

# Otolaryngology Milestones for the Middle East



May 2017

## The Otolaryngology Milestones for the Middle East

The Milestones are designed only for use in evaluation of residents in the context of their participation in ACGME-I-accredited residency programs. The Milestones provide a framework for the assessment of the development of the resident in key dimensions of the elements of physician competency in a specialty. They neither represent the entirety of the dimensions of the six domains of physician competency, nor are they designed to be relevant in any other context.

## Milestones Reporting

This document presents milestones designed for programs to use in semi-annual review of resident performance and reporting to the ACGME-I. Milestones are knowledge, skills, attitudes, and other attributes for each of the ACGME-I competencies organized in a developmental framework from less to more advanced. They are descriptors and targets for resident performance as a learner moves from entry into their program through graduation.

For each period, review and reporting will involve selecting milestone levels that best describe each resident's current performance and attributes. Milestones are arranged in numbered levels. Tracking from "Critical Deficiencies"/"Level 1" to "Aspirational"/"Level 5" is synonymous with moving from novice to expert in the specialty. These levels do not correspond with time in the educational program. Dependent upon previous education and experience, residents may enter a program at varying points in the Milestones.

Selection of a level implies that the resident substantially demonstrates the milestones in that level, as well as those in lower levels (see the diagram on page v).

**Level 1:** The resident demonstrates milestones expected of an incoming resident.

**Level 2:** The resident is advancing and demonstrates additional milestones, but is not yet performing at a mid-residency level.

**Level 3:** The resident continues to advance and demonstrate additional milestones, consistently including the majority of milestones targeted for residency.

**Level 4:** The resident has advanced so that he or she now substantially demonstrates the milestones targeted for residency. This level is designed as the graduation target.

**Level 5:** The resident has advanced beyond performance targets set for residency and is demonstrating "aspirational" goals, which might describe the performance of someone who has been in practice for several years. It is expected that only a few exceptional residents will reach this level.

## **Additional Notes**

The “Level 4” Milestones are designed as the graduation *target* and *do not* represent a graduation *requirement*. Making decisions about readiness for graduation is the purview of the program director. Study of Milestones performance data will be required before the ACGME-I and its partners will be able to determine whether milestones in the first four levels appropriately represent the developmental framework, and whether Milestone data overall are of sufficient quality to be used for high-stakes decisions.

*Answers to Frequently Asked Questions about Milestones are posted on the ACGME-I website.*

The diagram below presents an example set of milestones for one sub-competency in the same format as the ACGME-I Report Worksheet. For each reporting period, a learner’s performance on the milestones for each sub-competency will be indicated by selecting the level of milestones that best describes that learner’s performance in relation to those milestones.

Systems-Based Practice 1: Patient Safety and Quality Improvement				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of common patient safety events	Identifies system factors that lead to patient safety events	Participates in analysis of patient safety events (simulated or actual)	Conducts analysis of patient safety events and offers error prevention strategies (simulated or actual)	Actively engages teams and processes to modify systems to prevent patient safety events
Demonstrates knowledge of how to report patient safety events	Reports patient safety events through institutional reporting systems (actual or simulated)	Participates in disclosure of patient safety events to patients and families (simulated or actual)	Discloses patient safety events to patients and families (simulated or actual)	Role models or mentors others in the disclosure of patient safety events
Demonstrates knowledge of basic quality improvement methodologies and metrics	Describes local quality improvement initiatives (e.g., community vaccination rate, infection rate, smoking cessation)	Participates in local quality improvement initiatives	Demonstrates the skills required to identify, develop, implement, and analyze a quality improvement project	Creates, implements, and assesses quality improvement initiatives at the institutional or community level
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not yet achieved Level 1 <input type="checkbox"/>

Selecting a response box in the middle of a level implies that milestones in that level and in lower levels have been substantially demonstrated.

Selecting a response box on the line in between levels indicates that milestones in lower levels have been substantially demonstrated as well as **some** milestones in the higher level(s).

Patient Care 1: Salivary Disease				
Level 1	Level 2	Level 3	Level 4	Level 5
Obtains basic history and physical	Obtains focused history and physical, including comprehensive head and neck exam, neck and cranial nerve exam; orders appropriate labs, fine-needle aspiration (FNA), and radiologic studies	Interprets appropriate lab, pathologic, and radiologic studies	Accurately tumor node metastasis (TNM) stages a specific patient	Performs ultrasound guided FNA of salivary gland mass
Understands normal salivary gland function	Understands factors precipitating inflammatory salivary disease	Describes an accurate differential diagnosis of a salivary gland mass; able to clinically distinguish neoplastic from non-neoplastic etiologies	Makes correct diagnosis from clinical, radiologic, and pathologic information; knows histopathologic findings of common neoplastic processes	Teaches pathophysiology
Knows treatment of sialadenitis	Discusses treatment modality options in general terms (including adjuvant treatment)	Discusses appropriate therapeutic options and understands implications of those options	Formulates appropriate treatment plan for a specific salivary gland cancer patient based on primary site, disease stage, and patient factors	
Knows how to scrub; performs surgical time out; maintains sterile field	Performs intra-operative patient prep; raises skin flaps in appropriate plane; able to aesthetically close wound	Performs procedure with assistance; identifies neurovascular structures	Completes procedure with oversight	Performs extended dissection of parotid bed neoplasm with preservation of neurovascular (NV) structures as appropriate; teaches procedure

