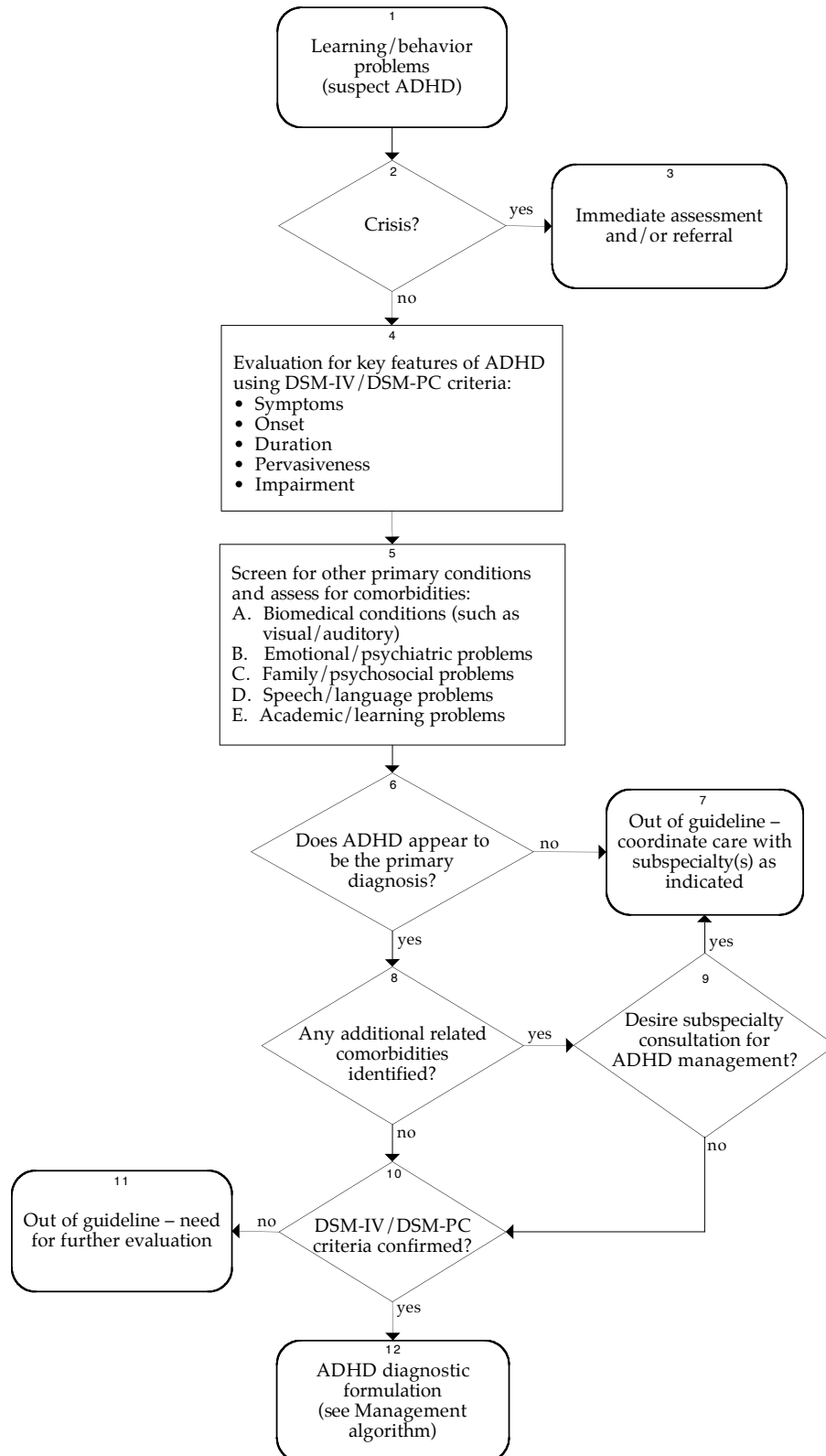
