GOALS & OBJECTIVES

Neurology Clerkship

Academic Year 2019-2020

The format for this listing of goals and objectives for the Neurology Clerkship is modeled after the ACGME Core Competencies (Patient Care, Medical Knowledge, Interpersonal and Communication Skills, Professionalism, Practice-Based Learning and Improvement, and Systems-Based Practice).

The goals listed for each competency mirror the goals stated in the Graduation Competencies for Drexel University College of Medicine.

The instructional strategies for the following objectives include: supervised clinical experiences, bedside teaching rounds, didactic sessions/case conferences, and online lectures. Clinical skills and medical knowledge are assessed through direct clinical observation, student completion of the clinical passport, completion of patient log with abnormal neurological findings, and faculty/resident completion of evaluation forms. Medical knowledge is also assessed through the NBME subject examination in Neurology, as well as the completion of a translational medicine project via a small group presentation.

At the end of their clinical rotation, the ultimate goal is that each student will feel very comfortable and competent at performing a comprehensive neurological examination; this skill set would then carry forward to all their future clinical encounters.

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. Communicate effectively and demonstrate caring and respectful behaviors when interacting with patients
2. Gather essential and accurate information about their patients
    - Obtain a thorough and accurate history with an appropriate neurologic review of systems
    - Perform a comprehensive neurologic examination and be able to identify abnormal neurologic findings
    - Adapt the neurologic exam to patients with reduced ability to participate in examination (e.g. patient with altered level of consciousness or abnormal mental status)
3. Make informed decisions about diagnostic and therapeutic interventions based on patient information and preferences, up-to-date scientific evidence, and clinical judgment
    - Interpret history and physical examination findings and propose a neuroanatomic localization
    - Create a broad initial differential diagnosis for each neurological problem
    - Outline an initial evaluation plan

- Use neuroimaging and other ancillary tests (EEG, EMG, lumbar puncture, labs) appropriately
- Describe the most common treatments for the diagnosis proposed

4. Counsel and educate patients and their families
    - Effectively communicate information about the diagnosis and treatment to the patient
    - Recognize the important role of patient education in the treatment of acute and chronic illness and prevention of disease
5. Use information technology to support patient care decisions and patient education
6. Provide health care services aimed at preventing health problems or maintaining health.
7. Work with other health care professionals, including those from other disciplines, to provide patient-focused care

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. Understand the basic structure and function of the neurologic system
2. Recognize symptoms that may signify neurologic disease
3. Describe common neurologic diseases including their characteristic signs and symptoms, etiology, epidemiology, and pathophysiology
4. Distinguish normal from abnormal findings on neurologic examination
5. Localize lesions of the:
    a. Cerebral hemisphere
    b. Posterior fossa
    c. Spinal cord
    d. Nerve root/Plexus
    e. Peripheral nerve
    f. Neuromuscular junction
    g. Muscle
6. Use clinical reasoning processes to interpret data to derive a differential diagnosis based on lesion localization, time course, relevant historical and demographic features and develop a clinical management plan
7. Have an awareness of the use and interpretation of common tests used in the diagnosis of neurologic disease including:
    a. Head CT
    b. MRI Brain and Spine
    c. EEG
    d. EMG
    e. Lumbar puncture
8. Understand the principles underlying a systematic approach to the management of common neurologic diseases including recognition and management of potential neurologic emergencies

9. Describe common medications used in neurology, their indications, typical side effects, and toxic effects.
10. Understand the systematic approach to the evaluation and differential diagnosis of patients 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. Dysphagia
    l. Acute mental status changes
    m. Dementia
    n. Aphasia
    o. Headache
    p. Focal pain
    q. Numbness or paresthesia
    r. Transient or episodic focal neurologic symptoms
    s. Transient or episodic alteration of consciousness
    t. Sleep disorders

11. Recognize situations in which it is appropriate to request neurologic consultation.
12. Utilize the basic concepts of evidence-based medicine to analyze the literature
13. Demonstrate knowledge of the ethical, moral, and legal foundations of neurological care
14. Identify social, economic, psychological, and cultural factors that contribute to health and disease

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 education 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.
6. Understand the role of basic science research in the development of therapeutic approaches in neurologic disease

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. Communicate effectively in difficult situations, for example, giving bad news, communicating adverse events, and working with distressed patients and their family members

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.