

This document is to be used in conjunction with the *Pathway to Competence User Guide*, which is available on the Royal College’s web site.

*This document applies to residents who have not yet entered the stage containing revised EPAs.*

<b>MEDICAL EXPERT MILESTONES: RESIDENCY</b>				
	<b>Transition to discipline</b>	<b>Foundations of discipline</b>	<b>Core of discipline</b>	<b>Transition to practice</b>
<b>1. Practise medicine within their defined scope of practice and expertise</b>				
1.1. Demonstrate a commitment to high-quality care of their patients		Demonstrate compassion and a commitment to high-quality care and for patients F6		Demonstrate a commitment to high-quality care of their patients
1.2. Integrate the CanMEDS Intrinsic Roles into their practice of Otolaryngology – Head and Neck Surgery	Explain how the Intrinsic Roles need to be integrated in practice of Otolaryngology – Head and Neck Surgery to deliver optimal patient care	Demonstrate the application of the CanMEDS Intrinsic Roles when managing patients under supervision	Integrate the CanMEDS Intrinsic Roles into their practice of Otolaryngology – Head and Neck Surgery	
1.3. Demonstrate the competencies of Surgical Foundations		Apply the competencies of Surgical Foundations	Consolidate the competencies of Surgical Foundations	
1.4. Apply knowledge of the clinical and biomedical sciences relevant to Otolaryngology – Head and Neck Surgery		Apply knowledge of clinical and biomedical sciences as relevant to Otolaryngology – Head and Neck Surgery F1a F3a F5a F7a F8 • Embryology	Apply a broad base and depth of knowledge in the basic and clinical sciences relevant to Otolaryngology – Head and Neck Surgery C5 C14a C16a C18a	Apply a broad base and depth of knowledge in clinical and biomedical sciences to manage the breadth of patient presentations in Oto - HNS TTP2

- Anatomy
- Histology
- Neuroanatomy
- Physiology
- Pathophysiology
- Pathology
- Microbiology
- Biochemistry
- Genetics
- Immunology
- Pharmacology

**Apply knowledge of tumorigenesis of benign neoplasms and cancers of the head and neck** C13a

**Apply knowledge of the physics of sound, voice, and speech production** C12a

**Apply knowledge of neurophysiology and neuropsychology of hearing perception** F5a

**Apply knowledge of cutaneous anatomy, aesthetic subunits, relaxed skin tension lines and non-distortable landmarks of the face** F6

**Apply knowledge of common fracture patterns of the facial skeleton and their mechanisms of**

Laryngology

- Anatomy and physiology of upper aerodigestive system related to swallowing, including phases of normal swallowing C5

Head and Neck Surgery

- principles of diagnosis, treatment, and adjuvant therapy for salivary gland neoplasia
- endocrinologic and metabolic pathophysiology C14a
- pharmacology pertaining to management of head and neck neoplasia and edocrinologic/metabolic disorders C14a

Facial Plastic and Reconstructive Surgery

- principles of restoration and enhancement of form and function including but not limited to: C16a
  - principles of cervicofacial aesthetic surgery C16a
  - biomechanical characteristics of skin and bone in the facial region as they relate to techniques used in facial plastic and reconstructive

		<p><b>injury</b> F7a</p> <p><b>Apply knowledge of medication dosing in pediatric patients</b> F4a</p> <p>Apply knowledge in clinical and biomedical sciences as they apply to the diagnostic techniques/procedures relevant to Otolaryngology – Head and Neck Surgery: F5a</p> <ul style="list-style-type: none"> <li>tuning forks F5a</li> <li>conventional audiometry (including but not limited to tympanometry and stapedial reflex testing) and otoacoustic emission testing F5a</li> <li>audiological assessments in different age groups F5a</li> </ul> <p>Apply the principles of diagnostic imaging F1a C14a C20</p>	<p>surgery including tissue expansion, and plating maxillofacial fractures C16a</p> <ul style="list-style-type: none"> <li>principles and techniques of facial reconstruction, including local and regional flaps and grafts C16a</li> <li>principles and techniques of facial reanimation</li> <li>principles of trauma management as it pertains to the maxillofacial region</li> <li>maxillofacial structural, cosmetic and functional principles including but not limited to facial buttresses, occlusion, and orbital function</li> </ul>	
		<p>Apply clinical and biomedical sciences to manage patient presentations in Otolaryngology – Head and Neck Surgery: F3a F4a F5a</p> <ul style="list-style-type: none"> <li>epistaxis</li> <li>nasal fracture</li> <li>peritonsillar abscess</li> <li>neck mass/swelling</li> <li>airway management</li> </ul>	<p><b>Apply a broad base and depth of knowledge in clinical and biomedical sciences to the medical and surgical management of the breadth of patient presentations in Otolaryngology – Head and Neck Surgery:</b> C1 C6 C8a C9a C9d C12a C13a C14a C16a <b>C18a</b> C19a C20</p> <p><u>General Otolaryngology</u></p> <ul style="list-style-type: none"> <li>head and neck</li> </ul>	

		<ul style="list-style-type: none"> <li>infections and inflammatory conditions and other pharyngeal and adenotonsillar disorders in both children and adults</li> <li>otitis externa</li> <li>acute otitis media</li> <li>hearing loss</li> <li>dizziness</li> <li>acute and chronic sinusitis</li> <li>nasal obstruction</li> <li>hoarseness and dysphagia</li> <li>neck mass or swelling</li> <li>post-operative head and neck wounds</li> <li>facial lacerations</li> <li>facial fractures</li> <li>acute and chronic wounds</li> </ul>	<p>manifestations of systemic disease</p> <ul style="list-style-type: none"> <li>blunt and penetrating neck trauma</li> <li>laryngeal trauma</li> <li>acute and chronic infections of the head and neck</li> <li>superficial and deep neck space infections</li> <li>airway obstruction and acute airway emergencies</li> <li>sleep disordered breathing, including obstructive sleep apnea and snoring, in both children and adults</li> <li>non-neoplastic disorders of the salivary glands</li> <li>epistaxis</li> <li>nasal obstruction and rhinorrhea</li> <li>middle ear disorders in both children and adults</li> <li>disorders of the external ear</li> <li>complications of treatment and management, including iatrogenic injury</li> </ul>	
	<p>Demonstrate an awareness of the spectrum of diseases and conditions affecting children that require prompt attention, including but not limited to airway compromise, post-operative complications, and the toxic</p>	<p><b>Knowledge of specific procedural steps: Understands steps of procedure, potential risks, and means to avoid/overcome them</b> <small>F1b</small>  <small>F2 F3b F4b F5b F7b C4 C7 C8b C9b C9c C10 C11 C12b C13b C14b C15 C16b C17 C18b C19b C19c</small></p>	<p><u>Pediatric Otolaryngology</u></p> <ul style="list-style-type: none"> <li>infectious and inflammatory airway conditions</li> <li>neoplastic and vascular anomalies</li> <li>congenital and inherited conditions</li> </ul>	

	patient		<ul style="list-style-type: none"> <li>• pediatric airway obstruction, both acute and non-acute, and the determination of the urgency of intervention</li> <li>• speech, hearing, voice, and swallowing disorders</li> <li>• allergic, inflammatory and neoplastic disorders of the nasal cavity and septum</li> <li>• acute and chronic inflammatory and infectious disorders of the paranasal sinuses</li> <li>• complications of infections of the paranasal sinuses</li> <li>• orbital issues including trauma, infection, and inflammatory disorders such as exophthalmos of Graves disease</li> <li>• anterior skull base including cerebrospinal fluid leaks, meningoencephalocles, iatrogenic and external trauma</li> </ul>	
			<p><u>Otology</u></p> <ul style="list-style-type: none"> <li>• acute and chronic infections or inflammatory diseases of the external and middle ear and their associated complications</li> <li>• tinnitus (pulsatile and nonpulsatile)</li> </ul>	

			<ul style="list-style-type: none"> <li>• Eustachian (auditory) tube disorders</li> <li>• non-infectious/inflammatory conditions affecting the ear (i.e. otosclerosis)</li> <li>• congenital and genetic causes of hearing and vestibular disorders</li> <li>• congenital disorders of the ear</li> <li>• neoplastic conditions of the outer and middle ear and mastoid</li> <li>• temporal bone trauma, physical, chemical, acoustic and barotrauma</li> <li>• conditions affecting the ear</li> </ul>	
			<p><u>Neurotology</u></p> <ul style="list-style-type: none"> <li>• profound hearing loss, including the ethical and surgical issues surrounding provision of cochlear implantation and Deaf culture</li> <li>• neoplasms of the lateral skull base</li> <li>• trauma to skull base, including but not limited to traumatic facial nerve paralysis and cerebrospinal fluid leakage</li> <li>• balance disorders, both central and peripheral</li> <li>• systemic conditions</li> </ul>	

			<p>affecting the ear</p> <ul style="list-style-type: none"> <li>• ototoxicity</li> <li>• age-related audiovestibular disorders</li> <li>• congenital and genetic disorders of the inner ear</li> <li>• disorders of the facial nerve, including congenital disorders, Bell's (idiopathic/viral) palsy, Ramsey Hunt (Herpes zoster oticus), facial schwannoma/neuroma, and complications of systemic disorders</li> <li>• complications of middle ear/mastoid disease, including infectious diseases</li> <li>• other causes of facial paralysis: oncological disorders; upper versus lower motor neuron disorders;</li> <li>• intratemporal versus extratemporal causes</li> </ul>	
			<p><u>Rhinology</u></p> <ul style="list-style-type: none"> <li>• infectious and inflammatory (allergic and nonallergic) conditions (CJ)</li> <li>• bacteriology and bacterial resistance as related to sinusitis <sup>C9a</sup></li> </ul>	

			<ul style="list-style-type: none"> <li>• pathophysiology of chronic sinusitis with and without polyposis C9a</li> <li>• principles of therapeutic agents for allergic disorders of the nose and Chronic Rhinosinusitis with nose polyps (CRSwNP) and Chronic Rhinosinusitis without nasal polyps (CRSsNP), including topical and systemic therapies C9a</li> <li>• benign and malignant tumours (CS)</li> <li>• diseases of the anterior skull base (CS)</li> <li>• trauma to the nose (CJ)</li> <li>• trauma to the paranasal sinuses (CS)</li> </ul>	
			<p><u>Laryngology</u></p> <ul style="list-style-type: none"> <li>• Dysphonia including that resulting from:             <ul style="list-style-type: none"> <li>○ infectious and inflammatory conditions C12a</li> <li>○ trauma C12a</li> <li>○ benign and malignant tumours C12a</li> <li>○ neurologic voice disorders C12a</li> <li>○ the professional voice C12a</li> </ul> </li> </ul>	

Head and Neck Surgery

- benign neoplasms and their management
- malignant neoplasms of the mucosa, soft tissue, and specialized tissue, including mucosa, mesenchyma, and neuroendocrine tissues
- medical and surgical conditions of the thyroid
- medical and surgical conditions of the parathyroid
- medical and surgical conditions of the salivary glands
- chronic pain, malnutrition, wound care, and other issues in the palliative management of patients with head and neck neoplasia
- impact, adverse effects and complications of neoplasia and antineoplastic treatments on normal anatomic structures and physiology of the head and neck
- psychological impact of head and neck neoplasia and treatment for both patients and their families