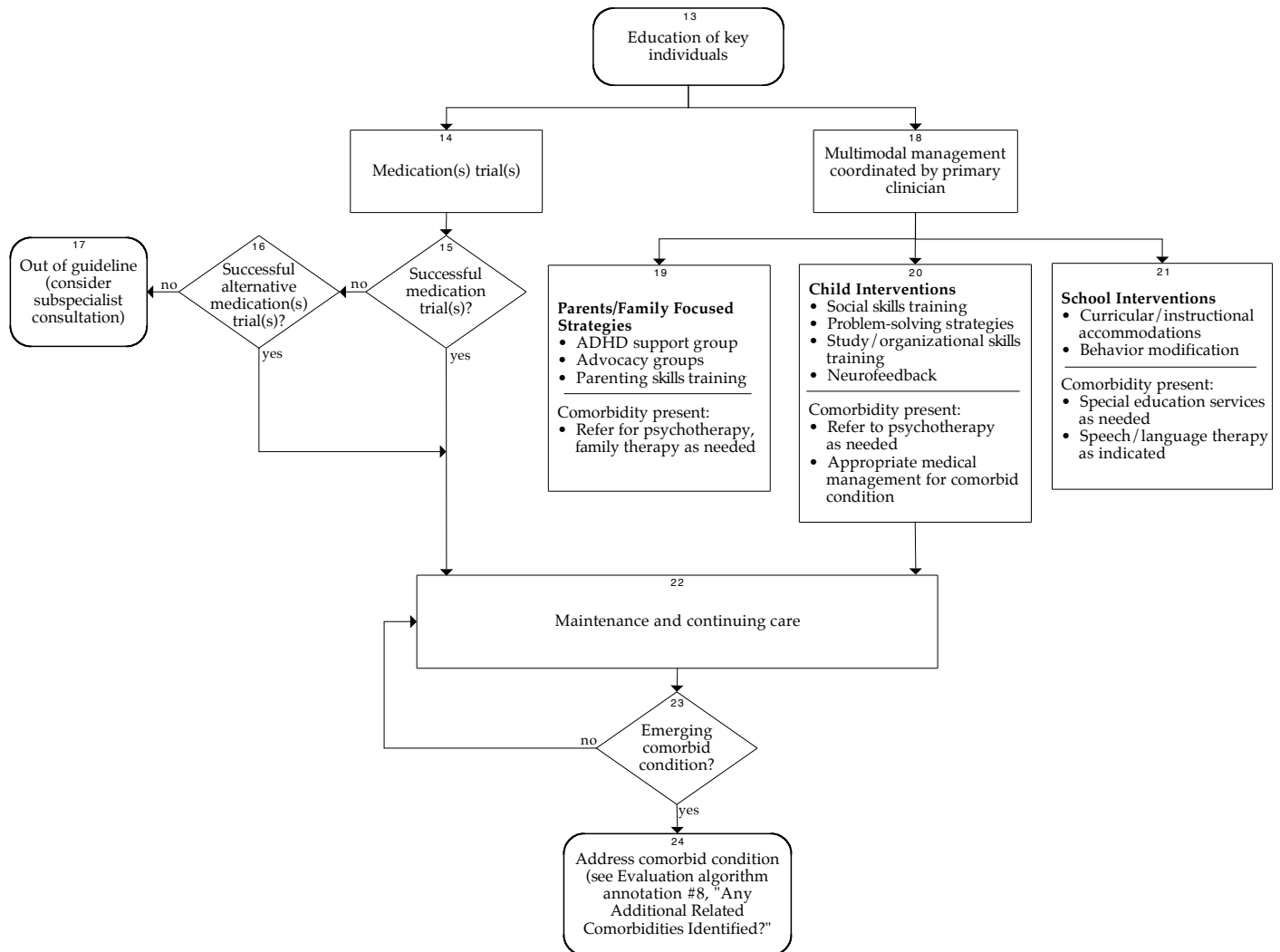


