

**Practice Parameters for the Psychiatric Assessment  
of Infants and Toddlers (0-36 Months)**

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**ABSTRACT**

These practice parameters describe the psychiatric assessment of infants and toddlers (0-36 months) and support the growth of infant and toddler psychiatry, a rapidly developing field. Infants and toddlers are brought to clinical attention because of concerns about emotional, behavioral, relational, or developmental difficulties. It is axiomatic that the infant or toddler must be understood, evaluated, and treated within the context of the family. A perspective that is developmental, relational, and multidimensional and that borrows from the knowledge of multiple disciplines is essential. Collaborative efforts support the urgent need and incomparable opportunity to understand and to intervene early and preventively with young children and their families. **Key words:** infant psychiatry, infant, toddler, interdisciplinary assessment, practice parameters.

Child and adolescent psychiatrists and other clinicians evaluate and treat infants and toddlers and their families. Very young children are brought to clinical attention because of concerns about emotional, behavioral, relational, or developmental difficulties. For infants, the most frequent referral problems are dysregulation of physiologic function, including fussy or colicky behavior, feeding and sleeping problems, and failure to thrive. For toddlers, the most frequent referral problems are behavioral disturbances including aggression, defiance, impulsivity, and overactivity. In addition, constitutional factors, including developmental delays and more subtle physiologic, sensory, and motor processing problems often derail expected developmental progress and bring young children to clinical attention. Problems with "goodness of fit" (Thomas et al., 1968) between the child's constitutional attributes or temperament and the parents' expectations create relationship difficulties that often lead to referral. Children in this age range are also referred for concerns that they may have been physically or sexually abused.

These guidelines are applicable to the assessment of infants and toddlers age 0 to 36 months. In this guideline, the term "infant" refers to children age 0 to 12 months; "toddler" refers to children age 12 to 36 months. "Child" is used to mean children 0 to 36 months. "Parents" and "parental" refer to the infant's or toddler's parent figures or primary caregivers, that is, the psychological parents. "Parents" include adoptive, foster, and shelter care primary caregivers as well as grandparents and other extended family or friends who are primary caregivers for the child. "Family" refers to the primary caregiving unit, that is, the psychological family. "Family" is similarly inclusive of the wide diversity of primary caregiving units in our culture. This document presumes familiarity with the normal development of infants and toddlers and the principles of child and adolescent psychiatric assessment, diagnosis, and treatment (Gaensbauer and Harmon, 1981; Schaffer et al., 1985; Call, 1987; King and Noshpitz, 1991; Weiner, 1991; Zeanah, 1993; Rutter and Hersov, 1994; King et al., 1995; Lewis, 1995).

It is axiomatic that the infant or toddler must be understood, evaluated, and treated within the context of the family or primary caregiving unit. Winnicott framed this concept in his now classic words, "There is no such thing as a baby," by which he meant that an infant or young child cannot be understood outside of the sustaining caregiving environment (Winnicott, 1960, 1965). Infants and toddlers also must be understood, evaluated, and treated within additional significant contexts, which may include other important caregivers, extended family, the school, the day care center, and the culture.

The family's emerging alliance with the evaluating clinician provides the context of the assessment and intervention process itself. That is, the parents' responses to the assessment process, the child, each other, and the clinician are shaped by their relationship with the clinician. It is through this personal relationship that the clinician observes and facilitates the parents' behavioral, affective, and psychological responses to the infant or toddler and to their concerns about the child. It is also through this relationship that the

parents' concerns are understood and a treatment plan mutually developed (Hirshberg, 1993).

The purposes of the diagnostic assessment of infants and toddlers include: to develop with the parents a shared understanding of the core concerns and other factors leading to the referral; to determine if there is a problem, and if psychopathology or conditions that lead to risk or vulnerability are present; to establish a developmentally based differential diagnosis and an ongoing mutual process of formulation that helps organize the parents' understanding of their experience with the child; and to develop with the parents a treatment plan that addresses the parents' explicit and implicit expectations and facilitates parent--child relationships that support the child's healthy development. In emergency circumstances, or for specialized consultative purposes, the focus of inquiry may be narrowed or expanded, to be followed by a full evaluation at a later time.

To accomplish these purposes, the specific aims of the diagnostic assessment of the infant and toddler are: to establish with the parents an ongoing therapeutic relationship built on respect for the parents' knowing their child, being a central influence in their child's life, wanting to make a better life for their child (Fraiberg, 1980), and having unique values, preferences and cultural ideals; to assess the nature, severity and developmental impact on the child and on the family, of the child's behavioral difficulties, functional impairment, or subjective distress; and to identify transactional, mutually influencing, biopsychosocial, individual, family, and sociocultural risk and protective factors that may, in the process of development, contribute to or ameliorate these concerns.

## LITERATURE REVIEW

The scientific literature on infants and toddlers spans approximately 50 years. Compared with other fields of medicine, there is paucity of early scientific data with a proliferation of interdisciplinary work during the last 20 years. Most of the literature reviewed in these parameters was selected by psychiatrists with clinical and research expertise in the subject area. Major resources for this document include work in Zeanah, 1993; Minde, 1995; and Meisels and Fenichel, 1996. In addition, literature searches were conducted for the period 1976 to 1996 in both *Medline* and *PsychLit* using key words: infant psychiatry, neonate, infant, and toddler, child psychiatry, child psychology, mental health, multidisciplinary assessment, interdisciplinary assessment, standardized tests, and standardized instruments.

## ASSESSMENT OF INFANTS AND TODDLERS

While the psychiatric assessment of infants and toddlers is similar in many respects to the assessment of older children as described in the American Academy of Child and Adolescent Psychiatry's Practice Parameters for the Psychiatric Assessment of Children and Adolescents (King et al., 1995), there are several important differences.

By design, assessment and intervention with infants and toddlers is oriented toward prevention. Identification of risk and intervention prior to the appearance of disorder are central to the field (Emde et al., 1993) and considered "key to the prevention of mental disorder throughout the lifespan" (Fonagy, 1996). Recent research suggests that identification and resolution of psychiatric disorder in the first three years of life prevents "use-dependent" internalization of disordered neural patterns in rapidly developing and organizing brain structures (Perry et al., 1995). Since infancy and toddlerhood are a time of rapid change and lay the foundation for future development, the clinician's primary goal is facilitating rapid change toward healthy developmental progress and strengthening parental and extended environmental support systems.

Because infants and toddlers are maximally dependent on parents, most of the facilitation of change must be accomplished through the parents. Therefore, the parents are primary in the treatment team. The goal is to develop with the parents an evolving mutual understanding of the core concerns which will allow them to support the healthy development of the child in the family and broader caregiving contexts.

