INTERNAL MEDICINE ROTATION PLAN

NAME OF ROTATION: IM Cardiology Ward

FOCUS OF THIS ROTATION
- The goal of this rotation is to provide the junior Internal Medicine trainee (PGY1) with the opportunity to develop basic competencies in the assessment and management of patients with cardiac disorders in the emergency department, and on the ward.
- The goals listed will be completed, in part, during the subspecialty rotation. Completion of all goals is expected by the end of the PGY 3 year and will be accomplished through ongoing clinical exposure, participation in the formal academic curriculum and personal learning strategies. Residents are encouraged to prioritize goals during their initial focused clinical exposure to this discipline.

CBD stage(s) for this rotation:
- TTD
- FOD

Length of this rotation:
- 2 blocks

PGY Level(s) for this rotation:
- PGY1

Locations for rotation:
- SHSC
- SMH
- SHS-MSH
- UHN-TWH

Required training experiences included in this rotation:

Required training experiences (TTD Stage, PGY1, Blocks 1-4):
Clinical training experiences: 1.
1.1. Inpatient cardiology service
1.2. After-hours cardiology coverage for inpatients and cardiology consultation to the emergency department

Required training experiences (Foundations stage, PGY1, Blocks 5-13):
Clinical training experiences: 1.
1.2. Inpatient Cardiology service: acute cardiac presentations in hospitalized patients
1.4. Acute Cardiology care experience with patients presenting to emergency department
1.5. After-hours Cardiology coverage for a broad spectrum of inpatients and internal medicine consultation to the emergency department
Other training experiences: 2.
2.1. Directed and/or independent learning experience, in topics such as medical ethics, critical appraisal, and wellness (e.g. use of journal clubs, online modules, academic rounds)

Recommended training experiences (Foundations stage):
Clinical training experiences: 3.
3.2. Cardiology consultation service
3.3. Care of the elderly patients with Cardiac disorders
### EPAs Mapped to this rotation:

<table>
<thead>
<tr>
<th>EPAs</th>
<th>Total # of EPAs</th>
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<tbody>
<tr>
<td>TTD1 Performing histories and physical exams, documenting and presenting findings, across clinical settings for initial and subsequent care</td>
<td>3</td>
</tr>
<tr>
<td>TTD2 Identifying and assessing unstable patients, providing initial management, and obtaining help</td>
<td>Do whenever possible</td>
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<tr>
<td>FOD 2B Managing patients admitted to acute care settings with common medical problems and advancing their care plans: Part B: Communication with Patient/Family</td>
<td>1</td>
</tr>
<tr>
<td>FOD 2C Managing patients admitted to acute care settings with common medical problems and advancing their care plan: Part C: Handover</td>
<td>0-1 (can do)</td>
</tr>
<tr>
<td>FOD 3 Consulting specialists and other health professionals, synthesizing recommendations, and integrating these into the care plan</td>
<td>0-1 (can do)</td>
</tr>
<tr>
<td>FOD 4A &amp; B Formulating, communicating, and implementing discharge plans for patients with common medical conditions in acute care settings</td>
<td>0-1 (can do)</td>
</tr>
<tr>
<td>FOD 6 Discussing and establishing patients’ goals of care</td>
<td>0-1 (can do)</td>
</tr>
<tr>
<td>FOD 7 Identifying personal learning needs while caring for patients, and addressing those needs</td>
<td>0-1 (can do)</td>
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<tr>
<td>COD 5 Performing the procedures of Internal Medicine</td>
<td>Do whenever possible</td>
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<tr>
<td>FOD 1 Assessing, diagnosing, and providing initial management for patients with common acute medical presentations in acute care settings</td>
<td>1</td>
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<tr>
<td>FOD 2A Managing patients admitted to acute care settings with common medical problems and advancing their care plans: Part A: Patient Assessment and Management</td>
<td>1</td>
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<tr>
<td>FOD 2B Managing patients admitted to acute care settings with common medical problems and advancing their care plans: Part B: Communication with Patient/Family</td>
<td>0-1 (can do)</td>
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</tr>
<tr>
<td>FOD 5 Assessing unstable patients, providing targeted treatment and consulting as needed</td>
<td>Do whenever possible</td>
</tr>
<tr>
<td>FOD 6 Discussing and establishing patients’ goals of care</td>
<td>1</td>
</tr>
<tr>
<td>FOD 7 Identifying personal learning needs while caring for patients, and addressing those needs</td>
<td>0-1 (can do)</td>
</tr>
<tr>
<td>COD 2A Assessing and managing patients with complex chronic conditions: Part A: Assessment, Diagnosis, and Management</td>
<td>0-1 (can do)</td>
</tr>
<tr>
<td>COD 5 Performing the procedures of Internal Medicine</td>
<td>Do whenever possible</td>
</tr>
<tr>
<td>COD 8 Caring for patients who have experienced a patient safety incident (adverse event)</td>
<td>Do whenever possible</td>
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### Key Objectives for this Rotation:

