CVICU Selective for MS IV students

Contacts:

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*In emergencies dial the UMC operator and they should be able to reach me at all times.

Clerkship Description

Cardiovascular disease is the leading cause of mortality in the United States and represents a significant proportion of diagnoses in the internal medicine out-patient service. Understanding the principles of diagnosis and management of the most common cardiovascular diseases is essential training for the general internist. The goal of the Cardiovascular (CV) selective is to give students the opportunity to develop basic skills in evaluation and treatment of patients with cardiovascular disease through exposure to cardiology in the critical care setting with a wide variety of diagnostic and therapeutic cardiovascular procedures.

Academic Success and Accessibility
Office of Accessibility Services
TTUHSC EP is committed to providing access to learning opportunities for all students with documented learning disabilities. To ensure access to this course and your program, please contact the Office of Accessibility Services (OAS) by calling 915-215-4398 to engage in a confidential conversation about the process for requesting accommodations in the classroom and clinical setting. Accommodations are not provided retroactively, so students are encouraged to register with OAS as soon as possible. More information can be found on the OAS website:
https://elpaso.ttuhsc.edu/studentservices/accessibility/default.aspx

Counseling Assistance
TTUHSC EP is committed to the well-being of our students. Students may experience a range of academic, social, and personal stressors, which can be overwhelming. If you or someone you know needs comprehensive or crisis mental health support assistance, on-campus mental health services are available Monday- Friday, 9 a.m. – 4 p.m., without an appointment. Appointments may be scheduled by calling

915-215-TALK (8255) or emailing support.elp@ttuhsc.edu. The offices are located in MSBII, Suite 2C201. Related information can be found at https://elpaso.ttuhsc.edu/studentservices/student-support-center/get-connected/ Additionally, the National Suicide Prevention Lifeline can be reached by calling or texting **988**.

Reporting Student Conduct Issues:
Campus community members who observe or become aware of potential student misconduct can use the Student Incident Report Form to file a report with the Office of Student Services and Student Engagement. Student behaviors that may violate the student code of conduct, student handbook, or other TTUHSCEP policies, regulations, or rules are considered to be student misconduct. This includes, but is not limited to, plagiarism, academic dishonesty, harassment, drug use, or theft.

TTUHSC El Paso Campus CARE Team:
The university CARE Team is here to support students who may be feeling overwhelmed, experiencing significant stress, or facing challenges that could impact their well-being or safety. If your professor notices any signs that you or someone else might need help, they may check in with you personally and will often connect you with the CARE Team. This is not about being "in trouble"—it's about ensuring you have access to trained professionals who can offer support and connect you to helpful resources. Additionally, if you have any concerns about your own well-being or that of a fellow student, please don't hesitate to reach out to let your professor know. You can also make a referral to the CARE Team using CARE Report Form. Your health, safety, and success are our top priorities, and we're here to help.

Rotation Overview

The CV selective is open to medical students in the 4th year of training.

The student should pick up the CV selective curriculum and rotation schedule from the cardiology secretary at least the day before the rotation starts. The student must review the curriculum prior to the rotation.

Clerkship content and Instructional Methods

1. CVICU bedside rounds and case discussion
2. ECG reading sessions
3. Stress test observation and reading sessions
4. Observation of Catheterization lab procedures
5. Reading and literature search assignments

Clerkship goals

During the rotation, the student will be exposed to the following common areas of cardiology:

- Diagnosis and management of chest pain

- Strengths and limitations of noninvasive and invasive CV tests
- Diagnosis and management of acute coronary syndromes
- Diagnosis and management of myocarditis, cardiomyopathies and heart failure
- Diagnosis and management of pericarditis and pericardial tamponade
- Diagnosis and management of atrial and ventricular tachyarrhythmias
- Diagnosis of bradyarrhythmias and indications for permanent pacing
- Diagnosis and management of Mitral & Aortic valvular diseases
- Diagnosis and management of complications of endocarditis including antibiotic prophylaxis
- Diagnosis and management of dyslipidemia
- Preoperative evaluation and care for non-cardiac surgery
- Diagnosis and management of aortic aneurysms and dissection
- Diagnosis and management of peripheral vascular disease
- Classification and management of hypertension and hypertensive emergencies

In the tables below, the principal learning objectives for each of the eight UME competencies are outlined. The abbreviations for the type of learning environment and evaluation method are defined below.

