

Neurology – Goals & Objectives

- **Participating Site(s):** Stroke Neurology / Neurocritical Care (NCC), General Neurology Consult Service, Outpatient Neurology (SHMG Fairlawn)
- **Duration:** 4 weeks
- **Required or Elective:** Required

Rotation Overview

This rotation provides residents with comprehensive exposure to the evaluation and management of acute and chronic neurologic conditions across inpatient, consultative, neurocritical care, stroke, and outpatient settings. Residents participate directly in stroke response, inpatient neurologic consultation, and ambulatory neurology care, with an emphasis on timely assessment, accurate neurologic examination, diagnostic reasoning, interdisciplinary coordination, and evidence-based management. The rotation is structured to build competency in common and high-acuity neurologic presentations while reinforcing professionalism, patient safety, and systems-based care within a comprehensive stroke center.

Overall Rotation Goal

The goal of the Neurology rotation is for residents to develop the clinical skills, medical knowledge, and professional judgment required to evaluate and manage neurologic disease, with particular emphasis on acute stroke care, neurologic emergencies, and effective collaboration with interdisciplinary teams.

Educational Objectives (Aligned with ACGME Competencies)

Patient Care

Residents will be able to:

- Perform accurate and comprehensive neurologic examinations, including funduscopic examination
- Rapidly assess patients with suspected acute stroke and participate in stroke team activations
- Apply standardized neurologic scoring systems, including NIH Stroke Scale, ICH Score, and Hunt & Hess Score
- Formulate diagnostic and management plans for common neurologic conditions such as stroke, seizures, delirium, dementia, movement disorders, and neuromuscular disease
- Recognize neurologic deterioration and promptly communicate changes to supervising faculty

Medical Knowledge

Residents will be able to:

- Describe the clinical presentation, differential diagnosis, diagnostic evaluation, and management of common neurologic disorders, including:
 - Ischemic and hemorrhagic stroke
 - Seizure disorders
 - Dementia and cognitive impairment
 - Delirium
 - Movement disorders
 - Neuropathies and neuromuscular disease
 - Neurologic infections (meningitis, encephalitis)
- Explain indications, contraindications, limitations, and appropriate use of neurologic diagnostic studies, including CT, CTA/CTP, MRI, MRA, MRV, EEG, and nerve conduction studies

- Apply evidence-based stroke guidelines, including blood pressure management, antithrombotic therapy, lipid management, and secondary stroke prevention

Practice-Based Learning and Improvement

Residents will be able to:

- Identify personal knowledge gaps in neurologic care and actively seek evidence-based resources
- Incorporate current literature and clinical guidelines into patient care decisions
- Use information technology and clinical tools (e.g., MDCalc) to support learning and clinical reasoning
- Reflect on feedback from faculty and interdisciplinary team members to improve performance

Interpersonal and Communication Skills

Residents will be able to:

- Communicate effectively with patients and families regarding neurologic diagnoses, prognosis, and treatment plans under attending guidance
- Present neurologic cases succinctly and accurately during rounds
- Collaborate effectively with nursing, advanced practice providers, stroke coordinators, social work, rehabilitation services, and consulting teams
- Maintain timely, complete, and legible medical documentation

Professionalism

Residents will be able to:

- Demonstrate compassion, integrity, and respect for patients, families, and all members of the care team
- Maintain patient confidentiality and adhere to ethical standards
- Recognize personal limitations and seek supervision appropriately
- Maintain professional attire and behavior consistent with hospital and departmental standards

Systems-Based Practice

Residents will be able to:

- Work effectively within a comprehensive stroke center and multidisciplinary neurologic care model
- Coordinate inpatient and outpatient transitions of care, including post-discharge stroke follow-up and referrals
- Utilize institutional protocols, order sets, and pathways to promote patient safety and high-value care
- Communicate effectively across care settings, including ICU, ED, inpatient floors, and outpatient clinics

PGY-Level Expectations

PGY-1:

- Perform focused neurologic histories and examinations under direct supervision
- Participate in stroke evaluations and consults with close guidance
- Accurately document findings using standardized neurology note templates
- Demonstrate basic familiarity with NIHSS and common neurologic presentations

PGY-2:

- Independently evaluate neurology consults and stroke patients with indirect supervision

- Apply neurologic scoring systems appropriately and interpret diagnostic studies
- Propose evidence-based management plans and communicate recommendations clearly
- Manage increasing patient volume while maintaining accuracy and professionalism

PGY-3:

- Lead stroke and general neurology evaluations with attending oversight
- Manage complex neurologic patients and coordinate interdisciplinary care
- Supervise junior residents and medical students when applicable
- Demonstrate efficiency, clinical judgment, and leadership in high-acuity settings

Teaching and Learning Activities

- Daily inpatient neurology, stroke, and neurocritical care rounds
- Active participation in stroke team activations
- General neurology consult evaluations and follow-ups
- One week of outpatient neurology experience at SHMG Neurology (Fairlawn)
- Case-based discussions and faculty-led bedside teaching
- Noon conference presentations as assigned

Evaluation and Feedback

Resident performance is evaluated through:

- Direct faculty observation
- Ongoing formative feedback from attendings and advanced practice providers
- Assessment of clinical documentation and communication
- End-of-rotation evaluation mapped to applicable ACGME milestones

Residents receive ongoing formative feedback and summative feedback at the conclusion of the rotation.

Supervision

Faculty supervision is provided in accordance with ACGME supervision guidelines and is based on resident demonstrated competence, PGY level, and patient acuity.