

Objectives of Training in Physical Medicine & Rehabilitation

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This document applies to those who begin training on or after July 1st, 2011.

(Please see also the "Policies and Procedures.")

DEFINITION

Physical Medicine & Rehabilitation is that branch of medicine concerned with comprehensive diagnosis, medical management and rehabilitation of people of all ages with neuromusculoskeletal disorders and associated disabilities.

GOALS

Upon completion of the educational program, the resident is expected to be a competent specialist in Physical Medicine & Rehabilitation (Physiatrist) capable of assuming a consultant's role in the specialty. The resident must acquire a working knowledge of the specialty, including its foundations in the basic medical sciences and research.

Residents must demonstrate the requisite knowledge, skills, and attitudes for effective patient-centered care to a diverse population. In all aspects of specialist practice, the resident must be able to address issues of gender, sexual orientation, age, culture, ethnicity and ethics in a professional manner.

PHYSICAL MEDICINE & REHABILITATION COMPETENCIES

At the completion of training, the resident will have acquired the following competencies and will function effectively as a:

Medical Expert

Definition:

As *Medical Experts*, Physiatrists integrate all of the CanMEDS Roles, applying medical knowledge, clinical skills, and professional attitudes in their provision of patient-centered care. *Medical Expert* is the central physician Role in the CanMEDS framework. The Physiatrist is a medical specialist, expert in the comprehensive diagnosis, management and rehabilitation of people of all ages with neuromusculoskeletal disorders and associated disabilities.

Key and Enabling Competencies: Physiatrists are able to ...

- 1. Function effectively as consultants, integrating all of the CanMEDS Roles to provide optimal, ethical and patient-centered medical rehabilitative care
 - 1.1. Perform a physiatric consultation effectively
 - 1.1.1. Demonstrate an understanding of the basic principles of Physical Medicine & Rehabilitation including: the concepts of impairment, activity limitation, participation restriction and the role of the interdisciplinary team
 - 1.1.2. Demonstrate an understanding of basic sciences relevant to Physical Medicine & Rehabilitation (including but not restricted to: anatomy, physiology, kinesiology and ergonomics) and the application of basic science principles to clinical care
 - 1.1.3. Formulate and implement a comprehensive medical, functional, and psychosocial problem list for a Physical Medicine & Rehabilitation patient, with a goal-oriented management plan
 - 1.1.4. Demonstrate effective consultation services with respect to patient care, education and medical-legal opinions
 - 1.2. Demonstrate effective use of all CanMEDS competencies relevant to physiatric practice
 - 1.3. Identify and appropriately respond to relevant ethical issues arising in patient care including but not limited to:
 - 1.3.1. End of life issues
 - 1.3.2. Autonomy for patients, relatives and caregivers
 - 1.3.3. Rational and just use of health resources
 - 1.3.4. Gender, sexual orientation, cultural and ethnic perspectives
 - 1.3.5. Research methodology, data presentation, storage, and analysis
 - 1.4. Demonstrate ability to effectively and appropriately prioritize professional duties both as part of day to day practice and when managing emergent conditions
 - 1.5. Demonstrate compassionate and patient-centered care
 - 1.6. Demonstrate medical expertise in situations other than patient care by providing expert legal testimony and advising governments or third-parties on the issues

such as, but not limited to, impairment, activity limitations, participation restriction and the role of the interdisciplinary team

2. Establish and maintain clinical knowledge, skills and attitudes appropriate to their practice

- 2.1. Apply knowledge of the clinical, socio-behavioural, and fundamental biomedical sciences relevant to the specialty of physiatry (including, but not restricted to anatomy, physiology, pathology, kinesiology, and ergonomics)
 - 2.1.1. Demonstrate knowledge of clinical features, diagnostic criteria, epidemiology, natural history, pathophysiology, complications and functional consequences of clinical presentations including, but not limited to:
 - 2.1.1.1. Amputations
 - 2.1.1.2. Arthridities
 - 2.1.1.3. Brain injury
 - 2.1.1.4. Cerebrovascular disease
 - 2.1.1.5. Neurologic disabilities of childhood
 - 2.1.1.6. Complications of immobility
 - 2.1.1.7. Disability due to cardiorespiratory disease
 - 2.1.1.8. Disability due to complex medical conditions
 - 2.1.1.9. Diseases of nerve and muscle
 - 2.1.1.10. Disorders of the spinal cord
 - 2.1.1.11. Musculoskeletal injuries and pain syndromes
 - 2.1.2. Describe normal growth and development, including developmental milestones
 - 2.1.3. Describe the aging process and its effects on physiology and biomechanics
 - 2.1.4. Demonstrate a respect and appreciation for the impact that any impairment, activity limitation and/or participation restriction may have on any patient and their family
 - 2.1.5. Demonstrate an understanding of the effect of mental health and psychosocial issues contributing to activity limitation and/or participation restriction
- 2.2. Describe the CanMEDS framework of competencies relevant to the Physiatrist
- 2.3. Apply lifelong learning skills of the Scholar Role to implement a personal program to keep up-to-date, and enhance areas of professional competence by accessing and applying relevant information to clinical practice
- 2.4. Contribute to the enhancement of quality care and patient safety in their practice, integrating the available best evidence and best practices

