADHD, PTBM is recommended as the first line of treatment; medication may be indicated in certain circumstances.

¹Source: Center for Disease Control (CDC)

Potential Barriers	Suggested Ideas for Change	Still Not Seeing Results?
<p>Gap: Treatment for suspected or confirmed conditions that mimic or are comorbid with ADHD not initiated by the primary care clinician (PCC) or a referral to the appropriate specialist/provider for further evaluation and/or treatment not made</p>		
<p>Clinicians and/or staff may not recognize the importance of evaluating/treating conditions that mimic or are comorbid with ADHD or do not know which conditions to consider.</p>	<ul style="list-style-type: none"> Review current AAP guideline recommendations regarding high-quality, evidence-based ADHD care: <ul style="list-style-type: none"> ✓ The AAP 2019 ADHD Guideline, Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder (ADHD) in Children and Adolescents. Use the tab provided to view supplemental files: <ul style="list-style-type: none"> – The ADHD PoC Algorithm, A Process of Care (PoC) Algorithm for the Diagnosis and Treatment of Children and Adolescents with ADHD – The ADHD Systemic Barriers document, <i>Systematic Barriers to the Care of Children and Adolescents with ADHD</i> <p>Pay specific attention to Key Action Statements 3 and 7, pertaining to this gap:</p> <p>KAS 3 In the evaluation of a child or adolescent for ADHD, the primary care clinician should include a process to at least screen for comorbid conditions, including emotional or behavioral conditions (eg, anxiety, depression, oppositional defiant disorder, conduct disorders, substance use), developmental conditions (eg, learning and language disorders, autism spectrum disorders), and physical conditions (eg, tics, sleep apnea).</p> <p>KAS 7. The primary care clinician, if trained or experienced in diagnosing comorbid conditions, may initiate treatment for such conditions or make a referral to an appropriate subspecialist for treatment. After detecting possible comorbid conditions, if the primary care clinician is not trained or experienced in making the diagnosis or initiating treatment, the patient should be referred to an appropriate subspecialist to make the diagnosis and initiate treatment.</p> <ul style="list-style-type: none"> Become familiar with these additional guidelines, initiatives, and practical tools for mental health screening and treatment in the primary care setting: 	<ul style="list-style-type: none"> Recognize that patients in whom a mimicking or comorbid condition goes unrecognized may be diagnosed and treated inappropriately, and/or may not receive treatments that would benefit them. Consider which conditions to treat in which order, as described in the book Gephart HR. ADHD Complex: Practicing Mental Health in Primary Care. St. Louis, MO: Elsevier; 2018 Complete REACH training, originating from the REsource for Advancing Children’s Health, which teaches primary care clinicians (PCCs) to deliver evidence-based mental health screening and treatment in the primary care setting. Available at: http://thereachinstitute.org/.

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Potential Barriers	Suggested Ideas for Change	Still Not Seeing Results?
	<ul style="list-style-type: none"> ✓ Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents, 4th Edition 2017 ✓ Algorithm from the AAP's Mental Health Toolkit, <i>Addressing Mental Health Concerns in Primary Care: A Clinician's Toolkit</i> ✓ AAP Mental Health Initiatives—Primary Care Tools Web page ✓ Guidelines for Adolescent Depression in Primary Care (GLAD-PC): Part I. Practice Preparation, Identification, Assessment, and Initial Management ✓ AAP ADHD Toolkit, <i>Caring for Children with ADHD: A Practical Resource Toolkit for Clinicians</i>, 3rd Edition (included with the Pediatric Care Online subscription or available for purchase at https://shop.aap.org/adhdtoolkit/) ✓ 2012 New Guidelines for Treating Maladaptive Aggression in Youth, available on the Agency for Healthcare Research and Quality Web page <ul style="list-style-type: none"> • Recognize that conditions that mimic or are comorbid with ADHD may impact the treatment approach. Adolescents with newly diagnosed ADHD should be assessed for symptoms of substance use prior to initiating medication treatment for ADHD. Consider the order and/or combination of psychosocial and medication treatments to maximize the impact on areas of greatest risk and impairment, while safeguarding against possible risks such as stimulant misuse or suicide attempts. 	
<p>Clinicians and/or staff do not feel comfortable treating conditions that mimic or are comorbid with ADHD and/or do not have a list of professionals for referral.</p>	<ul style="list-style-type: none"> • Be aware of the primary care clinician's (PCC) responsibility for the diagnosis, treatment, and coordination of ADHD care, including the treatment and/or referral of conditions that mimic or are comorbid with ADHD as outlined in KAS 3 and KAS 7 in Row 1 of this grid. PCCs are an important first resource for families who are worried about their child's behavioral problems. • Recognize that there is an insufficient workforce of developmental-behavioral and mental health care providers and consider accepting new challenges, perhaps with the consultative advice of other experts or while awaiting subspecialty care. • Consult with the AAP Chapter and other PCCs in your community for appropriate specialists/providers who can evaluate/treat conditions that mimic or are comorbid with ADHD. Create and routinely update a referral list and ensure it is readily available to appropriate staff members to use during patient visits. • Be aware of resources available through your state/regional departments of mental health and public health, including substance abuse helplines. • Establish collaborative working relationships with specialists to whom you refer. Facilitate bidirectional communication channels using standard forms and 	<ul style="list-style-type: none"> • Consider investigating the use of telemedicine to connect medical experts to patients/families and enable PCCs to collaborate with other specialists—for example, mental health providers who use evidence-based psychosocial treatments. Leveraging such technology can potentially replace repeated follow-up office visits and maximize access to care. For more information, search “telemedicine” on the John Hopkins Medicine Web site at https://www.hopkinsmedicine.org. • Consider hiring or designating a clinician (eg, nurse practitioner, social worker, physician) within your existing staff to develop

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Potential Barriers	Suggested Ideas for Change	Still Not Seeing Results?
	<p>processes, such as those found in the AAP Mental Health Initiatives, Primary Care Tools:</p> <ul style="list-style-type: none"> ✓ Primary Care Referral and Feedback form 	<p>special expertise in ADHD and mental health issues.</p> <ul style="list-style-type: none"> • Learn about psychiatric levels of care (eg, intensive outpatient, partial hospitalization, acute residential, etc.) and how to access them in your community.
<p>The family’s cultural attitudes or beliefs about ADHD diagnosis and treatment do not allow patients to receive treatment.</p>	<ul style="list-style-type: none"> • Become familiar with how cultural differences can lead to disparities in mental health care and learn ways to enhance cultural competence. Explore articles such as Pumariega AJ, Rothe E, Mian A, et al; American Academy of Child and Adolescent Psychiatry Committee on Quality Issues. Practice parameter for cultural competence in child and adolescent psychiatric practice. <i>J Am Acad Child Adolesc Psychiatry.</i> 2013;52(10):1101–1115. • Ask questions to uncover the family’s cultural context and try to identify areas where the PCC and family can mutually agree and use as a basis for treatment. Also ask about the family’s use of traditional therapies, herbals, or medicines as a treatment approach. • Provide patient/family education on ADHD. Understanding the challenges of ADHD and the treatment and resources available equips families to consider getting help for their child. See ADHD Educational Topics/Resources for Patients/Families and Tips for Developing Effective ADHD Education in Your Practice in the Appendix. Additional information that may be helpful to the family and clinician can be found in the Cincinnati Children’s Hospital ADHD Treatment Shared Decision Making Tool posting available at: https://www.cincinnatichildrens.org/service/j/anderson-center/evidence-based-care/decision-aids. 	<ul style="list-style-type: none"> • Provide written educational materials that match the language and literacy level of your patient population. • Consider these possibilities: <ul style="list-style-type: none"> ✓ Hire bilingual staff. ✓ Use a medical interpreter service. ✓ Offer interpreter skills training to other parent advocates.
<p>The practice has concerns about not being compensated for mental health screening.</p>	<ul style="list-style-type: none"> • Know which assessments are reimbursed by the main payors used within your practice. See Bright Futures Coding for Pediatric Preventive Care, 2019 to get started. • Review Coding at the AAP for tips on how to accurately capture services and ensure timely payment, ultimately improving the quality of care for children. Also review: <ul style="list-style-type: none"> ✓ ADHD Coding Fact Sheet for Primary Care Pediatricians ✓ Medical Home Coding Fact Sheet ✓ Coding and Financial Feasibility: Making ADHD Management Work for Your Practice from the AAP ADHD Toolkit 	<ul style="list-style-type: none"> • Consult with other practices or the AAP Chapter for compensation ideas to incorporate in your practice. • Consult your AAP Chapter Pediatric Council about fee-related concerns. Pediatric councils have the potential to facilitate better working relationships between pediatricians and health insurance

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Potential Barriers	Suggested Ideas for Change	Still Not Seeing Results?
	<ul style="list-style-type: none"> Review and revise payment systems to reflect the time and effort required to diagnose, treat, and manage pediatric ADHD, as described in Recommendations to Address Inadequate Payment for Needed Services and Payor Coverage Limitations for Needed Medications, an excerpt from the ADHD Systemic Barriers document. 	<p>plans and to improve quality of care for children.</p> <ul style="list-style-type: none"> Advocate for payment commensurate with the clinical resources required to provide comprehensive ADHD care in the medical home, as described in ADHD Systemic Barriers document.
<p>For patients 4–5 years of age</p> <p>Gap: Evidence-based behavioral/training interventions not recommended as the first line of treatment</p>		
<p>Clinicians may not be up to date on current guideline requirements for treatment of ADHD for this age group. Or, they prescribe medication with or without behavioral/training interventions for all patients with ADHD.</p>	<ul style="list-style-type: none"> Review the AAP 2019 ADHD Guideline and supplemental documents, paying specific attention to the KAS pertaining to treatment for this age group: KAS 5a. For preschool-aged children (age 4 years to the 6th birthday) with ADHD, the primary care clinician should prescribe evidence-based PTBM and/or behavioral classroom interventions as the first line of treatment, if available. Methylphenidate may be considered if these behavioral interventions do not provide significant improvement and there is moderate to severe continued disturbance in the 4- through 5-year-old child’s functioning. In areas where evidence-based behavioral treatments are not available, the clinician needs to weigh the risks of starting medication before the age of 6 years against the harm of delaying treatment. 	<ul style="list-style-type: none"> Recognize that ADHD symptoms must not merely be disruptive, annoying, disappointing to others, or otherwise inconvenient. To make a diagnosis, the symptoms must cause significant impairment and meet DSM-5 criteria for ADHD. Recognize the potential harms of delaying medication treatment if indicated: physical safety due to impulsivity, stigmatization by and negative interactions with peers and adults, risk of physical abuse, and poor self-esteem.
<p>There is a lack of evidence-based psychosocial treatments available in the community. Or, clinicians and staff are not aware of what is considered evidence-based behavioral/training interventions.</p>	<ul style="list-style-type: none"> Provide families with information about evidence-based behavioral/training interventions. Partner with mental health providers in the community for services. Investigate how to make therapy resources available to families, including training videos, video-based coaching, and directories to certified providers. Use the following list to get started; additional resources are available on the Resource list for this EQIPP. (Fees may apply for some materials.) <ul style="list-style-type: none"> ✓ Triple P (Positive Parenting Program)* at www.triplep.net ✓ Parent-Child Interaction Therapy* at http://www.pcit.org/ ✓ The Incredible Years Parenting Program at www.incredibleyears.com* ✓ Systematic Training for Effective Parenting (STEP), at www.steppublishers.com 	<ul style="list-style-type: none"> Consult the CHADD Web site for a resource directory search engine at https://chadd.org under the Get Support tab. Advocate for improved training, resources, and services as described in Recommendations to Address Limited Access to Care Due to Inadequate Developmental-Behavioral and Mental Health Care Training During Pediatric Residency, and Shortages of

