

McMaster Otolaryngology-Head and Neck Surgery
Goals & Objectives & Competencies
Otolaryngology-Head & Neck Surgery Rotation
St Joseph's Healthcare Hamilton
CanMEDS 2015

Resident Foundations of Discipline Stage-Second year

Overview

During the second year of residency training the resident will spend 4 blocks at St Joseph Healthcare during the Foundations of Discipline stage. The resident will gain experience in dealing with outpatients in the clinic and with inpatients on the wards, intensive care units, operating room and in the emergency department. The Otolaryngology –Head and Neck service at St Joseph's Hospital involves a significant amount of Head and Neck oncology, in addition to General practice and Otolaryngology/Neurotology. All residents must review their learning objectives with the Otolaryngology –Head and Neck Surgery Clinical Teaching Unit Director at the beginning and at the end of the rotation to facilitate meeting the objectives and competencies.

Clinical Teaching Unit Director: Dr. M. Gupta

Head and Neck Staff Surgeons:

Dr. S. Archibald

Dr. M. Gupta

Dr. S. Jackson

Dr. J.E.M. Young

Dr. Han Zhang

General Otolaryngology Staff Surgeon: Dr. E. Jeney

Otolaryngology and Neurotology Staff Surgeon: Dr. J Archibald

Schedule of the week:

You will be expected to make rounds with your team in the mornings before starting in the operating room or other activities of the service and at the end of the day. You are expected to make handover of patients to the resident on call. The Chief resident will assign the schedule of the week for the team. When the Chief resident is absent, he/she will delegate the resident with most seniority to that role temporarily.

Sample of weekly schedule (subject to change)

Monday	Tuesday	Wednesday	Thursday	Friday
OR	OR	OR	OR	OR
H&N Endo MPR ENDO	H&N X 2	<u>General/Rhino</u> E Jeney (2th-4 th) H&N MPR ENDO	<u>Flap day</u> b/w H&N surgeons + <u>Plastic Rec</u> H&N surgeons Plastic surgeon or H&N X 2 Otology MPR ENDO	H&N ENDO
Monday	Tuesday	Wednesday	Thursday	Friday
Clinic	Clinic	Clinic	Clinic	Clinic
Otology H&N	Otology H&N	Vertigo clinic H&N	H&N	Cancer clinic JH Otology E Jeney (am) H&N

MPR: minor procedure room

ENDO: endoscopy procedure

Call:

You will be assigned on home call with the Otolaryngology-Head and Neck Surgery service. A senior resident doing 2nd call will also be on home call with you. The Chief resident will make up your call schedule. Please note that call during weekdays is from 17:00 to 07:00 hrs and weekend call is from Friday 17:00 to Monday 07:00 hrs unless notified differently. At the end of the call shift, you must make handover of patients to the team when indicated. 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:

This rotation will help the resident to solidify foundation knowledge and skills in General Otolaryngology and Head and Neck surgery. Residents will be working at completing observations from the Foundations of Discipline stage Entrustable Professional Activities (EPAs) from the Surgical Foundations program and Otolaryngology-Head and Neck surgery program. The EPAs are listed on 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 resident eportfolio or McMaster MedSIS 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 found on some observation forms of EPAs)

Specific Objectives & Competencies:

Medical Expert

(1.1) Demonstrate compassion for patients

(1.4) Apply knowledge of the clinical and biomedical sciences relevant to Otolaryngology-Head and Neck Surgery

Understand in greater details the anatomy, embryology, histology and physiology of the ear, the nose, the paranasal sinuses, the upper aero digestive tract, salivary glands, thyroid gland, neck spaces and lymphatic system

Apply knowledge of the clinical and biomedical sciences to manage:

- General otolaryngology presentations with:
 - **Otitis media: acute, serous, chronic, external, and complications**
 - **Hearing loss conductive, sensorineural, and mixed**
 - Vertigo able to differentiate peripheral from central
 - **Epistaxis anterior, posterior and complications**
 - **Nasal fracture**
 - Rhinitis allergic/non allergic
 - Sinusitis: acute, chronic, with/without polyps and complications
 - **Adenotonsillar disease with comprehensive management, complications**
 - **Sleep disordered breathing, OSA**
 - Neck mass/swelling/deep neck space abscess/cellulitis
 - Foreign body ear, aero digestive system
 - Laryngopharyngeal acid reflux
 - Laryngitis/epiglottitis
 - Salivary gland diseases: infectious and non-infectious
 - **Emergent and non emergent airway obstruction initial clinical assessment, investigation and development of a management plan including but not limited to rigid bronchoscopy set up and tracheostomy set up**

