This list of assessment and evaluation tools and measures is NOT exhaustive. The Practice Committee has attempted to compile a list of the tools that are most commonly used by pediatric physical therapists. There are many other tools, as well as many Web sites, with additional information. This list should serve as a starting point for anyone seeking information on assessment and evaluation tools and measures. The Practice Committee suggests the following Web site as one source of additional information: http://nieer.org/assessment/. If you have additional tools or measures that you believe should be added to this list, please complete the form at the end of this document and submit it to the Section on Pediatrics at cindysliwa@apta.org.

Assessment Tools

ABILITIES INDEX
Purpose: Documents the nature and extent of the functional characteristics of childhood disability. Has potential to identify discrete profiles of functional characteristics
Age Range: 36-69 months
Areas Tested: Index of 9 domains: audition, behavior, intelligence, limbs, intentional communication, tonicity, integrity of health, eyes, and structure.

AGES & STAGES QUESTIONNAIRES (ASQ) – Second Edition
Authors: Diane Bricker, Jane Squires, & Linda Mounts
Publisher: Paul H. Brookes Publishing Co., PO Box 10624, Baltimore, MD 21285-0624
Purpose: To determine the developmental level of a child through parent report
Age Range: Four to sixty months (4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 27, 30, 33, 36, 42, 48, 54, 60)
Areas Tested: 19 questionnaires each containing thirty items covering five areas of development: Communication, Gross motor, Fine motor, Problem solving, Personal-social

AGES & STAGES QUESTIONNAIRES: Social Emotional (ASQ:SE)
Authors: Jane Squires, Diane Bricker, and Elizabeth Twombly
Purpose: To help identify young children at risk for social emotional difficulties.
Age Range: six to sixty months (6, 12, 18, 24, 30, 36, 48, and 60)
Area Tested: Social and emotional behavior

ALBERTA INFANT MOTOR SCALE (AIMS)
Author: Martha C. Piper and Johanna Darrah
Publisher: WB Saunders Co., The Curtis Center, Independence Mall West, Philadelphia, PA 19106
Purpose: To identify infants and toddlers with gross motor delay and to evaluate gross motor skill maturation over time
Age Range: Birth – 18 months
Areas Tested: Fifty-eight gross motor skill items divided among four positions: prone, supine, sitting, standing
Each item observed for the components of: weight bearing, posture, and anti-gravity movement

ASSESSMENT, EVALUATION, AND PROGRAMMING SYSTEM FOR INFANTS AND CHILDREN (AEPS)
Volume 1: Measurement for Birth to Three Years
Author: Diane Bricker
Publisher: Paul H. Brookes Publishing Co., PO Box 10624, Baltimore, MD 21285-0624
Purpose: To determine level of skill attainment, assist in the development of programmatic outcomes, goals and objectives, and monitor progress toward attainment of outcomes over time
Age Range: Developmental skill range from one to 36 months of age
Areas Tested: Two hundred twenty-eight items divided among six domains which are further divided into strands:
Fine motor: reach, grasp, release, functional use; Gross motor: movement in prone and supine, balance in sitting, standing and walking, and play; Adaptive: feeding, hygiene, undressing; Cognitive: sensory causality, problem-solving, pre-academic interaction with objects; Social: interaction with adults, peers, and environment; Communication: pre-linguistic, expressive, receptive
Each strand is further divided into goals and objectives. Goals and objectives are assessed and are arranged hierarchically

**BATTLE DEVELOPMENTAL INVENTORY (BDI)**
Authors: Newborg J, Stock JR, Wnek L., Guidubaldi J, Svinicki J.
Publisher: Riverside Publishing Co., 8420 Bryn Mawr Avenue, Chicago, IL 60631
Purpose: Judgment or performance based measure administered through structured format, interviews with caregivers or naturalistic observations. Norm referenced
Age Range: Birth to 8 years
Areas Tested: GM, FM personal-social, language and cognitive skills,

**BAYLEY INFANT NEURODEVELOPMENTAL SCREENER (BINS)**
Author: Glen P. Aylward
Publisher: Psychological Corporation, 19500 Bulverde Rd., San Antonio, TX 78259
Purpose: To identify infants who are at risk for delays or neurological impairments
Age Range: Three to twenty-four months
Areas Tested: Seventy-two items divided among six age sets (3, 6, 9, 12, 18, 24 months) each containing 11-13 items. Items are categorized into four "conceptual areas of ability": Basic neurological functions/intactness: tone, reflexes, and abnormal signs: Receptive functions: visual, auditory, verbal: Expressive functions: gross motor, fine motor, vocalizations: Cognitive processes; memory, problem solving, object permanence, attention

**BAYLEY SCALES OF INFANT DEVELOPMENT-II**
Author: Nancy Bayley
Publisher: Psychological Corporation, 19500 Bulverde Rd., San Antonio, TX 78259
Purpose: To identify developmental delay and to monitor a child's developmental progress
Age Range: One to 42 months
Areas Tested: Consists of three scales: Mental: cognition, object permanence, memory, manipulation, problem solving, verbal communication, and comprehension; Motor: gross and fine motor development/skill acquisition; Behavior: qualitative aspects of child's behavior during administration of mental and motor scale

**BERG BALANCE TEST**
Authors:
Purpose: Measures balance during movement activities
Age Range: 5 years and older
Areas Tested: 14 items including common movement activities such as picking an object up from the floor, walking and turning

**BRIGANCE INVENTORY OF EARLY DEVELOPMENT, REVISED EDITION (BDIED-R)**
Author: Albert Brigance
Publisher: Curriculum Associates, 5 Esquire Road, North Billerica, MA 01862-2589
Purpose: Commonly used assessment in early intervention and preschool programs to determine developmental delay in several domains and for program planning.
Age Range: Birth-7 years
Areas Tested: Criterion-referenced test of: psychomotor, self-help, speech and language, general knowledge and comprehension, early academic skills and social-emotional development.

