

May 2017

The Ophthalmology 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

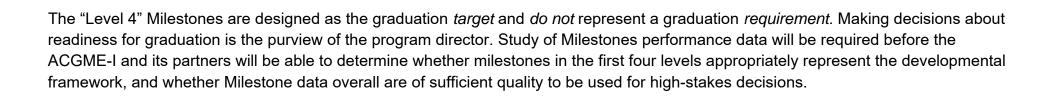
This document presents milestones designed for programs to use in semi-annual review of resident performance and reporting to the ACGME-I. Milestones are knowledge, skills, attitudes, and other attributes for each of the ACGME-I competencies organized in a developmental framework from less to more advanced. 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 a resident who has had some education in ophthalmology.
- **Level 2:** The resident is advancing and demonstrating additional milestones.
- **Level 3:** The resident continues to advance and is demonstrating additional milestones; the resident consistently demonstrates 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



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) Demonstrates the skills	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	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:				
Comments.			Not y	et achieved Level 1
Selecting a response box in of a level implies that mile that level and in lower leve substantially demonstrated	stones in els have been	Selecting a response between levels indicat lower levels have been demonstrated as well the higher level(s).	es that milestones in substantially	

Patient Care 1: Patient Inter	view			
Level 1	Level 2	Level 3	Level 4	Level 5
Obtains and documents basic history for ophthalmic complaint	Acquires accurate and relevant problem-focused history for common ocular complaints Obtains and integrates	Obtains relevant historical subtleties that inform and prioritize both differential diagnoses and diagnostic plans, including sensitive, complicated, and detailed information that may not often be volunteered by the patient	Demonstrates, for junior members of the health care team, role model interview techniques to obtain subtle and reliable information from the patient, particularly for sensitive aspects of ocular conditions	Incorporates new information from literature to tailor interview questions
	outside medical records			
Comments:			Not \	Yet Achieved Level 1

Assessment Tools: 360-degree global evaluation, the Ophthalmic Clinical Evaluation Exercise (OCEX), chart-stimulated recall, objective structured clinical examination (OSCE)

tonometry, direct and indirect	· •	testing, external, ocular mo	tility, pupils, slit lamp biomicros	scopy, gonioscopy,
Level 1	Level 2	Level 3	Level 4	Level 5
Describes components of complete ophthalmic examination	Performs and documents a complete ophthalmic examination targeted to a patient's ocular complaints and medical condition	Performs problem- focused exam and documents pertinent positive and negative findings	Identifies subtle or uncommon findings of common disorders and typical or common findings of rarer disorders	Incorporates into clinical practice new literature about exam techniques
Performs the basic parts of a screening or bedside eye examination without special equipment	Distinguishes between normal and abnormal findings	Consistently identifies common abnormalities; may identify subtle findings		
Comments:			Not Y	et Achieved Level 1

Assessment Tools: 360-degree global evaluation, OCEX, chart-stimulated recall, OSCE, simulation

Patient Care 3: Office Diagnostic Procedures (specific procedures: perimetry, corneal pachymetry and topography, ocular lubrication testing, ultrasonography, optic coherence tomography (OCT)/confocal laser tomography (CLT), fluorescein angiography, neuroimaging (CT and MRI))					
Level 1	Level 2	Level 3	Level 4	Level 5	
Describes role of office diagnostic procedures in diagnosis of ophthalmic disease	Selects and/or performs appropriate routine diagnostic tests and imaging procedures based on a patient's ocular complaints and medical condition	Interprets routine findings; recognizes indications for advanced diagnostic tests and imaging procedures	Interprets unusual findings, identifies artifacts; employs routine and advanced diagnostic tests and imaging procedures according to evidence-based medicine	Performs and interprets findings at subspecialty level	
Comments:	Comments: Not Yet Achieved Level 1				

Assessment Tools: 360-degree global evaluation, OCEX, chart-stimulated recall, simulation, oral/written examination, portfolio

Level 1	Level 2	Level 3	Level 4	Level 5
Describes basic clinical features of common ophthalmic disorders, (e.g., red eye, glaucoma, cataract, diabetic retinopathy)	Recalls and presents clinical facts of the history and basic eye exam without higher level of synthesis, and generates at least one item of the differential diagnosis for common ophthalmologic disorders	Abstracts and reorganizes elicited clinical findings Prioritizes potential causes of patient complaint; compares and contrasts diagnoses under consideration Generates more focused differential diagnosis and organized final assessment	Organizes clinical facts in a hierarchical level of importance; identifies discriminating features between similar patients Generates focused differential and evaluation strategy to finalize diagnosis Verifies diagnostic assessments of junior members of health care team	Incorporates most current literature findings in formulation of differential diagnoses

Assessment Tools: 360-degree global evaluation, OCEX, chart-stimulated recall, OSCE, oral/written examination, portfolio

