# **Emergency Medical Services Milestones**

The Accreditation Council for Graduate Medical Education



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## **Emergency Medical Services Milestones**

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.

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American Board of Emergency Medicine

**Review Committee for Emergency Medicine** 

### **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 his/her educational program just as a senior fellow may be at a lower level later in his/her 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 <a href="https://www.acgme.org">www.acgme.org</a>, 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.

Level 1		Level 2	Level 3		Level 4	Level 5
In routine s performs ta responsibili appropriate detail	sks and <sup>′</sup>	In routine situations, performs tasks and responsibilities in a timely manner with appropriate attention to detail	situation and resp timely m	ex or stressful s, performs tasks consibilities in a anner with ate attention to	Proactively implements strategies to ensure that the needs of patients, teams, and systems are met	Takes ownership of system outcomes
Responds prequests ar to complete responsibili	nd reminders tasks and	Takes responsibility for failure to complete tasks and responsibilities	that migl own abil tasks an in a time describe ensuring	zes situations ht impact one's ity to complete d responsibilities ly manner, and s strategies for i timely task on in the future	Recognizes situations that might impact others' ability to complete tasks and responsibilities	
Comments	:				Not Yet C	Completed Level 1
	Selecting a response box in the middle of a level implies that milestones in that level and in lower levels have been substantially demonstrated.			between levels in lower levels demonstrated	sponse box on the line indicates that mileston have been substantial as well as <b>some</b> the higher level(s).	nes

Patient Care 1: Procedures Performed in the Pre-Hospital Environment				
Level 1	Level 2	Level 3	Level 4	Level 5
Knows indications, contraindications, risks, and benefits, anatomic landmarks, equipment, procedural technique, and potential complications of common pre-hospital procedures	Performs the indicated common procedure on patients with moderate urgency who have identifiable landmarks and a low-moderate risk for complications	Performs the indicated procedure, takes steps to avoid potential complications, and recognizes the outcome and/or complications resulting from the procedure	Performs indicated procedures on patients, including those with challenging features (e.g., poorly identifiable landmarks, at extremes of age, or with comorbid conditions)	
Recognizes that the pre- hospital environment affects procedures	Discusses the effects of the pre-hospital environment on performing procedures	Evaluates the environment and situation in the decision to perform a procedure	Modifies the procedure depending on the environment and situation	Incorporates evidence- based medicine to improve procedures and develop novel techniques used in different environments
Comments:  Not Yet Completed Level 1  Not Yet Assessable				

Patient Care 2: Pre-Hospital Recognition and Stabilization of Time/Life-Critical Conditions				
Level 1	Level 2	Level 3	Level 4	Level 5
Recognizes when a patient is unstable and requires immediate intervention	Prioritizes stabilization actions in the resuscitation of a critical patient	Independently adapts management strategies of critical conditions to the situation and environment	Participates in policy and protocol development for the management of critical patients	Independently develops or leads the development of policies and protocols for the care of critical conditions
Performs a primary assessment on a critical patient	Reassesses a patient after implementing an intervention	Chooses appropriate transport modality and destination facility for critical conditions	Performs quality improvement efforts to improve the care to patients with critical conditions	
Describes local laws and regulations governing advanced directives for medical care	Evaluates the validity of an advanced directive for medical care as it applies to resuscitation	Makes the decision to withhold or end resuscitation	Participates in development of policies and protocols related to end-of-life care	Independently develops or leads the development of policies and protocols related to end-of-life care
Comments:  Not Yet Completed Level 1  Not Yet Assessable				

Patient Care 3: Recognition and Treatment of Pre-Hospital Conditions				
Level 1	Level 2	Level 3	Level 4	Level 5
Under supervision, manages patients with common and simple presentations	Independently manages patients with common and simple presentations	Under supervision, manages patients with uncommon and complicated presentations	Independently manages patients with uncommon and complicated presentations in challenging conditions	Teaches others how to manage patients with uncommon and complicated presentations in challenging conditions
Recognizes that the pre- hospital environment affects patient care	Discusses the effects of the pre-hospital environment on patient care	Modifies patient care depending on the environment and situation	Incorporates evidence- based medicine to improve patient care provided in different environments	Independently develops or leads the development of policies and protocols related to pre-hospital patient care
Comments:  Not Yet Completed Level 1  Not Yet Assessable				