3. Perform a complete and appropriate assessment of a patient

- 3.1. Identify and explore issues to be addressed in a patient encounter effectively, including the patient's context and preferences
- 3.2. Elicit a relevant, concise, and accurate history that identifies and explores issues addressed in a patient encounter for the purposes of prevention and health promotion, diagnosis and or management
- 3.3. Perform a relevant, focused and accurate physical examination with a special emphasis on the assessment of the neuromusculoskeletal system and functional abilities
- 3.4. Demonstrate and assess gait patterns, transfer techniques, use and need of mobility aids, and wheelchair seating
- 3.5. Select medically appropriate investigative methods in a resource-effective and ethical manner
 - 3.5.1. Describe the indications for and the interpretation and/or application of diagnostic tests including, but not limited to:
 - 3.5.1.1. Appropriate blood work and other fluid analysis
 - 3.5.1.2. Nerve conduction studies and electromyography
 - 3.5.1.3. Diagnostic imaging studies
 - 3.5.1.4. Cardiorespiratory testing
 - 3.5.1.5. Psychometric testing
 - 3.5.1.6. Urodynamic testing
 - 3.5.1.7. Interventional diagnostic procedures for pain
- 3.6. Demonstrate effective clinical problem solving and judgment to address neuromusculoskeletal disorders, including interpreting available data and integrating information to generate differential diagnoses and management plans

4. Use preventive and therapeutic interventions effectively

- 4.1. Implement an effective management plan in collaboration with a patient and their family
- 4.2. Demonstrate effective, appropriate, and timely application of preventive and therapeutic interventions relevant to a physiatric practice including:
 - 4.2.1. Mobility aids
 - 4.2.2. Orthoses
 - 4.2.3. Prostheses
 - 4.2.4. Exercise prescriptions
 - 4.2.5. Physical modality prescriptions
 - 4.2.6. Rehabilitation therapies
 - 4.2.7. Pharmacotherapies: oral, injectable and topical

- 4.3. Describe the use of interventional therapeutic procedures for pain including, but not limited to:
 - 4.3.1. Epidural injections
 - 4.3.2. Intrathecal drug delivery
 - 4.3.3. Medial branch blocks
 - 4.3.4. Percutaneous high frequency neurotomy
 - 4.3.5. Deep brain and spinal stimulators
 - 4.3.6. Neuroablative procedures
- 4.4. Ensure appropriate informed consent is obtained
- 4.5. Ensure patients receive appropriate end-of-life care
 - 4.5.1. Provide a multi-disciplinary approach when dealing with end-of-life-issues by delivering appropriate, timely and ethical care (including issues related to the living will, DNR status, power of attorney, competency, pain control, nutrition issues, functional independence)

5. Demonstrate proficient and appropriate use of procedural skills, both diagnostic and therapeutic

- 5.1. Ensure informed consent is obtained for procedures as listed in 5.2
- 5.2. Demonstrate effective, appropriate, and timely performance of the following diagnostic and therapeutic procedures:
 - 5.2.1. Arthrocentesis
 - 5.2.2. Intra-articular injections
 - 5.2.3. Soft tissue injections
 - 5.2.4. Superficial surgical debridement of wounds
 - 5.2.5. Chemodenervation
- 5.3. Document and disseminate information related to procedures performed and their outcomes

6. Seek appropriate consultation from other health professionals, recognizing the limits of their expertise

- 6.1. Demonstrate insight into their own limits of expertise
- 6.2. Demonstrate effective, appropriate, and timely consultation of another health professional as needed for optimal patient care
- 6.3. Arrange appropriate follow-up care services for a patient and their family

Communicator

Definition:

As *Communicators*, Physiatrists effectively facilitate the doctor-patient relationship and the dynamic exchanges that occur before, during, and after the medical encounter.