Learning Environments:
CVICU   Cardiovascular Intensive Care
DD   Didactic learning opportunities
ECG   Electrocardiography sessions
ECHO   Echocardiogram sessions
STRESS   Stress Tests
CATH   Catheterization Rounds

Evaluation Methods:
GA   Global assessment which will include clinical evaluation by the faculty, cardiology fellows and residents

Assessment

At the end of the CVICU Selective rotation, a student will be able to:

1. **Patient Care**

Objective	Learning Environments	Evaluation Methods
Perform a comprehensive history and physical examination using information from families, old records and private physicians as needed (PGO 1.1, 4.1, 4.2)	CC	GA
Clearly document patient management plans and any changes in the patient's condition in the medical record (PGO 4.4)	CC	GA

2. Medical Knowledge

Objective	Learning Environments	Evaluation Methods
Demonstrate basic knowledge of the etiology, pathophysiology, clinical manifestations, diagnostic evaluation findings and appropriate management for cardiovascular disorders (PGO 2.1, 2.2, 2.3)	CC, ECG, ECHO, STRESS, CATH	GA
Demonstrate basic understanding of risk factor modification for CAD/PAD and the management of acute coronary syndromes, acute aortic syndromes, cardiac arrhythmias, valvular heart disease, decompensated heart failure and other cardiovascular diseases (PGO 2.4, 2.5, 1.2, 1.6)	CC, ECG, ECHO, STRESS, CATH	GA

3. Practice-Based Learning and Improvement

Objective	Learning Environments	Evaluation Methods
Use feedback and self-evaluation in order to improve performance (PGO 3.1, 3.3)	CC, ECG, ECHO, STRESS, CATH	GA
Enhance learning by reading the required materials and articles provided (PGO 3.4)	CC, ECG, ECHO, STRESS, CATH	GA
Use the medical literature search tools in the library to find papers relevant to patient care (PGO 2.3, 3.4)	CC	GA

4. Systems -Based Learning

Objective	Learning Environments	Evaluation Methods
Incorporate cost-effectiveness into patient care decisions i.e. insurance /reimbursement issues (PGO 6.3)	CC	GA
Assist in the development of systems' improvement if problems are identified (PGO 3.2)	CC	GA
Assist in determining the root cause of any errors and identify methods for avoiding such errors in the future (PGO 3.5)	CC	GA

5. Professionalism

Objective	Learning Environments	Evaluation Methods
Treat all patients , health care provider and clinic personnel with respect (PGO 5.1)	CC, ECG, ECHO, STRESS, CATH	GA
Maintain a professional appearance at all times(PGO 5.1, 5.3)	CC, ECG, ECHO, STRESS, CATH	GA
Maintain patient confidentiality at all times (PGO 5.5, 5.2)	CC, ECG, ECHO, STRESS, CATH	GA
Be responsible and reliable at all times (PGO 5.3, 5.7)	CC, ECG, ECHO, STRESS, CATH	GA
Acknowledge errors and determine how to avoid future mistakes (PGO 5.3, 3.2)	CC, ECG, ECHO, STRESS, CATH	GA

6. **Interpersonal and Communication skills**

Objective	Learning Environments	Evaluation Methods
Clearly communicate histories, exam findings, and all patient information to the faculty and inform the faculty in a timely fashion of any change in status of a patient or problem (PGO 4.2, 1.5, 8.1)	CC	GA
Communicate accurately and compassionately with patients and their families (PGO 4.1)	CC	GA

7. **Interprofessional Collaboration**

Objective	Learning Environments	Evaluation Methods
Consistent demonstration of core values evidenced by working together, aspiring to and wisely applying principles of altruism, excellence, caring, ethics, respect, communication, [and] accountability to achieve optimal health and wellness in patients (PGO 7.2)	CC	GA
Place the interests of patients at the center of interprofessional health care delivery. (PGO 7.2, 7.3)	CC	GA
Work in cooperation with those who receive care, those who provide care, and others who contribute to or support the delivery of prevention and health services (PGO 7.1, 7.2, 2.5)	CC	GA

