

Internal Medicine Residency Program Rotation Curriculum

I. Rotation Sites and Supervision

Rotation Name: CARDIOLOGY CORONARY CARE UNIT

Site	Faculty Supervisor	Administrator	Phone
UCIMC	Pranav Patel, M.D.	Lesley Anderson	714-456-7015
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II. The educational rationale and goals for this rotation

To expose residents to inpatient care of patients with heart disease.

III. The principal teaching methods for this rotation

Direct patient care. Bedside rounds with attending staff. Scheduled didactic sessions.

IV. Responsibilities for medical students, PGY1 residents (interns), PGY2 & PGY3 residents and attendings on this rotation

- Medical student: Sub-intern, does in-house consults, admits inpatients
- Medical intern/residents: Direct patient care: Admits patients to CCU/monitored ward, writes orders and notes. Residents may supervise students & interns as Team Leader.

PGY 1 Residents

Patient Care Responsibilities:

Residents are responsible for following of a select number of patients on the CCU service. Patient selection is directed by the fellow or attending. All patient care activities of the CCU residents are under direct supervision of the fellow.

Procedures:

The resident can perform procedures appropriate for their level of training on the consult service. All procedures will be performed under the direct supervision of the resident or fellow.

Education:

The residents are expected to contribute on rounds. They are expected to present their patients on rounds, and contribute to the discussion of diagnosis, management, pathophysiology, and any related basic science issues. They will present patients at conference. They are expected to review pertinent medical literature. Guidance from the fellows and senior residents will be provided.

Patient Care:

The PGY1 residents will perform full consultation H&P on all new consults under their care. They will be responsible for collecting all database information, reviewing prior records, following laboratory information, and writing recommendations under direct supervision of the fellow.

Senior Residents (PGY2 & 3)

Senior residents will be responsible for all activities noted for PGY1 residents. In addition, these residents will be responsible for coordinating teaching efforts for interns and medical students. The senior residents will place emphasis on Medical Knowledge Management in the context of patient care. The senior residents will participate in divisional conferences and present appropriate cases

with literature review and critical appraisal. The senior residents will be available to teach medical students physical diagnosis.

The senior resident will be certified in basic procedures including thoracentesis, paracentesis, arterial blood gas procedures, and lumbar puncture, and will be responsible for teaching this procedure to the PGY1 residents.

Fellows

Supervises residents & interns, performs & supervises procedures

Attendings

Provides 24-hour supervision of in-house patients

A. Competency-based Objectives for the Coronary Care Unit Rotation

Education Objectives: The PGY1 resident

1. Will demonstrate competence in the cardiovascular physical exam.
2. Will demonstrate competence in the acquisition of the medical history related to cardiovascular function.
3. Will demonstrate the ability to define the acute coronary syndrome (ACS) and describe the initial management of all stages of ACS.
4. Will demonstrate competence in the initial assessment of heart failure.
5. Will demonstrate competence in the initial assessment of patients with arrhythmias

Educational Objectives: The Senior Resident

1. Will demonstrate competence in the management of ACS, heart failure, and arrhythmias including atrial fibrillation, SVT, and bradycardia.
2. Will demonstrate the ability to appropriately identify and consult for life-threatening arrhythmias.
3. Will demonstrate knowledge of the indications for valve replacement.
4. Will demonstrate knowledge of the indications for pacemaker insertion and for implantable defibrillator insertion.

Competency-based Objectives for the CCU Rotation

With regard to the following objectives, the resident at each level of training will demonstrate the following level of accomplishment, knowledge, skills, attitudes and attributes.

Patient Care

1. Acquires accurate and relevant histories from patients (PC 1)
2. Performs accurate and appropriate physical exams (PC 1)
3. Synthesizes data to define a patient's central clinical problem(s) (PC 1)
4. Consistently develops an appropriate care plan in the ICU setting (PC 2)
5. Efficiently organizes for the care of ICU patients (PC3)
6. Recognizes situations requiring urgent or emergent care (PC 2)
7. Seeks additional guidance or consultation when appropriate (PC 2)
8. Provides appropriate care in the intensive care unit (PC3)

9. Possesses basic technical skill for the completion of some common procedures (PC 4)
10. Asks meaningful clinical questions that guide the input of consultants (PC 5)

Medical Knowledge

1. Possesses the scientific knowledge required to provide care for common medical conditions (MK 1)
2. Able to interpret basic diagnostic tests accurately (MK 2)
3. Understands the rational and risks associated with common procedures (MK 2)

Systems Based Practice

1. Works effectively within an inter-professional team (SBP1)
2. Understands the roles and responsibilities of the team (SBP1)
3. Recognizes potential for error within the system (SBP 2)
4. Open to feedback about decisions that may lead to error or cause harm (SBP2)
5. Minimizes unnecessary diagnostic and therapeutic tests (SBP 3)
6. Provides complete and appropriate verbal and written care plans during times of transition (SBP 4)
7. Communicates effectively with future caregivers during transitions in patient care (SBP 4)

Practice Based Learning

1. Consistently self-reflects upon one's practice and performance (PBL-1)
2. Solicits feedback and is open to unsolicited feedback (PBL 3)
3. Able to utilize information technology effectively (PBL 4)
4. Able to critically appraise clinical research studies and reports (PBL 4)

Professionalism

1. Is respectful of and responsive to needs and concerns of patients, caregivers and members of the inter-professional team (PROF 1)
2. Completes tasks in a timely manner (PROF 2)
3. Is sensitive to each patient's unique characteristics and needs (PROF 3)
4. Demonstrates accountability for the care of patients (PROF 4)
5. Is honest and forthright in clinical interactions and documentation (PROF 4)

