

**Physical Medicine and Rehabilitation  
University of Toronto  
Rotation Specific Goals and Objectives  
Acquired Brain Injury Rehabilitation**

For this rotation, please FOCUS the evaluation on the following CanMEDS roles: 1) Medical Expert; 2) Leader; 3) Health Advocate; 4) Professional

### **General Requirements**

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

### **Medical Expert**

#### **Definition:**

**As Medical Experts, Psychiatrists 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 Psychiatrist 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 a willingness to reduce disability related cognitive and behavioural changes in patients with acquired brain injury
- Demonstrate a non-judgmental, supportive approach to challenging behaviours caused by brain injury
- Recognize the effects of brain injury and related changes on the patient's family and on their social function
- Demonstrate a willingness to work in interdisciplinary rehabilitation teams, both in the inpatient and outpatient setting
- Describe the roles of various health professionals commonly involved in brain injury rehabilitation
  - Pharmacist, physiotherapist, occupational therapist, speech language pathologist, social worker, neuropsychiatrist, neuropsychologist, behaviour therapist, rehabilitation therapist, nursing, dietician/nutritionist
- Demonstrate a willingness to help patients with ABI effectively navigate both the public and third party health care systems

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

- Demonstrate knowledge of relevant neuroanatomy and neurophysiology of the central nervous system including lobes and coverings of the brain, bony anatomy, vascular supply, cerebrospinal fluid dynamics and cranial nerves. Know the major functions of the various cortical and subcortical areas, including the brainstem and cerebellar nuclei.
- Correlate clinical findings to the location of the injury
- Demonstrate knowledge of the pathophysiology of a variety of etiologies of acquired brain injury (ABI), including, but not limited to: traumatic brain injury (TBI), anoxic brain injury, encephalitis/meningitis, etc.
- Describe the epidemiology and long-term outcomes of various etiologies of ABI
- Describe the recovery mechanisms after ABI
- Describe the disorders of consciousness
  - I.e., coma, vegetative state, minimally conscious state
- Describe the acute medical and surgical management of the brain injured patient
- Describe the medical and neurological complications of ABI and their management, e.g.,
  - Cranial nerve injuries
  - Visual impairment (not related to cranial nerve injury)
  - Motor impairment
  - Spasticity and contractures
  - Sensory impairment
  - Cognitive impairment
  - Dizziness and imbalance, including vestibular dysfunction
  - Peripheral and central causes of hearing impairment
  - Headache
  - Dysphagia
  - Disorders of communication, including cognitive-communication deficits
  - Heterotopic ossification
  - Venous thromboembolism
  - Autonomic instability/Dysautonomia
  - Seizures
  - Hydrocephalus
  - Neuroendocrine disorders
  - Fatigue and sleep disorders
  - Pain
  - Bowel and bladder dysfunction
  - Complex Regional Pain Syndrome
  - Sequelae of polytrauma including musculoskeletal and peripheral nerve injuries
- Demonstrate knowledge of the prevalence and management of mental health issues post-ABI
  - E.g., anxiety, depression, Post-traumatic Stress Disorder, addictive behaviours, agitation and aggression, apathy and abulia
- Demonstrate knowledge of mild traumatic brain injury/concussion
  - Definition, grading and management, including return to activities of normal life and sports.
- Demonstrate an understanding of the patient's impairments, activity limitations, participation restrictions, and expected recovery

### **3. Perform a complete and appropriate assessment of a patient**

- Obtain the necessary data for diagnosis and treatment of a patient with an acquired brain injury
- Perform a relevant physical examination with special emphasis on the mental status examination/cognitive assessment and neurological examination
- Formulate a comprehensive medical, physical, functional, and psychosocial problem list outlining an appropriate plan of management
- Have an approach to the use and interpretation of diagnostic tests used in acquired brain injury
  - E.g., blood tests, CT scan, MRI, SPECT scan, bone scan, radiographs, EEG, sleep study, audiogram, etc.

### **4. Use preventive and therapeutic interventions effectively**

- Demonstrate knowledge of neuropharmacology in ABI rehabilitation
- Demonstrate knowledge of prognostic indicators for TBI (e.g., Glasgow Coma Scale, coma duration, post-traumatic amnesia duration, etc.)
- Demonstrate knowledge of outcome measurement tools (e.g., Glasgow Outcome Scale, Disability Rating Scale, Functional Independence Measure, Ranchos Los Amigos Scale, etc.)
- Describe the commonly used severity classification of TBI (e.g. mild, moderate, severe)
- Demonstrate knowledge of community reintegration
  - E.g., return to work/education, return to driving, return to leisure/social activity, caregiver burden

### **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, Physiatrists 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 patients with acquired brain injuries and their families**

- Effectively gather information from patients with ABI who have cognitive impairments, aphasia, psychiatric and neurobehavioral disorders
- Demonstrate a compassionate, patient-centred and empathic approach to patients and their caregivers that acknowledges the psychosocial, cultural and economic implications of the patient's disability
- Seek out and synthesize information from multiple sources in an effort to understand the patient's disease as well as their unique personal circumstances

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

- Deliver accurate and understandable information in a caring and compassionate manner to patients and their caregivers regarding issues such as the pathophysiology of the brain injury, residual impairments and disability, timelines for recovery, prognosis etc.
- Address challenging communication issues effectively, such as obtaining informed consent, delivering bad news (e.g., need for safety precautions, notification to Ministry of Transportation, severity of injury and prognosis, activity restrictions, etc.)

