

# McMaster Otolaryngology-Head and Neck Surgery

# Goals & Objectives & Competencies Otolaryngology- Head and Neck Surgery Rotation Hamilton Health Sciences CanMEDS 2015

# Junior Core of Discipline Stage-Second year Resident

#### Overview

During the second half of PGY2 year of residency training the resident will spend 3 blocks on rotation at Hamilton Health Sciences. The resident will gain experience in dealing with patients in the clinics, on the wards, intensive care units, operating rooms and in the emergency departments. Otolaryngology-Head & Neck Surgery at McMaster University Medical Centre (MUMC) involves a significant amount of pediatric practice, in addition to an adult outpatient practice. The Hamilton General Hospital (HGH) involves an adult practice only. The Juravinski Hospital involves also an adult practice and our team provides the on call consultation and urgent service at this site. All residents must review their learning objectives/competencies with the 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. D Sommer

# Staff Surgeons:

Dr. E Jeney- General Otolaryngology

Dr. B Korman-Pediatric Otolaryngology

Dr. J. MacLean- Pediatric Otolaryngology

Dr. D Reid- General Otolaryngology

Dr. D Sommer- Rhinology, Anterior Skull base Surgery

You will be expected to make hospital rounds with your team in the mornings before starting in the days' 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 weekly schedule for the team. When the Chief resident is absent, the resident with most seniority takes this responsibility.

Weekly schedule: Variable; need to verify – posted at McMaster and HGH clinic sites

Monday	Tuesday	Wednesday	Thursday	Friday
MUMC	MUMC	MUMC	MUMC	MUMC
Clinic	Clinic	Clinic	Clinic	Clinic
Voice clinic	OR	OR	OR	OR1
OR				OR2 (2/4weeks)
				OR2 Jeney (2/4weeks)
HGH	HGH	HGH	HGH	HGH
Clinic	Clinic	Clinic	Clinic	Clinic
OR (skull base)		OR (skull base)	OR (2/4	OR (1/4 weeks)
			weeks)	

HGH clinic runs three days per week, which are variable; OR (skull base) time is variable

# 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.

# **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 expend his/her knowledge and skills in General and Pediatric Otolaryngology, and will be introduced to Rhinology and Laryngology.

Residents will be working at completing Entrustable Professional Activities (EPAs) observations from the Junior Core of Discipline stage in 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 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 a commitment to high-quality care of their patients (SF 1.1.)

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

Understand in greater detail the anatomy, embryology, histology, physiology, pathophysiology, pharmacology, microbiology, genetics and immunology as relevant to the structure and function of the ear, nose, paranasal sinuses, upper aerodigestive tract.

## General Otolaryngology

- Acute and chronic infections of the head and neck
- Superficial and deep neck space infections
- Emergent and non emergent airway obstruction
- Sleep disordered breathing, including obstructive sleep apnea and snoring, in both children and adults
- Non-neoplastic disorders of the salivary glands: infectious and non-infectious
- Epistaxis: anterior, posterior and complications
- Nasal obstruction
- Middle ear disorders in both children and adults: acute, serous, chronic, external and complications
- Disorders of the external ear
- Laryngopharyngeal acid reflux
- Dysphagia oral, oropharyngeal, esophageal

# Pediatric Otolaryngology

- Acute airway obstructions in NICU, PICU, ER (initial management)
- Stridor in neonates and infants
- Foreign body upper aero digestive tract
- Caustic ingestion/burns
- Common congenital anomalies: craniofacial, branchial cleft, Thyroglossal cyst, TEF etc.
- Hearing loss all etiologies and common syndromes
- Otitis media (acute, serous, chronic and complications)
- Sinusitis (acute, chronic, with polyp, cystic fibrosis and with complications)
- Laryngeal cysts/other congenital anomalies
- Benign vocal cord lesions
- Recurrent respiratory papillomatosis

#### Rhinology

- Anatomy and physiology of nasal cavity
- Infectious and inflammatory (allergic and nonallergic) conditions
- Nasal obstruction

# Laryngology

- Anatomy and physiology upper aerodigestive system related to swallowing and phases of normal swallowing 1.4.1
- Apply knowledge of physics of voice and speech 1.4.3
- Infectious and inflammatory conditions 1.4.2
- Trauma 1.4.2