			<ul style="list-style-type: none"> <li>• psychology of addictions, including but not limited to smoking cessation strategies and management of alcohol withdrawal</li> <li>• rehabilitation principles pertinent to patients treated for head and neck cancer, (especially principles for rehabilitation of speech and swallowing)</li> </ul>	
			<p><u>Facial Plastic and Reconstructive Surgery</u></p> <ul style="list-style-type: none"> <li>• congenital anomalies of the cervicofacial region</li> <li>• <b>effects of aging in the cervicofacial region including skin, soft tissue, and bone</b> C18a</li> <li>• <b>wound healing abnormalities, including the keloid scar</b> C18a</li> <li>• post-traumatic conditions</li> <li>• <b>aesthetic anomalies of the cervicofacial region</b> C18a</li> <li>• benign and malignant lesions of the skin</li> </ul>	
			Apply a broad base and depth of knowledge in clinical and	

			<p>biomedical sciences as they apply to the diagnostic techniques/procedures relevant to Otolaryngology – Head and Neck Surgery: C5 C9a C12a C19a C20</p> <ul style="list-style-type: none"> <li>• principles of diagnostic imaging             <ul style="list-style-type: none"> <li>○ recognition of normal structures and orientation within the temporal bone and skull base, facial skeleton, paranasal sinuses, soft tissue of the oral cavity, pharynx, larynx and neck</li> <li>○ application of diagnostic imaging within facial plastic and reconstructive surgery, including interpretation of maxillofacial trauma imaging</li> <li>○ interpretation of diagnostic imaging of the head and neck including the temporal bone and skull base, facial skeleton, paranasal sinuses, soft tissue of the oral cavity, pharynx, larynx and neck</li> <li>○ identification of appropriate imaging and/or investigations for</li> </ul> </li> </ul>	
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			<p>ear disorders including but not limited to osteomyelitis of skull base; suspected complication of chronic otitis media</p> <ul style="list-style-type: none"> <li>• principles of diagnostic endoscopy as relevant to adult and/or pediatric patients C12a</li> <li>• objective voice testing, and electrophysiological techniques C12a</li> <li>• tests of nasal function and olfactory disorders C9a</li> <li>• aerodynamic testing C12a</li> <li>• hearing assessments C19a, including but not limited to             <ul style="list-style-type: none"> <li>○ otoacoustic emissions (OAEs)</li> <li>○ electrocochleography,</li> <li>○ auditory brainstem response (ABR)</li> <li>○ cortical auditory evoked responses</li> <li>○ impedance/tympanometry</li> </ul> </li> <li>• vestibular assessment, including but not limited to principles of performance, and interpretation of</li> </ul>	
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			<p>electro/videonystagmography, computerized dynamic posturography, Gans sensory organization protocol, rotational chair assessment, head impulse testing, and vestibular evoked myogenic potentials <sup>C20</sup></p> <ul style="list-style-type: none"> <li>• electrophysiological assessments, including but not limited to intraoperative monitoring of cranial nerves and electroneurography</li> <li>• techniques for testing children with special needs</li> <li>• assessment methods used specifically in children <sup>C12a</sup></li> </ul>	
			<p><b>Apply a broad base and depth of knowledge in clinical and biomedical sciences as they apply to the therapeutic techniques/procedures relevant to Otolaryngology – Head and Neck Surgery:</b> <sup>C12a</sup>  <b>C13a</b> <sup>C16a C18a C19a C20</sup></p> <p><u>Otology</u></p> <ul style="list-style-type: none"> <li>• principles of use of surgical and non-surgical assistive devices, including but not limited</li> </ul>	

			<p>to hearing aids, bone conduction hearing devices, cochlear implants, and middle ear implants C19a</p> <ul style="list-style-type: none"> <li>• Tinnitus maskers and environmental masking</li> <li>• Cognitive behavioural therapy, tinnitus retraining therapy</li> <li>• Use of ear wick and microdebridement</li> <li>• Other therapeutic options including possible interventional radiology</li> </ul>	
			<p><u>Neurotology</u></p> <ul style="list-style-type: none"> <li>• principles of laser therapy for surgical procedures in the ear</li> <li>• principles underlying the effect of topical and systemic medications and their therapeutic and ototoxic effects C19a C20</li> <li>• principles underlying the use of intratympanic injections C19a</li> <li>• use of antiviral therapy and corticosteroids</li> </ul>	
			<p><u>Rhinology</u></p> <ul style="list-style-type: none"> <li>• principles of image</li> </ul>	

			guidance systems and their application to surgery (CJ)	
			<p><u>Laryngology</u></p> <ul style="list-style-type: none"> <li>principles of therapeutic procedures related to both endoscopic and open approaches C12a</li> <li>principles and techniques of laryngeal augmentation and laryngeal framework surgery</li> <li>principles of laser therapy of the larynx C12a</li> </ul>	
			<p><u>Head and Neck Surgery</u></p> <ul style="list-style-type: none"> <li><b>principles of different oncologic treatment modalities (including surgery, radiation therapy, chemotherapy, and immunotherapy) C13a</b></li> <li>surgical approaches to the skull base and orbit</li> <li>principles of management of cerebral spinal fluid and brain for surgeries involving the skull base</li> <li><b>principles of laser microsurgical resection, cryotherapy, robotic</b></li> </ul>	

			<p><b>surgery and/or electro surgery</b> C13a C16a C18a</p> <ul style="list-style-type: none"> <li>• reconstructive surgical options and their advantages, disadvantages, and complications</li> <li>• principles of skin grafts, pedicle flaps, and free flaps</li> <li>• principles governing use of local and systemic chemo- and immunotherapeutic agents C16a</li> <li>• principles of oncologic management of cutaneous malignancies of the face, head, and neck C16a</li> </ul>	
			<p><u>Facial Plastic and Reconstructive Surgery</u></p> <ul style="list-style-type: none"> <li>• principles of therapeutic radiation C16a</li> <li>• principles and techniques of frozen section diagnosis and Mohs micrographic surgery C16a</li> <li>• intra-operative design and inset of regional or free flaps</li> </ul>	

<p>1.5. Perform appropriately timed clinical assessments with recommendations that are presented in an organized manner</p>		<p>Perform focused clinical assessments with recommendations that are well-documented</p> <p><b>Recognize urgent issues that may need the involvement of more senior colleagues and engage them immediately</b></p> <p>F1a F3a F4a F5a F7a</p>	<p>Perform clinical assessments that address the breadth and depth of issues in each case C8a C14a</p> <p><b>Assess and document the extent of the disease including rating scores where appropriate</b> C9d</p>	
<p>1.6. Carry out professional duties in the face of multiple, competing demands</p>		<p>On the basis of patient-centered priorities, seek assistance to prioritize multiple competing tasks that need to be addressed</p>	<p><b>Maintain a duty of care and patient safety while balancing multiple responsibilities</b> C2</p> <p>Prioritize patients on the basis of clinical presentations C2</p>	<p>Carry out professional duties in the face of multiple, competing demands TTP2 TTP3</p>
<p>1.7. Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice</p>	<p>Identify clinical situations in which complexity, uncertainty, and ambiguity may play a role in decision-making</p>	<p>Develop a plan that considers the current complexity, uncertainty, and ambiguity in a clinical situation</p> <p><b>Recognize and respond to the complexity and uncertainty with managing an anticipated difficult airway by seeking proper assistance</b></p> <p>F9</p>	<p>Adapt care as the complexity, uncertainty, and ambiguity of the patient’s clinical situation evolves C14a</p> <p>Seek assistance in situations that are complex or new</p>	<p>Recognize and respond to the complexity, uncertainty, and ambiguity inherent in medical practice</p>

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

<p>2.1. Prioritize issues to be addressed in a patient encounter</p>	<p>Identify the concerns and goals of the patient and family during the encounter</p>	<p><b>Identify and recognize life threatening or emergent issues:</b> F1a F3a</p>	<p><b>Consider clinical urgency, feasibility, availability of</b></p>	<p>Prioritize which issues need to be addressed during future visits or with other</p>
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	<p>TTD1</p>	<ul style="list-style-type: none"> <li>• upper airway obstruction/compromise,</li> <li>• hemorrhage</li> <li>• infection</li> <li>• severe systemic effects of sepsis</li> <li>• dehydration</li> <li>• issues of patients with head trauma</li> </ul> <p>Iteratively establish priorities, considering the perspective of the patient and family (including values and preferences) as the patient’s situation evolves</p> <p>Recognize patients at risk of aspiration of gastric contents into the airway F9</p> <p>Identify concerns for flap viability and seek assistance of members of the microsurgical team</p>	<p><b>resources, and comorbidities in determining priorities to be addressed during the current encounter or during future visits or with other health care practitioners c2</b></p> <p>C5 C8a C9a</p>	<p>health care practitioners</p>
<p>2.2. Elicit a history, perform a physical exam and select appropriate investigations, and interpret their results for the purpose of diagnosis and management, disease prevention, and health promotion</p>	<p><b>Elicit a basic head and neck history</b> TTD1</p> <p><b>Synthesize patient information including symptoms, differential diagnosis, and treatment plan clearly and concisely</b> TTD1</p>	<p><b>Elicit a complete history for injury or trauma to the head and neck</b> F7a</p> <ul style="list-style-type: none"> <li>• cause, mechanism and time of injury</li> <li>• level of consciousness,</li> <li>• headache,</li> <li>• neck pain,</li> <li>• nausea/vomiting,</li> </ul>	<p><b>Elicit a history, perform a physical exam, select appropriate investigations, and interpret their results</b> c1</p> <p>C6 C9a C9d C14a C16a C18a</p> <p><b>Perform a focused history and physical exam to classify phase of dysphagia: oral; oro-pharyngeal; esophageal</b> c5</p> <p><b>Identify risk factors for</b></p>	<p>Focus the clinical encounter, and perform it in a time-effective manner without excluding key elements</p>

- change of vision,
- epistaxis,
- CSF leak,
- rhinorrhea, otorrhea,
- hearing loss,
- vertigo,
- focal motor deficits, paresthesia,
- cranial nerve function

**Elicit a focused history and perform a physical exam to identify patients with potential for a difficult airway** F8 F9

Elicit a history of risk factors for anastomotic failure in head and neck reconstruction:

- presence of underlying comorbidity
- presence of anticoagulant therapy

Perform a primary and secondary assessment as per ATLS guidelines

**Perform a physical exam with attention to risk of cervical spine injury** F7a

Perform a detailed secondary history and neurological assessment after the initial stabilization

**recurrent disease** C9d

**Identify risk factors pertaining to individual cases of head and neck neoplasia** C13a

**Identify patients experiencing or at risk for aspiration** C5

Apply the Glasgow coma scale in a patient with altered level of consciousness

**Identify and differentiate normal and abnormal findings in history and physical exam** F1a F3a F4a F5a

**Describe the size, components, and specific characteristics of a wound including special functional and aesthetic considerations** F6

Identify post-operative factors that could compromise free flap survival including but not limited to deep neck infection, neck hematoma, salivary fistula, compressive dressing

Recognize signs of a compromised flap

**Identify predictors of a difficult airway on physical examination such as a large overbite, large tongue, narrow mouth opening, short chin and/or Mallampati score** F9

