The Otolaryngology Milestone Project

A Joint Initiative of

The Accreditation Council for Graduate Medical Education and
The American Board of Otolaryngology





October 2013

The Otolaryngology Milestone Project

The milestones are designed only for use in evaluation of resident physicians in the context of their participation in ACGME-accredited residency or fellowship programs. The milestones provide a framework for the assessment of the development of the resident physician in key dimensions of the elements of physician competency in a specialty or subspecialty. 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.

Otolaryngology Milestones

Chair: Terry Tsue, MD, FACS

Working Group

Nasir I. Bhatti, MD

Anthony E. Brissett, MD, FACS

Brian Burkey, MD

Laura Edgar, EdD, CAE

Pamela Derstine, PhD, MHPE

Noel Jabbour, MD

Abraham Jacob, MD

Michael M. Johns III, MD

Eric Kezirian, MD

Daniel J. Kirse, MD

Joseph Walter Kutz, MD

Anna H. Messner, MD

Liana Puscas, MD, MHS

Matthew Ryan, MD

Ivan Wayne, MD

Advisory Group

Timothy Brigham, MDiv, PhD

Brian Burkey, MD

Sukgi S. Choi, MD

Michael Cunningham, MD, FACS

Ellen S. Deutsch, MD

Marvin P. Fried, MD, FACS

Sonya Malekzadeh, MD

Bradley Marple, MD

Anna H. Messner, MD

Robert Miller, MD

Michael G. Stewart, MD

Randal S. Weber, MD, FACS

Milestone Reporting

This document presents milestones designed for programs to use in semi-annual review of resident performance and reporting to the ACGME. Milestones are knowledge, skills, attitudes, and other attributes for each of the ACGME competencies organized in a developmental framework from less to more advanced. They are descriptors and targets for resident performance as a resident moves from entry into residency through graduation. In the initial years of implementation, the Review Committee will examine milestone performance data for each program's residents as one element in the Next Accreditation System (NAS) to determine whether residents overall are progressing.

For each period, review and reporting will involve selecting milestone levels that best describe a resident's current performance and attributes. Milestones are arranged into numbered levels. Tracking from Level 1 to Level 5 is synonymous with moving from novice to expert. These levels do not correspond with post-graduate year of education.

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).

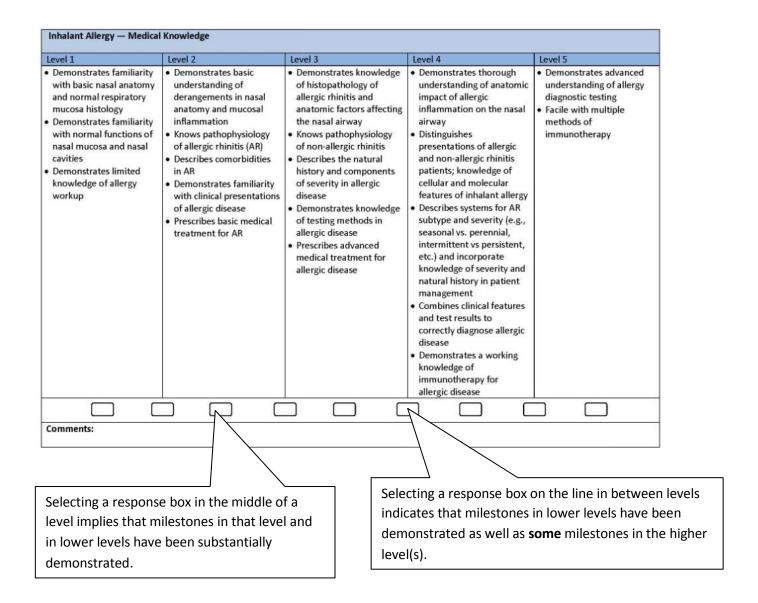
- **Level 1:** The resident demonstrates milestones expected of an incoming resident.
- **Level 2:** The resident is advancing and demonstrates additional milestones, but is not yet performing at a mid-residency level.
- **Level 3:** The resident continues to advance and demonstrate additional milestones, 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

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

Some milestone descriptions include statements about performing independently. These activities must occur in conformity to ACGME supervision guidelines, as well as institutional and program policies. For example, a resident who performs a procedure independently must, at a minimum, be supervised through oversight.

