Pediatric Otolaryngology Milestones

The Accreditation Council for Graduate Medical Education



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The Milestones are designed only for use in evaluation of fellows 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 fellow in key dimensions of the elements of physician competence 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.

Pediatric Otolaryngology Milestones Work Group

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American Board of Otolaryngology – Head and Neck Surgery

Review Committee for Otolaryngology – Head and Neck Surgery

American Society for Pediatric Otolaryngology

Understanding Milestone Levels and Reporting

This document presents the Milestones, which programs use in a semi-annual review of fellow performance, and then report to the ACGME. Milestones are knowledge, skills, attitudes, and other attributes for each of the ACGME Competencies organized in a developmental framework. The narrative descriptions are targets for resident/fellow performance throughout their educational program.

Milestones are arranged into levels. Tracking from Level 1 to Level 5 is synonymous with moving from novice to expert fellow in the specialty or subspecialty. For each reporting period, the Clinical Competency Committee will review the completed evaluations to select the milestone levels that best describe each learner's current performance, abilities, and attributes for each subcompetency.

These levels *do not* correspond with post-graduate year of education. Depending on previous experience, a junior fellow may achieve higher levels early in the educational program just as a senior fellow may be at a lower level later in the educational program. There is no predetermined timing for a resident to attain any particular level. Fellows may also regress in achievement of their milestones. This may happen for many reasons, such as over scoring in a previous review, a disjointed experience in a particular procedure, or a significant act by the fellow.

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

Additional Notes

Level 4 is designed as a graduation *goal* but *does not* represent a graduation *requirement*. Making decisions about readiness for graduation and unsupervised practice is the purview of the program director. Furthermore, Milestones 2.0 include revisions and changes that preclude using Milestones as a sole assessment in high-stakes decisions (i.e., determination of eligibility for certification or credentialing). Level 5 is designed to represent an expert fellow whose achievements in a subcompetency are greater than the expectation. Milestones are primarily designed for formative, developmental purposes to support continuous quality improvement for individual learners, education programs, and the specialty. The ACGME and its partners will continue to evaluate and perform research on the Milestones to assess their impact and value.

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

A Supplemental Guide is also available to provide the intent of each subcompetency, examples for each level, assessment methods or tools, and other available resources. The Supplemental Guide, like examples contained within the Milestones, is designed only to assist the program director and Clinical Competency Committee and is not meant to demonstrate any required element or outcome.

Supplemental Guides and other resources are available on the Milestones page of each specialty section of the ACGME website. On www.acgme.org, choose the applicable specialty under the "Specialties" menu, then select the "Milestones" link in the lower navigation bar.

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

Patient Care 2: Pediatric Acute Airway Management					
Level 1	Level 2	Level 3	Level 4	Level 5	
Identifies potential airway emergencies in neonates and children with risk factors for difficult airway	Performs airway assessment and age- appropriate focused history and physical	Performs straightforward age-appropriate airway emergency procedures	Performs advanced airway emergency procedures	Performs complex airway emergency procedures in complex patients	
Escalates care of emergency airway (e.g., alerts operating room)	Describes the age- appropriate airway management algorithm from least to most invasive	Implements an age- appropriate airway management algorithm from least to most invasive	Implements an age- appropriate airway management plan in complex patients	Develops age-appropriate and patient-specific anticipatory airway management plan	
Comments:	Comments: Not Yet Completed Level 1 Not Yet Assessable				
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 between levels indicates to in lower levels have been demonstrated as well as semilestones in the higher levels.	hat milestones substantially some	

Patient Care 1: Pediatric Chronic Airway Management				
Level 1	Level 2	Level 3	Level 4	Level 5
Performs an age- appropriate history and physical examination in patients with airway conditions	Formulates developmentally appropriate diagnostic and treatment plans for patients with airway conditions	Explains the risks, benefits, and alternatives of medical and surgical interventions for airway conditions	Implements a standard treatment plan that includes the interdisciplinary team	Adapts standard treatment plans and interventions to special circumstances
Provides routine perioperative care for pediatric patients with airway conditions	Performs routine operative airway procedures	Performs routine operative airway procedures in patients with complex conditions	Performs advanced operative airway procedures	Performs advanced operative airway procedures in patients with complex conditions, including revision
Recognizes common complications	Initiates work-up of common complications	Manages common complications; recognizes uncommon/infrequent complications	Manages uncommon/infrequent complications	Serves as a peer resource for managing uncommon/infrequent complications
Comments: Not Yet Completed Level 1 Not Yet Assessable				