A multidimensional perspective, borrowing from pediatrics, developmental psychology, speech and language therapy, occupational therapy, and physical therapy is essential to work with this age group because young children can provide only limited behavioral and verbal clues to help the clinician understand complex transactional, mutually-influencing etiologic factors. The well accepted transactional model of development (Sameroff and Chandler, 1975) guides the clinician in integrating the mutual influences of the child and the environment on each other.

A developmental perspective (Lieberman, 1993) is essential to differentiate normality from risk and pathology. For example, toddlers are normally quite active and have a limited attention span. These behaviors must be distinguished from situation-specific and pervasive hyperactivity and attention problems. Various studies have documented normative infant and toddler developmental process and have emphasized four discrete "biobehavioral shifts" (Emde et al., 1976; Zeanah et al., 1989, 1997). These shifts include the qualitative reorganization of biological, cognitive, affective, and social capacities at ages 2 to 3 months, 7 to 9 months, 12 to 13 months, and 18 to 20 months (Emde et al., 1976; McCall et al., 1977; Kagan, 1984; Emde, 1985; Stern, 1985; Zeanah et al., 1989). In addition, the correlation between symptoms and risk factors is less clear than in older children. For example, sleep problems may be constitutional/maturational, emotional/behavioral, or a combination.

A relationship perspective is essential for collaborative assessment and treatment planning with the parents. This perspective also is essential for differentiating problems specific to a relationship from those that generalize over time and across situations. Bowlby (1969) emphasized the importance of the parent--child relationship or the "attachment behavioral system" in maintaining the infant's sense of security and creating what Winnicott (1960,

1965) called a "holding environment." "Sensitivity" and "responsivity" (Ainsworth et al., 1978); "emotional availability" (Emde, 1980); and "connectedness" (Clark, 1985) provide the emotional scaffolding that supports a child's emerging capacities (Vygotsky, 1978; Clark et al., 1993). These factors also appear to facilitate both physiologic and behavioral regulation (Barrett and Campos, 1987; Zeanah et al., 1989) as well as exploration of the environment (Ainsworth et al., 1978). In a parallel process, responsive, emotionally available, connected clinician-family relationships facilitate assessment and intervention.

Multiple assessments over time are needed because infants and toddlers change rapidly in response to internal and external stressors. Observation of the child with multiple caregivers, and ideally, in various settings, provides a more valid understanding of the infant or toddler and the parents' concerns, and leads to better treatment. Consultations that focus on specific questions from a specific agency may necessitate more abbreviated assessments.

It is essential to gather information from those who are most familiar with the child's current and past functioning, including the family or primary caregiving unit. For children in foster or shelter care, in day care, or in the child welfare system, information from case workers and multiple caregivers is essential. For children who are referred with medical concerns, including consultation while being hospitalized, the assessment should include information from physicians and all those centrally involved in the care of the child.

## THE FAMILY INTERVIEW

Parents may be interviewed with or without the infant or toddler present. The assessment format should be responsive to the needs of the family and should allow the clinician to: explore the parents' explicit and implicit concerns, including the reason for the referral, the child's current difficulties, and the impact of the child and his or her symptoms on the each parent, the parental couple, and the family as a whole; obtain a detailed history of the child's past and current development in the context of the family; gather a history of the parents' experiences of being parented and the degree to which they understand these to contribute to their child's present behavior; assess the biopsychosocial functioning of the parents and family within their home, community, and culture; and assess familial medical or psychiatric disorders that may be significant to the etiology or treatment of the child's difficulties. The clinician should observe the parents with the child during free play and more structured activity, to allow assessment of their parenting ability relative to the child's developmental achievements and needs.

## Establishing a Working Alliance with the Family

Establishing a good working alliance with the family is primary as it facilitates a collaborative learning and intervention process. Parents often feel anxious or guilty because they believe problems in a young child imply their

parenting skills are inadequate. In addition, parents frequently report disturbing behaviors in their young children which, in profound ways, reflect their own childhood experiences of being parented. The parents' early experiences often influence the meaning a parent places on a young child's behavior and should be discussed as part of the assessment and intervention processes. A good working alliance allows a mutual discovery of the past as it is active in the present (Hirshberg, 1993, 1996) and permits potential distortions to be modified more readily.

#### Reason for Referral

Parents either call for help directly or are referred by medical, educational, or social service providers with whom the parents have shared their concerns. The parents' account of the child's presenting difficulties, and expectations (explicit and implicit) of how the clinician will help, are of primary importance. The clinician should inquire about the frequency, intensity, and duration of problematic behaviors; the circumstances in which they occur, improve, or worsen; and the attitudes parents and others have toward the difficulties. A detailed, systematic account of specific instances of the problematic behavior (Cox and Rutter, 1985; Stern, 1995) and interventions that have helped or failed should be sought. To assess the degree to which the present difficulties impair the child's functioning, the clinician should determine the severity of the child's distress; possible impact on the child's development; and the impact of the child's behavior on others (Cox and Rutter, 1985). In addition, reports from other significant caregivers should be sought for context and alternate perspectives.

The course of the history-taking varies with the nature of the presenting symptoms and with the details of each case. The goal is not only to obtain a description of the problematic behavior, but to understand the meaning and function of the symptoms in relation to factors in the child and his or her environment. To make these distinctions, the interviewer must assess the preceding circumstances, immediate precipitants, and consequences of the problematic behavior, as well as the developmental, family, and cultural contexts in which the symptoms occur. Thus, history-taking and diagnostic formulation are not separate processes; rather, the clinician continuously forms and tests tentative hypotheses for diagnostic possibilities.

History-taking should focus not only on the child's difficulties and symptoms, but also on his or her strengths of behavioral organization and areas of good adjustment. An approach that identifies positive attributes of the child and the caregiving environment helps enhance the parents' self-esteem and supports the working alliance between the clinician and the child's parents.

#### Developmental History

The clinician should obtain a detailed history of all developmental aspects pertaining to the biological, cognitive, temperamental, and socio-

emotional life of the infant or toddler with special focus on early concerns that may relate to the referral concerns.

Assessment of the physical, cognitive, and emotional development of the infant or toddler includes inquiry into prenatal, perinatal and postnatal complications, including maternal medication and substance use, length of gestation, and neonatal status. The physical history also includes data on gross and fine motor development, toilet training, eating behavior, and sleep patterns, as well as medication, illnesses, hospitalizations, injuries or operations, and the child's reactions to these events (Werner and Smith, 1982). The cognitive developmental history includes the child's attentional and organizational abilities as well as verbal skills over time (Bornstein and Sigman, 1986). Particular attention should be paid to apparent changes or discontinuities in the child's developmental progress or level of functioning.

Assessment of the child's early behavioral organization is based on the recognition that infants vary in the way they regulate their physiologic state, alertness, and activity patterns. Infants also vary in their ability to calm themselves and regulate their affect (De Gangi et al., 1991). To assess these functions, the clinician should determine how an infant or toddler organizes or regulates adaptive, physiological, sensory, attentional, motor, and affective behaviors. Each of these processes may be over- or under-regulated, since infants and toddlers vary in their ability to console themselves, regulate sleeping and eating, and adapt to new situations (Chess and Thomas, 1989; Greenspan, 1993).

