

**McMaster Otolaryngology-Head and Neck Surgery**  
**Goals & Objectives & Competencies**  
**Intensive Care Unit Rotation**  
**CanMEDS 2015**

**Foundations of Discipline Stage-First/Second Year Resident**

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**Overview**

During the Foundation Stage, the resident will spend two blocks on the Intensive care Unit (ICU) service at the Hamilton General Hospital.

Schedule of the week:

You will be assigned to a team. You will be expected to make rounds with your team in the mornings and to make handover of patients to the team when indicated.

**Call:**

You will be assigned for in hospital call on the ICU service from 17:00 to 07:00 hrs. Call will be set according to PARO guidelines.

**Overall Objectives & Competencies**

*It is recognized that the resident may not be exposed to all elements of these objectives; however at the conclusion of the rotation the resident should demonstrate knowledge or competency in the following:*

The resident is expected to gain understanding and knowledge of essential issues in Intensive/Critical care, and to have a high degree of “hands on” responsibility, under appropriate supervision. The major areas of concern are the assessment of critically ill patients in a systematic fashion, the monitoring, stabilization, and overall patient management. The critical care units are under the direction of team critical care specialists who coordinate the overall care, with the referring physicians or surgeons involved in varying degrees as determined by patient-specific agreement.

Residents will be working at completing Entrustable Professional Activities (EPAs) observations from the Foundations of Discipline stage of the Surgical Foundations program. The EPAs are listed on the resident’s Competence by Design road map schedule and at the end of this document. For the specific details of each EPA, please refer to the Royal College Mainport or MedSIS resident ePortfolio and to the

educational resident manual located on the Otolaryngology-Head & Neck Surgery division website.

*(Please note that in brackets with SF you will find corresponding Surgical Foundations competencies when applicable; and objectives/competencies in **bold** are the ones assessed on the in training evaluation report-ITER)*

## Specific Objectives & Competencies

### Medical Expert

- (1.1) Demonstrate a commitment to high-quality care of their patients (SF 1.1.)
  
- (1.4) **Apply knowledge of the clinical and biomedical sciences relevant to critical care patients (SF 1.3.)**
  - Airway assessment and management
  - Cardiac disorders, including acute MI, cardiac arrest, arrhythmias, pulmonary edema, pulmonary hypertension, electro-mechanical dissociation, etc. (SF 1.3.5., SF 1.3.18.3.)
  - Respiratory failure of various causes (SF 1.3.5., SF 1.3.18.10.)
  - Hematologic coagulation disorders (SF 1.3.5.)
  - Renal failure, including dialysis (SF 1.3.5., SF 1.3.18.6.)
  - Nutritional assessment and management (enteral/parenteral nutrition) (SF 1.3.6.)
  - Blood products and derivatives, including types, indications, and adverse reactions (SF 1.3.11.)
  - Fluid, electrolyte and acid/base balance (SF 1.3.17.3.)
  - Circulatory failure/shock (SF 1.3.18.1.)
  - Endocrine disorders (SF 1.3.5., SF 1.3.18.4)
  - Neurological disorders (coma, seizures, brain death) (SF 1.3.18.8)
  - Pharmacology of critically-ill patients, including antibiotics, inotropes, cardiac medications, anesthetic agents
  - Toxicology-related disorders, including overdoses, intoxications and poisonings
  - Perioperative management of critically ill patients
  
- (1.4) Perform appropriate consultation including the presentation of well-documented assessments including recommendations that are well documented of patients in the critical care unit (SF 1.4)
  
- (1.5) Seek assistance to prioritize multiple competing task that need to be addressed on the basis of patient centered priorities when appropriate (SF 1.5.)
  
- (1.6) Recognize urgent issues that may need the involvement of more senior colleagues or staff and engage them immediately (SF 1.6)
  
- (2.1) **Prioritize issues and /or tasks appropriately under urgent situation and for critically ill patients (SF 2.1.)**

**(2.2) Elicit a history, perform a physical exam and select appropriate investigations, and interpret the results for the purpose of diagnosis and management, disease prevention, and health promotion (SF 2.2.)**

- Perform a focused assessment of a critically ill patient
- Develop a problem list with appropriate differential diagnosis

**(2.4) Establish a patient-centred management plan (SF 2.4) and (4.1) implement a patient-centred care plan that supports ongoing care, follow-up on investigations, response to treatment, and further consultation (SF 4.1.)**

Longitudinal care of critically ill patients with common problems (SF 4.)

- Cardiovascular disease (SF 2.4.1.2., SF 4.1.1.2.2.)
- Disorder of hemostasis (SF 2.4.1.3.)
- Endocrine disease (SF 2.4.1.4.)
- Infections (SF 2.4.1.6.)
- Liver disease (SF 2.4.1.7.)
- Malnutrition (SF 2.4.1.8.)
- Pulmonary disease (SF 2.4.1.11., SF 4.1.1.22.4.)
- Renal/metabolic disease (SF 2.4.1.12., SF 4.1.1.2.5.)
- Gastrointestinal disease (SF 4.1.1.2.3.)