**Implementation Tool:
 Diagnosis and Management of Attention Deficit
 Hyperactivity Disorder in Primary Care for School-Age
 Children and Adolescents Guideline Summary**

Evaluation Algorithm



Management Algorithm



Key Principles

Introduction

It is expected that the primary care clinician making the initial diagnosis of attention deficit hyperactivity disorder will not only evaluate the primary symptoms described in the DSM-IV or DSM-PC criteria, but also will screen for other primary conditions and comorbidities using multiple data sources. Some patients will require further specialized evaluation based on information learned in this process. From these findings the primary clinician may choose to manage the patient or to utilize subspecialty consultation for ADHD management. It should be understood that at any point within the evaluation or management algorithm, the primary clinician may choose to seek subspecialty consultation from various disciplines.

The overall goal of this guideline is to ensure that all patients diagnosed with ADHD are accurately evaluated and appropriately managed, whether by the primary clinician or through subspecialty consultation.

Screening, Diagnosis and Comorbidities

The evaluation of primary symptoms should include information from multiple sources such as parents, the child and school personnel. A comprehensive interview with parents or caregivers – including current symptoms and their previous history, past medical and developmental history, school and educational history, family and psychosocial history – is most important. There is no single evaluation tool available to make a definitive diagnosis of ADHD. The diagnosis is based on a clinical picture of early onset, significant duration and pervasiveness, and causing functional impairment within the life of the child or adolescent. This can be facilitated through the use of a semistructured interview or questionnaire with behavior rating scales completed by the parents, other caregivers and school personnel.

The Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (Text Revision) (DSM-IV-TR) is recognized as the most widely used resource for diagnosis of mental disorders, including ADHD.

Many children can exhibit symptoms of ADHD at some point in their development, but it is important to note that common symptoms (inattention, hyperactivity, disruptive behavior, academic difficulty) can be caused by a number of other difficulties.

Children who have attention problems represent a very diverse, heterogeneous population and exhibit a broad range of symptom severity and a wide range of associated diagnoses. Because of this extensive comorbidity, the evaluation of children referred for problems with attention, impulse control or hyperactivity should include biobehavioral, developmental, psychological, psychosocial, educational and speech/language components.

Medication

The decision to use medication should be made in conjunction with parents following a thorough discussion of expected benefits and potential risks. Factors such as the child's age, severity of symptoms, and presence of comorbidity should also be considered and may involve decision-making regarding choice of medication.

Optimal medication management alone is superior to other modalities for the core symptoms of ADHD.

Psychostimulant medications are FDA approved therapy in children with ADHD. Absolute contraindications to the use of psychostimulants include psychosis, certain cardiovascular conditions, or previous serious reactions to psychostimulant medications. Response to one psychostimulant does not predict response to the others.

Avoid the use of CNS stimulants in patients with KNOWN structural cardiac abnormalities, cardiomyopathy, serious heart rhythm abnormalities, coronary artery disease, or other serious cardiac problems that could place patients at an increased risk to the sympathomimetic effects of CNS stimulants. All patients should receive a cardiovascular personal and family history and physical prior to initiation of stimulants. Medication history or physical exam changes consistent with possible cardiac disease during treatment with stimulant medication may require additional evaluation by a cardiologist.

Multimodal management

As with many conditions, ADHD is rarely a singular diagnosis. Multimodal intervention is commonly needed for other concomitant conditions and comorbidities. The primary care physician is in a unique position to coordinate care.

Upon initial diagnosis of ADHD, education of key individuals including the parents, the child and school personnel, is imperative. Communication may include information on the following:

- Support or advocacy groups
- Parent skills training
- Child social skills training
- Child problem solving strategies and/or cognitive behavioral therapy
- Child study skills training
- Neurofeedback
- Classroom strategies

Maintenance**Medication**

- Follow closely during initial medication trial by phone or clinic visit during trial and first several weeks. Titration of dose every one to three weeks is suggested until target ADHD symptoms remit, adverse effects prevent further dose increase, or maximum dose for the stimulant medication is reached. Atomoxetine may take up to four weeks at target dose for observed response.
- Clinic visit after initial medication trial to review care plan. The work group reviewed consensus guidelines from the American Academy of Child and Adolescent Psychiatry (2007) and the American Academy of Pediatrics (2001). Because of very little evidence, work group consensus based on community standards of care is to recommend for stimulant medications a follow-up visit within six weeks from initiation of therapy. (HEDIS measure: within four weeks)
- Once patient is stable, clinic visit every three to six months, depending on individual case; more frequent with significant comorbidity.

Anticipatory guidance

- Anticipatory guidance is given at each visit; this can include immediate and long-term expectations, study and organizational skills, guidance on behavior management, adolescent concerns, and updating resources. Advocacy issues and revising multimodal care management may be needed.
- Adolescent considerations include driving and medication needs, chemical use, and medication misuse and diversion.

Transition to adulthood

- Despite growing interest in adult attention-deficit/hyperactivity disorder, little is known about predictors of persistence of childhood cases into adulthood.
- Identify post secondary education or vocational plans and counsel patient regarding availability of academic support services.
- Identify adult health care provider to care transfer if necessary.