GOALS & OBJECTIVES
Neurology Clerkship
Academic Year 2015-2016

Goals: To teach the principles and skills required to recognize and manage common neurological disorders. These include the ability to obtain a good history, perform a neurologic examination, present a case, make diagnostic decisions and use appropriate diagnostic testing. These goals and objectives mirror the DUCOM exit objectives.

The instructional strategies include:

1. Bedside teaching rounds by faculty
2. Conferences
3. Didactic lectures
4. Online learning and virtual cases

Evaluation of these skills is by:

1. Direct clinical observation by residents and faculty
2. Completion of the clinical skills passport
3. Completion of patient log with documentation of abnormal signs
4. NBME Shelf examination

Competency: Patient Care

Goal: Students must be able to provide care that is compassionate, appropriate, and effective for the treatment of health problems and the promotion of health.

Objectives:

During this rotation, students are expected to be able to:

1. Obtain a complete and reliable neurological history
2. Perform a reliable neurologic examination
3. Examine a patient with altered level of consciousness or abnormal mental status
4. Formulate a plan for evaluation and diagnosis
5. Protect patients from harm

Competency: Medical Knowledge

Goal: Students must demonstrate knowledge about established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences, as well as the application of this knowledge to patient care.

Objectives:
During this rotation, students are expected to be able to:

1. Recognize symptoms of neurologic disease
2. Distinguish normal from abnormal findings on a neurologic examination
3. Localize lesions of the:
   a. Cerebral hemisphere
   b. Posterior fossa
   c. Spinal cord
   d. Nerve root/Plexus
   e. Peripheral nerve (mono or polyneuropathy)
   f. Neuromuscular junction
   g. Muscle
4. Formulate a differential diagnosis based on demographics, time course, lesion localization and relevant historical features
5. Have an awareness of the use and interpretation of common tests used in diagnosing neurologic disease:
   a. CT
   b. MRI
   c. EEG
   d. EMG
   e. Lumbar puncture
6. Have an awareness of the principles underlying a systematic approach to the management of who present with the following symptom complexes:
   a. Focal weakness
   b. Diffuse weakness
   c. Clumsiness
   d. Involuntary movements
   e. Gait disturbance
   f. Urinary or fecal incontinence
   g. Dizziness
   h. Vision loss
   i. Diplopia
   j. Dysarthria
   k. Dyphagia
   l. Acute mental status changes
   m. Dementia
   n. Aphasia
   o. Headache
   p. Focal pain
   q. Numbness or paresthesias
   r. Transient or episodic focal symptoms
   s. Transient or episodic alteration of consciousness
   t. Sleep disorders
   u. Developmental disorders
7. Have an awareness of the principles underlying a systematic approach to the management of who present with the following common neurological disease:
a. Alzheimer’s disease  
b. Parkinson’s disease  
c. Essential tremor  
d. Migraine  
e. Bell's palsy  
f. Carpal tunnel syndrome  
g. Diabetic polyneuropathy  

8. Recognize and initiate care for the following neurological emergencies:  
a. Acute respiratory distress due to neuromuscular disease (e.g., myasthenic crisis or acute inflammatory demyelinating polyradiculoneuropathy).  
b. Acute stroke (ischemic or hemorrhagic)  
c. Seizures and status epilepticus  
d. Toxic-metabolic encephalopathy  
e. Head Trauma  
f. Increased intracranial pressure  
g. Subarachnoid hemorrhage  
h. Meningitis/Encephalitis  
i. Spinal cord compression  

9. Recognize situations in which it is appropriate to request neurologic consultation.  

10. Have an awareness of neuroanatomy and neuropathology as applied to clinical neurology.  

11. Have an awareness of the principles of pharmacotherapy in clinical neurology.  

12. Have an awareness of the principles of genetics in clinical neurology.  

13. Utilize the basic concepts of evidence-based medicine to analyze the literature  

14. Demonstrate knowledge of the ethical, moral, and legal foundations of neurological care  

15. Identify social, economic, psychological, and cultural factors that contribute to health and disease  

16. Perform or witness common technical procedures accurately and safely, including:  
a. A lumbar puncture  
b. EMG  
c. EEG  
d. Brain death protocol  

17. Delineate elements of safety and quality improvement patient care programs.  

**Competency: Practice-based Learning and Improvement**  

Goal: Students must be able to investigate and evaluate their approach to patient care, appraise and assimilate scientific evidence, and continuously improve patient care based on self-evaluation and life-long learning.  

Objectives:  

During this rotation, students are expected to:
1. Demonstrate the ability to identify strengths and weaknesses in their knowledge and skills and seek opportunities to strengthen those deficits
2. Demonstrate maturity in soliciting, accepting, and acting on feedback in an effort to effectively make improvements
3. Utilize information technology in the practice of life-long learning and to support patient care decisions and promote patient education decisions
4. Contribute to the educations of patients, families, other students, and other health professionals.
5. Utilize established quality recommendations to provide care to patients and to help develop interventions to improve safe, quality patient care.

**Competency: Interpersonal and Communication Skills**

Goal: Students must be able to demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, their families, and professional associates.

Objectives:

During this rotation, students are expected to:

1. Demonstrate effective and appropriate verbal and nonverbal techniques to elicit a patient history
2. Communicate effectively with patients and families across a broad range of socioeconomic and cultural backgrounds
3. Communicate effectively with physicians and other health professionals to coordinate care and improve patient safety and quality of care
4. Deliver a clear, concise, and thorough oral presentation of a patient's history and examination
5. Prepare a clear, concise, and thorough written presentation of a patient's history and examination
6. Document medical information accurately

**Competency: Professionalism**

Goal: Students must demonstrate adherence to ethical principles, development of physician attributes, and a commitment to carrying out professional responsibilities.

Objectives:

During this rotation, students are expected to:

1. Demonstrate honesty, integrity, reliability, and responsibility in all interactions with patients, families, colleagues, and other professional contacts
2. Maintain patient confidentiality
3. Demonstrate a professional image in behavior and dress
4. Demonstrate behaviors and attitudes that promote the best interest of patients
5. Maintain a positive attitude and regard for education by demonstrating intellectual
curiosity, initiative, academic integrity, and willing acceptance of feedback.

Competency: Systems-based Practice

Goal: Students must demonstrate an awareness of, and responsiveness to, the larger
context and system of health care, as well as the ability to call effectively on other
resources in the system to provide optimal health care.

Objectives:

During this rotation, students are expected to:

1. Work collaboratively in inter-professional teams to enhance the quality of patient
care
2. Describe the costs, benefits, and potential harms of tests and procedures.
3. Identify health disparities and advocate for quality patient care.
4. Advocate for quality patient care and optimal patient care systems.
5. Describe how identifying systems errors and implementing potential systems
   solutions may improve care.