



McMaster Otolaryngology-Head and Neck surgery
Overall Goals & Objectives & Competencies
CanMEDS 2015
Residency Five-year Educational Program

Overview

Upon completion of the 5-year educational residency program, the graduate surgeon will be competent to function as a consultant in Otolaryngology-Head and Neck Surgery and will be eligible for the Fellow Examination of the Royal College of Physicians and Surgeons of Canada.

Specifically, in order to complete the 5-year educational residency program and be eligible for the Royal College's certification examination, a resident must:

1. Successfully complete the 2-year Royal College Surgical Foundations curriculum
2. Successfully complete the Surgical Foundations examination
3. Obtain a Confirmation of Completion of Training from an accredited program in Otolaryngology-Head and Neck Surgery
4. Participate in a scholarly project related to the Specialty

Once all of the above requirements and the Royal College of certification examinations are successfully completed, the resident will attain the Royal College Certification in Otolaryngology-Head and Neck Surgery.

Residents will develop clinical competence of detailed knowledge of the scientific rationale for the medical and surgical management of Otolaryngology-Head and Neck conditions in the following domains:

Head and Neck Surgery
Pediatric Otolaryngology
Facial Plastic and Reconstructive Surgery
Rhinology
Laryngology
Otology
Neurotology
General Otolaryngology

Residents should have a sound knowledge of the components in Neurosurgery, Plastic Surgery, Anesthesia, Facial Trauma and Oral/Maxillofacial Surgery, and other specialties that relate to the Otolaryngology-Head and Neck Surgery specialty. Residents will collaborate with other physicians such as anesthesiologists, radiation and medical oncologists, intensivists, emergency physicians, respiralogsists, pediatricians and other surgical specialists. They will also work closely with speech language pathologists, audiologists and respiratory technicians.

Residents must demonstrate the knowledge, sensitivities, skills and attitudes relating to gender, sexual orientation, age, culture and ethnicity pertinent to Otolaryngology - Head and Neck Surgery. In addition, they must demonstrate their ability to advocate for patients and populations with specific needs such as hearing impairment and those at risk of head and neck malignancies.

All residents must work on three research projects related to Otolaryngology-Head and Neck Surgery during their training. They will have the opportunity to present their projects at the annual resident research day and at national or international conferences.

The graduate in Otolaryngology-Head and Neck Surgery is also expected to have acquired adequate proficiency in all seven **2015 CanMEDS key competencies**.

Medical Expert
Communicator
Collaborator
Leader
Health Advocate
Scholar
Professional

Goals & Objectives & Competencies:

The resident is expected to have acquired these objectives/competencies by the completion of training. The following document is in keeping with the RCPS(C) document of "Otolaryngology-Head and Neck Surgery Competencies 2017" and our training program.

Medical Expert

1. As Medical Experts, Otolaryngology-Head and Neck Surgeons will be able to function effectively as consultants, integrating all of the CanMeds Roles to provide optimal, safe, ethical patient-centered care:

1. Practice medicine within their defined scope of practice and expertise:

1.1 Demonstrate a commitment to high-quality care of their patients

1.2 Integrate all the CanMEDS Intrinsic Roles into their practice of OTLHNS

1.3 Demonstrate the competencies of Surgical Foundations

1.4 Apply a broad base and depth of knowledge in clinical and biomedical sciences to manage the breadth of patient presentation in OTLHNS

- Embryology, anatomy, histology, physiology, genetics and immunology as they relate to the development, and function of the ear, the upper aerodigestive tract, and related structures of the face, head, and neck, including the special senses of hearing, balance, taste, and olfaction
- Physics of sound, voice and speech production
- Neurophysiology and neuropsychology of hearing perception
- Microbiology and antimicrobial resistance as relevant to Oto – HNS
- Pharmacology of topical and systemic medication
- Psychology of addiction, including but not limited to smoking cessation and alcohol withdrawal
- Biomechanical characteristics of skin and bone in the facial region as they relate to technique used in facial palstic reconstructive surgery
- Biomechanical characteristics/principles of bone in the skull base region as they relate to techniques used in lateral skull base resection and reconstruction
- Biomechanical characteristics/principles of skin, soft tissue/SMAS, cartilage and bone in the facial region as they relate to Facial Plastic and Reconstructive Surgery (tissue expansion, plating maxillofacial fractures)
- Cutaneous anatomy, aesthetic subunits, relaxed skin tension lines and non-distortable landmarks of the face
- Tumorigenesis of benign neoplasms and cancers of the head and neck
- Common fracture patterns of the facial skeleton and their mechanisms of injury
- Principles of diagnostic imaging for all domains of specialty

