
Professional Certificate in Pediatric Physical Therapy

Evaluation and Assessment

Evaluation and Assessment in Pediatric Physical Therapy

Evaluation and assessment are essential components of pediatric physical therapy practice. These processes help therapists gather information about a child's abilities, limitations, and needs to develop effective treatment plans. In the Professional Certificate in Pediatric Physical Therapy course, students will learn about the key terms and vocabulary related to evaluation and assessment in pediatric physical therapy. Let's explore these terms in detail:

1. Evaluation:

Evaluation refers to the process of gathering information about a child's physical abilities, impairments, and functional limitations. It involves a comprehensive assessment of a child's movement patterns, strength, flexibility, coordination, balance, and endurance. The evaluation helps therapists identify areas of need and set goals for therapy interventions.

Example: During an evaluation, a pediatric physical therapist assesses a child's gait pattern to identify any abnormalities that may be impacting their ability to walk independently.

2. Assessment:

Assessment involves the systematic measurement of a child's physical abilities and limitations using standardized tests, clinical observations, and parent/caregiver reports. Assessments provide quantitative data that therapists can use to track progress, measure outcomes, and adjust treatment plans as needed.

Example: A pediatric physical therapist administers the Pediatric Balance Scale to assess a child's balance and postural control in different functional tasks.

3. Functional Limitations:

Functional limitations refer to difficulties or restrictions in a child's ability to perform everyday activities such as walking, running, jumping, dressing, or playing. These limitations may be due to physical impairments, developmental delays, or neurological conditions.

Example: A child with cerebral palsy may have functional limitations in walking independently due to muscle weakness and poor coordination.

4. Impairments:

Impairments are deficits or abnormalities in body structure or function that may affect a child's movement and overall physical ability. Common impairments in pediatric physical therapy include muscle weakness, joint stiffness, poor balance, and decreased range of motion.

Example: A child with spina bifida may have impairments in lower extremity strength and sensation, leading to difficulties in standing and walking.

5. Gross Motor Skills:

Gross motor skills involve large muscle groups and movements that enable a child to perform activities such as crawling, walking, jumping, and climbing. Assessing gross motor skills is essential in pediatric physical therapy to address movement challenges and improve functional abilities.

Example: A pediatric physical therapist assesses a child's ability to jump forward and land with both feet to evaluate their gross motor coordination.

6. Fine Motor Skills:

Fine motor skills refer to the coordination and dexterity of small muscle groups in the hands and fingers. These skills are crucial for tasks such as writing, drawing, buttoning clothes, and using utensils. Assessing fine motor skills helps therapists identify challenges and implement interventions to improve hand function.

Example: A child with Down syndrome may have difficulties with fine motor tasks such as grasping small objects or manipulating buttons due to decreased hand strength and coordination.

7. Range of Motion (ROM):

Range of motion is the extent to which a joint can move through its full anatomical range without restrictions. Assessing ROM is important in pediatric physical therapy to identify joint limitations, muscle tightness, or contractures that may impact a child's mobility and functional abilities.

Example: A pediatric physical therapist measures a child's shoulder ROM to assess any restrictions that may affect their ability to reach overhead or perform activities requiring arm movements.

8. Strength:

Strength refers to the ability of muscles to generate force to perform movements and maintain posture. Assessing muscle strength is essential in pediatric physical therapy to identify weaknesses, asymmetries, or imbalances that may affect a child's functional abilities and mobility.

Example: A child with muscular dystrophy may have muscle weakness in the lower extremities, leading to difficulties in standing up from a seated position or climbing stairs.

9. Balance:

Balance is the ability to maintain stability and control body position during static and dynamic activities. Assessing balance is crucial in pediatric physical therapy to prevent falls, improve postural control, and enhance functional mobility.

Example: A pediatric physical therapist observes a child standing on one leg with eyes closed to assess their static balance and proprioceptive skills.

10. Coordination:

Coordination refers to the ability to execute smooth and precise movements using a combination of muscles and joints. Assessing coordination helps therapists identify challenges in motor planning, sequencing, and timing that may impact a child's ability to perform tasks requiring fine motor control and balance.

Example: A child with dyspraxia may have difficulties with coordination tasks such as catching a ball, jumping rope, or riding a bicycle due to poor motor planning and organization.

11. Endurance:

Endurance is the ability to sustain physical activity over time without fatigue. Assessing endurance is important in pediatric physical therapy to determine a child's stamina, tolerance to exercise, and cardiovascular fitness levels.

Example: A pediatric physical therapist assesses a child's aerobic endurance by monitoring their heart rate response during a timed walking test.