	<p><b>Perform a head and neck physical exam</b> TTD1</p> <ul style="list-style-type: none"> <li>• utilization of microscope for otoscopy</li> <li>• pneumatic otoscopy TTD1</li> <li>• tuning fork tests (Weber and Rinne) TTD1</li> <li>• use of headlight for anterior rhinoscopy and examination of oral cavity TTD1</li> <li>• palpation of neck, including thyroid TTD1</li> <li>• examination of cranial nerves TTD1</li> <li>• use of rigid and flexible endoscope for examination of upper aerodigestive tract</li> </ul>	<p><b>Perform and interpret findings of office-based exams:</b> F3a F5a</p> <ul style="list-style-type: none"> <li>• perform otomicroscopy F5a</li> <li>• interpret basic puretone audiogram/ tympanogram F5a</li> <li>• flexible and/or rigid endoscopy</li> <li>• flexible and/or rigid nasopharyngolaryngoscopy with or without topical anaesthesia F3a</li> <li>• Dix-Hall-Pike test</li> <li>• vestibular exam, including head thrust, gait tests, cranial nerve, cerebellar and oculomotor exam</li> </ul>	<p><b>Perform and interpret findings of office and /or clinic-based exams</b> C9d C12a C19a C20:</p> <ul style="list-style-type: none"> <li>• neuro-vestibular history and physical examination C20</li> <li>• neuro-otological examination C19a</li> <li>• stroboscopy</li> <li>• voice and airway analysis C12a</li> <li>• endoscopic culture</li> </ul> <p>Perform an appropriate workup for childhood sensory neural hearing loss, including but not limited to genetic testing, imaging, and cytomegalovirus testing</p>	
		<p><b>Develop a specific differential diagnosis relevant to the patient’s presentation for common Otolaryngology – Head and Neck Surgery presentations</b> F1a F3a F4a F5a</p>	<p><b>Develop a differential diagnosis, evaluation plan and treatment plan based on findings of appropriate investigations</b> C9a</p>	
		<p><b>Select and interpret appropriate investigations for</b></p>	<p><b>Select and interpret appropriate investigations for any Otolaryngology –</b></p>	

**common Otolaryngology – Head and Neck Surgery presentations, based on a differential diagnosis** F3a

F5a F7a

- laboratory testing,
- vestibular and audiological testing
- diagnostic imaging of the head and neck
- diagnostic imaging
- biopsy, (tissue and/or fine-needle aspiration)

Select, prioritize and interpret appropriate additional imaging, following initial stabilization/management of life-threatening or acute conditions

**Select and interpret laboratory and imaging investigations** F1a

**Head and Neck Surgery presentation based on a differential diagnosis** C1 C5 C9a

C9d C14a C16a

- **laboratory testing** C5
- vestibular and audiological testing
- manometry and/or PH monitoring
- flexible nasopharyngolaryngoscopy
- fiberoptic endoscopic examination of swallowing (FEES)
- **diagnostic imaging** C5
  - **thyroid ultrasound**
  - **barium swallow**
  - **CT**
  - **MRI**
- biopsy (tissue and/or fine needle aspiration)
- diagnostic endoscopy
- aerodynamic testing

Integrate key maxillofacial structural cosmetic and functional principles into the diagnosis and management of facial fractures, and their complications such as temporomandibular (TMJ) disorders, and cerebrospinal fluid (CSF) leak

			<p><b>Select and interpret vestibular and/or audiological investigations</b> C19a</p>	
<p>2.3. Establish goals of care in collaboration with patients and their families, which may include slowing disease progression, treating symptoms, achieving cure, improving function, and palliation</p>		<p><b>Work with patients and their families to understand relevant options for care</b> F4a</p>	<p>Establish goals of care, which may include achieving cure, improving function, slowing disease progression, treating symptoms, and palliation, in collaboration with patients and their families C5 C16a</p> <p><b>Address the impact of the medical condition on the patient’s ability to pursue life goals and purposes</b> C6 C12a C14a C19a</p> <p><b>Share concerns (in a constructive and respectful manner) with patients and their families about their goals of care when they are not felt to be achievable</b> C12a C18a C19a</p>	
<p>2.4. Establish a patient-centred management plan that includes nonsurgical/medical management, pre-operative, peri-operative, and post-operative care</p>	<p>Propose initial management for common problems in Otolaryngology – Head and Neck Surgery TTD1</p>	<p><b>Develop, implement and document initial management plans for common problems in Otolaryngology – Head and Neck Surgery</b> F3a F4a</p> <ul style="list-style-type: none"> <li>• indication for admission</li> <li>• fluid management</li> <li>• analgesia</li> <li>• appropriate antimicrobial selection</li> </ul>	<p><b>Develop, implement, and document a management plan</b> C1 C6 C9a C9d C16a</p> <p><b>Recognize and establish a management plan for life threatening or emergent issues:</b> C8a</p> <ul style="list-style-type: none"> <li>• upper airway obstruction</li> <li>• hemorrhage</li> <li>• deep space neck infection</li> <li>• extension of infection</li> </ul>	<p><b>Establish management plans that consider all relevant aspects of the patient’s care</b> TTP2</p>

		<ul style="list-style-type: none"> <li>surgical procedural options</li> <li>timing/urgency of operative intervention</li> </ul> <p><b>Recognize and suggest an initial management plan for emergent issues</b> F3a F4a F7a F9</p> <ul style="list-style-type: none"> <li>Airway management including but not limited to anticipated difficult airway</li> <li>CSF leak</li> </ul>	from the paranasal sinuses	
		<p><b>Ensure that the patient and family are informed about the risks and benefits of each treatment option in the context of best evidence and guidelines</b> F3a F4a F5a</p>	<p><b>Ensure that the patient and family are informed about the risks and benefits of each treatment option in the context of best evidence and guidelines, including procedures for which the patient is referred to other surgeons</b> C19a</p> <ul style="list-style-type: none"> <li>bone anchored hearing aids</li> <li>stapedotomy</li> <li>cochlear implants</li> </ul>	
		<p><b>Discuss with the patient and family the degree of uncertainty inherent in all clinical situations</b> F3a</p>	Develop, in collaboration with a patient and his or her family, a plan to deal with clinical uncertainty	
		Demonstrate knowledge of intraoperative optimization and patient care	<p><b>Provide timely and adequate responses to complications and undesired side effects of treatment</b> C1 C9d</p>	

		<p>Demonstrate knowledge of immediate management modalities of the elevated ICP patient</p> <p>Describe the options for wound closure by sequentially applying the concept of the “reconstructive ladder”</p> <p><b>Select the most appropriate wound closure option for the wound and patient F6</b></p> <p>Apply techniques for post-operative monitoring of free flap including but not limited to refill, Doppler implantable or not, color, prick test, oedema, firmness</p>	<p><b>Establish a patient-centred management plan C19a</b></p>	
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**3. Plan and perform procedures and therapies for the purpose of assessment and/or management**

<p>3.1. Determine the most appropriate procedures or therapies</p>		<p><b>Describe the indications, contraindications, risks, and/or alternatives for a given procedure or therapy F4a F5a</b></p> <p>Describe to patients common procedures or therapies for common conditions in their discipline F5a</p> <p>Describe indications for use of adjuncts to bag mask ventilation F8</p>	<p>Describe the indications, contraindications, risks, and alternatives for a given procedure or therapy</p> <p><b>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 C8a C12a C14a C16a C18a</b></p> <p><b>Integrate planned</b></p>	<p>Determine the most appropriate procedures or therapies for the purpose of assessment and/or management TTP2</p>
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		<p>Describe indications and contra-indications for tracheal intubation and for use of supraglottic airway devices F8</p> <p>Understand the indications and risks of rapid sequence induction and intubation and their steps of execution F9</p> <p><b>Pre-procedure plan: Gather/assess required information to reach diagnosis and determine correct procedure required</b> F1b F2 F3b F4b F5b F7b C4 C7 C8b C9b C9c C10 C11 C12b C13b C14b C15 C16b C17 C18b C19b C19c</p>	<p><b>procedures or therapies into global assessment and management plans</b> C6 C14a C16a C18a</p>	
3.2. Obtain and document informed consent, explaining the risks and benefits of, and the rationale for, a proposed procedure or therapy		<p>Obtain informed consent for commonly performed medical and surgical procedures and therapies, under supervision F5a F6</p> <p>Document the consent discussion accurately F5a</p>	<p><b>Obtain informed consent for complex medical and surgical procedures and therapies</b> C9a C12a C14a C16a C18a</p> <p><b>Use shared decision-making in the consent process, taking risk and uncertainty into consideration</b> C6 C14a</p>	<p>Obtain and document informed consent, explaining the risks and benefits of, and the rationale for the proposed options</p>
3.3. Prioritize a procedure or therapy, taking into account clinical urgency and available resources	<p>Recognize and discuss the importance of the triaging and timing of a procedure or therapy</p>	<p><b>Consider urgency and potential for deterioration in advocating for the timely execution of a procedure or therapy</b> F1a</p>	<p><b>Triage a procedure or therapy, taking into account clinical urgency, potential for deterioration, and available resources</b> C14a</p> <p>Advocate for a patient’s procedure or therapy on the basis of urgency and available resources</p>	<p>Prioritize a procedure or therapy, taking into account clinical urgency, potential for deterioration, and available resources</p>

<p>3.4. Perform diagnostic and therapeutic procedures relevant to Otolaryngology – Head and Neck Surgery in a skilful and safe manner, adapting to unanticipated findings or changing clinical circumstances</p>	<p>Demonstrate effective procedure preparation, including the use of a pre-procedure time-out or safety checklist as appropriate</p>	<p><b>Prepare the equipment required to be immediately available for basic airway management</b> <sup>F8</sup></p> <p>Demonstrate preparation for emergent airway management, including but not limited to rigid bronchoscopy set up and tracheostomy set up</p> <p><b>Apply a stepwise approach to sedation/intubation in an uncomplicated patient</b> <sup>F8</sup></p> <p>Describe the use of specialized surgical tools and instruments</p> <ul style="list-style-type: none"> <li>• nerve stimulators</li> <li>• image guided systems</li> <li>• Endoscopies for anterior skull base</li> </ul>		<p><b>Select appropriate materials and equipment for the procedure</b> <sup>TTP1</sup></p> <p><b>Perform surgical procedures in a skilful and safe manner</b> <sup>TTP1</sup></p> <p>Manage unexpected intraoperative findings and perioperative issues, adjusting the procedure as appropriate <sup>TTP1</sup></p>
	<p>Set up and position the patient for a procedure</p> <p>Perform basic Otolaryngology – Head and Neck Surgery procedures in a skilful, fluid, and safe manner with minimal assistance:</p> <ul style="list-style-type: none"> <li>• maintenance of sterile technique</li> <li>• comprehensive examination including</li> </ul>	<p>Set up and position the patient for intubation <sup>F8</sup></p> <p><b>Administer local anesthesia</b> <sup>F6</sup></p> <p><b>Perform common Otolaryngology – Head and Neck Surgery procedures in a skilful, fluid, and safe manner with minimal assistance:</b> <sup>F6 F8</sup></p>	<p><b>Competently perform core Otolaryngology – Head and Neck Surgery procedures in a timely manner:</b> <sup>C13a C20</sup></p> <p><u>General Otolaryngology</u></p> <ul style="list-style-type: none"> <li>• biopsies, including fine needle aspirate (FNAB), punch, incisional, excisional, and/or open</li> <li>• biopsy of the temporal artery</li> </ul>	

