NAME OF ROTATION: IM Critical Care Medicine

FOCUS OF THIS ROTATION
- By the completion of 4 blocks of critical care exposure, which includes 2-3 blocks on the Intensive Care Unit (ICU), 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 Critical Care rotation focuses on developing competencies in the assessment and management (resuscitation, stabilization and de-resuscitation) of unstable patients with (multi-system) organ failure in the ICU, emergency department and ward.

Extra competencies:
- End-of-life care
- Development of specific crisis resource management skills (e.g., situational awareness, resource utilization, communication, problem-solving, etc.)

CBD stage(s) for this rotation:
- COD

Length of this rotation:
- 4 blocks (not consecutive)

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

Locations for rotation
- SHSC
- SMH
- SHS (MSH)
- UHN-TGH
- UHN-TWH

Required training experiences included in this rotation:

Required training experiences (Core stage):
Clinical training experiences: 1.
1.3. Service providing ICU consultation to other disciplines or to medical subspecialty inpatient units
1.5. After hours coverage for a broad spectrum of ICU inpatients and ICU consultation to the emergency department
1.6. Experience with critically ill patients in the ICU

Other training experiences: 5.
5.1. Training in point-of-care ultrasound may occur

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<tr>
<th>EPAs Mapped to this rotation</th>
<th>Total # of EPAs</th>
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<tbody>
<tr>
<td>CORE OF DISCIPLINE (COD) = PGY2 AND PGY3</td>
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<tr>
<td>COD 1 Assessing, diagnosing, and managing patients with complex or atypical acute medical presentations</td>
<td>Optional</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>
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<tr>
<td>COD 4B Assessing, resuscitating, and managing unstable and critically ill patients: Part B: Interprofessional Care</td>
<td>1</td>
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<tr>
<td>COD 5 Performing the procedures of Internal Medicine</td>
<td>Optional</td>
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<tr>
<td>COD 6 Assessing capacity for medical decision-making</td>
<td>Optional</td>
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<tr>
<td>COD 7 Discussing serious and/or complex aspects of care with patients, families, and caregivers</td>
<td>Optional</td>
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<tr>
<td>COD 8 Caring for patients who have experienced a patient safety incident (adverse event)</td>
<td>Always do when you can</td>
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<tr>
<td>COD 9A Caring for patients at the end of life: Symptom Management in End of Life Care</td>
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<tr>
<td>COD 9B Caring for patients at the end of life: Discussion about transition away from disease modifying treatment</td>
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### Other assessments during this rotation:

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<th>Tool Location / Platform (e.g. POWER, Entrada):</th>
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### Key Objectives for this Rotation:

| 1. Discuss knowledgably the approach to potentially life-threatening conditions including their etiology, pathogenesis and clinical consequences. | Medical expert |
| Integrate data from the history physical examination and preliminary investigations in order to recognize typical and atypical presentations of acute illnesses seen in the Critical Care Unit. | Medical expert |
| Recognize clinical situations which require immediate and intensive medical care. | Medical expert |
| Initiate the resuscitation and stabilization of unstable patients with organ failure. | Medical expert |
| Demonstrate the appropriate rationale for and use of therapeutic options commonly used in the ICU (e.g., oxygen, fluids, vasoactive agents, mechanical ventilation, invasive and non-invasive monitoring) | Medical expert |
| Demonstrate competence in performing technical skills related to patient care in the critical care setting including but not limited to airway management and vascular access | Medical expert |
| Recognize the role of both aggressive and end-of-life comfort care. | Health Advocate |
| Demonstrate appropriate use of crisis resource management skills (e.g., situational awareness, resource utilization, communication, problem-solving, etc.) | Leader |

### Royal College Internal Medicine Competencies emphasized on ICU rotation.

Numbers refer to items identified in the Royal College Competencies document.

Disorders
Integrates data from history, physical examination and preliminary investigations in order to recognize typical and atypical presentations of illness seen in the Critical Care Unit including:

- Respiratory failure/acute respiratory distress syndrome
- Shock (various types including septic shock) 1.4.13.1.3.
- Hypertensive emergencies 1.4.2.3.1.
- Cardiac arrest 1.4.13.1.4.
- Undifferentiated multi-system failure
- Acute substance ingestion/poisoning 1.4.13.1.5.
- Altered level of consciousness 1.4.7.1.2.
- Hypothermia or hyperthermia 1.4.13.1.2.
- Life-threatening cardiac, respiratory, gastrointestinal, metabolic, neurologic and other organ system dysfunction and abnormalities 1.4.13.1.1.
- Brain death 1.4.7.2.2.

**Procedures**

Performs independently, or with minimal supervision, procedures and technical skills required to practice Critical Care Medicine:

- Establishment of an airway and use of bag and mask ventilation, mouth-to-mask ventilation, and hand-held resuscitators 3.4.2.1.
- Invasive and non-invasive mechanical ventilation 3.4.2.2.
- Insertion and care of peripheral arterial catheters 3.4.2.3.
- Venous access including central line placement in elective and emergency situations 3.4.2.4.
- Cardiopulmonary resuscitation 3.4.2.5.
  - Combined assisted ventilation and external cardiac compression in one-person and two-person rescue 3.4.2.5.1.
  - External cardiac defibrillation 3.4.2.5.2.
  - Endotracheal intubation 3.4.2.5.3.
  - Emergency trans-cutaneous pacing 3.4.2.5.4.
  - Diagnosis and management of life threatening cardiac arrhythmias 3.4.2.5.5.

**Therapies**

Integrates knowledge of the indications/contraindications, side-effects and pharmacokinetics of the following therapies in the care of patients in the ICU:

- Oxygen and inhalation therapy
- IV fluid management (colloid and crystalloid)
- Mechanical Ventilation
- Non-invasive and invasive monitoring
  - ECG, oximetry, non-invasive BP monitoring
  - Haemodynamic monitoring
- Dialysis in the Critical care setting
- Vasopressor/inotrope therapy