Patient Care 4: General Special Operations in Emergency Medical Services (EMS); Mass Casualty and Disaster Management				
Level 1	Level 2	Level 3	Level 4	Level 5
Describes the principles of care in mass casualty or disaster situations	With supervision, participates in a mass casualty or disaster management event/exercise	Independently provides care at a mass casualty or disaster event/exercise	Develops and implements protocols for a mass casualty or disaster event	Performs as a medical director for a mass casualty or disaster response team
Demonstrates awareness of National Incident Management System (NIMS) and Incident Command System (ICS)	Describes principles and terminology of mass casualty and disaster response, including triage, NIMS, and ICS	Participates in the development of an Incident Action Plan and/or After Action Review	Leads the team to develop an Incident Action Plan and/or After Action Review	Conducts scholarly activity in mass casualty or disaster management
Comments:  Not Yet Completed Level 1  Not Yet Assessable				

Medical Knowledge 1: Medical Oversight					
Level 1	Level 2	Level 3	Level 4	Level 5	
Identifies the need for medical oversight of EMS agencies and systems	Defines the core components of medical oversight of EMS agencies and systems	Performs medical oversight of an EMS agency, with supervision	Independently performs oversight of an EMS agency	Performs oversight of a complex or multi-agency EMS system	
Describes the policies for EMS oversight in their EMS agency or system	Contributes to meetings/planning sessions where policies for EMS agency or system oversight are discussed	Assists in policy development for oversight of EMS agencies or systems	Develops policy for oversight of EMS agencies or systems		
Comments:  Not Yet Completed Level 1  Not Yet Assessable					

Medical Knowledge 2: Special Teams						
Level 1	Level 2	Level 3	Level 4	Level 5		
Identifies and describes the basic roles of Special Teams	Defines the core components and specialty training required of Special Teams	Effectively participates as a medical team member of a Special Team during actual or simulated operations	Develops and implements protocols for Special Teams	Performs as medical director for a Special Team		
Comments:				completed Level 1		

Systems-Based Practice 1: Patient Safety					
Level 1	Level 2	Level 3	Level 4	Level 5	
Demonstrates knowledge of common patient safety events and knows how to report	Identifies system factors that lead to patient safety events	Participates in analysis of patient safety events (simulated or actual)	Conducts root cause analysis of patient safety events and offers error prevention strategies (simulated or actual)	Actively engages team and modifies system processes to prevent patient safety events	
Comments:  Not Yet Completed Level 1					

Systems-Based Practice 2: Quality Improvement					
Level 1	Level 2	Level 3	Level 4	Level 5	
Demonstrates knowledge of basic quality improvement methodologies and metrics	Describes local EMS agency/system quality improvement initiatives	Participates in local EMS agency/system quality improvement initiatives	Demonstrates the skills required for identifying, developing, implementing, and analyzing an EMS quality improvement project	Creates, implements, and assesses EMS quality improvement initiatives at the agency or local/regional/state system levels	
Comments:  Not Yet Completed Level 1					

Systems-Based Practice 3: System Navigation for Patient-Centered Care				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of care coordination	In routine clinical situations, coordinates patient care integrating the roles of interprofessional teams	In complex clinical situations, coordinates patient care by integrating the roles of the interprofessional teams, with supervision	In complex clinical situations, coordinates patient care by integrating the roles of the interprofessional teams, independently	Analyzes the process of EMS care coordination and implements systemic improvements
Identifies key elements for safe and effective transitions of care and hand-offs	In routine clinical situations, enables safe and effective transitions of care/hand-offs	In complex clinical situations, enables safe and effective transitions of care/hand-offs, with supervision	In complex clinical situations, enables safe and effective transitions of care/hand-offs, independently	Implements systemic improvement for transitions of care
Demonstrates knowledge of population and community health needs and disparities	Identifies specific population and community health needs and inequities for their local population	Effectively uses local EMS resources to meet the needs of a patient population and community	Participates in changing and adapting EMS practice to provide for the needs of specific populations	Leads EMS system innovations and advocates for populations and communities with health care inequities
Comments:  Not Yet Completed Level 1				