Key and Enabling Competencies: Physiatrists are able to ...

1. Develop rapport, trust, and ethical therapeutic relationships with patients and families

- 1.1. Recognize that being a good communicator is a core clinical skill for physicians, and that effective physician-patient communication can foster patient satisfaction, physician satisfaction, patient adherence and improved clinical outcomes
- 1.2. Establish positive therapeutic relationships with patients and their care givers that are characterized by understanding, trust, respect, honesty and empathy
 - 1.2.1. Demonstrate a patient centred, compassionate and empathetic approach to patients and their care givers that includes concern for the psychosocial, cultural and economic implications of a patient's unique situation and disability
- 1.3. Respect patient confidentiality, privacy and autonomy
- 1.4. Listen actively
- 1.5. Be aware of and responsive to nonverbal cues
- 1.6. Facilitate a structured clinical encounter effectively
- 1.7. Gather information about a disease, but also about a patient's beliefs, concerns, expectations and illness experience
- 1.8. Seek out and synthesize relevant information from other sources, such as a patient's family/caregivers and other professionals and review of relevant documentation
- 1.9. Synthesize the information gathered for the diagnosis and management of a particular patient problem

2. Convey relevant information and explanations accurately to patients and care givers, colleagues and other professionals

- 2.1. Deliver information to a patient and their care givers, in a humane, respectful, clear, concise and accurate manner so that it is understandable and encourages discussion and participation in decision-making
- 2.2. Deliver information to colleagues and other health professionals in a respectful, clear, concise and accurate manner to encourage and facilitate inter-professional person-centered collaborative practice
- 2.3. Address challenging communication issues effectively, such as obtaining informed consent, delivering bad news, and addressing anger, confusion and misunderstanding

- 2.4. Recognize biases, including personal, and their impact on patient care
- 3. Develop a common understanding on issues, problems and plans with patients, care givers, and other professionals to develop a shared plan of care
 - 3.1. Identify and explore problems to be addressed from a patient encounter effectively, including the patient's context, responses, concerns, and preferences
 - 3.2. Respect diversity and difference, including, but not limited to the impact of gender, religion and cultural beliefs on decision-making
 - 3.3. Encourage discussion, questions, and interaction in the encounter
 - 3.4. Engage patients, care givers, and relevant health professionals in shared decision-making to develop a plan of care and promote patient autonomy.
 - 3.5. Address challenging communication issues effectively, such as obtaining informed consent, delivering bad news, and addressing anger, confusion and misunderstanding
- 4. Convey effective oral and written information about a medical encounter
 - 4.1. Prepare and maintain clear, complete, accurate, and appropriate records of clinical encounters and plans
 - 4.1.1. Prepare complete and informative consultations, progress and medicolegal reports in a timely manner
 - 4.2. Present verbal reports of clinical encounters and plans effectively
 - 4.3. Present medical information effectively to the public about a medical issue

Collaborator

Definition:

As *Collaborators*, Physiatrists effectively work within a health care team to achieve optimal patient care.

Key and Enabling Competencies: Physiatrists are able to ...

- 1. Participate effectively and appropriately in an interprofessional health care team
 - 1.1. Describe clearly the specialist's roles and responsibilities to other professionals
 - 1.2. Describe the roles and responsibilities of other professionals within the health care team
 - 1.3. Recognize and respect the diversity of roles, responsibilities and competencies of other professionals in relation to their own
 - 1.3.1. Discuss the principles of interdisciplinary team functioning unique abilities of its members (including but not exclusive to Physiatrists, other physicians,

physiotherapists, occupational therapists, nurses, speech and language pathologists, psychologists, social workers, orthotists, prosthetists, and community health care workers) and the special relationship of the patient and family to the team

- 1.4. Work with others to assess, plan and provide integrated care for individual patients (or groups of patients)
- 1.5. Work with others to assess, plan, provide and review other tasks, such as research problems, educational work, program review or administrative responsibilities
- 1.6. Participate effectively in interprofessional team meetings, family conferences and discharge planning conferences
 - 1.6.1. Display behaviour in keeping with attitudes which value the unique professional contributions of the other health care professionals on the team
- 1.7. Enter into interdependent relationships with other professions for the provision of quality care
- 1.8. Describe the principles of team dynamics
- 1.9. Respect team ethics, including confidentiality, resource allocation and professionalism
- 1.10. Demonstrate leadership in a health care team
 - 1.10.1. Demonstrate the ability to lead and/or facilitate a rehabilitation team including team and family conferences