	Lists some potential complications	Recognizes common complications; obtains appropriate consultations for patient management	Recognizes and is able to treat and/or develop treatment plan for common complications	Treats complex complications
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Patient Care 2: Aerodigestive Tract Lesions (ADT)				
Level 1	Level 2	Level 3	Level 4	Level 5
Obtains basic history and physical	Obtains focused history and physical, including comprehensive aerodigestive tract and cranial nerve clinic exam with recognition of normal anatomy and obvious abnormalities	Orders appropriate labs, functional, and radiologic studies; performs flexible and rigid endoscopic evaluation	Interprets appropriate lab, functional, and radiologic studies	Performs flexible fiberoptic laryngoscopy with manipulation with oversight
Demonstrates limited understanding of normal laryngeal function	Understands normal laryngeal and esophageal function; understands factors precipitating inflammatory laryngeal disease	Knows differential diagnosis of vocal cord lesion; able to clinically distinguish neoplastic from non-neoplastic etiologies	Makes correct diagnosis from clinical, radiologic, and pathologic information; knows histopathologic findings of common neoplastic processes	Teaches pathophysiology
Demonstrates limited knowledge of treatment options	Discusses treatment modality options in general terms	Discusses appropriate therapeutic options and understands implications of each	Formulates appropriate treatment plan for a specific vocal cord lesion patient based on lesion and patient factors	Teaches management of complex ADT lesions
	Positions patient properly for laryngoscopy, and sometimes able to visualize the larynx	Able to consistently visualize the larynx during laryngoscopy and perform binocular microlaryngoscopy	Performs microlaryngoscopy consistently with complete exposure of the anterior commissure	Performs microlaryngoscopy in the difficult to expose patient with complete exposure of the anterior commissure
	Positions patient properly for esophagoscopy, and sometimes able to visualize the esophagus	Performs esophagoscopy with biopsy in patients with favorable anatomy	Recognizes and is able to treat and/or develop treatment plan for common complications	Performs esophagoscopy with complex intervention efficiently in the difficult to expose patient

	Lists some potential complications (e.g., identifies and appropriately treats local injury from endoscopic instruments)	Recognizes common complications; obtains appropriate consultations for patient management		Treats complex complications				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Comments:							Not Yet Achieved Level 1	<input type="checkbox"/>

Patient Care 3: Sleep Disordered Breathing (SDB)				
Level 1	Level 2	Level 3	Level 4	Level 5
Obtains general history and performs basic physical exam	<p>Recognizes signs and symptoms of SDB and the differences between children and adults; orders appropriate routine lab, radiologic, and sleep studies</p> <p>Demonstrates basic understanding of spectrum of sleep disorders in children and adults</p> <p>Demonstrates beginning understanding of treatment measures</p> <p>Performs tonsillectomy and/or adenoidectomy (T&amp;A) on typical pediatric or adult patient</p> <p>Lists common potential complications</p>	<p>Performs detailed examination with evaluation of upper airway anatomy and interprets basic diagnostic testing</p> <p>Demonstrates moderate understanding of spectrum of sleep disorders in children and adults</p> <p>Demonstrates deepening understanding of medical treatments, role of surveillance, and alternate therapies</p> <p>Performs palatopharyngoplasty on typical patient</p> <p>Lists rare complications; recognizes common complications and is able to initiate treatment in the typical patient</p>	<p>Interprets examination and advanced diagnostic testing</p> <p>Demonstrates thorough understanding of spectrum of sleep disorders in children and adults</p> <p>Able to list and prioritize treatment options for the patient with SDB in complicated patient populations</p> <p>Performs T&amp;A and palatopharyngoplasty on complex patients</p> <p>Recognizes and is able to treat and/or develop treatment plan for common and uncommon complications in the complex patient</p>	<p>Teaches focused history and physical exam</p> <p>Recognizes interaction between SDB and other sleep disorders in children and adults</p> <p>Identifies indications and risks of non-surgical treatment plans for sleep disorders other than SDB, and disorders of initiating and maintaining sleep</p> <p>Teaches T&amp;A and palatopharyngoplasty</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Patient Care 4: Facial Trauma				
Level 1	Level 2	Level 3	Level 4	Level 5
Obtains history and performs basic physical exam	Recognizes symptoms of mandible and facial fractures; able to quickly assess airway, breathing, and circulation (ABC's) and need for urgent intervention	Obtains focused history and performs focused exam, including airway evaluation and survey for other head and neck injuries; orders appropriate routine lab and radiologic studies	Interprets appropriate lab and radiologic studies; identifies and orders necessary adjunctive studies (i.e., angiography)	
Demonstrates basic knowledge of normal facial skeleton and relationships	Localizes zones of the traumatically involved facial skeleton (i.e., frontal, orbital, midface, and mandible) using detailed familiarity with normal facial bony and soft tissue anatomy	Identifies common facial skeleton fracture patterns	Accurately diagnoses location and extent of specific facial trauma	
Demonstrates limited knowledge of treatment options	Discusses treatment modality options in general terms; demonstrates limited knowledge of potential indications for operative open reduction and internal fixation (ORIF) of the spectrum of facial fractures	Discusses appropriate therapeutic options for major facial fracture types/patterns	Develops appropriate treatment plan and performs ORIF for a facial fracture patient with combined mandible and midface fracture	Develops appropriate treatment plan for panfacial fracture patient
Knows how to scrub; Performs surgical time out	Demonstrates beginning ability to apply maxillo-mandibular fixation hardware and to perform intraoral and external incisions	Facile at placing maxillary-mandibular fixation (MMF) and establishing baseline patient occlusion; able to perform surgical approaches (location and extent) to visualize	Performs uncomplicated mandibular ORIF	Performs revision/infected mandibular fracture ORIF

