Internal Medicine ROTATION PLAN (2019-20)

NAME OF ROTATION: Coronary Care Unit (CCU)

FOCUS OF THIS ROTATION
By the completion of 4 blocks of critical care exposure, which includes 1-2 blocks on the Coronary Care Unit (CCU), senior medicine residents should be adept in the management of acutely ill patients with multi-system failure. The resident should see a progression of knowledge and skills across the clinical rotations. The CCU rotation focuses on the acutely ill patient with cardiac disease.

CBD stage(s) for this rotation:
● COD

Length of this rotation:
● 1-2 block

PGY Level(s) for this rotation:
● PGY2
● PGY3

Locations for rotation:
● SHSC
● SMH
● UHN-TGH

Required training experiences included in this rotation:
Core stage:
Clinical training experiences: 1.
1.3. Service providing CCU internal medicine consultation to other disciplines or to medical subspecialty inpatient units
1.5. After hours coverage for CCU inpatients
1.6. Experience with critically ill patients in the CCU, and CCU consultation to the emergency department

<table>
<thead>
<tr>
<th>EPAs Mapped to this rotation:</th>
<th>Total # of EPAs</th>
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<tbody>
<tr>
<td>COD 1 Assessing, diagnosing, and managing patients with complex or atypical acute medical presentations</td>
<td>0-1 (can do)</td>
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<tr>
<td>COD 3A Providing internal medicine consultation to other clinical services: Part A: Patient Assessment and Decision-Making</td>
<td>0-1 (can do)</td>
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<tr>
<td>COD 3B Providing internal medicine consultation to other clinical services: Part B: Written Communication</td>
<td>0-1 (can do)</td>
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<tr>
<td>COD 3C Providing internal medicine consultation to other clinical services: Part C: Oral Communication</td>
<td>0-1 (can do)</td>
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<tr>
<td>COD 4A Assessing, resuscitating, and managing unstable and critically ill patients: Part A: Patient Care</td>
<td>6</td>
</tr>
<tr>
<td>COD 4B Assessing, resuscitating, and managing unstable and critically ill patients: Part B: Interprofessional Care</td>
<td>2</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>COD 6 Assessing capacity for medical decision-making</td>
<td>0-1 (can do)</td>
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<tr>
<td>COD 7 Discussing serious and/or complex aspects of care with patients, families, and caregivers</td>
<td>0-1 (can do)</td>
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Other assessments during this rotation:  Tool Location / Platform (e.g. POWER, Entrada):

1. ITAR  POWER

Key Objectives for this Rotation:  CanMEDS Role(s):

1. Synthesize all available data including history, physical examination, relevant laboratory data and other investigations to diagnose cardiac clinical problems.  Medical Expert
2. Correlate relevant pathophysiology to the ordering and interpretation of laboratory and imaging investigations commonly used in the assessment of acute cardiac disorders.  Medical Expert
3. Accurately recognize and effectively manages acute cardiovascular conditions requiring emergent intervention, including complications of acute cardiac disorders and their treatment.  Medical Expert
4. Demonstrate competence in performing technical skills related to patient care in the coronary care setting including but not limited to arterial cannulation, central vein cannulation, and haemodynamic monitoring.  Medical Expert
5. Communicate routinely, clearly and compassionately with patients/families regarding informed consent, medical condition, and treatment plan.  Communicator
6. Work effectively as a member within the inter-professional team to ensure safe patient care.  Collaborator
7. Recognize the role of both aggressive and end-of-life/comfort-oriented care.  Health advocate

Royal College Internal Medicine Competencies emphasized on CCU rotation.
Numbers refer to items identified in the Royal College Competencies document

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.

- Acute myocardial infarction with ST segment elevation
- Acute coronary syndromes without ST segment elevation
- Arrhythmias including bradyarrhythmias and tachyarrhythmias
- Cardiogenic shock*
- Decompensated congestive heart failure
- Cardiac tamponade
- Hypertensive emergencies
- Acute valvular insufficiency
- With hemodynamic compromise*
  - Acute aortic dissection*

Investigations
Develops technical skills related to patient care in the CCU:

- Arterial cannulation (radial and femoral)
- Central vein cannulation (femoral, jugular, and subclavian vein)

Discusses fluently the rationale for procedures in the CCU:
Various pacing mechanisms including but not limited to:
- Transvenous pacing
- Atrial and ventricular pacing
- Overdrive pacing
- Pericardiocentesis
- Intra-aortic balloon pump counterpulsation
- Ventricular assist devices and cardiac transplantation
- Urgent cardioversion
- Transthoracic and transesophageal echocardiography
- Invasive hemodynamic monitoring
- Referral for coronary angiography and intervention

Therapies
Integrates knowledge of the indications/contraindications, side-effects and pharmacokinetics of the following therapies in the care of patients in the CCU:
- Thrombolytic agents
- Conventional and new antiplatelet and anticoagulant agents
- Intravenous nitroglycerine
- Inotropic and pressor agents
- Vasodilator agents
- Antiarrhythmic agents

*Conditions requiring referral to a tertiary cardiac centre