I. Key Points
   A. ADHD is a chronic neurobiological condition that may persist into adulthood, extend across developmental phases and present different challenges in each phase.
   B. Screening for ADHD should be part of every client’s mental health assessment.
   C. Children and adolescents with ADHD should be considered as youth with special health care needs.
   D. ADHD does not remit with the onset of puberty alone. The rates of ADHD in adults vary according to the number of symptoms and level of impairment required for the diagnostic threshold.
   E. Management of youth with ADHD should follow the principles of the chronic care model and the medical home.
   F. Key to effective long-term management of youth with ADHD is continuity of care with a clinician experienced in the treatment of ADHD.
   G. Psychosocial treatments may be useful for ADHD with comorbid disorders or other problems responsive to such nonmedication treatments.

II. Diagnosis and Assessment
   A. There is no laboratory “test” for ADHD. ADHD is a clinical diagnosis requiring evaluation of behavior across multiple settings.
   B. The PCP should initiate an evaluation for ADHD for any child 4 – 18 years of age who presents with academic or behavioral problems and symptoms of inattention, hyperactivity or impulsivity.
   C. Clinician interviews and rating scales of youth/parents/caregiver/teachers/clinicians are the core of the ADHD assessment process. The evaluator should determine that DSM-5 criteria have been met, including documented impairment in more than one major setting.
   D. The evaluator should rule out any alternative cause. Evaluation should include assessment for other conditions that might coexist with ADHD. These include emotional, behavioral, developmental and physical conditions.
   E. Psychological and neuropsychological tests are not medically necessary to diagnose ADHD. They should be performed if the client’s history suggests low general cognitive ability or low achievement language or mathematics relative to the client’s intellectual ability, or a complex diagnostic presentation, or repeated ineffective medication trials.

III. Selecting a Course of Treatment: General Considerations
   A. Therapeutic alliance with youth/parents/caregiver/teachers is crucial to treatment planning and implementation.
   B. Treatment plans should:
      1. Be individualized.
      2. Consider client strengths and target symptoms identified in assessment process.
      3. Include psychoeducation of parents and client about ADHD.
      4. Provide periodic follow-up focused on targeted outcomes and adverse effects based on input from parents, teachers and client.
5. Anticipate long-term therapeutic planning and monitoring.

C. Treatment goals should:
   1. Be realistic, attainable and measurable.
   2. Improve relationships with key individuals in the client’s life.
   3. Decrease disruptive/inappropriate behaviors that are setting-specific.
   4. Improve academic performance.
   5. Increase independence by self-monitoring and completion of assigned activities.

D. Frequency and duration of follow-up sessions should be individualized for each client/family depending on:
   1. Severity of ADHD symptoms.
   2. Degree of comorbidity of other psychiatric symptoms.
   4. Degree of impairment in home/school/work/peer-related activities.

E. Clinician should establish an effective feedback vehicle including all important informants in the client’s environment.

F. Degree of contact with clinician should occur 2 – 4 times per year in cases of uncomplicated ADHD and up to weekly sessions in times of severe dysfunction or complications in treatment.

G. School supports may be helpful in the overall treatment plan for youth with ADHD
   1. Children with special needs are entitled rights to services in school under federal and state laws.
   2. It is important to encourage parents to be aware of these laws and regulations, to use relevant resources, and to advocate for their child to make sure the child receives appropriate services.

IV. Medication: General Considerations

A. Decision to treat with medication should be based on:
   1. Persistent target symptoms sufficiently severe to cause functional impairment in multiple settings.
   2. Continuing efficacy of medication.
   3. Family/parent/caregiver preference.

B. Clients should have their height and weight monitored throughout treatment.

C. The initial psychopharmacological treatment of ADHD should be a trial with an agent approved by the FDA for the treatment of ADHD.

D. Stimulants are recommended as the first line of treatment for ADHD, particularly when no comorbidity is present. As a general rule, atomoxetine is preferred if the client experiences severe side effects to stimulants such as mood lability or tics.

E. Limitations in medication treatment arise from lack of maintenance if treatment is discontinued and/or failure in settings where treatment has not been well applied.

F. Medication should be restarted when target symptoms re-emerge if medication is discontinued and when ratio of therapeutic benefit to side effects is acceptable.

G. PCP should titrate doses of medication for ADHD to achieve maximum benefit with minimum adverse effects.

H. During psychopharmacological intervention the client should be monitored for adverse side effects. If medication trials with FDA-approved medications do not result in satisfactory treatment outcomes, the clinician should undertake a careful
review of the diagnosis and then consider behavior therapy and/or use of medications not approved by the FDA for the treatment of ADHD.