- Pathology and pathophysiology as relevant to disorders of the ear, the upper aerodigestive tract, the related structures of the face, head, and neck, and the special senses of hearing, balance, taste, and olfaction
 - Endocrinologic and metabolic pathophysiology of the head and neck region, including the thyroid and parathyroid glands
- Principles of oncology as they apply to neoplasms of the face, head, and neck, skin and skull base
 - Risk factors, incidence and prevalence, genetic predisposition, growth and dissemination patterns, and prognostic variables

1.4.1. Diagnosis, natural history, and medical and surgical management of the following domains of the specialty:

Head and Neck

Become proficient at reaching a reasonable differential diagnosis and plan of investigation and treatment of common, less common, elective and emergency problems, and neoplasms of the head and neck.

Diagnostic plan of investigation, treatment, prognosis of malignant neoplasms of the head and neck and obtain a proper staging related to TNM (tumour, node, metastasis) classification (AJCC 201) or other relevant classification system.

- Nasal cavity and paranasal sinuses
- Nasopharynx
- Oropharynx: tongue base, soft palate, tonsils
- Hypopharynx: piriform sinus, postcricoid, lateral and posterior pharyngeal wall
- Oral cavity: lip, oral tongue, floor of the mouth, buccal mucosa, gingiva, hard palate, retromolar
- Larynx: supraglottic, glottic, subglottic
- Ear/temporal bone
- Esophagus: cervical
- Thyroid
- Major and minor salivary glands
- Melanoma of the upper aero digestive tract

Diagnosis and management of other head and neck neoplasms:

- Parapharyngeal neoplasm,
- Lymphoma: Hodgkin and non-Hodgkin,
- Melanoma cutaneous

- Temporal bone neoplasm
- Maxillofacial bone neoplasm
- Glomus neoplasm
- Midline granuloma
- Parathyroid glands

Radiotherapy theory, treatment, advantages, limitations and complications as they apply to head and neck cancer

Chemotherapy theory, treatment, complications and side effects as they apply to head and neck cancer

Head and neck lymphatic neck dissections (basic anatomy, physiopathology, types and indications)

Reconstruction surgery to correct head and neck defects, with a view to formulating a surgical reconstructive plan that takes restoration of cosmetic and function into consideration in head and neck cancer

Management options for :

- Voice rehabilitation post total laryngectomy
- Swallowing difficulty/dysphagia post surgery, and rehabilitation
- Surgical nutrition, fluid and electrolytes balance
- Wound care
- Facial nerve disorders and reanimation strategies
- Common complications (bleeding, hematoma, airway obstruction, fistula saliva, chyle, CSF, flap ischemia and congestion, fluid and electrolytes disorders) in head and neck cancer patient

Carry out pre and post-op care on the ward and the clinic and show efficient follow-up skills related to the head and neck disease and compliance with treatment

Recognize adverse effects and complications of interventions and treatments

Pediatric Otolaryngology

Embryology, anatomy, histology, physiology, pharmacology, pathology, pathophysiology, microbiology, biochemistry, genetics and immunology related to disease processes and symptoms encountered in the pediatric population

Diagnosis and management of disorders of the ear, the upper aerodigestive tract, and related structures of the head, face and neck, including the special senses of hearing, balance, taste and olfaction in the pediatric population:

- Congenital, inherited disorders
- Infectious/inflammatory

- Head and neck neoplasms benign and malignant
- Acute airway obstructions in NICU, PICU, ER
- Chronic airway obstruction
- Syndromic disorders
- Hearing loss all etiologies and common syndromes
- Hearing loss rehabilitation such as hearing aids, FM system, BAHA, cochlear implants selection and indication

Indication and interpretation of audiometry, tympanometry, auditory brain stem response, otoacoustic emissions in pediatric population including infant hearing loss screening, diagnosis and treatment

Diagnostic imaging and their application within Pediatric Otolaryngology

Carry out appropriate pre-and post-operative care and show efficient follow-up skills related to Pediatric Otolaryngology disease and conforming with treatment

Recognize adverse effects and complications of interventions and treatments

Facial Plastic and Reconstructive Surgery

Diagnosis and treatment:

- Techniques of frozen sections diagnosis and Mohs surgery
- Techniques of facial reconstruction ladder, including local and regional flaps and grafts
- Trauma maxillofacial region
- Technique facial reanimation
- Laser therapy, cryotherapy, electrosurgery and their applications as they pertain to the skin of the face, head and neck
- Facial cosmetic surgery

Plastic and Reconstructive Surgery including the interpretation of maxillofacial trauma imaging