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Potential Barriers	Suggested Ideas for Change	Still Not Seeing Results?
	<ul style="list-style-type: none"> ✓ CHADD: Parent-to-Parent Family Training on ADHD, at www.chadd.org ✓ Everyday Parenting: The ABCs of Child Rearing, available free from Coursera at https://www.coursera.org/learn/everyday-parenting/home/info ✓ ADDitude Web site for webinars, parenting tools, and magazine subscriptions at https://www.additudemag.com ✓ New Forest Parenting Program for military families at https://lion.militaryfamilies.psu.edu/programs/new-forest-parenting-programme-nfpp ✓ 1-2-3 Magic positive parenting video and workbook suitable for children 12 years of age and younger at www.123magic.com <p>*Also applicable for preschool children.</p> <ul style="list-style-type: none"> • Provide families with information about finding a therapist: <ul style="list-style-type: none"> ✓ Behavioral therapy for young children with ADHD: Finding a Therapist, available at: https://www.cdc.gov/ncbddd/adhd/documents/behavior-therapy-finding-a-therapist.pdf ✓ The handout in this EQIPP course, Therapist Search Checklist, to help families in the search for a therapist ✓ Information about state or local behavioral navigation programs such as Sooner Success in Oklahoma at https://soonersuccess.ouhsc.edu/, to help families locate available resources ✓ Information about Aunt Bertha at www.auntbertha.com to search by zip code for community-based free and reduced-cost social services 	<p>Consultant Specialists and Referral Resources, from the ADHD Systems Barriers document.</p>
<p>Clinicians and staff make treatment recommendations based on what is or is not likely to be covered by insurance.</p>	<ul style="list-style-type: none"> • Help families understand their role as advocates for their child in the health care system. Encourage them to advocate for payment from insurers and State and Federal government agencies. • Prepare to write a letter of medical necessity to appeal denials, or request prior authorization for services you prescribe and believe are medically necessary. Information on this can be found on the Medical Home Portal at: https://www.medicalhomeportal.org/issue/writing-letters-of-medical-necessity. • See Recommendations to Address Inadequate Payment for Needed Services and Payor Coverage Limitations for Needed Medications. 	<ul style="list-style-type: none"> • Consult the AAP Chapter and advocacy groups like CHADD for recommendations. • Consult the pediatric counsel within AAP Chapters. • Identify and educate the clinicians involved in determining medical necessity at the insurer level about behavioral/training interventions.
<p>For patients 6–11 years of age Gap: FDA-approved medications for ADHD and/or evidence-based behavioral/training interventions not recommended</p>		

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Potential Barriers	Suggested Ideas for Change	Still Not Seeing Results?
<p>Clinicians may not be up to date on current treatment recommendations for ADHD in this age group. Or, they do not know what treatment to prescribe, including medication/dosage, and psychosocial interventions.</p>	<ul style="list-style-type: none"> Review the AAP 2019 ADHD Guideline and supplemental documents, paying specific attention to the KAS treatment recommendations pertaining to this age group: KAS 5b. For elementary- and middle-school-aged children (age 6 years to the 12th birthday) with ADHD, the primary care clinician should prescribe FDA-approved medications for ADHD along with PTBM and/or behavioral classroom intervention (preferably both PTBM and behavioral classroom interventions). Educational interventions and individualized instructional supports—including school environment, class placement, instructional placement, and behavioral supports—are a necessary part of any treatment plan and often include an Individual Education Program (IEP) or a rehabilitation plan (504 plan). Recognize that effective treatment plans for patients with ADHD may require medical, educational, and psychosocial interventions. Review the list of FDA-approved medications for ADHD available at www.ADHDMedicationGuide.com. Accept the agreement to view the pdf of the guide. Consider having a staff member review and summarize the drug formulary for different insurance carriers. Or, consult with local pharmacy. 	<ul style="list-style-type: none"> Review the book by Gephart HR. ADHD Complex: Practicing Mental Health in Primary Care. St. Louis, MO: Elsevier; 2018, which reviews key subjects of importance to help PCCs assess, diagnose, treat, and manage patient populations with ADHD. Review the <i>AAP Developmental and Behavioral Pediatrics, 2nd Edition</i> for information about ADHD, psychopharmacology, psychosocial interventions, special education law, and common comorbid conditions. Review resources made available for viewing in this EQIPP from the AAP ADHD Toolkit: <ul style="list-style-type: none"> ✓ ADHD Basic Facts: What Every Clinician Should Know Before Starting a Patient on Medication ✓ ADHD Basic Facts: What Every Parent Should Know Before Starting a Patient on Medication ✓ Next Steps in Medication Management: What Clinicians Should Know About Titration, Managing Side Effects, and Combining Medications
<p>ADHD medications are not covered by insurance and families are unable to afford them.</p>	<ul style="list-style-type: none"> Become familiar with the prior authorization processes of major payers used by families in the practice, if feasible, and discuss with families as warranted. Remind families to stay in communication regarding concerns about medication, including when cost prohibits the filling of a prescription. 	<ul style="list-style-type: none"> See www.auntbertha.com to search by zip code for community-based free and reduced cost social services, including financial

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Potential Barriers	Suggested Ideas for Change	Still Not Seeing Results?
	<ul style="list-style-type: none"> • Suggest ways that families can identify their cost/copayment for medications to help them determine affordability. Families can begin by contacting their insurance company to determine if the recommended medication is on their drug formulary and ask about the cost or copay amount. • Share information about the Partnership for Prescription Assistance program, which helps low-income, uninsured patients get free or low-cost, brand-name medications. • Be in close communication with local pharmacies, if feasible, and request that they call you if there is a problem filling a prescription. • Consult with pharmacies about formularies of insurance companies to identify what ADHD medications are covered, at what tier and the copayment amount. Be prepared to document which medications have been tried and what the results were (eg, how it was determined to be ineffective; what side effects were seen and how severe they were) when pursuing prior authorization for a noncovered medication. • Review Recommendations to Address Inadequate Payment for Needed Services and Payor Coverage Limitations for Needed Medications in the ADHD Systems Barriers document, which outlines common barriers that impede ADHD care and makes clinical and policy recommendations for those seeking to improve care. 	<p>assistance for health care and prescriptions.</p> <ul style="list-style-type: none"> • Advocate for medication approval by payers when the patient's symptoms are well controlled by an existing medication and a replacement drug is substituted/recommended by insurance. • Medication choice and cost information can be found on the Cincinnati Children's Hospital ADHD Treatment Shared Decision-Making Tool posting at: https://www.cincinnatichildrens.org/service/j/anderson-center/evidence-based-care/decision-aids.
<p>Medication is prescribed, but evidence-based behavioral/training interventions are not.</p>	<ul style="list-style-type: none"> • Recognize that the goals of effective behavioral therapy are to learn or strengthen positive behaviors and eliminate unwanted or problem behaviors. Behavioral therapy can include training for the child, family, or a combination. Teachers can also use behavioral therapy to reduce problem behaviors in the classroom. • Provide families with information about evidence-based behavioral therapy as described earlier in this grid. • Be aware that children with ADHD may be eligible for individualized education programs (IEPs) or rehabilitation plans (504 plans) in public schools, free of charge to families or accommodations at school under the Individuals with Disabilities in Education Act (IDEA) and anti-discrimination law, Section 504. The US Department of Education Resource Guide (available at: http://www2.ed.gov/about/offices/list/ocr/letters/colleague-201607-504-adhd.pdf) helps educators, families, students, and other stakeholders better understand how these laws apply to students with ADHD so that they can get the services and education they need to be successful. 	<ul style="list-style-type: none"> • Review information on the CHADD Web site at http://www.chadd.org, which serves as a clearinghouse for evidence-based information on ADHD. • Consider a subscription to ADDitude magazine at www.additudemag.com to receive downloadable educational information on ADHD, articles, books, podcasts, blogs, advocacy, and more. (Fees may apply.)
<p>For patients 12–18 years of age</p>		

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Potential Barriers	Suggested Ideas for Change	Still Not Seeing Results?
<p>Gap: FDA-approved medications and/or evidence-based behavioral/training intervention not recommended with the adolescent's assent</p>		
<p>Clinicians may not be up to date on current treatment recommendations for ADHD in this age group. Or, they do not know what treatment to prescribe, including medication and dosage and behavioral/training interventions.</p>	<ul style="list-style-type: none"> Review the AAP 2019 ADHD Guideline and supplemental documents, paying specific attention to the KAS treatment recommendations pertaining to this age group: KAS 5c. For adolescents (age 12 years to the 18th birthday) with ADHD, the primary care clinician should prescribe FDA-approved medications for ADHD with the adolescent's assent. The primary care clinician is encouraged to prescribe evidence-based training interventions and/or behavioral interventions as treatment for ADHD, if available. Educational interventions and individualized instructional supports—including school environment, class placement, instructional placement, and behavioral supports—are a necessary part of any treatment plan and often include an IEP or a 504 plan. Understand that adolescents with ADHD can benefit from explicit training in school functional skills (eg, homework management; study skills; time management; planning and organization of materials). 	<ul style="list-style-type: none"> Review information on the CHADD Web site and subscription to ADDitude magazine as previously described. Review <i>Treatment of Attention-Deficit/Hyperactivity Disorder in Adolescents: A Systematic Review</i> (JAMA, 2016) for a concise review of the effectiveness of ADHD medications and psychosocial interventions in this age group.
<p>Clinicians and/or staff instruct rather than confer with the adolescent when making treatment recommendations.</p>	<ul style="list-style-type: none"> Recognize that treatment success is dependent on patient and family preference, which needs to be considered. Adolescents may have a different preference than their parents, so clinicians may need to broker a treatment plan that is acceptable to all. Consider the timing of adolescents' transition to adult care and build into the treatment plan a roadmap to prepare them to assume responsibility for their own health care in adulthood. 	<ul style="list-style-type: none"> See the following for an example medication responsibility transition plan: Fogler JM, Burke D, Lynch J, Barbaresi WJ, Chan E. Topical review: transitional services for teens and young adults with attention-deficit hyperactivity disorder: a process map and proposed model to overcoming barriers to care. <i>J Pediatr Psychol</i>. 2017;42(10):1108-1113. Available at: https://academic.oup.com/jpepsy/article/42/10/1108/4057690. Accessed September 1, 2019
<p>Gap: Written ADHD care plan not informed by recommendations obtained from the patient/family and school (for school-aged children)</p>		

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Potential Barriers	Suggested Ideas for Change	Still Not Seeing Results?
Clinicians and/or staff do not recognize ADHD as a chronic condition and do not consider these patients as children and youth with special health care needs (CYSHCN).	<ul style="list-style-type: none"> Review the AAP 2019 ADHD Guideline and supplemental documents, specifically the following Key Action Statement (KAS): <p>KAS 4. ADHD is a chronic condition; therefore, the primary care clinician should manage children and adolescents with ADHD in the same manner that they would children and youth with special health care needs, following the principles of the chronic care model and the medical home.</p> <p>This recommendation is based on the evidence that, for many individuals, ADHD causes symptoms and dysfunction over long periods of time, even into adulthood. In addition, the medical home model has been accepted as the preferred standard of care for children with chronic conditions.</p> 	<ul style="list-style-type: none"> Review information on the CHADD Web site and a subscription to ADDitude magazine (associated fees may apply for some materials) as previously described in this grid.
Clinicians and/or staff are not familiar with the medical home model.	<ul style="list-style-type: none"> Review resources on the medical home model such as the following: <ul style="list-style-type: none"> ✓ <i>The Building Your Medical Home Toolkit</i> ✓ <i>Addressing Mental Health Concerns in Primary Care: A Clinician’s Toolkit. Care</i> ✓ Medical home information in the AAP’s <i>Bright Futures Guidelines</i>, 4th Edition ✓ <i>AAP Developmental and Behavioral Pediatrics</i>, 2nd Edition Be aware that PCCs who provide effective medical homes identify family strengths and recognize the importance of families in the care team. 	<ul style="list-style-type: none"> Review and share with staff the infographic, Back to Basics: Tips to Understand and Implement the Medical Home Model from the National Resource Center for Patient/Family-Centered Home, which explains the medical home model.
The practice does not have a care plan for CYSHCN with ADHD and/or the electronic health record (EHR) does not have ADHD care integrated into the system.	<ul style="list-style-type: none"> Develop a care plan for CYSHCN in your practice that, for patients with ADHD, also outlines the therapeutic goals and actions to help control ADHD symptoms, including evidence-based behavioral/training interventions, FDA-approved medications for ADHD, school services and classroom interventions, and patient/family education. See the example ADHD care plan with Action Plan. Review the importance of a shared plan of care for CYSHCN requiring multiple services and supports to facilitate key functions of the medical home model, including, but not limited to, comprehensive care coordination, communication, and patient- and family-centered care at https://medicalhomeinfo.aap.org/tools-resources/Pages/Shared-Plan-of-Care.aspx. Review the report, McAllister JW, Achieving a Shared Plan of Care with Children and Youth with Special Health Care Needs. Lucile Packard Foundation for Children’s Health; 2014. 	<ul style="list-style-type: none"> Identify a champion within the practice to lead clinical and operational improvements in ADHD care. The champion can lead efforts of developing an ADHD care plan suitable for your practice. Update system-based procedures to adhere to ADHD care planning.
Clinicians and/or staff may not recognize the importance of collaborating with the	<ul style="list-style-type: none"> Establish relationships with schools and other programs to facilitate communication and establish clear expectations when collaborating on care for a child with ADHD. Form partnerships with parents and teachers for effective 	<ul style="list-style-type: none"> Be aware that children with ADHD often act immaturely and have difficulty controlling their