The child's degree of individuation should be assessed, including the child's level of independence and involvement with parents, other adults, siblings, and peers.

The child's special strengths and vulnerabilities should be assessed, including strengths in symbolic play or coordination, being shy, or having hypo- or hypersensitivities to specific stimuli.

The child's response to previous stressors also should be assessed. These would include physical or sexual abuse, medical illnesses or hospitalizations, significant parental absence, birth of a sibling, move to a different house, or other stresses affecting the parents or family. The parents' responsiveness to the child, and the potential effect this has had on the child's relatedness and other competencies, should also be considered.

### Family Relational History

Although the relationship between child and parent is important to psychiatric evaluations of children at any age, it is particularly critical to the evaluation of the infant or toddler. The infant's or toddler's profound dependence on the parents places them in a key role to facilitate the healthy development of the child across multiple domains.

The parents' perceptions, distortions, attitudes, and expectations of the child are important to assess thoroughly, especially since the history is expected to reflect perceptual bias. Such information may be gleaned from the subtle nuances (such as word choice and gestures) of the parents' open-

ended reports. Specific questions, however, may be helpful. For example, the clinician might ask if the child reminds the parents' of specific family members. The parents' identification of the child with another family member may provide a powerful clue to their biases and expectations. During this portion of the session, interviewing the parents without the child may facilitate greater disclosure, especially with parents of toddlers. Many clinicians report, however, that the presence of the infant or toddler during such sessions is catalytic to the process (Fraiberg, 1980).

The clinician should explore the parents' early relationship histories, to uncover the origins of parenting style as well as the symbolic value of the child to each parent. Fraiberg (1980) theorized that earlier unresolved feelings haunt the parents' developing relationship with the infant. Bowlby (1982) described an "internal working model," or a set of expectations (conscious and unconscious) of what parents are expected to do for, and how they are expected to be with, their child. It is important to determine both the positive and negative nature of parental expectations and whether expectations of behavior are developmentally appropriate. The clinician attempts to understand the parents' "internal working model" to determine how this plays a role in the strengths of or problems in the infant--parent relationship.

The clinician should gather a detailed family history, including information about the parents, their siblings, and their caregivers from birth onward. The history may yield information on deaths, separations, or divorces, their placement into out-of-home care, and other important events that have impacted the parenting style or the parents' ability to care for their child.

In assessing the parents' past and present relationships with their own parents and other important role models, the clinician should determine learning the structure and supervision provided by their parents; the parental warmth and types of punishment used; problems in either parent's life that may be similar to the infant's problems; the amount of family conflict present during their childhood; the number of and satisfaction with peer relationships; and the quality of school experiences and relationships with teachers. These factors have an established validity in predicting how parents will interact with their own children and can be reliably ascertained during a clinical interview (Quinton and Rutter, 1988; Fonagy et al., 1991; Minde, 1995, 1996). The family interview also should cover the parents' education and occupation, familial medical or psychiatric conditions, and medical history.

### Clinical Observation

Observation of the child and parents interacting, and of the quality of the affective bonds, is central in the assessment process. Home visits are helpful, but usually impractical. Visits to day care facilities may be helpful, especially if a day care provider encouraged the referral. Most of the sessions with the infant or toddler should take place in the presence of a parent. Initial observations usually are obtained during the history-taking with the family. For further direct observation of the child--parent relationship, an

interactive play setting is necessary. It is imperative that the examiner inform the parents about the nature and purpose of the session. A small, comfortable playroom with a variety of toys, but not an overwhelming number, is most helpful. Carpeting facilitates both children and adults playing on the floor.

The clinician invites the family to interact as they usually would at home for at least 15 to 20 minutes. Unstructured parent--child or family play provides optimal opportunity for interactional observation. Structured activities, and the child's response to brief parental separation and reunion (Clark, 1985; Boris et al., 1997), also may be useful depending upon the child's developmental age and the nature of the problem. Often a combination of assessment methods is needed.

It is helpful to observe family play with multiple family members, including siblings. The presence of siblings gives examiners a more naturalistic view of the family's experience at home. Observing the child in separate interactive sessions with each parent and available significant caregivers helps establish relationship-specific problems and clarifies the strengths and weakness of each caregiver, which is helpful in intervention planning.

During family play, the evaluator may observe all or part of the session through a one-way mirror, or may be in the room as a "participant-observer." When the clinician is a participant-observer, it is helpful to explain that to facilitate spontaneity, he or she will defer extensive conversation for another time. Limited verbal exchange between the parents and clinician can be helpful, however, to explore the parents' feelings about, and experience of, the child during play and to assess the parents' perception of the infant's emotional states. Additional guidelines for unstructured play observations are detailed by Segal and Webber (1996).

Clinically relevant dimensions of each parent's behavior include level of affection expressed towards the infant and the willingness and ability to engage the child (both verbally and non-verbally); the parent's level of attunement to the child's cues; the parent's vigilance, protectiveness, and ability to regulate the child's emotional responses; the use of limits and the manner in which the parent allows or facilitates autonomous play in the child; the level of dyadic pleasure and harmony during play; and the thematic content of play and the role played by the parent.

The child's capacity for and interest in interpersonal relatedness should also be assessed in the context of interactive play with the parent. Clinically relevant dimensions of the child's behavior include the amount and extent of physical contact and eye contact; the manner and extent to which the child engages or initiates play with the parent and observer; the quality and quantity of verbal exchange; and the child's capacity for affective involvement with the parent. The child's interactive capacity and level of play, from sensorimotor to imaginative, are key.

In parent--infant dyads, the clinician looks for mutual engagement, shared interests, simple imitation, and attuned exchanges. In parent--toddler

dyads, the clinician, in addition, looks for symbolic play, especially that involving and elaborated by the parent (Greenspan, 1990; Stern, 1984). Observations of the child's capacity for relatedness with the evaluator also may be helpful, keeping in mind that anxiety may significantly inhibit the child.

Parents often feel inhibited during interactive sessions. After the session, it is important to ask parents about their level of comfort and how the play was similar to or different from what happens at home, both for the child and the caregiver (Clark, 1985). This is particularly important for children, given that state-related changes in behavior (due to illness or fatigue, for example) may be significant. For these reasons, it is preferable to observe parent-child interactions over multiple sessions.

Validated, semi-structured interactional assessments also may be of benefit to the clinician but are not a necessary part of a comprehensive evaluation (Gaensbauer and Harmon, 1981). Systematic scoring of observations is not necessary for clinical purposes. A semi-structured approach, however, allows the clinician to view the dyad in a variety of representative situations. An example of a semi-structured play interview, the Parent--Child Early Relational Assessment (Clark, 1985), involves the observations of feeding/eating, a teaching task, separation and reunion, and free play.