Principles of radiotherapy theory, treatment, advantages, limitations and complications as they apply to skin cancer

Carry out appropriate pre-and post-operative care and show efficient follow-up skills related to facial plastic disease and compliance with treatment

Recognize adverse effects and complications of interventions and treatments

Rhinology

Diagnosis and management of:

- Infectious and inflammatory (allergic and non-allergic) conditions of the nose and paranasal sinuses
- Anosmia/hyposmia
- Nasal and paranasal sinus benign and malignant neoplasms, including the anterior skull base
- Repair of skull base defects including CSF leak
- Trauma of the nose and paranasal sinuses

Principles of diagnostic imaging including interpretation of imaging techniques of nose, paranasal sinuses, anterior skull base

Principles of image guidance system and their application to surgery for the nose and paranasal sinuses including the anterior skull base

Carry out appropriate pre-and post-operative care and show efficient/appropriate follow-up skills related to nasal, paranasal sinus and anterior skull base disease and compliance with treatment

Recognize adverse effects and complications of interventions and treatments

Laryngology

Techniques of objective vocal testing, aerodynamic testing, electrophysiological techniques and other related laboratory procedures

Diagnosis and treatment of various voice disorders:

- Infectious and inflammatory conditions of larynx and upper airway
- Muscle tension dysphonia
- Benign vocal cord lesions
- Neurological and systemic diseases affecting voice,
- Vocal cord paralysis
- Laryngopharyngeal acid reflux
- Professional voice
- Trauma larynx/upper airway (burn,blunt, penetrating,fracture)

Diagnosis and treatment of the adult airway, including diagnostic and endoscopy and therapeutic procedures related to both endoscopic and open approach

Principles of oncology as they apply to the larynx and upper airway

Principles of therapeutic and diagnostic imaging and their application within Laryngology, including the interpretation of imaging techniques relevant to the larynx and upper airway

Laser therapy, cryotherapy, and electro surgery and their applications as they pertain to the larynx

Technique used for the evaluation and treatment of speech, voice and swallowing disorders

Carry out appropriate pre-and post-operative care and show efficient follow-up skills related to laryngeal and upper airway disease and compliance with treatment

Recognize adverse effects and complications of interventions and treatments

Otology

Diagnosis and management of :

- Hearing loss of all etiologies including surgical and non-surgical auditory rehabilitation (hearing aids and assistive devices, cochlear implants, BAHA, implantable hearing aids)
- Middle ear and temporal bone trauma
- Acute and chronic infections/inflammatory diseases of the external and middle ear and mastoid, including its complications
- Benign and malignant neoplasms of the external and middle ear and mastoid

Principles of conventional audiometry and impedance audiometry and their application in the evaluation of the adult and pediatric population with hearing disorders

Principles of diagnostic imaging including interpretation of imaging techniques of the temporal bone and lateral skull base

Principles of radiotherapy theory, treatment, advantages, limitations and complications as they apply to neoplasms of the external and middle ear and mastoid

Carry out appropriate pre-and post-operative care and show efficient follow-up skills related to ear disease and compliance with treatment

Recognize adverse effects and complications of interventions and treatments

Neurotology

Diagnosis and management of :

- Profound hearing loss including the ethical and surgical issues surrounding provision of cochlear implantation
- Tinnitus and pathophysiology
- Ototoxic medications side effects

- Vertigo including the indication for surgical treatment of vertigo (labyrinthectomy, vestibular nerve section, endolymphatic sac surgery, posterior canal occlusion and superior canal resurfacing)
- Vestibular rehabilitation rational approach
- Benign and malignant neoplasms of the lateral skull base
- Disorders of the facial nerve
- Trauma to the facial nerve and temporal bone

Principles and application of conventional audiometry, impedance audiometry, otoacoustic emissions (OAEs), electrocochleography, auditory brainstem response (ABR) and cortical auditory evoked responses in the evaluation of patients with hearing disorders, both peripheral and central

Principles and application of vestibular assessment by electronystagmography (ENG), videonystagmography (VNG), computerized dynamic posturography, rotational chair assessment and vestibular evoked myogenic potentials (VEMP) including performance and interpretation of findings

Principles of radiotherapy theory, treatment, advantages, limitations and complications as they apply to the lateral skull base

Principles of electrophysiological assessment of the facial nerve, including intra-operative monitoring

Principles of diagnostic imaging and their application within neurotology including the interpretation of CT and MR imaging of the temporal bone, skull base and cerebellopontine angle

Carry out appropriate pre-and post-operative care and show efficient follow-up skills related to inner ear and lateral skull base disease and compliance with treatment