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Potential Barriers	Suggested Ideas for Change	Still Not Seeing Results?
family, school, and child to identify target goals.	<p>behavior management in the classroom. Help them understand the importance of focusing behavioral intervention strategies on praise rather than on punishment. The ADHD Toolkit resource, How to Establish a School Report Card, can help with this.</p> <ul style="list-style-type: none"> Recognize that treatment success is dependent on patient and family preference, which needs to be considered. Parents and adolescents working together can develop behavioral contracts and improve parent-adolescent communication and problem solving. It is also important to collaborate with the patient, family, and school to identify target goals. 	<p>impulsiveness and hyperactivity. They may have problems forming friendships and/or difficulty thinking through the social consequences of their actions.</p>
There is a lack of bidirectional communication between the primary care practice and the school.	<ul style="list-style-type: none"> Establish relationships with school nurses and appropriate school personnel as well as other associations in your community. Be aware of regulations concerning privacy laws: Family Educational Rights and Privacy Act (FERPA) and the Health Insurance Portability and Accountability Act of 1996 (HIPAA) regulations regarding student health records. (See the Confidentiality Laws Tip Sheet from Healthy Foster Care America for more information.) Review AAP News article, Children with special needs: breaking barriers to improve communication between primary and specialty care. Consider alternative methods for collecting information: by mail, telephone, in person, or via secure fax/e-mail or patient portal Web site. Adjust the office communication flow to support bidirectional communication with ADHD care team members. Share strategies and resources with teachers to equip them to deal effectively with students with ADHD, such as those found on the US Department of Education Web page, Teaching Children With Attention Deficit Hyperactivity Disorder: Instructional Strategies and Practices. 	<ul style="list-style-type: none"> Use online ADHD information exchange sources such as myADHD.com, mehealth.com, or CHADIS.com to exchange information.
Gap: Written ADHD care plan not reviewed and/or updated at every visit in which ADHD is discussed		
Clinicians and/or staff do not recognize the importance of periodically updating the care plan.	<ul style="list-style-type: none"> Review guidelines on the medical home model listed earlier in this grid, which stresses the importance of coordinated care for CYSHCNs. Create a population-based ADHD registry to track and monitor patient care. Review the following, which stress the importance of coordinated care: <ul style="list-style-type: none"> ✓ Building Your Medical Home: An Introduction to Pediatric Primary Care Transformation, an online resource guide, features helpful resources that support coordination of care across settings and providers, such as a New 	<ul style="list-style-type: none"> Consider discussing ways to adjust the EHR to prompt for care plan activities with information technology (IT) staff. Review with staff the importance of a shared plan of care for CYSHCN and key functions of the medical home model, as previously described in this grid.

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Potential Barriers	Suggested Ideas for Change	Still Not Seeing Results?
	Patient Referral/Consultation Information Form and Co-Management Letter and Agreement customizable form. ✓ American College of Physicians High-Value Care Coordination Project , a toolkit was created to facilitate more effective, high-value, patient-centered care coordination between primary care and subspecialty/specialty practices.	

Appendix

Family

Today, the term family is used to describe a unit that may comprise a married nuclear family; cohabiting family; single-parent, blended, or stepfamily; grandparent-headed household; single-gender parents; commuter or long-distance family; foster family; or a larger community family with several individuals who share the caregiving and parenting responsibilities. Each of these family constellations presents unique challenges to child-rearing for parents as well as children.

Reference: Hagan JF, Shaw JS, Duncan PM, eds. *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents*. 4th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2017

Conditions That Mimic or Are Comorbid With ADHD

A 2007 study by the National Survey of Children’s Health (NSCH) found that most children with ADHD (67%) have at least 1 other comorbid condition, and 18% have 3 or more comorbidities such as mental health disorders and/or learning disorders.¹ These comorbidities increase the complexity of the diagnostic and treatment process.

It is important that the PCC determine if symptoms are due to alternative causes before confirming the diagnosis of ADHD. It is also necessary to determine if the patient has an additional condition or conditions. If other conditions are suspected or detected during the diagnostic evaluation, an assessment of the urgency of these conditions and their impact on the ADHD treatment plan should be made.

Examples of conditions that mimic, are comorbid with ADHD, or contribute to the cause of ADHD include but are not limited to the following:

Type	Examples
Medical	Vision/hearing, anemia, medicine side effects, thyroid disorders, seizures, sleep apnea, and restless leg syndrome are examples of medical conditions that should be treated first to see if the treatment addresses the ADHD symptoms. Sequelae of central nervous system hypoxia, prematurity, intrauterine growth restriction (IUGR), and small for gestational age (SGA) syndromes, medical syndromes (Fetal Alcohol Spectrum Disorder [FASD], Fragile X, etc), traumatic brain injury, central nervous system infections, and near-drowning are examples of medical issues that should be treated along with ADHD.
Developmental	Autism, speech/language and specific learning disorders, intellectual deficits, tic disorders, developmental coordination disorders, motor delays, sensory processing disorders
Behavioral/emotional	Anxiety, depression, oppositional defiant disorder, conduct disorder, bipolar disorder, reactive attachment disorder, disruptive mood dysregulation disorder, post-traumatic stress disorder, obsessive-compulsive disorder
Family/environmental	Family separation, divorce, death, adverse events, exposure to violence, physical abuse/neglect, sexual abuse

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	In the school environment: bullying, poor school or teacher fit, giftedness
Substance use	Alcohol, marijuana, and other illicit substances or misuse of prescription medication

Of Special Importance

- Urgent conditions that put the patient’s health at risk (eg, depression with suicidal ideation, high-risk behaviors, and substance use) need to be addressed immediately with providers capable of handling them. Frequent, ongoing assessment is essential, and the impact of such conditions on the ADHD treatment plan should be considered.
- If symptoms arise suddenly without prior history, it is important to consider other conditions, including but not limited to the following: mood or anxiety disorders; substance use; head trauma; physical or sexual abuse; neurodegenerative disorders; sleep disorders (including sleep apnea); or a major psychological stress in the family, community (eg violence), or school (eg bullying).
- The PCC may evaluate and treat the comorbid disorder if it is within the PCC’s expertise. If the advice of another subspecialist is required, the PCC should carefully consider when to initiate treatment for ADHD. In some cases, it may be advisable to delay the start of medication until the full care team is established/consulted.
- The evaluation, diagnosis, and treatment of ADHD and its comorbid conditions are a continuous process. PCCs should be aware of the need for reassessment at every visit.

¹Larson K, Russ SA, Kahn RS, Halfon H. [Patterns of comorbidity, functioning and service use for US children with ADHD, 2007](#). *Pediatrics*. 2011;127(3): 462-470

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Bidirectional Communication

ADHD—Diagnose, Treat, and Monitor Bidirectional Communication



The goal of **bidirectional communication** in ADHD care is to encourage cooperation in identifying target behaviors; measuring the effectiveness of pharmacologic and nonpharmacologic treatment plans; and creating relevant and feasible accommodations to improve learning and quality of life at home, school, and other important locations.

Successful teams work together to identify goals and oversee different interventions. They communicate regularly and with any significant change in either therapy or in the child or adolescent's behaviors at home or school. Timely flow of information allows for treatment plan adjustments that are responsive to all aspects in the life of the child or adolescent.

Abbreviations:
CYSHCN, Children and Youth with Special Health Care Needs
PCC, Primary Care Clinician
ADHD, Attention-Deficit/Hyperactivity Disorder

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ADHD Educational Topics/Resources for Patients/Families

Educational Topic	Resources
<ul style="list-style-type: none"> ADHD causes and symptoms Diagnostic evaluation process Conditions that mimic or are comorbid with ADHD Treatment options including potential benefits and adverse effects Long-term sequelae 	<ul style="list-style-type: none"> ADHD: What Every Parent Needs to Know, 3rd Edition, AAP Diagnosing ADHD in Children: Guidelines & Information for Parents at www.healthychildren.org The CHADD Information and Resource Guide to ADHD, 2nd Ed., available at: www.chadd.org (for parents of children with ADHD) ADHD Shared Decision-Making Tools available at: https://www.cincinnatichildrens.org/service/j/anderson-center/evidence-based-care/decision-aids <p>Web sites with information for families on these and other ADHD topics:</p> <ul style="list-style-type: none"> www.aap.org—Search ADHD www.chadd.org—See for Parents & Caregivers tab www.understood.org—See Your Parent Toolkit tab www.sandrarium.com—See Educational Teaching Methods for ADHD Children www.mayoclinic.org—Search ADHD
<ul style="list-style-type: none"> Helping the child or adolescent understand ADHD 	<p>Books and other resources that can be read by or to children to help them understand ADHD:</p> <ul style="list-style-type: none"> <i>Eukee the Jumpy Jumpy Elephant</i> (ages 5–7 years) <i>Slam Dunk: A Young Boy's Struggle With Attention Deficit Disorder</i> (ages 8–12 years) <i>Some Kids Just Can't Sit Still!</i> (ages 4–9 years) <i>Making the Grade</i> (ages 9–14 years) www.ADDitudemag.com—Search for teens Video: “How to ADHD,” available at: https://www.youtube.com/channel/UC-nPM1_kSZf91ZGkcgY_95Q
<ul style="list-style-type: none"> Parenting the child with ADHD 	<ul style="list-style-type: none"> Triple P (Positive Parenting Program) at www.triplep.net Parent-Child Interaction Therapy* at www.pcit.org The Incredible Years Parenting Program at www.incredibleyears.com
<ul style="list-style-type: none"> Specialized educational services, including how parents can partner with schools to develop IEP/504 	<ul style="list-style-type: none"> www.additudemag.com—search for IEP 504 www.understood.org—search for IEP 504 ADHD Parent-Pediatrician Letters to the School; A Family-Centered Medical Home Tool to Improve Collaboration, Grades, and Behavior, available at: https://doi.org/10.1177/2333794X15574284

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<ul style="list-style-type: none"> • Anticipatory guidance 	<p>Performing Preventative Services: A Bright Futures Handbook (See section on Anticipatory Guidance)</p>
<ul style="list-style-type: none"> • Transition of adolescents towards self-management • Transition to adult care 	<ul style="list-style-type: none"> • Nadeau K. <i>Survival Guide for College Students With ADHD or LD</i>. 2nd Ed. 2010 • www.chadd.org—Search for transition to adult and self management • www.ADDitudemag.com—search for teens
<ul style="list-style-type: none"> • Advocacy 	<ul style="list-style-type: none"> • Matthew Cohen. <i>A Guide to Special Education Advocacy</i>. 2009 • Peter Jensen. <i>Making the System Work for Your Child with ADHD</i>. 2004. Guilford Press • Robert Brooks and Sam Goldstein. <i>Raising Resilient Children</i>. McGraw Hill • Russell Barkley. <i>Taking Charge of ADHD</i>. 3rd Ed. 2013 • Video: “Advocating for Your Child”: https://www.understood.org/en/school-learning/partnering-with-childs-school/working-with-childs-teacher/10-ways-to-be-an-effective-advocate-for-your-child-at-school

