Ambulatory Cardiology, R1

I. General Information

a. Rotation Length: Four weeks
b. Course Director: A. Nasser Khan, MD
c. Faculty Physicians: The Iowa Clinic Cardiologists

II. Orientation

a. The resident should contact Carrie at The Iowa Clinic Cardiovascular Services during the week before the rotation begins to confirm the rotation and schedule orientation. The phone number is 241-6577.
b. The resident must provide Carrie with his or her schedule for Continuity Clinic and information regarding any anticipated absences, including scheduled vacation or any educational activities required by the program.
c. Dr. Khan or his designee will complete the orientation to the rotation.

III. Rotation Description

a. Educational Goals and Purpose: The purpose of this rotation is to provide an opportunity to learn the principles and practice of cardiovascular medicine in an ambulatory setting. Residents will see patients with cardiovascular disease in an ambulatory setting, practice and refine the cardiovascular physical examination, present those patients to an attending cardiologist, and learn the basics of how to develop and implement a diagnostic and therapeutic plan for patients with cardiovascular disease.
b. Principal Objectives
   i. Learn the presentation, diagnosis, and management of common cardiovascular diseases, including coronary artery disease, valvular heart disease, dyslipidemias, hypertension, congestive heart failure, cardiomyopathies, dysrhythmias, and pericardial disease.
   ii. Practice and refine the cardiovascular physical examination.
   iii. Learn fundamentals of ECG interpretation.
   iv. Observe noninvasive stress testing, and learn the basics of how to interpret those tests.
c. Principal Teaching Methods: The principal teaching method will be a combination of clinical teaching provided by the faculty physicians with
whom the resident works and case-based learning using approved sources.
The resident should complete the MKSAP on Cardiovascular Disease during
this rotation, and the series of practice ECGs that are assigned.

d. **Educational Format:** The resident will complete this rotation in the offices of
The Iowa Clinic, Cardiovascular Diseases, under the direct and indirect
supervision of the cardiologists of The Iowa Clinic. The resident will see
patients in the office Monday through Friday, from 8:30 AM to 4:30 PM. The
resident will see assigned patients, complete a clinically relevant history and
exam, and then present the patient to his or her attending cardiologist. The
resident and the attending physician will discuss the condition and the
diagnostic and management plan as time permits, and the resident will
participate in discussions the attending physician has with the patient. The
resident will complete any documentation requested by the attending
physician, and assist with the disposition of the patient.

In addition, the resident may have the opportunity to observe noninvasive
stress tests, echocardiograms, and invasive diagnostic tests including cardiac
catheterization and electrophysiologic testing.

e. **Educational Content:** The resident will encounter a wide variety of
cardiovascular diseases commonly seen in the ambulatory setting, including
coronary artery disease, congestive heart failure, congenital heart disease,
valvular heart disease, cardiomyopathies, pericardial disease, dysrhythmias,
hypertension, and dyslipidemias. In addition, residents may have the
opportunity to observe the different diagnostic modalities used in the
evaluation of cardiovascular disease, and learn their indications,
contraindications, and limitations.

f. **Educational Materials:** The resident is expected to read the MKSAP section
on Cardiovascular Disease during this rotation. In addition, residents are
expected to use a core textbook in internal medicine or cardiovascular
disease, or the equivalent, for case-based learning during this rotation.
Residents should use a recognized text on physical diagnosis in order to
further refine knowledge of the cardiovascular physical examination, and the
resident will complete the practice ECGs that are assigned.

IV. **Competency Specific Learning Objectives**

a. **Patient Care:** The resident will develop and demonstrate the ability to
obtain a focused and clinically relevant cardiovascular history, perform
properly a cardiovascular physical examination, and interpret cardiovascular diagnostic testing in the context of Bayes’ theorem. The resident will learn and demonstrate the ability to develop a patient-centered and effective diagnostic and therapeutic plan. The residents will demonstrate basic skills in the interpretation of ECGs.

b. **Medical Knowledge:** The resident will acquire and demonstrate knowledge of cardiovascular diseases commonly encountered in the ambulatory setting, diagnostic modalities commonly used by cardiologists, and a basic knowledge of ECG interpretation.

c. **Practice Based Learning and Improvement:** The resident will be able to use resources and guidelines to guide management decisions in a real-time fashion, and the resident will be able to identify gaps or deficiencies in his or her knowledge base and implement strategies to overcome those deficiencies.

d. **Interpersonal and Communication Skills:** The resident will demonstrate effective, respectful and timely communication skills. The resident will demonstrate effective communication skills with patients, attending physicians, nursing staff, and administrative staff. All required documentation will be completed in a timely fashion.

e. **Professionalism:** The resident will demonstrate reliability, punctuality, honesty and responsibility at all times. The resident will demonstrate dedication to his or her patients and scholarship.

f. **Systems Based Practice:** The resident will demonstrate the ability to work cooperatively and effectively with nursing staff, clerical staff, and other staff in providing essential patient care.

V. **Operations of the Rotation (What You Need to Know)**

a. **Lines of Supervision and Responsibility:** The resident will be directly and indirectly supervised by the attending cardiology faculty of The Iowa Clinic. The resident will be responsible for accurate and complete presentations of patient information to the attending physician, completion of any assigned curriculum, and to the policies of the residency program, the institution, and The Iowa Clinic. The attending physicians are responsible for teaching, providing accurate and timely feedback and evaluations, and ensuring a good educational environment and experience for the resident. Any concerns that
either the resident or attending physician has regarding the rotation can and should be directed to the program director.

b. **Duty Hours:** The resident will be assigned to this clinical rotation from Monday through Friday, excluding recognized holidays, from 8:00 AM to 5:00 PM. There is no call during this rotation. There are no weekend duties.

c. **Continuity of Care Clinic:** The resident will have Continuity of Care Clinic during this rotation.

VI. **Evaluation**

a. Evaluations will be completed electronically by the assigned attending physician, and will be coordinated and reviewed by the program director before they are released to the resident.

b. Evaluations will be in competency-specific language and will reflect the objectives and core competencies described above.

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