Recognize adverse effects and complications of interventions and treatments

General Otolaryngology

Diagnosis and management of :

- Acute upper airway emergencies
- Epistaxis
- Sleep disordered breathing
- Head and neck trauma (blunt, penetration)
- Acute and chronic infectious/inflammatory conditions of the head and neck
- Salivary glands diseases
- Endocrine thyroid/parathyroid disease

Recognize adverse effects and complications of interventions and treatments

1.4.2. Diagnostic techniques and procedures relevant to OTLHNS:

- Medical imaging (identification of appropriate imaging and recognition of normal structures and interpretation of anomalies)
- Diagnostic specimen collection, sampling techniques
- Endoscopies rigid and flexible
- Pulmonary function tests
- Esophageal manometry
- Voice assessment (direct laryngoscopy and stroboscopy)
- Swallowing assessment (swallowing study, FEES)
- Nasal function and olfaction assessments
- Hearing assessment (basic audiogram, impedance and tympanometry, otoacoustic emissions, auditory brainstem response, electrocochleography, cortical auditory evoked responses)
- Vestibular assessment (electro/videonystagmography, computerized dynamic posturography, Gans sensory organization protocol, rotational chair assessment, head impulse testing, and vestibular evoked myogenic potentials)
- Electrophysiological assessment of facial nerve and other cranial nerves
- Sleep disorder assessment, oximetry, polysomnography, and sleep endoscopy
- Pediatric assessment of speech, hearing, voice, and swallowing disorders

1.4.3. Therapeutic modalities relevant to OTLHNS:

- Endoscopic and open surgical approaches
- Topical and systemic medications, including both therapeutic and ototoxic implications
- Oncologic treatment modalities, including surgery, radiation therapy, chemotherapy, and immunotherapy
- Cryotherapy and electrosurgery, and their applications
- Laser therapy and microsurgical resection office based and in OR
- Image guidance systems and their application to surgery
- Non-invasive ventilation, including continuous positive airway pressure (CPAP), bilevel positive airway pressure (BIPAP), and Heliox therapy
- Principles of restoration and enhancement of form and function as they relate to techniques used in facial plastic and reconstructive surgery
- Reconstructive surgical options and their advantages, disadvantages, risks, and complications
- Application for robotic surgery

1.5 Perform appropriately timed clinical assessments addressing the breadth of the discipline with recommendations that are well organized and properly documented in written and/or oral form

1.6 Carry out professional duties in the face of multiple, competing demands

1.7 Recognize and respond to the complexity, uncertainty, and ambiguity inherent in OTLHNS

2. Perform a patient-centered clinical assessment and establish a management plan

2.1 Prioritize issues to be addressed in a patient encounter

Respond appropriately to life threatening or emergent issues, including but not limited to:

Upper airway obstruction

Hemorrhage

Severe systemic effects of sepsis, shock

Dehydration

Deep space neck infection

Necrotizing fasciitis

Extension of infection from paranasal sinuses and middle ear infection

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

- Utilization of headlight
- Anterior rhinoscopy
- Flexible or rigid nasopharyngolaryngoscopy with or without topical anesthesia
- Otoscopy
- Otomicroscopy
- Audiological testing
 - Puretone audiogram and tympanogram
 - Tuning fork tests
- Neuro-vestibular exam, including but not limited to
- head thrust, gait tests, cranial nerve, cerebellar and oculomotor exams, and the Dix-Hall-Pike test
- Neck palpation
- Oral cavity, oropharynx examination
- Videostroboscopy
- Voice and airway analysis
- Pulmonary function tests
- Sleep disorder assessments
- Esophageal manometry
- Medical imaging, including:

- x-ray: neck, chest, panorex
- Barium swallow
- Computerized tomography (CT)
- Magnetic Resonance Imaging (MRI)

2.3 Establish goals of care in collaboration with the patient and family, which may include slowing disease progression, achieving cure, improving function, and palliation

2.4 Establish a patient-centred management plan

- Nutritional support, including but not limited to enteral therapy
- Pharmacologic therapy
- Behavioural modification

3. Plan and perform procedures and therapies for the purpose of assessment and/or management plan

3.1 Determine the most appropriate procedures and therapies

3.2 Obtain and document informed consent, explaining the risks and benefits of, and the rationale for, a proposed procedure or therapy

3.3 Prioritize a procedure or therapy, taking into account clinical urgency, potential for deterioration, and available resources

3.4 Perform procedures in a skilful and safe manner, adapting to unanticipated findings or changing clinical circumstances