Tips for Developing Effective ADHD Education in Your Practice

<p>6. Recognize that education is an ongoing process that can, and should be, provided over time. Consider setting up a series of educational topics that are delivered on a set schedule to keep all patients/families in the loop. Educational topics may need to be repeated and tailored to the changing needs of the child as he or she enters a new stage of development (eg, adolescence) or school setting (eg, middle school, high school). Consider the list of ADHD Educational Topics/Resources for Patients/Families provided next.</p>
<p>7. Provide education in a variety of formats, including discussion, print, video, or Web-based. Group sessions and guest speakers can also be effective educational delivery options.</p>
<p>8. Ensure that educational messages meet the cultural, language, and literacy needs of your patient population.</p>
<p>9. Continue to provide education at all follow-up visits. Allow families to give input regarding areas where they need more information. Adjust over time to address the specific needs of adolescents as they develop more autonomy and independence.</p>
<p>10. Review educational resources regularly to ensure they are current and relevant.</p>

Recommendations to Address Inadequate Payment for Needed Services and Payor Coverage Limitations for Needed Medications

DSM-5 Criteria

The Diagnostic and Statistical Manual of Mental Disorders, 5th Edition handbook, or DSM-5*, is the authoritative guide to the diagnosis of mental disorders, including ADHD, in the United States and other parts of the world. It defines the following dimensions, or presentations of ADHD:

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5. ADHD primarily of the **Inattentive** presentation
6. ADHD primarily of the **Hyperactive-Impulsive** presentation
7. ADHD **Combined** presentation
8. ADHD **Other Specified, and Unspecified** ADHD

The diagnosis of ADHD must establish that 6 or more (5 or more if the adolescent is aged 17 or older) core symptoms are present in either or both the Inattention Dimension and/or the Hyperactivity-Impulsivity Dimension presentations and occur inappropriately often. The core symptoms and dimensions are presented in the table below. Note that symptoms may present differently at different ages.

Table 1. Core Symptoms of ADHD Adapted from the DSM-5		
Inattention Dimension	Hyperactivity-Impulsivity Dimension	
	Hyperactivity	Impulsivity
<ul style="list-style-type: none"> • Careless mistakes • Difficulty sustaining attention • Seems not to listen • Fails to finish tasks • Difficulty organizing • Avoids tasks requiring sustained attention • Loses things • Easily distracted • Forgetful 	<ul style="list-style-type: none"> • Fidgeting • Unable to stay seated • Moving excessively (restless) • Difficulty engaging in leisure activities quietly • “On the go” • Talking excessively 	<ul style="list-style-type: none"> • Blurting answers before questions completed • Difficulty awaiting turn • Interrupting/intruding upon others

Source: ADHD PoC Algorithm, taken from the [AAP 2019 ADHD Guideline: Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder \(ADHD\) in Children and Adolescents](#), as adapted from the *DSM 5 Diagnostic and Statistical Manual of Mental Disorders, 5th Edition*.

Following are the DSM-5 criteria by dimension. Behaviors must persist 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:

- **ADHD/I:** Having at least 6 of 9 *Inattention* behaviors, and less than 6 *Hyperactive-Impulsive* behaviors.
- **ADHD/HI:** Having at least 6 of 9 *Hyperactive-Impulsive* behaviors, and less than 6 *Inattention* behaviors.
- **ADHD/C:** Having at least 6 of 9 behaviors in both the *Inattention* and *Hyperactive-Impulsive* dimensions.
- **ADHD Other Specified, and Unspecified ADHD:** These categories are meant for children who meet many of the criteria for ADHD but not the full criteria, and who have significant impairment. ADHD Other Specified is used if the PCC specifies those criteria that have not been met; Unspecified ADHD is used if the PCC does not specify these criteria.

Following is a recap of the conditions that must be met:

- Symptoms occur in 2 or more settings, such as home, school, and social situations, and cause some impairment.
- In a child 4 to under 17 years of age, 6 or more symptoms in at least 1 dimension are identified.
- In a child aged 17 years and older, 5 or more symptoms in at least 1 dimension are identified.
- Symptoms significantly impair the child's ability to function in some of the activities of daily life, such as schoolwork, relationships with family, relationships with friends, or the ability to function in groups such as sports teams.

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- Symptoms start before the child reaches 12 years of age. However, these may not be recognized as ADHD symptoms until a child is older.
- Symptoms have continued for more than 6 months.

Note: Because symptoms can change over time, the presentation may change over time as well.

Reference: [AAP 2019 ADHD Guideline](#): *Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder (ADHD) in Children and Adolescents*, as adapted from **DSM-5 Diagnostic and Statistical Manual of Mental Disorders, 5th Edition*.

**Diagnostic and Statistical Manual of Mental Disorders: DSM-5*. 5th ed. Washington, DC: American Psychiatric Association; 2013. Available at: <https://dsm.psychiatryonline.org/doi/10.1176/appi.books.9780890425596.Introduction>. Accessed August 29, 2019 (Login and subscription required.)

Evidence-based Behavioral/Training Interventions

Evidence-based behavioral or training interventions can help children and adolescents with ADHD manage their symptoms of hyperactivity, impulsiveness, and inattention by teaching skills to help control symptoms. Strategies can include reward and consequence systems, self-monitoring, modeling/role playing, self-instruction, generation of alternatives, and reinforcement. Strategies may focus on staying organized and focused; other strategies may focus on reducing disruptive behaviors that can get the child into trouble at school, make it difficult to form friendships, or disrupt family life.

Ongoing adherence to psychosocial treatments is a key contributor to its beneficial effects. Some children and adolescents, especially those with severe ADHD symptoms, benefit from medication along with behavioral or training interventions; the decision about using 1 or both types of therapies, however, depends on acceptability and feasibility to the family. It is important to note that different behavioral/training interventions may be more suitable and effective in some age groups than in others. Also, the presence of comorbid conditions may affect the type of intervention required.

Behavioral therapy can include training for the child, family, or a combination. Teachers can also use behavioral techniques and enlist the help of the school psychologist to provide strategies for reducing problem behaviors in the classroom. Some techniques found to be helpful to parents and teachers include:

- Timeout
- Reward/consequences
- Token economies
- Daily behavior report card
- 1-2-3 Magic Parenting: Positive Parenting

Following is a summary of age-specific treatment recommendations concerning both behavioral/training interventions and medication from the AAP 2019 ADHD Guideline.

Age of Patient	Summary of AAP 2019 ADHD Guideline-based Treatment Recommendation
4–5 years of age	Evidence-based parent training in behavior management (PTBM) and/or behavioral classroom interventions as first-line treatment (FDA-approved medications for ADHD may be indicated in certain circumstances)

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6–11 years of age	FDA-approved medications for ADHD and optimally also have both PTBM and behavioral classroom interventions recommended
12–18 years of age	FDA-approved medications for ADHD with the adolescent’s assent and optimally also have evidence-based training interventions and/or behavioral interventions recommended
Note: For school-aged children and adolescents, educational interventions and individualized instructional supports in the school setting including school environment, class placement, instructional placement, and behavioral supports are a necessary part of the treatment plan and often include an IEP or a 504 plan.	

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Therapist Search Checklist

ADHD - Diagnose, Treat, and Monitor Therapy Search Checklist



Using a planned, organized approach to locate a therapist may increase your chances of finding one sooner!

- Do you have copies of your child's most recent clinical reports or developmental evaluations with treatment recommendations to share with potential therapists?
- Are you asking multiple referral sources to help you compile a list of therapist names to contact, for example:
 - Your child's pediatrician
 - Special Education (SPED) Coordinator
 - School psychologist
 - Local Special Education Parent Advisory Council (SPED-PAC) or parent support group?
 - Case manager, service coordinator, family support coordinator from a social service agency funded by the Department of Developmental Services (DDS) or the Department of Mental Health
 - Trusted family members or friends
 - A carefully selected therapy referral service
- Did you call your insurance company to review your mental health coverage or request additional referrals for therapists if needed?
- Did you contact a minimum of 3–5 potential therapy providers?
- Are you using a set list of questions to ask each therapy practice when you call?
- Are you using a notebook to keep a running log of the therapists you contact and a calendar to remind yourself which therapists you may want to follow up with in the future?
- Are you being flexible with your search criteria for finding a therapist, for example, flexibility with regard to:
 - Scheduling appointment times
 - Office locations
 - Pay arrangements
- Have you considered using additional methods to help expand your therapy search, for example:
 - Online therapy directories
 - A professional therapy referral/matching service such as William James Interface (<https://interface.williamjames.edu/>)
- Are you asking for help if the search process makes you feel overwhelmed or you're unsure of how to begin/continue the search? Perhaps a social worker or trusted family member can help you make phone calls or reach out to providers on your behalf.



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FDA-approved Medications


The US Food and Drug Administration (FDA) approves product labeling for prescription drugs for the purpose of ensuring patient care and safety and educating providers. It is important that PCCs:

- Recognize the FDA-approved indications for the use of stimulant and related medications in pediatric patients.
- Follow AAP-approved treatment guidelines for the management of ADHD in pediatric patients.
- Are familiar with benefits and adverse reactions and risks of using stimulant and related medications in pediatric patients and help parents/caregivers/patients (as age appropriate) understand them.

A list of FDA-approved medications for ADHD is available at www.ADHDMedicationGuide.com. Accept the copyright agreement to open the pdf of the ADHD Medication Guide. Shared Decision Making tools to help caregivers understand the pros and cons of psychosocial treatments as well as the various FDA-approved ADHD medication options are available at: <https://www.cincinnatichildrens.org/service/j/anderson-center/evidence-based-care/decision-aids>.

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Confidentiality Laws Tip Sheet

 **Healthy Foster Care America**

CONFIDENTIALITY LAWS TIP SHEET

Numerous federal and state laws protect the privacy of health care information. In particular, at least 4 types of laws affect the ability of pediatricians and mental health professionals (eg, psychiatrists and psychologists) to share information about a patient in their care.

These laws are:

1. Federal medical privacy rules issued under the federal Health Insurance Portability and Accountability Act (HIPAA)
2. State privacy laws
3. State minor consent laws
4. Family Educational Rights and Privacy Act (FERPA)

In addition, there are specific federal confidentiality rules that govern facilities deemed to be federal alcohol and drug abuse treatment programs.

Confidentiality statutes are complex, subject to federal and/or state oversight and jurisdiction, and typically vary by state depending on the law. It is beyond the scope of this summary to provide an in-depth analysis of these statutes. However, general information, strategies for obtaining state-specific information about the laws, and resources for further information are outlined below.

Health Insurance Portability and Accountability Act Privacy Rules

In 1996, Congress passed HIPAA to establish national standards to protect the privacy of health care data, and to promote more standardization and efficiency in the health care industry. The HIPAA Privacy Rules, which are enforced by the US Department of Health and Human Services, Office for Civil Rights, took effect on April 14, 2003, and represent a uniform, federal floor of privacy protections for consumers.¹

The HIPAA Privacy Rules limit the ways that health plans, pharmacies, hospitals, doctors, and other health care providers can use patients' medical information (eg, information that is in medical records, communicated orally, or on computers). They are designed to govern disclosure of patient protected health information while protecting patient rights. With regard to sharing of health information between providers, the HIPAA Privacy Rule permits a health care provider to disclose protected health information about an individual, without his or her authorization, to another health care provider for that provider's treatment of the individual. Indeed, consulting with another health care provider about a patient is within the HIPAA Privacy Rule's definition of treatment and, therefore, is permissible.²

State Privacy Laws


In addition to these federal rules, many states have enacted state privacy laws (informed consent laws) that place further protections on health privacy. The HIPAA standards do not affect state privacy laws that may be more restrictive regarding privacy protections. Any state law providing additional protections would continue to apply.²

Health Insurance Portability and Accountability Act and Minor Consent

While the HIPAA rules permit sharing information between providers, there are unique considerations for minors who have legally consented to care. In general, HIPAA allows a parent to have access to the medical records for his or her minor child, when the access is consistent with state or other law.

