

ASSESSMENT

Screening

Clinical consensus and existing guidelines from the Social Security Act, the Individuals with Disabilities Education Improvement Act (IDEA) of 2004, and the American Academy of Pediatrics (AAP)^{20,21} consistently recommend standardized developmental screening and support a variety of validated, parent-report screening tools for the early identification of developmental delays. The Ages and Stages Questionnaire (ASQ),²² which is endorsed across specialties for clinical screening and research purposes,²³ and the Parent's Evaluation of Developmental Status (PEDS)²⁴ are two of the most frequently used measures.²⁵ Table 2 lists commonly used screening tools for developmental delay.

The American Academy of Pediatrics recommends that screening begin in the medical home as part of the standard 9-, 12-, 18-, 24-, and 30-month well-child visits, with sensitive and specific standardized developmental screening tools²¹ that are able to detect children who display underdeveloped motor, language, and social skills. Some children display signs of ID/IDD later in their development, when academic demands exceed their capacities. Despite minimal literature on, or measures available for, systematic screening in later childhood and adolescence, primary care and mental health professionals should consider referring children and adolescents who have academic performance or behavioral challenges for standardized testing of intellectual functioning.

Diagnostic Evaluation

A positive screen for intellectual or developmental delay is followed by a diagnostic evaluation by a qualified practitioner (eg, a psychologist) to determine the degree of intellectual and adaptive impairment. Prior guidelines from the IDEA and the AAP^{20,21} recommend that any child who screens positive for developmental delay should have standardized testing of intellectual functioning and assessment of adaptive functioning, using validated measures. Commonly used assessments of intelligence and adaptive functioning are listed in Table 3.

Child and adolescent psychiatrists (CAP) can be actively involved in the diagnosis of ID/IDD and in specifying severity as described in the diagnostic manual.⁵ The *DSM-5* emphasizes the psychiatrist's role in the following: (1) identifying intellectual deficits (eg, in reasoning, problem solving, planning, abstract thinking, judgment, academic learning, learning from experience); (2) identifying adaptive functioning deficits in one or more areas of daily life (eg, communication, social participation, independent living) across multiple environments (eg, home, school, work,

community); and (3) using the severity table to assess adaptive functioning in three domains (conceptual, social, and practical).⁵

The *DSM-5* intellectual deficit criterion is met when confirmed by both clinical assessment and individualized, standardized intelligence testing.⁵ The *DSM-5* adaptive functioning deficit criterion is met when the individual fails to meet standards for personal independence and social responsibility.⁵ Standardized scales to measure adaptive behaviors do not capture all functional domains; thus, adaptive functioning requires clinical assessment.^{1,5}

The *DSM-5* notes that IQ test scores are "approximations of conceptual functioning but may be insufficient to assess reasoning in real life situations and mastery of practical skills."⁵ With standardized intelligence testing, individual cognitive profiles based on neuropsychological testing are more useful for understanding intellectual disability than a single IQ score. The profile of IQ subtests can be more helpful than the IQ composite score, as it can reveal both cognitive strengths and weaknesses needing supports.¹ Performance on standardized testing can be underestimated in children from cultural and linguistic minorities, as testing instruments may not be as sensitive for these populations. Other factors at the time of testing that can have significant effects on the reliability of the results include motivation, cooperation, interest, temperament, behavior, physical health, mental health, the test setting, and whether the tester has a supportive attitude, as well as communication, sensory, and motor factors.

In addition, the results of intellectual testing are less reliable for individuals with more severe ID or language impairment, as fewer of such individuals were ascertained to establish score ranges. Clinical training and judgment are thus required to interpret the results of intellectual testing and assess performance.

In children under 5 years of age, IQ measures are not considered reliable, and the term "Global Developmental Delay" (GDD) is used, defined by significant limitations in two or more developmental domains.⁵ The term "Unspecified Intellectual Disability" (Intellectual Developmental Disorder) is used in individuals over the age of 5 years when assessment of the degree of intellectual disability is rendered difficult or impossible because of associated sensory or physical impairment, communicative difficulties, locomotor disability, or the presence of severe problem behaviors or co-occurring psychiatric disorders.⁵

A diagnosis of ID/IDD requires continued reassessment, and federal law requires re-evaluation at least every 3 years in school-aged children.²⁶ Provisional diagnoses are sometimes necessary in the absence of reliable measurement