Minds Matter
Ohio Psychotropic Medication Quality Improvement Collaborative

Algorithm D

Inattention, Hyperactivity, Impulsivity

D.1.

Patient presents with any of the following concerns expressed by parent, caregiver, teacher, or social service worker:

- **Inattention** – Child gets bored easily, lacks concentration, is easily distracted.
- **Hyperactivity** – Child always seems to be in motion, fidgety or restless.
- **Impulsivity** – Child often speaks and acts without thinking first, finds it difficult to wait.

D.2. EVALUATE

PATIENT/FAMILY INTERVIEW

- Review 18 ADHD symptoms in DSM criteria.
- History of symptoms:
  - Duration, severity, frequency
  - Age of onset
  - Circumstances and settings of occurrences
- Mental health and educational history.
- Adverse childhood experiences or trauma.
- Perinatal, medical, and developmental histories.
- Family history, structure, functioning, social interaction.

PHYSICAL/DEVELOPMENTAL ASSESSMENT

- Hearing or vision problems.
- Sleep difficulties (e.g., obstructive sleep apnea).
- Learning problems or disabilities.
- Developmental problems.
- Language impairment or disorder.
- Assess function, vocabulary, thought processes.
- Physical Illness.
- Laboratory and/or neurological exams if warranted by medical history.
- Toxin exposure and other general medical conditions (e.g., epilepsy, hyperthyroidism, cardiac disorders).

D.3. VALIDATE DIAGNOSTIC IMPRESSION

ADHD SYMPTOM VALIDATION

- Complete Vanderbilt ADHD Rating Scales with:
  - Parent (See *Parent Scale*)
  - School (See *Teacher Scale*)
- Obtain academic records and administrative reports.

CONSIDER OTHER CONDITIONS

- Identify potentially confounding signs/ symptoms.
- Depression, irritability, and mood dysregulation. (See tool kit section: *Moodiness and Irritability.*)
- Agitation, aggression, and disruptive behaviors. (See tool kit section: *Disruptive Behavior and Aggression.*)
- Anxiety
- Substance Abuse.
- Cognitive impairment.
- Medical tests as indicated (e.g., blood tests, EKG).
- Psycho-educational testing if learning disorder suspected.

D.4. Patient meets DSM criteria for ADHD? (See *ADHD Treatment Guide.*)

NO → **D.5.** Other condition?

YES → **D.6.** Exit this guideline. Evaluate or refer, as appropriate.

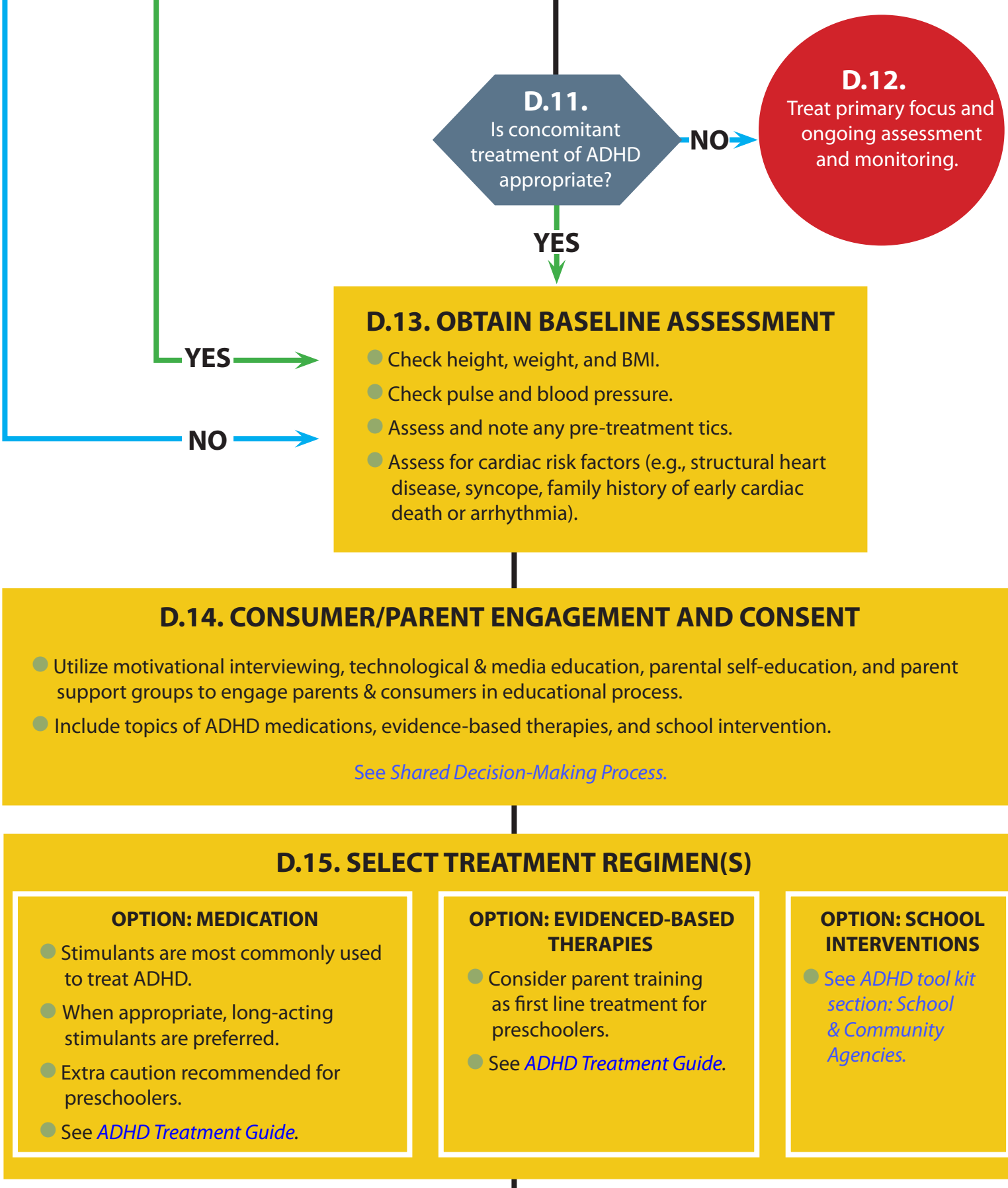
NO → **D.8.** Consider offering parent management training and behavioral management strategies.