Three exceptions to the HIPAA Privacy Rule are as follows:

1. When a minor has consented for the care and the consent of the parent is not required by state or other applicable law
2. When a minor obtains care at the direction of a court
3. When a parent agrees that a health care provider and minor may have a confidential relationship²

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Courtesy of AAP Healthy Foster Care America. Confidential Laws Tip Sheet. AAP Web site. https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/healthy-foster-care-america/Documents/Confidentiality_Laws.pdf. Accessed August 31, 2019

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Recommendations to Address Limited Access to Care Due to Inadequate Developmental-Behavioral and Mental Health Care Training During Pediatric Residency, and Shortages of Consultant Specialists and Referral Resources

Policy-Oriented Strategies for Change

- Promote changes in pediatric and family medicine residency curricula to devote more time to developmental, behavioral, learning, and mental health issues with focus on prevention, early detection, assessment, diagnosis, and treatment. Changes in the national and individual training program requirements and in funding of training should foster practitioners' understanding of the family perspective; promote communication skills, including motivational interviewing; and bolster understanding and readiness in the use of behavioral interventions and medication as treatment options for ADHD.
- Emphasize teaching and practice activities within general pediatric residencies and other clinical training, so pediatricians and other PCCs gain the skills and ability they need to function within a medical home setting.
- Support pediatric primary care mental health specialist (PMHS) certification for advanced practice registered nurses through the Pediatric Nursing Certification Board to provide advanced practice care to help meet evidence-based needs of children or adolescents with ADHD.
- Encourage the development and maintenance of affordable programs to provide CME and other alternative post-training learning opportunities on behavioral and developmental health, including ADHD. These opportunities will help stakeholders—including PCCs, mental health clinicians, and educators—become more comfortable in providing such services within the medical home and/or educational settings.
- Develop, implement, and support collaborative care models that facilitate PCCs' rapid access to behavioral and mental health expertise and consultation. Examples include integration (such as collaborative care or colocation); on-call consultation; and support teams such as the Massachusetts Child Psychiatry Access Program,¹³ the New York State Department of Mental Health's "Project Teach Initiative,"¹⁴ and Project ECHO (Extension for Community Healthcare Outcomes), a collaborative model of medical education and care management that can be targeted to pediatric mental health.¹⁵ In addition, federal funding had provided grants to 18 states to develop Child Psychiatry Access Programs through HRSA's Pediatric Mental Health Care Access Program.^{16,17} Promote incentives such as loan forgiveness to encourage medical students to enter the fields of child and adolescent psychiatry and developmental and behavioral pediatrics, particularly for those who are willing to practice in underserved communities.
- Expand post-training opportunities to include postpediatric portal programs, which provide alternative ways to increase number of child and adolescent psychiatrists.

Source: The AAP 2019 ADHD Guideline supplemental Systemic Barriers document, *Systematic Barriers to the Care of Children and Adolescents With ADHD Systematic Barriers to the Care of Children and Adolescents with ADHD*, taken from the [AAP 2019 ADHD Guideline: Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder \(ADHD\) in Children and Adolescents](#), as adapted from the *DSM 5 Diagnostic and Statistical Manual of Mental Disorders, 5th Edition*.

Abbreviation: CME – Continuing Medical Education credit
^{14,15,16,17} See the Systemic Barriers document for complete reference information.

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Example Substance Use Screening and Assessment Tool(s)

Following are the Screening to Brief Intervention (S2BI) and Car, Relax, Alone, Forget, Friends, Trouble (CRAFT) screening tools:

TABLE 3 S2BI Screen for Substance Use Risk Level

The following questions will ask about your use, if any, of alcohol, tobacco, and other drugs. Please answer every question by clicking on the box next to your choice.

In the past year, how many times have you used ...

Tobacco?

- Never
- Once or twice
- Monthly
- Weekly or more

Alcohol?

- Never
- Once or twice
- Monthly
- Weekly or more

Marijuana?

- Never
- Once or twice
- Monthly
- Weekly or more

STOP if answers to all previous questions are "never." Otherwise, continue with the following questions.

In the past year, how many times have you used...

Prescription drugs that were not prescribed for you (such as pain medication or Adderall)?

- Never
- Once or twice
- Monthly
- Weekly or more

Illegal drugs (such as cocaine or Ecstasy)?

- Never
- Once or twice
- Monthly
- Weekly or more

Inhalants (such as nitrous oxide)?

- Never
- Once or twice
- Monthly
- Weekly or more

Herbs or synthetic drugs (such as salvia, "K2," or bath salts)?

- Never
- Once or twice
- Monthly
- Weekly or more

Source: Levy SH, Williams JF; Committee on Substance Use and Prevention. Substance use screening, brief intervention, and referral to treatment. *Pediatrics*. 2016;138(1):e20161211. Available at: <https://doi.org/10.1542/peds.2016-1211>. Accessed August 29, 2019

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Box 1. The CRAFFT Screening Interview

Begin: "I'm going to ask you a few questions that I ask all my patients. Please be honest. I will keep your answers confidential."

Part A

During the PAST 12 MONTHS, did you:

	No	Yes
1. Drink any alcohol (more than a few sips)? (Do not count sips of alcohol taken during family or religious events.)	<input type="checkbox"/>	<input type="checkbox"/>
2. Smoke any marijuana or hashish?	<input type="checkbox"/>	<input type="checkbox"/>
3. Use <i>anything else</i> to get high? (“anything else” includes illegal drugs, over the counter and prescription drugs, and things that you sniff or “huff”)	<input type="checkbox"/>	<input type="checkbox"/>

For clinic use only: Did the patient answer “yes” to any questions in Part A?

No Yes
 ↓ ↓
Ask CAR question only, then stop Ask all 6 CRAFFT questions in Part B

Part B

	No	Yes
1. Have you ever ridden in a CAR driven by someone (including yourself) who was “high” or had been using alcohol or drugs?	<input type="checkbox"/>	<input type="checkbox"/>
2. Do you ever use alcohol or drugs to RELAX , feel better about yourself, or fit in?	<input type="checkbox"/>	<input type="checkbox"/>
3. Do you ever use alcohol or drugs while you are by yourself, or ALONE ?	<input type="checkbox"/>	<input type="checkbox"/>
4. Do you ever FORGET things you did while using alcohol or drugs?	<input type="checkbox"/>	<input type="checkbox"/>
5. Do your FAMILY or FRIENDS ever tell you that you should cut down on your drinking or drug use?	<input type="checkbox"/>	<input type="checkbox"/>
6. Have you ever gotten into TROUBLE while you were using alcohol or drugs?	<input type="checkbox"/>	<input type="checkbox"/>

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Source: Knight J, Roberts T, Gabrielli, Hook SV. [Adolescent alcohol and substance use and abuse](#). In: *Performing Preventative Services: A Bright Futures Handbook*. Elk Grove Village, IL: American Academy of Pediatrics; 2017:3

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Potential Barriers and Suggested Ideas for Change

Key Activity: Monitor		
Rationale: Children and adolescents with ADHD require close monitoring during treatment to assure that there is improvement in their symptoms, leading to decreased impairment. Patients with ADHD are at higher risk to develop comorbid conditions as they enter adolescence, so ongoing assessment for such conditions is necessary during treatment for ADHD care. Treatment may need to be adjusted as the child or adolescent's needs, symptoms, and impairment change over time.		
Potential Barriers	Suggested Ideas for Change	Still Not Seeing Results?
For patients on ADHD medication Gap: Attempt to contact the patient/family within 1–2 weeks of medication initiation not made. (Note: Standard of care for ADHD <u>stimulant</u> medication is to make contact within 1 week. Nonstimulant medications take more time to show maximal benefit. Continuous weekly contact during the titration process is optimal to determine the proper dose.)		
The recommendation to contact the patient/family within 1–2 weeks of medication initiation is unclear or there are no systems in place to ensure contact is made.	<ul style="list-style-type: none"> Recognize the PCC's responsibilities to monitor ADHD medication, as described in Key Action Statement (KAS) 6 of the AAP 2019 ADHD Guideline and supplemental documents, ADHD PoC Algorithm, and ADHD Systems Barriers document: KAS 6. The primary care clinician should titrate doses of medication for ADHD to achieve maximum benefit with tolerable side effects. Explain the titration process to the patient/family and equip them to help in the process by doing the following: <ul style="list-style-type: none"> ✓ Explain that the goal is to find the best dose of medicine to control the child's symptoms of ADHD with tolerable side effects. Help the patient/family realize that it can take several weeks to get the correct medication dose and that frequent contact and follow-up are needed to assure the medicine is working, the dose is correct, and any side effects experienced by the patient are acceptable to the patient/family and the medical team. (Initially, it is important to prepare the family for weekly contact.) ✓ Ask the family to call the office right away if medication is not covered by insurance. ✓ Develop a system to stay in contact with the family after initiating medication to establish a way to communicate efficiently if there is a concern or worry about medication side effects. (Some common examples include decreased appetite or weight loss, trouble sleeping, stomachache, headache, dizziness, and personality changes.) Provide and explain the use of DSM-based rating scales from home, school, or other major settings for follow-up purposes. Rating scale information and feedback from parents/teachers regarding behavioral changes and side effects 	<ul style="list-style-type: none"> Review tools from the AAP ADHD Toolkit available for viewing in this EQIPP: <ul style="list-style-type: none"> ✓ Monitoring Children and Adolescents with ADHD: A Strategic Plan provides general principles for effective monitoring of ADHD. ✓ Sample Initial Titration Record helps keep track of medication dosage and engage the family in the titration process. ✓ Next Steps in Medication Management: What Clinicians Should Know About Titration, Managing Side Effects, and Combining Medications provides valuable clinical information on ADHD medication management. Identify a champion within the practice to lead clinical and operational improvements in ADHD care.

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Potential Barriers	Suggested Ideas for Change	Still Not Seeing Results?
	<p>informs the primary care clinician (PCC) about adjusting/maintaining the medication dose according to the degree of improvement or ongoing impairment. (Include the use of school report cards and progress reports to help monitor for improvement with medication in the discussion, as these reports often provide valuable information about symptoms and impairment.)</p> <ul style="list-style-type: none"> • Set and clarify clinician and staff responsibilities within the practice and establish processes for the timely review of patients who have ADHD medication prescribed. Use clinical judgement and the following recommendations to review the patient’s response to medication therapy, at a minimum: <ul style="list-style-type: none"> ✓ Develop a care plan for child or youth with special health care needs (CYSHCN) that, for patients with ADHD, also outlines the therapeutic goals and actions to help control ADHD symptoms, including evidence-based behavioral/training/interventions, medication, school services/accommodations, and patient/family education. See the example ADHD care plan with Action Plan. ✓ Contact the patient/family within 1–2 weeks of medication initiation to assess the medication’s effectiveness and the patient’s tolerance. (Note: Standard of care for ADHD stimulant medication is to make contact within 1 week. Non-stimulant medications take more time to show maximal benefit. Ongoing, weekly contact during the titration process is essential to determine the proper dose. See the checklist of medication follow-up questions to ask the family in the Appendix.) ✓ Use information obtained from DSM-based ADHD rating scales from 2 or more major settings (eg, home and school) as well as information from parents/teachers about behavior changes or side effects to maintain/adjust medication dosage. ✓ Put system reminders in place to ensure medication checks are completed on a timely basis. As described later in this grid, schedule an in-person follow-up visit within 30 days. Understand the need for regular and ongoing follow-up. A minimum of 2 in-person follow-up visits should be completed within 12 months once medication dose and symptoms have stabilized. 	<ul style="list-style-type: none"> • Consider the addition of reminder prompts in the EHR to trigger medication checks. Consult with Information Technology (IT) staff to determine feasibility. • If practices have difficulty contacting families within 1–2 weeks of medication initiation via telephone, contact can also occur via electronic communication systems (eg, MyChart.com or online ADHD tracking and communication systems such as mehealth.com).
<p>For patients on ADHD medication</p> <p>Gap: Follow-up visit within 30 days of initiating ADHD medication not completed</p>		
<p>A follow-up visit does not occur within 30 days of medication initiation—because it is not scheduled, the patient/family misses the</p>	<ul style="list-style-type: none"> • Set and clarify clinician and staff responsibilities to titrate and monitor medication, as described in Row 1 of this grid. A follow-up visit should be completed within 30 days. 	<ul style="list-style-type: none"> • Provide education to staff and families about the titration process, as described in Row 1 of this grid.

