

Neurology – Stroke

GOALS AND OBJECTIVES

Rotation Goals

The Stroke Rotation is a senior-level clinical experience designed to consolidate residents' expertise in the assessment and management of acute and subacute cerebrovascular disease. Residents are fully integrated into the dedicated Stroke Unit, where they participate in the comprehensive care of patients with ischemic and hemorrhagic stroke, transient ischemic attack, and related neurological emergencies. The rotation emphasizes rapid evaluation and evidence-based, time-sensitive management, including eligibility assessment for thrombolysis and endovascular therapy, secondary prevention planning, and multidisciplinary rehabilitation strategies. Residents participate in stroke call, assuming a key role in the acute response to code stroke activations, and collaborate closely with emergency medicine, neuroradiology, and interventional neurology teams. Through progressive responsibility under appropriate supervision, residents develop familiarity and competence with interprofessional stroke care, complex diagnostic and ethical decisions, and transitions across the continuum of care.

Entrustable Professional Activities

CORE OF DISCIPLINE

- C1 Assessing, diagnosing and managing patients with complex or atypical acute medical presentations
- C2 Assessing, diagnosing, and managing patients with complex chronic diseases
- C4 Assessing, resuscitating, and managing unstable and critically ill patients
- C5 Performing the procedures of Internal Medicine
- C6 Assessing capacity for medical decision-making
- C7 Discussing serious and/or complex aspects of care with patients, families, and caregivers
- C8 Caring for patients who have experienced a patient safety incident (adverse event)
- C9 Caring for patients at the end of life
- C10 Implementing health promotion strategies in patients with or at risk for disease

TRANSITION TO PRACTICE

- P3 Assessing and managing patients in whom there is uncertainty in diagnosis and/or treatment
- P6 Working with other physicians and healthcare professionals to develop collaborative patient care plans
- P7 Identifying learning needs in clinical practice, and addressing them with a personal learning plan
- P8 Identifying and analyzing system-level safety, quality or resource stewardship concerns in healthcare delivery

Clinical Presentations and Diagnoses

In alignment with the *Royal College Internal Medicine Competencies*, residents are expected to encounter and manage the following Medical Expert topics on this rotation:

Residents will be expected to cover the following patient presentations during this rotation with the goal of competently assessing and managing the following:

- Acute focal neurologic deficit
- Altered level of consciousness secondary to cerebrovascular events
- Acute dizziness, ataxia, or vertigo
- Severe or sudden-onset headache (includes SAH)
- Seizure
- Complications in hospitalized stroke patients

Residents will be expected to cover the following diagnoses during this rotation with the goal of competently assessing and managing the following:

- Ischemic stroke
- Stroke mimics (seizure, migraine with aura, encephalopathy, functional neurologic disorder)
- Transient ischemic attack
- Subarachnoid hemorrhage (recognition, stabilization, referral)
- Cerebral venous sinus thrombosis
- Secondary prevention and vascular risk management

Objectives (by Stage of Training)

The specific objectives for this rotation align with the CanMEDS Competencies and Milestones as outlined in the *Royal College 2023 Entrustable Professional Activities for Internal Medicine document (Version 3.0, 2023)* and the *Royal College Internal Medicine Competencies (Version 1.0, 2018)*. Objectives are structured to ensure progressive acquisition of competence across stages.

Transition to Discipline

N/A – residents in TTD do not participate in this rotation.

Foundations of Discipline

N/A – residents in FOD do not participate in this rotation.

Core of Discipline

Medical Expert

1. Perform appropriately timed clinical assessments with recommendations that are presented in an organized manner (ME1.4)
2. Carry out professional duties in the face of multiple, competing demands (ME1.5)
3. Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice (ME1.6)
4. Establish a patient-centred management plan (ME2.4)
5. Plan and perform procedures and therapies for the purpose of assessment and/or management (ME3)
6. Implement a patient-centred care plan that supports ongoing care, follow-up on investigations, response to treatment, and further consultation (ME4.1)
7. Recognize and respond to harm from health care delivery, including patient safety incidents (ME5.1)
8. Adopt strategies that promote patient safety and address human and system factors (ME5.2)