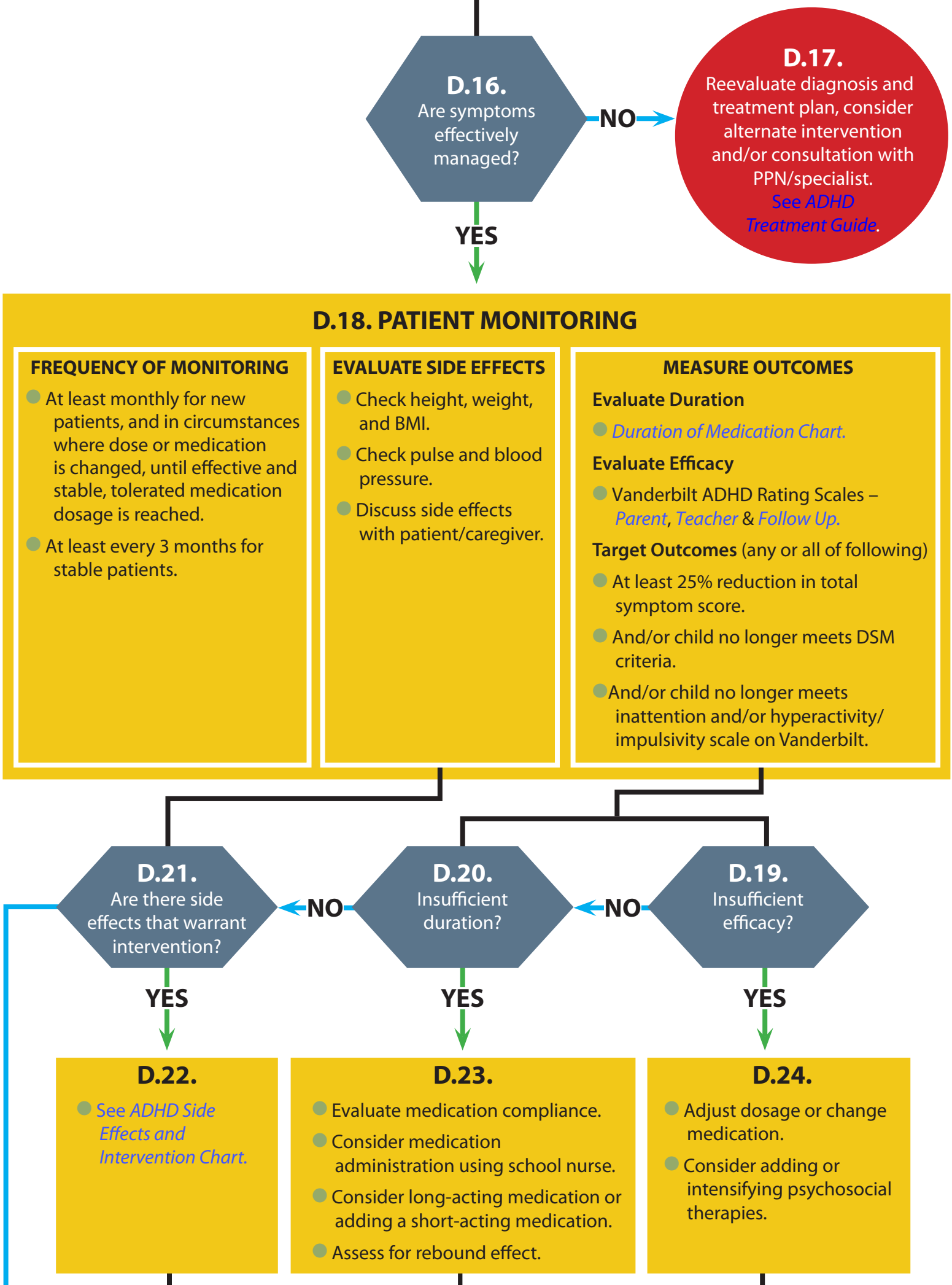
YES → **D.7.** Co-existing conditions?