_evel 1	Level 2	Level 3	Level 4	Level 5
Describes basic concepts of ophthalmic charmacotherapy (e.g., most common topical diagnostic and herapeutic agents)	Describes categories of medications (e.g., lubricant, antibiotic, anti-inflammatory, anesthetic); describes basic pharmacology of drug therapy and broad indications/contraindications for medical therapy of common ophthalmic conditions; describes routes of drug administration (e.g., topical, oral, periocular, intravenous) and dosing regimens	Initiates therapy with medication for common ophthalmic diseases; monitors for adverse drug reactions and interactions Describes indications for oral and intravenous therapy; recognizes possible racial, gender, and genomic differences in outcomes of medical therapy Demonstrates ability to use electronic prescribing; demonstrates competence in periocular injections	Manages and individualizes medical therapy for more complex ophthalmic conditions Recognizes indications for alternative therapies, including surgical intervention; integrates environmental/behavioral factors Manages complications Considers non-medical factors, such as cost, convenience, and ability to receive medication Demonstrates competence in intravitreal injections	Adopts new therapies based on continuing medical education (CME) and literature review; identifies gaps in care and process for improvement

Assessment Tools: 360-degree global evaluation, OCEX, chart-stimulated recall, OSCE, oral/written examination, portfolio

Comments:

Patient Care 6: Non-Operating Room (OR) Surgery (specific procedures: laser procedures, nasolacrimal probing and irrigation, chalazion excision, excision/biopsy lid lesion, temporal artery biopsy) Level 2 Level 5 Level 1 Level 3 Level 4 For each procedure: Describes essential Administers anesthesia Administers anesthesia Reviews individual components of care 1. Lists indications and and performs procedure and performs procedure outcome and process describes relevant with indirect supervision with oversight supervision related to non-OR measures, and surgery (e.g., informed anatomy and participates in practice pathophysiology of improvement consent, indications and disorder contraindications for surgery, pertinent 2. Identifies findings that anatomy, anesthetic and operative technique, are indicators for the potential intra- and postprocedure and potential operative complications) post-operative complications Manages intra- and post-3. Describes anesthetic Recognizes intra- and and surgical technique, post-operative operative complications mechanism of effect, and complications specific instruments required 4. Performs directed preoperative assessment: administers anesthesia and performs procedure with direct supervision; provides appropriate post-operative care

Assessment Tools: 360-degree global evaluation, chart-stimulated recall, oral/written examination, portfolio, case logs

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Not Yet Achieved Level 1

Level 1	Level 2	Level 3	Level 4	Level 5
Describes essential components of care related to OR surgery (e.g., informed consent, indications and contraindications for surgery, pertinent anatomy, anesthetic and operative technique, potential intraand post-operative complications)	For each specified procedure: 1. Lists indications for procedure selection; describes relevant anatomy and instrumentation for procedures, including calibration and operation of the microscope; describes necessary post-operative care	Obtains informed consent and performs procedures with indirect supervision	Obtains informed consent and performs procedures with oversight supervision	Reviews individual outcome and process measures, and participates in practice improvement
	 Identifies common intraand post-operative complications, and performs post-operative care managing common complications Prepares and drapes for extra-ocular and intra-ocular procedures Describes methods for regional and general anesthesia Performs procedures with direct supervision 	Identifies and manages less common intra- and post-operative complications	Identifies and manages uncommon intra- and post-operative complications	

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Ophthalmology Milestones for the Middle East

Assessment Tools: 360-degree global evaluation, OCEX, , chart-stimulated recall, oral/written examination, portfolio, case logs, Global Rating Assessment of Skills in Intraocular Surgery (GRASIS), OR Surgical Skills assessment (Direct Observational Procedure Skills (DOPS) for pediatric and oculoplastic rotations)

Level 1	Level 2	Level 3	Level 4	Level 5
Describes the role of ophthalmology consultation in systemic disease	Provides specific, responsive ophthalmologic consultation to other medical specialties	Recognizes ophthalmic emergencies and immediate, necessary interventions	Identifies consultations requiring surgical intervention, including procedural options and timing	Participates in ophthalmic subspecialty consultation when indicated
	Recognizes urgent versus non-urgent ophthalmic consultation	Provides appropriate differential diagnosis and initiates non-surgical treatment plan	Interprets ancillary tests, and formulates and initiates treatment plan independently	
	Examines inpatient at bedside, including visual acuity and field, portable slit lamp exam (+ fluorescein stain), intraocular pressure (IOP) measurement, ophthalmoscopy	Orders ancillary testing; requests ophthalmic subspecialty involvement when indicated	Coordinates treatment plan with multiple specialties	
	Communicates findings (written and oral) to consulting service	Maintains continuing communication with other involved medical specialists		

Assessment Tools: 360-degree global evaluation, OCEX, chart-stimulated recall, OSCE, oral/written examination, portfolio