<p>indirect and flex laryngoscopy</p> <ul style="list-style-type: none"> <li>• basic suturing and knot tying applying an understanding of the equipment/materials</li> </ul>	<ul style="list-style-type: none"> <li>• fine needle aspiration biopsy</li> <li>• bag mask ventilation</li> <li>• basic airway maneuvers to relieve airway obstruction, including chin lift/head tilt, jaw thrust and application of cpap</li> <li>• oropharyngeal airway insertion to assist ventilation</li> <li>• nasopharyngeal airway insertion to assist ventilation</li> <li>• direct laryngoscopy for endotracheal tube insertion and confirmation of placement using chest rise, breath sounds and capnography</li> <li>• insertion of supraglottic airway and confirmation of placement</li> <li>• extubation of an endotracheal tube</li> <li>• removal of supraglottic airway</li> <li>• laryngeal mask airway insertion and placement confirmation</li> <li>• videolaryngoscopy (glidescope) for endotracheal</li> </ul>	<ul style="list-style-type: none"> <li>• <b>upper aerodigestive flexible endoscopies with or without biopsy as it relates to tumour staging and treatment planning</b> C13a</li> <li>• diagnostic endoscopy</li> <li>• flexible or rigid laryngoscopy with or without foreign body extraction and/or biopsy and/or dilatation</li> <li>• flexible or rigid esophagoscopy with or without foreign body extraction and/or biopsy and/or dilatation</li> <li>• flexible or rigid bronchoscopy with or without foreign body extraction and/or biopsy and/or dilatation</li> <li>• flexible and/or rigid nasopharyngolaryngoscopy with or without foreign body extraction and/or biopsy</li> <li>• emergency surgical airway including cricothyroidotomy and awake tracheostomy including but not limited to emergent and complex</li> <li>• fistula repair (tracheo-cutaneous)</li> <li>• incision and drainage of deep neck space infections</li> <li>• penetrating and blunt</li> </ul>	
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			<p><u>Pediatric Otolaryngology</u></p> <ul style="list-style-type: none"> <li>biopsy of head and neck neoplasms</li> <li>otoplasty</li> <li>myringoplasty</li> <li>tympanoplasty</li> <li>myringotomy with ventilation tube insertion in complex patients, including but not limited to those with a cleft palate, Trisomy 21, Apert’s Syndrome, or other head and neck related syndrome</li> <li>pre-auricular sinus</li> </ul>	

		<p>adenotonsillectomy</p> <ul style="list-style-type: none"> <li>• microscopic ear examination with or without debridement and/or foreign body removal</li> <li>• myringotomy, with or without ventilation tube insertion</li> <li>• cerumen removal</li> <li>• cleaning of mastoid cavity</li> <li>• skin biopsy (including shave, punch, incisional, and excisional)</li> <li>• raising of skin flaps</li> <li>• wound closure</li> <li>• primary wound closure including appropriate selection of suture material, method of suture placement and technique</li> <li>• split/full thickness skin grafting</li> <li>• simple advancement, rotation or transposition flap</li> </ul>	<p>excision</p> <ul style="list-style-type: none"> <li>• branchial cleft sinus/cyst excision</li> <li>• thyroglossal duct cyst excision</li> <li>• infant tracheostomy</li> <li>• surgical management of floor of mouth lesions including ranula and sublingual gland excision</li> <li>• incision and drainage of neck abscesses</li> <li>• excision of neck nodes or other masses</li> <li>• management of vascular anomalies, both surgical excision and sclerotherapy</li> <li>• otomicroscopy and ear debridement (in clinic, awake)</li> </ul>	
			<p><u>Otology:</u></p> <ul style="list-style-type: none"> <li>• myringoplasty</li> </ul>	

			<ul style="list-style-type: none"> <li>• meatoplasty</li> <li>• tympanotomy</li> <li>• tympanoplasty</li> <li>• canaloplasty</li> <li>• ossiculoplasty</li> <li>• tympanomastoidectomy (Pediatric and adult), including both canal wall up (combined approach) and canal wall down approaches</li> <li>• mastoidectomy including both canal wall up (combined approach) and canal wall down approaches</li> </ul>	
			<p><u>Neurotology</u></p> <ul style="list-style-type: none"> <li>• intratympanic therapeutic injections</li> <li>• <b>particle repositioning maneuvers, including Epley maneuver and log roll maneuver</b> c20</li> </ul>	
			<p><u>Rhinology:</u></p> <ul style="list-style-type: none"> <li>• surgical management of epistaxis</li> <li>• biopsy of intranasal masses</li> <li>• debridement of the nasal cavities</li> <li>• limited endoscopic sinus surgery (nasal polypectomy, uncinectomy, maxillary antrostomy, and anterior</li> </ul>	<p>Independently perform the following procedures in a skilful and safe manner, adapting to unanticipated findings or changing clinical circumstances:</p> <p><u>Rhinology:</u></p> <ul style="list-style-type: none"> <li>• revision endoscopic sinus surgery</li> <li>• revision septoplasty</li> </ul>

			<p>ethmoidectomy)(JC)</p> <ul style="list-style-type: none"> <li>• endoscopic sinus surgery (ESS) complete sphenoethmoidectomy SC)</li> <li>• open sinus procedures, including Caldwell-Luc and trephine</li> <li>• septoplasty (JC)</li> <li>• turbinoplasty(JC)</li> <li>• debridement of ESS cavity</li> </ul>	
			<p><u>Laryngology:</u></p> <ul style="list-style-type: none"> <li>• diagnostic laryngoscopy, and esophagoscopy with or without foreign body extraction and/or biopsy and/or dilatation</li> <li>• microlaryngoscopy with or without removal of laryngeal/tracheal lesions</li> <li>• vocal fold injections</li> <li>• laser/ debridement procedures on the larynx</li> </ul>	
			<p><u>Head and Neck Surgery</u></p> <ul style="list-style-type: none"> <li>• simple submandibular gland excision (JC)</li> <li>• excision of neck mass (JC)</li> <li>• hemithyroidectomy (SC)</li> </ul>	

			<ul style="list-style-type: none"> <li>• superficial parotidectomy (SC)</li> <li>• parathyroidectomy (SC)</li> <li>• thyroidectomy (SC)</li> <li>• neck dissection (SC)</li> <li>• simple trans oral mucosal resections (SC)</li> <li>• open neck biopsies (JC)</li> </ul>	
			<p><u>Facial Plastic and Reconstructive Surgery</u></p> <ul style="list-style-type: none"> <li>• regional anaesthesia of the head, face, and neck (JC)</li> <li>• Basic alignment and fixation of fractured or osteotomized bone with due consideration of functional, cosmetic and structural issues</li> <li>• intraoperative decision making and technical assistance during management of non-nasal facial fracture</li> <li>• cartilage graft (JC)</li> <li>• composite graft (auricular) (JC)</li> <li>• bone graft (calvarial) (JC)</li> <li>• local/locoregional flaps (JC)</li> <li>• rhinoplasty (SC)</li> <li>• facial trauma and reconstructive surgery</li> </ul>	

			<p>(JC)</p> <ul style="list-style-type: none"> <li>• scar revision (JC)</li> <li>• management of pigmented/vascular lesions of the skin (JC)</li> <li>• regional flaps</li> <li>• cosmetic cervicofacial surgery (SC)</li> <li>• complex trauma repair</li> <li>• resection of lesions with negative margins and reconstruction with appropriate reconstructive techniques</li> </ul>	
		<p>Provide assistance with neurosurgical procedures in the operating room:</p> <ul style="list-style-type: none"> <li>• burr hole drilling with assistance</li> <li>• craniotomy</li> <li>• wound closure</li> <li>• apply proper dressing</li> </ul>	<p><b>Perform flexible nasopharyngolaryngoscopy and/or FEES, as relevant, and interpret the results</b> <sup>c5</sup></p> <p><b>Perform post-sinus surgery debridement</b> <sup>c9d</sup></p> <p>Demonstrate an understanding of, and perform all or parts of the following Otolaryngology – Head and Neck Surgery procedures under supervision:</p> <p><u>Pediatric Otolaryngology</u></p> <ul style="list-style-type: none"> <li>• choanal atresia repair</li> <li>• cleft lip and palate repair</li> <li>• laryngeal cleft repair-open and endoscopic</li> <li>• laryngotracheal reconstruction</li> <li>• cricothyroid resection</li> </ul>	<p>Demonstrate an understanding of the following advanced procedures:</p> <p><u>Laryngology</u></p> <ul style="list-style-type: none"> <li>• laryngeal fracture repair</li> <li>• laryngeal framework surgery</li> </ul>

			<ul style="list-style-type: none"> <li>• slide tracheoplasty</li> <li>• piriform aperture stenosis repair</li> <li>• microtia repair</li> <li>• aural atresia repair</li> </ul> <p><u>Head and Neck</u></p> <ul style="list-style-type: none"> <li>• laryngectomy (SC)</li> <li>• oromandibular resection</li> <li>• maxillectomy</li> </ul> <p><u>Otology</u></p> <ul style="list-style-type: none"> <li>• procedures for bone anchored hearing aids</li> <li>• stapedotomy</li> <li>• cerebrospinal fluid (CSF) leak repair</li> <li>• excision of exostoses</li> </ul> <p><u>Neurotology</u></p> <ul style="list-style-type: none"> <li>• surgical excision of tumours of the middle ear/mastoid (including paraganglioma)</li> <li>• cochlear implant surgery</li> <li>• facial nerve decompression</li> <li>• labyrinthectomy</li> <li>• approaches to skull base, including translabyrinthine, middle fossa and suboccipital</li> </ul>	
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			<p>approaches</p> <ul style="list-style-type: none"> <li>• semicircular canal repair or plugging</li> <li>• petrous apicectomy</li> </ul> <p><u>Laryngology</u></p> <ul style="list-style-type: none"> <li>• thyroplasty type 1</li> </ul> <p><u>Facial Plastic Surgery</u></p> <ul style="list-style-type: none"> <li>• facial reanimation procedures (SC)</li> </ul>	
			<p>Perform Otolaryngology – Head and Neck Surgery procedures as part of a simulated learning activity:</p> <p><u>Rhinology:</u></p> <ul style="list-style-type: none"> <li>• frontal sinus trephine</li> <li>• drainage of intraorbital subperiosteal abscess</li> <li>• lateral canthotomy</li> <li>• orbital decompression for intraorbital hemorrhage</li> <li>• repair of iatrogenic cerebral spinal fluid leakage</li> </ul>	
		<p>Apply dressings for post-procedure care F6</p> <p><b>Establish and implement</b></p>		