#### Videotaping and the Use of Early Family Records

Videotaping may be a useful adjunct to an interactive play observation. Videotaping is ideally done with hidden cameras or through a one-way mirror to decrease the intrusiveness of the camera, but also can be done with a camera on a tripod in the room. The videotape provides the clinician, and perhaps more importantly the family and clinician together, an opportunity to identify interactional strengths and concerns. It should be noted, however, that video is limited in capturing affective complexity. Videotaping has become an increasingly accepted tool for both assessment and treatment (McDonough, 1990). Informed consent for videotaping should be obtained in advance of the procedure.

In addition, if family videotapes, films, photos, and baby books recording the child's development or problematic behavior are available, they may be reviewed and discussed with the parents as part of the assessment (Call, 1985).

#### THE INFANT AND TODDLER MENTAL STATUS EXAM

The Infant and Toddler Mental Status Exam (ITMSE) is a reference tool that highlights, with examples, how traditional categories of the mental status exam for adults and older children may be adapted to observations of infants and toddlers. New categories have been added, including sensory and state regulation, that reflect important areas of infant development and of disorders in young children. In focusing on both individual and interactional behaviors and on the emotional and developmental functioning of the infant,

the ITMSE can help clinicians systematize observations of young children that are typically made in a naturalistic or play setting.

Developmental status in young children may be characterized by delays, deviations, precocious, and age expected skills. Not every child will need or have access to developmental testing. The clinician must be sufficiently familiar with early child development to use this Exam to guide observations that help determine which children to refer for further evaluation.

As a tool for assessing the social and emotional status of the young child, ITMSE includes observations of the child, the child's interactions with parents, and the child's reaction to an unfamiliar adult. The clinician may interact directly with the child during parts of the session to elicit information not revealed in observations of parent and child. It is useful to describe the flow of the session, and especially of play, in a narrative form, as well as noting findings on each part of the Mental Status Exam. The parent should be asked how the observed behavior compares to that typical of the child at home. The ITMSE provides examples of both normal capacities and abnormal findings.

Figure 1. INFANT AND TODDLER MENTAL STATUS EXAM

1. Appearance: Size; level of nourishment; dress and hygiene; apparent maturity compared to age; dysmorphic features, e.g., facies, eye and ear shape and placement, epicanthal folds, digits etc., abnormal head size; cutaneous lesions.
2. Apparent Reaction to Situation (Note where evaluation takes place and with whom.)
  - A. Initial reaction to setting and to strangers: Explores; freezes; cries; hides face; acts curious, excited, apathetic, or anxious (describe).
  - B. Adaptation
    1. Exploration: When and how child begins exploring faces, toys, stranger.
    2. Reaction to transitions: From unstructured to structured activity; when examiner begins to play with infant; cleaning up; leaving.
3. Self-Regulation
  - A. State regulation: An infant's state of consciousness ranges from deep sleep through alert stages to intense crying. Predominant state and range of states observed during session; patterns of transition, e.g., smooth vs. abrupt; capacity for being soothed and self-soothing; capacity for quiet alert state. (Some of these categories also apply to toddlers.)
  - B. Sensory regulation: Reaction to sounds, sights, smells, light and firm touch; hyper- or hypo-responsiveness (if observed) and type of response, including apathy, withdrawal, avoidance, fearfulness, excitability, aggression or marked behavioral change; excessive seeking of particular sensory input.
  - C. Unusual behaviors: Mouthing after 1 year of age; head banging; smelling objects; spinning; twirling; hand-flapping; finger-flicking; rocking; toe walking; staring at lights or spinning objects; repetitive, perseverative or bizarre verbalizations or behaviors with objects or people; hair pulling; ruminating; or breath-holding.
  - D. Activity level: Overall level and variability (Note that toddlers often incorrectly are called hyperactive.) Describe behavior, e.g., squirming constantly in parent's arms; sitting quietly on floor or in infant seat; constantly on the go; climbing on desk and cabinets; exploring the room; pausing to play with each of 6 to 8 toys.
  - E. Attention span: Capacity to maintain attentiveness to an activity or interaction; longest and average length of sustained attention to a given toy or activity; distractibility.  
Infants: Visual fixing and following at 1 month; tracking at 2 to 3 months; attention to own hands or feet and faces; duration of exploration of object with hands or mouth.
  - F. Frustration tolerance: Ability to persist in a difficult task, despite failure; capacity to delay reaction if easily frustrated, e.g., aggression, crying, tantrums, withdrawal, avoidance.
  - G. Aggression: Modes of expression; degree of control of or preoccupation with aggression; appropriate assertiveness.
4. Motor  
Muscle tone and strength; mobility in different positions; unusual motor pattern, e.g., tics, seizure activity; intactness of cranial nerves, e.g., movement of face, mouth, tongue, and eyes, including feeding, swallowing, and gaze (Note excessive drooling.)
  - A. Gross motor coordination  
Infants: Pushing up; head control; rolling; sitting; standing.  
Toddlers: Walking; running; jumping; climbing; hopping; kicking; throwing and catching a ball (It is useful to have something for child to climb on, such as a chair.)
  - B. Fine motor coordination

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Infants: Grasping and releasing; transferring from hand to hand; using pincer grasp; banging; throwing.

Toddlers: Using pincer grasp; stacking; scribbling; cutting. Both fine motor and visual-motor coordination can be screened by observing how child handles puzzles, shape boxes, a ball and hammer toy, small cars, and toys with connecting parts.

### 5. Speech and Language

- A. Vocalization and speech production: Quality, rate, rhythm, intonation, articulation, volume.
- B. Receptive language: Comprehension of others' speech as seen in verbal or behavioral response, e.g., follows commands; points in response to "where is" questions; understands prepositions and pronouns (Include estimate of hearing, especially in child with language delay, e.g., response to loud sounds and voice; ability to localize sound.)
- C. Expressive language: Level of complexity, e.g., vocalization, jargon, number of single words, short phrases, full sentences; over generalization, e.g., uses "kitty" to refer to all animals; pronoun use including reversal; echolalia, either immediate or delayed; unusual or bizarre verbalizations.  
Preverbal children: Communicative intent, e.g., vocalizations, babbling, imitation, gestures, such as head shaking and pointing; caregiver's ability to understand infant's communication; child's effectiveness in communication.

### 6. Thought

The usual categories for thought disorder almost never apply in young children. Primary process thinking, as evidenced in verbalizations or play, is expected in this age group. The line between fantasy and reality is often blurred. Bizarre ideation; perseveration; apparent loose associations; and the persistence of pronoun reversals, jargon, and echolalia in an older toddler or preschooler may be noted in a variety of psychiatric disorders, including pervasive developmental disorders.