**BRUININKS-OSERETSKY TEST OF MOTOR PROFICIENCY (BOTMP)**
Author: Robert Bruininks, ----Oseretsky
American Guidance Service, Publisher's Bldg., PO Box 99, Circle Pines, MN 55014-1796

Purpose: Developmental motor skills
Age Range: 4.5–14.5 years
Areas Tested: Balance, strength, coordination, running speed and agility, upper limb coordination (ball skills), dexterity, fine motor control, visual-motor

Canadian Occupational Performance Measure
Author: Mary Law, Sue Baptiste, Anne Carswell, Mary Ann McCall, Helene Polatajko, & Nancy Pollock
Publisher: CTTC Building, Suite 3400, 1125 Colonel By Drive, Ottawa, Ontario K1S 5RI
Purpose: To detect changes in parent or child's self-perception of performance over time.
Age Range: Any
Areas Tested: Satisfaction and disability rating of daily activities and routines, which are, identified by the child and family as important part of daily life

The Capute Scales: CAT/CLAMS
Author: Arnold J. Capute
Purpose: To quantify delay in language and problem solving
Age Range: One to 36 months
Areas Tested: Cognitive Adaptive Test (CAT): visual-motor skills, problem solving
Clinical Linguistic and Auditory Milestone Scale (CLAMS): receptive and expressive language

Child Health and Illness Profile- Adolescent Edition (CHIP-AE)
Purpose: Detects differences in health status among children with chronic illness.
Age Range: 11–17 years
Areas Tested: Self-administered questionnaire of health assessment. Domains covered: comfort, satisfaction with health, risk, disorder, achievement of social expectations and resilience

Child Health Questionnaire (CHQ)
Author: Jeanne Landgraf, Linda Abetz, John Ware
Publisher: Quality Metric Inc., 640 George Washington Hwy., Suite 201, Lincoln, RI 02865
Purpose: Measures physical and psychosocial health concepts
Age Range: 2 months – 17 years
Areas Tested: Judgment based quality of life instrument, completed by parent or child.

Child Health Assessment Questionnaire (CHAQ)
Author: Len
Purpose: Judgment based quality of life measure; developed primarily for children with arthritis but has been used for children with other physical disabilities
Age Range: Any age
Areas Tested: Performance of activities of daily living and assistance required.

The Carolina Curriculum for Infants and Toddlers with Special Needs, Second Edition (CCITSN)
Authors: Nancy M. Johnson-Martin, Kenneth G. Jens, Susan M. Attermeier, and Bonnie J. Hacker
Publisher: Paul H. Brookes Publishing Co., PO Box 10624, Baltimore, MD 21285-0624
Purpose: Curriculum based assessment used to determine approximate developmental level of children and programming strategies
Age Range: Birth to twenty-four month developmental range
Areas Tested: Three hundred fifty-nine items and curricula content covering twenty-six areas of development (sequences) divided among five developmental domains: Cognition-Communication-Social/adaptation-Fine motor-Gross motor

Carolina Curriculum for Preschoolers with Special Needs (CCPSN)
Authors: Nancy M. Johnson-Martin, Susan M. Attermeier, Kenneth Jens, and Bonnie Hacker
Purpose: Curriculum based assessment used to determine approximate developmental level of children and programming strategies
Age Range: Two and five years developmentally
Areas Tested: Five hundred and eighteen items and curriculum content covering twenty-five sequences divided among five domains of development: - Cognition- Communication- Social Adaptation- Fine Motor- Gross Motor

CLINICAL OBSERVATIONS OF MOTOR AND POSTURAL SKILLS 2ND EDITION (COMPS)
Author: Brenda Wilson, Nancy Pollack, Bonnie Kaplan, & Mary Law
Publisher: Therapro, 225 Arlington Street, Framingham, MA 01702-8723
Purpose: Screens for subtle motor coordination problems.
Age Range: 5-9 years screening
Areas Tested: Tests subtle motor coordination during slow movements, arm rotation, finger-nose touching, prone extension posture, prone extension posture, asymmetrical tonic neck reflex, and supine flexion posture.

DEGANGI-BERK TEST OF SENSORY INTEGRATION (TSI)
Author: Georgia Degani & Ronald Berk
Publisher: Western Psychological Services, 12031 Wilshire Blvd., Los Angeles, CA 90025
Purpose: Screens for sensory integration dysfunction in preschoolers.
Age Range: 3-5 years
Areas Tested: Criterion-referenced test of postural control, bilateral motor integration and reflex integration.

DENVER DEVELOPMENTAL SCREENING TEST-II
Author: William K. Frankenburg, Josiah Dodds, Phillip Archer, Beverly Bresnick, Patrick Maschka, Norman Edelman, and Howard Shapiro
Publisher: Denver Developmental Materials, Inc., PO Box 6919, Denver, CO 80206-0919
Purpose: to detect potential developmental problems in young children and monitor children at-risk for developmental problems
Age Range: One week to six years, six months of age

DEVELOPMENTAL HAND DYSFUNCTION 2ND EDITION
Author: Rhonda Erhardt
Publisher: Therapy Skill Builders, 19500 Bulverde Rd., San Antonio, TX 78259-3701
Purpose: Used to determine delay or dysfunction in prehension skills, but without standardized scores. Useful tool in intervention planning.
Age Range: Birth-15 months
Areas Tested: Criterion-referenced assessment of prehension including positional-reflexive, cognitively directed movement and prewriting skills.

DEVELOPMENTAL OBSERVATION CHECKLIST SYSTEM (DOCS)
Author: Wayne P. Hresko, Shirley Miguel, Rita Sherbenou, & Steve Burton
Publisher: PRO ED, Inc., 8700 Shoal Creek Blvd., Austin, TX 78757-6897
Purpose: Provides general developmental assessment.
Age Range: Birth – 6 years
Areas Tested: Norm-referenced checklist covering language, motor, social and cognitive development. Also includes adjustment behavior and parent stress and support.