Head and Neck Surgery

- Direct laryngoscopy rigid and flexible with biopsy
- Esophagoscopy rigid and flexible with biopsy
- Bronchoscopy rigid and flexible with biopsy
- Biopsy of lesions from the nasal cavity, oral cavity, pharynx, larynx and the skin
- FNA of neck masses, lymph nodes, salivary glands and thyroid gland lesions

Perform all or parts of major head and neck procedures:

- Neck dissection with limited supervision
- Submandibular gland excision
- Parotidectomy with supervision
- Thyroidectomy
- Parathyroidectomy
- Branchial cleft cyst excision
- Thyroglossal cyst excision
- Oral cavity lesion excision, tongue wedge excision

- Total laryngectomy, laser resection with supervision
- Open partial laryngectomy with supervision
- Pharyngectomy with supervision
- Mandibulectomy, mandibulotomy and rigid fixation surgery with supervision
- Excision of skin Cancer and closure with limited supervision
- Maxillectomy, medial maxillectomy with supervision

- Skull base neoplasms excision observation
- Anterior craniofacial resection observation
- Parapharyngeal neoplasms excision observation
- Glomus tumor excision observation

Pediatric Otolaryngology

- Flexible nasopharyngolaryngoscopy in neonates, infants and children
- Rigid bronchoscopy diagnostic with or without foreign body removal, and/or biopsy
- Perform rigid esophagoscopy diagnostic and with removal of foreign body
- Direct laryngoscopy diagnostic, removal foreign body, lesions (papillomatosis) with microdebrider/ CO₂ laser
- Tracheostomy in neonates/infants/children with supervision
- Tonsillectomy, adenoidectomy and adenotonsillectomy
- Myringotomy and ventilating tube insertion
- Cortical mastoidectomy, tympanomastoidectomy
- Myringoplasty, tympanoplasty, canaloplasty, ossiculoplasty
- Pre-auricular sinus excision
- Epistaxis management by nasal packing, cauterization
- Septoplasty, turbinate reduction, nasal polypectomy
- Endoscopic sinus surgery, uncinectomy, ethmoidectomy, maxillary antrostomy
- Drainage subperiosteal orbital abscess external/endoscopic approach with supervision
- Choanal atresia repair with supervision/observation
- Thyroglossal cyst removal (sistrunk)
- Incision and drainage of deep neck abscesses
- Branchial cleft cyst removal
- Salivary gland surgery with supervision
- Pediatric airway surgical reconstruction with supervision/observation
- Frenuloplasty
- Management of vascular anomalies, both surgical and sclerotherapy

Facial Plastic and Reconstructive Surgery

- Skin biopsy (shave, punch, incision and excision)
- Perform local anesthetic when indicated, including loco-regional blocks

- Apply various techniques of wound closure (simple, subcutaneous, running, horizontal/vertical mattress, etc.)
- Repair of skin lacerations to the face and neck
- Basic techniques of nerve suture or repair
- Perform appropriate skin margin biopsies/excisions for frozen section of skin facial and neck malignancies; understand the principles of Moh's surgery
- Therapeutic procedures including surgical and non-surgical treatment of benign and malignant skin lesions, using proper soft tissue techniques with appropriate incisions to obtain a favourable scar orientation
- Perform diverse reconstructive techniques for skin closure including
 - local/loco regional flap,
 - graft design,
 - elevation and placement
- Cartilage graft
- Calvarial bone graft
- Scar revision
- Facial fracture repair including nasal bone, mandible and midfacial bone, application of plating systems with supervision
- Principles of techniques for cleft lip/palate repair observation
- Cervicofacial cosmetic surgery:
 - Principles of techniques surgical and non-surgical for face aging correction including botox injection, facial injectable fillers, laser surgery, chemical peels/dermabrasion, facial implants, forehead lifts, brow lifts, blepharoplasty, rhytidectomy observation
 - Rhinoplasty: closed or external approach, lateral/medial/intermediate/transcutaneous osteotomy, intercartilagenous incision and skin elevation, removal nasal hump cartilage/bone with supervision
 - Nasal tip correction, nasal valve correction observation
 - Otoplasty with supervision/observation

Rhinology

- Rigid and flexible nasal/sinus endoscopies
- Biopsy nasal cavity/sinus
- Endoscopic sampling for culture
- Debridement of nasal cavities
- Septoplasty, revision septoplasty
- Rhinoplasty
- Inferior turbinate reduction, cauterization
- Endoscopic sinus surgery nasal polypectomy, uncinectomy, anterior and posterior ethmoidectomy, maxillary antrostomy
- Endoscopic sinus surgery frontal recess, sphenoidotomy with supervision/observation

