Rotation: OHSU and VA Consult Service

Resident Level: PGY-4

Setting: Residents will be trained to evaluate patients with neurological complications of medical, psychiatric, and surgical diseases and to advise the primary treating team about optimal neurological management. In addition, residents will evaluate and advise the primary treating team regarding medical, psychiatric or surgical manifestations in a patient with an underlying primary neurological disease.

The importance of timely and professional delivery of neurological consultations and effective communication with the primary team is stressed with this rotation.

Training will encompass the following:

I. Patient Care

Goals:

1. To perform and document, with close supervision, a neurological consultation in patients with neurological complications of medical or surgical or psychiatric illnesses including patients in the Intensive Care Units, and to manage patients with neurological disorders who have medical, surgical, or psychiatric complications of their disease.
2. To delineate appropriate advanced differential diagnoses
3. To evaluate, assess, and recommend effective advanced, skilled management of patients

Objectives:

1. To determine:
   a. If a patient's symptoms are the result of a disease affecting the central and/or peripheral nervous system or are of another origin, e.g., of a systemic, psychiatric, or psychogenic illness
   b. Advanced formulation, differential diagnosis, laboratory investigation, and management plan
2. To develop and maintain the advanced technical skills to:
   a. Perform lumbar puncture, edrophonium, and caloric testing
   b. Identify and describe abnormalities seen in common neurological disorders on radiographic testing, including plain films, myelography, angiography, CT, isotope, and MRI
   c. Evaluate the application and relevance of investigative procedures and interpretation in the diagnosis of neurological disease, including the following:
      1) Electroencephalogram
      2) Motor and sensory nerve conduction studies
      3) Electromyography
      4) Evoked potentials
      5) Polysomnography
      6) Electronystagmogram
      7) Audiometry
      8) Perimetry
      9) Psychometry
      10) CSF analysis
      11) Vascular imaging (Duplex, transcranial Doppler)
      12) Radiographic studies as outlined above.
3. To recognize and treat neurological disorders including recognition of neurological emergencies

II. Medical Knowledge

Goals:
To gain a broad advanced knowledge of neurological disease in patients with a variety of other medical conditions.
Objectives:
1. To develop advanced knowledge of major disorders, including considerations relating to age, gender, race, and ethnicity, based on the literature and standards of practice. This knowledge shall include:
   a. The epidemiology of the disorder
   b. The etiology of the disorder, including medical, genetic, and sociocultural factors
   c. The phenomenology of the disorder
   d. The experience, meaning, and explanation of the illness for the patient and family, including the influence of cultural factors and culture-bound syndromes
   e. Effective treatment strategies
   f. Course and prognosis
2. To gain an advanced knowledge of healthcare delivery systems, including patient and family counseling
3. To develop a solid, advanced knowledge of the application of ethical principles in delivering medical care
4. To achieve advanced skills to reference and use electronic systems to access medical, scientific, and patient information

1. To achieve a competency in advanced neuroscience and the pathophysiology of major psychiatric and neurological disorders including:
   a. Neuroanatomy
   b. Neuropathology
   c. Neurochemistry
   d. Neurophysiology
   e. Neuropharmacology
   f. Neuroimmunology/neurovirology
   g. Neurogenetics/molecular neurology and neuroepidemiology
   h. Neuroendocrinology
   i. Neuroimaging
   j. Neuro-ophthalmology
   k. Neuro-otology
   l. Cerebrospinal fluid
   m. Critical care and emergency neurology
   n. Coma and brain death
   o. Geriatric neurology
   p. Headache and facial pain
   q. Interventional neurology (basic principles only)
   r. Movement disorders

3. To demonstrate advanced knowledge of psychiatry, including the following:
   a. Psychopathology, diagnostic criteria, and clinical course for common psychiatric disorders
   b. Drug dependence and substance abuse
   c. Psychopharmacology

III. Interpersonal Communication Skills

Goals: To become an accomplished and effective communicator including with patients, peers, coworkers and learners.

Objectives
1. To develop skills to listen to and understand patients and to attend to nonverbal communication
2. To communicate effectively with patients using verbal, nonverbal, and written methods
3. To develop and maintain a therapeutic alliance with patients by instilling feelings of trust, honesty, openness, rapport, and comfort in the relationship
4. To partner with patients to develop an agreed upon healthcare management plan
5. To transmit information to patients in a clear and meaningful fashion
6. To understand the impact of the their own feelings and behavior so that such feelings and behaviors do not interfere with appropriate treatment
7. To communicate effectively and work collaboratively with allied healthcare professionals and with other professionals involved in the lives of patients
8. To educate patients and professionals about medical, psychosocial, and behavioral issues

To develop competency in advanced skills to be an effective consultant to other medical specialists, mental health professionals, and community agencies by demonstrating the ability to:
1. Communicate effectively with the requesting party to refine the consultation question
2. Communicate clear and specific recommendations
3. Respect the knowledge and expertise of the requesting professionals

To demonstrate the ability to communicate effectively with patients and their families by:
1. Gearing all communication to the educational and intellectual levels of patients and their families
2. Demonstrating sociocultural sensitivity to patients and their families
3. Providing explanations of psychiatric and neurological disorders and treatment that are jargon-free and geared to the educational and intellectual levels of patients and their families
4. Providing preventive education that is understandable and practical
5. Respecting the patients' cultural, ethnic, religious, and economic backgrounds
6. Developing and enhancing rapport and a working alliance with patients and their families
7. Ensuring that the patient and/or family have understood the communication

Residents shall maintain up-to-date medical records and write legible prescriptions. These records must capture essential information while simultaneously respecting patient privacy, and they must be useful to health professionals outside of neurology.

