# Rotational Electrophysiology Guideline

## **Educational Purpose of the Rotation**

Participation in the electrophysiology rotation provides sub-specialty fellows with the opportunity to gain knowledge and procedural skills in the areas of electrophysiology testing. This includes pacemaker evaluation, insertion, and post insertion assessment. Additional skills include tilt table testing, cardiac ablation procedures, defibrillators, and temporary pacemaker intervention. The educational process also provides teaching the guidelines for proper assessment and referral of patients to the electrophysiology specialty area, as well as a comprehensive understanding of benefits and risks of these procedures. An important part of this rotation is learning about medical and interventional management of a variety of arrhythmias.

## **Rotation Attendings**

Ranjan Thakur MD Mark Castellani MD John Ip MD

This rotation occurs at Sparrow Health System. This is a required rotation which the sub-specialty fellows rotate twice during the three-year program. Additional rotations may be arranged as electives for those sub-specialty fellows who express interest in a specialization in this field.

#### Resources

Sparrow Health System has modern electrophysiology laboratories with all necessary equipment to perform intracardiac arrhythmia mapping and ablation procedures. This clinical experience includes assessment and management of new and return patients as well as pacemaker and defibrillator follow up, including interrogation and reprogramming. Referrals to this service occur via cardiologists (both MSU and private), primary care physicians, and other consulting services. The patients consist of both genders, diverse ethnicity, and socioeconomic backgrounds. The diagnoses may include ventricular and supraventricular arrhythmias, tachyarrhythmias, bradyarrhythmias, accessory pathways, syncope, and other related symptoms.

### Responsibilities

Participation in this rotation requires the sub-specialty fellow to:

- 1. Secure a thorough history and physical examination with presentation of the case to the attending physician in a logical and timely manner.
- 2. Learn the appropriate indications and possible complications of testing modalities associated with this specialty, including the risks, benefits, and probable outcomes of treatment and non-treatment options.
- 3. Actively participate in the patient management prior to, during, and following any procedure including follow up pacemaker and defibrillation implantation.
- 4. Ensure hemostasis of the venous access site.
- 5. Utilize the electronic medical record system to document patient interaction, assessment, and procedural notes under the direction of the attending physician.
- 6. Review results/outcomes with referring physicians, patients, patient family members, and members of the health care team.
- 7. Present case studies during cardiology grand rounds and attend other conferences as required.
- 8. Review and be prepared to discuss relevant literature references.

### **Objectives**

At the conclusion of the electrophysiology training segment the sub-specialty fellow will:

- 1. Demonstrate an increased proficiency in the fundamental knowledge required to perform electrophysiology studies including interpretation of cardiac arrhythmias.
- 2. Progression in skill levels will allow the sub-specialty fellow to more actively participate in the procedures and dictation of final reports. Cases are always to be discussed with the attending physician.
- 3. Demonstrate an increased awareness of the indications, risks, benefits and possible outcomes of electrophysiologic testing and procedures.
- 4. Work effectively with all members of the health care team, communicate effectively with patients and their families as well as referring and consulting physicians.

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## **Instructional Methods**

Attending physicians participating in this rotation will:

- 1. Supervise and instruct the sub-specialty fellows in accordance with the supervision policy.
- 2. Provide an atmosphere allowing for responsible patient care while encouraging subspecialty fellows to assume more primary responsibility as their skills progress.
- 3. The sub-specialty fellow must be provided with on-going performance feedback and interpretation of skills.
- 4. Provide structured teaching opportunities including appropriate literature references/citations for review and discussion.

### **Evaluation Process**

At the conclusion of each rotation, evaluations must be completed by both the attending physicians and sub-specialty fellow.

- Faculty members will summarize and accurately describe the sub-specialty fellow's performance on the provided evaluation form. The faculty member will review this form with the sub-specialty fellow, both members will sign their acknowledgment and the evaluation will be returned to the program office. This information will be included in the sub-specialty fellows file for program director review.
- 2. Sub-specialty fellows will summarize and accurately describe both the faculty performance and the educational benefit of the rotation and return this evaluation to the program office. In accordance with the provision for subspecialty fellow anonymity, these rankings are entered into a spreadsheet program for tabulation and the original forms are destroyed.

Readings: As assigned.

**Schedule:** Please refer to master sub-specialty fellow schedule

**Competency Level:** 

Completion of the electrophysiology rotations would permit the sub-specialty fellow to qualify for Level I competency under the COCATS4 Guidelines. A log must be kept on all EP procedures.