

Paediatric Essential and Recommended Content Areas in Entry Level Professional Physical Therapy Education



Statement by the
International Organisation of
Physical Therapists in Paediatrics (IOPTP)

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International Organisation of
Physical Therapists in Paediatrics



**World
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SUBGROUP

Paediatric Essential and Recommended Content Areas in Entry Level Professional Physical Therapy Education

BACKGROUND

The IOPTP acknowledges that the paediatric content in physical therapist professional entry level educational programs varies worldwide and that for some countries, mechanisms already exist to provide extensive paediatric content. However, this is not universal. The IOPTP anticipates that different countries will use this curriculum guide to varying extents dependent on their needs. While some aspects of this guideline may already be implemented, other aspects may include elements to which countries are striving to fulfill.

In 2011, the World Confederation for Physical Therapy (WCPT) developed “Guidelines for physical therapist professional entry level educational programs”¹. The current identification of the paediatric essential and recommended content areas by the IOPTP was developed to expand the description of the paediatric content that should be incorporated in professional entry-level educational programs. The IOPTP guideline and the WCPT guideline may provide guidance on professional entry-level standards, curriculum criteria, or courses of action in areas relevant to physical therapy education research, practice, or policy. These guidelines may be used for curriculum planning, curriculum development, in internal and external quality assurance processes and benchmarking, and standards assessment.

The Paediatric Content Areas were developed through several stages; initially a review of the literature²⁻⁵ in 2011 informed a general survey of WCPT member countries about paediatric physical therapy practice. In 2015, a further review of the literature⁶⁻⁸ informed a second IOPTP survey of WCPT member countries, regarding core competencies in paediatrics in physical therapy. The survey process identified the *Essential Content Areas* (ECA) in paediatric physical therapy curriculum (where 50% or more countries agreed that these survey items were important for entry-level education) and *Recommended Content Areas* (RCA) (where 40%-49% of the countries agreed that these survey items were important for entry-level education). The guidelines developed by the IOPTP incorporated the ECAs and RCAs, while highlighting additional areas identified that might be addressed.

Additionally, a mapping process, adapted from previously published work⁹ was used to confirm that the previously identified ECAs and RCAs were represented in the WCPT guidelines and to identify areas in the WCPT guidelines that were not represented in the IOPTP survey. To better encompass the constructs of the WCPT Guidelines, the IOPTP is recommending that paediatric-specific knowledge, skills and abilities be applied across all aspects of the patient management model outlined in the WCPT Guidelines. The IOPTP also is recommending that all aspects of evidence-based practice and the ICF model are supported in the educational content. Additionally, provision of family-centered care and inclusion of content related to health promotion and fitness are strongly recommended.

While these IOPTP guidelines have been developed with input from, and specific reference to, the Member Organisations of the IOPTP, it also was developed with the intent that countries who are not members of the IOPTP or countries where the profession is not represented in WCPT will be able to use these guidelines.

THE NATURE OF PHYSICAL THERAPY EDUCATION

Physical therapist professional entry-level education programs need to equip students with the necessary communication and decision-making skills to work in collaboration with their patient/client, carer, other professionals, and colleagues¹.

The physical therapist professional curriculum includes content, learning experiences and clinical education experiences that encompass: Management of patient/clients with an array of conditions across the lifespan¹.

Essential competencies in physical therapy entry-level education should prepare clinicians to provide evidence-based, patient/client and family-centered care for paediatric patients/clients and their families⁶.

The graduate of a physical therapy professional entry-level education program should demonstrate knowledge, skills, and abilities related to paediatric physical therapy as per the content areas listed below. The graduate should be able to apply an understanding of these content areas to clinical decision making and to successfully interact with infants, children, adolescents and their families/carers.