- Revision endoscopic sinus surgery
- Orbital decompression for intraorbital hemorrhage
- Endoscopic sinus surgery repair of CSF leak with supervision/observation
- Drainage of subperiosteal orbital abscess external/ endoscopic approach with supervision
- Caldwell Luc procedure and trephine
- External approach to sinuses: ethmoidectomy, frontal trephination, frontal sinus osteoplastic flap with supervision/observation
- Endoscopic treatment of benign sino-nasal neoplasms with supervision/observation
- Endoscopic or external medial wall maxillectomy with supervision
- Frontal sinus fracture repair with supervision /observation
- Epistaxis: endoscopic sphenopalatine artery ligation with supervision
- Epistaxis: anterior ethmoid artery, internal maxillary artery ligation with supervision
- Setting up the image system guidance

Laryngology

- Direct laryngoscopy/stroboscopy in voice clinic
- Microlaryngoscopy laryngeal and tracheal biopsy/excision lesions
- Microlaryngoscopy excision lesion with CO2 laser/debrider
- Vocal fold injection
- Thyroplasty with limited supervision
- Repair of laryngeal injuries/fractures with supervision
- Airway reconstruction such as repair of subglottic/tracheal stenosis in adults with supervision

Otology

- Microscopic ear debridement, cleaning mastoid cavity
- Myringotomy and ventilating tube insertion
- Myringoplasty
- Tympanotomy
- Tympanoplasty
- Canaloplasty
- Ossiculoplasty
- Tympanomastoidectomy including canal wall down and combined approaches in pediatric and adult population
- Meatoplasty
- Mastoidectomy
- Practice temporal bone dissection in the lab

Neurotology

- Assist at/observe stapedotomy/stapedectomy
- Middle ear perfusion of intratympanic medications (gentamicin or steroids)
- Particle repositioning maneuvers, including Epley maneuver and log roll maneuver
- Participate in the surgical treatment of vertigo (includes labyrinthectomy, vestibular
- nerve section, endolymphatic sac surgery, posterior canal occlusion and superior semicircular canal resurfacing)
- Assist at surgery for treatment of lateral skull base lesions including acoustic neuromas,
- other benign CPA lesions and petrous apex lesions
- Cochlear implant observation

General Otolaryngology

- Upper aerodigestive flexible with or without foreign body removal and/or biopsy
- Rigid endoscopies including sinonasal, laryngoscopy, esophagoscopy, bronchoscopy with or without foreign body removal and/or biopsy and/or dilatation
- Regional and local anesthesia of the larynx, face, head, and neck
- Sampling of lesions, including incisional, excisional, fine needle aspiration, (FNA), shave, punch, and open biopsies, as well as resections
- Wound closure
- Epistaxis management including as anterior and posterior nasal packing, cauterization
- Septoplasty and turbinate reduction
- Tonsillectomy, adenoidectomy, adenotonsillectomy
- Peritonsillar abscess incision and drainage
- Deep neck space and wound abscess incision and drainage
- Hematoma evacuation
- Excision of lymph nodes and other masses of the neck (branchial cleft cyst, thyroglossal duct cyst)
- Tracheostomy opened and percutaneous, elective, awake, emergent, complex
- Cricothyroidotomy
- Tracheo-cutaneous fistula repair
- Exploration and repair for penetrating and blunt neck trauma
- Management of sleep disorders breathing including uvulopalatopharyngoplasty (UP3), nasal optimization, simple tongue base procedures
- Ear debridement and examination with the microscope
- Tympanocentesis and myringotomy with ventilating tube insertion
- Myringoplasty

4. Establish plans for ongoing care and, when appropriate, timely consultation

4.1 Implement a patient-centred care plan that supports ongoing care, follow-up on investigations, response to treatment, and further consultation

- Provide nutritional support
 - Manage acute and chronic pain
 - Recognize and manage complications of interventions and treatments
 - Identify indications for consultation with other health care professionals
 - Provide referral for advanced Oto – HNS procedures
 - Identify indications and timing of interoperative pathology consultation
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- Address end-of-life issues in patients with head and neck cancer

5. Actively contribute, as an individual and as a member of a team providing care, to the continuous improvement of health care quality and patient safety

5.1 Recognize and respond to harm from health care delivery, including patient safety incidents

- Apply knowledge of the steps for disclosure of adverse events, including post analysis disclosure, and the role of apology

