

Cardiology

1. Medical Expert

- ❑ Integrates knowledge of pathophysiology, clinical presentation, diagnosis and management in the care of patients with the following common cardiac conditions:
 - Coronary artery disease – Includes stable angina/coronary artery disease, acute coronary syndromes (unstable angina pectoris/Non-ST elevation myocardial infarction and ST-elevation myocardial infarction) post-MI management including complications of myocardial infarction and secondary prevention.
 - Congestive heart failure – Includes both right and left sided heart failure secondary to systolic and diastolic dysfunction
 - Cardiomyopathies
 - Arrhythmias – Includes brady-arrhythmias and general indications for pacing along with atrial (atrial fibrillation, atrial flutter, AVNRT, AVRT and atrial tachycardia) and ventricular tachy-arrhythmias.
 - Valvular heart disease – Includes obstructive and regurgitant aortic and mitral valve disease, rheumatic valvular disease.
 - Infective endocarditis – Includes indications for prophylaxis.
 - Hypertension – Includes refractory hypertension.
 - Pericardial diseases – Includes acute pericarditis and cardiac tamponade.
 - Congenital Heart Disease – Bicuspid aortic valve disease and ASD.
 - Peripheral arterial disease - Includes thoracic and abdominal aortic aneurysm and dissection.
 - Pulmonary Hypertension – Includes venous thrombo-embolic disease

- ❑ Obtains a detailed, accurate and relevant cardiovascular history in patients who present with common cardiac conditions.

- ❑ Develops an approach to the evaluation of patients presenting with the cardinal cardiac symptoms of:
 - Chest pain
 - Dyspnea
 - Palpitations
 - Syncope

- ❑ Performs and interprets a detailed cardiovascular physical examination including assessment of the JVP, central arterial waveform, precordium, and peripheral manifestations of cardiac disease. Is familiar with physical examination findings encountered in patients who present with common cardiac conditions.

- ❑ Applies knowledge of the usual indications/contraindications, adverse effects, toxicity, and pharmacokinetics of the common classes of cardiovascular drugs when planning patient care.
 - Beta-blockers
 - Conventional and new anti-platelet and anti-thrombotic agents
 - ACE inhibitors and angiotensin receptor blockers
 - Vasodilator medications

- Calcium channel blockers
 - Diuretics
 - Anti-arrhythmic agents
 - Digoxin
 - Lipid lowering agents
- Discusses the indications for common cardiovascular investigations:
 - Exercise testing
 - Exercise and resting perfusion studies
 - Transthoracic echocardiography
 - Transesophageal echocardiography
 - Stress echocardiography
 - Invasive electrophysiologic testing
 - Cardiac catheterization
- Recognizes the indications for various cardiovascular interventions:
 - Percutaneous coronary intervention
 - Coronary artery bypass grafting surgery
 - Cardiac valve repair and replacement surgery
 - Pacemaker and defibrillator therapy
- Develops technical skills related to the practice of cardiology:
 - Performance and interpretation of the 12-lead electrocardiogram
 - Interpretation of exercise stress testing
 - Interpretation of the chest radiograph for common cardiac abnormalities such as cardiac chamber enlargement and pulmonary edema
 - Performance and interpretation of ankle-brachial index measurements

2. Communicator

- Accurately conveys medical information to patients and families, colleagues and other professionals as appropriate to the patient's cardiovascular disease and state
- Provides clear, concise and timely verbal and written communication as applied to consultation notes, progress notes, discharge plans and sign-over.

3. Collaborator

- Works effectively in a team to provide acute and convalescent cardiac care with an understanding of the role of other allied healthcare providers including pharmacy, nutrition, occupational and physical therapy, and nursing

4. Manager

- Prioritizes clinical care effectively reflecting on patient based and system based factors
- Manages clinical, administrative and/or educational commitments to reflect the need for optimal patient care and the dual role of the resident (as care provider and learner)

- ❑ Appreciates the role of the physician in allocation of finite resources and implement patient care practices in consideration of these

5. Health Advocate

- ❑ Identifies opportunities for patient counseling and education regarding cardiac disease and where relevant, prevention strategies
- ❑ Educates patients regarding impact of cardiac disease on activities of daily living, exercise capacity and general health status

6. Scholar

- ❑ Accesses medical information resources to answer clinical questions and support decision making
- ❑ Applies clinical evidence, as appropriate, in the provision of patient care

7. Professional

- ❑ Treats all patients with dignity, civility and respect
- ❑ Maintains patient confidentiality
- ❑ Demonstrates integrity in all interactions with colleagues and patients
- ❑ Ensures timely and accurate completion of clinical, administrative and curricular tasks