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Demonstrates limited familiarity with complications	Lists some potential complications	fractures and provide adequate exposure for ORIF  Recognizes common complications; makes appropriate consultations for patient management	Recognizes and is able to treat common complications	Treats complex complications
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Patient Care 5: Rhinosinusitis				
Level 1	Level 2	Level 3	Level 4	Level 5
Obtains basic sinonasal symptom history and performs basic head and neck exam	Obtains focused history and physical, including detailed sinonasal symptom inventory	Performs nasal endoscopy and recognizes basic sinonasal pathology; demonstrates basic understanding of appropriate laboratory, pathologic, and radiologic diagnostic studies	Identifies nasal endoscopic pathologic findings in the previously operated patient; facile with interpretation/use of appropriate laboratory, pathologic and radiologic diagnostic studies	Teaches nasal endoscopy
Recognizes symptoms that indicate sinonasal pathology	Explains the diagnostic distinction between viral upper respiratory infections (URI) and acute bacterial sinusitis	Provides a differential diagnosis that includes the most common spectrum of bacterial sinusitis disease processes	Distinguishes the pathophysiologic and clinical presentations of the various subtypes of chronic rhinosinusitis	Recognizes and diagnoses the possible uncommon etiologies of chronic bacterial sinusitis refractory to standard therapy
Demonstrates minimal knowledge of treatment options	Discusses treatment modality options in general terms; prescribes medical therapy for simple common conditions (i.e., viral URI, acute bacterial rhinosinusitis [ABRS])	Discusses appropriate therapeutic options for chronic rhinosinusitis (CRS) and chronic rhinosinusitis with nasal polyps (CRSNP)	Formulates appropriate treatment plan for patient with acute exacerbations of CRS or recurrent polypoid disease; tailors medical therapy to patient's symptoms level and disease presentation	Provides treatment of recurrent/extensive frontal sinus disease
Performs surgical time out; familiar with pre-op documentation requirements (e.g., consent, history and physical, imaging); knows how to scrub	Performs intra-operative patient nasal decongestion and local injections under endoscopic guidance; able to apply/register stereotactic surgical guidance system	Performs endoscopic sinus surgery (ESS) procedure with guidance; recognizes endoscopic surgical landmarks	Completes ESS procedure with oversight	Performs revision and advanced endoscopic sinus surgery