Answers to Frequently Asked Questions about Milestones are available on the Milestones web page: http://www.acqme.org/acqmeweb/Portals/0/MilestonesFAQ.pdf. The diagram below presents an example set of milestones for one sub-competency in the same format as the milestone report worksheet. For each reporting period, a resident's performance on the milestones for each sub-competency will be indicated by selecting the level of milestones that best describes that resident's performance in relation to the milestones.



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

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

Sleep Disordered Breathing		Lovel 2	Lovel 4	LovelE
Obtains general history and performs basic physical exam	 Recognizes signs and symptoms of SDB and the differences between children and adults; orders appropriate routine lab, radiologic, and sleep studies Demonstrates basic understanding of spectrum of sleep disorders in children and adults Demonstrates beginning understanding of treatment measures Performs tonsillectomy and/or adenoidectomy (T&A) on typical pediatric or adult patient Lists common potential complications 	 Performs detailed examination with evaluation of upper airway anatomy and interprets basic diagnostic testing Demonstrates moderate understanding of spectrum of sleep disorders in children and adults Demonstrates deepening understanding of medical treatments, role of surveillance, and alternate therapies Performs palatopharyngoplasty on typical patient Lists rare complications; recognizes common complications and is able to initiate treatment in the typical patient 	 Interprets examination and advanced diagnostic testing Demonstrates thorough understanding of spectrum of sleep disorders in children and adults Able to list and prioritize treatment options for the patient with SDB in complicated patient populations Performs T&A and palatopharyngoplasty on complex patients Recognizes and is able to treat and/or develop treatment plan for common and uncommon complications in the complex patient 	 Teaches focused history and physical exam Recognizes interaction between SDB and other sleep disorders in children and adults Identifies indications and risks of non-surgical treatment plans for sleep disorders other than SDB, and disorders of initiating and maintaining sleep Teaches T&A and palatopharyngoplasty

Level 1	Level 2	Level 3	Level 4	Level 5
 Obtains history and performs basic physical exam Demonstrates basic knowledge of normal facial skeleton and relationships Demonstrates limited knowledge of treatment options Knows how to scrub; Performs surgical time out Demonstrates limited familiarity with complications 	 Recognizes symptoms of mandible and facial fractures; able to quickly assess airway, breathing, and circulation (ABC's) and need for urgent intervention Localizes zones of the traumatically involved facial skeleton (i.e., frontal, orbital, midface, and mandible) using detailed familiarity with normal facial boney and soft tissue anatomy 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 Demonstrates beginning ability to apply maxillomandibular fixation hardware and to perform intraoral and external incisions Lists some potential complications 	 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 Identifies common facial skeleton fracture patterns Discusses appropriate therapeutic options for major facial fracture types/patterns Facile at placing maxillarymandibular fixation (MMF) and establishing baseline patient occlusion; able to perform surgical approaches (location and extent) to visualize fractures and provide adequate exposure for ORIF Recognizes common complications; makes appropriate consultations for patient management 	 Interprets appropriate lab and radiologic studies; identifies and orders necessary adjunctive studies (i.e., angiography) Accurately diagnoses location and extent of specific facial trauma Develops appropriate treatment plan and performs ORIF for a facial fracture patient with combined mandible and midface fracture Performs uncomplicated mandibular ORIF Recognizes and is able to treat common complications 	 Develops appropriate treatment plan for panfacial fracture patient Performs revision/infected mandibular fracture ORIF Treats complex complications