	Level 2	Level 3	Level 4	Level 5
rticulates knowledge of athophysiology, clinical ndings, and therapy for phthalmic conditions outinely managed by on-ophthalmologists	Demonstrates basic knowledge of pathophysiology, clinical findings, and therapy for common ophthalmic conditions routinely managed by ophthalmologists	Demonstrates advanced knowledge of pathophysiology, clinical findings, and therapy for commonly encountered ophthalmic conditions and demonstrates basic knowledge of pathophysiology, clinical findings, and therapy for less commonly encountered conditions	Demonstrates advanced knowledge of pathophysiology, clinical findings, and therapy for less commonly encountered ophthalmic conditions	Educates junior residents and medical students and contributes to the body of knowledge for pathophysiology, clinical findings, and therapy for ophthalmic conditions

Assessment Tools: OKAP Exams, department written exam, didactic MCQs

Medical Knowledge 2: Demonstrate Level-Appropriate Knowledge Applied to Patient Management				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates level- appropriate knowledge for patient management on ophthalmology rotation	Demonstrates level- appropriate knowledge for patient management on PGY-2 rotations	Demonstrates level- appropriate knowledge for patient management on PGY-3 rotations	Demonstrates level- appropriate knowledge for patient management on PGY-4 rotations	Demonstrates post- residency-level knowledge for patient management on PGY-4 rotations
Comments:			Not Ye	et Achieved Level 1

Assessment Tools: Post-rotation written/oral exams, department written exam, didactic MCQs

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
Comments:			Not Y	et Achieved Level 1

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
Comments:			Not Y	et Achieved Level 1

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)	
Comments:			Not Yet	: Achieved Level 1

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
Comments:			Not Ye	t Achieved Level 1

Practice-Based Learning and Improvement 2: Reflective Practice and Commitment to Personal Growth					
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) in order to inform goals	Seeks performance data episodically, with adaptability and humility	Intentionally seeks performance data consistently, with adaptability and humility	Role models consistently seeking performance data, with adaptability and humility	
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	
Actively seeks opportunities to improve	Designs and implements a learning plan, with prompting	Independently creates and implements a learning plan	Uses performance data to measure the effectiveness of the learning plan and, when necessary, improves it	Facilitates the design and implementation of learning plans for others	
Comments:	Comments: Not Yet Achieved Level 1				

_evel 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	Demonstrates professional behavior in complex or stressful situations	Recognizes situations that may trigger professionalism lapses and intervenes to prevent lapses in self and others	Coaches others when their behavior fails to meet professional expectations
Describes when and now to appropriately report professionalism apses, including strategies for addressing common parriers	Takes responsibility for own professionalism lapses	Analyzes complex situations using ethical principles	Recognizes and utilizes appropriate resources for managing and resolving ethical dilemmas as needed (e.g., ethics consultations, literature review, risk management/legal consultation)	Identifies and seeks to address system-level factors that induce or exacerbate ethical problems or impede their resolution
Demonstrates knowledge of the ethical principles underlying informed consent, surrogate decision making, advance directives, confidentiality, error disclosure, stewardship of limited resources, and related topics	Analyzes straightforward situations using ethical principles	Recognizes need to seek help in managing and resolving complex ethical situations		

Level 1	Level 2	Level 3	Level 4	Level 5
Takes responsibility for failure to complete tasks and responsibilities, dentifies 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	Takes ownership of system outcomes
Responds promptly to requests or reminders to complete tasks and responsibilities	Recognizes situations that may impact 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		

evel 1	Level 2	Level 3	Level 4	Level 5
Recognizes status of personal and professional well-being, with assistance	Independently recognizes status of personal and professional well-being	With assistance, proposes a plan to optimize personal and professional well-being	Independently develops a plan to optimize personal and professional well-being	Coaches others when emotional responses or limitations in knowledge/skills do not meet professional expectations
Recognizes limits in the knowledge/skills of self or team, with assistance	Independently recognizes limits in the knowledge/skills of self or team	With assistance, proposes a plan to remediate or improve limits in the knowledge/skills of self or team	Independently develops a plan to remediate or improve limits in the knowledge/skills of self or team	
	Demonstrates appropriate help-seeking behaviors			

Interpersonal and Communi	Interpersonal and Communication Skills 1: Patient- and Family-Centered Communication				
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 patient/family 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 own role within the health care system	Identifies complex barriers to effective communication (e.g., health literacy, cultural)	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 practice while identifying teaching a contextual approach to minimize communication barriers	
Identifies the need to adjust communication strategies based on assessment of patient/family expectations and understanding of their health status and treatment options	Organizes and initiates communication with patients/families by introducing stakeholders, setting the agenda, clarifying expectations, and verifying an understanding of the clinical situation	With guidance, sensitively and compassionately delivers medical information; elicits patient/family values, goals and preferences; and acknowledges uncertainty and conflict	Independently uses shared decision making to align patient/family values, goals, and preferences with treatment options to make a personalized care plan	Role models shared decision making in patient/family communication in situations with a high degree of uncertainty/conflict	
Comments:			Not	Yet Achieved Level 1	

Interpersonal and Comm	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	Uses active listening to adapt communication style to fit team needs		
	Solicits feedback on performance as a member of the health care team	Communicates concerns and provides feedback to peers and learners		
Comments:			Not Y	et Achieved Level 1

evel 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 communicatio 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			