NSUR8014

Advanced Neurosurgery

Course Goals

1. Develop the skills and knowledge to be able to recognize the impact of the global and local health care system and its impact on patient outcomes.

2. Develop the skills and knowledge to be prepared for an internship in neurosurgery.

3. Develop the skills and knowledge to communicate complex medical and personal information with patients, families and Neurosurgery faculty and residents.

4. Develop the skills and knowledge to independently carry out the duties of an intern in neurosurgery.

5. Develop the skills necessary for self-reflection that leads to improvement in practice.

6. Develop the skills and knowledge necessary to exemplify the highest level of professionalism both in typical daily activities of a neurosurgery.

7. Develop the skills and knowledge that demonstrate progress towards functioning independently as a Neurosurgery PGY.

8. Develop the skills and knowledge necessary to use evidence-based medicine in clinical decision-making.

Clinical Learning Objectives

Clinical

Interpersonal and Communication Skills

1. Deliver difficult news to patients and their family regarding diagnoses and 1 prognosis in a respectful manner.

2. Identify when to use an interpreter.

3. Demonstrate collaborative decision-making with patients.

4. Demonstrate the ability to effectively communicate with other physicians and health care providers.

5. Utilize the EMR to obtain and document relevant patient information.

Interprofessional Collaboration

1. Interact respectfully with all members of the health care team, consultants and fellow physician providers.

2. Demonstrate an understanding of the importance of interdisciplinary team members, consultants and health care resources and how they impact the care and outcomes of a patient's hospital stay.

Medical Knowledge for Practice

1. Explain the implications for surgical intervention versus watchful management in patients with acute and/or chronic neurological medical disorders.

2. Explain the evaluation and management of common neurosurgical conditions in adult and pediatric patients, including: traumatic brain/ spine injury; tumor; neurovascular disease; degenerative spine/ spinal deformity; movement disorders; epilepsy; peripheral nerve disorders, and hydrocephalus.

Patient Care

1. Participate in and describe the limitations of the sign-out/hand-off process.

2. Develop an early-manager level plan for newly admitted patients.

3. Interact with relevant surgical and medical consults to form an appropriate medical plan.

4. Perform a focused physical examination as indicated by the presenting complaint.

5. Develop the differential diagnosis for and an appropriate assessment of patients presenting with core signs, symptoms, and clinical issues encountered during this rotation.

6. Perform and interpret a targeted neurologic examination.

7. Explain the etiology, evaluation, and treatment of the primary diagnosis being treated.

8. Perform basic bedside neurological procedures.

Personal and Professional Development
1. Actively seek out feedback based on recognized deficiency in clinical performance.
2. Demonstrate receptiveness to feedback about clinical performance and changes practice based on this input.

Practice-Based Learning and Improvement
1. Discuss the clinical course of patients, active clinical issues, and new events or studies.
2. Locate and assimilate evidence-based studies relevant to the patients' clinical situations.
3. Use new information technology to access information such as medical journals and patient information web sites.

Professionalism
1. Demonstrate a level of professionalism when working the neurosurgical care provider team.
2. Reflect professionalism to patients.

Systems-Based Practice
1. Recognize systems-based error and evaluate likely cause (possibly using root-cause analysis).
2. Discuss the literature surrounding systems-based problems.
3. Recognize deficiencies/deficits in all scopes practice and seeks out local resources for improvement.

Didactic Learning Objectives

Mid-Point Feedback
1. Discuss an example utilizing feedback; the circumstances regarding the situation; how the feedback and outcome changed behavior; and self-reflection surrounding the feedback.

Quality Improvement Project
1. Identify medical errors that are secondary to systems related problems.
2. Analyze the individual and systems factors that contributed to the medical error.
3. Identify potential system-based solutions that could prevent similar errors.