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

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

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

examination and is able to correctly diagnose acute OM, OM with effusion, and OE participates in surgical time out OK and OE participates in surgical time out	Level 1	Level 2	Level 3	Level 4	Level 5
	Understands concept of OM and OEParticipates in surgical	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 • Describes the etiologic organisms most commonly associated with OM and OE; understands the predisposing factors associated with each type of ear infection • Appropriately prescribes topical and/or oral antibiotics for ear infections; demonstrates familiarity with effectiveness/ ineffectiveness of nonantibiotic medications and alternative treatments • Inserts ear speculum and safely cleans cerumen from	otoscopy and accurately diagnose acute OM, OM with effusion, and OE; knows when additional imaging is required for diagnosis • Accurately diagnoses patients along the OM natural history spectrum and identifies ramifications of treated/untreated OM • Recognizes treatment failures/refractoriness and indications for surgical intervention • Identifies tympanic membrane and external auditory canal (EAC) landmark and structures; able to consistently perform appropriate myringotomy • Recognizes common complications; obtains appropriate consultations	otoscopist in children of all ages; recognizes complications of acute OM, OM with effusion, and OE • Diagnoses intra- and extracranial complications of ear infections • Treats complications of ear infections • Places tympanostomy tube safely in all patients with easy anatomy and in some patients with difficult anatomy • Recognizes and is able to treat and/or develop treatment plan for	 otoscopist in syndromic children Places tympanostomy tube safely in patients with

Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates basic understanding of UADT and neck anatomy Knows normal UADT function (mastication, deglutition, respiration, and phonation) Obtains basic history and physical	 Demonstrates moderate knowledge of UADT and neck anatomy; teaches anatomy to medical students in the operating room (OR) Knows abnormal UADT physiologic function and locoregional manifestations; knows tobacco is correlated with UADT cancer Knows most common disease state presentations for UADT malignancies Performs focused history and physical, including clinic laryngoscopy; understands appropriate labs, FNA, and radiologic studies for workup Describes basic treatment algorithm for UADT malignancies 	 Demonstrates proficient knowledge of normal anatomy; teaches anatomy to junior residents in the OR Knows major risk factors for UADT cancer according to type of cancer Knows most common disease progression routes for UADT malignancy Interprets appropriate lab, pathologic, and radiologic studies Understands concepts of neo-adjuvant, primary, and adjuvant treatments; describes options for securing the difficult airway in the OR 	 Correlates anatomic knowledge with disease physical examination (PEx) and radiologic findings Understands molecular basis for UADT cancer; knows benign and malignant differential diagnoses of common site presentations Knows staging system for most common UADT cancers, and can accurately stage using available clinical and radiologic data Understands the prognostic indicators of tumor pathology, including molecular markers Describes treatment options based on primary site, disease stage, and patient factors 	Gives lectures on anatomy Articulates treatment protocol specifics for primary chemoradiation therapy

knowledge of temporal bone and cochleovestibular anatomy Demonstrates limited understanding of the physiology of hearing loss Demonstrates limited understanding of the natural history of hearing loss 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 Demonstrates lamited understanding of the natural history of hearing loss Recognizes normal ear exam and normal audiometry; able to identify basic hearing loss Demonstrates lamited understanding of the natural history of presbycusis and noise-induced hearing loss classifications on an audiogram; demonstrates limited knowledge of options for diagnostic work-up of hearing loss Demonstrates awareness of non-surgical aural Robolego of normal temporal bone and cochleovestibular histopology Generates differential diagnosis for hearing loss in adult patients Understands the natural history of adult onset hearing loss Recognizes an abnormal ear exam/audiogram; orders appropriate routine audiometric, laboratory, and imaging studies Demonstrates a limited understandis por hearing loss in children, and identifies uncommon causes of hearing loss on didity bone and cochleovestibular anatomy Generates differential diagnosis for hearing loss in children, and identifies uncommon causes of hearing loss on duncommon causes of adult-onset hearing loss Recognizes an abnormal ear exam/audiogram; orders appropriate routine audiometric, laboratory, and imaging studies Demonstrates audiometric, laboratory, and imaging tests for work-up Demonstrates limited understandition potions	Level 1	Level 2	Level 3	Level 4	Level 5
understands importance rehabilitation techniques; of hearing surveillance tailors aural rehabilitation to patient-specific needs	knowledge of temporal bone and cochleovestibular anatomy Demonstrates limited understanding of the physiology of hearing Demonstrates limited understanding of the natural history of hearing	knowledge of temporal bone and cochleovestibular gross anatomy/embryology Understands normal middle ear mechanics and cochlear physiology Understands the natural history of presbycusis and noise-induced hearing loss 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 Demonstrates awareness of non-surgical aural rehabilitation options; understands importance	knowledge of normal temporal bone and cochleovestibular histopathology Generates differential diagnosis for hearing loss in adult patients Understands the natural history of adult onset hearing loss Recognizes an abnormal ear exam/audiogram; orders appropriate routine audiometric, laboratory, and imaging tests for work-up Demonstrates comprehensive awareness of aural rehabilitation options, including surgical management of hearing	variations of temporal bone and cochleovestibular anatomy • Generates differential diagnosis for hearing loss in children, and identifies uncommon causes of hearing loss in adults • Understands the natural history of pediatric hearing loss and uncommon causes of adult-onset hearing loss • Considers unusual causes for hearing loss and orders/interprets appropriate advanced audiometric, laboratory, and imaging studies • Describes indications/ contraindications and complications of the surgical aural rehabilitation techniques; tailors aural rehabilitation	•