8. Personal and Professional Development

Objective	Learning Environments	Evaluation Methods
Demonstrate ongoing self-assessment of personal knowledge and correction of deficiencies. (PGO 3.1)	CC	GA
Use feedback from external sources to further identify personal knowledge gaps and learning needs. (PGO 3.3)	CC	GA
Integrate newly acquired knowledge and technologies into clinical and research environments. (PGO 3.4, 2.3, 2.6)	CC	GA

Required Reading/Resources

1. Mukherjee D (ed). Cardiology Pocketbook. Germany, Borm Bruckmeier Publishing LLC, 2011
   https://www.barnesandnoble.com/w/cardiology-pocket-d-mukherjee/1100928535

2. Mukherjee D (ed). ECG Cases pocket book. Germany, Borm Bruckmeier Publishing LLC
   https://www.amazon.com/ECG-Cases-Dr-Debabrata-Mukherjee/dp/1591032296

Required Expectations:

1. Attendance /Punctuality. Call the CV secretary Ms. Georgina Grado or MSIII coordinator Ms. Marissa Tafoya to report acute illness or personal/family emergency necessitating absence. **Missed days will be managed per Common Clerkship Policies.**
2. Attendance at all scheduled sessions
3. Professional behavior at all times
4. Completion of reading and literature search assignments in a timely manner
5. Attendance at the Internal Medicine Core conferences daily at noon
6. Ability to identify common cardiac emergencies and formulate a plan for their management.
7. Clerkship objectives identify the types of patient conditions students are expected to encounter as part of the clerkship.
8. **<u>Five</u> History and Physicals will need to be documented in appropriate form and presented to the attending.**
9. *******Please do not bring food or drink (s) into the areas where studies are either being conducted or interpreted.

OP-LOG POLICY
1. Students will be required to complete Op-Log entries on all patients with whom they have clinical contact; e.g., take all, or significant part of the patient's history, conduct a physical examination, perform or assist in diagnostic or treatment procedure, write orders, participate in treatment decisions, etc. A student will also be expected to complete Op-Log entries on patients seen with an attending or resident where clinical teaching and learning through observation is an explicit goal of the encounter.

2. Students will document each problem/diagnosis addressed by the student at the time of the encounter; e.g., if a patient has the following diagnoses listed on his/her record—DM type 2, hypertension, and osteoarthritis, but the student only addresses the OA during the encounter, OA is the only problem that would be recorded in Op-Log for that encounter.

3. **Students are expected to record their encounters in OP-Log on <u>at least a weekly basis</u>.** Regardless of where the assessment falls in a week, students must have their Op-Log recordings up-to-date at least 24 hours prior to scheduled mid-block of clerkship formative assessment and 24 hours prior to the final end of block or clerkship assessment. For hospitalized patients, a student will complete an entry at the time of patient discharge OR when the student's responsibility for caring for a patient ends. Timely, complete, and accurate clinical encounter Op-log entries will be a component of the clerkship assessment. **Students who do not meet expectations in the documentation of their clinical experiences will not be eligible for "Honors" designation.**

4. Students will not document "incidental" patient-encounters. Routine follow-up visits with hospitalized patients do not need to be documented in Op-log (see #3 above).

5. We expect that students will document a minimum of five encounters during this selective. Please note that these are <u>minimum/mandatory</u> expectations.

     a. The five required minimum encounters must include the following at the level of assist or manage:

          1. Chest Pain Evaluation or Acute Coronary Syndrome

          2. Dyspnea/shortness of breath

     b. . In rare circumstances it may be necessary to assign students computerized cases, simulations, or special readings to achieve objectives that are not being met through actual patient care.

Society for Critical Care Medicine Modules

Students will be given access to SCCM adult learning modules. Completion of the Virtual Critical Care Modules I and II are required.