DEVELOPMENTAL PROGRAMMING FOR INFANTS AND YOUNG CHILDREN - REVISED (DPIYC)
Author: D. Sue Schafer, Martha S. Moersch, and Diane B. D'Eugenio
Publisher: University of Michigan Press, 389 Green Street, Ann Arbor, MI 48104
Purpose: To describe the developmental status of a child with a disability and assist with program planning and implementation
Age Range: Early Intervention Developmental Profile (EIDP): 0-36 months
Areas Tested: The EIDP has 299 items divided into six areas of development
Cognition-Gross Motor- Fine Motor- Language-Social-emotional-Self-care

DEVELOPMENTAL TEST OF VISUAL-MOTOR INTEGRATION – FOURTH EDITION (VMI-4)
Author: Keith Beery
Publisher: PRO-ED, Inc., 8700 Shoal Creek Blvd., Austin, TX 78757
Purpose: Easy test to determine problems in visual-motor integration important in writing and reading.
Age Range: 3-8 years (short form), 3-18 years (long form)
Areas Tested: Norm-referenced test of visual perception, motor coordination, and integration.

DEVELOPMENTAL TEST OF VISUAL PERCEPTION – 2ND EDITION (DTVP-2)
Author: Donald Hammil, Nils Person, & Judith Voress
Publisher: PRO-ED, Inc., 8700 Shoal Creek Blvd., Austin, TX 78757
Purpose: Assists in distinguishing between problems in visual perception verses visual-motor problems.
Age Range: 4-10 years
Areas Tested: Norm-referenced test of form consistency, figure ground, position in space and spatial relation.

DEVEREUX EARLY CHILDHOOD ASSESSMENT PROGRAM (DECA)
Author: P. A. LeBuffe, & J. A. Naglieri
Age Range: Ages 2-5 years
Purpose: To measure resilience in preschool children. Resilience is defined as the ability to recover from or adjust to misfortune or change.
Areas Tested: The tool therefore addresses the child’s social emotional development

EARLY INTERVENTION DEVELOPMENTAL PROFILE (EDP)
Authors: Schafer SD, Moersch MS
Purpose: Developmental screening tool
Age Range: Birth – 3
Areas Tested: Cognition, gross motor, language, perceptual / fine motor, self-care, social/emotional

ENERGY EXPENDITURE INDEX (EEI)
Authors: Rose
Purpose: Measure of endurance
Age Range: 3 years and older
Areas Tested: Calculation of heart rate, distance walked and time, Working HR – Resting Heart Rate/ Speed

ERHARDT DEVELOPMENTAL PREHENSION ASSESSMENT (EDPA) - Second Edition
Author: Rhonda P. Erhardt
Purpose: To describe the quality of both right and left arm and hand prehension patterns for treatment planning
Age Range: Birth - 15 months
Areas Tested: Three hundred forty-one items divided into three sections: 1. Positional-reflexive: involuntary arm-hand patterns; 2. Cognitively directed: voluntary movements of approach, grasp, manipulation, and release 3. Pre-writing skills: pencil grasp and drawing

FACES PAIN SCALE
Author: Bieri, D., Reeve, R., Addicoat, L. & Ziegler, J.
Purpose: Measures self reporting of pain intensity, although probably a better measure of child’s emotional distress.
Age Range: 6-8 years
Areas Tested: Pain intensity rating scale using pictures of faces

FIRSTSTEP: SCREENING TEST FOR EVALUATING PRESCHOOLERS (FirstSTEP™)
Author: Lucy Jane Miller
Publisher: The Psychological Corporation, 19500 Bulverde Road, San Antonio, TX 78259
Purpose: Determine delay in all developmental areas.
Age Range: 2.9 years – 6.2 years
Areas Tested: Norm-referenced screening test of cognition, communication, motor, social-emotional, and adaptive behavior.

FUNCTIONAL OUTCOMES ASSESSMENT GRID (FOAG)
Author: Phillipa H. Campbell
Purpose: To assist team in developing and implementing functional outcomes for children with disabilities
Age Range: No specific age range. Individualized based on desired outcomes thus age is not a factor
Areas Tested: Six functional outcome areas associated with four disability categories (physical, sensory, special health care needs, and other): Caring for self, Communication, Learning and problem solving, Mobility, Play and leisure skills, Socialization. Performance areas delineated within each outcome area. Performance areas: posture and alignment against gravity, movement patterns, movement of body in space, secondary physical disabilities. Performance areas are further divided into performance components with items such as weight shifting, muscle tone, oral-motor control, transitional movements and movement patterns, etc.

FUNCTIONAL INDEPENDENCE MEASURE FOR CHILDREN (WeeFIM)
Authors: Carl Granger, Susan Braun, Kim Griswood, Nancy Heyer, Margaret McCabe, Michael Msau, and Byron Hamilton
Publisher: Uniform Data System for Medical Rehabilitation, State Univ. of New York, Research Foundation, 82 Farbert Hall SUNY South Campus, Buffalo, NY 14214
Purpose: To determine the severity of a child's disability, the measurement of caregiver assistance needed in the Performance of functional activities, and outcomes of rehabilitation
Age Range: Children without disabilities: 6 months to 8 years; Children with developmental disabilities: 6 months to 12 years; Children with developmental disabilities and mental ages less than 7 years
Areas Tested: Eighteen items grouped into two major categories of function, motor, and cognition that are divided into six domains divided into sub domains: Motor, Self-care: eating, grooming, bathing, dressing, toileting, Sphincter control: bladder and bowel management, Transfers: chair, wheelchair, toilet, tub, and shower, Locomotion: wheelchair/crawl, stairs, Cognitive -Communication: comprehension, expression, Social cognition: social interaction, problem solving, and memory.

FUNCTIONAL INDEPENDENCE MEASURE (FIM)
Authors: Dodds, Heinemann
Purpose: Measures mobility in the home and community environment & ability to perform ADLs
Age Range: 7 years through adulthood
Areas Tested: Performance in self-care, sphincter control, transfers, locomotion, communication and social cognition

FUNCTIONAL REACH TEST (FRT)
Authors: 
Purpose: Measure of anticipatory standing balance when reaching
Age Range: 4 years and older
Areas Tested: Measurement of the distance that the child can reach forward from a stationary standing position

REVISED GESELL AND AMATRUDA DEVELOPMENTAL AND NEUROLOGIC EXAMINATION
Author: H. Knobloch, F. Stevens, A.F. Malone (1987)
Purpose: It is a norm-referenced test identifying minor deviations in the areas of development and it is used to determine developmental status.
Age Range: 4 weeks to 36 months
Areas Tested: 5 areas of development-gross motor-fine motor-language-personal/social-adaptive

GROSS MOTOR FUNCTION MEASURE (GMFM)
Authors: Dianne Russell, Peter Rosenbaum, Carolyn Gowland, Susan Hardy, Mary Lane, Nancy Plews, Heather McGavin, David Cadman, and Sheila Jarvis
Publisher: Clinics in Developmental Medicine, No. 159, London, England: Mac Keith Press
Purpose: To evaluate change in gross motor function in children with cerebral palsy, describe a child's current level of motor function, and determine treatment goals
Age Range: No specific age range is recommended by the authors; however, the test has been validated on children between 5 months and 16 years. Seems best suited for children two to five years.