Dysphagia-Dysphonia — Med	lical Knowledge			
Level 1	Level 2	Level 3	Level 4	Level 5
 Demonstrates limited understanding of aerodigestive functional anatomy Demonstrates limited understanding of common voice and swallowing disorders Demonstrates limited knowledge of disease progression and sequelae of untreated voice and swallowing disorders Obtains basic history and physical Demonstrates minimal understanding of treatment options and rationales, and risks/benefits of each treatment option 	 Understands basic anatomy and physiology of voice and swallowing Demonstrates basic understanding of common voice and swallowing disorders Understands age-related changes to voice and swallowing Obtains focused history and physical, including clinic laryngoscopy; able to list appropriate diagnostic modalities for work-up of voice and swallowing disorders Demonstrates beginning understanding of treatment options and rationales, and risks/benefits of each treatment option 	 Demonstrates mid-level understanding of anatomy and physiology of voice and swallowing Demonstrates mid-level understanding of common voice and swallowing disorders Demonstrates knowledge of disease progression and sequelae of untreated voice and swallowing disorders Interprets appropriate lab, pathologic, and radiologic studies Demonstrates mid-level understanding of treatment options and rationales, and risks/benefits of each treatment option 	 Demonstrates thorough knowledge of anatomy and physiology of voice and swallowing Demonstrates comprehensive understanding of most voice and swallowing disorders, including voice and swallowing manifestations of systemic diseases (i.e., autoimmune disorders, sarcoid, neuromuscular 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]) Correlates laboratory and radiologic work-up with clinical diagnosis Demonstrates understanding of treatment options and rationales, risks/benefits of each treatment option, and surveillance algorithms for malignant disease 	• Teaches pathophysiology
Comments:				
Comments.				

with basic nasal anatomy and normal respiratory mucosa histology Demonstrates familiarity with normal functions of nasal mucosa and nasal cavities Demonstrates limited knowledge of allergy work-up Nemonstrates familiarity with clinical presentations of allergic disease Prescribes basic medical treatment for AR Prescribes davided treatment for AR Observibes the natural history and components of severity in allergic disease Prescribes advanced medical treatment for allergic disease Prescribes advanced medi	Level 1	Level 2	Level 3	Level 4	Level 5
alici gic disease	and normal respiratory mucosa histology Demonstrates familiarity with normal functions of nasal mucosa and nasal cavities Demonstrates limited knowledge of allergy	understanding of derangements in nasal anatomy and mucosal inflammation Knows pathophysiology of allergic rhinitis (AR) Describes comorbidities in AR Demonstrates familiarity with clinical presentations of allergic disease Prescribes basic medical	of histopathology of allergic rhinitis and anatomic factors affecting the nasal airway • Knows pathophysiology of non-allergic rhinitis • Describes the natural history and components of severity in allergic disease • Demonstrates knowledge of testing methods in allergic disease • Prescribes advanced medical treatment for	understanding of anatomic impact of allergic inflammation on the nasal airway • Distinguishes presentations of allergic and non-allergic rhinitis patients; demonstrates knowledge of cellular and molecular features of inhalant allergy • 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 • Combines clinical features and test results to correctly diagnose allergic disease • Demonstrates a working knowledge of	Is facile with multiple methods of

