



**Neurosurgery Rotation Curriculum**  
NGMC- Family Medicine Residency Program  
Gainesville, Ga

**PGY: 3**

**Description of Rotation:**

The Neurosurgery rotation experience is a 4-week rotation that occurs during the third year. Family physicians commonly care for patients who will require neurosurgical evaluation and intervention. This rotation is designed to provide the skill and expertise expected of family physicians with active practices involving this surgical subspecialty area. During this rotation the resident will be supervised by a community neurosurgeon. The resident can expect to participate in neurosurgical cases at any NGMC hospital campus and attend with the neurosurgeon in the care of patients in the ambulatory setting.

**Overall Goals of the Neurosurgery Rotation:**

At the completion of this rotation the resident will demonstrate:

- An understanding of the practice of neurosurgery in a community setting which will facilitate appropriate referral practices in the future
- Gain an appropriate level of understanding of the common conditions that a family physician may encounter in their practice that require neurosurgical evaluation and surgical intervention
- Understand the principles of surgical management of common neurosurgical conditions (including pre-operative and post-operative care) that are common to the practice of family medicine

**Patient Care Objectives and Competencies**

**Objectives:**

- Comprehend the evaluation and treatment options for neurological disorders commonly seen by family physicians (PC-1 and 2)
- Improve understanding and interpretation of neurological imaging and laboratory evaluation (PC-1 And 2)
- Develop an understanding of the utility of consultative services for patients presenting with the possible need for neurosurgical intervention (PC-1,2 and 3)
- Develop an understanding of what multidisciplinary services are useful to neurological/neurosurgical patients (PC-1,2 and 3)
- Demonstrate the ability to perform an appropriate history and physical examination on the neurosurgery patient and to present these findings to another physician in an appropriate manner (PC-1 and 2).
- Demonstrate the ability to interpret appropriate data related to the neurosurgical patient and arrive at reasonable diagnostic and management decisions, weighing alternatives, benefits, and risks of diagnostic and therapeutic options, and co-managing patients appropriately with other specialists (PC-1 and 2)).

**Medical Knowledge Objectives and Competencies**

**Objectives:**

- Continue to build upon the basic principles learned during the general surgery rotation (Criteria for surgical consultation and intervention, pre-op and post-op care, contraindications to surgery, recognition and care of common post-operative complications, etc.) (MK-1 and 2)
- Show competence in principles in sterile techniques and the use of basic surgical instruments (MK-1)



- Understand wound physiology and the healing process (MK-1)
- Understanding the pathophysiology and surgical indications for common conditions that a family physician may encounter in their practice that require neurosurgical evaluation and possibly surgical intervention: (MK-1 and 2)
  - Intracranial pathologies (hemorrhage, tumor, hydrocephalus, etc.)
  - Spinal pathology (disc disease, spondylosis, spinal stenosis, tumors, nerve root impingement, etc.)
  - Peripheral nerve pathology (cubital tunnel syndrome, carpal tunnel syndrome, other forms of nerve entrapment)

### Systems Based Practice Objectives and Competencies

#### **Objectives:**

- Gain appreciation of and how to address the ethical considerations relative to surgical intervention (quality and quantity of life, alleviation of pain, informed consent, etc.) (SBP-2 and 3)
- The resident will learn to become aware of available resources and the cost effectiveness of testing and therapeutic options (SBP-1)
- The resident will gain an increasing understanding of the role of the patient, physician, support staff, and insurer in the health care environment (SBP-1 and 3)
- The resident will become aware of the available resources in our community as well as to the possible limitations of the resources in one's community to patients with neurologic disorders (SBP-4)

### Practice Based Learning and Improvement Objectives and Competencies:

#### **Objectives:**

- Scientific evidence will be reviewed by the resident and attending physician in the context of their patients. (PBL-1)
- The practical implementation of evidence-based medicine will be discussed as the medical decision making is reviewed. (PBL-1)
- Information technology will be utilized by the resident as he or she is required to research topics as directed by the attending physician. (PBL-1 and 2)
- The resident will also be evaluated on the steps they took during the rotation to improve their shortcomings. (PBL-3)

### Professionalism Objectives and Competencies:

#### **Objectives:**

The resident will be able to demonstrate:

- Compassion, respect, and integrity and responsiveness to the needs of patients and society that supersedes self-interest; accountability to patients, society, and the profession; a commitment to excellence and on-going professional development (P 1-3).
- A commitment to ethical principles pertaining to the provision or withholding of clinical care, confidentiality of patient information, informed consent, and business practices (P 1-3).
- Sensitivity and responsiveness to a patient's culture, age, gender, and disabilities (P-3).
- Personal responsibility including attendance, promptness, motivation, completion of duties, and appropriate dress (PROF-1 and 2)
- Comprehension of the ethical and legal practice skills within the context of this rotation (PROF-1 and 2)



- Respect for cultural, gender and age, differences will be taught, observed and evaluated (PROF-1-3)
- Respect, understanding, sympathy and honesty toward the patient, families and colleagues (PROF-1 -3)
- Continue to strive for maintaining emotional, physical and mental health in the practice of medicine (PROF-4)

### Interpersonal and Communication Skills Objectives and Competencies

#### **Objectives:**

- Demonstration of appropriate communication and interpersonal skills while obtaining and documenting patient medical and social history (C-1 and 2)
- Demonstration of appropriate communication and interpersonal skills while providing education, diagnoses and intervention plans to the patient and family (C-1 and 2)
- Exhibit the ability to work cooperatively with other health professionals as part of a health care team (C-3)