I. If the client has a robust response to psychopharmacological intervention and shows normative functioning in key domains, then psychopharmacological treatment alone for ADHD is satisfactory. For children with ADHD alone who do not have significant comorbidity, studies do not for the most part show an additive effect of psychosocial interventions.

J. If a client with ADHD has a less than optimal response to medication alone, has a comorbid disorder or experiences stressors in family life, then psychosocial treatment in conjunction with medication treatment is often beneficial.

V. Recommendations for treatment of ADHD vary depending on the client’s age

A. Very young children (VYC = less than 3 years of age)
1. Treating VYC is poorly understood but widely practiced.
2. Diagnosing ADHD is problematic because short attention span, high activity level and impulsivity are normal traits at various stages of development.
3. Information is scarce on the treatment of ADHD in VYC. It reveals:
   a. Accurate diagnosis of ADHD is difficult to obtain.
   b. Efficacy and safety of psychotropic medications is unclear.
   c. Great variability exists in medication and treatment regimens.
   d. Efficacy and risk research with VYC has been sparse and plagued by sample size problems.
   e. Little is known about the effects of medicines on the neurochemistry of the brain, especially during periods of formative plasticity in VYC.
   f. Careful diagnosis, comprehensive management strategies and clinical caution are necessary to ensure the well-being of VYC.
   g. The guiding question of medication management in VYC with severe ADHD is whether or not the benefit of treatment significantly improves the quality of life for the child and the family.
   a. Four programs of parent behavior training have shown good efficacy in multiple good-quality studies.
   b. Incredible Years, Parent-Child Interaction Therapy, New Forest Parenting Program and Triple P (Positive Parenting of Preschoolers program).
5. No medications (stimulant or non-stimulant) have been approved by FDA for VYC.

B. Preschool-aged children (3 – 5 years of age)
1. First line: parent/teacher evidence-based behavior management training
2. Second line: may prescribe methylphenidate if behavior interventions do not result in significant improvement and/or continued moderate-severe disturbance in functioning
3. If behavioral treatments not available, PCP must weigh risks of starting medication against the harm of delaying diagnosis and treatment.
4. Results from short-term, open-label, run-in and double-blind, crossover studies show that methylphenidate is effective in preschoolers with ADHD.
5. Dosages for any stimulant should be titrated more conservatively in preschoolers than in school-age clients, and lower mean doses may be effective.

C. Elementary school-aged children (6 – 11 years of age)
   1. PCP should prescribe FDA-approved medication for ADHD and/or evidence-based parent/teacher behavior management therapy.
   2. The evidence is very strong for stimulant medications and sufficient but less strong for atomoxetine, extended-release guanfacine and extended-release clonidine (in that order).
   3. The school environment or program is a part of any treatment plan.

D. Adolescents (12 – 18 years of age)
   1. PCP should prescribe FDA-approved medication for ADHD with assent of the client and/or behavior therapy.
References

Agency for Healthcare Research and Quality. Attention Deficit Hyperactivity Disorder: 
   Effectiveness of Treatment in At-Risk Preschoolers; Long-Term Effectiveness in All ages; 
   and Variability in Prevalence, Diagnosis, and Treatment. Effective Health Care Program: 
   Comparative Effectiveness Review. Number 44.

American Academy of Pediatrics. ADHD: Clinical Practice Guideline for the Diagnosis, Evaluation, 
   and Treatment of Attention-Deficit/Hyperactivity Disorder in Children and Adolescents. 
   Pediatrics (Volume 128, Number 5, November 2011).

American Academy of Pediatrics. Implementing the Key Action Statements: An Algorithm and 
   Explanation for Process of Care for the Evaluation, Diagnosis, Treatment, and Monitoring 
   of ADHD in Children and Adolescent Process of Care Supplemental Appendix. Pediatrics 
   (2013).

Connor, D. Preschool attention deficit hyperactivity disorder: a review of prevalence, diagnosis, 
   neurobiology, and stimulant treatment. Journal of Developmental and Behavioral 

Firestone, P., Musten, L.M., Pisterman, S., Mercer, J., Bennett, S. Short-term side effects of stimulant 
   medication are increased in preschool children with attention-deficit/hyperactivity disorder: 
   a double-blind placebo-controlled study. Journal of Child and Adolescent 

Greenhill, L.L. The use of psychotropic medication in preschoolers: indications, safety, and efficacy. 

Halasz, G., Vance, A.L.A. Attention deficit hyperactivity disorder in children: moving forward with 


**Other Resources**

www.aacap.org

www.aacap.org/AACAP/Families_and_Youth/Resource_Centers/ADHD_Resource

www.parentsmedguide.org