2. Work effectively with other health professionals to prevent, negotiate, and resolve interprofessional conflict

- 2.1. Demonstrate a respectful attitude towards other colleagues and members of an interprofessional team
- 2.2. Work with other professionals to prevent conflicts
- 2.3. Employ collaborative negotiation to resolve conflicts
 - 2.3.1. Recognize one's own differences, misunderstanding and limitations that may contribute to interprofessional tension
 - 2.3.2. Respect differences and address misunderstandings and limitations in other professionals
 - 2.3.3. Describe how group process plays a role in conflict resolution

Manager

Definition:

As *Managers*, Physiatrists are integral participants in health care organizations, organizing sustainable practices, making decisions about allocating resources, and contributing to the effectiveness of the health care system.

Key and Enabling Competencies: Physiatrists are able to ...

1. Participate in activities that contribute to the effectiveness of their health care organizations and systems

- 1.1. Work collaboratively with others in their organizations
- 1.2. Demonstrate knowledge of and participate in quality improvement activities
- 1.3. Describe the structure and function of the health care system as it relates to physiatry and the role of the Physiatrist, including the management and administration of hospitals, clinical programs, academic institutions and licensing bodies
- 1.4. Describe the structure and function of the health care system as it relates to patients with functional impairments, activity limitation and/or participation restriction, their community support and advocate groups
- 1.5. Describe principles of health care financing, including physician remuneration, budgeting and organizational funding
 - 1.5.1. Recognize and discuss the impact of health care economics on patients and their families, residents, medical staff and allied health professionals

2. Manage their practice and career effectively

- 2.1. Set priorities and manage time to balance patient care, practice requirements, outside activities and personal life
- 2.2. Manage a practice including finances and human resources
- 2.3. Implement processes to ensure personal practice improvement
- 2.4. Employ information technology appropriately for patient care

3. Allocate finite health care resources appropriately

- 3.1. Recognize the importance of just allocation of health care resources, balancing effectiveness, efficiency and access with optimal patient care for individuals and disabled populations
- 3.2. Apply evidence and management processes for cost-appropriate care
- 3.3. Recognize and discuss the impact of health care economics on patients and their families, residents, medical staff and other health professionals

4. Serve in administration and leadership roles, as appropriate

- 4.1. Chair or participate effectively in committees and meetings
- 4.2. Lead or implement change in health care
- 4.3. Plan relevant elements of health care delivery (e.g., work schedules)
- 4.4. Perform managerial and administrative functions in an efficient and organized fashion

Health Advocate

Definition:

As *Health Advocates*, Physiatrists responsibly use their expertise and influence to advance the health and well-being of individual patients, communities, and populations.

Key and Enabling Competencies: Physiatrists are able to ...

1. Respond to individual patient health needs and issues as part of patient care

- 1.1 Identify the health needs of an individual patient
 - 1.1.1. Assist patients and families in accessing health and social resources in the community, including patient support groups
 - 1.1.2. Demonstrate sensitivity to special issues of gender, ethnicity and social bias in dealing with patients, families and persons with disabilities
- 1.2 Identify opportunities for advocacy, health promotion and disease prevention with individuals to whom they provide care

2. Respond to the health needs of the communities that they serve

- 2.1. Describe the practice communities that they serve
- 2.2. Identify opportunities for advocacy, health promotion and disease prevention in the communities that they serve, and respond appropriately
 - 2.2.1. Promote a heightened awareness of the challenges and abilities of persons with disabilities
- 2.3. Appreciate the possibility of competing interests between the communities served and other populations

3. Identify the determinants of health for the populations that they serve

- 3.1. Identify the determinants of health of persons with disabilities, including barriers to access to care and resources
- 3.2. Identify vulnerable or marginalized populations within those served and respond appropriately

3.3. Identify and respond appropriately to issues of gender, ethnicity and social bias in dealing with persons with disabilities