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Potential Barriers	Suggested Ideas for Change	Still Not Seeing Results?
<p>scheduled appointment, or there is a lack of knowledge about the importance of follow up.</p>	<ul style="list-style-type: none"> • Ensure that all parties involved—patient/family and staff recognize that ADHD treatment is multimodal and requires ongoing assessment. • Have a staff meeting to discuss obstacles for access to care, missed appointments, and lack of follow-up visits. Brainstorm ways to overcome these obstacles and implement workable ideas. Here are some tips to improve access to care: <ul style="list-style-type: none"> ✓ Make the follow-up appointment before the patient leaves the office. ✓ Provide flexible appointment times. ✓ Consider whether transportation is an issue for the family and whether a government-sponsored transportation voucher or information on public transit is needed. Involve social services as needed. ✓ Consider whether the parent needs an ADHD referral if forgetfulness and lack of organization are the cause of missed appointments. ✓ Ask what appointment time, reminder method, or other access-to-care strategy works best for the family. 	<ul style="list-style-type: none"> • Brainstorm with staff and IT personnel to establish a workable reminder system to trigger medication checks and put follow-up processes in place. Online ADHD information exchange sources such as mehealth.com, trivoxhealth.com, myADHD.com, and CHADIS can be used to automate sending of ADHD rating scales to caregivers for completion at customizable intervals. • Develop good refill habits with patients/families by setting clear refill authorization rules that are consistently enforced by clinicians and staff. (For example, all ADHD medication refills require a mandatory visit at least every 3– 6 months once symptoms have improved and medication dose is stabilized.)
<p>For patients on ADHD medication</p> <p>Gap: Medication dosage not maintained/adjusted using information obtained from DSM-based ADHD rating scales from 2 or more major settings (eg, home and school)</p>		
<p>Caregivers do not understand the importance of ADHD medication follow-up using information obtained from DSM-based ADHD rating scales from 2 or more major settings.</p>	<ul style="list-style-type: none"> • Provide education to help caregivers understand that ADHD symptoms and impairments are exhibited in multiple settings. Help them recognize that gathering information from adults from 2 major settings, who regularly interact with the patient, provides necessary information for the diagnostic evaluation of ADHD and its ongoing treatment. Rating scale information and feedback from parents/teachers regarding behavioral changes and side effects informs the PCC about adjusting/maintaining the medication dose according to the degree of improvement or ongoing impairment. • Ensure that all caregivers recognize the importance of titrating medication. Specifically, clinicians and staff should be familiar with KAS 6 of the AAP 2019 ADHD Guideline, as described in Row 1 of this grid. 	<ul style="list-style-type: none"> • Brainstorm with staff and IT personnel to establish a workable reminder system to trigger the return of rating scales and put follow-up processes in place. • Enlist the family’s help to select the teachers/classes that will yield the most helpful information. If the family is meeting barriers with getting forms turned in, consider contacting guidance counselors or other school professionals. (This is especially important for patients in

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Potential Barriers	Suggested Ideas for Change	Still Not Seeing Results?
	<ul style="list-style-type: none"> Set expectations about the need for continuous monitoring of ADHD symptoms and response to treatment in the initial ADHD information package provided to home, school, or other major setting. Explain the benefits and risks of ADHD medication, as appropriate. Discuss target goals with family and teachers in context of needing information again. Reinforce the need for ongoing assessment to monitor for improvement. Share strategies and resources with teachers to equip them to deal effectively with students with ADHD, such as those found on the U.S. Department of Education Web page, Teaching Children With Attention Deficit Hyperactivity Disorder: Instructional Strategies and Practices. 	<p>high school, as teachers interact with many students daily.)</p> <ul style="list-style-type: none"> Request the special education teacher to coordinate information if the patient has an individualized education plan (IEP). Request weekly progress reports as part of the 504 Plan if the student has one.
<p>Rating scales are provided for multiple settings to evaluate treatment response but are not returned.</p>	<ul style="list-style-type: none"> Consider alternative methods for collecting information: by mail, telephone, in person, or via secure fax/e-mail or patient portal Web site. Consider the use of specialized ADHD Parent-Pediatrician letters to the school, as described in the article, ADHD Parent–Pediatrician Letters to the School: A Family-centered Medical Home Tool to Improve Collaboration, Grades, and Behavior, available at: https://journals.sagepub.com/doi/10.1177/2333794X15574284. The purpose of the letters is to improve interaction between the PCC and the school, to authorize the school to provide information, and to establish clear expectations regarding the return of rating scales. Be aware of regulations concerning privacy laws in the Family Educational Rights and Privacy Act (FERPA) and the Health Insurance Portability and Accountability Act of 1996 (HIPAA) regulations regarding student health records. (See https://www.hhs.gov/hipaa/for-professionals/faq/ferpa-and-hipaa/index.html for more information.) Request that families return standardized questionnaires prior to their appointment, ideally 1 week before the appointment. See Recommendations to Address Challenges in Practice Organization, an excerpt from the ADHD Systems Barriers document. 	<ul style="list-style-type: none"> Reach out to other school personnel when teachers do not respond (eg, school guidance counselor, nurse, or school administrator) and enlist their help to obtain information. Ask parents to help identify supportive school personnel. Consider the use of online ADHD information exchange sources such as mehealth.com, trivoxhealth.com, myADHD.com, CHADIS or electronic health records (EHRs) with patient and community portals to obtain information. Some EHRs may be able to incorporate rating scales in their system.
<p>For patients on FDA-approved ADHD medications and for whom the medication dosage and symptoms have stabilized Gap: Minimum of 2 or more in-person follow-up visits within 12 months not completed</p>		
<p>Follow-up visits are scheduled, but not completed</p>	<ul style="list-style-type: none"> Review the helpful tips to improve access to care and help ensure follow up visits occur within the recommended timeframe, as previously presented in this grid. 	<ul style="list-style-type: none"> Have a staff meeting to discuss obstacles for access to care,

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Potential Barriers	Suggested Ideas for Change	Still Not Seeing Results?
<p>within the recommended timeframe.</p>	<ul style="list-style-type: none"> • Brainstorm obstacles for visit attendance within your practice’s patient population and ways to overcome them. Conduct Plan, Do, Study, Act (PDSA) to see which ideas yield solutions to the problem. • Provide flexible appointment times. • Consider whether transportation is an issue for the family and whether a government-sponsored transportation voucher or information on public transit is needed. Involve social services as needed. • Establish a reminder/recall system. • Consider whether the parent needs an ADHD referral if forgetfulness and lack of organization is the cause of missed appointments. • Ask the family what appointment time, reminder method, or other access to care strategy works best for them. • Ensure the whole practice understands the importance of ADHD follow-up to assess how well treatment is or is not working, and to titrate medications. Consider accomplishing this through regularly scheduled team huddles in which you reinforce your practice’s goals and vision for quality ADHD care and create an urgent energy to close gaps in care. <p>Establish workable processes to regularly monitor <u>all</u> aspects of ongoing ADHD care and its associated comorbid conditions, including:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Systematic reassessment of ADHD core symptoms, target goals, and function as well as ongoing assessment for conditions that mimic or may be comorbid <input type="checkbox"/> Confirmation of adherence to the treatment plan, including any prescribed medications and/or behavioral/training interventions, with adjustments made as needed using information from DSM-based ADHD rating scales from 2 or more major settings (eg, home and school) <input type="checkbox"/> Regular reassessment of target goals <input type="checkbox"/> Assurance that care coordination and bidirectional communication are occurring and are meeting the needs of the patient/family <input type="checkbox"/> Ongoing ADHD education and anticipatory guidance <input type="checkbox"/> Transition of adolescents towards self-management and an adult health care provider as needed and appropriate <input type="checkbox"/> Empowerment of patients/families to be informed advocates 	<p>missed appointments, and lack of follow-up visits. Brainstorm ways to overcome these obstacles and implement new ideas into practice processes.</p> <ul style="list-style-type: none"> • Ensure that all parties involved—patient/family and staff recognize that ADHD treatment is multimodal and requires ongoing assessment. Provide education to help ensure that all understand the importance of titrating medication. • Brainstorm with staff and IT personnel to identify ways to put effective medication and follow-up reminder/recall systems in place.
<p>Patients follow up on ADHD care with a mental health</p>	<ul style="list-style-type: none"> • Recognize that the PCC in the medical home coordinates all aspects of a child’s health care, including preventive, acute, chronic, and the transition to adult care. Communication with the care team, including mental health professionals 	<ul style="list-style-type: none"> • Host lunch and learns, inviting guest speakers from within your practice, the community, CHADD

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Potential Barriers	Suggested Ideas for Change	Still Not Seeing Results?
<p>professional outside of the practice.</p>	<p>providing behavior therapy, training interventions, or other mental health care for the patient is imperative. It can be challenging when mental health professionals work in a different system.</p> <p>Review resources on the medical home model such as the following:</p> <ul style="list-style-type: none"> ✓ <i>The Building Your Medical Home Toolkit</i> ✓ <i>Addressing Mental Health Concerns in Primary Care: A Clinician’s Toolkit</i> ✓ Medical home information in the AAP’s <i>Bright Futures Guidelines, 4th Edition</i> <ul style="list-style-type: none"> • Establish bidirectional communication with all ADHD care team members. 	<p>members to provide the family perspective, or the AAP Chapter to talk about anonymous cases, resources, issues, school opportunities, etc. Such face-to-face encounters help develop relationships and disseminate information.</p>
<p>Medication is discontinued by patient/family, perhaps due to problems with side effects, because the medication is not working, the cost of the medication is a hardship, or to see if the ADHD has remitted.</p>	<ul style="list-style-type: none"> • Recognize that ADHD follow-up care and treatment adherence can be enhanced by improving the relationship between the family and the medical home, so the family feels involved and knowledgeable about their child’s health condition and treatment regimen. • Provide education to help patients/families understand the impairment that may occur due to ongoing ADHD symptoms if appropriate treatment is discontinued or interrupted. See the article, Can Your Child Safely Take a Break from ADHD Meds? on the ADDitude Web site. • Present additional treatment options. Explain to patients/families that there is no one size fits all treatment regimens for ADHD. • Use motivational interviewing strategies with adolescents to identify discontinuation reasons and to address adherence to medication. • Consider using multiple N of 1 medication trials to demonstrate whether the adolescent continues to require medication. (An N of 1 trial is a planned, iterative trial off and on of stimulant medication, using adolescent, parent, and teacher reports on target behaviors/goals to determine whether medication is still a necessary component of a comprehensive ADHD treatment plan.) • Consider reasons medication may not be working, including the following: <ul style="list-style-type: none"> ✓ Was ADHD diagnosed correctly? ✓ Is the patient taking the medication as prescribed? ✓ Should different or additional medicine be considered? ✓ Is parent training in behavioral management part of the treatment plan and should it be reassessed? ✓ Are there other comorbid conditions? ✓ Has there been a trauma or other significant life event? ✓ Have the target goals been met? Why not? Discuss what is important to the patient/family. Should the target goals be reassessed? 	<ul style="list-style-type: none"> • Review articles such Barbaresi WJ, Colligan RC, Weaver AL, Voigt RG, Killian JM, Katusic SK.et al. Mortality, ADHD, and psychosocial adversity in adults with childhood ADHD: a prospective study. <i>Pediatrics</i>. 2013;13(4):637-644, about the importance of ADHD treatment and share information with patients/families. • Share similar patient stories/outcomes to help families understand the need to find the best treatment regimen for the child or adolescent.