Areas Tested: Eighty-eight items of gross motor function divided into five dimensions: -Lying and rolling-Sitting Crawling and kneeling-Standing-Walking, running, and jumping. Items were selected to represent those typically performed by children by age five.

**HEALTH UTILITIES INDEX – MARK 3 (HUI-3)**

Author: William Furlong

Purpose: Measures children’s functional health status; can compute cardinal utility value to represent Health Related Quality of Life

Age Range: Any age


**INSIDE THE HAWAII EARLY LEARNING PROFILE (Inside-HELP)**

Author: Stephanie Parks

Publisher: VORT Corporation, PO Box 6032, Palo Alto, CA 94306

Purpose: To provide definitions and guidelines for administration and scoring of skills and serve as a reference for all the HELP curriculum and assessment materials

Age Range: Birth to 36 months


**HOME OBSERVATION FOR MEASUREMENT OF THE ENVIRONMENT (HOME)**

Author: Bettye M. Caldwell and Robert H. Bradley

Purpose: A screening tool to identify the quality and quantity of social, emotional and cognitive supports available to the child in the home environment

Age Range: Infant and toddlers version birth to three

Areas Tested: Infant and toddlers version: forty-five items clustered into six subscales: Parental responsivity, acceptance of child-Organization of the environment-Play materials-Parental involvement with the child. Variety of stimulation.

**INFANT TODDLER DEVELOPMENTAL ASSESSMENT (IDA)-PROVENCE PROFILE**

Author: Sally Provence, Joanna Erikson, Susan Vater, and Saro Palmeri

Purpose: To determine a performance age range and a descriptive summary of a child’s developmental competencies

Age Range: Birth - 3 years

Areas Tested: Six phase process of evaluation with phase four a developmental assessment (Provence Profile). Assessment items are grouped by age sets and the number of items varies at each age set and within each domain


**INFANT DEVELOPMENTAL SCREENING SCALE (IDSS)**

Author: W. Jane Proctor

Purpose: To assess developmental status of newborns

Age Range: Normal and at-risk infants between 38–42 weeks gestational age; can also be used sequentially on infants from 32 to 40 weeks gestational age.
Areas Tested: Twenty-four items divided into two groups-Behavioral: habituation, attention/interaction, motor responses, physiological system, abnormal posture or movements-Reflexes: rooting, suck, hand grasp, toe grasp, Babinski, ankle clonus, positive support, walk, placing, crawl, ATNR, Moro

**INFANT MOTOR SCREEN (IMS)**
Author: Robert E. Nickel
Purpose: To determine the neuromotor status of infants prematurely born
Age Range: Four to 16 months corrected age
Areas Tested: Twenty-five items adapted from the Milani-Comparetti and the Movement Assessment of Infants
Muscle tone-Primitive reflexes-Automatic responses-Symmetry

**INFANT NEUROLOGICAL INTERNATIONAL BATTERY (INFANIB)**
Authors: Patricia H. Ellison
Publisher: Therapy Skill Builders, 19500 Bulverde Rd., San Antonio, TX 78259-3701
Purpose: To distinguish infants with normal neuromotor function from those with abnormal findings and to predict need for follow-up treatment
Age Range: One to eighteen month old at risk infants and toddlers, especially those born premature
Areas Tested: Twenty items divided into five content domains: -Spasticity: TLR, ATNR, hands open/closed
Vestibular function: parachute, body rotative.-Head and trunk control: pull to sit, body derotative, sitting, prone posture.
-French angles: scarf sign, heel-to-toe, popliteal angle, and hip abduction. -Legs: foot grasp, positive support reaction, dorsiflexion

**INFANT/TODDLER SYMPTOM CHECKLIST: A Screening Tool for Parents (ITS)**
Author: Georgia A. DeGangi, Susan Poisson, Ruth Z. Sickel, and Andrea Santman Wiener
Purpose: To identify infants at risk for sensory integrative disorders, attentional deficits, and emotional or behavioral problems
Age Range: 7 - 30 months
Areas Tested: Five age specific checklists (7-9, 10-12, 13-18, 19-24, 25-30) containing information on nine domains. Self-regulation: fussy-difficult behaviors such as crying, difficulty with transitions- sleep patterns: difficulty falling asleep, attention; difficulty initiating and shifting attention-eating, feeding dressing or bathing: gagging, vomiting, food preferences, behavior problems during feeding-dressing, bathing, touch: tactile hypersensitivities, intolerance in being confined-movement: activity level, motor planning difficulties, balance, postural insecurity listening, language and sound: hyposensitivity to sound, language problems-looking and sight: sensitivity to light, visual distractibility-attachment/emotional functioning: gaze aversion, mood deregulation, flat affect, separation problems. There is also a general screening version.

**LEG LENGTH DISCREPANCY TAPE MEASURE**
Authors: Staheli
Purpose: Measure of leg length
Age Range: Any age
Areas Tested: Tape measurement from ASIS to medial malleoli

**MANUAL MUSCLE TEST (MMT)**
Purpose: Measure of muscle strength
Age Range: 4-5 years and older
Areas Tested: Contraction of muscles and if strong enough, application of manual resistance to the muscle contractions; Strength judged on ordinal scale

**MILANI-COMPARETTI MOTOR DEVELOPMENT SCREENING TEST, Third Edition (MC)**
Author: A. Milani-Comparetti and E.A. Gidoni, Wayne Stuberg, Project Director for revised edition
Publisher: Meyer Children’s Rehabilitation Institute, University of Nebraska Medical Center, 444 South 44th Street, Omaha, NE 68131-3795
Purpose: To identify motor dysfunction in infants by systematically examining the integration of primitive reflexes and the emergence of volitional movement against gravity
Age Range: Birth to two years
Areas Tested: Twenty-seven items divided into two groups: Spontaneous motor behaviors: locomotion, sitting, standing; Evoked responses: equilibrium reactions, protective extension reactions, righting reactions, primitive reflexes.

