

Public Health and General Preventive Medicine Milestones

The Accreditation Council for Graduate Medical Education



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Public Health and General Preventive Medicine Milestones

The Milestones are designed only for use in evaluation of residents or 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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Public Health and General Preventive Medicine Milestones Work Group

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American Board of Preventive Medicine

Review Committee for Preventive Medicine

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Understanding Milestone Levels and Reporting

This document presents the Milestones, which programs use in a semi-annual review of resident or 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 resident/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 resident/fellow may achieve higher levels early in his/her educational program just as a senior resident/fellow may be at a lower level later in his/her educational program. There is no predetermined timing for a resident/fellow to attain any particular level. Residents/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 resident/fellow.

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

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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 resident/fellow whose achievements in a sub-competency 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 <u>www.acgme.org</u>, choose the applicable specialty under the "Specialties" menu, then select the "Milestones" link in the lower navigation bar.

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

Practice-Based Learning	and Improvement 1: Ev	idence-E	Based and Informed P	ractice	
Level 1	Level 2	Leve	el 3	Level 4	Level 5
Recognizes the need for evidence in decision making in order to care for a routine patient, situation, or public health problem	Identifies evidence and elicits patient or population preferences and values to guide a patient or population intervention	evid patie	lies the best available ence, integrated with ent or population erences and values	Critically appraises and applies evidence, even in the face of uncertainty and conflicting evidence, to guide care tailored to an individual or population	Trains others to critically appraise and apply evidence to complex situations
Comments:				Not Yet C	completed Level 1
Selecting a response middle of a level impli milestones in that leve levels have been sub- demonstrated.	es that el and in lower		between levels indi		

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Patient Care 1: Emergen	cy Preparedness and Resp	oonse – Apply Skills in Eme	rgency Preparedness and	d Response
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies examples of public health threats that might warrant an emergency response	Describes how a response to a public health emergency is organized	Plans and/or participates in an emergency preparedness event (actual or simulated)	Evaluates an emergency preparedness event (actual or simulated)	Provides leadership during an emergency preparedness event (actual or simulated)
Comments:				ompleted Level 1

Patient Care 2: Policies a	and Plans – Develop Policie	es and Plans to Support Ind	lividual and Community H	lealth Efforts
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies pertinent policies and interventions for individual patient care	Describes how policies and plans are developed and implemented to support the health of individuals and communities	Applies policies and plans for disease prevention and health promotion to individuals and/or communities	Evaluates policies and plans for disease prevention and health promotion that have been applied to individuals and/or communities	Develops and/or implements policies or plans to improve community health
Comments:				ompleted Level 1

Patient Care 3: Clinical a	nd Community Preventive	Services		
Level 1	Level 2	Level 3	Level 4	Level 5
Locates and appraises evidence about a clinical preventive service for an individual patient	Discusses the strengths and weaknesses of an individual study relevant to a clinical preventive service	Examines the quality and strength of evidence of a clinical preventive service	Participates in the analysis of a guideline to address a clinical preventive service	Evaluates the implementation of an evidence-based guideline to address a clinical preventive service and identifies barriers and proposes solutions to improving system-level adherence
Recognizes distinctions between population and individual health services	Describes the usefulness and value of population- based health services in meeting the needs of target populations	Assesses evidence for population-based health services	Uses established performance criteria to evaluate a population- based health service, to include identifying barriers to services and strategies for improvement	Develops program goals and/or performance criteria to evaluate a population-based health service for strategic or operational improvements
Comments:			Not Yet C Not Yet As	ompleted Level 1

Patient Care 4: Lifestyle Me	dicine			
Level 1	Level 2	Level 3	Level 4	Level 5
Lists modifiable and non- modifiable risk factors associated with the development of prevalent chronic conditions	Identifies evidence of utilizing lifestyle interventions that reduce the risk of developing, or to mitigate the effects of, prevalent chronic conditions	Recommends lifestyle interventions to mitigate and treat prevalent chronic conditions in individuals	Evaluates or develops a plan for management of lifestyle factors associated with prevalent chronic conditions at the population or community level	Implements and evaluates a population- based strategy for an evidence-based lifestyle program or policy that mitigates prevalent chronic conditions at the population or community level
Comments:			Not Yet Completed Not Yet Assessabl	

Medical Knowledge 1: Er	vironmental Health			
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies common illnesses that may be caused or influenced by exposure to environmental hazards	Identifies the components of an environmental exposure history	Takes a complete environmental exposure history, including individual factors that impact susceptibility to environmental hazards	Recommends methods for reducing or eliminating exposure to environmental hazards and methods for addressing the health effects resulting from these exposures	Evaluates and interprets the results of individual and/or population-level environmental monitoring
Identifies major classes of environmental hazards and their routes of human exposure	Describes situations that warrant an environmental risk assessment	Identifies the steps in an environmental risk assessment and describes how the results are used to manage and communicate risk	Conducts a population- level environmental risk assessment (actual or simulated)	Makes policy recommendations based on the results of an environmental risk assessment
Comments:				ompleted Level 1