		<p><b>a plan for post-procedure care</b> F1a F5a</p>		
			Document procedures accurately	
		<p>Seek advice or supervision as needed when unanticipated findings or changing clinical circumstances are encountered F1a</p> <p><b>Case preparation: Patient correctly prepared and positioned, understands approach and required instruments, prepared to deal with probable complications</b> F1b F2 F3b F4b F5b F7b C4 C7 C8b C9b C9c C10 C11 C12b C13b C14b C15 C16b C17 C18b C19b C19c</p> <p><b>Technical performance: Efficiently performs steps, avoiding pitfalls and respecting soft tissues</b> F1b F2 F3b F4b F5b F7b C4 C7 C8b C9b C9c C10 C11 C12b C13b C14b C15 C16b C17 C18b C19b C19c</p> <p><b>Visuospatial skills: 3D spatial orientation and able to position instruments/hardware where intended</b> F1b F2 F3b F4b F5b F7b C4 C7 C8b C9b C9c C10 C11 C12b C13b C14b C15 C16b C17 C18b C19b C19c</p>		

		<p><b>Post-procedure plan: Appropriate complete post procedure plan</b> F1b F2 F3b F4b F5b F7b C4 C7 C8b C9b C9c C10 C11 C12b C13b C14b C15 C16b C17 C18b C19b C19c</p> <p><b>Efficiency and flow: Obvious planned course of procedure with economy of movement and flow</b> F1b F2 F3b F4b F5b F7b C4 C7 C8b C9b C9c C10 C11 C12b C13b C14b C15 C16b C17 C18b C19b C19c</p>		
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**4. Establish plans for ongoing care and, when appropriate, timely consultation**

<p>4.1. Implement a patient-centred care plan that supports ongoing care, follow-up on investigations, response to treatment, and further consultation</p>		<p><b>Ensure follow-up on results of investigation and response to treatment</b> F1a F3a F5a</p> <p><b>Recognize need for consultation of other healthcare professionals</b> F1a F5a F3a F7a</p> <p><b>Implement appropriate wound care and follow-up at the end of each procedure</b> F6</p>	<p>Coordinate investigation, treatment, and follow-up plans when multiple physicians and healthcare professionals are involved C1 C6 C8a</p> <p><b>Establish plans for ongoing care</b> C1 C6 C9a C9d C12a</p> <p><b>Accurately identify situations that necessitate consultation of other health professionals to assist in the management of disorders encountered in Otolaryngology – Head and Neck Surgery</b> C1 C8a C9d</p> <p><b>Provide long-term management of a patient after medical and/or surgical treatment</b> C9d</p> <p>Address end-of-life issues in patients with head and neck</p>	<p>Implement a patient-centred care plan that supports ongoing care, follow-up on investigations, response to treatment, and further consultation</p> <p><b>Determine appropriate timing of future visits based on planned investigations, clinical status and/or anticipated clinical course</b> TTP2</p> <p><b>Establish plans for post-operative care</b> TTP1</p>
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<b>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</b>				
5.1. Recognize and respond to harm from health care delivery, including patient safety incidents	<p>Recognize the occurrence of a patient safety incident</p> <p>Differentiate outcomes of medical conditions and diseases from complications related to the inherent risks of treatments and from patient safety incidents</p>			
		<p>Demonstrate knowledge of the Canadian disclosure guidelines (understanding harm, potential-for-harm, no potential-for-harm, close calls, the stages of disclosure of adverse events and reporting them)</p>	<p>Apply the stages for disclosure of adverse events:</p> <ul style="list-style-type: none"> <li>attend to clinical care</li> <li>plan the initial disclosure meeting with patient and family</li> <li>plan the post-analysis disclosure</li> </ul> <p>Report patient safety incidents to appropriate institutional representatives</p>	<p>Apply the stages for disclosure of adverse events, including post analysis disclosure, and acknowledge the role of apology</p>
		<p>Prioritize the initial medical response to adverse events to mitigate further injury</p> <p>Incorporate, as appropriate, into a differential diagnosis, harm from health care delivery</p>	<p>Recognize near-misses in real time and respond to correct them, preventing them from reaching the patient</p>	

			<p>Identify potential improvement opportunities arising from harmful patient safety incidents and near misses</p> <p>Participate in an analysis of patient safety incidents</p>	
<p>5.2. Adopt strategies that promote patient safety and address human and system factors</p>	<p>Describe common types of cognitive and affective bias</p> <p>Describe the principles of situational awareness and their implications for Otolaryngology – Head and Neck Surgery practice</p>	<p>Use cognitive aids such as procedural checklists, surgical timeouts, debriefing, structured communication tools, or care paths to enhance patient safety <sup>F8</sup></p> <p>Describe strategies to mitigate the negative effects of human and system factors on clinical practice</p>	<p>Engage patients and their families in the continuous improvement of patient safety</p>	<p>Apply the principles of situational awareness to clinical practice</p> <p><b>Lead the team in the use of the surgical safety checklist <sup>TTP1</sup></b></p> <p>Use systems to track and follow-up on clinical data such as studies and laboratory tests <sup>TTP2</sup></p>

**COMMUNICATOR MILESTONES: RESIDENCY**

	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice
<b>1. Establish professional therapeutic relationships with patients and their families</b>				
1.1. Communicate using a patient-centred approach that encourages patient trust and autonomy and is characterized by empathy, respect, and compassion	Communicate using a patient-centered approach that facilitates patient trust and autonomy and is characterized by empathy, respect, and compassion			
1.2. Optimize the physical environment for patient comfort, dignity, privacy, engagement, and safety	Mitigate physical barriers to communication to optimize patient comfort, privacy, engagement, and safety	<b>Optimize the physical environment for patient comfort, dignity, privacy, engagement, and safety</b> F1a F3a F6 F8		
1.3. Recognize when the values, biases, or perspectives of patients, physicians, or other health care professionals may have an impact on the quality of care, and modify the approach to the patient accordingly			<b>Recognize when the values, biases, or perspectives of patients, physicians, or other health care professionals may have an impact on the quality of care, and modify the approach to patient care</b> C18a	
1.4. Respond to patients' non-verbal behaviours to enhance communication	Identify, verify and validate non-verbal cues on the part of patients and their families  Use appropriate non-verbal communication to demonstrate attentiveness,		Respond to patients' non-verbal communication and use appropriate non-verbal behaviours to enhance communication with patients  C13a	

	interest, and responsiveness to the patient and family			
1.5. Manage disagreements and emotionally charged conversations, including but not limited to discussions surrounding end-of-life issues		Recognize when personal feelings in an encounter are valuable clues to the patient’s emotional state	<p><b>Recognize when strong emotions (such as anger, fear, anxiety, or sadness) are impacting an interaction and respond appropriately</b> C8a C12a C13a</p> <p>Establish boundaries as needed in emotional situations</p> <p><b>Manage conversations that are emotionally charged</b> C13a</p>	
1.6. Adapt to the unique needs and preferences of each patient and to his or her clinical condition and circumstances		Assess patients’ decision-making capacity F1a F5a	<p>Tailor approaches to decision-making to patient capacity, values, and preferences</p> <p><b>Recognize the communication requirements relevant to patients who are deaf, hard of hearing or who have speech and/or voice disorders</b> C19a</p>	Adapt to the unique needs and preferences of each patient and to his or her clinical condition and circumstances

**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 identify and gather relevant biomedical and psychosocial information		<b>Conduct a patient-centred interview, gathering all relevant biomedical and psychosocial information for any clinical presentation</b> F1a F3a F5a F7a C5	Use patient-centred interviewing skills to effectively gather relevant biomedical and psychosocial information C6 C9a C14a C16a	
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		<p><b>Demonstrate knowledge of techniques for eliciting health information from children and their families</b>  <b>F4a F5a</b></p> <p>Integrate and synthesize information about the patient’s beliefs, values, preferences, context and expectations with biomedical and psychosocial information  <b>F4a</b></p> <p>Recognize the psychological, occupational, and social consequences of sensory or communication disorders <b>F5a</b>                  Recognize the psychological, occupational, and social consequences of sensory or communication disorders</p>	<p>Integrate, summarize, and present the biopsychosocial information obtained from a patient-centred interview <b>C1 C9a C14a C16a</b></p> <p>Actively listen and respond to patient cues <b>C14a C16a</b></p>	
<p>2.2. Provide a clear structure for and manage the flow of an entire patient encounter</p>		<p>Conduct a focused and efficient patient interview, managing the flow of the encounter while being attentive to the patient’s cues and responses <b>F1a F3a</b></p>	<p><b>Manage the flow of challenging patient encounters, including those with angry, distressed, or excessively talkative individuals</b> <b>C12a C13a C18a</b></p>	<p>Provide a clear structure for and manage the flow of an entire patient encounter</p>
<p>2.3. Seek and synthesize relevant information from other sources, including the patient’s family, with the patient’s consent</p>		<p>Seek and synthesize relevant information from other sources, including the patient’s family, with the patient’s consent <b>F1a</b></p>		

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

<p>3.1. Share information and explanations that are clear, accurate, and timely, while checking for patient and family understanding</p>	<p>Communicate the diagnosis, prognosis and plan of care in a clear, compassionate, respectful, and accurate manner to the patient and family</p> <p>Recognize when to seek help in providing clear explanations to the patient and family <small>TTD1</small></p>	<p>Use strategies to verify and validate the understanding of the patient and family with regard to the diagnosis, prognosis, and management plan <small>F1a</small></p>	<p><b>Provide information on diagnosis and prognosis in a clear, compassionate, respectful, and objective manner</b> <small>C8a C13a C14a C16a</small></p> <p><b>Convey information related to the patient’s health status, care, and needs in a timely, honest, and transparent manner</b> <small>C1 C6 C8a C9a C14a C16a</small></p>	<p>Communicate clearly with patients and others in the setting of ethical dilemmas</p> <p><b>Convey information about the procedure, operative findings, and patient status to the family clearly and compassionately</b> <small>TTP1</small></p>
<p>3.2. Disclose harmful patient incidents, to patients and their families accurately and appropriately</p>	<p>Describe the steps in providing disclosure after a patient safety incident</p>	<p>Disclose patient safety incidents to the patient and family accurately and appropriately</p>	<p><b>Communicate the reasons for unanticipated clinical outcomes to patients and disclose patient safety incidents</b> <small>C1</small></p> <p>Apologize appropriately for a harmful patient safety incident</p>	<p>Plan and document follow-up to a harmful patient safety incident</p>

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

<p>4.1. Facilitate discussions with patients and their families in a way that is respectful, non-judgmental, and culturally safe</p>	<p>Conduct an interview, demonstrating cultural awareness <small>TTD1</small></p>	<p>Explore the perspectives of the patient and others when developing care plans</p> <p>Communicate with cultural awareness and sensitivity</p>	<p>Facilitate discussions with the patient and family in a way that is respectful, non-judgmental, and culturally safe <small>C14a C16a</small></p>	
<p>4.2. Assist patients and their families to identify, access, and make use of information and</p>				<p>Assist patients and their families to identify, access, and make use of information and communication</p>

communication technologies to support their care and manage their health				technologies to support their care and manage their health
4.3. Use communication skills and strategies that help patients and their families make informed decisions regarding their health	Demonstrate steps to obtaining informed consent	<b>Answer questions from the patient and family about next steps</b> F1a	<b>Use communication skills and strategies that help the patient and family make informed decisions regarding their health</b> c1 C6 C14a C16a  Use translation service as needed	