Patient Care 2: Pediatric Acute Airway Management				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies potential airway emergencies in neonates and children with risk factors for difficult airway	Performs airway assessment and age- appropriate focused history and physical	Performs straightforward age-appropriate airway emergency procedures	Performs advanced airway emergency procedures	Performs complex airway emergency procedures in complex patients
Escalates care of emergency airway (e.g., alerts operating room)	Describes the age- appropriate airway management algorithm from least to most invasive	Implements an age- appropriate airway management algorithm from least to most invasive	Implements an age- appropriate airway management plan in complex patients	Develops age-appropriate and patient-specific anticipatory airway management plans
Comments: Not Yet Completed Level 1 Not Yet Assessable				

Patient Care 3: Pediatric Head and Neck Mass/Lesion				
Level 1	Level 2	Level 3	Level 4	Level 5
Performs a history and physical examination in patients with head and neck mass/lesion	Formulates a diagnostic plan for patients with head and neck mass/lesion	Explains the risks and benefits of treatment plans for head and neck mass/lesion	Implements a treatment plan that includes the interdisciplinary team	Adapts typical treatment plans and techniques to special circumstances
Provides routine perioperative care for patients with head and neck mass/lesion, with guidance	Performs routine operative procedures for head and neck mass/lesion	Performs routine operative procedures for head and neck mass/lesion in patients with complex conditions	Performs advanced operative procedures for head and neck mass/lesion	Performs advanced operative procedures for complex or recurrent head and neck mass/lesion
Recognizes common complications	Initiates work-up of common complications	Manages common complications; recognizes uncommon/infrequent complications	Manages uncommon/infrequent complications	Serves as a peer resource for managing uncommon/infrequent complications
Comments: Not Yet Completed Level 1 Not Yet Assessable				

Patient Care 4: Pediatric Otologic Disease				
Level 1	Level 2	Level 3	Level 4	Level 5
Performs a history and physical examination; interprets routine behavioral audiograms in patients	Provides age-appropriate diagnostic and treatment plans for patients with ear disease and/or hearing loss	Explains the risks, benefits, and alternatives of interventions for ear disease, hearing loss, or vestibular disorders	Implements standard treatment plans for otologic and vestibular conditions; centralizes multidisciplinary care for treatment plans	Adapts standard treatment plans and interventions to special circumstances; promotes family-centered care
Provides routine peri- operative care for patients with ear disease and/or hearing loss	Performs routine otologic operative procedures	Performs routine otologic operative procedures in patients with complex conditions	Performs advanced otologic operative procedures	Performs advanced otologic operative procedures in patients with complex conditions; performs revision procedures; teaches otologic surgery
Recognizes common complications	Initiates work-up of common complications	Manages common complications; recognizes uncommon/infrequent complications	Manages uncommon/infrequent complications	Serves as a peer resource for managing uncommon/infrequent complications
Comments: Not Yet Completed Level 1 Not Yet Assessable				

Patient Care 5: Pediatric Rhinologic Diseases				
Level 1	Level 2	Level 3	Level 4	Level 5
Performs a history and physical examination in patients with rhinologic disease	Formulates developmentally appropriate diagnostic and treatment plans for patients with rhinologic disease	Explains the risks, benefits, and alternatives of medical and surgical interventions for rhinologic disease	Implements a standard treatment plan that includes the multidisciplinary team	Adapts standard treatment plans and interventions to special circumstances
Provides routine perioperative care for patients with rhinologic disease	Performs routine rhinologic operative procedures	Performs routine rhinologic operative procedures in patients with complex conditions	Performs advanced endoscopic rhinologic operative procedures in patients with complex conditions	Performs advanced endoscopic rhinologic and skull base surgical care in patients with complex conditions, including revision
Recognizes common complications	Initiates work-up of common complications associated with rhinologic disease	Manages common complications; recognizes uncommon/infrequent complications	Manages uncommon/infrequent complications associated with rhinologic disease	Serves as a peer resource for managing uncommon/infrequent complications
Comments: Not Yet Completed Level 1 Not Yet Assessable				

Patient Care 6: Pediatric Craniofacial, Plastic, and Reconstructive Surgery				
Level 1	Level 2	Level 3	Level 4	Level 5
Performs a history and physical examination in patients with craniofacial conditions and trauma	Formulates developmentally appropriate diagnostic and treatment plans for patients with craniofacial conditions and trauma	Explains the risks, benefits, and alternatives of medical and surgical interventions for craniofacial conditions and trauma	Implements a standard treatment plan that includes the multidisciplinary team	Adapts standard treatment plans and interventions to special circumstances (rare cases)
Provides routine perioperative care for patients with craniofacial conditions and trauma	Performs routine craniofacial and trauma operative procedures	Performs routine craniofacial and trauma operative procedures in patients with complex conditions	Performs advanced craniofacial and trauma operative procedures	Performs advanced craniofacial and trauma operative procedures in patients with complex condition, including revision
Recognizes common complications	Initiates work-up of common complications	Manages common complications; recognizes uncommon/infrequent complications	Manages uncommon/infrequent complications	Serves as a peer resource for managing uncommon/infrequent complications
Comments: Not Yet Completed Level 1 Not Yet Assessable				