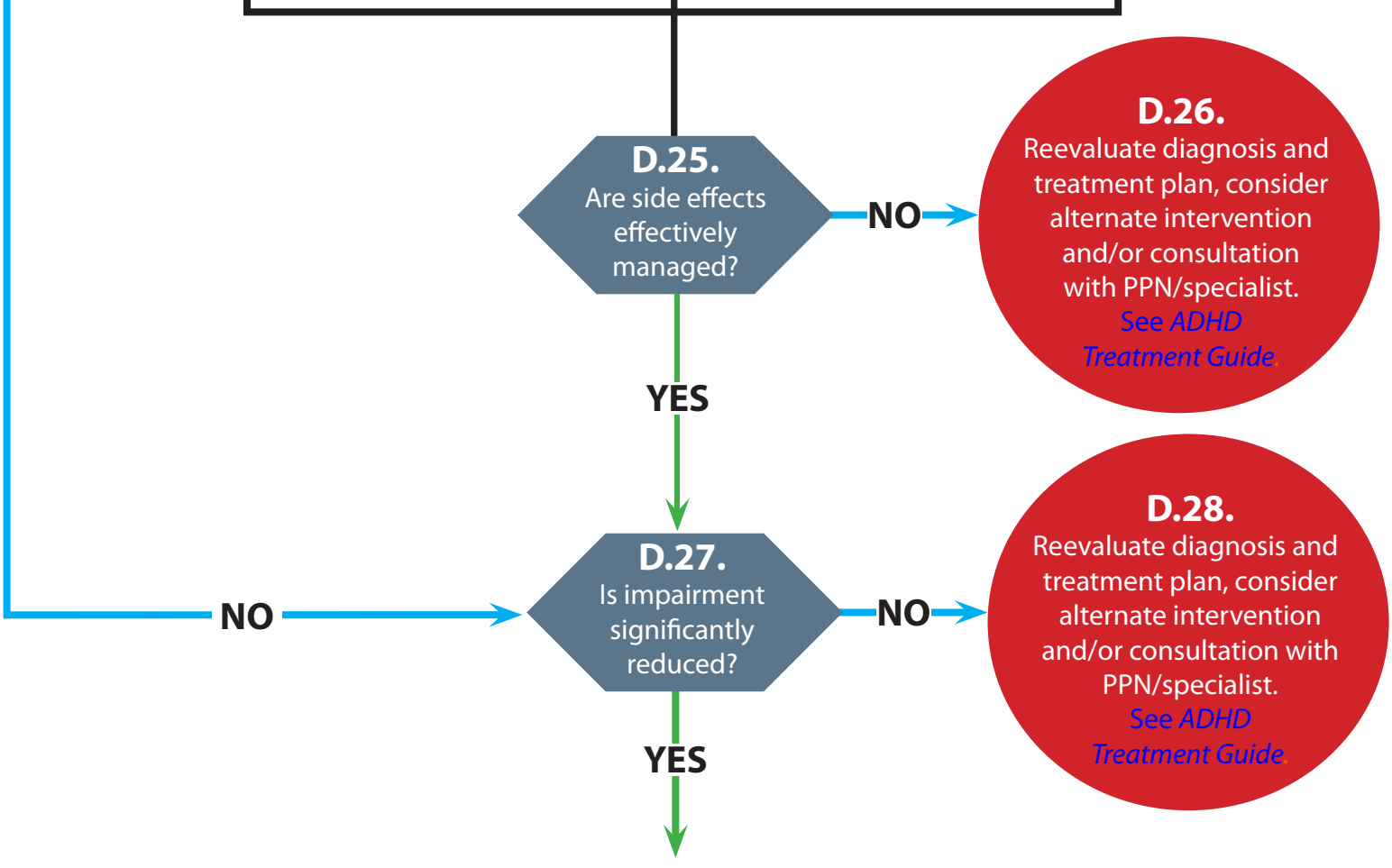
YES → **D.9.** Is ADHD the primary focus of treatment?