ESSENTIAL CONTENT AREAS (ECA's) in PAEDIATRICS

1. Typical development of motor, sensory, cardiorespiratory, cognitive, and social-emotional function.
2. Atypical development of motor, sensory, and cardiorespiratory function related to common paediatric conditions.
3. Selection and implementation of age-appropriate examination techniques related to:
 - a. Motor development and function
 - b. Other areas - global development
 - c. Integumentary system
 - d. Cardiorespiratory system
 - e. Orthotics, prosthetics, assistive devices
 - f. Functional training
 - g. Physical agents, electrotherapy

4. Selection and implementation of age-appropriate intervention techniques
 - a. Strengthening
 - b. Motor development
 - c. Motor control
 - d. Motor planning
 - e. Integumentary system
 - f. Cardiorespiratory system
 - g. Orthotics, prosthetics, assistive devices
 - h. Functional training
 - i. Physical agents, electrotherapy
5. Family-centered care
6. Culturally competent care
7. Age-appropriate communication



RECOMMENDED CONTENT AREAS (RCA's) in PAEDIATRICS

1. Typical development of language and communication - to assist the physical therapist in successfully interacting with infants, children, adolescents and their families, and referring infants, children, adolescents when appropriate.
2. Atypical cognitive and social-emotional development - to more effectively work with children with cognitive impairment, autism spectrum disorder and other paediatric conditions that may impact the child's ability to interact with the physical therapist and participate in the physical therapy process.
3. Laws and regulations related to services for individuals with disabilities/special needs - so that the physical therapist may more successfully assist the child/family in accessing available services.



ADDITIONAL CONTENT AREAS (ACA's) in PAEDIATRICS

Additionally, the WCPT Practice expectations (Section 5.1) cover content with unique paediatric information and application and should be included in physical therapy educational programs. These expectations address:

- a. Health promotion, wellness, fitness and injury prevention
- b. Inter-professional practice and/or working within the paediatric healthcare/educational team
- c. Delegation within the paediatric team



**These guidelines
provide a
minimum
standard for
inclusion in
professional entry
level physical
therapy
curriculum**



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REFERENCES

1. World Confederation of Physical Therapy. (2011). WCPT Guideline for Physical Therapist Professional Entry Level Education. (Accessed Online - Jan 12th 2019)
http://dnn.einitia.com/Portals/1/Repository/Guideline_PTEducation_complete.1481e4b7-e059-464a-9ac4-cadf8021d594.pdf
2. Cherry, D. B., & Knutson, L. M. (1993). Curriculum structure and content in pediatric physical therapy: results of a survey of entry-level physical therapy programs. *Pediatric Physical Therapy*, 5(3), 109-116.
3. Turner, D. (1993). A model for entry-level pediatric physical therapy education. *Pediatric Physical Therapy*, 5(3), 117.
4. Cochrane CG, Farley BG, Wilhelm IJ. Preparation of physical therapists to work with handicapped infants and their families: current status and training needs. *Phys Ther*. 1990;70(6):372-80.
5. Gandy, J. S. (1993). Survey of academic programs: exploring issues related to pediatric clinical education. *Pediatric Physical Therapy*, 5(3), 128-134.
6. Rapport MJ, Furze J, Martin K, Schreiber J, Dannemiller LA, Dibiasio PA, et al. Essential competencies in entry-level pediatric physical therapy education. *Pediatr Phys Ther*. 2014;26(1):7-18.
7. Kenyon, L. K., Tovin, M. M., & Hellman, M. (2012). Clinical instructors' perspectives: what should we be teaching in pediatrics? *Pediatric Physical Therapy*, 24(2), 183-191.
8. Kenyon, L. K., Dole, R. L., & Kelly, S. P. (2013). Perspectives of academic faculty and clinical instructors on entry-level DPT preparation for pediatric physical therapist practice. *Physical Therapy*, 93(12), 1661-1672.
9. Cech, D., Krzak, J. J., & Anderson, D. K. (2017). Linking the essential core competencies to pediatric content in an entry-level physical therapy education curriculum: a case report. *Journal of Physical Therapy Education*, 31(4), 89-94.

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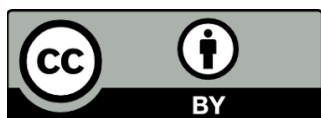
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PUBLICATION INFORMATION



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FURTHER INFORMATION

At the time this guideline was developed the IOPTP was a subgroup of the World Physical Therapy Confederation (WCPT). In 2020, the WCPT was rebranded to World Physiotherapy. Therefore, all use of the words 'Physical Therapy' should be understood to also mean 'Physiotherapy'.

Anticipated Review Date: 2025.