**MILLER ASSESSMENT OF PRESCHOOLERS (MAP)**
Author: Lucy Jane Miller
Publisher: The Foundation for Knowledge in Development, 1855 West Union Avenue, Suite B-8, Englewood, CO 80110
Purpose: Determination of preschoolers, without major problems, who are at risk for preacademic problems.
Age Range: 2 years, 9 months-5 years, 8 months
Areas Tested: Norm-referenced test of sensory and motor foundations and coordination, verbal and nonverbal cognitive skills and complex tasks.

**MEADE MOVEMENT CHECKLIST (MMCL)**
Author: Vicki Meade
Purpose: To screen infants for neuromotor delays
Age Range: Four to 6 months
Areas Tested: Flexor and extensor control is observed in six positions or transitional movements: - Sitting on lap: awareness to the surroundings- Prone: orientation of infant's body; tolerance of position- Rolling to back position of head, shoulder, pelvis, and hips- Supine: infant's alertness to self and external stimulus- Sitting: position of head, shoulders, pelvis, and hips- Standing: weight bearing through body; tolerance to position-Ventral suspension: lifting of the head and active movement of legs throughout hips/pelvis

**MERRILL-PALMER SCALE-REVISED (2003)**
Publisher: Stoelting Co., 620 Wheat Lane, Wood Dale, IL 60191
Purpose: The new addition of the motor measures makes this a comprehensive assessment that can be used from birth to kindergarten to determine delay or dysfunction and evaluate intervention effectiveness.
Age Range: 2-78 months
Areas Tested: Norm-referenced, standardized measure of cognitive (reasoning, memory, visual, etc.), language and motor (fine and gross), self-help/adaptive and social-emotional development. Patterns of development are assessed. Includes supplemental parent and examiner ratings.

**MODIFIED ASHWORTH SCALE (MAS)**
Authors: Bohannon RW. Smith MB.
Purpose: Measure of resistance to passive movement associated with spasticity
Age Range: 4-5 years and older
Areas Tested: Passive movement of a limb (usually the leg) through range while judging the resistance to the movement; resistance judged on ordinal scale

**MOTOR SKILLS ACQUISITION IN THE FIRST YEAR & CHECKLIST**
Author: Lois Bly
Publisher: Therapy Skill Builders, 19500 Bulverde Rd., San Antonio, TX 78259-3701
Purpose: To monitor motor development and assist in intervention planning for infants with motor delays or dysfunction.
Age Range: Birth –12 months
Areas Tested: Detailed explanation with photographs and checklist of gross motor development and indications of possible disturbances in motor development.

**MOVEMENT ASSESSMENT BATTERY FOR CHILDREN (MOVEMENT ABC)**
Author: Shelia Henderson & David Sugden
Publisher: The Psychological Corporation, 19500 Bulverde Road, San Antonio, TX 78259-7301
Age Range: 4-12 years
Areas Tested: Norm-referenced standardized performance test of manual dexterity, ball skills and static and dynamic balance. Also included is a checklist of daily routine activities, consideration of the context of performance and behavioral attributes.

**MOVEMENT ASSESSMENT OF INFANTS (MAI)**  
Author: Lynnette S. Chandler, Mary S. Andrews, and Marcia W. Swanson  
Publisher: Infant Movement Research, PO Box 4631, Rolling Bay, WA 98061  
Purpose: To identify motor dysfunction in infants, especially those considered at-risk and monitor the effects of physical therapy on infants whose motor behaviors is at or below one year of age  
Age Range: Birth to 12 months  
Areas Tested: Sixty-five items within four areas of neuromotor functioning:  
- Muscle tone: anti-gravity postures, resistance to passive stretch, and consistency  
- Reflexes: relative presence or absence of primitive reflexes  
- Automatic reactions: righting, equilibrium, and protective  
- Volitional movement: gross and fine motor behaviors, hearing and vision.

**NATURALISTIC OBSERVATION OF NEWBORN BEHAVIOR (NONB)**  
Author: Heidelise Als  
Purpose: To develop a profile of the infants' physiological and behavioral responses to environmental demands and care giving.  
Age Range: Neonates to four weeks post term  
Areas Tested: Ninety-one behaviors based on the conceptual framework underlying the Assessment of Preterm Infant Behavior (APIB)  
- Autonomic: respiration, color, tremors, and twitch  
- Visceral: gagging, burp, spit up, and sounds  
- Motor: tone, posture, gross motor flexion or extension, upper and lower extremity movement  
- State-related (attention related behaviors): eye movement, facial expressions, and gross body movements

**NEONATAL INDIVIDUALIZED DEVELOPMENTAL CARE AND ASSESSMENT PROGRAM (NIDCAP)**  
Author: Heidelise Als  
Publisher: National NIDCAP Training Center, Enders Pediatric Research Laboratories, The Children's Hospital, 320 Longwood Avenue, Boston, MA 02115  
Purpose: Used to determine the infant's physiological and behavioral responses to the environment to assist parents and caregivers.  
Training program recommended to become reliable in test administration.  
Age Range: Neolates-4 Weeks post-term  
Areas Tested: Criterion-referenced assessment of physiological and behavioral responses in the areas of autonomic, motor and attention.