Systems-Based Practice 4: Physician Role in Health Care Systems					
Level 1	Level 2	Level 3	Level 4	Level 5	
Identifies key components of EMS within the complex health care system	Describes how components of a complex health care system are interrelated to EMS systems, and how this impacts patient care	Discusses how individual EMS practice affects the broader system	Manages various components of the complex EMS system to provide efficient and effective patient care and the transition of care	Advocates for or leads EMS systems change that enhances high value, efficient, and effective patient care, and the transition of care	
Identifies basic knowledge domains required for medical practice	Demonstrates efficient integration of information technology, including EMS information systems, required for medical practice	Describes core administrative knowledge needed for the transition to independent EMS practice	Analyzes individual EMS practice patterns and professional requirements		
Comments:  Not Yet Completed Level 1					

Systems-Based Practice 5: EMS Personnel (Supervision and Training)				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates awareness of educational content appropriate to scope of practice	With supervision, designs and presents educational content appropriate to scope of practice	Identifies educational needs and develops training materials appropriate to scope of practice	Develops educational content in response to identified educational need	Designs a curriculum or course appropriate for a given scope of practice or to address a specific need involving multiple levels of care providers
Demonstrates awareness of culture of safety and EMS clinician health and well-being	Describes a culture of safety and EMS clinician health and well-being	Integrates a culture of safety and EMS clinician health and well-being into pre-hospital practice, with supervision	Independently integrates culture of safety and EMS clinician health and well-being into prehospital practice	Designs health and well- being program for EMS system
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 and use available evidence	Articulates the questions necessary to guide evidence-based systems of care	Locates and applies the best available evidence to guide systems of care	Critically appraises and applies evidence even in the face of incomplete or conflicting evidence to guide systems of care	Coaches others to critically appraise and apply evidence for systems of care, and/or participates in the development of guidelines	
Comments:  Not Yet Completed Level 1					

Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates an openness to feedback and other input	Demonstrates an openness to feedback and other input and uses it to develop personal and professional goals	Seeks and accepts feedback and other input for developing personal and professional goals	Using feedback and other input, continually improves and measures the effectiveness of one's personal and professional goals	Acts as a role model for the development of personal and professional goals
	Identifies the factors that contribute to the gap(s) between expectations and actual performance	Analyzes and reflects upon 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	Coaches others on reflective practice

Professionalism 1: Professional Behavior and Ethical Principles					
Level 1	Level 2	Level 3	Level 4	Level 5	
Demonstrates professional behavior in routine situations and in how to report professionalism lapses	Identifies and describes potential triggers and takes responsibility for professionalism lapses	Exhibits professional behavior in complex and/or stressful situations	Identifies situations that might trigger professionalism lapses and intervenes to prevent them in oneself and others	Coaches others when their behavior fails to meet professional expectations	
Demonstrates knowledge of the ethical principles underlying patient care	Analyzes straightforward situations using ethical principles	Analyzes complex situations using ethical principles, and recognizes the need to seek help in managing and resolving them	Uses appropriate resources for managing and resolving ethical dilemmas	Identifies and addresses system-level factors that either induce or exacerbate ethical problems or impede their resolution	
Comments:  Not Yet Completed Level 1					

