

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

**Senior Core of Discipline Stage-Fourth Year Resident**

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**Overview**

During the fourth year of residency training the resident will spend 3 blocks at St Joseph Healthcare. The resident will gain experience in dealing with patients in the clinic, on the wards, the intensive care units, head and neck unit, operating room and in the emergency department. The Otolaryngology –Head and Neck Surgery service at St Joseph's Hospital involves a significant amount of Head and Neck oncology, in addition to General practice and Otolaryngology/Neurotology. On Fridays, residents participate to a multidisciplinary cancer clinic at the Juravinski Hospital.

All residents must review their learning objectives/competencies with the Otolaryngology – Head and Neck Clinical Teaching Unit Director at the beginning and at the end of the rotation to facilitate meeting the objectives/competencies.

Clinical Teaching Unit Director: Dr. M. Gupta

Head and Neck Surgeons: Drs S. Archibald, M. Gupta, S. Jackson, J.E.M. Young and H. Zhang  
General Otolaryngology Surgeon: Dr. E. Jeney  
Otolaryngology and Neurotology Surgeon: Dr. J Archibald

**Call:**

You will be assigned on home call with the Otolaryngology-Head and Neck Surgery service. 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.

**Schedule of the week:**

You will be expected to make hospital rounds with your team in the mornings before starting the day's activities of the service and at the end of the day. The Chief resident assigns the weekly schedule for the team. When the Chief resident is absent, the resident with the most seniority takes this responsibility.

Sample of weekly schedule (subject to change, **relevant exposure to this rotation is bolded**)

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

MPR: minor procedure room

ENDO: endoscopy procedure

### 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 consists of having an in-depth exposure to head and neck oncology, facial plastic reconstruction and advanced general otolaryngology presentations. Although much is acquired by enhancing their surgical expertise, greater proficiency is to be gained in the other CanMEDS domains also.

Residents will be working at completing Entrustable Professional Activities (EPAs) observations from the Senior Core of Discipline stage in the Otolaryngology-Head and Neck Surgery 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 resident ePortfolio or McMaster MedSIS and to the educational resident manual located on the Otolaryngology-Head & Neck surgery division website.

*(Please note that 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 Oncology and General Otolaryngology presentations**

Understand well in depth the anatomy, embryology, histology and physiology of the nose, the paranasal sinuses, the upper aero digestive tract, salivary glands, thyroid/parathyroid glands, neck and lymphatic system

#### **Apply clinical and biomedical sciences to manage:**

##### ➤ **Advanced General Otolaryngology presentations with:**

- Severe epistaxis anterior, posterior and complications
- Neck mass/swelling/deep neck space abscess/cellulitis
- Endocrine thyroid/parathyroid
- Emergent airway obstruction initial clinical assessment, investigation and development of a management plan including but not limited to rigid bronchoscopy set up and cricothyroidotomy/tracheostomy

#### **Apply clinical and biomedical sciences to manage:**

##### ➤ **Head and Neck/Oncology presentations with:**

- Nasal cavity and paranasal sinuses
- Nasopharynx
- Oral cavity: lip, oral tongue, floor of the mouth, buccal mucosa, gingiva, hard palate, retromolar
- Oropharynx: tongue base, soft palate, tonsils
- Hypopharynx: piriform sinus, postcricoid, lateral and posterior pharyngeal wall
- Larynx: supraglottic, glottic, subglottic.
- Oesophagus: cervical
- Thyroid gland
- Major salivary glands
- Melanoma of the upper aero digestive tract
- Skin malignancy of the head and neck
- Other head and neck neoplasms:
  - Parapharyngeal
  - Lymphoma: Hodgkin and non-Hodgkin
  - Temporal bone
  - Maxillofacial
  - Glomus
  - Midline granuloma
  - Parathyroid glands
- **Cervical metastasis of unknown primary**
- **Head and neck lymphatic nodes in cancer patients:**
  - Diagnosis, frequency related to the primary site