**NEUROLOGICAL ASSESSMENT OF THE PRETERM AND FULL-TERM NEW BORN INFANT (NAPFI)**  
Author: Lilly Dubowitz and Victor Dubowitz  
Publisher: Cambridge University Press, 40 W. 20th Street, New York, NY 10011  
Purpose: To document status of the nervous system in infants, document neurological maturation and/or change in infants  
Age Range: Full term infants up to the third day of life and preterm infants who are medically stable and can tolerate handling up to term gestation age  
Areas Tested: Thirty-three items divided into four categories: Habituation: visual and auditory stimuli Movement and tone: posture, tone of limbs, trunk and neck, abnormal movements Reflexes: tendon reflexes, primitive reflexes, Neurobehavioral characteristics: selected items from Neonatal Behavioral Assessment Scale

**NEUROBEHAVIORAL ASSESSMENT OF PRETERM INFANT (NAPI)**  
Author: Anneliese Korner and Valerie Thom  
Purpose: To assess neurobehavioral status of prematurely born infants, to monitor effects of intervention, and to document individual differences  
Age Range: Thirty-two to 37 weeks conceptual age  
Areas Tested: Seventy-one items divided into seven clusters:  
- Motor development and vigor  
- Scarf sign  
- Popliteal angle  
- Alertness and orientation  
- Irritability  
- Vigor of cry  
- Percent sleep

**NEONATAL BEHAVIORAL ASSESSMENT SCALE (NBAS)**
Author: T. Berry Brazelton and J. Kevin Nugent
Publisher: Cambridge University Press, 40 W. 20th Street, New York, NY 10011
Purpose: To assess and describe infant's interactions and behaviors within the context of a dynamic relationship with a caregiver. Results provide information regarding infant's ability to handle stressors and self-organize. Originally designed to study individual differences in neonates that contribute to infant-caregiver interactions and for studying group differences among infants.
Age Range: Full term neonates 37 to 48 weeks post-conceptual age. Supplemental items are provided to test infants born less than 37 weeks.
Areas Tested: Twenty-eight behavioral and eighteen elicited items that provide information in five packages: Habituation: response decrement -Motor-Oral: reflexes of the feet, rooting, sucking, glabella-Truncal: undressing and moderate handling such as pull to sit, grasp-Vestibular: maximal handling and stimulating items (TNR, Moro) -Social-Interactive: state dependent orientation items. There are also nine supplemental (optional items), five of which were devised by Als and one devised by Horowitz to be used with babies born premature.

NEUROLOGICAL EXAM OF THE FULL TERM INFANT
Author: Heinz Prechtl
Publisher: Cambridge University Press, 40 W. 20th Street, New York, NY 10011
Purpose: To diagnose infants with neurological abnormality and predict future neurological problems. A screening test is also available which can be used to determine the need for further testing in low risk infants.
Age Range: Full term and preterm infants 38-42 weeks gestation
Areas Tested: Twelve summary items that include primitive reflexes and responses. Posture: symmetry, Opistolithonus-Eyes: reaction to light, reflexes-Power and passive movements: tone, range of motion, recall, muscular consistency-Spontaneous and voluntary movements: head control, tremors, clonus-State

NEONATAL NEUROBEHAVIORAL EXAMINATION (NNE)
Author: Andrew Morgan, Vera Koch, Vicki Lee, and Jean Aldag
Purpose: To determine neurobehavioral status of infants.
Age Range: Thirty-two-42 weeks post conceptional age
Areas Tested: Twenty-seven items divided into three sections each having nine items-Tone and motor patterns-Primitive reflexes-Behavioral responses

NEONATAL ORAL MOTOR ASSESSMENT SCALE (NOMAS)
Author: Murray A. Braun and Marjorie M. Palmer
Purpose: To screen for oral motor dysfunction in the neonate, distinguish infants with normal sucking from those with disorganization, identify infants with poor feeding abilities, and distinguish inefficient from efficient feeders.
Age Range: Neonate to three months of age
Areas Tested: Twenty-six items divided into two categories, jaw movements and tongue movements: -Rate-Rhythmicity-Consistency of degree of jaw excursion- Direction, range of motion, timing of tongue movement
Tongue configuration

NINE MINUTE WALK TEST (Screening tool)
Authors:
Purpose: Endurance
Age Range: 5 years and older
Areas Tested: Distance walked in nine minutes. Subtest from a full fitness battery of the Health-Related Fitness Test.

OBSERVATIONAL GAIT SCALE (OGS)
Authors: Mackey
Purpose: Structured scale to rate gait parameters from video recordings
Age Range: 6-21 years
Areas Tested: Seven sections rated: Knee mid-stance; Initial foot contact; Foot contact mid-stance; Heel rise; Hind foot; Base of support; Assistive devices

ORAL MOTOR/FEEDING RATING SCALE
Author: Judy Michaels Jelm
Purpose: To document oral motor/feeding patterns and feeding function
Age Range: One year through adulthood
Areas Tested: Two major areas of oral motor/feeding behavior: Oral motor/feeding patterns lip/cheek movement, tongue movement, jaw movement. Related areas of feeding function: self-feeding, adaptive feeding equipment, diet adaptation, position, sensitivity, food retention, swallowing, oral-facial structures

OUCHER SCALE
Author: J.E. Beyer
Publisher: The Oucher: A user manual and technical report. Evanston, IL: The Hospital Play Equipment Co.
Purpose: Measures self-reporting of pain intensity
Age Range: 5-12 years
Areas Tested: Pain intensity rating scale using actual pictures

PEDIATRIC QUALITY OF LIFE INVENTORY (Peds QL)
Author: James W. Varni
Purpose: To measure health related quality of life
Age Range: 2-18
Areas Tested: The generic core scale consists of 23 items measuring the core dimensions of health from the World Health Organization, physical, emotional, and social functioning, as well as school functioning. The test contains child self-report forms for children 5 and older and parent proxy forms for children 2-18 years of age. Disease-Specific Modules are available for children with asthma, rheumatology, diabetes, cancer, and cardiac conditions.