Interpersonal & Communication Skills

1. Engages patients in shared decision making (ICS 1)
2. Able to develop therapeutic relationships with patients and caregivers (ICS 1)
3. Engages in collaborative communication with appropriate members of the team (ICS 2)
4. Health records are organized and accurate (ICS 3)

V. Core primary resource readings

Basic Recommended Readings for this rotation come from **Current Medical Diagnosis and Treatment**, 2009. Access these readings at

<http://www.accessmedicine.com/resourceTOC.aspx?resourceID=1>

In addition, you should be familiar with basic practice guidelines in this discipline. Access these at <http://www.accessmedicine.com/guidelines.aspx?type=1>

Select the appropriate chapters for review. These chapters can be accessed through the Grunigen Medical Library website.

<http://www.accessmedicine.com/resourceTOC.aspx?resourceID=1>

Chapters of specific relevance for this rotation are:

Chapter 10	<u>Heart Disease</u>
Chapter 11	<u>Systemic Hypertension</u>
Chapter 12	<u>Blood Vessel & Lymphatic Disorders</u>

- 2012 ACCF/AHA/ACP/AATS/PCNA/SCAI/STS Guideline for the Diagnosis and Management of Patients With Stable Ischemic Heart Disease. *Circulation* December 18, 2012
- 2012 ACCF/AHA Focused Update of the Guideline for the Management of Patients With Unstable Angina/Non–ST-Elevation Myocardial Infarction (Updating the 2007 Guideline and Replacing the 2011 Focused Update). *Circulation*. 2012; 126: 875-910.
- 2009 Focused Updates: ACC/AHA Guidelines for the Management of Patients With ST-Elevation Myocardial Infarction (Updating the 2004 Guideline and 2007 Focused Update) and ACC/AHA/SCAI Guidelines on Percutaneous Coronary Intervention (Updating the 2005 Guideline and 2007 Focused Update). *Circulation*, December 1, 2009
- ACC/AHA 2005 Guideline Update for the Diagnosis and Management of Chronic Heart Failure in the Adult A Report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (Writing Committee to Update the 2001 Guidelines for the Evaluation and Management of Heart Failure): Developed in Collaboration With the American College of Chest Physicians and the International Society for Heart and Lung Transplantation: Endorsed by the Heart Rhythm Society *Circulation*. 2005;112:e154-e235.)
- Practical Implementation of the Guidelines for Unstable Angina/Non–ST-Segment Elevation Myocardial Infarction in the Emergency Department.
A Scientific Statement From the American Heart Association Council on Clinical Cardiology (Subcommittee on Acute Cardiac Care), Council on Cardiovascular Nursing, and Quality of Care

and Outcomes Research Interdisciplinary Working Group, in Collaboration With the Society of Chest Pain Centers. (Circulation. 2005;111:2699-2710.)

- ACC/AHA/SCAI 2005 Guideline Update for Percutaneous Coronary Intervention—Summary Article. A Report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines (ACC/AHA/SCAI Writing Committee to Update the 2001 Guidelines for Percutaneous Coronary Intervention). (Circulation. 2006;113:156-175.)
- ACC/AHA/ESC 2006 Guidelines for the Management of Patients With Atrial Fibrillation—Executive Summary. A Report of the American College of Cardiology/American Heart Association Task Force on Practice Guidelines and the European Society of Cardiology Committee for Practice Guidelines (Writing Committee to Revise the 2001 Guidelines for the Management of Patients With Atrial Fibrillation): Developed in Collaboration With the European Heart Rhythm Association and the Heart Rhythm Society. (Circulation. 2006;114:700-752.)

Web Site for these full reports:

<http://www.acc.org> or <http://www.americanheart.org>.

Books

- Cardiology for the House Officer, Heger, et al.
- Practical Electrocardiography, Marriott
- Textbook of Cardiovascular Medicine, Topol
- Heart Disease, Braunwald
- The Heart, Hurst

VI. Key physical diagnosis skills which should be reviewed during this rotation:
Cardiac Examination

VII. Key procedures which the resident should be able to perform
Arterial line placement
Central venous line

VIII. Key procedures that the resident should be able to understand the indications for and to interpret

- Coronary angiography
- Echocardiography
- Electrocardiography
- Stress testing
- Nuclear cardiac imaging

IX. Key topics (The most important diseases or conditions which the resident should see and understand during his rotation):

Atherosclerotic coronary disease
Chest pain syndromes
CHF
Cardiac arrhythmias

X. Evaluation methods

Professional competencies will be evaluated by (check all that apply)

Evaluation Method	Direct Observation & Feedback	Journal Club	Written Exam	Report or Presentation	Other (specify)
Competency					
Patient Care	X			X	
Medical Knowledge	X			X	
Practice-based Learning	X			X	
Communication Skills	X			X	
Professionalism	X			X	
Systems-based Practice	X			X	

Faculty will evaluate each resident's performance using the Competencies Evaluation Form and any special documents developed for the rotation. Faculty will provide formative, face-to-face feedback at the midpoint and end of each rotation.

Evaluation forms will be submitted to the Program Director for review by the Residency Oversight Committee (ROC; competency committee).

Residents will evaluate the rotation, their faculty attending and their peers on the rotation. Rotation Evaluations will be reviewed by the ROC and transmitted to the Division Chiefs.

Updated 6/2014