A. GENERAL COMPETENCIES

( ) denotes optional competencies

At the completion of the Adult Otolaryngology rotation, the student will be able to:

1) MEDICAL EXPERT

- Develop an introductory knowledge in general adult otolaryngology including the subspecialties of head & neck surgery, rhinology, laryngology, plastic and reconstruction, and otology.
- Demonstrate the ability to take a directed history, and to perform a complete exam required in otolaryngology, and to develop a differential diagnosis.
- Differentiate between emergency, severe and minor otolaryngology conditions, and to decide which condition warrant appropriate and timely referral to an otolaryngologist.
- Demonstrate the ability to evaluate and manage common ear, nose and throat problems presenting to the primary care physician.
- (Demonstrate skills in basic surgical techniques such as knot-typing, suturing and limited dissection.)

2) COMMUNICATOR/DOCTOR-PATIENT RELATIONSHIP

- Communicate effectively and empathetically with patients and their families.
- Demonstrate thorough and clear documentation and charting, with concise recording of pertinent positive and negative findings.
- Demonstrate the ability to present a patient case in a clear, concise and complete manner.

3) COLLABORATOR

- Establish and maintain effective working relationships with colleagues and other healthcare professionals commonly treating otolaryngology patients (nursing, audiology, speech language pathology).
- (Demonstrate knowledge of community resources available to the otolaryngologist.)

4) MANAGER

- Demonstrate appropriate and cost-effective use of investigations and treatments.
- Learn to set priorities and manage time efficiently.
- (Develop organizational skills and efficiency in managing patients and maintaining...
patient flow.)

- (Develop an understanding of the factors contributing to resource issues in the otolaryngology clinic.)

5) HEALTH ADVOCATE/COMMUNITY RESOURCES

- Demonstrate an awareness of the underlying psychosocial and socioeconomic problems that contribute to otolaryngologic problems.
- Identify opportunities for primary and secondary prevention strategies

6) SCHOLAR

- Access and critically appraise the literature relevant to otolaryngology.
- (Understand the many unique learning and teaching opportunities available in otolaryngology.)

7) PROFESSIONAL

- Recognize and accept his or her limitations and know when to ask for help.
- Be reliable and responsible in fulfilling obligations.
- Recognize situations where common medical errors may occur in the otolaryngology clinic.

B. EDUCATIONAL CORE OBJECTIVES

(*) denotes optional objectives

1) SKILLS

By the end of the Otolaryngology rotation, the student should be able to demonstrate basic proficiency in the following skills.

a) Clinical Examination Skills:

- Complete Head and Neck examination, including anterior rhinoscopy
- Cranial nerve examination
- Otoscopy including pneumatic otoscopy (recognize and describe abnormal findings on ear examination)
- Tuning fork exams
- (Under direct staff supervision, student may acquire optional skills such as:
  - Direct laryngoscopy
  - Nasal packing
  - Use a microscope to examine the ear
  - Removal of ear wax)

b) Operative Skills:

- Closure of skin wounds
- For the following procedures, student will contribute to the preoperative preparation of patients, observe the surgery and participate in their care postoperatively.
2) PROBLEM BASED

By the end of the Otolaryngology rotation, the student should be able to demonstrate an approach (including differential diagnosis, assessment and management) to patients presenting with the following common conditions.

a) Ear Infections
   - Understand the pathology, presentation and management of acute otitis media (AOM), chronic otitis media, serous otitis media, and otitis externa
   - Understand the common associated risk factors
   - Describe the common complications associated with each of the above conditions, including cholesteatoma and necrotizing otitis externa
   - Discuss the indications for myringotomy and tube insertion.

b) Hearing Loss and Tinnitus
   - Understand the basic principles of anatomy, physiology and pathology of the ear as related to hearing impairment
   - Understand the etiology, presentation, differential diagnosis and management of the common causes of conductive and sensorineural hearing loss
   - Be familiar with the interpretation of basic audiograms (hearing test) and impedance testing
   - Be familiar with the devices available for rehabilitation (hearing aids/assistive devices)

c) Vertigo
   - Understand the basic principles of anatomy, physiology and pathology of the ear as related to vertigo
   - Understand the etiology, presentation, differential diagnosis and management of the common peripheral causes of vertigo (BPPV, Labyrinthitis, Vestibular neuronitis, Meniere’s disease)
   - Be familiar with the Dix-Hallpike test for BPPV.

d) Tonsillitis/Pharyngitis/Sore Throat
   - Understand the etiology, presentation, differential diagnosis and management of the common causes of pharyngitis and sore throat
   - Know the indications for tonsillectomy
   - Conduct a physical examination to differentiate causes of throat pain
   - Order appropriate investigations for evaluation of a sore throat, and know when treatment
is indicated.

- Recognize potential complications of tonsillitis and deep space neck infections

e) Airway Obstruction/ Hoarseness

- Be able to define stridor and understand how the quality of stridor can help localize the area of obstruction
- Be able to identify signs and symptoms of impending airway obstruction
- Be able to assess a patient with stridor (history and physical examination)
- Know the differential diagnosis and basic management of common causes of stridor and/or respiratory distress in children (including epiglottis and vocal cord paralysis)
- Be familiar with appropriate airway management in acute airway obstruction (including positioning, artificial airways and tracheotomy)
- Describe the mechanisms in place that maintains and protects the lower respiratory tract
- Formulate a differential diagnosis for dysphonia (hoarseness).

f) Nose and Paranasal Sinuses

- Describe the functions of the nose (airway, mucociliary system, warming and humidification), and understand the basic anatomy of the paranasal sinuses
- Demonstrate knowledge of the differential diagnosis of nasal obstruction (with and without rhinitis)
- Recognize, investigate, and treat acute and chronic sinusitis
- Be aware of the indications for referral in acute and chronic sinusitis
- Formulate an approach to a patient with acute epistaxis.

g) Upper Digestive Tract

- Outline the three phases of swallowing and demonstrate knowledge of the differential diagnosis of dysphagia
- Demonstrate a knowledge of the anatomy and physiology of the 3 major salivary glands
- Discuss the differential and management of salivary gland swelling
- Understand the basic presentation and treatment of acute sialadenitis and sialoliths.

h) Neck Masses

- Demonstrate knowledge of the differential diagnosis of neck masses in adults
- Discuss the investigations and management of neck masses.

C. LEARNING RESOURCES

1) Recommended Reading

- Books available in the B240 Conference room:
  - Primary Care Otolaryngology. Stafferl JG et al eds.
  - EMILY method for examining the tympanic membrane in a child. Schloss MD and Katz MS eds.
2) Online resources:

- Baylor College of Medicine: http://www.bcm.edu/oto/gr-archive
- Otolaryngology Houston: http://www.ghorayeb.com/pictures.html
- Martindale's The "Virtual" Medical Centre: http://www.martindalecenter.com/MedicalAudio_2_C.html
- Canadian Society of Otolaryngology – Head and Neck Surgery (link for “Undergraduate Education”): www.entcanada.org
- University of Western Ontario: http://www.uwoent.ca/files/Clerkship_Lecture.pdf

3) Apps:

- Learn ENT for iPhone and iPad
- Sinusitis Toolbox for iPad