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<tr>
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<th>CanMEDS Role(s):</th>
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<tbody>
<tr>
<td>1.</td>
<td>Perform an accurate and detailed history and physical examination to elicit details of common cardiac disorders.</td>
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<td>2.</td>
<td>Correlate relevant pathophysiology to the ordering and interpretation of laboratory and imaging investigations commonly used in the assessment of cardiac disorders.</td>
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<td>3.</td>
<td>Demonstrate an understanding of the indications for and limitations of echocardiography, cardiac stress testing and cardiac catheterization.</td>
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<td>4.</td>
<td>Interpret electrocardiograms accurately.</td>
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<td>5.</td>
<td>Effectively manage acute cardiac disorders.</td>
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<td>6.</td>
<td>Demonstrate a patient-centred approach to and evidence-informed rationale for the management of common chronic cardiac disorders.</td>
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<td>7.</td>
<td>Engage patients and their families in developing plans that reflect the patient’s health care needs and goals of care.</td>
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<td>8.</td>
<td>Effectively collaborate with other health care professionals and medical staff to coordinate the patient’s care.</td>
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Royal College Internal Medicine Competencies emphasized on the Cardiology rotation.
Numbers refer to items identified in the Royal College Competencies document

### Symptoms

Identify the causes and be able to use history, physical exam and investigations to arrive at a differential and provisional diagnosis for each of the following:
- Chest pain 1.4.1.1.1.
- Dyspnea 1.4.1.1.2.
- Palpitations 1.4.1.1.3.
- Syncope 1.4.1.1.4.

### Findings

Identify the causes and be able to use history, physical exam and investigations to arrive at a differential and provisional diagnosis for the following:
- Cardiac murmurs 1.4.1.2.2.

### Investigations

Be able to order and interpret reports from each of the following:
- Abnormal cardiac enzymes 1.4.1.2.1.
- Exercise testing
- Stress imaging
- Transthoracic and transesophageal echocardiography
- Cardiac catheterization

### Disorders

Using results of history, physical examination and investigations, be able to confirm the diagnosis of each of the following, and propose a management plan. The plan may include further investigations and treatment, taking into account the underlying cause and any complications. Must be able to manage cardiac emergencies.*
- Acute coronary syndromes and their complications* 1.4.1.3.1.
– Includes acute coronary syndromes (unstable angina pectoris/Non-ST elevation myocardial infarction and ST-elevation myocardial infarction) post-MI management including secondary prevention
  o Arrhythmias*
    - Includes common, as well as, life threatening arrhythmias (atrial fibrillation, atrial flutter, ventricular fibrillation, ventricular tachycardia, and heart block).
  o Cardiomyopathies 1.4.1.3.2.
  o Congestive heart failure* 1.4.1.3.3.
    - Focusing on acute decompensated heart failure, including HFrEF and HFpEF
  o Coronary artery disease 1.4.1.3.4.
  o Hypertension
  o Infective endocarditis
  o Pericarditis, pericardial effusion, and tamponade* 1.4.1.3.5.
  o Pulmonary hypertension 1.4.1.3.6.
  o Valvular heart disease 1.4.1.3.7

Therapies
Integrate knowledge of the indications/contraindications, side-effects and pharmacokinetics of the following therapies in the care of patients with cardiac disorders:
  o Anti-platelet and anti-thrombotic agents
  o ACE inhibitors, angiotensin receptor blockers and ARNI
  o Beta-blockers
  o Vasodilator medications
  o Calcium channel blockers
  o Diuretics
  o Anti-arrhythmic agents
  o Digoxin
  o Lipid lowering agents
  o SGLT-2 inhibitors