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

5.1. Document clinical encounters in an accurate, legible, complete, timely, and accessible manner, in compliance with regulatory and legal requirements	<b>Organize information in appropriate sections within an electronic or written medical record</b> TTD1  Maintain accurate and up-to-date problem lists and medication lists	Use the vocabulary and appropriate abbreviations specific to Otolaryngology – Head and Neck Surgery and workplace  Document information about patients and their medical conditions in a manner that enhances intra-and interprofessional care F1a F3a  <b>Document clinical encounters to adequately convey clinical reasoning and the rationale for decisions</b> F1a F3a  Document the airway/intubation information accurately and comprehensively within an	Adapt record keeping to specific guidelines of Otolaryngology – Head and Neck Surgery and the clinical context C13a  Document procedures in the operative report in a fashion that is commensurate with level of participation  Identify and correct vague or ambiguous documentation	<b>Document clinical encounters in an accurate, complete, and timely manner</b> TTP2  Document surgical procedures in an accurate, complete, and timely manner TTP1
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		<p>electronic or written medical record F8 F9</p> <p><b>Document soft tissue defects and closure providing a good description, diagnosis, progression of healing or deterioration and management plan, including follow up F6</b></p>		
5.2. Communicate effectively using a written health record, electronic medical record, or other digital technology		<p>Demonstrate reflective listening, open-ended inquiry, empathy, and effective eye contact while using a written or electronic medical record</p>	<p>Adapt use of the health record to the patient’s health literacy and the clinical context</p> <p><b>Communicate effectively using a written health record, electronic medical record, or other digital technology C1 C9a C9d C14a C16a</b></p>	<p>Demonstrate an understanding of the role of social media in a medical practice</p>
5.3. Document and share written and electronic information about the medical encounter to optimize clinical decision-making, patient safety, confidentiality, and privacy	<p>Assess patients’ needs and preferences with respect to methods of information sharing</p>		<p>Adapt written and electronic communication to the specificity of the discipline and to the expectations of patients</p>	<p>Share information with patients and others in a manner that respects patient privacy and confidentiality and enhances understanding</p>

**COLLABORATOR MILESTONES: RESIDENCY**

	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice
<b>1. Work effectively with physicians and other colleagues in the health care professions</b>				
1.1. Establish and maintain positive relationships with physicians and other colleagues in the health care professions to support relationship-centered collaborative care		<p>Compare and contrast enablers of and barriers to collaboration in health care</p> <p>Respect established rules of their team</p> <p>Receive and appropriately respond to input from other health care professionals</p> <p>Differentiate between task and relationship issues among health care professionals</p> <p><b>Establish and maintain positive relationships with physicians and other colleagues</b> F8</p>	<p>Anticipate, identify, and respond to patient safety issues related to the function of a team C5</p>	<p>Establish and maintain healthy relationships with physician and other colleagues in the health care professions to support relationship-centered collaborative care</p>
1.2. Negotiate overlapping and shared responsibilities with physicians and other colleagues in the health care professions in episodic and ongoing care	<p>Discuss the role and responsibilities of a specialist in Otolaryngology – Head and Neck Surgery</p>	<p>Describe the roles and scopes of practice of other health care providers related to Otolaryngology – Head and Neck Surgery F1a</p> <p>Contribute individual expertise to interprofessional teams F7a</p> <p><b>Consult as needed with other health care professionals, including but not limited to other</b></p>	<p><b>Recognize, value, and utilize the expertise of interprofessional team members</b> C2 C8a C13a C20</p> <p>Liaise with intersecting health professionals C8a C13a</p> <ul style="list-style-type: none"> <li>• audiologists,</li> <li>• speech language pathologists,</li> <li>• vestibular therapists,</li> </ul>	<p>Negotiate overlapping and shared care responsibilities with physicians and other colleagues in the health care professions in episodic and ongoing care</p> <p>Identify indications that necessitate consultation with other health care professionals</p> <ul style="list-style-type: none"> <li>• difficult airways</li> </ul>

		<p><b>physicians or surgeons</b> <sup>F8</sup>  <b>C2 C5 C8a C13a C14a C16a</b></p>	<ul style="list-style-type: none"> <li>• respiratory therapists,</li> <li>• radiation oncologists,</li> <li>• paediatricians,</li> <li>• radiologists, and anesthesiologists</li> <li>• dieticians,</li> <li>• physiotherapists,</li> <li>• social workers,</li> <li>• ophthalmologists</li> <li>• psychotherapists</li> <li>• psychiatrists</li> <li>• sleep disorder specialists</li> <li>• family physicians</li> </ul>	<ul style="list-style-type: none"> <li>• complex hearing, balance</li> <li>• speech, and swallowing disorders</li> </ul> <p><b>Work effectively with outpatient clinic staff</b> <sup>TTP2</sup></p>
<p>1.3. Engage in respectful shared decision-making, such as a tumour board, with physicians and other colleagues in the health care professions</p>	<p>Discuss with the patient and family any plan for involving other health care professionals, including other physicians, in the patient care</p>	<p><b>Identify referral and consultation as opportunities to improve quality of care and patient safety by sharing expertise</b> <sup>F1a F3a</sup></p> <p>Integrate the patient’s perspective and context into the collaborative care plan <sup>F3a</sup></p> <p><b>Communicate effectively with physicians and other colleagues in the health care professions</b> <sup>F9 C8a C13a</sup></p> <p><b>Professional and effective communication/utilization of staff</b> <sup>F1b F2 F3b F4b F5b F7b</sup></p>	<p><b>Provide timely and necessary information to colleagues to enable effective relationship-centered care</b> <sup>c20</sup></p>	<p>Engage in respectful shared decision-making with physicians and other colleagues in the health care professions</p> <p>Lead interprofessional team meetings, including but not limited to tumour boards <sup>TTP3</sup></p> <p>Use referral and consultation as opportunities to improve quality of care and patient safety by sharing expertise</p> <p><b>Communicate effectively with the operating room team</b> <sup>TTP1</sup></p>

		C4 C7 C8b C9b C9c C10 C11 C12b C13b C14b C15 C16b C17 C18b C19b C19c		
<b>2. Work with physicians and other colleagues in the health care professions to promote understanding, manage differences, and resolve conflicts</b>				
2.1. Show respect toward collaborators	Convey information thoughtfully  Show respect towards collaborators TTD1 F9	<b>Actively listen to and engage in interactions with collaborators</b> F1a F9  Respond to requests and feedback in a respectful and timely manner F8	<b>Delegate tasks and responsibilities in an appropriate and respectful manner</b> c2  Maintain positive relationships in all professional contexts C8a	
2.2. Implement strategies to promote understanding, manage differences, and resolve conflict in a manner that supports a collaborative culture		Identify communication barriers between health care professionals  Communicate clearly and directly to promote understanding, manage differences, and resolve conflicts F1a  Listen to understand and find common ground with collaborators F1a	Gather the information and resources needed to manage differences and resolve conflict among collaborators  Analyze problems with team dynamics  Gain consensus among colleagues in resolving conflicts	Implement strategies to promote understanding, manage differences, and resolve conflicts in a manner that supports a collaborative culture
<b>3. Hand over the care of a patient to another health care professional to facilitate continuity of safe patient care</b>				
3.1. Determine when care should be transferred to another physician or health care professional		<b>Identify patients requiring handover to other physicians or health care professionals</b> F1a F3a		Determine when care should be transferred to another physician or health care professional TTP2

<p>3.2. Demonstrate safe handover of care, both verbal and written, during a patient transition to a colleague, different health care professional, setting, or stage of care</p>	<p>Describe specific information required for safe and effective handover during transitions in care</p>	<p>Communicate with the receiving physicians or health care professionals during transitions in care, clarifying issues after transfer as needed <small>F3a</small></p> <p><b>Communicate with the patient’s primary health care professional about the patient’s care</b> <small>F4a</small></p> <p>Summarize the patient’s issues in the transfer summary, including plans to deal with ongoing issues <small>F6</small></p> <p><b>Demonstrate safe handover care, both written and oral during patient transitions</b> <small>F7a F8</small></p>	<p>Organize the handover of care to the most appropriate physician or health care professional <small>C1</small></p> <p>Analyze gaps in communication between health care professionals during transitions in care</p> <p>Recognize and act on patient safety issues in the transfer of care</p>	<p>Demonstrate safe handover of care, both verbal and written, during patient transitions to a different health care professional, setting, or stage of care</p> <p>Transition patient care safely to the post-operative team <small>TTP1</small></p>
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**LEADER MILESTONES: RESIDENCY**

	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice
<b>1. Contribute to the improvement of health care delivery in teams, organizations, and systems</b>				
1.1. Apply the science of quality improvement to contribute to improving systems of patient care	Describe quality improvement methodologies	<p>Compare and contrast the traditional methods of research design with those of improvement science</p> <p>Seek data to inform practice and engage in an iterative process of improvement</p>	<p>Analyze and provide feedback on processes seen in one’s own practice, team, organization, or system</p> <p>Participate in a patient safety and/or quality improvement initiative</p> <p>Demonstrate effective skills in quality assurance</p> <p><b>Identify potential improvement opportunities</b> C3</p> <p><b>Gather information for the purposes of quality assurance or improvement</b> C3</p> <p><b>Identify the impact of human and system factors on health care delivery</b> C3</p> <p><b>Integrate existing standards for health care delivery with findings of data collection</b> C3</p>	<p>Apply the science of quality assurance and improvement (practice-based learning and system-based learning and improvement) to contribute to improving systems of patient care TTP4</p> <p>Incorporate evidence-based medicine for quality assurance and improvement in Oto - HNS practice TTP4</p> <p>Perform audits/self-audits of clinical practice and their implication for quality and improvement TTP4</p>
1.2. Contribute to a culture that promotes patient safety	Review and understand the guidelines regarding patient safety provided by	Demonstrate knowledge of and adherence to the standard safety procedures	Actively encourage all involved in health care, regardless of their role, to	Contribute to a culture that promotes patient safety TTP4

	the institution	in place at the resident’s centre <sup>F8</sup>	report and respond to unsafe situations  Engage patients and their families in the continuous improvement of patient safety  Model a just culture to promote openness and increased reporting	
1.3. Analyze patient safety incidents and near misses to enhance systems of care	Describe the available supports for patients and health care professionals when patient safety incidents occur	Actively participate in audit rounds, identifying safety issues that need to be addressed, and generating solutions <sup>TTP3</sup>		Analyze harmful patient safety incidents and near misses to enhance systems of care <sup>TTP3</sup>
1.4. Use health informatics to improve the quality of patient care and optimize patient safety	Describe the data available from health information systems in their discipline to optimize patient care		Map the flow of information in the care of patients in Otolaryngology – Head and Neck Surgery and suggest changes for quality improvement and patient safety  Use data on measures of clinical performance during team discussions and to support team decision-making	Use health informatics to improve the quality of patient care and optimize patient safety <sup>TTP3</sup>