Medical Knowledge 2: Biostatistics				
Level 1	Level 2	Level 3	Level 4	Level 5
Recognizes common statistical concepts and tests	Identifies statistical test(s) for a given research question and data set	Performs data analyses using various statistical methods	Interprets the statistical and clinical significance of a data set and evaluates the generalizability of the results to a population	Analyzes and interprets large data sets using complex statistical methods and submits the results for publication or presentation
Comments:			Not Yet C Not Yet A	ompleted Level 1

Medical Knowledge 3: Ep	oidemiology			
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies sources of data and common measures for descriptive epidemiology	Defines basic measures of disease frequency and excess risk	Calculates measures of disease frequency and excess risk for a specified disease or condition	Uses data to characterize the health of a local population and compares it with that of other populations	Teaches use of data to characterize the health of a population and compare it with that of other populations
Describes the basic types of research studies	Compares and contrasts commonly used study designs	Critiques epidemiologic studies, including assessing external and internal validity and distinguishing between association and causation	Participates in epidemiological research, including evaluating and interpreting results	Independently designs and conducts epidemiologic research
Describes the natural history of disease and relevance to primary, secondary, and tertiary prevention	Identifies criteria for effective screening tests	Assesses the validity and reliability of individual screening tests	Uses evidence about individual screening tests, interventions, and harms to weigh the potential benefits and harms of screening programs	Provides expert opinion on the benefits and harms of screening programs
Comments:			Not Yet C Not Yet As	ompleted Level 1

Medical Knowledge 4: Public Health Regulations				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies examples of public health regulatory agencies	Describes the regulatory requirements for a specific public health topic	Interprets regulatory requirements as applied to individuals and/or populations	Develops or modifies a public health policy based upon regulatory requirements or public health laws (actual or simulated)	Contributes to the development or modification of a proposed regulatory requirement or public health law
Comments:			Not Yet C Not Yet A	ompleted Level 1

Medical Knowledge 5: In	fectious Diseases of Public	: Health Significance		
Level 1	Level 2	Level 3	Level 4	Level 5
Describes common methods for preventing the transmission of infectious diseases	Discusses aspects of disease and common environmental, health, and behavioral risk factors associated with infectious diseases of public health significance	Describes the epidemiology, risk factors, prevention strategies, diagnosis, and treatment for infectious diseases of public health significance	Applies knowledge of the epidemiology, risk factors, prevention strategies, diagnosis, and treatment for infectious diseases of public health significance to the individual or population- level	Designs a plan for the prevention, diagnosis, and treatment of an infectious disease of public health significance at the population level
Comments:				ompleted Level 1

Level 1	Level 2	Level 3	Level 4	Level 5
Lists common patient safety events and describes how to report patient safety events	Identifies system factors that lead to patient safety events	Participates in a root cause analysis (actual or simulated)	Conducts analysis of patient safety events and offers error prevention strategies (actual or simulated)	Actively modifies systems to prevent patient safety events
Discusses basic quality improvement methodologies and metrics	Describes quality improvement initiatives	Participates in local quality improvement initiatives	Demonstrates the skills required to identify, develop, implement, and analyze a quality improvement project	Leads the conduct and implementation of a quality improvement project

Level 1	Level 2	Level 3	Level 4	Level 5
Lists examples of care coordination in a health care system	Demonstrates coordination of care of patients in routine clinical situations, effectively using the roles of interprofessional team members and care settings	Demonstrates coordination of care of patients in complex clinical situations, effectively using the roles of interprofessional team members	Models effective coordination of patient- and population-centered care among different disciplines and specialties/settings	Analyzes the process of care coordination and leads in the design and implementation of improvements
Recognizes population and community health needs and inequities	Identifies specific population and community health needs and inequities for the local population	Uses local resources effectively address the health needs and inequities of a patient population and community	Participates in changing and adapting practice to provide for the health needs and inequities experienced by specific populations	Leads innovations and advocates for populations and communities with health needs and inequities

Level 1	Level 2	Level 3	Level 4	Level 5
Identifies key components of the health care system	Describes how components of a health care system are inter- related, and how they impact patient and/or population/stakeholder care	Discusses how individual practice affects the broader system	Navigates components of the complex health care system to promote efficient and effective patient and/or population/stakeholder care	Leads health care systems change that enhances high-value, efficient, and effective patient care
Identifies key agencies involved in community health efforts	Describes the interactions between agencies and how these impact the overall health of the community	Discusses how each agency impacts the broader goal of a healthy community	Participates in a community needs assessment to identify and improve the overall health of a community (actual or simulated)	Leads a community needs assessment to identify and improve the overall health of a community