To demonstrate the ability to effectively lead a multidisciplinary treatment team, including being able to:
1. Listen effectively
2. Elicit needed information from team members
3. Integrate information from different disciplines
4. Manage conflict
5. Clearly communicate an integrated treatment plan

To communicate effectively with patients and their families while respecting confidentiality including:
1. The results of assessments
2. Use of informed consent when considering procedures
3. Genetic counseling and palliative care when appropriate
4. Consideration and compassion for the patient in providing accurate medical information and prognosis
5. The risks and benefits of the proposed treatment plan, including possible side effects of medications and/or complications of nonpharmacologic treatments
6. Alternatives (if any) to the proposed treatment plan
7. Appropriate education concerning the disorder, its prognosis, and prevention strategies

IV. Practice-Based Learning and Improvement

Goals: To recognize and accept limitations in one’s own knowledge base and clinical skills, and understand and develop the practice of lifelong learning.

Objectives:

To demonstrate advanced appropriate skills for obtaining and evaluating up-to-date information from scientific and practice literature and other sources to assist in the quality care of patients. This shall include, but not be limited to:
1. Use of medical libraries
2. Use of information technology, including Internet-based searches and literature databases (e.g., Medline)
3. Use of drug information databases
4. Active participation, as appropriate, in educational courses, conferences, and other organized educational activities both at the local and national levels
To evaluate caseload and practice experience in a systematic manner. This may include:
1. Case-based learning
2. Use of best practices through practice guidelines or clinical pathways
3. The review of patient records and outcomes
4. Obtaining evaluations from patients (e.g., outcomes and patient satisfaction)
5. Obtaining appropriate supervision and consultation
6. Maintaining a system for examining errors in practice and initiating improvements to eliminate or reduce errors

To demonstrate an advanced ability to critically evaluate relevant medical literature. This ability may include:
1. Using knowledge of common methodologies employed in research
2. Researching and summarizing a particular problem that derives from their own caseloads.

To demonstrate the ability:
1. To review and critically assess scientific literature to determine how quality of care can be improved in relation to one's practice (e.g., practice parameter adherence). Within this aim, physicians shall be able to assess the generalizability or applicability of research findings to patients in relation to their sociodemographic and clinical characteristics.
2. To develop and pursue effective remediation strategies that are based on critical review of the scientific literature.

V. Professionalism

Goal: To become proficient in responsibility for patient care, ethical behavior, respect for others including patients and peers, and to exhibit honesty and trustworthy behavior in interactions with patients, peers and others.

Objectives:
To demonstrate advanced responsibility for their patients' care, including:
1. Responding to communication from patients and health professionals in a timely manner
2. Establishing and communicating back-up arrangements, including how to seek emergent and urgent care when necessary
3. Using medical records for appropriate documentation of the course of illness and its treatment
4. Providing coverage if unavailable, (for example, when out of town or on vacation)
5. Coordinating care with other members of the medical and/or multidisciplinary team
6. Providing for continuity of care, including appropriate consultation, transfer, or referral if necessary

To demonstrate advanced skills in ethical behavior, integrity, honesty, compassion, and confidentiality in the delivery of care, including matters of informed consent/assent, professional conduct, and conflict of interest.

To demonstrate respect for patients and their families, and their colleagues as persons, including their ages, cultures, disabilities, ethnicities, genders, socioeconomic backgrounds, religious beliefs, political leanings, and sexual orientations.

To show understanding of and sensitivity to end of life care and issues regarding provision of care.

To review their professional conduct and remediate when appropriate.

To participate in the review of the professional conduct of their colleagues.

To be aware of safety issues, including acknowledging and remediating medical errors, should they occur.
VI. Systems-Based Practice

**Goal:** To have a working knowledge of the diverse systems involved in treating patients of all ages, and understand how to use the systems as part of a comprehensive system of care in general and as part of a comprehensive, individualized treatment plan.

**Objectives:** To develop experience and advanced competence in the:
1. Use of practice guidelines
2. Ability to access community, national, and allied health professional resources that may enhance the quality of life of patients with chronic psychiatric and neurological illnesses
3. Ability to lead and delegate authority to healthcare teams needed to provide comprehensive care for patients with psychological and neurological disease
4. Practice of ambulatory medicine, including time management, clinic scheduling, and efficient communication with referring physicians
5. Use of appropriate consultation and referral mechanisms for the optimal clinical management of patients with complicated medical illness
6. Skill of ensuring adequate cross coverage
7. Use of accurate medical data in the communication with and effective management of patients

To:
1. Recognize the limitation of healthcare resources and demonstrate the ability to act as an advocate for patients within their sociocultural and financial constraints
2. Demonstrate knowledge of the legal aspects of psychiatric and neurological diseases as they impact patients and their families
3. Demonstrate an understanding of risk management.

To demonstrate knowledge of and interact with managed health systems, including:
1. Participating in utilization review communications and, when appropriate, advocating for quality patient care
2. Educating patients concerning such systems of care

To demonstrate knowledge of community systems of care and assist patients to access appropriate care and other support services.