5.2 Adopt strategies that promote patient safety and address human and system factors

Communicator

1. Establish professional therapeutic relationships with patients and their families

- Communicate using a patient-centred approach that encourages patient trust and autonomy and is characterized by empathy, respect, and compassion
- Optimize the physical environment for patient comfort, dignity, privacy, engagement, and safety
- Recognize when the values, biases, or perspectives of patients, physicians, or other health care providers may have an impact on the quality of care, and modify the approach to the patient accordingly
- Respond to a patient's non-verbal communication to enhance communication
- Manage disagreements and emotionally charged conversations
- Adapt to the unique needs and preferences of each patient and to his or her clinical condition and circumstances
 - Adapt to the unique communication needs of children
 - Adapt to the unique communication needs of patients who are deaf or hard of hearing, and/or who have speech and/or voice disorders

2. Elicit and synthesize accurate and relevant information, incorporating the perspectives of patients and their families

2.1 Use patient-centred interviewing skills to effectively gather relevant biomedical and psychosocial information

- Explore patients' beliefs, concerns, and expectations about the origin, nature, and management of their illness
- Assess the impact of such factors as age, gender, ethno-cultural background, social support, and emotional influences on a patient's illness
- Recognize the psychological, occupational, and social consequences of disorders of the head and neck, including chronic debilitating conditions and end-of-life discussions
- Recognize the psychological, occupational and social consequences of speech and voice disorders particularly relevant to vocational demands

2.2 Provide a clear structure for and manage the flow of an entire patient encounter

2.3. Seek and synthesize relevant information from other sources, including the patient's family, with the patient's consent

3. Share health care information and plans with patients and their families

- Share information and explanations that are clear, accurate, and timely while checking for patient and family understanding
- Disclose harmful patient safety incidents to patients and their families accurately and appropriately

4. Engage patients and their families in developing plans that reflect the patient's health care needs and goals

- Facilitate discussions with patients and their families in a way that is respectful, non-judgmental, and culturally safe
- Assist patients and their families to identify, access and make use of information and communication technologies to support their care and manage their health
- Use communication skills and strategies that help patients and their families make informed decisions regarding their health
 - Use translation services as needed

5. Document and share written and electronic information about the medical encounter to optimize clinical decision-making, patient safety, confidentiality, and privacy

- Document clinical encounters in an accurate, complete, timely, and accessible manner, in compliance with regulatory and legal requirements
- Communicate effectively using a written health record, electronic medical record, or other digital technology
- Share information with patients and others in a manner that respects patient privacy and confidentiality, and enhances understanding

Collaborator

- 1. Work effectively with physicians and other colleagues in the health care professions**
 - Establish and maintain positive relationships with physicians and other colleagues in the health care professions to support relationship-centred collaborative care
 - Negotiate overlapping and shared responsibilities with physicians and other colleagues in the health care professions in episodic and ongoing care
 - Recognize, value, and utilize the expertise of other team members, including but not limited to audiology, speech language pathology, radiation oncology, pediatrics, medical imaging, and anesthesiology
 - Contribute individual expertise to interprofessional teams
 - Engage in respectful shared decision-making with physicians and other colleagues in the health care professions
 - Contribute to discussions at interprofessional conferences
- 2. Work with physicians and other colleagues in the health care professions to promote understanding, manage differences, and resolve conflicts**
 - Show respect toward collaborators
 - Implement strategies to promote understanding, manage differences, and resolve conflict in a manner that supports a collaborative culture
- 3. Hand over the care of a patient to another health care professional to facilitate continuity of safe patient care**
 - Determine when care should be transferred to another physician or health care professional
 - Demonstrate safe handover of care, using both verbal and written communication, during a patient transition to a different health care professional, setting, or stage of care

Leader

- 1. Contribute to the improvement of health care delivery in teams, organizations, and systems**
 - Apply the science of quality improvement to contribute to improving systems of patient care
 - Participate in a culture that promotes patient safety
 - Analyze patient safety incidents to enhance systems of care
 - Use health informatics to improve the quality of patient care and optimize patient safety
- 2. Engage in the stewardship of health care resources**
 - Allocate health care resources for optimal patient care
 - Apply evidence and management processes to achieve cost-appropriate care

3. Demonstrate leadership in professional practice

- Demonstrate leadership skills to enhance health care systems
- Facilitate change in health care to enhance services and outcomes

4. Manage career planning, finances, and health human resources in a practice

- Set priorities and manage time to integrate practice and personal life
- Manage a career and a practice
- Implement processes to ensure personal practice improvement

Health Advocate

1. Respond to an individual patient's health needs by advocating with the patient within and beyond the clinical environment