12. Functional Mobility:

Functional mobility refers to a child's ability to move safely and independently in various environments and perform activities of daily living. Assessing functional mobility helps therapists evaluate a child's level of independence, identify barriers to participation, and recommend assistive devices or modifications to improve mobility.

Example: A child with spina bifida uses ankle-foot orthoses to improve stability and walking efficiency, enhancing their functional mobility in the community.

13. Developmental Milestones:

Developmental milestones are age-appropriate skills and abilities that children should achieve at specific stages of growth and development. Assessing developmental milestones helps therapists monitor a child's progress, identify delays or deviations from typical development, and provide early intervention to promote optimal outcomes.

Example: A pediatric physical therapist assesses a 6-month-old infant's ability to roll from back to stomach to determine if they are meeting motor milestones for their age.

14. Standardized Tests:

Standardized tests are validated tools and assessments with established norms and scoring criteria used to measure a child's performance in various areas of development. These tests provide objective data that therapists can use to compare a child's abilities to their peers, track progress over time, and make informed decisions about treatment planning.

Example: The Bruininks-Oseretsky Test of Motor Proficiency (BOT-2) is a standardized assessment used to

evaluate a child's gross and fine motor skills, balance, and coordination.

15. Parent/Caregiver Report:

Parent/caregiver reports are valuable sources of information about a child's daily activities, routines, challenges, and progress outside of the therapy setting. Gathering input from parents and caregivers helps therapists gain insight into a child's functional abilities, behavior, motivation, and social interactions in different contexts.

Example: A pediatric physical therapist interviews a parent to gather information about a child's sleep patterns, feeding habits, play preferences, and participation in recreational activities to understand their overall well-being and quality of life.

16. Interdisciplinary Team:

An interdisciplinary team consists of professionals from different disciplines (e.g., physical therapy, occupational therapy, speech therapy, psychology, social work) who collaborate to provide comprehensive care and support for children with complex needs. Working as part of an interdisciplinary team allows therapists to share expertise, coordinate services, and address the holistic needs of the child and family.

Example: A pediatric physical therapist collaborates with an occupational therapist, speech-language pathologist, and developmental psychologist to develop a comprehensive treatment plan for a child with autism spectrum disorder to address communication, sensory, motor, and social-emotional needs.

17. Individualized Education Program (IEP):

An Individualized Education Program (IEP) is a legal document developed for students with disabilities that outlines their educational goals, accommodations, and specialized services to support their learning and development. Pediatric physical therapists play a crucial role in the IEP team by providing input on a child's physical abilities, functional limitations, and therapy goals to promote academic success and inclusion in school settings.

Example: A pediatric physical therapist attends an IEP meeting to discuss a child's need for adaptive equipment, physical therapy services, and environmental modifications to facilitate participation in physical education classes and school activities.

18. Evidence-Based Practice:

Evidence-based practice involves integrating the best available research evidence, clinical expertise, and patient values to inform decision-making and improve outcomes in healthcare. Pediatric physical therapists use evidence-based practice to guide assessment, intervention, and evaluation strategies that are supported by research and tailored to meet the unique needs of each child.

Example: A pediatric physical therapist reviews recent studies on the effectiveness of aquatic therapy for children with cerebral palsy to determine if incorporating water-based exercises into a child's treatment plan may improve motor function and quality of life.

19. Family-Centered Care:

Family-centered care is an approach that recognizes the importance of involving families as equal partners in the healthcare decision-making process and promoting collaboration between parents, caregivers, and healthcare professionals. Pediatric physical therapists embrace family-centered care principles to engage families in goal-setting, treatment planning, and home exercise programs that support a child's development and well-being.

Example: A pediatric physical therapist provides education and training to parents on therapeutic exercises, positioning techniques, and equipment use to empower them to support their child's progress and independence at home.

20. Cultural Competence:

Cultural competence is the ability to interact effectively with individuals from diverse cultural backgrounds, respecting their beliefs, values, traditions, and communication styles. Pediatric physical therapists strive to enhance cultural competence by recognizing and addressing cultural influences on a child's health beliefs, attitudes towards disability, and preferences for care to provide culturally responsive and equitable services.

Example: A pediatric physical therapist collaborates with an interpreter to communicate with a non-English-speaking family and gain a deeper understanding of their cultural practices, health beliefs, and expectations for therapy services.

In conclusion, understanding the key terms and vocabulary related to evaluation and assessment in pediatric physical therapy is essential for students in the Professional Certificate in Pediatric Physical Therapy course. By familiarizing themselves with these concepts, students can effectively evaluate a child's physical abilities, assess functional limitations, and develop evidence-based treatment plans that promote optimal outcomes and quality of life for children and their families.