Patient Safety — Systems-based Practice				
Level 1	Level 2	Level 3	Level 4	Level 5
Understands the need for formal patient safety measures (e.g., surgical time out)	 Participates in the use of tools to prevent adverse events (e.g., checklists and briefings) Understands and uses chain of command to develop and implement patient care plans (junior to senior resident to attending) 	 Consistently uses tools to prevent adverse events (e.g., checklists and briefings) Identifies potential patient safety issues (patient positioning in OR, aspiration risk) and means to prevent those problems Presents at morbidity and mortality (M&M) conference (organizes data and identification of some pertinent patient safety issues) 	 Advocates for quality patient care and optimal patient care systems Analyzes M&M findings and provides feedback to improve patient safety 	Educates other services re patient safety issues in otolaryngology head and neck surgery OHNS
Comments:				

Resource Utilization — Systems-based Practice				
Level 1	Level 2	Level 3	Level 4	Level 5
Uses resources (social work, patient care manager) to coordinate patient care	 Actively functions as part of an interdisciplinary team to care for patients Aware of socioeconomic issues in patient care and takes those into consideration when developing patient care plans 	 Incorporates cost issues into care decisions Contributes to leadership of the interdisciplinary care team Uses technology and other hospital/clinic resources in patient care 	 Practices cost-effective care (e.g., managing length of stay, operative efficiency) Leads interdisciplinary team in patient care 	Designs measurement tools to monitor and provide feedback to providers/teams on resource consumption to facilitate improvement
Comments:				

The ability to investigate and evaluate the care of patients, to appraise and assimilate scientific evidence, and to continuously improve patient care based on constant self-evaluation and life-long learning — Practice-based Learning and Improvement				
Level 1	Level 2	Level 3	Level 4	Level 5
 Is aware of one's own level of knowledge and uses feedback from teachers, colleagues, and patients Identifies learning resources 	 Continually seeks and incorporates feedback to improve performance Develops a learning plan and uses published review articles and guidelines 	 Demonstrates improvement in clinical thought and action based on continual self- assessment Selects an appropriate evidence-based information tool to answer specific questions 	 Demonstrates consistent behavior of incorporating evidence- based information in common practice areas Organizes educational activities at the program level 	 Is competent at performing meta-analyses to answer complex patient care questions is a sophisticated user of learning resources
Comments:				

Professionalism				
Level 1	Level 2	Level 3	Level 4	Level 5
 Demonstrates behavior that conveys caring, honesty, and genuine interest in patients and families Exhibits professional behavior (e.g., reliability, industry, integrity, and confidentiality) Maintains respect for patient confidentiality 	 Is aware of ethical issues in patient care, including issues of autonomy, end-of-life care and research ethics Recognizes individual limits in clinical situations and asks for assistance when needed Understands and manages the issues related to fatigue and sleep deprivation Completes paperwork, administrative tasks and assignments in a timely manner 	 Recognizes ethical issues in practice and is able to discuss, analyze, and manage common ethical situations Displays sensitivity and responsiveness toward all patient populations 	 Analyzes and manages ethical issues in complicated and challenging situations Develops a mutually agreeable care plan in the context of conflicting physician and patient values and beliefs 	Helps lead institutional and organizational ethics programs
Comments:				

Level 1	Level 2	Level 3	Level 4	Level 5
 Develops a positive relationship with patients and understands patients' and families perspectives Utilizes interpreters as needed 	 Effectively communicates during transitions of care Communicates with patients and families, taking into account the socioeconomic and cultural backgrounds of these individuals Ensures that the medical record is timely, accurate, and complete 	 Sustains effective relationships with services requesting OHNS consultation Works effectively as a member of a health care team Uses multiple forms of communication (e.g., e-mail, patient portal, social media) ethically and with respect for patient privacy 	 Develops working relationships across specialties and systems of care Organizes and facilitates family/health care team conferences 	 Develops models/approaches to managing difficult communications Coaches others to improve communication skills