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Potential Barriers	Suggested Ideas for Change	Still Not Seeing Results?
For patients receiving evidence-based behavioral/training interventions Gap: Progress not reassessed and/or adjusted using information obtained from DSM-based ADHD rating scales from 2 or more major settings (eg, home and school)		
Information about the patient’s symptoms and impairment are not gathered from 2 or more major settings—perhaps because the rating scales are provided to multiple sources but are not returned.	<ul style="list-style-type: none"> Recognize that symptoms and impairments are exhibited in multiple settings. Gathering data from adults in multiple settings who regularly interact with the patient provides enriched information from different viewpoints and an opportunity to investigate differences in reporting and inconsistencies. Consider alternative methods for collecting information as previously described, obtaining authorization to release health information and being aware of regulations concerning privacy laws such as FERPA and HIPAA. Also consider online ADHD information exchange sources such as mehealth.com, trivoxhealth.com, myADHD.com, CHADIS.com or EHRs with parent/patient and community portals to obtain information. EHRs may also be able to incorporate rating scales in their systems. Ensure that the whole practice understands that effective treatment plans for patients with ADHD and its associated comorbid conditions require ongoing assessment. Establish workable processes to regularly monitor <u>all</u> aspects of ongoing ADHD care and its associated comorbid conditions, as previously described. 	<ul style="list-style-type: none"> Reach out to other school personnel when teachers do not respond (eg, school guidance counselor, nurse, or school administrator) to help obtain information.

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Appendix

Conditions That Mimic or Are Comorbid With ADHD

A 2007 study by the National Survey of Children’s Health (NSCH) found that most children with ADHD (67%) have at least 1 other comorbid condition, and 18% have 3 or more comorbidities such as mental health disorders and/or learning disorders.¹ These comorbidities increase the complexity of the diagnostic and treatment process.

It is important that the PCC determine if symptoms are due to alternative causes before confirming the diagnosis of ADHD. It is also necessary to determine if the patient has an additional condition or conditions. If other conditions are suspected or detected during the diagnostic evaluation, an assessment of the urgency of these conditions and their impact on the ADHD treatment plan should be made.

Examples of conditions that mimic, are comorbid with ADHD, or contribute to the cause of ADHD include but are not limited to the following:

Type	Examples
Medical	Vision/hearing, anemia, medicine side effects, thyroid disorders, seizures, sleep apnea, and restless leg syndrome are examples of medical conditions that should be treated first to see if the treatment addresses the ADHD symptoms. Sequelae of central nervous system hypoxia, prematurity, intrauterine growth restriction (IUGR), and small for gestational age (SGA) syndromes, medical syndromes (Fetal Alcohol Spectrum Disorder [FASD], Fragile X, etc), traumatic brain injury, central nervous system infections, and near-drowning are examples of medical issues that should be treated along with ADHD.
Developmental	Autism, speech/language and specific learning disorders, intellectual deficits, tic disorders, developmental coordination disorders, motor delays, sensory processing disorders
Behavioral/emotional	Anxiety, depression, oppositional defiant disorder, conduct disorder, bipolar disorder, reactive attachment disorder, disruptive mood dysregulation disorder, post-traumatic stress disorder, obsessive-compulsive disorder
Family/environmental	Family separation, divorce, death, adverse events, exposure to violence, physical abuse/neglect, sexual abuse In the school environment: bullying, poor school or teacher fit, giftedness
Substance use	Alcohol, marijuana, and other illicit substances or misuse of prescription medication

Of Special Importance

- Urgent conditions that put the patient’s health at risk (eg, depression with suicidal ideation, high-risk behaviors, and substance use) need to be addressed immediately with providers capable of handling them. Frequent, ongoing assessment is essential, and the impact of such conditions on the ADHD treatment plan should be considered.
- If symptoms arise suddenly without prior history, it is important to consider other conditions, including but not limited to the following: mood or anxiety disorders; substance use; head trauma; physical or sexual abuse; neurodegenerative disorders; sleep disorders (including sleep apnea); or a major psychological stress in the family, community (eg violence), or school (eg bullying).
- The PCC may evaluate and treat the comorbid disorder if it is within the PCC’s expertise. If the advice of another subspecialist is required, the PCC should carefully consider when to initiate treatment for ADHD. In some cases, it may be advisable to delay the start of medication until the full care team is established/consulted.

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- The evaluation, diagnosis, and treatment of ADHD and its comorbid conditions are a continuous process. PCCs should be aware of the need for reassessment at every visit.

¹Larson K, Russ SA, Kahn RS, Halfon H. [Patterns of comorbidity, functioning and service use for US children with ADHD, 2007](#). *Pediatrics*. 2011;127(3): 462-470

Family

Today, the term family is used to describe a unit that may comprise a married nuclear family; cohabiting family; single-parent, blended, or stepfamily; grandparent-headed household; single-gender parents; commuter or long-distance family; foster family; or a larger community family with several individuals who share the caregiving and parenting responsibilities. Each of these family constellations presents unique challenges to child-rearing for parents as well as children.

Reference: Hagan JF, Shaw JS, Duncan PM, eds. *Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents*. 4th ed. Elk Grove Village, IL: American Academy of Pediatrics; 2017

Evidence-based Behavioral/Training Interventions

Evidence-based behavioral or training interventions can help children and adolescents with ADHD manage their symptoms of hyperactivity, impulsiveness, and inattention by teaching skills to help control symptoms. Strategies can include reward and consequence systems, self-monitoring, modeling/role playing, self-instruction, generation of alternatives, and reinforcement. Strategies may focus on staying organized and focused; other strategies may focus on reducing disruptive behaviors that can get the child into trouble at school, make it difficult to form friendships, or disrupt family life.

Ongoing adherence to psychosocial treatments is a key contributor to its beneficial effects. Some children and adolescents, especially those with severe ADHD symptoms, benefit from medication along with behavioral or training interventions; the decision about using 1 or both types of therapies, however, depends on acceptability and feasibility to the family. It is important to note that different behavioral/training interventions may be more suitable and effective in some age groups than in others. Also, the presence of comorbid conditions may affect the type of intervention required.

Behavioral therapy can include training for the child, family, or a combination. Teachers can also use behavioral techniques and enlist the help of the school psychologist to provide strategies for reducing problem behaviors in the classroom. Some techniques found to be helpful to parents and teachers include:

- Timeout
- Reward/consequences
- Token economies
- Daily behavior report card (See The ADHD Toolkit resource, [How to Establish a School Report Card](#).)
- 1-2-3 Magic Parenting: Positive Parenting

Following is a summary of age-specific treatment recommendations concerning both behavioral/training interventions and medication from the AAP 2019 ADHD Guideline.

Age of Patient	Summary of AAP 2019 ADHD Guideline-based Treatment Recommendation
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4–5 years of age	Evidence-based parent training in behavior management (PTBM) and/or behavioral classroom interventions as first-line treatment (FDA-approved medications for ADHD may be indicated in certain circumstances)
6–11 years of age	FDA-approved medications for ADHD and optimally also have both PTBM and behavioral classroom interventions recommended
12–18 years of age	FDA-approved medications for ADHD with the adolescent’s assent and optimally also have evidence-based training interventions and/or behavioral interventions recommended
Note: For school-aged children and adolescents, educational interventions and individualized instructional supports in the school setting including school environment, class placement, instructional placement, and behavioral supports are a necessary part of the treatment plan and often include an IEP or a 504 plan.	

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Checklist of Medication Follow-up Questions

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Checklist of Medication Follow-Up Questions

<input type="checkbox"/> In-person, completed by parent: _____	Date: __/__/__
<input type="checkbox"/> By phone, completed by staff: _____	
1. Has your child started taking the medication prescribed?	<input type="checkbox"/> Yes <input type="checkbox"/> No
If not, why?	
If yes, when did medication start?	
2. Please verify the ADHD medicine your child is currently taking. What is/are the medication name(s) and dose? _____	
At what time, where, and how is the medication administered?	Time: _____ <input type="checkbox"/> Home <input type="checkbox"/> School How: _____
How many tablets (or milliliters if liquid) of your child's ADHD medication are left?	
Do you need a refill of your child's ADHD medication?	<input type="checkbox"/> Yes <input type="checkbox"/> No
3. Have you noticed any improvement toward your child's target goal(s)? If yes, what has improved?	<input type="checkbox"/> Yes <input type="checkbox"/> No
4. Have you noticed any change in your child's ADHD symptoms? If yes, what has improved or worsened? What time of the day do you notice a change in symptoms? _____	<input type="checkbox"/> Yes <input type="checkbox"/> No
What changes have been noticed in your child's behavior at home and at school?	
5. How has your child's performance at school changed (eg, homework completion, tests, progress reports)? Explain changes: _____	<input type="checkbox"/> Yes <input type="checkbox"/> No
6. Does your child have any side effects from the medication? Examples include headache, stomachache, change in appetite, trouble sleeping, irritability, socially withdrawn, extreme sadness or unusual behavior, tremors/feeling shaky, repetitive movements, picking at skin/fingers/nails, sees or hears things that aren't there, or other issues.	<input type="checkbox"/> Yes <input type="checkbox"/> No Side effects: _____
7. What time of day does the medication stop working?	
8. What questions or concerns do you have?	

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DSM-based ADHD Rating Scales

DSM-based rating scales are designed to focus on ADHD symptoms (inattentive, hyperactive-impulsive) to help determine the possible presence of core symptoms of ADHD as defined by DSM-5 criteria for ADHD.* The AAP recommends the use of DSM-based ADHD rating scales when evaluating ADHD:

4. For the initial diagnosis of a child with ADHD
5. For the assessment of conditions that mimic or are comorbid with ADHD
6. For monitoring the treatment strategy that has been put in place

DSM-based rating scales should be completed for 2 or more major settings. The rating scales may be completed by the parent or other family members, teachers, clinicians, or other professional observers who have opportunities to observe the child’s behavior to help determine which ADHD symptoms and co-occurring conditions are present in the patient, in which environments (home, school, work, social), and over what time period. **NOTE: Be aware that screening tools and rating scales are not diagnostic; they are instruments used to help clinicians identify the possible presence of a condition. Additional information/tests are required to confirm or rule out a diagnosis.**

For purposes of this EQIPP course, some recommended age-specific rating scales/scoring interpretations include, but are not limited to, the following:

Age	Recommended Rating Scales	Scoring Interpretation
Preschool children, ages 4–5	ADHD Rating Scale IV—Preschool Version* Note: Currently validated for DSM-4. There are some wording variations to make the DSM criteria more applicable to preschool children, but symptom criteria are the same as on the other rating scales. Also see the Vanderbilt Assessment Scales below, which can be applicable to preschoolers.	Proprietary. Rating Scales and scoring information as described in McGoey KE, DuPaul GJ, Haley E, Shelton TL. Parent and teacher ratings of attention-deficit/hyperactivity disorder in preschool: the ADHD rating scale-IV preschool version . <i>J Psychopathol Behav Assess</i> . 2007;29(4):269-276
School-age children and adolescents, ages 6–18	Vanderbilt Assessment Scale: ADHD Toolkit Parent-Informant Form Vanderbilt Assessment Scale, Follow-up: ADHD Toolkit Parent-Informant Form Vanderbilt Assessment Scale: ADHD Toolkit Teacher-Informant Form Vanderbilt Assessment Scale, Follow-up: ADHD Toolkit Teacher-Informant Form Note: Vanderbilt Scales are updated to DSM-5 but only validated for DSM-4. Originally designed for the 6- to 12-year-old age group, they are applicable to other age groups, including preschoolers and adolescents.	Use the gray boxes to tally positive scores in the right margin at the end of each section. The Vanderbilt Assessment Scales Scoring Instructions provides scoring information for diagnostic purposes and for monitoring symptom and performance improvement. The instructions help correlate totals to DSM-5 criteria.