Apply knowledge to the clinical and biomedical sciences to manage:

- Head and Neck presentations with:
 - **Anatomy relevant to all basic surgical approaches (SF 1.3.1.)**
 - Basic pre and peri-operative care
 - Metabolic responses to surgical stress including catabolic response, need for metabolic support, and endocrine changes (SF 1.3.3.)
 - Sepsis and the inflammatory responses as it pertains to metabolic, hemodynamic patterns and their impact on organ systems (SF 1.3.4.)

- Indications for, complications, and benefits for nutritional supports, including enteral and parenteral feeding (SF 1.3.6.)
- Blood products and derivatives, including types, and adverse reactions (SF 1.3.11.)
- Principles of prophylaxis, antibacterial and thromboembolic (SF 1.3.16.6.)
- Principles of routine post-operative patient care (SF 1.3. 17.)
 - Wound care (SF 1.3.17.1.)
 - Management of tubes and drains (SF 1.3.17.2.)
 - Fluids and electrolytes management (SF 1. 3.17.3.)
 - Pain management (SF 1.3.17.4.)
- Medical and psychosocial issues at the end of life, and principles of palliative and end-of-life care (SF 1.3.19.)
- Start learning staging for oncology presentations

(1.4) **Perform focused clinical assessments with recommendations that are well-documented** (SF 1.4.)

(1.4) **Recognize urgent problems that may need the involvement of more experienced colleagues and seek their assistance immediately** (SF 1.4.2.)

(2.1) Identify and recognize life threatening or emergent issues of surgical patients including but not limited to patient involved in upper airway obstruction, haemorrhage

(2.2) **Ability to elicit complete history, perform a detailed physical exam and select appropriate investigations , and interpret their results for the purpose of diagnosis and management, disease prevention and health promotion of the above clinical presentation** (SF 2.2.)

(2.2) Identify and differentiate normal and abnormal findings on history, physical examination and perform the following when indicated:

- Flexible nasopharyngolaryngoscopy
- Nasal endoscopy flexible and rigid

(2.2) **Select and demonstrate an understanding of the pertinent investigations for the common Otolaryngology-Head and Neck surgery presentations including:** (SF 2.2.)

- Laboratory testing
- Diagnostic imaging
- Conventional audiometry testing and impedance audiometry

(2.2) Develop a specific differential diagnosis for most common problems in Otolaryngology-Head and Neck surgery

(2.4) **Develop, implement and document management plans for common problems in Otolaryngology-Head and Neck surgery, including:**

- **Airway obstruction (initial management)**
- **Pre-operative optimization of the patient** (SF 2.4.1.)
- Management of unexpected peri-operative bleeding (SF 2.4.2.)

- **Use of appropriate prophylaxis, antibiotic, thromboembolic, immunization (SF 2.4.3)**

- (3.2) **Obtain and document informed consent explaining the risks and benefits of, and the rational for, a commonly performed medical and surgical procedures and therapies, under supervision (SF 3.2.)**

- (3.4) **Perform the following (bolded) procedures in a skillful, fluid, and safe manner with minimal assistance or no assistance:**
 - **General Otolaryngology**
 - Intubations in acute airway obstruction with flexible scope
 - **Rhinoscopy**
 - **Nasal packing (anterior and posterior)**
 - **Nasal cauterization**
 - Nasal cavity biopsy
 - **Reduction nasal bone fracture**
 - Septoplasty with assistance
 - Turbinoplasty with assistance
 - **Incision and drainage of peritonsillar abscess (SF 3.4.12.)**
 - Incision and drainage of deep neck space and wound abscesses (SF 3.4.12.)
 - Removal of foreign bodies from the ear, nose and pharynx
 - **Adenoidectomy and tonsillectomy**
 - **Myringotomy and tube insertion**
 - Microlaryngoscopy with or without biopsy with assistance
 - Rigid esophagoscopy for removal foreign body with assistance