Resuscitation of the critically ill patients (SF 4.1)

- Prioritize problems/tasks appropriately under urgent situation
- Perform essential technical skills for resuscitation
- Lead the team in the initial resuscitation
- Recognize, and initiate an appropriate management in patients presenting with:
  - Respiratory failure (SF 4.1.1.22.4.)
  - Shock (SF 2.4.1.13.)
  - Sepsis (SF 4.1.1.2.7.)
  - Altered level of consciousness/acute change in mental status

**(3.4) Perform diagnostic and therapeutic procedures in a skilful and safe manner**

- **Obtain and maintain an airway by appropriate means**
  - -BVM
  - -ETT placement
- **Central venous line insertion (SF 3.4.18.14.)**
- **Arterial line insertion (SF 3.4.18.14.)**

**Communicator**

- (1.1) Communicate using a patient-centered approach that is respectful (SF 1.1.)
- (1.2) Optimize the physical environment for patient comfort, dignity, privacy, engagement, and safety (SF 1.2.)
- (1.4) Respond to patients nonverbal behaviors to enhance communication (SF 1.4)
- (2.1) Use patient-centered interviewing skills to effectively identify and gather relevant biomedical and psychosocial information (SF 2.1.)

- (2.3) Seek and synthesize relevant information from other sources, including the patient's family, with the patient's consent when possible (SF 2.3.)
- (3.1) **Share information and explanations that are clear, accurate, and timely, while checking for patient and family understanding with regard to the diagnosis, prognosis and treatment plan (SF 3.1.)**
- (4.1) Facilitate discussions with patients and their families in a way that is respectful, non-judgmental, and culturally safe (SF 4.1.)
- (5.1) **Document information about patients and their medical conditions by keeping medical records legible, clear, concise and problem-oriented (SF 5.1.)**

### **Collaborator**

- (1.1) **Establish and maintain positive relationships with physicians and other colleagues (nurses, respiratory technicians, dietician, physiotherapist) to support relationship-centered collaborative care (SF 1.1.)**
- (1.3) Actively listens and engages respectfully in interactions and decision-making with physicians and other colleagues for urgent situations and for longitudinal care of critically ill patients (SF 1)
- (3.2) **Demonstrate safe handover of care, both verbal and written, during a patient transition to a colleague, different healthcare professional, setting, or stage of care (SF 3.2.)**
  - Summarize well the patient's issues in the transfer summary, including plans to deal with the ongoing issues

### **Leader**

- (1.2) **Contribute to a culture that promotes patient safety (SF 1.2.)**
- (1.4) Use health informatics to improve the quality of patient care and optimize patient safety (SF 1.4.)
- (3.1) **Demonstrate leadership skills by leading the team in the initial resuscitation (SF 3.1.)**

### **Health Advocate**

- (1.1) Advocate for treatment that is consistent with the patient's values and wishes, including limiting treatment or withdrawal of life support when appropriate (SF 1)

### **Scholar**

- (1.1) Develop successful implementation of a personal continuing education plan (SF 1.1.)
- (1.2) **Identify, record, prioritize and answer learning needs that arise in daily work, scanning the literature or attending formal or informal education sessions while on ICU (SF 1.2.)**
- (2.0) Demonstrate basic skills in teaching others, including peers (SF 2.)
- (3.1) **Recognize practice uncertainty and knowledge gaps and seek for advice/consultation when needed (SF 3.1.)**

## **Professional**

- (1.1) **Exhibit appropriate professional behaviours and relationships in all aspects of practice (SF 1.1.)**
- (1.3) Identify common ethical problems encountered in ICU (SF 1.3)
- (2.2) demonstrate a commitment to patient safety and quality improvement through adherence to institutional ICU policies and procedures (SF 2.2)

## **Entrustable Professional Activities**

### **Assessment:**

In training evaluation report (ITER) on MedSIS

*The following Entrustable Professional Activity (EPA) from the Surgical Foundations Program and Home program assessment forms must be completed during the rotation; however at the conclusion of the rotation it is possible that all EPAs are not all achieved:  
Form 1-Royal College Mainport ePortfolio or McMaster MedSIS  
Form 2-Royal College Mainport ePortfolio or McMaster MedSIS*

**During the rotation, you need to work on the following EPAs for competencies:**

### ***Surgical Foundations EPAs***

#### ***EPA 2.1***

Providing initial management for critically ill surgical patients

#### ***EPA 2.8***

Managing postoperative patients with complications

***Otolaryngology-Head & Neck Surgery EPA:*** (if not completed already)

#### ***Version 1 (residents starting July 1<sup>st</sup> 2018)***

##### ***EPA 2.13***

Identifying patients presenting with an anticipated difficult airway and preparing for initial management options

#### ***Version 2 (residents starting July 1<sup>st</sup> 2019)***

##### ***EPA 2.9***

Identifying patients presenting with an anticipated difficult airway and preparing for initial management options

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