

Physical Medicine and Rehabilitation University of Toronto Rotation Specific Goals and Objectives Stroke Rehabilitation

For this rotation, please FOCUS the evaluation on the following CanMEDs roles: 1) Medical Expert; 2) Communicator; 3) Collaborator; 4) Manager

General Requirements:

- Demonstrate a working understanding of knowledge areas pertaining to stroke rehabilitation clinical practice
- Demonstrate diagnostic and therapeutic skills for ethical and effective patient care

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.**

1. Function effectively as consultants, integrating all of the CanMEDS Roles to provide optimal, ethical and patient-centered medical rehabilitative care

- Demonstrate compassionate and caring professional attitude in dealings with stroke patients and their family members
- Demonstrate respect and openness toward other team members, along with willingness to provide education to them, patients and their families
- Demonstrate patient focused approach in management of the stroke victim, respecting patient's own goals, cultural and other values
- Demonstrate knowledge of the triage process to stroke rehabilitation including the assessment of patient appropriateness for rehabilitation and validated assessment tools, including the Orpington Prognostic Scale and AlphaFIM
- Describe the types of stroke rehabilitation, the role of outpatient therapy, the components of an effective stroke rehabilitation unit, and the evidence for efficacy of stroke rehabilitation
- Explain the roles and skill sets of the interdisciplinary team members

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

- Demonstrate knowledge of cerebrovascular anatomy including the lobes of the brain, brainstem, cerebellum and vascular supply to the brain
- Describe of the pathophysiology of ischemic and hemorrhagic cerebrovascular accidents (CVA)
- Describe the common stroke syndromes
- Describe the epidemiology and risk factors for stroke

- Discuss the acute management of ischemic and hemorrhagic stroke including risk assessment post-TIA and inclusion and exclusion criteria for TPA
- Discuss the natural history of stroke including the mechanisms and timeline of stroke recovery and role of stroke rehabilitation
- Be able to diagnose and treat the various medical complications following stroke including the following:
 - Common pain presentations
 - Post-stroke shoulder pain
 - Complex regional pain syndrome
 - Central pain syndrome
 - Spasticity
 - Definition
 - Pathophysiology
 - Assessment
 - Approach to management (physical, pharmacological and surgical options)
 - Post-stroke depression
 - DVT/PE prevention
 - Bowel/bladder management - incontinence, constipation, UTIs
 - Other (delirium, osteoporosis, seizure, infections, skin care)
- Describe the recovery process following stroke including the following:
 - Predictors of recovery (for functional status, upper extremity function, ambulation, discharge home, return to work)
 - Mechanisms of recovery post-stroke, including neuroplasticity
 - Types and timeline for stroke recovery
 - Brunnstrom stages of motor recovery
 - Synergy patterns of the upper and lower extremities
 - Common tools for evaluating stroke recovery
 - Causes and risk factors for mortality post-stroke
 - Positive and negative prognostic factors post-stroke
- Demonstrate commitment to learning and evidence based practice

3. Perform a complete and appropriate assessment of a patient

- Obtain a comprehensive history from the patient, family members and/or other care providers
- Identify impairments resulting from the stroke
- Perform a relevant physical examination including the following:
 - General neurologic examination
 - Detailed examinations for specific neurologic deficits
 - Cognitive and perceptual deficits examination
 - Musculoskeletal, general medical and other examinations for relevant post-stroke sequelae, including
 - Spasticity assessment
 - Gait
 - Orthotic/gait aid assessment
- Formulate an appropriate treatment plan for patients with stroke
- Be able to assess and treat common impairments after stroke including the following:
 - Aphasia and language dysfunction
 - Motor, sensory and coordination impairments
 - Cognitive and perceptual impairments, including neglect and vascular dementia

- Dysarthria
- Dysphagia
- Apraxia
- Demonstrate knowledge of appropriate and rational use of investigations to determine stroke etiology
- Demonstrate ability to interpret CT and MRI imaging, including early signs of infarction in acute stroke
- Assess patients for safety to return to driving post-stroke

4. Use preventive and therapeutic interventions effectively

- Describe the modifiable and non-modifiable risk factors for CVA
- Demonstrate knowledge of primary and secondary stroke prevention including the evidence and key clinical trials for secondary prevention and recommendations for:
 - Physical activity
 - Diet
 - Smoking
 - Alcohol
 - Hypertension
 - Hypercholesterolemia
 - Diabetes
 - Anticoagulation/antiplatelet treatment
 - Carotid stenosis
- Discuss the types of therapy utilized by members of the interdisciplinary team including the philosophies of therapy (CIMT, NDT etc) and indications, contraindications and evidence of efficacy for modalities used such as FES
- Demonstrate familiarity with commonly used outcome measures in stroke, including the Functional Independence Measure, Berg Balance Scale and Chedoke-McMaster Stroke Assessment Scale
- Demonstrate awareness of community resources for stroke patients
- Prescribe appropriate assistive device including ambulation aids and orthoses