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	ADHD Rating Scale–5, (ADHD RS-5) Home Version ADHD Rating Scale–5, (ADHD RS-5) School Version Note: Available in Child Form (ages 5–10) and Adolescent Form (ages 11–17); both updated and validated for DSM-5.	Proprietary. Rating scales and scoring sheets may be purchased from Guilford Press .
	Conners Rating Scales (Conners 3) 6–18 years. Parent and Teacher Scales 8–18 years. Self-Report Scale Note: All scales updated to DSM-5 but validated only for DSM-4.	Proprietary. Forms and scoring sheets may be purchased through MHS Assessments .

***Note:** The fifth edition of the DSM-5 does not include significant changes to ADHD-related recommendations from the DSM-4 publication. Therefore, rating scales based on DSM-4 criteria are sufficient for purposes of this EQIPP quality improvement activity. Notable changes from DSM-4 to DSM-5 include: 1) Permission now granted to diagnose ADHD and autistic spectrum disorder as coexisting diagnoses; 2) ADHD symptoms must be seen before age 12; and 3) adolescents age 17 may qualify for an ADHD diagnosis if 5 of 9 symptoms of inattention and/or hyperactivity/impulsivity are noted.

Recommendations to Address Challenges in Practice Organization

Clinician-Focused Implementation Strategies

- Develop ADHD-specific office workflows, as detailed in the “preparing the practice” section of the PoCA (see supplemental information).
- Ensure that the practice is welcoming and inclusive to patients and families of all backgrounds and cultures.
- Enable office systems to support communication with parents, education professionals, and mental health specialists, possibly through electronic communication systems (discussed below).
- Consider office certification as a patient- and family-centered medical home.
- If certification as a patient- and family-centered medical home is not feasible, implement medical home policies and procedures, including care conferences and management. Explore care management opportunities, including adequate resourcing and payment, with third-party payers.
- Identify and establish relationships with mental health consultation and referral sources in the community and within the region, if available, and investigate integration of services as well as the resources to support them.
- Promote communication between ADHD care team members by integrating health and mental health services and using collaborative care model treatments when possible.
- Be aware of the community mental health crisis providers’ referral processes, and be prepared to educate families about evidence-based psychosocial treatments for ADHD across the lifespan.

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Policy-Oriented Suggested Strategies

- Encourage efforts to support the development and maintenance of patient- and family-centered medical homes or related systems to enable patients with chronic complex disorders to receive comprehensive care.
- Support streamlined, coordinated ADHD care across systems by providing incentives for the integration of health and mental health services and collaborative care models.

Source: *Systematic Barriers to the Care of Children and Adolescents with [ADHD](#)* taken from the [AAP 2019 ADHD Guideline: Clinical Practice Guideline for the Diagnosis, Evaluation, and Treatment of Attention-Deficit/Hyperactivity Disorder \(ADHD\) in Children and Adolescents](#).

FDA-approved Medications

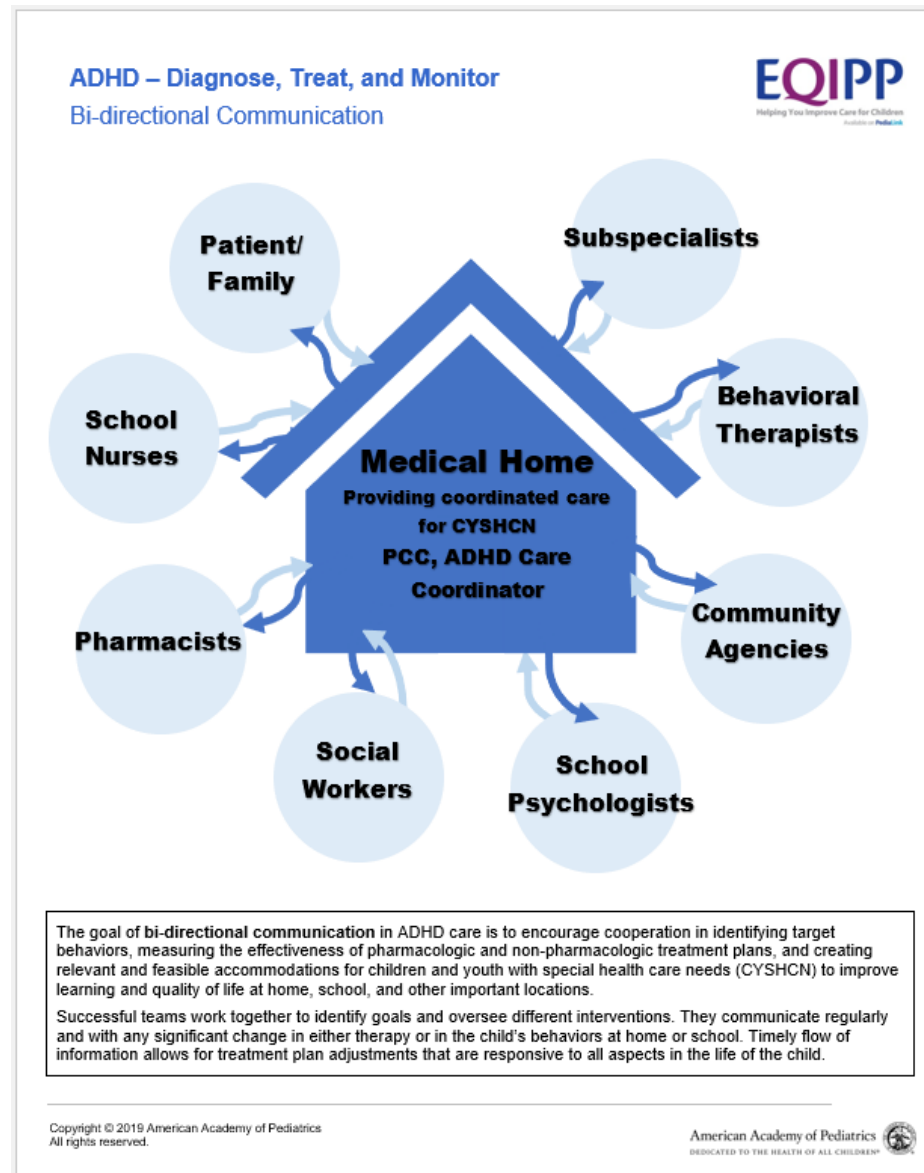
The US Food and Drug Administration (FDA) approves product labeling for prescription drugs for the purpose of ensuring patient care and safety and educating providers. It is important that PCCs:

- Recognize the FDA-approved indications for the use of stimulant and related medications in pediatric patients.
- Follow AAP-approved treatment guidelines for the management of ADHD in pediatric patients.
- Are familiar with benefits and adverse reactions and risks of using stimulant and related medications in pediatric patients and help parents/caregivers/patients (as age appropriate) understand them.

A list of FDA-approved medications for ADHD is available at www.ADHDMedicationGuide.com. Accept the copyright agreement to open the pdf of the ADHD Medication Guide. Shared Decision Making tools to help caregivers understand the pros and cons of psychosocial treatments as well as the various FDA-approved ADHD medication options are available at: <https://www.cincinnatichildrens.org/service/j/anderson-center/evidence-based-care/decision-aids>.

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Bidirectional Communication



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ADHD Educational Topics/Resources for Patients/Families

Educational Topic	Resources
<ul style="list-style-type: none"> ADHD causes and symptoms Diagnostic evaluation process Conditions that mimic or are comorbid with ADHD Treatment options including potential benefits and adverse effects Long-term sequelae 	<ul style="list-style-type: none"> ADHD: What Every Parent Needs to Know, 3rd Edition, AAP Diagnosing ADHD in Children: Guidelines & Information for Parents at www.healthychildren.org The CHADD Information and Resource Guide to ADHD, 2nd Ed., available at: www.chadd.org (for parents of children with ADHD) ADHD Shared Decision-Making Tools available at: https://www.cincinnatichildrens.org/service/j/anderson-center/evidence-based-care/decision-aids <p>Web sites with information for families on these and other ADHD topics:</p> <ul style="list-style-type: none"> www.aap.org—Search ADHD www.chadd.org—See for Parents & Caregivers tab www.understood.org—See Your Parent Toolkit tab www.sandrarief.com—See Educational Teaching Methods for ADHD Children www.mayoclinic.org—Search ADHD
<ul style="list-style-type: none"> Helping the child or adolescent understand ADHD 	<p>Books and other resources that can be read by or to children to help them understand ADHD:</p> <ul style="list-style-type: none"> <i>Eukee the Jumpy Jumpy Elephant</i> (ages 5–7 years) <i>Slam Dunk: A Young Boy’s Struggle With Attention Deficit Disorder</i> (ages 8–12 years) <i>Some Kids Just Can’t Sit Still!</i> (ages 4–9 years) <i>Making the Grade</i> (ages 9–14 years) www.ADDitudemag.com—Search for teens Video: “How to ADHD,” available at: https://www.youtube.com/channel/UC-nPM1_kSZf91ZGkcgY_95Q
<ul style="list-style-type: none"> Parenting the child with ADHD 	<ul style="list-style-type: none"> Triple P (Positive Parenting Program) at www.triplep.net Parent-Child Interaction Therapy* at www.pcit.org The Incredible Years Parenting Program at www.incredibleyears.com
<ul style="list-style-type: none"> Specialized educational services, including how parents can partner with schools to develop IEP/504 	<ul style="list-style-type: none"> www.additudemag.com—search for IEP 504 www.understood.org—search for IEP 504 ADHD Parent-Pediatrician Letters to the School; A Family-Centered Medical Home Tool to Improve Collaboration, Grades, and Behavior, available at: https://doi.org/10.1177/2333794X15574284

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<ul style="list-style-type: none"> • Anticipatory guidance 	<p>Performing Preventative Services: A Bright Futures Handbook (See section on Anticipatory Guidance)</p>
<ul style="list-style-type: none"> • Transition of adolescents towards self-management • Transition to adult care 	<ul style="list-style-type: none"> • Nadeau K. <i>Survival Guide for College Students With ADHD or LD</i>. 2nd Ed. 2010 • www.chadd.org—Search for transition to adult and self management • www.ADDitudemag.com—search for teens
<ul style="list-style-type: none"> • Advocacy 	<ul style="list-style-type: none"> • Matthew Cohen. <i>A Guide to Special Education Advocacy</i>. 2009 • Peter Jensen. <i>Making the System Work for Your Child with ADHD</i>. 2004. Guilford Press • Robert Brooks and Sam Goldstein. <i>Raising Resilient Children</i>. McGraw Hill • Russell Barkley. <i>Taking Charge of ADHD</i>. 3rd Ed. 2013 • Video: “Advocating for Your Child”: https://www.understood.org/en/school-learning/partnering-with-childd-school/working-with-childd-teacher/10-ways-to-be-an-effective-advocate-for-your-child-at-school

Tips for Developing Effective ADHD Education in Your Practice

11. Recognize that education is an ongoing process that can, and should be, provided over time. Consider setting up a series of educational topics that are delivered on a set schedule to keep all patients/families in the loop. Educational topics may need to be repeated and tailored to the changing needs of the child as he or she enters a new stage of development (eg, adolescence) or school setting (eg, middle school, high school). Consider the list of ADHD Educational Topics/Resources for Patients/Families provided next.
12. Provide education in a variety of formats, including discussion, print, video, or Web-based. Group sessions and guest speakers can also be effective educational delivery options.
13. Ensure that educational messages meet the cultural, language, and literacy needs of your patient population.
14. Continue to provide education at all follow-up visits. Allow families to give input regarding areas where they need more information. Adjust over time to address the specific needs of adolescents as they develop more autonomy and independence.
15. Review educational resources regularly to ensure they are current and relevant.