

**Non-invasive Cardiology Rotation
Providence VA Medical Center**

Overview of Rotation

revised date: 1/2/07

I. GENERAL INFORMATION	
Name of Rotation	Non-Invasive Cardiology
Course Director	Gaurav Choudhary, MD
Duration of Rotation	1 month
Address	111-A, VA Medical Center (VAMC)
Telephone	457-3063
Fax	457-3364
Administrative/Secretarial Contact & Phone	Kathryn Rehak – 457-3063
Location to report on first day of rotation	Rm 206 – Cardiology Fellows room
Resident Study/Resource Area	Rm 206 – Cardiology Fellows room

II. FACULTY
Drs. Satish Sharma, Gaurav Choudhary, David Fortunato, Hank Wu
<p>Lines of Responsibility (in order): In all clinical in-patient rotations, cardiology fellows will interact with generalists and specialists in all areas, functioning as consultants for cardiovascular problems. Particularly close interactions are fostered with cardiothoracic surgery and internal medicine residents and staff. Primary care of such patients remains with the surgical or medical services, with the cardiology staff available for any level of consultation at any time. At any time, a given in-patient service thus may be comprised of an attending, a cardiology fellow, medical residents, and medical students. The team is led by the attending, who bears final responsibility for patient management or recommendations for management. The cardiology fellow is next in line, followed by medical residents and medical students, if present on the rotation.</p>

III. GENERAL GOALS AND EDUCATIONAL OBJECTIVES FOR THIS ROTATION
<p>➤ Goals: a. Improve EKG and Holter monitor reading skills; b. Improve procedural skills in the performance of cardioversions, TEE's, outpatient PA catheter measurements of intracardiac pressures; c. Understand role of non-invasive studies in management of patients with cardiac diseases.</p>
<p>➤ Objectives - By the end of this rotation, the resident will be able to: understand indications for commonly used noninvasive cardiac diagnostic tests, improvement in the skills involved in the performance and interpretation of TEE's, outpatient PA catheter insertion, stress testing, cardioversions</p>

IV. TOPICS/TEACHING METHODS/MATERIALS USED DURING THIS ROTATION
<p>Specific topics to be covered during this rotation:</p> <ul style="list-style-type: none"> • Appropriate use of noninvasive diagnostic modalities in cardiology. • Interpretation of standard ECGs • Interpretation of ambulatory ECG recordings (Holter monitors). • DC cardioversion • Performance of PA catheter insertion and management – techniques, indications • Performance and interpretation of exercise stress testing (including imaging)

Principal teaching methods (see section IX):

Clinical teaching (A)
 Clinical experiences (B)
 Performance feedback
 Monthly evaluations (C1)
 Semiannual evaluations (C2)

Educational materials provided/referred to the resident:

Reading lists will be provided by faculty.

V. EVALUATIONS

A. Evaluation of the resident's successful completion of the above goals will be carried out by the attending physicians (see section IX). Assessment methods includes:

- Clinical performance ratings: Rotation evaluations (1A), semiannual evaluations (1B)
- Focused observation and evaluation (2)
- Faculty/staff meetings (4)
- Procedure logs (5)
- Project reports (portfolio) (6A)

B. Residents will evaluate the rotation annually.

VI. RESPONSIBILITY OF ATTENDING ON ROTATION

- The VA attending physician would provide direct supervision of all procedures
- The VA attending physicians are responsible for the safety and final interpretation of the tests

VII. RESPONSIBILITY OF RESIDENT ON ROTATION

- 1) Read Electrocardiograms daily
- 2) Read Ambulatory EKGs (Holter)
- 3) Reading of the echocardiograms of the day
- 4) Performance of outpatient procedures (e.g. TEE's, Cardioversions, PA catheter measurements, etc.)
- 5) Performance of inpatient TEE's
- 6) Supervision of stress testing laboratory and performance of Exercise stress testing one-day a week
- 7) Interpretation and review of Nuclear Images with Dr. Wu and Radiologist
- 8) Weekly half day outpatient continuity clinic
- 9) Coverage of the clinical consult service when the consult fellow is unavailable (both routine and emergency consults)

VIII. CONFERENCE AND CLINIC SCHEDULE DURING THIS ROTATION

	Monday	Tuesday	Wednesday	Thursday	Friday	
AM	0800-0930 EKG reading and Holter Intpretation	0800-0930 EKG reading and Holter Intpretation	0800-0930 EKG reading and Holter Intpretation	0800-0930 EKG reading and Holter Intpretation	0800-0930 EKG reading and Holter Intpretation	
	0930-1200 Outpatient Procedures	0930-1200 Outpatient Procedures	0930-1200 Outpatient Procedures	0930-1200 Outpatient Procedures	0930-1200 Stress test	

PM	1300-1500 ECHO reading session 1500-1600 Nuclear Stress test reading sessions	1200-1300 Cardiology Teaching Conference 1300-1500 ECHO reading session 1500-1600 Nuclear Stress test reading sessions	1300-1500 ECHO reading session 1500-1600 Nuclear Stress test reading sessions	1300-1500 ECHO reading session 1500-1600 Nuclear Stress test reading sessions	1300-1500 ECHO reading session 1500-1600 Nuclear Stress test reading sessions	
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X. CORE COMPETENCY CURRICULUM

Competency Category	Specific Goals	Teaching & Assessment (sections IV, V above)
Medical Knowledge	Demonstration of investigatory and analytical thinking relevant to the clinical rotation	A,B,C,D -- 1,2,4,5
	Acquisition the appropriate background relevant to specific rotations	B,C -- 1,2
Patient Care	Application of basic and population science to practice	A,B,C,D -- 1,2
	Obtains appropriate information concerning the patient (history, past medical records, examination)	B,C -- 1,2,4
	Knowledge of the appropriate indications for diagnostic and therapeutic cardiology procedures	A,B,C -- 1,2,4
	Understands utilization of information technology as it relates to clinical care of patients	B,C -- 1,2
Practice-Based Learning & Improvement	Procedures: ECG, Holter	B,D -- 2
	Procedures: Stress testing (level 1)	B -- 2,5
	Procedures: Echocardiography or Nuclear Imaging (level 1)	A,B,C -- 1,2,4,5
	Demonstration of self-critical thinking and motivation to improve	B,C -- 1,2,4
Professionalism	Commitment to professional responsibilities and ethics	B,C -- 1,2,4
	Commitment to ongoing professional development	B,C -- 1,2,4

XI. OTHER IMPORTANT INFORMATION FOR RESIDENTS ON THIS ROTATION

- All absences must have prior approval by Dr. Choudhary in advance