- A. Specific fears: Feared object; worry about being lost or separated from parent.
- B. Dreams and nightmares: Content is sometimes obtainable in children aged 2 to 3 years. Child does not always perceive it as a dream, e.g., "A monster came in the front door."
- C. Dissociative state: Sudden episodes of withdrawal and inattention; eyes glazed; "tuned out"; failure to track ongoing social interaction. Dissociative state may be difficult to differentiate from an absence seizure, depression, autism, or deafness. The context may be helpful, e.g., child with a history of neglect freezes in a dissociative state as mother leaves room. Neurologic or audiologic evaluation may be warranted.
- D. Hallucinations: Extremely rare, except in the context of a toxic or organic disorder, then usually visual or tactile.

### 7. Affect and Mood

The assessment of mood and affect may be more difficult in young children because of limited language; lack of vocabulary for emotions; and use of withdrawal in response to a variety of emotions from shyness and boredom to anxiety and depression.

- A. Modes of expression: Facial; verbal; body tone and positioning.
- B. Range of expressed emotions: Affect, especially in parent-child relationship.
- C. Responsiveness: To situation; content of discussion; play; and interpersonal engagement.
- D. Duration of emotional state: Need history or multiple observations.
- E. Intensity of expressed emotions: Affect, especially in parent--child relationship.

### 8. Play

Play is a primary mode of information gathering for all sections of the ITMSE. In very young children, play is especially useful in the evaluation of the child's cognitive and

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symbolic functioning, relatedness, and expression of affect. Themes of play are helpful in assessing older toddlers. The management and expression of aggression is assessed in play as in other areas of behavior. Play may be with toys or with child's own or another's body, e.g., peek-a-boo, roughhousing; verbal, e.g., sound imitation games between mother and infant; interactional or solitary. It is important to note how the child's play varies with different familiar caregivers and with parents versus the examiner.

### A. Structure of play (ages approximate)

1. Sensorimotor play
  - a. (0-12 months): Mouthing, banging, dropping and throwing toys or other objects.
  - b. (6-12 months): Exploring characteristics of objects, e.g., moving parts, poking, pulling.
2. Functional play
  - a. (12 to 18 months): Child's use of objects shows understanding and exploration of their use or function, e.g., pushes car, touches comb to hair, puts telephone to ear.
3. Early symbolic play
  - a. (18 months and older): Child pretends with increasing complexity; pretends with own body to eat or sleep, pretends with objects or other people, e.g., "feeds" mother; child uses one object to represent another, e.g., a block becomes a car; child pretends a sequence of activities, e.g., cooking and eating.
4. Complex symbolic play
  - a. (30 months and older): Child plans and acts out dramatic play sequences, uses imaginary objects. Later, child incorporates others into play with assigned roles.
5. Imitation, turn-taking, and problem-solving as part of play.

### B. Content of Play

The toddler's choice and use of toys often reflect emotional themes. It is desirable to have on hand toys that tap different developmental and emotional domains. An overfull playroom may be overwhelming or overstimulating and reduce meaningful observations. Young toddlers of both sexes often gravitate to dolls, dishes, animals, and moving toys, such as cars. The examiner's choice of specific materials may facilitate the expression of pertinent emotional themes. For example, a child traumatized by a dog bite may more likely reenact the trauma if a dog and doll figures are available. The child's reaction to scary toys, such as sharks, dinosaurs, or guns, should be noted, especially if they are avoided or dominate the session. Does aggressive pretend play become "real" and physically hurtful? By age 2½ to 3, a child's animal or doll play can reveal important themes about family life, including reactions to separation, parent--child and sibling relationships, experiences at day care, quality of nurturance and discipline, and physical or sexual abuse. The examiner must use caution in interpreting play, viewing it as a possible combination of reenactment, fears, and fantasy.

### 9. Cognition

Using information from all above areas, especially play, verbal and symbolic functioning, and problem-solving, roughly assess child's cognitive level in terms of developmental intactness, delays or precocity.

10. Relatedness

A. To parents: How "in tune" do the child and parent seem? Does the child make and maintain eye, verbal, or physical contact? Is there active avoidance by child? Note infant's level of comfort and relaxation being held, fed, "molding" into caregiver's body. Does toddler move away from caregiver and check back or bring toys to show, to put into his or her lap, to play with together or near caregiver? Comment on physical or verbal affection, hostility, reaction to separation and reunion, and use of transitional objects (blanket, toy, caregiver's possession). Describe differences in relating if more than one caregiver is present.

B. To examiner: Young children normally show some hesitancy to engage with a stranger, especially after 6 to 8 months of age. Appropriate wariness in young children may result in a period of watching the examiner; staying physically close to a familiar caregiver before engaging; or showing some constriction of affect, vocalization or play. After initial wariness, does the child relate? Does the child engage too soon or not at all? How does relatedness with a stranger compare to that with a parent? Is the child friendly versus indiscriminately attention-seeking, guarded versus overanxious? Can examiner engage the child in play or structured activities to a degree not seen with caregiver? Does the child show pleasure in successes if the examiner shows approval?

C. Attachment behaviors: Observe for showing affection, comfort-seeking, asking for and accepting help, cooperating, exploring, controlling behavior, and reunion responses. Describe age-related disturbances in these normative behaviors. Disturbances are often seen in abused and neglected children, e.g., fearfulness, clinginess, over compliance, hypervigilance, impulsive overactivity, and defiance; restricted or hyperactive and distractible exploratory behavior; and restricted or indiscriminate affection and comfort-seeking.

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## STANDARDIZED INSTRUMENTS

Standardized instruments may augment the clinician's understanding of many aspects of biopsychosocial and cultural risk and protective factors. Although there are standardized assessment tools for infants and toddlers, their usefulness and suitability in routine clinical practice have not been clearly defined. Furthermore, there is no one measure used by most clinicians to assess the various lines of development or dysfunction in infants and toddlers (See Table 2, p. 55).

Standardized instruments may be used as part of comprehensive assessment but should not constitute the sole basis for diagnosis or treatment planning. In addition, standardized instruments should be used within a developmental framework, guided by the principle that infants and toddlers must be understood in the context of the relationships within which they are developing.

Because developmental processes are complex and rapidly changing for this age group, establishing reliability and validity of standardized measures is especially challenging (Clark, et al., 1993). The Bayley Scales of Infant Development, Second Edition (1993) were developed to identify deviations in development. They have been used cross-culturally in research and clinical assessment since the first edition in 1969. Interview and observation schedules for specific disorders presenting in the infant and toddler years are also available (DiLavore, 1995). These measures provide a standardized format for child assessment and parent interviews by prompting the psychiatrist to inquire about disorder-specific items. Additional standardized data may be derived from parent checklists and rating scales assessing a narrow or broad range of symptoms (Clark, et al., 1993; Crowell and Fleischman, 1993; Meisels and Shonkoff, 1990; Meisels and Provence, 1989; Barkley, 1988). These measures are used for problem identification or screening for developmental delays.