**2. Engage in the stewardship of health care resources**

2.1. Allocate health care resources for optimal patient care	Describe the costs of common diagnostic and therapeutic interventions relevant to Otolaryngology – Head and Neck Surgery	Describe models for resource stewardship in health care used at the institution level  Consider costs when	<b>Use clinical judgment to minimize wasteful practices</b> <sup>c2</sup>  Develop practice-based and system-based rules for	Allocate health care resources for optimal patient care
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		choosing care options <sup>F5a</sup>	resource allocation	
2.2. Apply evidence and management processes to achieve cost-appropriate care		<p><b>Apply evidence and guidelines with respect to utilization relevant to common clinical scenarios</b> <sup>F4a F5a</sup></p> <p>Apply American Society of Anesthesiology (ASA) Guidelines for Management of the Difficult Airway <sup>F9</sup></p>	<p>Determine cost discrepancies between best practice and their current practice</p> <p>Optimize practice patterns for cost-effectiveness and cost control</p>	Apply evidence and management processes to achieve cost-appropriate care

### 3. Demonstrate leadership in professional practice

3.1. Demonstrate leadership skills to enhance health care	Analyze their own leadership styles, including strengths, weaknesses, and biases		<p>Contribute to a health care change initiative</p> <p><b>Assume the role of chief resident and lead junior residents in a hospital patient care team</b> <sup>c2 C8a</sup></p>	Demonstrate leadership skills to enhance health care <sup>TTP3</sup>
3.2. Facilitate change in health care to enhance services and outcomes		<p>Analyze patient feedback to help improve patient experiences and clinical outcomes</p> <p>Describe key health policy and organizational issues in their discipline</p>	<p>Develop a strategy for implementing change in health care with patients, physicians, and other health care professionals</p> <p>Analyze ongoing changes occurring in health care delivery</p>	Facilitate change in health care to enhance services and outcomes <sup>TTP3</sup>

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

<p>4.1. Set priorities and manage time to integrate practice and personal life</p>	<p>Align priorities with expectations for professional practice</p>	<p>Build relationships with mentors</p> <p>Organize work using strategies that address strengths and identify areas to improve in personal effectiveness</p>		<p>Set priorities and manage time to integrate practice and personal life</p> <p><b>Manage time effectively to maintain clinic flow</b> TTP2</p> <p><b>Review and act on test results in a timely manner</b> TTP2</p>
<p>4.2. Manage a career and a practice</p>	<p>Review opportunities for practice preparation, including choices available for further training</p> <p>Maintain a portfolio and reflect professional development</p>	<p>Examine personal interests and seek career mentorship and counselling</p>	<p>Reconcile expectations for practice with job opportunities and workforce needs</p> <p>Adjust educational experiences to gain competencies necessary for future independent practice</p> <p>Describe remuneration models as they pertain to the discipline</p>	<p>Manage a career and a practice</p> <p>Plan practice finances, considering short- and long-term goals</p>
<p>4.3. Implement processes to ensure personal practice improvement</p>	<p>Describe how practice standardization can improve quality of health care</p>		<p>Improve personal practice by evaluating a problem, setting priorities, executing a plan, and analyzing the results</p>	<p>Implement processes to ensure personal practice improvement TTP4</p>

**HEALTH ADVOCATE MILESTONES: RESIDENCY**

	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice
<b>1. Respond to an individual patient’s health needs by advocating with the patient within and beyond the clinical environment</b>				
1.1. Work with patients to address determinants of health that affect them, and their access to needed health services and resources	Analyze a given patient’s needs for health services or resources related to the scope of Otolaryngology – Head and Neck Surgery	Demonstrate an approach to working with a patient to advocate for beneficial services or resources	<b>Facilitate access to the local and national services and resources that are available for patients, including but not limited to those who are deaf and hard of hearing</b> C19a	Work with patients to address the determinants of health that affect them and their access to needed health services or resources  Work with individual patients to improve their timely access to diagnostic and therapeutic care
1.2. Work with patients and their families to increase opportunities to adopt healthy behaviours	Identify resources or agencies that address the health needs of patients	<b>Select patient education resources related to Oto - HNS</b> F4a  Educate the patient and family about information and communication technologies to improve health	<b>Apply the principles of behaviour change during conversations with patients about adopting healthy behaviours</b> C5	Work with the patient and family to increase opportunities to adopt healthy behaviours
1.3. Incorporate disease prevention, health promotion, and health surveillance into interactions with individual patients		Work with the patient and family to identify opportunities for disease prevention, health promotion, and health protection F1a F3a F5a F7a	Evaluate with the patient the potential benefits and harms of health screening C16a  Promote hearing protection and conservation at home and at work  <b>Promote risk reduction through smoking cessation, responsible alcohol use, UVA/UVB</b>	Incorporate disease prevention, health promotion, and health surveillance activities into interactions with individual patients

			<p><b>protection, and/or promotion of HPV vaccination for girls and boys</b> C12a C16a</p> <p>Work with families to implement foreign body aspiration prevention C5</p> <p>Minimize otitis media by encouraging healthy environment including strategies such as smoking cessation (second hand smoke) and encouraging breastfeeding for newborns</p> <p>Promote screening for and management of early childhood hearing and communication disorders</p> <p>Promote choking prevention in children C5</p> <p>Recognize importance and understand principles of newborn/universal hearing screening C19a</p>	
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**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**

2.1. Work with a community or population to identify the determinants of health that affect them		Identify communities or populations they serve who are experiencing health inequities	Analyze current policy or policy developments that affect the communities or populations they serve	Work with a community or population to identify the determinants of health that affect them
2.2. Improve clinical practice by applying a process of continuous quality		Identify patients or populations that are not being served optimally in	Report epidemics or clusters of unusual cases seen in practice, balancing	Improve clinical practice by applying a process of continuous quality

<p>improvement to disease prevention, health promotion, and health surveillance activities</p>		<p>their clinical practice</p>	<p>patient confidentiality with the duty to protect the public’s health</p> <p>Participate in local and national health promotion and disease prevention programs relevant to their practice</p>	<p>improvement to disease prevention, health promotion, and health surveillance activities <sup>TTP3</sup></p>
<p>2.3. Contribute to a process to improve health in the community or population they serve</p>		<p>Partner with others to identify the health needs of a community or population they serve</p>	<p>Appraise available resources to support the health needs of communities or populations they serve</p> <p>Distinguish between potentially competing health interests of the individuals, communities, and populations they serve</p> <p>Promote policies that encourage early identification of patients presenting with disorders of the head and neck through screening programs for hearing impairment and malignancy of the head and neck</p>	<p>Contribute to a process to improve health in the communities or populations they serve <sup>TTP3</sup></p> <p>Demonstrate an awareness of the Otolaryngology – Head and Neck Surgery Surgeon’s privileged perspective on health and access to patients accounts, and acknowledge the ways in which this authority and knowledge can be leveraged to influence healthcare systems by:</p> <ul style="list-style-type: none"> <li>• actively educating other health care professionals and the public regarding common head and neck problems that benefit from early intervention</li> <li>• educating and advocating for recommended management strategies (i.e. guidelines) to prevent antimicrobial resistance by</li> </ul>

				<p>encouraging rational antibiotic use</p> <ul style="list-style-type: none"><li>• encouraging broad adherence to existing vaccination protocols and evolving ones</li><li>• encouraging health care systems to allocate appropriate resources to serve current and emerging need of community</li></ul>
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**SCHOLAR MILESTONES: RESIDENCY**

	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice
<b>1. Engage in the continuous enhancement of their professional activities through ongoing learning</b>				
1.1. Develop, implement, monitor, and revise a personal learning plan to enhance professional practice	Describe physicians' obligations for lifelong learning and ongoing enhancement of competence	<p>Create a learning plan in collaboration with a designated supervisor, identifying learning needs related to Otolaryngology – Head and Neck Surgery and career goals</p> <p>Use technology to develop, record, monitor, revise, and report on learning in medicine</p> <p>Demonstrate a structured approach to monitoring progress of learning in the clinical setting <sup>F9</sup></p>	Review and update earlier learning plan(s) with input from others, identifying learning needs related to all CanMEDS Roles to generate immediate and longer-term career goals	Develop, implement, monitor, and revise a personal learning plan to enhance professional practice
1.2. Identify opportunities for learning and improvement by regularly reflecting on and assessing their performance, using various internal and external data sources		<p>Identify, record, prioritize and answer learning needs that arise in daily work, scanning the literature or attending formal or informal education sessions</p> <p>Identify opportunities for learning needs that arise in daily work and seek for feedback from staff or senior residents</p> <p><b>Identify opportunities for learning and improvement by reflecting on and</b></p>	Seek and interpret multiple sources of performance data and feedback, with guidance, to continually improve performance <sup>TTP4</sup>	Identify opportunities for learning and improvement by regularly reflecting on and assessing their performance using various internal and external data sources <sup>TTP4</sup>

		<p><b>assessing performance and preparation</b> F9</p> <p>Maintain a surgical procedure log</p>		
1.3. Engage in collaborative learning to continuously improve personal practice and contribute to collective improvements in practice		Identify the learning needs of a health care team	Participate in collaborative learning projects	<p>Lead collaborative learning projects TTP3</p> <p>Engage in collaborative learning to continuously improve personal practice and contribute to collective improvements in practice</p>

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

2.1. Recognize the influence of role-modeling and the impact of the formal, informal, and hidden curriculum on learners	Define the “hidden curriculum”	<p>Identify behaviours associated with positive and negative role-modelling</p> <p>Describe the link between role-modelling and the hidden curriculum</p>	Use strategies for deliberate, positive role-modelling C2	Recognize the influence of role-modelling and the impact of the formal, informal, and hidden curriculum on learners
2.2. Promote a safe learning environment		Explain how power differentials between learners and teachers can affect the learning environment	<p>Identify and respond to threats to the safe learning environment as they occur C2</p> <p>Provide a safe environment for junior learners C2</p>	Ensure a safe learning environment for all members of the team
2.3. Ensure patient safety is maintained when learners are involved		Identify and respond to unsafe clinical situations involving learners	<b>Supervise learners to ensure they work within limitations, seeking guidance and supervision when needed</b> C2	<p>Ensure patient safety is maintained when learners are involved</p> <p><b>Provide junior learners with opportunities for</b></p>

			<b>Balance clinical supervision and graduated responsibility, ensuring the safety of patients and learners C2</b>	<b>appropriate clinical responsibility TTP1</b>
2.4. Plan and deliver a learning activity		Demonstrate basic skills in teaching others, including peers	<p>Describe how to formally plan a medical education session based on the learning needs of others</p> <p>Describe sources of information used to assess learning needs</p> <p>Define specific learning objectives for a teaching activity</p> <p>Describe clinical teaching strategies relevant to their discipline C2</p>	Plan and deliver a learning activity
2.5. Provide feedback to enhance learning performance		Provide written or verbal feedback to other learners, faculty and other members of the team		<p>Role-model regular self-assessment and feedback-seeking behaviour</p> <p>Provide effective feedback to enhance learning and performance of others</p>
2.6. Assess and evaluate learners, teachers, and programs in an educationally appropriate manner			Appropriately assess junior learners in various learning situations C2	Assess and evaluate learners, teachers, and programs in an educationally appropriate manner