Level 1	Level 2	Level 3	Level 4	Level 5
In routine situations, performs tasks and responsibilities 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, performs tasks and responsibilities in a timely manner with appropriate attention to detail	Proactively implements strategies to ensure that the needs of patients, teams, and systems are met	Takes ownership of system outcomes
Responds promptly to requests and reminders to complete tasks and responsibilities	Takes responsibility for failure to complete tasks and responsibilities	Recognizes situations that might impact one's own ability to complete tasks and responsibilities in a timely manner, and describes strategies for ensuring timely task completion in the future	Recognizes situations that might impact others' ability to complete tasks and responsibilities	

Professionalism 3: Self-Awareness and Well-Being					
Level 1	Level 2	Level 3	Level 4	Level 5	
Recognizes, with assistance, the status of one's personal and professional well-being	Independently recognizes the status of one's personal and professional well-being and engages in help-seeking behaviors	With assistance, proposes a plan to optimize personal and professional well-being	Independently develops a plan to optimize one's personal and professional well-being	Coaches others when their emotional responses or level of knowledge/skills fail to meet professional expectations	
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 reflect respect and establish rapport while accurately communicating one's own role within the health care system	Establishes a therapeutic relationship in straightforward encounters with patients, using active listening and clear language	Establishes a therapeutic relationship in challenging patient encounters	Easily establishes therapeutic relationships with patients, regardless of the complexity of cases	Acts as a mentor to others in situational awareness and critical self-reflection with the aim of consistently developing positive therapeutic relationships and minimizing communication barriers
Identifies common barriers to effective communication (e.g., language, disability)	Identifies complex barriers to effective communication (e.g., health literacy, cultural, technology)	When prompted, reflects on one's personal biases, while attempting to minimize communication barriers	Independently recognizes personal biases of patients, while attempting to proactively minimize communication barriers	
With insight gained through an assessment of patient/patient's family's expectations coupled with an understanding of their health status and treatment options, adjusts one's communication strategies	Organizes and initiates communication with a patient/patient's family by clarifying expectations and verifying one's understanding of the clinical situation	With guidance, sensitively and compassionately delivers medical information to patients, elicits patient/patient's family's values, learns their goals and preferences, and acknowledges uncertainty and conflict	Independently uses shared decision making with a patient/patient's family to align their values, goals, and preferences with potential treatment options and ultimately to achieve a personalized care plan	Acts as a role model to exemplify shared decision making in patient/patient's family's communication that embodies various degrees of uncertainty/conflict

Level 1	Level 2	Level 3	Level 4	Level 5
Identifies the roles and areas of expertise of various members of the health care team	Describes the roles and areas of expertise of various members of the health care team	Integrates recommendations made by various members of the health care team to optimize patient care	Uses flexible communication strategies to incorporate input from all team members and resolve conflict when needed	Acts as a role model for communication skills necessary to lead or manage health care teams
Uses language that reflects the values all members of the health care team	Communicates information effectively with all health care team members	Engages in active listening to adapt to the communication styles of the team	Uses effective communication to lead or manage health care teams	
Receives feedback in a respectful manner	Solicits feedback on performance as a member of the health care team	Communicates concerns and provides feedback to peers and learners	Communicates feedback and constructive criticism to superiors	In complex situations, facilitates regular health care team-based feedback

Interpersonal and Communication Skills 3: Communication within Health Care Systems					
Level 1	Level 2	Level 3	Level 4	Level 5	
Recognizes how to accurately document information in the patient's record and safeguards the patient's personal information	Demonstrates organized diagnostic and therapeutic reasoning through the patient record in a timely manner	Concisely reports diagnostic and therapeutic reasoning in the patient record	Communicates clearly, concisely, and contemporaneously in an organized written form, including anticipatory guidance	Models feedback to improve others' written communication	
Communicates professionally through appropriate channels/chain of command	Respectfully communicates concerns about the system	Uses appropriate channels/chain of command to offer constructive suggestions for improving the system	Initiates difficult conversations with appropriate stakeholders to improve the system	Leads dialogue regarding systems issues among broader community stakeholders	
Comments:  Not Yet Completed Level 1					