Infants and toddlers referred for assessment may have had developmental screening tests completed by their day care providers or pediatricians. The most frequently used measure is the Denver Developmental Screening Test II (Frankenburg, 1990). While specific measures vary considerably, most of the standardized protocols include instruments to assess general cognitive functioning, communication, and social and emotional functioning. Table 1 lists examples of instruments that have been frequently used for standard assessment of infants and toddlers. Some of the instruments cited do not require training to administer (CBCL, Vineland, Home, PSI). The PCERA is often adapted for clinical use by evaluators without special training but requires training to score for investigative purposes. The Bayley requires training to administer.

Other infant and toddler assessment tools used to structure clinical observations and augment parental reports include: Infant-Toddler Developmental Assessment (IDA) (Provence et al., 1995; Erikson, 1996); Infant/Toddler Symptom Checklist: A Screening Tool for Parents (DeGangi et al., 1995); Working Model of the Child Interview (Zeanah and Benoit, 1995);

the MacArthur Communicative Development Inventory (MacArthur Communicative Development Inventory, 1993); Project AIMS: Developmental Indicators of Emotional Health (Partridge et al., 1992; Partridge et al., 1996); Nursing Child Assessment Satellite Training (NCAST) Teaching and Feeding Scales (Barnard, 1979). Widely used temperament scales include the Infant Behavior Questionnaire (Rothbart, 1986) and the Toddler Behavior Assessment Questionnaire (Goldsmith, 1996).

#### INTERDISCIPLINARY ASSESSMENT AND REFERRAL

Frequently, adjunctive assessments are needed to supplement the initial assessment. Ideally, adjunctive assessments are performed by an established interdisciplinary team, given the interaction between the individual, the family, and the larger environment, and the risk and protective factors that contribute to the presenting concerns. Adjunctive assessments may include assessments in other settings (home, child care agency, school, etc.) and by professionals from other disciplines, including pediatrics, developmental pediatrics, neurology, genetics, nutrition, ophthalmology, audiology, psychology, speech and language therapy, occupational therapy, physical therapy, and social and educational services. In many communities, assessment, screening, and coordination programs (federally authorized in all states for children ages 0 through 2 years) have developed referral networks for appropriate assessment and referral services.

#### DIAGNOSTIC FORMULATION

Infant and toddler assessment aims to enhance the understanding of core concerns and the child's developmental potential. One outcome of the assessment may be the diagnosis of one or more psychiatric disorders as defined by the *Diagnostic and Statistical Manual, Fourth Edition (DSM-IV)* (American Psychiatric Association, 1994), the *International Classification of Diseases (ICD-10)* (World Health

Organization, 1992) or the *Diagnostic Classification: 0 to 3 (DC:0-3)* (Zero to Three, 1994). The assessment process, however, goes well beyond a categorical psychiatric diagnosis in an effort to explain the extent and nature of an infant's or toddler's symptoms, distress, or impairment and what, if any, treatment to recommend.

Diagnostic classification schemes are evolving as data and understanding in this field progress. The *ICD-10* categories parallel those of the *DSM-IV*. Both lack diagnostic criteria and time frames specific to infants and toddlers. The *DC:0-3* is the newest classification. *DC:0-3* proposes an evolving developmentally appropriate multi-axial framework intended to complement the *DSM-IV*. The Zero to Three/National Center for Infants, Toddlers, and Families' interdisciplinary Diagnostic Classification Task Force was established in 1987. Preliminary data collected by the Task Force guided the development of diagnostic criteria. Plans for standardized training, ongoing data collection, and field testing for the *DC:0-3* are currently being developed (Zero to Three, 1994).

*DC:0-3* contributes axes and diagnostic categories that define new constructs arising out of clinical and research experience with infants, toddlers, and their families. New Axis I categories include Regulatory Disorders and Multisystem Developmental Disorders. Regulatory Disorders define disorders that are constitutionally and maturationally based sensory, sensory-motor, or organizational processing problems associated with difficulties in regulating behavior. Multisystem Developmental Disorders offers an alternative to pervasive developmental disorders (*DSM-IV* and *ICD-10*) for young children with significant impairment in relating, significant motor and sensory processing difficulties, yet some potential for closeness. Axis II, Relationship Classification, may be used to describe Relationship Disorders or patterns of relating with each significant parent figure or caregiver. Axis V, Functional Emotional Developmental Level describes the child's capacity to organize experience (Zero to Three, 1994).

The clinician's diagnostic formulation process expands the formal categorical diagnosis by identifying, to the fullest extent possible, the predisposing factors and current precipitants of the infant's difficulties. The formulation and recommendation processes evolve collaboratively with the family as a continuation of the assessment process.

## **TREATMENT PLANNING**

On the basis of the findings, formulation, and knowledge of available resources, treatment recommendations are developed collaboratively with the family. The resources available to a family, as well as the unique combination of individual and family capacities for learning and change, are considered. The summarizing discussion with the parents reviews the complexity of the assessment process, including the interdisciplinary, developmental, and multigenerational elements. The infant's attachment capacity; social, emotional, cognitive, physical, and language development; and temperament are characterized. Such features as vigilance, protection,

physiologic regulation, play, symbolism, communication, learning style, control, and regulation of affect are described, and relative strengths and weaknesses are clarified. Risk factors, protective factors, socio-cultural experience, and biological factors are components of the discussion.

The discussion of the findings, formulation, and recommendations may require more than one session. The parents' and other caregivers' explicit and implicit expectations may help guide selection of treatments. An individualized plan is designed to capitalize on the strengths of the child and parents, and the extended environmental context. Further assessments, treatment referrals, and communication of findings to outside sources should be discussed as part of the treatment planning process. Sharing the findings and recommendations with other providers, including pediatrician, day care personnel, social services personnel, or parents' mental health providers helps to coordinate the complex environmental support system young children need.

## **DEVELOPMENT OF THESE PARAMETERS**

### **CONFLICT OF INTEREST**

As a matter of policy, some of the authors of these practice parameters are in active clinical practice and may have received income related to treatments discussed in these parameters. Some authors may be involved primarily in research or other academic endeavors and also may have received income related to treatments discussed in these parameters. To minimize the potential for these parameters to contain biased recommendations due to conflict of interest, the parameters were reviewed extensively by Work Group members, consultants, and Academy members; authors and reviewers were asked to base their recommendations on an objective evaluation of the available evidence; and authors and reviewers who believed that they might have a conflict of interest that would bias, or appear to bias, their work on these parameters were asked to notify the Academy.