NO → **D.10.**

- Address primary focus.
- Assess impact of coexisting conditions on treatment.
- Evaluate or refer as needed.


D.11.
Is concomitant treatment of ADHD appropriate?
NO
D.12.
Treat primary focus and ongoing assessment and monitoring.
YES
YES
NO
D.13. OBTAIN BASELINE ASSESSMENT
Check height, weight, and BMI.
Check pulse and blood pressure.
Assess and note any pre-treatment tics.
Assess for cardiac risk factors (e.g., structural heart disease, syncope, family history of early cardiac death or arrhythmia).
D.14. CONSUMER/PARENT ENGAGEMENT AND CONSENT
Utilize motivational interviewing, technological & media education, parental self-education, and parent support groups to engage parents & consumers in educational process.
Include topics of ADHD medications, evidence-based therapies, and school intervention.
See Shared Decision-Making Process.
D.15. SELECT TREATMENT REGIMEN(S)
OPTION: MEDICATION
Stimulants are most commonly used to treat ADHD.
When appropriate, long-acting stimulants are preferred.
Extra caution recommended for preschoolers.
See ADHD Treatment Guide.
OPTION: EVIDENCED-BASED THERAPIES
Consider parent training as first line treatment for preschoolers.
See ADHD Treatment Guide.
OPTION: SCHOOL INTERVENTIONS
See ADHD tool kit section: School & Community Agencies.


D.16.
Are symptoms effectively managed?
NO
D.17.
Reevaluate diagnosis and treatment plan, consider alternate intervention and/or consultation with PPN/specialist.
See ADHD Treatment Guide.
YES
D.18. PATIENT MONITORING
FREQUENCY OF MONITORING
At least monthly for new patients, and in circumstances where dose or medication is changed, until effective and stable, tolerated medication dosage is reached.
At least every 3 months for stable patients.
EVALUATE SIDE EFFECTS
Check height, weight, and BMI.
Check pulse and blood pressure.
Discuss side effects with patient/caregiver.
MEASURE OUTCOMES
Evaluate Duration
Duration of Medication Chart.
Evaluate Efficacy
Vanderbilt ADHD Rating Scales – Parent, Teacher & Follow Up.
Target Outcomes (any or all of following)
At least 25% reduction in total symptom score.
And/or child no longer meets DSM criteria.
And/or child no longer meets inattention and/or hyperactivity/ impulsivity scale on Vanderbilt.
D.21.
Are there side effects that warrant intervention?
NO
D.20.
Insufficient duration?
NO
D.19.
Insufficient efficacy?
YES
YES
YES
D.22.
See ADHD Side Effects and Intervention Chart.
D.23.
Evaluate medication compliance.
Consider medication administration using school nurse.
Consider long-acting medication or adding a short-acting medication.
Assess for rebound effect.
D.24.
Adjust dosage or change medication.
Consider adding or intensifying psychosocial therapies.



D.29. ONGOING MONITORING

- After initial session of parent training (typically 3-6 months), consider psychosocial interventions to address comorbidities.
- Every year, conduct complete diagnostic assessment.
- Every year consider a 1-2 week medication holiday during a selected, strategic time (perhaps summer holiday) to re-assess need for medication.
- Coordinate care provided by medical home and specialists, parents/ caregiver, and school (e.g., psychosocial, exercise, nutrition or environmental adjustments).