**3. Integrate best available evidence into practice**

<p>3.1. Recognize practice uncertainty and knowledge gaps in clinical and other professional encounters and generate focused questions that can address them</p>		<p>Recognize uncertainty and knowledge gaps in clinical and other professional encounters relevant to Otolaryngology – Head and Neck Surgery <sup>F9</sup></p> <p>Recognize uncertainty and knowledge gaps in clinical encounters and generate questions relevant to neurosurgery safe practice while on rotation</p>	<p>Generate focused questions to address practice uncertainty and knowledge gaps</p>	
<p>3.2. Identify, select, and navigate pre-appraised resources</p>		<p>Conduct a basic literature search</p> <p>Contrast the various study designs used in medicine and the quality of various pre-appraised resources</p>	<p>Identify, select, and navigate pre-appraised resources</p>	
<p>3.3. Critically evaluate the integrity, reliability, and applicability of health-related research and literature</p>		<p>Interpret study findings including a critique of their relevance to Otolaryngology – Head and Neck Surgery practice</p> <p>Determine the validity and risk of bias in a source of evidence</p>	<p><b>Evaluate the applicability (external validity or generalizability) of evidence from a resource</b> c3</p> <p>Describe the study results in both quantitative and qualitative terms</p>	<p>Critically evaluate the integrity, reliability, and applicability of health-related research and literature</p>
<p>3.4. Integrate evidence into decision-making in their practice</p>	<p>Identify the commonly used medical literature databases and know how to access them</p>	<p>Discuss the barriers to and facilitators of applying evidence into practice</p> <p>Describe how various</p>	<p>Identify new evidence appropriate to their scope of professional practice through quality-appraised evidence-alerting services</p>	

		sources of information, including studies, expert opinion, and practice audits, contribute to the evidence base of medical practice	Demonstrate awareness and knowledge of clinical practice guidelines for Otolaryngology-Head and Neck Surgery  <b>Integrate best evidence and clinical expertise into decision-making</b> C3 TTP2	
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**4. Contribute to the creation and dissemination of knowledge and practices applicable to health**

4.1. Demonstrate an understanding of the scientific principles of research and scholarly inquiry and the role of research evidence in health care		Describe the role of research and scholarly inquiry in addressing questions in Otolaryngology – Head and Neck Surgery	Apply the principles of research and scholarly inquiry to contribute to a scholarly investigation or the dissemination of research findings in Otolaryngology – Head and Neck Surgery	Demonstrate an understanding of the scientific principles of research and scholarly inquiry and the role of research evidence in health care
4.2. Identify ethical principles for research and incorporate them into obtaining informed consent, considering potential harms and benefits, and considering vulnerable populations		Discuss and provide examples of the ethical principles applicable to research and scholarly inquiry relevant to Otolaryngology – Head and Neck Surgery	Identify ethical principles for research and incorporate them into obtaining informed consent, considering harm and benefit, and considering vulnerable populations	
4.3. Contribute to the work of a research program		Compare and contrast the roles and responsibilities of members of a research team, and describe how they differ from clinical and other practice roles and responsibilities	Actively participate as a research team member, balancing the roles and responsibilities of a researcher with the clinical roles and responsibilities of a physician	Contribute to the work of a research program

<p>4.4. Pose questions amenable to scholarly investigation and select appropriate methods to address them</p>	<p>Discuss and critique the possible methods of addressing a given scholarly question</p>	<p>Describe and compare the common methodologies used for scholarly inquiry in Otolaryngology – Head and Neck Surgery</p> <p>Identify the pertinent population, intervention, control group and outcomes for a specific clinical question</p>	<p>Pose medically and scientifically relevant and appropriately-constructed questions amenable to scholarly investigation</p> <p>Select appropriate methods of addressing a given scholarly question</p> <p><b>Perform data analysis c3</b></p>	
<p>4.5. Summarize and communicate to professional and lay audiences, including patients and their families, the findings of relevant research and scholarly inquiry</p>		<p>Summarize and communicate to peers the findings of applicable research and scholarship</p>	<p>Summarize and communicate to professional and lay audiences, including patients and their families, the findings of applicable research and scholarly inquiry</p> <p>Prepare a manuscript suitable for publication in a peer-reviewed journal</p>	

**PROFESSIONAL MILESTONES: RESIDENCY**

	Transition to discipline	Foundations of discipline	Core of discipline	Transition to practice
<b>1. Demonstrate a commitment to patients by applying best practices and adhering to high ethical standards</b>				
1.1. 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	<p>Consistently prioritize the needs of patients and others to ensure a patient’s legitimate needs are met TTD1</p> <p>Demonstrate punctuality TTD1</p> <p>Complete assigned responsibilities TTD1</p>	Independently manage specialty-specific issues surrounding confidentiality, intervening when confidentiality is breached	<p>Manage complex issues while preserving confidentiality</p> <p><b>Intervene when behaviours toward colleagues and learners undermine a respectful environment C2</b></p> <p>Exhibit appropriate professional behaviours and relationships in all aspects of practice, reflecting honesty, integrity, humility, commitment, compassion, respect, altruism, respect for diversity, and maintenance of confidentiality C1 C9d C14a C16a</p>	
1.2. Demonstrate a commitment to excellence in all aspects of practice and to active participation in collaborative care	Set clinical skills goals for the first year of residency	Develop a strategy for acquiring and mastering clinical skills during residency	<p>Demonstrate a commitment to excellence in all aspects of practice C1 C2 C9a C9d C14a C16a</p> <p>Analyze how the system of care supports or jeopardizes excellence</p>	<p>Demonstrate excellence in all aspects of practice and mentor junior colleagues TTP3</p> <p><b>Prepare for surgical procedures, reviewing the list of planned operations TTP1</b></p>
1.3. Recognize and respond to ethical issues encountered in practice including but not limited to deaf community, end		Identify common ethical problems encountered in surgical practice including issues unique to Otolaryngology – Head and	Manage ethical issues encountered in the clinical and academic setting, including but not limited to the deaf community, end of	Recognize and respond to ethical issues encountered in independent practice

of life issues, children and families, driving/vertigo and OSA		Neck Surgery	life issues, treatment of children and families, driver licensing with regards to patients with vertigo or obstructive sleep apnea	
1.4. Recognize and manage conflicts of interest		Identify potential conflicts of interest in a surgical practice	Proactively resolve real, potential, or perceived conflicts of interest transparently and in accordance with ethical, legal, and moral obligations	Recognize and manage conflicts of interest in independent practice
1.5. Exhibit professional behaviours in the use of technology-enabled communication	Describe the risks of technology-enabled communication in practice	Demonstrate appropriate use of technology-enabled communications	Intervene when aware of breaches of professionalism involving technology-enabled communication	Mentor junior colleagues regarding professional behaviours in the use of technology-enabled communication

**2. Demonstrate a commitment to society by recognizing and responding to societal expectations in health care**

2.1. Demonstrate accountability to patients, society, and the profession by responding to societal expectations in healthcare	Describe the ways that physicians are accountable to patients, society and the profession	<p>Manage tensions between societal and physician’s expectations</p> <p>Describe the tension between the physician’s role as advocate for individual patients and the need to manage scarce resources</p>	<p>Demonstrate a commitment to the promotion of the public good in health care, including stewardship of resources <sup>C2</sup></p> <p>Demonstrate a commitment to maintaining and enhancing competence</p>	Demonstrate accountability to patients, society, and the profession by recognizing and responding to societal expectations of the profession <sup>TTP3</sup>
2.2. Demonstrate a commitment to patient safety and quality improvement		<p>Demonstrate a commitment to patient safety and quality improvement through adherence to institutional policies and procedures</p> <p>Monitor institutional and clinical environments and respond to issues that can</p>	Demonstrate a commitment to patient safety and quality improvement initiatives within their own practice environment <sup>C3 TTP4</sup>	

		harm patients or the delivery of health care		
<b>3. Demonstrate a commitment to the profession by adhering to standards and participating in physician-led regulation</b>				
3.1. Fulfil and adhere to the professional and ethical codes, standards of practice, and laws governing practice	Describe the roles of the Royal College, provincial licensing authority, hospital board and university from a resident’s perspective	<p>Demonstrate knowledge of the key professional standards of practice as mandated by the Royal College, provincial licensing authority, hospital board and university</p> <p>Fulfil and adhere to the professional and ethical codes, standards of practice, and laws governing practice</p> <p>Demonstrate knowledge of the policies, procedures and guidelines for residency code of conduct of your institution</p>	<p>Describe how to respond to a colleague complaint or legal action</p> <p>Demonstrate accountability to patients, the profession, and society with regard to the impact of decisions that are made</p> <p>Describe the relevant codes, policies, standards, and laws governing physicians and the profession including standard-setting and disciplinary and credentialing procedures</p>	Fulfil and adhere to the professional and ethical codes, standards of practice, and laws governing practice
3.2. Recognize and respond to unprofessional and unethical behaviours in physicians and other colleagues in the health care profession	<p>Describe common lapses on professional and ethical practice among health care workers</p> <p>Respond to peer-group lapses in professional conduct</p>	Identify specific unprofessional or unethical behaviours that have been witnessed	<p>Recognize and respond to real or simulated unprofessional and unethical behaviours in physicians and other colleagues in the health care professions</p> <p>Describe and identify regulatory codes and procedures relevant to involving a regulatory body in a case of serious unprofessional behaviour or practice</p>	Recognize and respond to unprofessional and unethical behaviours in physicians and other colleagues in the health care professions
		Provide examples of peer review and standard-setting	Participate in the review of practice, standard-setting	Participate in peer assessment and standard-

3.3. Participate in peer assessment and standard-setting		processes	and quality improvement activities  Participate in the assessment of junior learners <small>C2</small>  <b>Prepare a morbidity and mortality report or chart review</b> <small>C3</small>	setting
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**4. Demonstrate a commitment to physician health and well-being to foster optimal patient care**

4.1. Exhibit self-awareness and manage influences on personal wellbeing and professional performance	<p>Demonstrate knowledge of the factors in residency that may affect personal well-being and professional performance</p> <p>Demonstrate knowledge of the resident safety policy of your program</p>	<p>Develop a personal plan for managing stress and maintaining physical and mental well-being</p> <p>Manage the impact of physical and environmental factors on performance</p>	<p>Exhibit strategies for managing stress and maintaining physical and mental well-being during residency <small>C2</small></p> <p>Integrate skills that support adaption and recovery in challenging situations</p>	<p>Exhibit self-awareness and effectively manage influences on personal well-being and professional performance</p> <p>Develop a personal plan for managing stress and maintaining physical and mental well-being during independent practice</p> <p>Demonstrate an ability to regulate attention, emotions, thoughts, and behaviours while maintaining capacity to perform professional tasks</p>
4.2. Manage personal and professional demands for a sustainable practice throughout the physician life cycle	Recognize evolving professional identity transitions and manage inherent stresses	Describe the influence of personal and environmental factors on the development of a career plan	Manage competing personal and professional priorities during residency	Develop a strategy to manage personal and professional demands for a sustainable independent practice <small>TTP4</small>
4.3. Promote a culture that recognizes, supports,	Be aware of the risk factors for physician distress	Describe and recognize signs of physician or other health	Support others in their professional transitions <small>C2</small>	Promote a culture that recognizes, supports, and

<p>and responds effectively to colleagues in need</p>		<p>care worker distress</p> <p>Demonstrate knowledge of the resources available to physicians in distress</p> <p>Use strategies to mitigate the impact of patient safety incidents</p>		<p>responds effectively to colleagues in need</p> <p>Provide mentorship to colleagues</p>
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