### **SCIENTIFIC DATA AND CLINICAL CONSENSUS**

Practice parameters are strategies for patient management, developed to assist clinicians in psychiatric decision-making. These parameters, based on evaluation of the scientific literature and relevant clinical consensus, describe generally accepted approaches to assess and treat specific disorders, or to perform specific medical procedures. The validity of scientific findings was judged by design, sample selection and size, inclusion of comparison groups, generalizability, and agreement with other studies. Clinical consensus was determined through extensive review by the members of the Work Group on Quality Issues, child and adolescent psychiatry consultants with expertise in the content area, the entire Academy membership, and the Academy Assembly and Council.

These parameters are not intended to define the standard of care; nor should they be deemed inclusive of all proper methods of care or exclusive of other methods of care directed at obtaining the desired results. The ultimate

judgment regarding the care of a particular patient must be made by the clinician in light of all the circumstances presented by the patient and his or her family, the diagnostic and treatment options available, and available resources. Given inevitable changes in scientific information and technology, these parameters will be reviewed periodically and updated when appropriate.

**OUTLINE OF PRACTICE PARAMETERS FOR THE PSYCHIATRIC ASSESSMENT OF INFANTS AND TODDLERS (0-36 MONTHS)**

- I. Purpose, Aims, and Special Considerations
  - A. The purposes of the assessment are
    1. To develop with parents a shared understanding of the core concerns;
    2. To determine whether psychopathology or conditions that lead to risk are present;
    3. To establish a developmentally based differential diagnosis and an ongoing mutual process of formulation;
    4. To develop with the parents a treatment plan that addresses the parents' explicit and implicit expectations and facilitates supportive parent--child relationships.
  - B. To accomplish these purposes, the aims of the assessment process are
    1. To establish with the parents an ongoing therapeutic relationship built on respect;
    2. To assess the nature, severity, and developmental impact of the child's behavioral difficulties, functional impairment, or subjective distress on the child and on the family.
    3. To identify mutually influencing biopsychosocial, individual, family, and sociocultural risk and protective factors.
  - C. Special considerations in the assessment of infants and toddlers
    1. By design, assessment and intervention of infants and toddlers are unified and oriented toward prevention.
    2. Because infants and toddlers are maximally dependent on parents, the parents are primary in the treatment team.
    3. A multidimensional biopsychosocial approach is essential for understanding complex transactional etiologic factors.
    4. A developmental perspective is essential to differentiate normality from risk and pathology.
      5. A relationship perspective is essential to understand the power of relationships both in a child's development and in collaborative assessment, intervention, and treatment planning with parents.
      6. Multiple assessments over time are needed because infants and toddlers change rapidly in response to internal and external stimuli.
      7. Collaborative efforts at all levels support the urgent need and incomparable opportunity to intervene preventively.

- II. Assessment.
  - A. Sources of information
    - 1. For most children, the informants include
      - a. the parents or other primary caregivers.
      - b. the child.
      - c. the extended family.
      - d. the school or day care personnel.
      - e. the pediatrician.
    - 2. For children involved with the child welfare system, or in institutional care, it is important to obtain records and current information.
    - 3. Records of relevant pediatric, psychiatric, psychological, or special educational evaluations should be reviewed.
  - B. Family interview.
    - 1. The family interview ideally includes all primary caregivers and may include other important sources of support.
    - 2. A good working alliance with the family is primary.
    - 3. Most clinicians require 3 to 5 sessions to complete an assessment. Special circumstances may necessitate an abbreviated assessment.
    - 4. Components agreed on by most practitioners include
      - a. Family sessions. The infant or toddler is usually present in order to facilitate observations of interactions and relationships during the interview and play. Siblings and other children living with the patient also are often present.
      - b. Parents session. Parents usually feel that an opportunity to meet with clinicians alone is helpful.
      - c. Child session(s). It often is helpful to interact, play, and talk with the child alone, especially in the case of toddlers aged 18 months and older.
    - 5. Discussion of practical and administrative matters includes
      - a. Duration, format, and scheduling of the assessment.
      - b. Cost and payment arrangements.
      - c. Confidentiality, including permission to obtain relevant records and informed written consent to share the results of the assessment with specified professionals.
    - 6. Obtain parental account of reason for referral.
      - a. Clarify who is concerned, why, and why help is being sought at present.
      - b. Define and discuss parents' explicit and implicit expectations of referral.

7. Obtain details of current difficulties.
  - a. Duration, frequency and intensity.
  - b. Precipitants, if any.
  - c. Circumstances in which difficulties occur.
  - d. Consequences, including: degree of distress of the child and impact on the child, parents, and family as a whole.

8. Developmental history.

The developmental history elicits both the objective facts and the emotional significance of these facts. The relevant chronology may be in terms of important events in the child's or family's life.

- a. Circumstances of conception, pregnancy, adoption, infancy.
  - i. Was the pregnancy planned and wanted? What was going on in the family at that time, including significant maternal stresses?
  - ii. Prior pregnancies, miscarriages, abortions.
  - iii. Complications of pregnancy, including maternal alcohol or drug use.
  - iv. Labor and delivery.
  - v. Circumstances of adoption, if applicable.
  - vi. Early infancy, including temperament and patterns of regulation and attachment.
- b. Physical development and medical history.
  - i. Physical growth, height, weight.
  - ii. Fine and gross motor development and coordination.
  - iii. Feeding and eating behavior and attitudes.
  - iv.. Toilet training and lapses, if appropriate.
  - v. Sleep patterns.
  - vi. Medical history: hospitalizations, operations, serious injuries (especially head trauma); physical disabilities; chronic and acute illnesses; seizure-like episodes; allergies; vision or hearing impairments; exposure to lead or other toxins; medications.
- c. Cognitive development.
  - i. Speech and language.
  - ii. Cognitive strengths and weaknesses.
  - iii. Attention span, concentration.
  - iv. Motivation to learn and explore the world.
- d. Emotional development and temperament.
  - i. Mood and affect regulation.

- ii. Tolerance for frustrations.
    - iii. Attitude towards discipline.
  - e. Family relationships.
    - i. Child's relationships with parents, siblings, other family members.
    - ii. Child's place in family system.
    - iii. Reaction to family life events, including deaths; births; moves; parental separation, divorce, or remarriage; illnesses; changes in visitation or custody arrangements; foster care.
  - f. Peer relations.
    - i. Number and quality of friendships, including preferences regarding age and gender.
    - ii. Participation in informal and organized peer activities.
  - g. Unusual or traumatic circumstances.  
Describe nature of exposure, reaction of child and family, and risk of continued exposure.
    - i. Sexual or physical abuse, neglect, over-stimulation.
    - ii. Alcohol or drug abuse by parent or family member.
    - iii. Family, community, or political violence.
    - iv. Natural disaster.
- 9. Assessment of the family, community and cultural background.
  - a. Parents.
    - i. Strengths, weaknesses, areas of conflict as individuals, marital couple, and parental couple.
    - ii. Attitudes toward the child, including hopes, fears, or areas of disagreement.  
Expectations of the child, including appropriateness to the child's abilities.
    - iii. Attachment patterns with the child during the course of development.
    - iv. Experiences with own parents that influence attitudes or behavior toward child.
    - v. "Internal working models," or what the child represents to the parents and how this may be a source of projections.
    - vi. Quality of temperamental fit between the child and parental expectations.
    - vii. Ethnic, cultural, and religious background.