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Lists some complications of rhinosinusitis	Performs rigid nasal endoscopy, uncinectomy, anterior ethmoidectomy, maxillary antrostomy under supervision  Lists some potential complications of sinus surgery	Recognizes common complications; appropriate management for common complications	Recognizes and is able to treat and/or develop treatment plan for significant complications	Treats complex complications
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Patient Care 6: Nasal Deformity				
Level 1	Level 2	Level 3	Level 4	Level 5
Obtains basic history and performs basic head and neck exam	Obtains focused history and physical	Performs limited dynamic nasal function analysis and anterior rhinoscopy	Performs comprehensive dynamic nasal function analysis; identifies aesthetic/cosmetic abnormalities; correlates examination findings with underlying structural etiologies	Performs analysis in revision/post-surgical setting
Demonstrates minimal knowledge of treatment options	Demonstrates understanding of normal nasal physiology	Differentiates between variable and fixed nasal obstruction contributors	Identifies specific components of nasal pathophysiology in functional obstruction	
	Discusses treatment modality options in general terms; prescribes medical therapy for simple common condition	Discusses appropriate therapeutic options for common nasal deformities	Formulates appropriate treatment plan for patient with fixed and/or dynamic nasal obstruction	Formulates appropriate treatment plan for patient requiring revision surgery
Performs surgical time out; knows how to scrub	Prepares patient intra-operatively			
	Plans, performs, and closes incisions that would be needed for adequate exposure; able to intra-operatively prepare patient (i.e., pack nose with decongestant pledgets, inject nose with local anesthetic)	Plans and performs incisions that would be needed for both intranasal and external rhinoplasty; cognizant of landmarks that mark important neurovascular structures	Resects or augments bony or cartilaginous framework, places and secure grafting material, and performs osteotomies	Performs revision rhinoplasty, including harvest and placement of graft material
		Elevates septal mucosal	Resects, recontours, and corrects septal	Performs revision septal surgery, including

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	Demonstrates limited knowledge of potential complications	flaps adequately to address identified structural Abnormalities  Performs septoplasty under supervision  Recognizes common complications	abnormalities  Recognizes and is able to treat and/or develop treatment plan for common complications	correction of complex septal abnormalities  Treats complex complications					
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Comments:								Not Yet Achieved Level 1	<input type="checkbox"/>

Patient Care 7: Chronic Ear				
Level 1	Level 2	Level 3	Level 4	Level 5
Performs general history and physical	Obtains pertinent otologic history and performs hand-held otoscopy; differentiates middle ear/mastoid disease from otitis externa; performs cranial nerve exam	Performs reliable otomicroscopic exam; orders appropriate audiometry, laboratory, and radiologic studies	Accurately interprets appropriate diagnostic studies; understands the indications for operative intervention; recognizes acute complications in the setting of COM	Interprets less commonly utilized diagnostic tests
Knows some common symptoms of ear infections	Identifies Eustachian tube (ET) dysfunction and the normal and abnormal physiologic contributors	Clinically differentiates otitis media (OM), otitis externa (OE), necrotizing OE, chronic otitis media (COM), mastoiditis, and cholesteatoma	Understands mechanisms underlying the development of intratemporal and intracranial complications of chronic ear disease	Manages chronic otitis media in an only hearing ear
Demonstrates limited knowledge of chronic ear disease				
Demonstrates little knowledge of medical/surgical treatments for ear disease	Prescribes appropriate systemic and/or topical antibiotic therapy for chronic otitis media; understands basics of post-operative wound care	Recognizes clinical failure of medical management; describes surgical risks, benefits, and alternatives; understands concept of recidivism and understands need for long-term surveillance plan	Formulates appropriate treatment plan for care of a patient with complications of chronic ear disease	
Knows how to scrub; performs surgical time out; maintains sterile field	Positions, preps, and drapes patient; able to inject local anesthetic; makes post-auricular incision; able to aesthetically close wound	Performs ear canal incisions and elevates tympanomeatal flap; performs cortical mastoidectomy and identifies antrum/horizontal semicircular canal;	Removes granulation tissue and/or cholesteatoma from the middle ear/mastoid; skeletonizes vertical segment of the facial nerve; performs tympanoplasty and/or ossiculoplasty	Performs canal wall down mastoidectomy skillfully; able to proficiently perform facial recess approach

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	Lists potential complications of ear surgery	skeletonizes posterior canal wall Able to manage routine post-operative complications	Recognizes major complications	Treats major post-surgical complications
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Patient Care 8: Pediatric Otitis Media (OM) and Otitis Externa (OE)				
Level 1	Level 2	Level 3	Level 4	Level 5
Performs basic history and physical examination	Performs focused clinical examination and is able to correctly diagnose acute OM, OM with effusion, and OE some of the time; knows when to order basic audiometric testing	Performs pneumatic otoscopy and accurately diagnose acute OM, OM with effusion, and OE; knows when additional imaging is required for diagnosis	Skilled pneumatic otoscopist in children of all ages; recognizes complications of acute OM, OM with effusion, and OE	Skilled pneumatic otoscopist in syndromic children
Understands concept of OM and OE	Describes the etiologic organisms most commonly associated with OM and OE; understands the predisposing factors associated with each type of ear infection	Accurately diagnoses patients along the OM natural history spectrum and identifies ramifications of treated/untreated OM	Diagnoses intra- and extracranial complications of ear infections	
	Appropriately prescribes topical and/or oral antibiotics for ear infections; demonstrates familiarity with effectiveness/ineffectiveness of non-antibiotic medications and alternative treatments	Recognizes treatment failures/refractoriness and indications for surgical intervention	Treats complications of ear infections	
Participates in surgical time out	Inserts ear speculum and safely cleans cerumen from ear canal	Identifies tympanic membrane and external auditory canal (EAC) landmark and structures; able to consistently perform appropriate myringotomy	Places tympanostomy tube safely in all patients with easy anatomy and in some patients with difficult anatomy	Places tympanostomy tube safely in patients with difficult anatomy