- Staging, treatment options/plan (surgical and radiotherapy)
- Prognosis
- **Principles of radiotherapy theory:**
  - Advantages, limitations and complications
  - Dental precautions and complications related to radiotherapy
- **Principles of chemotherapy and immunotherapy theory:**
  - Common chemotherapy agents used in head and neck cancer; combination of agents
  - Advantages and limitations, complications and common side effects
- **Interpret pathology reports**
- **Malignancy staging**
- **Voice rehabilitation post total laryngectomy management options**
- **Swallowing difficulty/dysphagia post-surgery management and rehabilitation**

**Apply knowledge of tumorigenesis of benign and cancers of the head and neck**

**Principles of different oncologic treatment modalities, including surgery, radiation therapy, chemotherapy and immunotherapy**

**Principles of laser microsurgical resection, cryotherapy, robotic surgery and/or electro-surgery**

**Apply clinical and biomedical sciences to manage:**

- **Facial Plastic Head and Neck reconstruction presentations with:**
  - **Develop an understanding of the “reconstructive ladder” to correct head and neck defects by:**
    - formulating a surgical reconstructive plan that takes restoration of cosmetic and function into consideration, advantages, disadvantages and complications
  - **Define the different types of flaps that can be used for head and neck/maxillofacial reconstruction**
    - Skin grafts
    - Regional/pedicle flaps
    - Free flaps
    - Explain their principles of physiology and blood supply
  - **Facial nerve disorders and reanimation strategies**

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

**(1.6) Maintain duty of care and patient safety while balancing multiple responsibilities**

**(1.7) Seek assistance in situations that are complex or new**

- (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 perform a detailed physical exam and select appropriate investigations , interpret their results for the purpose of diagnosis and management, disease prevention and health promotion of the above clinical presentation**
  - Identify patient’s risk factors pertaining to head and neck neoplasia
- (2.2) **Select and demonstrate an understanding of the pertinent investigations for the Oncology presentations in Otolaryngology-Head and Neck Surgery including:**
  - Laboratory testing
  - Diagnostic imaging
  - Fine needle aspiration/biopsy
- (2.3) **Establish goals of care in collaboration with patients and their families, including slowing disease progression, treating symptoms, achieving cure, improving function, and palliation**
- (2.4) **Provide timely and adequate responses to complications and undesired side effects of treatment**
- (3.2) **Obtain and document informed consent for more complex diseases explaining the risks and benefits of, and the rational for performing medical and surgical procedures and therapies**
- (3.4) Perform the following (bolded) procedures in a skillful, fluid, and safe manner with minimal assistance or no assistance:
  - **General Otolaryngology**
    - Upper aerodigestive flexible endoscopies with or without foreign body removal or biopsy
    - **Intubations in acute airway obstruction with flexible scope**
    - Nasal packing for severe epistaxis (anterior and posterior)
    - **Ligation sphenopalatine artery and ethmoid artery**
    - Incision and drainage of deep neck space and wound abscesses
    - **Cricothyroidotomy**
    - **Tracheostomy emergent, awake**
    - Branchial cleft cyst and thyroglossal cyst removal
    - **Thyroidectomy/hemithyroidectomy**
  - **Laryngology**
    - **Microlaryngoscopy with or without biopsy, excision, laser removal , debridement,**
    - **Dilatation**
    - **Vocal cord injection, thyroplasty**

- Head and Neck oncology
  - **Upper aerodigestive flexible endoscopies with or without biopsies as it relates to tumour staging and treatment plan**
  - Fine needle aspiration of neck mass or lymphatic node
  - Nasal cavity biopsy
  - Oral cavity, oropharynx biopsy
  - Skin biopsy
  - Neck lymphatic nodes biopsy
  - **Tracheostomy elective and emergent**
  - **Panendoscopy, including rigid and flexible instrumentation and biopsy**
  - **Mucosal cancer dissection (see EPA 3.19)**
    - Tongue wedge excision
    - Oral cavity lesion excision
    - Total laryngectomy, laser resection with supervision
    - Open partial laryngectomy with supervision
    - Pharyngectomy with supervision
  - **Neck dissection**
  - **Thyroidectomy/hemithyroidectomy**
  - Submandibular gland excision
  - **Parotidectomy superficial**
  - **Excision of skin cancer and closure**
  - Exposure and observation/assist for the following procedures:
    - Mandibulectomy, mandibulotomy and rigid fixation
    - Maxillectomy, medial maxillectomy
    - Skull base tumors excision
    - Anterior craniofacial resection
    - Parapharyngeal neoplasms excision
    - Glomus tumor excision
    - Parathyroidectomy