- viii. Education, occupation, and financial resources.
  - b. Family and household.
    - i. Composition of family, including significantly involved relatives.
    - ii. Composition of household, including non-family members.
    - iii. Boundaries and alliances within family and child's role with respect to them.
    - iv. Family's style of communication and problem-solving.
    - v. Prevailing emotional tone of family, especially as it impinges on the patient.
    - vi. Family activities, including activities of daily living, leisure and recreational activities.
    - vii. Family expectations and discipline.
    - viii. Family stresses.
    - ix. Housing.
  - c. Family medical and psychiatric history, especially past and current physical and psychiatric disorders with potential environmental or genetic consequences for child.
  - d. Community and culture, including adverse circumstances.
- C. Observation of interactions and relationships.

Interactional observation is essential to the assessment of the infant and toddler.

  - 1. Child should be observed with the parents or primary caregivers together, if possible, and may be observed in separate sessions with each parent, to assess relationship-specific symptomatology.
  - 2. Relational assessments may occur with the clinician present or observing through a one-way mirror.
  - 3. A play session with family members is minimally structured to approximate a naturalistic context. Families are asked to play with the child as they would at home.
  - 4. Adaptations of the interactional assessment are expected for children or families who have special needs or requests.
  - 5. Semi-structured, videotaped relational assessments may be used to augment observational data.
  - 6. Key clinical observations include:
    - a. Parents' ability and willingness to engage with the child.

- b. Parental sensitivity, affective responsivity, attunement, capacity to regulate the child's emotional expression, and use of limits.
  - c. Child's interest in parents and use of parents as support.
  - d. Child's ability to act autonomously.
  - e. Thematic content of interactional play and role of parent figures.
- D. Infant and toddler mental status exam.  
The infant's or toddler's developmental, social and emotional functioning and style are assessed both within the family and with the examiner.
- 1. Physical appearance including dysmorphic features.
  - 2. Reaction to new setting and people; adaptation during evaluation.
  - 3. Self regulation: State regulation, sensory regulation, unusual behaviors, activity level, attention span, frustration tolerance.
  - 4. Motor function (gross and fine): Tone, coordination, tics, abnormal movements, seizure activity.
  - 5. Vocalization and speech production: expressive and receptive language.
  - 6. Thought: Fears, nightmares, dissociative states, and hallucinations.
  - 7. Affect and mood: Modes of expression, range, responsiveness, duration, intensity.
  - 8. Play: Structure, content, symbolic functioning, modulation of aggression.
  - 9. Cognitive functioning.
  - 10. Relatedness to parents, other caregivers, examiner.
- E. Standardized instruments.  
Standardized instruments may be used within a developmental framework guided by the principle that infants and toddlers must be understood within the context of their relationships. Instruments should constitute one part of a comprehensive assessment, never the sole basis for assessment or treatment planning. Limitation of measures need to be recognized.
- F. Interdisciplinary assessment and referral.
- 1. Comprehensive interdisciplinary assessment is ideally completed by an interdisciplinary team, but may be accomplished through referral or consultation.
  - 2. Components of the assessment, in addition to the parent and child interview, may include assessment in home, child care agency, and school settings and by clinicians in other disciplines.

- a. Pediatrics.
- b. Developmental pediatrics.
- c. Neurology.
- d. Genetics.
- e. Nutrition.
- f. Ophthalmology.
- g. Audiology.
- h. Psychology.
- i. Speech and language therapy.
- j. Occupational therapy.
- k. Physical therapy.
- l. Social and educational services.
- m. Community programs for coordination of care and advocacy.

G. Diagnostic formulation

1. Reviews and integrates clinical findings.
2. Identifies potential predisposing and precipitating factors.
3. Establishes a working differential diagnosis (multi-axial).
  - a. *DSM-IV* or *ICD-10*.
  - b. *DC: 0-3*.
4. Provides current knowledge of prognosis and consequences of symptoms.

H. Development of treatment plan with the family.

1. The parents's explicit and implicit expectations help guide treatment planning and selection.
2. Reviews with the family their understanding of concerns and the collaborative treatment process.
3. Includes mutually defined, comprehensible terms.
4. Addresses the child's strengths and vulnerabilities.
5. Indicates areas of uncertainty and makes recommendations on further assessment(s).
6. Communicates with the referring clinician, agencies, pediatricians, and schools (with parental consent).
7. Helps parents identify services and facilitates referrals.

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**TABLE 2 Examples of Standard Instruments for Infant & Toddler Assessment**

Measure	Age Content (Examples)	Method and Purpose	Standardization, Validity and Forms	
Bayley Scales of Infant Development II  Bayley, 1993	1 - 42 mos.	Mental, motor, & behavior scales	Items administered; some observation and parental report  Widely used measure of infant/toddler development	Standardization includes race, gender, parent education, & geographic region  Reliability and validity established
Child Behavior Checklist (CBCL)  Achenbach, 1987	2 - 3 years	Profile of behavior problems; Internalizing & externalizing behaviors	Parental report of behavioral problems	Available in Spanish and many other languages  Reliability and validity established
Vineland Adaptive Behavior Scales  Sparrow et al., 1984	0 - 18 years	Communications , Daily Living, Socialization, & Motor Skills	Parental report assesses performance on daily activities required for social self-sufficiency	Standardization includes minority groups Available in Spanish  Reliability and validity established
Home Observation for Measurement of Environment (HOME)  Caldwell & Bradley, 1978	0 - 3 years	Maternal responsivity, Organization of the environment, Maternal involvement, Infant stimulation	Home observation and parental report  Most widely used home environment measure  Administered in natural environment	Limited use with ethnic minority populations  Available in Spanish  Good predictive validity to cognitive functioning
Parent-Child Early Relational Assessment (PCERA)  Clark, 1985	0 - 5 years	Parental sensitivity and responsiveness, Infant dysregulation, Dyadic mutuality and tension	Interaction videotaped and rated; video replay interview with parents Assesses quality of affect and behavior in parent-child interactions Identifies strengths and concerns	Inter-rater agreement and discriminant validity established  Normative data available
Parenting Stress Index (PSI)  Abidin, 1995 (a,b)	0 - 10 years	Parental sense of competence, Child adaptability and demandingness, Life stress	Parental report  Identifies parent--child systems under stress and at risk for dysfunctional parenting	Short form available  Reliability and validity established