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	Lists potential complications	Recognizes common complications; obtains appropriate consultations for patient management	Recognizes and is able to treat and/or develop treatment plan for common complications	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Medical Knowledge 1: Upper Aerodigestive Tract (UADT) Malignancy				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates basic understanding of UADT and neck anatomy	Demonstrates moderate knowledge of UADT and neck anatomy; teaches anatomy to medical students in the operating room (OR)	Demonstrates proficient knowledge of normal anatomy; teaches anatomy to junior residents in the OR	Correlates anatomic knowledge with disease physical examination (PEX) and radiologic findings	Gives lectures on anatomy
Knows normal UADT function (mastication, deglutition, respiration, and phonation)	Knows abnormal UADT physiologic function and locoregional manifestations; knows tobacco is correlated with UADT cancer	Knows major risk factors for UADT cancer according to type of cancer	Understands molecular basis for UADT cancer; knows benign and malignant differential diagnoses of common site presentations	Articulates treatment protocol specifics for primary chemoradiation therapy
Obtains basic history and physical	Knows most common disease state presentations for UADT malignancies	Knows most common disease progression routes for UADT malignancy	Knows staging system for most common UADT cancers, and can accurately stage using available clinical and radiologic data	
	Performs focused history and physical, including clinic laryngoscopy; understands appropriate labs, FNA, and radiologic studies for workup	Interprets appropriate lab, pathologic, and radiologic studies	Understands the prognostic indicators of tumor pathology, including molecular markers	
	Describes basic treatment algorithm for UADT malignancies	Understands concepts of neo-adjuvant, primary, and adjuvant treatments; describes options for securing the difficult airway in the OR	Describes treatment options based on primary site, disease stage, and patient factors	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Medical Knowledge 2: Hearing Loss				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Demonstrates limited knowledge of temporal bone and cochleovestibular anatomy</p> <p>Demonstrates limited understanding of the physiology of hearing</p> <p>Demonstrates limited understanding of the natural history of hearing loss</p>	<p>Demonstrates proficient knowledge of temporal bone and cochleovestibular gross anatomy/embryology</p> <p>Understands normal middle ear mechanics and cochlear physiology</p> <p>Understands the natural history of presbycusis and noise-induced hearing loss</p> <p>Recognizes normal ear exam and normal audiometry; able to identify basic hearing loss classifications on an audiogram; demonstrates limited knowledge of options for diagnostic work-up of hearing loss</p> <p>Demonstrates awareness of non-surgical aural rehabilitation options; understands importance of hearing surveillance</p>	<p>Demonstrates proficient knowledge of normal temporal bone and cochleovestibular histopathology</p> <p>Generates differential diagnosis for hearing loss in adult patients</p> <p>Understands the natural history of adult onset hearing loss</p> <p>Recognizes an abnormal ear exam/audiogram; orders appropriate routine audiometric, laboratory, and imaging tests for work-up</p> <p>Demonstrates comprehensive awareness of aural rehabilitation options, including surgical management of hearing loss</p>	<p>Understands congenital variations of temporal bone and cochleovestibular anatomy</p> <p>Generates differential diagnosis for hearing loss in children, and identifies uncommon causes of hearing loss in adults</p> <p>Understands the natural history of pediatric hearing loss and uncommon causes of adult-onset hearing loss</p> <p>Considers unusual causes for hearing loss and orders/interprets appropriate advanced audiometric, laboratory, and imaging studies</p> <p>Describes indications/contraindications and complications of the surgical aural rehabilitation techniques; tailors aural rehabilitation to patient-specific needs</p>	<p>Demonstrates knowledge of central auditory pathways</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Comments:</b>				Not Yet Achieved Level 1 <input type="checkbox"/>