 - **Head and Neck**
 - Local anesthesia of the head, face and neck, including loco-regional blocks (SF 3.4.13.)
 - **Fine needle aspiration of neck mass or lymphatic node (SF 3.4.18.13.)**
 - Panendoscopy, including rigid and flexible instrumentation
 - Oral cavity, oropharynx biopsy
 - Lymphatic nodes biopsy with assistance (SF 3.4.18.13.)
 - **Soft tissue handling with preservation of tissue vitality SF 3.4.18.3.)**
 - **Hemorrhage control in elective and critical situations (SF 3.4.18.4.)**
 - **Selection and application of wound dressing (SF 3.4.18.6.)**
 - **Improve basic surgical skills such as suturing and knot tying (SF 3.4.18.5.1.)**
 - **Selection and placement use of tubes and/or drains (SF 3.4.18.7.)**
 - Needle cricothyroidotomy (SF 3.4.19.3.1.)
 - **Tracheostomy open (SF 3.4.19.3.2.)**
 - **Skin graft**
 - **Primary skin closure: face or neck**
 - Learn the basic surgical stepwise approach to the various common operating procedures

- (3.4) **Provide assistance and function as first or second assistance for the wide range of Otolaryngology-Head and Neck surgical procedures (SF 3.4.15.1)**

- **Take direction from a lead surgeon** (SF 3.4.15.2.)
 - Effectively assist at major head and neck surgical procedures
- (4.1) Implement a patient-centered care plan that supports ongoing care, follow-up on investigations, response to treatment, and further consultation (SF 4.1.)
- (4.1) **Implement a post-operative care plan for management of patients undergoing above listed procedures** (SF 4.1.1.)
 - **Implement a post-operative care plan for patients with a complicated post-operative course** (SF 4.1.5.)
- (5.2) **Use cognitive aids such as procedural checklists, surgical timeouts, debriefing, structured communication tools, or care paths to enhance patient safety** (SF 5.2, SF 5.2.1.)

Communicator

- (1) Establish professional therapeutic relationships with patients and their families
- (1.2) Optimize the physical environment for patient comfort, privacy, engagement and safety (SF 1.2.)
- (2.1) Conduct a patient-centered interview, gathering all relevant biomedical and psychosocial information for any clinical presentation (SF 2.1.)
- (3.1) **Share health care information and plans with patients and their families** (SF 3.1.)
- (4.1) **Communicate with cultural awareness and sensitivity** (SF 4.1.)
- (5.1) Document clinical encounters in an accurate, legible, complete, timely and accessible manner to adequately convey clinical reasoning and rationale for decisions (SF 5.1.)
 - **Document clinical encounters to adequately convey clinical reasoning and the rationale for decisions**
 - **Document operative procedures to adequately convey clinical findings, reasoning and rationale for decisions**
- (5.3) Share information with patients and others in a manner that respects patient safety, privacy and confidentiality (SF 5.3.)

Collaborator

- (1.1) Establish and maintain positive relationships with physicians and other colleagues (SF 1.1.)
- (1.2) **Consult as needed with other health care professionals, including other physicians** such as ophthalmologist, otolaryngology-head and neck surgery, neurosurgery, nurses and other ancillary medical staff - In particular speech language pathologists, audiologists, oncologist, radiotherapist (SF 1.2.)
- (1.3) **Integrate the patient's perspective and context into collaborative care plan** (SF 1.3.1.)
- (3.2) Demonstrate safe handover of care, verbal, dictated and written (SF 3.2)
- (3.2) **Arrange for appropriate resources and allied health care assistance to be available for the surgical patient** (SF 3.2.1.)

Leader

- (1.2) Demonstrate knowledge and adhere to the standard safety guidelines 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 helping the team to enhance health care by effective, complete and exemplary care of patients (SF 3.1.)

Health Advocate

- (1.1) Demonstrate familiarity with important determinants of health such as foreign body, voice misuse, life style changes for acid reflux control, smoking cessation, alcohol abuse, poor nutrition (SF 1.1.)
- (1.2) Work with patients and their families to address above determinants of healthy behaviours (SF 1.2.)
 - **Select patient education resources related to surgical practice** (SF 1.2.1.)
- (1.3) **Encourage modification of risk factors for head and neck cancer** (SF 1.3.)