PEABODY DEVELOPMENTAL MOTOR SCALES SECOND EDITION (PDMS-2)
Author: M. Rhonda Folio and Rebecca R. Fewell
Publisher: Pro-ed, 8700 Shoal Creek Blvd., Austin, TX 78757-6897
Purpose: To determine level of motor skill acquisition, detect small changes in motor development in children with known motor delays or disabilities, and assist in programming for children with disabilities
Age Range: One through eighty-three months
Areas Tested: Two hundred forty-nine items divided into two scales which are further divided into subtests. Gross Motor Scale: one hundred fifty-one items divided among three subtests: -Reflexes: primitive, automatic reactions -Stationary: static, dynamic -Locomotion: walk, run, jump, hop -Object manipulation: ball handling. Fine Motor Scale: ninety eight items divided among two subtests: -Grasping: basic reach, grasp patterns, hand use -Visual-motor integration: visual perceptual skills paired with motor, eye hand coordination

PEDIATRIC EVALUATION OF DISABILITY INVENTORY (PEDI)
Authors: Stephen M. Haley, Wendy J. Coster, Larry H. Ludlow, Jane T. Haltiwarger, and Peter J. Andrellas
Publisher: The Psychological Corporation, 19500 Bulverde Road, San Antonio, TX 7825-37019
Purpose: To determine functional capabilities and performance, monitor progress in functional skill performance, and evaluate therapeutic or rehabilitative program outcome in children with disabilities
Age Range: Six months to seven years, six months
Areas Tested: Two hundred seventy-one items divided into three subtests in the Functional Skill Scale: -Self care: eating, grooming, dressing, bathing, toileting -Mobility: transfers, indoors and outdoors mobility -Social function: communication, social interaction, household and community tasks. Also environmental modification and amount of caregiver assistance is systematically recorded in Modification Scale and Caregiver Assistance Scale

PEDIATRIC CLINICAL TEST OF SENSORY INTERACTION FOR BALANCE (P-CTSIB)
Authors: Crowe, Luyt, Westcott
Purpose: Measures sensory system effects on stationary standing postural control (balance)
Age Range: 4-10 years
Areas Tested: Six conditions: Standing on floor with eyes open, eyes closed, and with dome (eyes open, but vision stabilized); Standing on foam with eyes open, eyes closed, and with dome (eyes open, but vision stabilized)

POSNA PEDIATRIC MUSCULOSKELETAL FUNCTIONAL HEALTH QUESTIONNAIRE
Author: Daltroy, L.H., Liang, M.H., Fossel, A.H., & Goldberg, M.J.
Publisher: Pediatric Outcomes Instrument Development Group.
Purpose: Used to assess functional health outcomes, generally post orthopedic surgery. Can also examine child-parent agreement.
Age Range: 2-18 years with musculoskeletal disorders
Areas Tested: Scales completed by child and parent to measure upper extremity function, transfers and mobility, physical function and sports, comfort (pain free), happiness and satisfaction, and expectations for treatment.

POSTURE AND FINE MOTOR ASSESSMENT OF INFANTS
Author: Jane Case-Smith & Rosemarie Bigsby
Publisher: Therapy Skill Builders, 19500 Bulverde Rd., San Antonio, TX 78259-3701
Purpose: Assists in intervention planning and documenting progress over brief periods of time.
Age Range: 2-12 months
Areas Tested: Fine motor scales addressing infant’s reaching and grasping patterns, finger and thumb movements, release and manipulation.

INFANT/TODDLER SENSORY PROFILE
Author: Winnie Dunn
Publisher: Psychological Corporation, 19500 Bulverde Rd., San Antonio, TX 78259
Purpose: Provides a standard method for measuring an infant’s sensory processing with the child’s daily life performance.
Age Range: Birth to 36 months
Areas Tested: sensory systems

QUALITY OF WELL-BEING SCALE (QWB)
Author: R.M. Kaplan, J.W. Bush, C.C. Berry
Purpose: Summarizes health across symptoms, problems and functional states.
Age Range: 14 years and older
Areas Tested: Four scales focus on the physical impact of an illness related to symptoms, functions, social and mobility levels.

RILEY INFANT PAIN SCALE
Author: Schare, J., Joyce, B., Gerkensmeyer, J., & Keck, J.
Purpose: Indication of pain in infants and pre or non verbal children.
Age Range: Infants & pre or non verbal children
Areas Tested: Behavioral observation as an indication of pain

SCALES OF INDEPENDENT BEHAVIOR-REVISED (SIB-R)
Authors: Robert H. Bruininks, Richard W. Woodcock, Richard F. Weatherman, and Bradley K. Hill
Publisher: Riverside Publishing Co., 8420 Bryn Mawr Avenue, Chicago, IL 60631
Purpose: To measure functional independence and adaptive functioning in school, home, employment, and community settings
Age Range: Three months - 90+ years
Areas Tested: Adaptive Behavior Full Scale contains two hundred fifty-nine items divided into fourteen subscales which are organized into four clusters: Motor skills: gross, fine-Social interaction and communication skills: social interaction, language comprehension and expression-Personal living skills: eating and meal preparation, toileting, dressing, personal self-care, domestic skills-Community living skills: time and punctuality, money and value, work skills, home/community orientation-Screening Forms: -Short Form: forty selected items from the 14 subscales-Early Development Form: forty items from developmental areas of Full Scale, for children up to 6 years of age, and individuals with a developmental level below 8 years of age-Problem Behavior Scale: Divided into three broad maladaptive behavior indexes with eight problem behavior areas: Internalized Maladaptive Behavior: hurtful to self, unusual or repetitive habits, withdrawal or inattentive behavior Asocial Maladaptive Behavior: socially offensive behavior, uncooperative behavior Externalized Maladaptive Behavior: hurtful to others, destructive to property, disruptive behavior
SCHOOL FUNCTION ASSESSMENT (SFA)
Authors: Coster W, Deeney T, Haltiwanger J, Haley S
Publisher: Psychological Corporation, 19500 Bulverde Rd., San Antonio, TX 78259
Purpose: Measures function in the school environment & can be used to guide program planning
Age Range: Elementary school students
Areas Tested: Three parts: Participation in school activity settings; Task supports; Activity Performance. Includes physical and cognitive/behavioral tasks.