Medical Knowledge 3: Dysphagia-Dysphonia				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates limited understanding of aerodigestive functional anatomy	Understands basic anatomy and physiology of voice and swallowing	Demonstrates mid-level understanding of anatomy and physiology of voice and swallowing	Demonstrates thorough knowledge of anatomy and physiology of voice and swallowing	Teaches pathophysiology
Demonstrates limited understanding of common voice and swallowing disorders	Demonstrates basic understanding of common voice and swallowing disorders	Demonstrates mid-level understanding of common voice and swallowing disorders	Demonstrates comprehensive understanding of most voice and swallowing disorders, including voice and swallowing manifestations of systemic diseases (i.e., autoimmune disorders, sarcoid, neuromuscular disorders)	
Demonstrates limited knowledge of disease progression and sequelae of untreated voice and swallowing disorders	Understands age-related changes to voice and swallowing	Demonstrates knowledge of disease progression and sequelae of untreated voice and swallowing disorders	Articulates comprehensive understanding of risk factors and timeframe for malignant transformation of premalignant conditions (laryngopharyngeal reflux disease [LPRD], Barrett's, Dysplasia/Leukoplakia, recurrent respiratory papillomatosis [RRP])	
Obtains basic history and physical	Obtains focused history and physical, including clinic laryngoscopy; able to list appropriate diagnostic modalities for work-up of	Interprets appropriate lab, pathologic, and radiologic studies	Correlates laboratory and radiologic work-up with clinical diagnosis	