Scholar

- (1.1) **Prepare, read and learn around clinical and surgical cases, understand the steps of the proposed treatment and participate appropriately by asking questions** (SF 1)
- (1.1) Obtain a satisfactory performance at your annual residency oral/written exam and at the Canadian in training exam
- (1.2) Maintain a surgical procedure log, surgical evaluation forms (SF 1.1.2.1.)
- (2.) Teach medical students, more junior residents or other health care professionals (SF 2.)
- (2.4) Participate in preparation and presentation of a Grand Round (SF 2.4.)
- (3.1) Recognize practice uncertainties, knowledge gaps, seek for advice/consultation (SF 3.1.)
- (3.3) Participate to critical appraisal of the literature, research methodology, biostatistics, during scheduled Journal Club (SF 3.3.)
- (4.3) Contribute to research endeavours and search for research ideas (SF 4.3.)

Professional

- (1.1) Deliver health care to patients in an honest, ethical and professional manner (SF 1.1.)
- (2.2) Demonstrate a commitment to patient safety and quality improvement by adherence to hospital policies and procedures while working in the operative room (SF 2.2.)
- (3.1) **Fulfill and adhere to professional and ethical codes, standards of practice, and laws governing practice** (SF 3.1.1.)
- (4.1) Exhibit self-awareness and manage your personal well-being and professional performance (SF 4.1.)

Entrustable Professional Activities

Assessment:

The following EPA assessment forms must be completed during the rotation; however at the conclusion of the rotation it is not expected that all EPAs will be achieved:

Form 1-Royal College Mainport ePortfolio or McMaster MedSIS

Form 2-Royal College Mainport ePortfolio or McMaster MedSIS

Form 3-Royal College Mainport ePortfolio or McMaster MedSIS

During the rotation, you need to work on the following Foundations of Discipline in Otolaryngology-Head & Neck surgery EPAs for competencies:

VERSION 1 (residents starting July 1st, 2018)

EPA 2.1

Providing initial clinical assessment, investigation and development of a management plan for patients with acute airway obstruction

EPA 2.2

Assessing and providing initial management for patients with a deep neck space infection or peritonsillar abscess

EPA 2.3

Assessing and providing basic management for patients with epistaxis

EPA 2.4

Assessing and initiating investigations for adult and pediatric patients presenting with a neck mass

EPA 2.6

Assessing and providing initial management for patients with nasal obstruction

EPA 2.7

Assessing and providing initial management patients with acute-onset hearing loss

EPA 2.8

Participating in peri-operative care of patients undergoing free flap reconstruction

EPA 2.9

Closing soft tissue defects, applying the concept of the reconstructive ladder

VERSION 2 (residents starting July 1st, 2019)

EPA 2.1

Providing initial clinical assessment, investigation and development of a management plan for patients with acute airway obstruction

EPA 2.2

Draining a peritonsillar abscess

EPA 2.3

Assessing and providing basic management for patients with epistaxis

EPA 2.5

Assessing and providing initial management patients with hearing loss

EPA 2.6

Performing primary skin closure: face or neck

During the rotation, you need to work on the following Foundations of Discipline in the Surgical Foundations program EPAs for competencies:

EPA 2.1

Providing initial management for critically ill surgical patients

EPA 2.3

Assessing and performing risk optimization for preoperative patients in preparation for surgery

EPA 2.4

Providing patient education and informed consent in preparation for surgical care

EPA 2.5

Demonstrating the foundational aspects of surgical procedures

EPA 2.6

Participate in surgical procedures

EPA 2.7

Managing uncomplicated postoperative surgical patients

EPA 2.8

Managing postoperative patients with complications

The following CanMEDS intrinsic roles assessment must be completed during the rotation:

Faculty provides summative feedback on CanMEDS intrinsic roles (non-medical expert role) by using the narrative observation form. The narrative form is located on the Royal College Mainport eportfolio *or* *McMaster MedSIS* and must be triggered by the learner or observer.

Bibliography suggestions

Deweese and Saunders: *Otolaryngology-Head and Neck Surgery*

Byron J Bailey: *Head and Neck Surgery-Otolaryngology*

Cummings: *Otolaryngology- Head and Neck Surgery*

Moore Keith: *The Developing Human, embryology* at McMaster library

Radiology

Hermans R: *Head and Neck Cancer Imaging* on line

Harnsberger: *Handbook of Head and Neck Imaging*

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