Practice-Based Learning and Improvement 1: Evidence-Based and Informed Practice					
Level 1	Level 2	Level 3	Level 4	Level 5	
Recognizes the need for evidence in decision- making to care for a routine patient, situation, or public health problem	Identifies evidence and elicits patient or population preferences and values to guide a patient or population intervention	Applies the best available evidence, integrated with patient or population preferences and values	Critically appraises and applies evidence, even in the face of uncertainty and conflicting evidence, to guide care tailored to an individual or population	Trains others to critically appraise and apply evidence to complex situations	
Comments:	Comments:				

Level 1	Level 2	Level 3	Level 4	Level 5
Establishes goals for personal and professional development	Demonstrates openness to feedback and other input to inform goals	Analyzes, reflects on, and institutes behavioral change(s) to narrow the gap(s) between expectations and actual performance	Intentionally seeks feedback consistently, with adaptability and humility	Role models consistently seeking feedback with adaptability and humility
Actively seeks opportunities to improve	Designs and implements a learning plan, with prompting	Independently creates and implements a learning plan	Uses feedback to measure the effectiveness of the learning plan and, when necessary, improves it	Facilitates the design and implementation of learning plans for others

Level 1	Level 2	Level 3	Level 4	Level 5
Discusses common causes of disease clusters and outbreaks	Describes the steps of a cluster or outbreak investigation	Analyzes an outbreak, assessing for steps taken, mitigation strategies, results, and areas for improvement in the approach	Participates in the planning and implementation of a cluster/outbreak investigation (actual or simulated)	Leads a team to investigate and manage an outbreak, including supervision of staff members, assignment of roles, program design, monitoring of effectiveness, etc.
Recognizes the need to report selected diseases to public health authorities and describes the need for surveillance systems in a variety of settings	Identifies and summarizes commonly used surveillance systems	Lists the challenges in designing and maintaining a surveillance system	Analyzes surveillance data to identify appropriate targets for individual, community, and/or systems interventions and to evaluate the quality of the system	Independently designs and implements a new surveillance system

Professionalism 1: Professional Behavior and Ethical Principles					
Level 1	Level 2	Level 3	Level 4	Level 5	
Identifies potential triggers for and reporting of professionalism lapses	Demonstrates insight into professional behavior in routine situations	Demonstrates professional behavior in complex or stressful situations	Intervenes to prevent or mitigate lapses in professional behavior of oneself and others	Coaches others when their behavior fails to meet professional expectations	
Defines the ethical principles underlying informed consent, surrogate decision- making, advance directives, privacy and confidentiality, error disclosure, stewardship of limited resources, and related topics	Analyzes straightforward situations using ethical principles	Uses appropriate resources for managing ethical dilemmas	Develops an approach to manage and resolve complex ethical situations	Implements system-level factors to improve ethical behavior in health care professionals	
Comments:	Comments: Not Yet Completed Level 1				

Professionalism 2: Accountability/Conscientiousness					
Level 1	Level 2	Level 3	Level 4	Level 5	
Recognizes situations that may impact one's own ability to complete tasks and takes responsibility	Responds promptly to requests to complete tasks and responsibilities	Proactively implements strategies to ensure responsibilities are met	Recognizes situations that may impact others' ability to complete tasks and responsibilities in an accurate and timely manner	Modifies/develops a system of accountability to ensure completeness of tasks and responsibilities in an accurate and timely manner	
Comments:	Comments:				

Professionalism 3: Self-Awareness and Help-Seeking Behaviors					
Level 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	
Comments: Not Yet Completed Level 1					

of factors that affect well-being, the mechanisms by which those factors affect well-being, and available resources and tools to improve well-being

Interpersonal and Communication Skills 1: Community- and Population-Centered Communication and Shared Decision-Making					
Level 1	Level 2	Level 3	Level 4	Level 5	
Identifies common barriers to effective communication while accurately communicating one's own role and responsibilities within the health system	Identifies complex barriers to effective communication	Recognizes personal biases while attempting to minimize communication barriers	Independently uses shared decision-making to align community/population values, goals, and preferences with preventive services	Practices shared decision-making in community/population communication, including in situations with a high degree of uncertainty/conflict	
Comments:					

Level 1	Level 2	fessional Team Communic	Level 4	Level 5	
Uses language that values all members of an interprofessional team	Communicates information effectively, including the use of active listening and feedback, with all members of an interprofessional team and/or with community stakeholders	Adapts communication style to fit the needs of health care team members or community stakeholders	Facilitates interprofessional team and community group communication using multiple communication strategies	Serves as a role model for effective interprofessional team communication	
Recognizes the importance of the role of feedback within an interprofessional team	Solicits feedback on performance as a member of an interprofessional team or community group	Communicates concerns and provides feedback to peers and learners	Uses constructive criticism skills in communicating with interprofessional team members, community stakeholders, and leaders		
Comments:					