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Demonstrates minimal understanding of treatment options and rationales, and risks/benefits of each treatment option	voice and swallowing disorders Demonstrates beginning understanding of treatment options and rationales, and risks/benefits of each treatment option	Demonstrates mid-level understanding of treatment options and rationales, and risks/benefits of each treatment option	Demonstrates understanding of treatment options and rationales, risks/benefits of each treatment option, and surveillance algorithms for malignant disease	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Medical Knowledge 4: Inhalant Allergy				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates familiarity with basic nasal anatomy and normal respiratory mucosa histology	Demonstrates basic understanding of derangements in nasal anatomy and mucosal inflammation	Demonstrates knowledge of histopathology of allergic rhinitis and anatomic factors affecting the nasal airway	Demonstrates thorough understanding of anatomic impact of allergic inflammation on the nasal airway	Demonstrates advanced understanding of allergy diagnostic testing
Demonstrates familiarity with normal functions of nasal mucosa and nasal cavities	Knows pathophysiology of allergic rhinitis (AR)	Knows pathophysiology of non-allergic rhinitis	Distinguishes presentations of allergic and non-allergic rhinitis patients; demonstrates knowledge of cellular and molecular features of inhalant allergy	Is facile with multiple methods of immunotherapy
Demonstrates limited knowledge of allergy work-up	Describes comorbidities in AR	Describes the natural history and components of severity in allergic disease	Describes systems for AR subtype and severity (e.g., seasonal vs. perennial, intermittent vs. persistent, etc.) and incorporates knowledge of severity and natural history into patient management	
	Demonstrates familiarity with clinical presentations of allergic disease	Demonstrates knowledge of testing methods in allergic disease	Combines clinical features and test results to correctly diagnose allergic disease	
	Prescribes basic medical treatment for AR	Prescribes advanced medical treatment for allergic disease	Demonstrates a working knowledge of immunotherapy for allergic disease	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Systems-Based Practice 1: Patient Safety and Quality Improvement				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of common patient safety events	Identifies system factors that lead to patient safety events	Participates in analysis of patient safety events (simulated or actual)	Conducts analysis of patient safety events and offers error prevention strategies (simulated or actual)	Actively engages teams and processes to modify systems to prevent patient safety events
Demonstrates knowledge of how to report patient safety events	Reports patient safety events through institutional reporting systems (actual or simulated)	Participates in disclosure of patient safety events to patients and families (simulated or actual)	Discloses patient safety events to patients and families (simulated or actual)	Role models or mentors others in the disclosure of patient safety events
Demonstrates knowledge of basic quality improvement methodologies and metrics	Describes local quality improvement initiatives (e.g., community vaccination rate, infection rate, smoking cessation)	Participates in local quality improvement initiatives	Demonstrates the skills required to identify, develop, implement, and analyze a quality improvement project	Creates, implements, and assesses quality improvement initiatives at the institutional or community level
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Systems-Based Practice 2: System Navigation for Patient-Centered Care				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of care coordination	Coordinates care of patients in routine clinical situations effectively utilizing the roles of the interprofessional teams	Coordinates care of patients in complex clinical situations effectively utilizing the roles of their interprofessional teams	Role models effective coordination of patient-centered care among different disciplines and specialties	Analyzes the process of care coordination and leads in the design and implementation of improvements
Identifies key elements for safe and effective transitions of care and handoffs	Performs safe and effective transitions of care/handoffs in routine clinical situations	Performs safe and effective transitions of care/handoffs in complex clinical situations	Role models and advocates for safe and effective transitions of care/handoffs within and across health care delivery systems, including outpatient settings	Improves quality of transitions of care within and across health care delivery systems to optimize patient outcomes
Demonstrates knowledge of population and community health needs and disparities	Identifies specific population and community health needs and inequities for their local population	Uses local resources effectively to meet the needs of a patient population and community	Participates in changing and adapting practice to provide for the needs of specific populations	Leads innovations and advocates for populations and communities with health care inequities
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Systems-Based Practice 3: Physician Role in Health Care Systems				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies components of the complex health care system	Describes the physician's role and how the interrelated components of complex health care system impact patient care	Analyzes how personal practice affects the system (e.g., length of stay, readmission rates, clinical efficiency)	Manages the interrelated components of the complex health care systems for efficient and effective patient care	Advocates for or leads change to enhance systems for high value, efficient, and effective patient care
Describes basic health payment systems, including government, private, public, and uninsured care and different practice models	Delivers care informed by patient specific payment model	Utilizes shared decision making in patient care, taking into consideration payment models	Advocates for patient care understanding the limitations of each patient's payment model (e.g., community resources, patient assistance resources)	Participates in advocacy activities for health policy to better align payment systems with high value care
		Identifies resources and effectively plans for transition to practice (e.g., information technology, legal, billing and coding, financial, personnel)	Describes basic elements needed to transition to practice (e.g., contract negotiations, malpractice insurance, government regulation, compliance)	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Practice-Based Learning and Improvement 1: Evidence-Based and Informed Practice				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates how to access and use available evidence, and incorporate patient preferences and values in order to care for a routine patient	Articulates clinical questions and elicits patient preferences and values in order to guide evidence-based care	Locates and applies the best available evidence, integrated with patient preference, to the care of complex patients	Critically appraises and applies evidence even in the face of uncertainty and conflicting evidence to guide care, tailored to the individual patient	Coaches others to critically appraise and apply evidence for complex patients, and/or participates in the development of guidelines