- Benign and malignant tumours 1.4.2
- Neurologic voice disorders 1.4.2
- The professional voice 1.4.2
- Dysphagia
- (1.5) Perform appropriately timed clinical assessments with recommendations that are presented in an organized manner
- (2.1) Prioritize issues to be addressed in a patient encounter
- (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 3)
  - Focused history and physical exam to classify phase of dysphagia 2.2.2
- (2.2) Identify and differentiate normal and abnormal findings on history, physical examination and perform the following when indicated:
  - Identify patients having or at risk of aspiration 2.2.5
  - Flexible nasopharyngolaryngoscopy 2.2.9
  - Nasal endoscopy flexible and rigid
  - Otomicroscopy
  - Tuning fork
- (2.2) Select and demonstrate an understanding of the pertinent investigations for the common Otolaryngology-Head and Neck surgery presentations including 2.2.9:
  - Laboratory testing (manometry, PH monitor) 2.2.9
  - Diagnostic imaging (barium swallow, modified barium swallow, ultrasound, CT, MRI) 2.2.9
  - Fiberoptic endoscopic examination of swallow (FEES) 2.2.9
  - Conventional audiometry testing and impedance audiometry
  - Objective voice testing, electrophysiological techniques and aerodynamic testing
- (2.2) Develop a specific differential diagnosis for most common problems in Otolaryngology-Head and Neck surgery
- (2.4) Develop, implement and document a patient-centred management plan for common problems in Otolaryngology-Head and Neck surgery
- (3.1) Determine the most appropriate procedures or therapies Begin to formulate and develop the following:
  - Describe the indications, contraindications, risks, and alternatives for a given procedure or therapy 3.1.1
  - Integrate all sources of information to develop a procedural or therapeutic plan that is safe, patient-centred, and considers the risks and benefits of all approaches and inform patient and family 3.1.2 (SF 3.1.1.)

- Integrate planned procedures or therapies into global assessment and management plans
- (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.)
  - Obtain and document informed consent for complex medical and surgical procedures and therapies 3.2.1
  - Use shared decision-making in the consent process, taking risk and uncertainty into consideration 3.2.2
- (3.4) Perform the following (bolded) procedures in a skillful, fluid, and safe manner with minimal assistance or no assistance:
  - Intubations in acute airway obstruction with flexible scope
  - Biopsies, including fine needle aspirate (FNAB), punch, incisional, excisional, and/or open and use appropriate collection techniques (SF 3.4.18.13, SF 3.4.21.)
  - Incision and drainage of deep neck space and wound abscess (SF 3.4.18.12.)
    - Trans-oral incision and drainage retro/para-pharyngeal abscess
  - Direct laryngoscopy for biopsy, foreign body (FB) removal
  - Rigid esophagoscopy for removal FB
  - Removal of FB from the nose and pharynx
  - Pediatric Otomicroscopy for ear debridement (awake)
  - Pediatric Otomicroscopy for FB removal (awake)
  - Myringoplasty
  - Transtympanic injection
  - Septoplasty
  - Turbinoplasty
  - Flexible nasopharyngolaryngoscopy
  - Microlaryngoscopy with biopsy
  - Soft tissue handling/suturing (SF 3.4.18.3)
- (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.)
- (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.)
  - Establish plans for ongoing care, taking into consideration the patient's clinical state, circumstances, preferences, and actions, as well as available resources, best practices, and research evidence 4.1.2

- Accurately identify situations that necessitate consultation of other health professionals to assist in the management of disorders encountered in Otolaryngology – Head and Neck Surgery
- (5.2) Adopt strategies that promote patient safety and address human and system factors (SF 5.2.)
  - Use cognitive aids such as procedural checklists, surgical timeouts, debriefing, structured communication tools, or care paths to enhance patient safety (SF 5.2.1.)
  - Engage patients and their families in the continuous improvement of patient safety

# Communicator

- (1.0) Establish professional therapeutic relationships with patients and their families
- (1.1) Communicate using a patient-centred approach that encourages patient trust and autonomy and is characterized by empathy, respect, and compassion (SF 1.1.)
- (1.2) Optimize the physical environment for patient comfort, privacy, engagement and safety (SF 1.2.)
- (1.4) Respond to patients' non-verbal behaviours to enhance communication (SF 1.4.)
- (1.6) Adapt to the unique needs and preferences of each patient and to his or her clinical condition and circumstances (SF 1.6.)
  - Tailor approaches to decision-making to patient capacity, values, and preferences 1.6.1
- (2.1) Use patient-centred interviewing skills to effectively identify and gather relevant biomedical and psychosocial information (SF 2.1.)
  - Use patient-centred interviewing skills to effectively gather relevant biomedical and psychosocial information 2.1.1
  - Integrate, summarize, and present the biopsychosocial information obtained from a patient-centred interview 2.1.2
  - Actively listen and respond to patient cues 2.1.3
- (2.2) Provide a clear structure for and manage the flow of an entire patient encounter (SF 2.2.)
  - Manage the flow of challenging patient encounters, including those with angry, distressed, or excessively talkative individuals
- (3.1) Share information and explanations that are clear, accurate, and timely, while checking for patient and family understanding (SF 3.1.)
  - Provide information on diagnosis and prognosis in a clear, compassionate, respectful, and objective manner
  - Convey information related to the patient's health status, care, and needs in a timely, honest, and transparent manner
- (4.) Engage patients and their families in developing plans that reflect the patient's health care needs and goals
- (4.1) Facilitate discussions with patients and their families in a way that is respectful, non-judgmental, and culturally safe (SF 4.1.)