- Facial Plastic and Reconstructive Surgery
  - Regional anaesthetic of the head, face and neck
  - Cartilage graft
  - Composite graft
  - Bone graft (calvarial)
  - **Local skin flap**
  - **Regional and free flaps (intra-operative design and inset)**

(3.4) Provide assistance and function as first assistance for the wide range head and neck oncology and facial plastic/head and neck reconstructive surgical procedures

- Effectively assist at major head and neck oncology surgical procedures

(4.1) **Establish and implement a plan for routine/complex post-procedure care of the listed procedures**

(4.1) **Implement a patient-centered care plan that supports ongoing care, follow-up on investigations, response to treatment, and further consultation when needed**

- **Address end-of –life issues with patients with head and neck cancer**

## Communicator

- (1.1) Demonstrate empathy, respect and compassion
- (1.2) Optimize the physical environment for patient comfort, privacy, engagement and safety
- (1.5) **Manage emotionally charged conversations**
- (2.1) **Conduct a patient-centered interview, gathering all relevant biomedical and psychosocial information for oncology clinical presentation**
  - **Actively listen to patient cues**
- (2.1) Integrate, summarize, and present the information obtained from a patient-centered interview
- (3.1) **Share health care information and plans with patients and their families**
- (3.1) **Provide information on diagnosis, prognosis in a clear compassionate, respectful, objective manner**
- (3.2) **Apologize appropriately for a harmful patient safety incident**
- (4.3) **Use communication skills and strategies that help patient and family make informed decisions regarding their health**
- (5.1) Document clinical encounters of oncology diagnosis with staging accurately and accessible manner to adequately convey clinical reasoning and rational for decisions

## Collaborator

- (1.2) **Consult as needed with other health care professionals** (multidisciplinary oncology team, speech language pathology, head and neck unit nurses, respiratory technicians and other physicians)
- (1.3) **Communicate effectively with physicians and other colleagues in the health care professions** (intensivist, medical and radiation oncologist)
- (1.3) **Provide timely and necessary written information to colleagues for effective relationship-centered care**
- (2.1) Maintain positive relationships in all professional contexts
- (2.1) **Delegate tasks and responsibilities in appropriate and respectful manner**
- (3.2) Demonstrate safe handover of care, verbal, dictated and written
- (3.2) Recognize and act on patient safety issues during transfer of care

## Leader

- (1.1) Participate in a patient safety and/or quality improvement initiative
- (1.1) **Demonstrate awareness and knowledge of clinical practice guideline for the following:**
  - **Thyroid nodules**
  - **Head and neck oncology**
- (2.1) **Use clinical judgment to minimize wasteful practice**
- (1.2) Adhere to the standard safety guidelines that promotes patient safety by reporting and responding to unsafe situations
- (1.4) Use health informatics to improve the quality of patient care, to optimize patient safety and suggest changes to the team when applicable
- (3.1) Demonstrate leadership skills by helping the team to enhance health care by performing effective, complete and exemplary care of patients on the Head and Neck Unit
- (4.1) Set priorities and manage time to integrate practice and personal life

## Health Advocate

- (1.1) Demonstrate familiarity with important determinants of health (smoking cessation, alcohol abuse, poor nutrition, HPV and HIV)
- (1.2) Apply the principles of behaviour change during conversations with patients and families about adopting healthy behaviours
- (1.3) Promote reduction of risk factors for head and neck cancer through smoking cessation, responsible alcohol use, UVA/UVB protection, HPV vaccination for girls and boys**