SENSORY INTEGRATION AND PRAXIS TEST
Authors: Ayres
Publisher: Western Psychological Services, 12031 Wilshire Blvd., Los Angeles, CA 90025
Purpose: Measures sensory systems contributions to balance and motor coordination
Age Range: 4-8 yrs 11 months
Areas Tested: Numerous tests of postural control, motor coordination & planning, fine and gross motor function, & sensory integration

TEST OF GROSS MOTOR DEVELOPMENT – 2 (TGMD2)
Author: Dale Ulrich
Publisher: PRO ED, Inc., 8700 Shoal Creek Blvd., Austin, TX 78757-6897
Purpose: Used to identify children who are significantly behind their peers in gross motor skill development.
Age Range: 3-10 years
Areas Tested: Norm referenced test of 12 gross motor skills involving locomotion and object control

TEST OF INFANT MOTOR PERFORMANCE (TIMP)
Authors: S.K. Campbell, G. Kolobe, G. Girolami, E. Osten, and M. Lenke
Publisher: Infant Motor Performance Scales, LLC, 1301 W. Madison St. #526, Chicago, IL 60607-1953
Purpose: To identify infants with deficits in postural control and to document the effects of developmental therapy to improve postural control needed for functional movement in early infancy
Age Range: 32 weeks gestational age through 4 months post-term (or full term to 4 months)
Areas Tested: 27 observed behaviors and 26 elicited behaviors assessing the ability to orient and stabilize the head in space and in response to auditory and visual stimulation in supine, prone, side lying, upright, and during transitions from one position to another, body alignment when the head is manipulated, distal selective control of the fingers, wrists, hands, and ankles, antigravity control of arm and leg movement

TEST OF VISUAL-MOTOR SKILLS-REVISED (TVMS-R)
Author: Morrison Gardner
Publisher: Psychological and Educational Publications, Inc., PO Box 520, Hydesville, CA 95547-0520
Purpose: Simple test of visual-motor skills.
Age Range: 3-14 years
Areas Tested: Norm-referenced tests of eye-hand coordination, motor accuracy, motor control, motor coordination, and the child's interpretation.

TEST FOR HIP JOINT INTEGRITY
Authors: Staheli
Purpose: Measures hip joint placement to determine likelihood of dislocation
Age Range: Any age
Areas Tested: Manual movement of the hip joint

TEST OF SENSORY FUNCTION IN INFANTS (TSFI)
Authors: Georgia DeGangi and Stanley Greenspan
Publisher: Western Psychological Services, 12031 Wilshire Blvd., Los Angeles, CA 90025
Purpose: To determine sensory processing and reactivity in infants as an assist to diagnosing sensory processing dysfunction
Age Range: Four to 18 months
Areas Tested: Twenty-four items divided into five subtests: -Reactivity to tactile deep pressure-Adaptive motor function-Visual-tactile integration-Ocular motor control-Reactivity to vestibular stimulation
TIMED OBSTACLE AMBULATION TEST (TOAT)
Authors:
Purpose: Measures time and quality of walking at several points when walking through a specified path
Age Range: Any
Areas Tested: Negotiation over different surfaces, picking up an object, stepping up, over, going around, ducking under obstacles.

TIMED UP AND GO (TUG)
Authors:
Purpose: Measure of anticipatory standing balance & gait control, motor function through a typical activity
Age Range: 4 years and older
Purpose: Measurement of the time it takes to rise from a chair, walk 3 meters, turn around and return to a seated position in the chair.

TODDLER & INFANT MOTOR EVALUATION (TIME)
Authors: Lucy Jane Miller and Gale H. Roid
Publisher: The Psychological Corporation, 19500 Bulverde Road, San Antonio, TX 7825-37019
Purpose: To identify those children with mild to severe motor problems, identify patterns of movement, evaluate motor development over time, plan intervention, and conduct treatment efficacy research
Age Range: Four months to 3 1/2 years
Areas Tested: Eight subtests: five primary, three optional (clinical)
Primary Subtests- mobility-motor organization-stability-functional performance-social-emotional abilities
Clinical Subtests-quality rating-component analysis-atypical positions

TRANSDISCIPLINARY PLAY-BASED ASSESSMENT- REVISED (TPBA)
Author: Toni W. Linder
Publisher: Paul H. Brookes Publishing Co., PO Box 10624, Baltimore, MD 21285-0624
Purpose: To identify intervention needs, develop intervention plans and to evaluate progress made by children
Age Range: Six months to six years
Areas Tested: Comprehensive assessment of developmental processes, learning style, and interaction patterns in four developmental areas: -Cognitive-Social-emotional-Communication and language-Sensorimotor

VISUAL ANALOG SCALE
Publisher: (2003). Pediatric pain measurement using a visual analogue scale. Clinical Pediatrics, April.
Purpose: Measures self report of pain intensity
Age Range: 5 years & above, over 11 years
Areas Tested: Pain intensity rating scale using numerical scale on a vertical or horizontal continuum

VULPE ASSESSMENT BATTERY-REVISED (VAB-R)
Author: Shirley German Vulpe
Publisher: Slosson Educational Publications, Inc., PO Box 280, East Aurora, NY 14052
Purpose: To determine skill performance, strengths and needs, degree of central nervous system functioning, and environmental influence on task performance
Age Range: Children with atypical developmental or functional skills between birth to six years of age
Areas Tested: Thirteen hundred developmental tasks divided into three sections: Assessment of Basic Senses and Function: analysis of sensory-motor abilities such as muscle tone, joint range of motion, coordination, planning
Assessment of Developmental Behavior: sixty skill sequences contained in six domains of behavior: gross motor, fine motor, language, cognitive processing, adaptive behavior, and activities of daily living, Assessment of the Environment: includes caregiver characteristics and interaction and information regarding the settings such as home, child-care, hospital, Performance Analysis System composed of three sections used to analyze the child's processing related to task performance

YOUTH QUALITY OF LIFE INSTRUMENT-RESEARCH VERSION (YQOL-R)
Author:
Purpose: To assess quality of life with an emphasis on aspects of positive health.
Age Range: 12-18 years with and without disabilities
Areas Tested: Self-report measure in four domains: sense of self, social relationships, environment and general quality of life.
Recommendation for Addition to
Section on Pediatrics List of Assessment Tools
for Use in Pediatric Physical Therapy

Name of Tool:

Author(s):

Purpose of Tool:

Age Range:

Areas Tested:

Publisher & Date:

How to Obtain:

In case we have any questions, we would appreciate your name and a way to contact you.

Name:

Phone/E-Mail:

Thank you for contributing to the Section on Pediatrics’ List of Assessment Tools for Use in Pediatric Physical Therapy!

Please fax this form to: 703/706-8575
mail to: Section on Pediatrics, 1111 N Fairfax St, Alexandria, VA 22314
or e-mail to: cindysliwa@apta.org