CARDIOLOGY ROTATION DESCRIPTION

Internal Medicine Residency Program • Mubarak Al-Kabeer Hospital

1. Rotation Overview

The rotation will provide Internal Medicine residents with structured exposure to critical care cardiology, inpatient cardiology including consultations, the heart failure service (both inpatient and outpatient), echocardiography, and cardiac catheterization laboratory experience.

Duration: 4–8 weeks

Week	Clinical Area
Week 1	Coronary Care Unit (CCU) and Acute Cardiology
Week 2	Heart Failure Service (inpatient and outpatient services)
Week 3	Echocardiography
Week 4	Cardiology Consultations (inpatient and emergency room)

2. Rotation Goals

By the end of the rotation, the resident should be able to:

Clinical Assessment

- Perform a focused cardiovascular history and physical examination.
- Evaluate common cardiovascular diseases and pathologies.
- Evaluate valvular and structural heart diseases and pathologies.
- Assess cardiovascular risk factors and initiate appropriate preventive therapy.
- Recognize cardiovascular emergencies and determine when urgent intervention is required.

Data Interpretation

- Interpret ECGs systematically.
- Perform basic interpretation of echocardiography and identify pathologies.
- Understand coronary angiograms, procedures, and data interpretation.

Management and Professional Practice

- Recognize and initiate management of acute coronary syndromes (ACS), acute and chronic heart failure, and common arrhythmias.
- Communicate effectively with patients, families, and the multidisciplinary team.
- Practice evidence-based and patient-centered cardiology.

3. Daily Responsibilities

Time	Responsibilities
Morning	• Attend the morning meeting; review assigned patients and overnight events. • Review ECGs, laboratory results, and imaging. • Prepare assessment and management plans; participate in consultant and senior rounds.
During the day	• Assess new admissions and cardiology consultations; participate in CCU care. • Follow up on investigations and results. • Attend scheduled teaching and echocardiography laboratory sessions.
End of day	• Complete timely documentation and a safe, structured handover. • Communicate important clinical issues to the responsible team. • Identify unstable patients requiring escalation of care.

4. On-Call Responsibilities

During cardiology on-call duties, residents should be able to:

- Assess acute chest pain and recognize acute coronary syndromes.
- Recognize unstable arrhythmias and cardiogenic shock.
- Assess acute pulmonary edema and initiate management of acute heart failure.
- Participate in cardiac arrest management.
- Obtain urgent senior cardiology assistance when required.

5. Procedures and Practical Skills

Residents should develop competence, appropriate to their training level, in:

- ECG acquisition.
- Basic and Advanced Cardiac Life Support (BLS/ACLS), including the principles of defibrillation and cardioversion.
- Arterial blood gas (ABG) interpretation.
- Recognition of indications for temporary cardiac pacing.
- Recognition and initial management of vascular and access-site complications.

6. Teaching and Presentations

Teaching Activity	Frequency
ECG teaching	Weekly
Cardiology journal club	Weekly
CCU case review	Weekly
Cardiovascular examination	Regular supervised teaching
Echocardiography	Regular supervised exposure

Each resident should ideally complete at least one of each of the following presentations:

- Formal clinical case presentation.
- ECG-based presentation.
- Evidence-based guideline presentation.

7. End-of-Rotation Assessment

Domain	Assessment Methods
Knowledge	Oral assessment; case-based discussion
Clinical skills	Direct observation of cardiovascular examination, ECG interpretation, and acute cardiac case management
Professionalism	Communication, teamwork, documentation, and patient safety
Feedback	Consultants and senior residents