- (4.3) Use communication skills and strategies that help patients and their families make informed decisions regarding their health 4.3.1 (SF 4.3.)
- (5.1) Document clinical encounters in an accurate, legible, complete, timely and accessible manner to adequately convey clinical reasoning and rational for decisions (SF 5.1.)
  - Adapt record keeping to specific guidelines of Otolaryngology-Head and Neck surgery and the clinical context
  - Document procedures in the OR report in a fashion that is commensurate with level of participation
  - Identify and correct vague or ambiguous documentation
- (5.2) Communicate effectively using a written health record, electronic medical record, or other digital technology (SF 5.2.)
- (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 in the health care professions to support relationship-centered collaborative care (SF 1.1.)
  - Anticipate, identify, and respond to patient safety issues related to the function of a team
- (1.2) Consult as needed with other health care professionals, including speech language pathologists, audiologists, pediatricians, sleep disorder specialists, family physicians (SF 1.2.)
- (2.1) Show respect toward collaborators (SF 2.1.)
  - Maintain positive relationships in all professional contexts
- (3.2) Demonstrate safe handover of care, both verbal and written (SF 3.2.)

# Leader

- (1.2) Contribute to a culture that promotes patient safety
  - Demonstrate knowledge and adhere to the standard safety guidelines that promote patient safety (SF 1.2.1.)
  - Engage patients and their families in the continuous improvement of patient safety
- (1.4) Use health informatics to improve quality of patient care and optimize patient safety while working in private clinic
- (2.1) Allocate health care resources for optimal patient care (SF 2.1.)
  - Use clinical judgment to minimize wasteful practices
- (3.1) Demonstrate leadership skills by helping the team to enhance health care by performing effective, complete and exemplary care of patients (SF 3.1.)

# **Health Advocate**

- (1.1) Demonstrate familiarity with important determinants of health and work with patients to address them (foreign body, voice misuses, and life style changes for acid reflux control, smoking cessation, alcohol abuse and poor nutrition (SF 1.1.)
- (1.2) Apply the principles of behaviour change and discuss with patients about adopting healthy behaviours 1.2.1

- (1.3) Incorporate disease prevention, health promotion and health surveillance into interactions with individual patients 1.3.3
  - FB aspiration and choking prevention
  - Otitis media prevention
    - Cessation Second hand smoke
    - Breastfeeding for newborns
    - Vaccination
    - Bottle feeding supine avoidance
  - Aerodigestive –Head &Neck prevention
    - Smoking cessation, alcohol use
    - UVA/UVB protection
    - Promote HPV vaccination

# **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.)
- (1.2) Maintain a surgical procedure log, surgical evaluation forms (SF 1.1.2.)
- (3.1) Recognize practice uncertainty, knowledge gaps and seek for advice/consultation (SF 3.1.)
- (3.3) Demonstrate awareness and knowledge of clinical practice guidelines for Otolaryngology-Head and Neck Surgery

# **Professional**

- (1.1) Deliver health care to patients in an honest, ethical and professional manner (SF 1 1)
- (1.2) Demonstrate a commitment to excellence in all aspects of practice (SF 1.2.)
- (2.2) Demonstrate a commitment to patient safety and quality improvement through adherence to hospital policies and procedures while working in the operative room (SF 2.2.)
- (4.1) Exhibit self-awareness and manage your personal well-being and professional performance (SF 4.1.)

# **Entrustable Professional Activities**

#### Assessment:

The following Entrustable Professional Activity (EPA) assessment forms from the junior 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

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

#### **EPA 3.1**

Providing post-operative management-Form 1

#### **EPA 3.6**

Performing surgical drainage of deep neck space infections in adult and pediatric patients JC-Form 2

### **EPA 3.8**

Assessing patients with dysphagia or swallowing disorders and provide surgical management JC -Form 1 & 2 (biopsy, FB removal)

#### **EPA 3.9**

Assessing and managing adult and pediatric patients with sleep disordered breathing-Form 1

## **EPA 3.12**

Assessing and managing pediatric patients with acute otitis media and/or otitis media with effusion (AOM/OME) JC -Form 1 & 2

#### EPA 3.16

Assessing and managing patients with nasal obstruction and/or septal deformities JC-Form 1 & 2

#### **EPA 3.18**

Assessing patients with dysphonia JC- Form 1

During the rotation, you can work on any pending Surgical Foundations program EPAs when applicable.

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

- Faculty provides summative feedback on CanMEDS intrinsic roles (nonmedical 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.
- 360 (multisource feedback x1 business clerk, x1 OR nurse)
- OR dictation x1
- Consult dictation x1

# **Bibliography suggestions**

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

Revised January 2019