Optional:

1. Didactic presentations to the CVICU/Cardiology group
2. Journal club presentation

Grading and Evaluation

1. A formal evaluation and verbal discussion with the student will be performed at mid-clerkship and at the end of the rotation. Student evaluations are written with input from the cardiology attending, nursing staff, patients or their families.
2. Students will also be required to evaluate faculty at the end of the rotation.

Mid-Clerkship Review

1. Cardiology Attending will conduct this and the student will be scheduled by the coordinator in his office.
2. This mid-point review will specifically focus on strengths and weaknesses and a plan to optimize CVICU selective experience.
3. Mid-clerkship assessment form

MS4 Mid-Clerkship Assessment v.1 ✕

Knowledge for Practice

Can independently apply knowledge to identify problems

○ N/A   ○ Needs Improvement   ○ Pass   ○ Honors

Patient Care and Procedural Skills

Addresses patient's agenda

○ N/A   ○ Needs Improvement   ○ Pass   ○ Honors

Completes an appropriate history

○ N/A   ○ Needs Improvement   ○ Pass   ○ Honors

Exam is appropriate in scope

○ N/A   ○ Needs Improvement   ○ Pass   ○ Honors

Identifies pertinent physical findings

○ N/A   ○ Needs Improvement   ○ Pass   ○ Honors

Develops a treatment plan appropriate to the patient and based on up-to-date scientific evidence.

○ N/A   ○ Needs Improvement   ○ Pass   ○ Honors

Appropriately documents findings.

○ N/A   ○ Needs Improvement   ○ Pass   ○ Honors

Independently performs exam with proper technique.

○ N/A   ○ Needs Improvement   ○ Pass   ○ Honors

Interpersonal and Communication Skills

Communicates effectively with patients and families across a broad range of socio-economic and cultural backgrounds.

○ N/A   ○ Needs Improvement   ○ Pass   ○ Honors

Presentations to faculty or resident are organized.

○ N/A   ○ Needs Improvement   ○ Pass   ○ Honors

Practice-Based Learning and Improvement

Demonstrates knowledge of current peer-reviewed literature in relation to patient management.

○ N/A   ○ Needs Improvement   ○ Pass   ○ Honors

Takes the initiative in increasing clinical knowledge and skills; for example, identifies a learning issue on rounds or in the OR and reports back to the team/resident.

○ N/A   ○ Needs Improvement   ○ Pass   ○ Honors

Systems-Based Practice

Effectively utilizes medical care systems and resources to benefit patient health.

○ N/A   ○ Needs Improvement   ○ Pass   ○ Honors

Professionalism

Displays appropriate level of professionalism.

○ N/A   ○ Needs Improvement   ○ Pass   ○ Honors

Planned date of discussion

Actual date of discussion

Areas that would yield the greatest improvement in the student's skills

OpLog - Discuss student's oplog documentation and any areas where the students does not appear on track. Identify date when student should come back to see you if he/she has not yet met the requirements

Please discuss the student's 2-3 strongest performance areas

Selective Layout (M – F)

	Monday	**Tuesday**	**Wednesday**	**Thursday**	**Friday**
7:00-8:00 AM	Morning report	Morning report	Morning report	Morning report	Morning report
8:00AM-12:00PM	CVICU Rounds	CVICU Rounds	CVICU Rounds	CVICU Rounds	CVICU Rounds
12:00 PM-1:00 PM	Residents' conference	Residents' conference	Residents' conference	Residents' conference	Residents' conference
1:00 -5:00 PM	Stress Lab (Dr Okajima)	ECHO Dr Mukherjee	Didactics/ Self study	CATH LAB (Dr Sekhar)	ECHO (Dr. Siddiqui)

Preparation for Teaching

Attending faculty and residents will be oriented to the experience by the CVICU Clerkship Director or their designee, and provided copies of the syllabus and forms that they will use to assess student performance.

Residents will be required, as part of their training and orientation, to function as teachers. All residents are required to participate in a "Residents as Teachers" program that is administered by the Office of Graduate Medical Education. In addition, each resident will be provided copies of the Medical Student syllabus with particular emphasis on goals, objectives, and assessment methods and criteria.