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Practice-Based Learning and Improvement 2: Reflective Practice and Commitment to Personal Growth				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Accepts responsibility for personal and professional development by establishing goals</p> <p>Identifies the factors that contribute to gap(s) between expectations and actual performance</p> <p>Actively seeks opportunities to improve</p>	<p>Demonstrates openness to performance data (feedback and other input) in order to inform goals</p> <p>Analyzes and reflects on the factors that contribute to gap(s) between expectations and actual performance</p> <p>Designs and implements a learning plan, with prompting</p>	<p>Seeks performance data episodically, with adaptability and humility</p> <p>Analyzes, reflects on, and institutes behavioral change(s) to narrow the gap(s) between expectations and actual performance</p> <p>Independently creates and implements a learning plan</p>	<p>Intentionally seeks performance data consistently, with adaptability and humility</p> <p>Challenges assumptions and considers alternatives in narrowing the gap(s) between expectations and actual performance</p> <p>Uses performance data to measure the effectiveness of the learning plan and, when necessary, improves it</p>	<p>Role models consistently seeking performance data, with adaptability and humility</p> <p>Coaches others on reflective practice</p> <p>Facilitates the design and implementation of learning plans for others</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Professionalism 1: Professional Behavior and Ethical Principles				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Identifies and describes potential triggers for professionalism lapses</p> <p>Describes when and how to appropriately report professionalism lapses, including strategies for addressing common barriers</p> <p>Demonstrates knowledge of the ethical principles underlying informed consent, surrogate decision making, advance directives, confidentiality, error disclosure, stewardship of limited resources, and related topics</p>	<p>Demonstrates insight into professional behavior in routine situations</p> <p>Takes responsibility for own professionalism lapses</p> <p>Analyzes straightforward situations using ethical principles</p>	<p>Demonstrates professional behavior in complex or stressful situations</p> <p>Analyzes complex situations using ethical principles</p> <p>Recognizes need to seek help in managing and resolving complex ethical situations</p>	<p>Recognizes situations that may trigger professionalism lapses and intervenes to prevent lapses in self and others</p> <p>Recognizes and utilizes appropriate resources for managing and resolving ethical dilemmas as needed (e.g., ethics consultations, literature review, risk management/legal consultation)</p>	<p>Coaches others when their behavior fails to meet professional expectations</p> <p>Identifies and seeks to address system-level factors that induce or exacerbate ethical problems or impede their resolution</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Professionalism 2: Accountability/Conscientiousness				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Takes responsibility for failure to complete tasks and responsibilities, identifies potential contributing factors, and describes strategies for ensuring timely task completion in the future</p> <p>Responds promptly to requests or reminders to complete tasks and responsibilities</p>	<p>Performs tasks and responsibilities in a timely manner with appropriate attention to detail in routine situations</p> <p>Recognizes situations that may impact own ability to complete tasks and responsibilities in a timely manner</p>	<p>Performs tasks and responsibilities in a timely manner with appropriate attention to detail in complex or stressful situations</p> <p>Proactively implements strategies to ensure that the needs of patients, teams, and systems are met</p>	<p>Recognizes situations that may impact others' ability to complete tasks and responsibilities in a timely manner</p>	<p>Takes ownership of system outcomes</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Professionalism 3: Self-Awareness and Help-Seeking				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Recognizes status of personal and professional well-being, with assistance</p> <p>Recognizes limits in the knowledge/skills of self or team, with assistance</p>	<p>Independently recognizes status of personal and professional well-being</p> <p>Independently recognizes limits in the knowledge/skills of self or team</p> <p>Demonstrates appropriate help-seeking behaviors</p>	<p>With assistance, proposes a plan to optimize personal and professional well-being</p> <p>With assistance, proposes a plan to remediate or improve limits in the knowledge/skills of self or team</p>	<p>Independently develops a plan to optimize personal and professional well-being</p> <p>Independently develops a plan to remediate or improve limits in the knowledge/skills of self or team</p>	<p>Coaches others when emotional responses or limitations in knowledge/skills do not meet professional expectations</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Interpersonal and Communication Skills 1: Patient- and Family-Centered Communication				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Uses language and non-verbal behavior to demonstrate respect and establish rapport</p> <p>Identifies common barriers to effective communication (e.g., language, disability) while accurately communicating own role within the health care system</p> <p>Identifies the need to adjust communication strategies based on assessment of patient/family expectations and understanding of their health status and treatment options</p>	<p>Establishes a therapeutic relationship in straightforward encounters using active listening and clear language</p> <p>Identifies complex barriers to effective communication (e.g., health literacy, cultural)</p> <p>Organizes and initiates communication with patients/families by introducing stakeholders, setting the agenda, clarifying expectations, and verifying an understanding of the clinical situation</p>	<p>Establishes a therapeutic relationship in challenging patient encounters</p> <p>When prompted, reflects on personal biases while attempting to minimize communication barriers</p> <p>With guidance, sensitively and compassionately delivers medical information; elicits patient/family values, goals and preferences; and acknowledges uncertainty and conflict</p>	<p>Easily establishes therapeutic relationships, with attention to patient/family concerns and context, regardless of complexity</p> <p>Independently recognizes personal biases while attempting to proactively minimize communication barriers</p> <p>Independently uses shared decision making to align patient/family values, goals, and preferences with treatment options to make a personalized care plan</p>	<p>Mentors others in situational awareness and critical self-reflection to consistently develop positive therapeutic relationships</p> <p>Role models self-awareness practice while identifying teaching a contextual approach to minimize communication barriers</p> <p>Role models shared decision making in patient/family communication in situations with a high degree of uncertainty/conflict</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Interpersonal and Communication Skills 2: Interprofessional and Team Communication				
Level 1	Level 2	Level 3	Level 4	Level 5
Respectfully requests a consultation	Clearly and concisely requests a consultation	Checks own understanding of consultant recommendations	Coordinates recommendations from different members of the health care team to optimize patient care	Role models flexible communication strategies that value input from all health care team members, resolving conflict when needed
Respectfully receives a consultation request	Clearly and concisely responds to a consultation request	Checks understanding of recommendations when providing consultation	Communicates feedback and constructive criticism to superiors	Facilitates regular health care team-based feedback in complex situations
Uses language that values all members of the health care team	Communicates information effectively with all health care team members  Solicits feedback on performance as a member of the health care team	Uses active listening to adapt communication style to fit team needs  Communicates concerns and provides feedback to peers and learners		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

Interpersonal and Communication Skills 3: Communication within Health Care Systems				
Level 1	Level 2	Level 3	Level 4	Level 5
Accurately records information in the patient record	Demonstrates organized diagnostic and therapeutic reasoning through notes in the patient record	Concisely reports diagnostic and therapeutic reasoning in the patient record	Communicates clearly, concisely, in a timely manner, and in an organized written form, including anticipatory guidance	Models feedback to improve others' written communication
Safeguards patient personal health information	Demonstrates accurate, timely, and appropriate use of documentation shortcuts	Appropriately selects direct (e.g., telephone, in-person) and indirect (e.g., progress notes, text messages) forms of communication based on context	Produces written or verbal communication (e.g., patient notes, e-mail, etc.) that serves as an example for others to follow	Guides departmental or institutional communication around policies and procedures
Communicates through appropriate channels as required by institutional policy (e.g. patient safety reports, cell phone/pager usage)	Documents required data in formats specified by institutional policy	Uses appropriate channels to offer clear and constructive suggestions to improve the system	Initiates difficult conversations with appropriate stakeholders to improve the system	Facilitates dialogue regarding systems issues among larger community stakeholders (e.g., institution, health care system, field)
	Respectfully communicates concerns about the system			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>