## Scholar

- (1.1) Prepare, read and learn around clinical and surgical cases, understand the steps of the proposed treatment and participate appropriately
- (1.1) Review and update earlier learning plans, identify learning needs related to all CanMEDS roles to generate immediate and long-term career goals**
- (1.1) Obtain a satisfactory performance at your residency oral/written exam and at the Canadian in training exam
- (1.2) Maintain a surgical procedure log, surgical evaluation forms**
- (1.2) Seek and interpret multiple sources of performance data and feedback to improve performance
- (1.3) Participate in collaborative learning projects
- (2.4) Teach medical students, more junior residents or other health care professionals**
- (3.1) Recognize practice uncertainty, knowledge gaps and seek for advice/consultation
- (3.3) Participate to critical appraisal of the literature, research methodology, biostatistics, during scheduled Journal Club
- (4.3) Contribute to research endeavours

## Professional

- (1.1) Deliver health care to patients in an honest, ethical and professional manner**
- (1.2) Demonstrate a commitment to excellence in all aspects of practice
- (1.3) Recognize and respond to ethical issues encountered in practice**
- (2.2) Demonstrate a commitment to patient safety and quality improvement
- (4.1) Exhibit strategies for managing stress and maintaining physical and mental well-being

## Entrustable Professional Activities

### Assessment:

*The following Entrustable Professional Activity (EPA) assessment forms from the Senior CORE of Discipline stage 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 e-Portfolio or McMaster MedSIS*

*Form 2-Royal College Mainport e-Portfolio or McMaster MedSIS*

*Form 3-Royal College Mainport e-Portfolio or McMaster MedSIS*

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

### **EPA 3.1**

Providing post-operative management-Form 1



**EPA 3.2**

Managing an inpatient surgical service (SC)-Form 3

**EPA 3.5**

Providing emergency surgical management for patients with acute airway problems-  
Form 1 & 2

**EPA 3.10**

Assessing patients with facial paralysis, and providing recommendations for both  
surgical and non-surgical treatment options-Form 1

**EPA 3.13**

Providing advanced surgical management for patients with epistaxis (SC)-Form 1 & 2

**EPA 3.15**

Assessing and managing patients presenting with a sinonasal mass (SC)-Form 1 & 2

**EPA 3.17**

Assessing patients with chronic airway obstruction (SC) Form 2

**EPA 3.18**

Assessing patients with dysphonia (SC)-Form 2

**EPA 3.19**

Assessing and managing patients with mucosal squamous cell carcinoma of the head  
and neck and providing surgical management (SC)-Form 1 & 2

**EPA 3.20**

Providing surgical management of uncomplicated patients requiring a thyroidectomy  
(SC)-Form 2 and providing follow-up of patients with thyroid cancer (SC)-Form 1

**EPA 3.21**

Assessing and managing patients with disorders of the parathyroid (SC)-Form 1

**EPA 3.22**

Providing surgical management of uncomplicated patients requiring superficial  
parotidectomy (SC)-Form 2

**EPA 3.24**

Assessing and managing patients with head and neck surgical defects (SC)-Form 1 & 2

**EPA 3.25**

Assessing and managing patients with benign or malignant skin lesions of the head and  
neck (SC)-Form 1 & 2

**During the rotation, you can work on any pending Junior Core of Discipline EPAs when applicable.**

**The following CanMEDS intrinsic roles assessment must be completed during the rotation when indicated on your CBD road map:**

- 360 (multisource feedback x1 H & N unit nurse, x1 OR nurse)
- OR dictation x1
- Consult dictation x1

**Bibliography suggestions**

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

Cummings: *Otolaryngology-Head and Neck Surgery*

Lee K J: *Essential Otolaryngology: Head and Neck Surgery*, ninth edition

Radiology

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

Harnsberger: *Handbook of Head and Neck Imaging*

**The resident should read these current journals**

Journal of Otolaryngology- Head & Neck Surgery

Archives of Otolaryngology-Head & Neck Surgery

Laryngoscope

**Surgical skills references**

Byron J Bailey: *Atlas of Head & Neck Surgery-Otolaryngology*

Montgomery W Wayne: *Surgery of the upper respiratory system vol.2*

Lore: *An Atlas of Head and Neck Surgery*

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