- Work with patients to address determinants of health that affect them and their access to needed health services or resources
 - Facilitate patient access to local and national resources available for patients who are deaf or hard of hearing
- Work with patients and their families to increase their opportunities to adopt healthy behaviours
- Incorporate disease prevention, health promotion, and health surveillance activities into interactions with individual patients
 - Promote protection and conservation of hearing at home and at work
 - Promote risk reduction of malignancy of the head and neck through smoking cessation, responsible alcohol use, ultraviolet A and B (UVA/UVB) protection, and human papillomavirus (HPV) vaccination for girls and boys
 - Promote screening for and management of early childhood hearing and communication disorders
 - Promote choking prevention in children
 - Minimize risk of otitis media by encouraging a healthy environment, including smoking cessation, and encouraging breastfeeding for newborns

2. Respond to the needs of the communities or populations they serve by advocating with them for system-level change in a socially accountable manner

- Work with a community or population to identify the determinants of health that affect its members
- Improve clinical practice by applying a process of continuous quality improvement to disease prevention, health promotion, and health surveillance activities
- Contribute to a process to improve health in the community or population they serve

- Promote policies that encourage early identification of patients presenting with disorders of the head and neck through screening programs for hearing impairment and malignancy
- Educate other health care professionals and the public regarding common head and neck problems that benefit from early intervention
- Educate and advocate for recommended management strategies (for example, use of guidelines) to prevent antimicrobial resistance by encouraging rational antibiotic use
- Encourage adherence to immunization schedules

Scholar

1. Engage in the continuous enhancement of their professional activities through ongoing learning

- Develop, implement, monitor, and revise a personal learning plan to enhance professional practice
- Identify opportunities for learning and improvement by regularly reflecting on and assessing their performance using various internal and external data sources
- Maintain a surgical procedure log, surgical evaluation forms
- Engage in collaborative learning to continuously improve personal practice and contribute to collective improvements in practice

2. Teach students, residents, the public, and other health care professionals

- Recognize the influence of role-modeling and the impact of the formal, informal, and hidden curriculum on learners
- Promote a safe learning environment
- Ensure patient safety is maintained when learners are involved
- Plan and deliver a learning activity during COCLIA and Grand Round
- Provide feedback to enhance learning and performance
- Assess and evaluate learners, teachers, and programs in an educationally appropriate manner

3. Integrate best available evidence into practice

- Recognize practice uncertainty and knowledge gaps in clinical and other professional encounters, and generate focused questions that can address them
- Identify, select, and navigate pre-appraised resources
- Critically evaluate the integrity, reliability, and applicability of health-related research and literature for Journal club presentation
- Integrate evidence into decision making in their practice of OTLHNS

4. Contribute to the creation and dissemination of knowledge and practices applicable to health

- Demonstrate an understanding of the scientific principles of research and scholarly inquiry and the role of research evidence in health care
- Identify ethical principles for research and incorporate them into obtaining informed consent, considering potential harms and benefits, and considering vulnerable populations

- Contribute to the work of a research program in OTLHNS
- Pose questions amenable to scholarly investigation in OTLHNS and select appropriate methods to address them
- Summarize and communicate to professional and lay audiences, including patients and their families, the findings of relevant research and scholarly inquiry

Professional

1. Demonstrate a commitment to patients by applying best practices and adhering to high ethical standards

- Exhibit appropriate professional behaviours and relationships in all aspects of practice, demonstrating honesty, integrity, humility, commitment, compassion, respect, altruism, respect for diversity, and maintenance of confidentiality
- Demonstrate a commitment to excellence in all aspects of practice
- Recognize and respond to ethical issues encountered in practice, including but not limited to Deaf culture, end-of-life issues, consent in children, and driving restrictions related to vertigo or obstructive sleep apnea (OSA)
- Recognize and manage conflicts of interest
- Exhibit professional behaviours in the use of technology-enabled communication

2. Demonstrate a commitment to society by recognizing and responding to the social expectations in health care

- Demonstrate accountability to patients, society, and the profession by responding to societal expectations of physicians
- Demonstrate a commitment to patient safety and quality improvement

3. Demonstrate a commitment to the profession by adhering to standards and participating in physician-led regulation

- Fulfil and adhere to the professional and ethical codes, standards of practice, and laws governing practice
- Recognize and respond to unprofessional and unethical behaviours in physicians and other colleagues in the health care professions
- Participate in peer assessment and standard-setting

4. Demonstrate a commitment to physician health and well-being to foster optimal patient care

- Exhibit self-awareness and manage influences on personal well-being and professional performance
- Manage personal and professional demands for a sustainable practice throughout the physician life cycle
- Promote a culture that recognizes, supports, and responds effectively to colleagues in need