Medical Knowledge 1: Head and Neck Developmental Anatomy and Embryology				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of normal growth and developmental milestones	Recognizes atypical growth or development	Describes treatment for otolaryngological disease impacting growth or development	Incorporates growth and development outcomes into complex treatment plans	Serves as a peer resource for growth and developmental outcomes
Describes normal embryologic development of face and neck	Diagnoses common patterns of abnormal embryology and resultant diseases	Describes detailed embryology of all head and neck structures	Applies knowledge of congenital anomalies to treatment planning	Participates in multidisciplinary treatment planning for fetal anomalies
Comments: Not Yet Completed Level 1 Not Yet Assessable				

Medical Knowledge 2: Syndromes and Complex Comorbidities Impacting Otolaryngologic Care, including Genetics					
Level 1	Level 2	Level 3	Level 4	Level 5	
Recognizes features of common craniofacial syndromes	Discusses developmental implications of common craniofacial syndromes	Recognizes less-common features and nuances of craniofacial syndromes	Diagnoses craniofacial syndromes and conditions	Recognizes uncommon or newly defined syndromes	
Identifies comorbid conditions that impact management	Discusses implications of comorbidities on management	Develops comprehensive knowledge of complex comorbidities	Applies knowledge of complex comorbidities to treatment planning	Develops recommendations or guidelines for management of patients with complex comorbidities	
Comments: Not Yet Completed Level 1 Not Yet Assessable					

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 (simulated or actual)	Participates in disclosure of patient safety events to patients and patients' families (simulated or actual)	Discloses patient safety events to patients and patients' 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	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
Comments: Not Yet Completed Level 1				

Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of care coordination	Coordinates care of patients in routine clinical situations effectively using the roles of interprofessional team members	Coordinates care of patients in complex clinical situations effectively using the roles of interprofessional team members	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 hand-offs	Performs safe and effective transitions of care/hand-offs in routine clinical situations	Performs safe and effective transitions of care/hand-offs in complex clinical situations	Role models and advocates for safe and effective transitions of care/hand-offs 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 inequities	Identifies specific population and community health needs and inequities for the 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

Systems-Based Practice 3: Physician Role in Health Care Systems				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies key components of the complex health care system (e.g., hospital, skilled nursing facility, finance, personnel, technology)	Describes how components of a complex health care system are interrelated, and how they impact patient care	Discusses how individual practice affects the broader system (e.g., length of stay, readmission rates, clinical efficiency)	Manages various components of the complex health care system to provide efficient and effective patient care and transitions of care	Advocates for or leads systems change that enhances high-value, efficient, and effective patient care and transitions of care
Describes basic health payment systems, including government, private, public, uninsured care, and practice models	Delivers care with consideration of each patient's payment model (e.g., insurance type)	Engages with patients in shared decision-making, informed by each patient's payment models	Advocates for patient care needs (e.g., community resources, patient assistance resources) with consideration of the limitations of each patient's payment model	Participates in health policy advocacy activities
Identifies basic knowledge domains for effective transition to practice (e.g., information technology, legal, billing and coding, financial, personnel)	Describes core administrative knowledge needed for transition to practice (e.g., contract negotiations, malpractice insurance, government regulation, compliance)	Demonstrates use of information technology required for medical practice (e.g., electronic health record, documentation required for billing and coding)	Analyzes individual practice patterns and professional requirements in preparation for practice	Educates others to prepare them for transition to practice
Comments:	Comments: Not Yet Completed Level 1			

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 available evidence, and incorporate the patient's and patient's family's preferences and values to the care of a routine patient	Articulates clinical questions and elicits the patient's and patient's family's preferences and values to guide evidence-based care	Locates and applies the best available evidence, integrated with the patient's and patient's family's preference, to the care of complex patients	Critically appraises and applies evidence, even in the face of uncertainty and conflicting evidence, to guide care to the individual patient	Coaches others to critically appraise and apply evidence for complex patients, and/or participates in the development of guidelines	
Comments: Not Yet Completed Level 1					

Level 1	Level 2	Level 3	Level 4	Level 5	
Accepts responsibility for personal and professional development by establishing goals	Demonstrates openness to performance data (feedback and other input) to inform goals	Seeks performance data episodically, with adaptability	Intentionally seeks performance data consistently, with adaptability	Role models consistently seeking performance data with adaptability	
Identifies the factors that contribute to gap(s) between expectations and actual performance	Analyzes and reflects on the factors that contribute to gap(s) between expectations and actual performance	Analyzes, reflects on, and institutes behavioral change(s) to narrow the gap(s) between expectations and actual performance	Challenges assumptions and considers alternatives in narrowing the gap(s) between expectations and actual performance	Coaches others on reflective practice	