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

- Be attuned to the challenges of preparing a plan of care in the setting of issues such as anosognosia and other cognitive impairments, history of polysubstance abuse, loss of independence, finite financial resources, etc.
- Facilitate a successful family conference, employing negotiation and conflict resolution skills where necessary to build consensus with patients and families
- Recognize that patients' capacity to make decisions must be evaluated on a case-by-case basis and must be re-evaluated at appropriate intervals as the patient recovers
- Support substitute decision makers in dealing with the challenges of decision making in the setting where the patient lacks capacity

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

- Prepare and maintain clear, complete, accurate, and appropriate records of clinical encounters and plans
  - Prepare complete and informative consultations and progress notes in a timely manner, with an awareness of the medicolegal implications of such records
- Present verbal reports of clinical encounters and plans effectively

## **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**

- Participate effectively in interprofessional team meetings, family conferences and discharge planning conferences
  - Develop a shared management plan for patients with ABI which takes into consideration the views of all team members
  - Demonstrate an ability to engage members of an outpatient's interprofessional team despite challenges such as differing views on healthcare, the lack of a case manager, being unable to meet in person, etc.
- Effectively gather information from the interprofessional team to ensure patient safety and to achieve a broad understanding of the patient and their functional abilities.
- Work with others to assess, plan, and review other tasks, such as research problems, educational work, program review or administrative responsibilities

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

- Through your actions and words, demonstrate respect for other members of the interprofessional health care team.
- Employ collaborative negotiation to resolve conflicts

## **Leader**

### ***Definition:***

**As Leaders, Psychiatrists 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**

- Describe the structure and function of third party health care systems (e.g. motor vehicle insurance system, WSIB) and the medicolegal system as they relate to patients with ABI and their caregivers

- Recognize the impact of health care economics on patients, their families and health care professionals, taking into account the particular challenges of allocating finite resources in a patient population where recovery is a long term process, and chronic disability is common

## **2. Manage their practice and career effectively**

- Set priorities and manage time to balance patient care, practice requirements, outside activities and personal life

## **3. Allocate finite health care resources appropriately**

- Effectively organize timely discharge plans; discharge the patient upon achievement of appropriate rehabilitation goals and arrange for follow-up care
- Educate and reassure patients and families regarding community resources to support them upon discharge

## **4. Serve in administration and leadership roles, as appropriate**

### **Health Advocate**

#### ***Definition:***

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

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

- Recognize that impairments in ABI may be “invisible” and that patients may not understand or be able to convey the nature of their disability or their needs to others
- Given the above, liaise with third parties, including employers, insurers, case managers, lawyers, etc., to ensure the ABI patient’s individual needs are identified and met
- Assist patients and families in accessing health and social resources in the community, including publicly and privately funded treatment programs, brain injury associations and patient support groups, addiction and other counselling services and medicolegal services

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

- Identify opportunities in the community for advocacy, health promotion and disease prevention, related to acquired brain injury, and respond appropriately
- Assist other health care providers in providing services, for example, mental health services and addiction health services, that are structured to account for a diagnosis of brain injury

### **3. Promote the health of individual patients, communities, and populations**

- Promote a heightened awareness of the challenges and abilities of persons with acquired brain injury, including environmental and attitudinal barriers
- Describe how public policy (e.g. motor vehicle laws, bicycle helmets, sport policy) impacts on the health of the ABI population and the role of local and national organizations in shaping such policy

## **Scholar**

### ***Definition:***

**As Scholars, Psychiatrists 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**

- Identify and address learning objectives throughout the rotation using a variety of sources of information
- Apply the principles of self-directed learning to all settings during the rotation (e.g. teaching sessions, inpatient and outpatient care, etc.)

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

- Seek out, evaluate and apply current evidence or best practice recommendations in the care of patients

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

- Prepare and deliver an evidence-based presentation on a topic related to ABI rehabilitation to the interdisciplinary team
- Demonstrate the ability to facilitate learning using a variety of teaching methods (for example, presentation/lecture, bedside teaching and small group interactive teaching)
- Receive and provide feedback regularly and effectively throughout the rotation

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

- Contribute to the exchange of new knowledge with all health care professionals with whom you interact on the rotation
- Consider pursuing a research question related to ABI rehabilitation

## **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**
- 2. Demonstrate a commitment to their patients, profession and society through participation in profession-led regulation**
- 3. Demonstrate a commitment to physician health and sustainable practice**