4. Promote the health of individual patients, communities, and populations

- 4.1. Describe an approach to implementing a change in a determinant of health of persons with disabilities
- 4.2. Promote a heightened awareness of the challenges and abilities of persons with disabilities including environmental and attitudinal barriers
- 4.3. Describe how public policy impacts on the health of the populations served
 - 4.3.1. Discuss the role of local and national organizations in shaping public policy on care for persons with disabilities, and the prevention of disability
- 4.4. Identify points of influence in the health care system
- 4.5. Describe the ethical and professional issues inherent in health advocacy, including altruism, social justice, autonomy, integrity and idealism
- 4.6. Appreciate the possibility of conflict inherent in their role as a health advocate for a patient or community with that of manager or gatekeeper
- 4.7. Describe the role of the medical profession in advocating collectively for health and patient safety

Scholar

Definition:

As *Scholars*, Physiatrists demonstrate a lifelong commitment to reflective learning, as well as the creation, dissemination, application and translation of medical knowledge.

Key and Enabling Competencies: Physiatrists are able to ...

1. Maintain and enhance professional activities through ongoing learning

- 1.1 Describe the principles of maintenance of competence
- 1.2 Describe the principles and strategies for implementing a personal knowledge management system
- 1.3 Recognize and reflect learning issues in practice
- 1.4 Conduct a personal practice audit
- 1.5 Pose an appropriate learning question
- 1.6 Access and interpret the relevant evidence
- 1.7 Integrate new learning into practice
- 1.8 Evaluate the impact of any change in practice
- 1.9 Document the learning process

2. Evaluate medical information and its sources critically, and apply this appropriately to practice decisions

- 2.1. Describe the principles of critical appraisal as applied to Physical Medicine & Rehabilitation and related literature
- 2.2. Critically appraise retrieved evidence in order to address a clinical question
- 2.3. Integrate critical appraisal conclusions into clinical care thereby demonstrating a commitment to lifelong learning

3. Facilitate the learning of patients, families, students, residents, other health professionals, the public and others, as appropriate

- 3.1. Describe principles of learning relevant to medical education
- 3.2. Identify collaboratively the learning needs and desired learning outcomes of others
- 3.3. Demonstrate the ability to facilitate learning using a variety of teaching methods (for example, presentation/lecture, bedside teaching and small group interactive teaching)
- 3.4. Assess and reflect on a teaching encounter
- 3.5. Receive and provide feedback effectively
- 3.6. Describe the principles of ethics with respect to teaching and learning

4. Contribute to the development, dissemination, and translation of new knowledge and practices

- 4.1. Describe the principles of research and scholarly inquiry
- 4.2. Describe the principles of research ethics including an ability to incorporate gender, cultural and ethnic perspectives
- 4.3. Demonstrate basic research skills enabling completion of a research project
 - 4.3.1. Pose a scholarly question
 - 4.3.2. Conduct a systematic search for evidence
 - 4.3.3. Select and apply appropriate methods to address the question
 - 4.3.4. Disseminate the findings of a study in an appropriate manner

Professional

Definition:

As *Professionals*, Physiatrists are committed to the health and well-being of individuals and society through ethical practice, profession-led regulation, and high personal standards of behaviour.

Key and Enabling Competencies: Physiatrists are able to ...

1. Demonstrate a commitment to their patients, profession, and society through ethical practice

- 1.1 Exhibit appropriate professional behaviors in practice, including honesty, integrity, commitment, compassion, respect and altruism
- 1.2 Demonstrate a commitment to delivering the highest quality care and maintenance of competence
- 1.3 Recognize and appropriately respond to ethical issues encountered in practice in such areas as truth-telling, consent, advanced directives, end-of-life issues and resource allocation
- 1.4 Manage conflicts of interest appropriately
- 1.5 Recognize the principles and limits of patient confidentiality as defined by professional practice standards and the law
- 1.6 Maintain appropriate relations with patients

2. Demonstrate a commitment to their patients, profession and society through participation in profession-led regulation

- 2.1. Demonstrate knowledge and an understanding of the professional, legal and ethical codes of practice to which physicians are bound
- 2.2. Fulfill the regulatory and legal obligations required of current practice
- 2.3. Demonstrate accountability to professional regulatory bodies
- 2.4. Recognize and respond appropriately to others' unprofessional behaviours in practice
- 2.5. Participate in peer review

3. Demonstrate a commitment to physician health and sustainable practice

- 3.1. Balance personal and professional priorities to ensure personal health, to ensure a sustainable practice and to optimize patient care
 - 3.1.1. Evaluate one's abilities, knowledge and skills continually
 - 3.1.2. Recognize the limitations of professional competence
- 3.2. Recognize other professionals in need and respond appropriately