Level 1	Level 2	Level 3	Level 4	Level 5
Identifies and describes potential triggers for professionalism lapses	Demonstrates insight into professional behavior in routine situations and how to appropriately report professionalism lapses	Demonstrates professional behavior in complex or stressful situations	Recognizes situations that may trigger professionalism lapses and intervenes to prevent lapses in oneself and others	Coaches others when their behavior fails to meet professional expectations
Demonstrates knowledge of the ethical principles underlying patient care, including informed consent, surrogate decision making, advance directives, confidentiality, error disclosure, stewardship of limited resources, and related topics	Analyzes straightforward situations using ethical principles	Analyzes complex situations using ethical principles and recognizes the need to seek help in managing and resolving complex ethical situations	Recognizes and uses appropriate resources for managing and resolving ethical dilemmas as needed	Identifies and seeks to address system-level factors that induce or exacerbate ethical problems or impede their resolution

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

Professionalism 3: Knowledge of Systemic and Individual Factors of Well-Being					
Level 1	Level 2	Level 3	Level 4	Level 5	
Recognizes the importance of getting help when needed to address personal and professional well-being	Lists resources to support personal and professional well-being Recognizes institutional	With prompting, reflects on how personal and professional well-being may impact one's clinical practice Describes institutional	Reflects on actions in real time to proactively respond to the inherent emotional challenges of physician work Suggests potential	Participates in institutional changes to promote personal and professional well-being	
	factors that affect well- being	factors that affect well- being	solutions to institutional factors that affect well-being		
Comments: Not Yet Completed Level 1					

This subcompetency is not intended to evaluate a fellow's well-being. Rather, the intent is to ensure that each fellow has the fundamental knowledge of factors that affect well-being, the mechanisms by which those factors affect well-being, and available resources and tools to improve well-being.

Level 1	Level 2	Level 3	Level 4	Level 5
Uses language and non- verbal behavior to demonstrate respect and establish rapport	Establishes a therapeutic relationship in straightforward encounters using active listening and clear language	Establishes a therapeutic relationship in challenging patient encounters	Easily establishes therapeutic relationships, with attention to a patient's/patient's family's concerns and context, regardless of complexity	Mentors others in situational awareness and critical self-reflection to consistently develop positive therapeutic relationships
Identifies common barriers to effective communication (e.g., language, disability) while accurately communicating one's own role within the health care system	Identifies complex barriers to effective communication (e.g., health literacy, cultural differences)	When prompted, reflects on personal biases while attempting to minimize communication barriers	Independently recognizes personal biases while attempting to proactively minimize communication barriers	Role models self- awareness while identifying a contextual approach to minimize communication barriers
Identifies the need to adjust communication strategies based on assessment of a patient's/patient's family's expectations and understanding of their health status and treatment options	Organizes and initiates communication with a patient/patient's family by introducing stakeholders, setting the agenda, clarifying expectations, and verifying understanding of the clinical situation	With guidance, sensitively and compassionately delivers medical information; elicits a patient's/patient's family's values, goals, and preferences; and acknowledges uncertainty and conflict	Independently, uses shared decision making to align the patient's/patient's family's values, goals, and preferences with treatment options to make a personalized care plan	Role models shared decision making in communication with patients/patients' families, including those situations with a high degree of uncertainty/conflict

Interpersonal and Communication Skills 2: Interprofessional and Team Communication					
Level 1	Level 2	Level 3	Level 4	Level 5	
Respectfully requests/receives a consultation	Clearly and concisely requests/responds to a request for consultation	Receives follow-up and feedback on the outcome of the consultation	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	
Uses language that values all members of the health care team	Communicates information effectively with all health care team members	Uses active listening to adapt communication style to fit team needs	Communicates feedback and constructive criticism to superiors	Facilitates health care team-based feedback in complex situations	
	Respectfully receives feedback on performance as a member of the health care team	Solicits feedback on performance as a member of the health care team	Communicates concerns and provides feedback to peers and learners	Facilitates teaching of team-based communication and feedback	
Comments: Not Yet Completed Level 1					

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, timely, and in an organized written form, including anticipatory guidance	Models feedback to improve others' written communication	
Safeguards patients' personal health information	Documents required data in formats specified by institutional policy	Appropriately selects direct (e.g., telephone, inperson) and indirect (e.g., progress notes, text messages) forms of communication based on context	Produces written or verbal communication (e.g., patient notes, email) that serves as an example for others to follow	Guides departmental or institutional communication around policies and procedures	
Comments: Not Yet Completed Level 1					