Communicator

1. Recognize when the values, biases, or perspectives of patients, physicians, or other health care professionals may have an impact on the quality of care, and modify the approach to the patient accordingly (CM1.3)
2. Manage disagreements and emotionally charged conversations (CM1.5)
3. Elicit and synthesize accurate and relevant information, incorporating the perspectives of patients and their families (CM2)
4. Provide a clear structure for and manage the flow of an entire patient encounter (CM2.2)
5. Share information and explanations that are clear, accurate, and timely, while checking for patient and family understanding (CM3.1)
6. Disclose harmful patient safety incidents to patients and their families accurately and appropriately (CM3.2)
7. Engage patients and their families in developing plans that reflect the patient's health care needs and goals (CM 4)
8. Document and share written and electronic information about the medical encounter to optimize clinical decision-making, patient safety, confidentiality, and privacy (CM 5)

Collaborator

1. Engage in respectful shared decision-making with physicians and other colleagues in the health care professions (CL1.3)
2. Negotiate overlapping and shared responsibilities with physicians and other colleagues in the health care professions in episodic and ongoing care (CL1.2)
3. Demonstrate safe handover of care, using both verbal and written communication, during a patient transition to a different health care professional, setting, or stage of care (CL3.2)

Leader

1. Analyze patient safety incidents to enhance systems of care (LD1.3)
2. Allocate health care resources for optimal patient care (LD2.1)
3. Demonstrate leadership in professional practice (LD3)
4. Set priorities and manage time to integrate practice and personal life (LD4.1)

Health Advocate

1. Work with patients to address determinants of health that affect them and their access to needed health services or resources (HA1.1)
2. Work with patients and their families to increase opportunities to adopt healthy behaviors (HA1.2)
3. Incorporate disease prevention, health promotion, and health surveillance into interactions with individual patients (HA1.3)

Scholar

1. Integrate evidence into decision-making in their practice (SC3.4)

Professional

1. Demonstrate a commitment to patients by applying best practices and adhering to high ethical standards (PR1)
2. Fulfill and adhere to the professional and ethical codes, standards of practice, and laws governing practice (PR3.1)

Transition to Practice

Medical Expert

1. Perform a patient-centered clinical assessment and establish a management plan (ME2)
2. Carry out professional duties in the face of multiple, competing demands (ME1.5)
3. Prioritize issues to be addressed in a patient encounter (ME2.1)
4. Implement a patient-centered care plan that supports ongoing care, follow-up on investigations, response to treatment, and further consultation (ME4.1)
5. Recognize and respond to harm from health care delivery, including patient safety incidents (ME5.1)
6. Adopt strategies that promote patient safety and address human and system factors (ME5.2)

Communicator

1. Share information and explanations that are clear, accurate, and timely, while checking for patient and family understanding (CM3.1)
2. Facilitate discussions with patients and their families in a way that is respectful, non-judgmental, and culturally safe (CM4.1)
3. Document clinical encounters in an accurate, complete, timely, and accessible manner, in compliance with regulatory and legal requirements (CM5.1)

Collaborator

1. Establish and maintain positive relationships with physicians and other colleagues in the health care professions to support relationship-centered collaborative care (CL1.1)
2. Negotiate overlapping and shared responsibilities with physicians and other colleagues in the health care professions in episodic and ongoing care (CL1.2)
3. Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports a collaborative culture (CL2.2)

Leader

1. Analyze patient safety incidents to enhance systems of care (LD1.3)
2. Engage in the stewardship of health care resources (LD2)
3. Set priorities and manage time to integrate practice and personal life (LD4.1)
4. Implement processes to ensure personal practice improvement (LD4.3)

Health Advocate

1. Work with patients to address determinants of health that affect them and their access to needed health services or resources (HA1.1)

Scholar

1. Develop, implement, monitor, and revise a personal learning plan to enhance professional practice (SC1.1)
2. Recognize practice uncertainty and knowledge gaps in clinical and other professional encounters and generate focused questions that address them (SC3.1)
3. Integrate evidence into decision-making in their practice (SC3.4)

Professional

1. Exhibit appropriate professional behaviors and relationships in all aspects of practice, demonstrating honesty, integrity, humility, commitment, compassion, respect, altruism, respect for diversity, and maintenance of confidentiality (PR1.1)
2. Demonstrate a commitment to the profession by adhering to standards and participating in physician-led regulation (PR3)
3. Fulfill and adhere to the professional and ethical codes, standards of practice, and laws governing practice (PR3.1)
4. Promote a culture that recognizes, supports, and responds effectively to colleagues in need (PR4.3)