I. Educational Purpose and Goals

The neurology rotation will provide inpatient neurology consultative experience. The goals of the rotation are for the residents to become proficient in the “neurologic exam” and to develop proficiency in localizing Central and Peripheral Nervous System lesions based on their physical exam in concert with relying on imaging studies.

II. Principal Teaching Methods

A. Supervised Direct Patient Care:

Residents will learn through direct patient care with a supervising attending in the inpatient setting. In the inpatient setting, residents will be responsible for primary evaluation of patients and development of an initial assessment and plan. The resident will present patients that they have worked up to both the attending and the multidisciplinary team, which includes supervising attending.

B. Didactic Lectures: Residents attend the joint Neuro-Radiology Conference between South and North Kaiser, which occurs on Fridays. Multiple interesting cases are presented at this conference. Residents are also the primary presenters at the Multidisciplinary Rounds.

C. Independent Reading: The resident will read independently to answer questions about patient care that arise in the hospital. The residents are encouraged to use the Neurology text, which are housed at the Neurology Clinic, primary literature, or UpToDate (Neurology).

III. Educational Content

A. Mix of Diseases: Residents see a range of Neurological disorders, including but not limited to: strokes, seizure disorders, multiple sclerosis, Guillain-Barre syndrome, and intracranial infections.

B. Patient Characteristics: Kaiser Permanente is a non profit HMO that has a capture population well over 175,000. Our patient population is very diverse in age, gender, and ethnicity. However, 50% of the hospitalized patients are 65 years of age or older. The majority of our population based are employed and or their dependence.

C. Procedures and Services: Neurology consults on hospitalized patients on both the surgical and medical services, as well as the two intensive care units. Basic procedures include Lumbar Puncture.
D. Learning Venues:

1. Conferences:
   1) **Neurology Conference:** Fridays, 7-8:30am. North Kaiser -- Morse Avenue, Commons Bldg, 1st floor, Room 117.
   2) **Stroke Rounds** meet at 1:30 pm at the 3rd floor nurses station. Cases are presented at the bedside and patients evaluated.
   3) **Academic Conference:** At UC Davis Medical Center on Mondays, 1pm – 5 pm. Residents must be allowed to leave the hospital to attend this conference.
   4) **Continuity Clinic:** One afternoon per week; days vary. Check [www.amion.com](http://www.amion.com).
   5) **Grand Rounds:** Thursday 8-9am. Conference rooms 3,4 in the basement of the South Kaiser hospital. Sign in on the table. Breakfast served.

2. Neuro Radiology Grand Rounds: 10 – 20 interesting Neurology cases are presented during these rounds. The discussion focuses on either interpreting images or the management of complex case. Participants of the conference are staff Neurologists, Neurosurgeon, Neuroradiologists, Neurointerventionalists, and the residents.

3. Stroke Rounds: This is also a multidisciplinary rounds that is attended by the Neurologists, PM&R, Speech Therapy, Physical Therapy, Occupational Therapy, and Discharge Planning. The purpose of stroke rounds is patient management. However, an extensive amount of teaching does occur.

4. Attending Rounds: The Neurology attending have daily combined patient management and teaching rounds with the residents, on all patients.

IV. Educational Goals and Objectives
By the end of the rotation, the internal medicine resident will be familiar with hospital Neurology.

A. Rotation specific competencies:

**Patient Care:** By the end of the rotation, residents will be able to:

- Demonstrate an appropriate initial evaluation and management of neurological diseases.
- Obtain accurate and complete information through medical interviews, physical examination, and review of the electronic medical records.
- Present a case thoroughly.
- Create a complete problem list and appropriate differential diagnosis.
- Demonstrates sound clinical judgment; incorporating patient preferences into the care plan.

**Medical Knowledge:** By the end of the rotation, residents will:

- Have learned an approached to the evaluation of the Neurologic patient.

**Practice-Based Learning and Teaching:**
- Critiques own performance
- Receptive to constructive criticism
• Learns from errors and uses errors to improve patient care on both a personal and system-wide level
• Uses information sources effectively to support patient care decisions and to educate self, patients, and other physicians
• Active participation during interactive teaching sessions and case discussions
• Responsiveness to constructive criticism and enthusiasm for self-education and self improvement (practice based learning).

Interpersonal and Communication Skills:

• Develops a good working relationship and rapport and communicates clearly with other physicians, health professionals, and patients
• Presents cases in a well-thought out manner
• Maintains comprehensive, timely electronic medical records
• Communicates effectively with HBS physicians and ER doctors after completion of consultation.

Professionalism

• Develops good rapport with patients and staff.
• Able to work with people from diverse backgrounds (professionalism).
• Demonstrates respect, compassion and integrity in working with patients, families, colleagues and other health professionals regardless of their background
• Adheres to principles of confidentiality, scientific and academic integrity and informed consent
• Recognizes and identifies deficiencies in peer performance in a constructive manner
• Takes responsibility for patient care; acknowledges mistakes

Systems-Based Practice

• Able to work with within the multidisciplinary stroke team effectively to deliver optimal patient care.
• Able to work with effectively within Kaiser Permanente’s highly integrated health care system.
• Demonstrates appropriateness and cost-effectiveness of proposed diagnostic studies and therapeutic maneuvers.

V. Ancillary Educational Materials

A. Computer-based Resources: Access to Up-to-Date Neurology is available via the computer in the Neurology Department, as is online texts and an extensive Kaiser Permanente Clinical Library.

B. Textbooks: Basic text books on neurology are available in the Neurology Department.

VI. Methods of Evaluation

A. Resident Performance: Resident performance will be assessed through direct observation on teaching and management rounds. The attending also reviews the resident’s notes. The attending will evaluate the resident in writing at the end of the rotation and provide verbal feedback during and at the end of the rotation using E-Value. Real time feedback is given when appropriate.
B. Rotation, Faculty Evaluations: The residents will anonymously evaluate the clinical experience and the attending at the end of the rotation.

VII. Supervision

Residents will work in direct contact with the staff Neurology attending. There is a Neurologist on call at all times.

VIII. Resident Responsibilities:

A. Patient Care Responsibilities: On all consults, the resident is expected to:

1. Perform a history and physical examination with a focus on Neurological issues.
2. Formulate a differential diagnosis and management recommendations for the active Neurological issues.
3. Participate actively in the management of the patient and discussions concerning the patient.
4. Pre-round on each patients in preparation for attending teaching and management rounds.
5. Write a daily note on each patient he/she is following.
6. Contact the primary team directly about any urgent management issues decided during attending, and or multidisciplinary rounds.

IX. Duty Hours

Neurology Consults Rotation is Monday through Friday, 7:00am – 5:00pm. There is no evening nor weekend calls.