

NS-1 Year

Educational Program Goals and Objectives

The **NS-1** year is divided equally at the Nebraska Medical Center and Methodist/Children's Complex with six consecutive months at each site. The resident will participate in the pre-operative and post-operative evaluation and care of patients at both sites. The resident will learn how to perform a history and physical neurologic examination, order appropriate tests and follow-up with the results, schedule admissions and surgery, perform patient teaching, perform daily care and make appropriate notes, discharge planning and follow-up with the patient after discharge. The residents will be expected to scrub with the faculty in the operating room and perform the surgical procedures for which they are qualified, depending upon their level of technical ability and educational background. The resident will be expected to evaluate emergency room patients and provide evaluation and medical and surgical care.

At all stages of training, residents' clinical activities are monitored and supervised by faculty to ensure appropriate, safe, timely, and cost-effective care. At the same time, our faculty understands the need for residents to develop their independence so they will become capable, independent neurosurgical practitioners. We accomplish this goal by providing our residents, at each level of training, progressively greater freedom in evaluating and managing patients within the limits of their medical knowledge and technical expertise as judged by the supervising faculty. Junior residents work at all times under the direct supervision of their "senior consultants", including the faculty, the Senior Resident, and the Chief Resident. During the initial phase of junior level training, they will report frequently to their senior consultants. As they demonstrate competency in the evaluation and management of neurosurgical patients, particularly with more common, less critical disorders, they are given greater latitude and independence for the primary assessment (including ordering of diagnostic tests). They are encouraged to develop a management plan but are expected to present their plan to their senior supervisor(s) prior to initiating treatment. In the operating room, they will learn to perform minor cases as first surgeon and will learn to assist with major cases.

The goals of the NS-1 year include developing fundamental knowledge of the inpatient and outpatient delivery of care to include consults, new and return visits by patients, proper documentation and dictating of information to meet the requirements of the hospital, insurance companies, and referral of patients as required, and basic neurosurgical skills. Global evaluation of resident performance will be performed by the neurosurgery faculty and support staff ("360 degree evaluation") at the conclusion of each 6 month rotation. The NSY-1 resident will take the written examination of the American Board of Neurological Surgery (ABNS) for self-assessment. Residents will also complete a "self-assessment" and formal evaluation of the program and the faculty (see Appendix for sample evaluation forms) annually.

Educational Goals and Objectives of Training Year NS-1

Patient Care

Goal: provide appropriate and compassionate care to a broad range of patients and in a variety of healthcare settings.

Specific Objectives:

- 1. Take and document a comprehensive neurosurgery history and do a physical examination*
- 2. Order pre-surgical laboratory studies and imaging, interpret and apply the results to patient care*
- 3. Develop and implement appropriate care plans in consultation with the chief resident or attending surgeon*
- 4. Counsel patients on the risks, goals, limits and alternatives for simple and common neurosurgical procedures under the supervision of the Senior or Chief Resident or attending surgeon*
- 5. Perform basic neurosurgical procedures, including ventriculostomies and intracranial pressure monitor placement under direct supervision of the Senior or Chief resident or faculty*
- 6. Assist in major surgical procedures and perform, under supervision, portions of such procedures that are appropriate for level of training*

Assessment: observation by faculty, Senior and Chief Residents

Medical Knowledge

Goal: to demonstrate knowledge of basic neurosurgical disorders and treatments

Specific objectives:

- 1. Demonstrate a solid foundation of knowledge of anatomy, physiology and pharmacology related to inpatient neurosurgery patients*
- 2. Correctly interpret basic laboratory and radiological studies*
- 3. Demonstrate familiarity with basics of neurosurgical disorders and therapies*
- 4. Perform above the 10th percentile on the ABNS primary examination*

Assessment: Written examination of American Board of Neurological Surgery

Practice-Based Learning and Improvement

Goal: to learn to investigate and evaluate the care of patients, acquire and assimilate scientific evidence, and analyze practices in order to improve patient care

Specific objectives:

- 1. Participate in regular morbidity and mortality quality improvement conferences, critically evaluate patient care, and apply results to improve safety and outcomes*
- 2. Use information technology to locate evidence from scientific studies related to common neurosurgical problems and apply this evidence to improve patient care*

Assessment: observation by faculty, Senior, and Chief Residents

Interpersonal and Communication Skills

Goal: to develop skills that result in the effective exchange of information with patients, families, and other healthcare providers

Specific objectives:

- 1. Demonstrate an ability to work effectively with patients from a broad range of socioeconomic and cultural backgrounds*
- 2. Communicate effectively with other health care professionals by requesting consultations from other services and respond to requests for neurosurgical consultations*

Assessment: observation by faculty, Senior, and Chief Residents; 360 degree evaluation including support staff

Professionalism

Goal: to demonstrate a commitment to carrying out professional responsibilities and adhere to ethical principles.

Specific objectives:

- 1. Demonstrate sensitivity and responsiveness to patients' culture, age, gender and disabilities*
- 2. Demonstrate respect for patient privacy and autonomy*

Assessment: observation by faculty, Senior, and Chief Residents; 360 degree evaluation including support staff

System-Based Practice

Goal: to demonstrate awareness of the larger context of healthcare and call effectively on other resources in the system to provide optimal healthcare

Specific objectives:

1. *Coordinate care between inpatient and outpatient units by discharging patients from the inpatient unit and arranging appropriate outpatient follow-up*
2. *Arrange transfer of patients from the inpatient hospital unit to outside care centers such as skilled nursing facilities and rehabilitation programs*
3. *Understand differences between delivery of care in the private healthcare setting compared to the University tertiary level center*

Assessment: observation by faculty, Senior, and Chief Residents; 360 degree evaluation including support staff