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

- Perform appropriate procedures including
 - Common joint injections
 - Focal chemodenervation techniques

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

- Demonstrate effective, appropriate, and timely consultation of another health professional as needed for optimal patient care
- Arrange appropriate follow-up care

Communicator

Definition:

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

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

- Establish positive therapeutic relationships with stroke patients and their care givers that are characterized by understanding, trust, respect, honesty and empathy
- Be aware of and responsive to patients with communication impairments.
- Synthesize the information gathered for the diagnosis and management of stroke patients

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

- Address challenging communication issues effectively such as obtaining informed consent from an aphasic patient, informing a patient that the Ministry of Transportation will be advised of their medical condition
- Participate in family meetings to deliver appropriate medical information for stroke, relevant medications, risk factors and answer patient and family questions effectively

3. Develop a common understanding on issues, problems and plans with patients, care givers, and other professionals to develop a shared plan of care

- Engage stroke patients, care givers, and relevant health professionals in shared decision- making to develop a plan of care and promote patient autonomy.

4. Convey effective oral and written information about a medical encounter

- Prepares complete and informative consultation notes and daily progress notes
- Delivers clear and organized oral case presentation
- Dictates concise and organized consultation notes

Collaborator**Definition:**

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

1. Participate effectively and appropriately in an interprofessional health care team

- Work with others to assess, plan and provide integrated care for stroke patients
- Participate effectively in interprofessional team meetings, family conferences and discharge planning conferences

- Display behaviour in keeping with attitudes which value the unique professional contributions of the other health care professionals on the team
- Demonstrate the ability to lead and/or facilitate a stroke rehabilitation team including team and family conferences

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

- Demonstrate a respectful attitude towards other colleagues and members of a stroke interprofessional team
- Recognize one's own differences, misunderstanding and limitations that may contribute to interprofessional tension
- Respect differences and address misunderstandings and limitations in other professionals

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.

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

- Work collaboratively with others in their organizations
- Describe the structure and function of the health care system as it relates to stroke patients with functional impairments, activity limitation and/or participation restriction, their community support and advocate groups

2. Manage their practice and career effectively

- Set priorities and manage time to balance patient care, practice requirements, outside activities and personal life
- Implement processes to ensure personal practice improvement
- Employ information technology appropriately for stroke patient care

3. Allocate finite health care resources appropriately

- Recognize the importance of just allocation of health care resources, balancing effectiveness, efficiency and access with optimal patient care for individuals with stroke
- Recognize and discuss the impact of health care economics on stroke patients and their families, residents, medical staff and other health professionals

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.

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

- Assist stroke patients and their families in accessing health and social resources in the community, including patient support groups
- Identify opportunities for advocacy, health promotion and disease prevention in the stroke population

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

- Promote a heightened awareness of the challenges and abilities of persons with stroke

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

- Identify and respond appropriately to issues of gender, ethnicity and social bias in dealing with persons with stroke

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

- Appreciate the possibility of conflict inherent in their role as a health advocate for a patient or community with that of manager or gatekeeper
- 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.

1. Maintain and enhance professional activities through ongoing learning

- Pose an appropriate learning question with respect to the stroke population
- Access and interpret the relevant evidence on topics including secondary stroke prevention and post-stroke rehabilitation
- Integrate new learning about stroke and stroke rehab into practice
- Document the learning process

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

- Critically appraise retrieved evidence in order to address a clinical question with respect to the stroke population

- 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

- Demonstrate the ability to facilitate learning using a variety of teaching methods (for example, presentation/lecture, bedside teaching and small group interactive teaching)
- Assess and reflect on a teaching encounter
- Receive and provide feedback effectively

Professional

Definition:

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

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

- Exhibit appropriate professional behaviours in practice, including honesty, integrity, commitment, compassion, respect and altruism
- Demonstrate a commitment to delivering the highest quality care and maintenance of competence
- Manage conflicts of interest appropriately
- Maintain appropriate relations with patients

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

- Demonstrate knowledge and an understanding of the professional, legal and ethical codes of practice to which physicians are bound
- Recognize and respond appropriately to others' unprofessional behaviours in practice

3. Demonstrate a commitment to physician health and sustainable practice

- Balance personal and professional priorities to ensure personal health, to ensure a sustainable practice and to optimize patient care
- Evaluate one's abilities, knowledge and skills continually
- Recognize the limitations of professional competence