

Internal Medicine Milestones

The Accreditation Council for Graduate Medical Education



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Internal Medicine Milestones

The Milestones are designed only for use in evaluation of residents in the context of their participation in ACGME-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 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.

Internal Medicine Milestones Work Group

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Alliance for Academic Internal Medicine American Board of Internal Medicine American College of Physicians Association of Medical Colleges Review Committee for Internal Medicine Society of Hospital Medicine Society of General Internal Medicine

Understanding Milestone Levels and Reporting

This document presents the Milestones, which programs use in a semi-annual review of resident 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 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 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 may achieve higher levels early in his/her educational program just as a senior resident 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. Residents 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.

Selection of a level implies the resident 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 resident 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.

Examples are provided for some milestones within this document. Please note: the examples are not the required element or outcome; they are provided as a way to share the intent of the element.

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 resident 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.

Additional resources are available in the <u>Milestones</u> section of the ACGME website. Follow the links under "What We Do" at <u>www.acgme.org</u>.

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 resident's performance on the milestones for each sub-competency will be indicated by selecting the level of milestones that best describes that resident's performance in relation to 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 (simulated or actual)	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 skills required to identify, develop, implement, and analyze a quality improvement project	Designs,, implements, and assesses quality improvement initiatives at the institutional or community level
Comments:				ompleted 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 inc	

Patient Care 1: History				
Level 1	Level 2	Level 3	Level 4	Level 5
Elicits and reports a comprehensive history for common patient presentations, with guidance	Elicits and concisely reports a hypothesis- driven patient history for common patient presentations	Elicits and concisely reports a hypothesis- driven patient history for complex patient presentations	Efficiently elicits and concisely reports a patient history, incorporating pertinent psychosocial and other determinants of health	Efficiently and effectively tailors the history taking, including relevant historical subtleties, based on patient, family, and system needs
Seeks data from secondary sources, with guidance	Independently obtains data from secondary sources	Reconciles current data with secondary sources	Uses history and secondary data to guide the need for further diagnostic testing	Models effective use of history to guide the need for further diagnostic testing
Comments: Not Yet Completed Level 1				

Patient Care 2: Physical Examination				
Level 1	Level 2	Level 3	Level 4	Level 5
Performs a general physical examination while attending to patient comfort and safety	Performs a hypothesis- driven physical examination for a common patient presentation	Performs a hypothesis- driven physical examination for a complex patient presentation	Uses advanced maneuvers to elicit subtle findings	Models effective evidence-based physical examination technique
Identifies common abnormal findings	Interprets common abnormal findings	Identifies and interprets uncommon and complex abnormal findings	Integrates subtle physical examination findings to guide diagnosis and management	Teaches the predictive values of the examination findings to guide diagnosis and management
Comments: Not Yet Completed Level 1				

Patient Care 3: Clinical Reasoning				
Level 1	Level 2	Level 3	Level 4	Level 5
Organizes and accurately summarizes information obtained from the patient evaluation to develop a clinical impression	Integrates information from all sources to develop a basic differential diagnosis for common patient presentations	Develops a thorough and prioritized differential diagnosis for common patient presentations	Develops prioritized differential diagnoses in complex patient presentations and incorporates subtle, unusual, or conflicting findings	Coaches others to develop prioritized differential diagnoses in complex patient presentations
	Identifies clinical reasoning errors within patient care, with guidance	Retrospectively applies clinical reasoning principles to identify errors	Continually re-appraises one's own clinical reasoning to improve patient care in real time	Models how to recognize errors and reflect upon one's own clinical reasoning
Comments: Not Yet Completed Level 1				

Patient Care 4: Patient Management – Inpatient				
Level 1	Level 2	Level 3	Level 4	Level 5
Formulates management plans for common conditions, with guidance	Develops and implements management plans for common conditions, recognizing acuity, and modifies based on the clinical course	Develops and implements value-based (high value) management plans for patients with multisystem disease and comorbid conditions; modifies based on the clinical course	Uses shared decision making to develop and implement value-based (high value) comprehensive management plans for patients with comorbid and multisystem disease, including those patients requiring critical care	Develops and implements comprehensive management plans for patients with rare or ambiguous presentations or unusual comorbid conditions
Identifies opportunities to maintain and promote health	Develops and implements management plans to maintain and promote health, with guidance	Independently develops and implements plans to maintain and promote health, incorporating pertinent psychosocial and other determinants of health	Independently develops and implements comprehensive plans to maintain and promote health, incorporating pertinent psychosocial and other determinants of health	
Comments: Not Yet Completed Level 1 Not Yet Assessable				

Patient Care 5: Patient Management – Outpatient				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies opportunities to maintain and promote health	Develops and implements management plans to maintain and promote health	Develops and implements plans to maintain and promote health, incorporating pertinent psychosocial and other determinants of health	Develops and implements value- based (high-value) comprehensive plans to maintain and promote health	
Formulates management plans for a common chronic condition, with guidance	Develops and implements management plans for common chronic conditions	Develops and implements management plans for multiple chronic conditions	Develops and implements value- based (high value) comprehensive management plans for multiple chronic conditions, incorporating pertinent psychosocial and other determinants of health	Creates and leads a comprehensive patient- centered management plan for the patient with highly complex chronic conditions, integrating recommendations from multiple disciplines
Formulates management plans for acute common conditions, with guidance	Develops and implements management plans for common acute conditions	Develops and implements an initial management plan for patients with urgent or emergent conditions in the setting of chronic comorbidities	Develops and implements value- based (high value) management plans for patients with acute conditions	Develops and implements management plans for patients with subtle presentations, including rare or ambiguous conditions
Comments: Not Yet Completed Level 1				

Patient Care 6: Digital Health				
Level 1	Level 2	Level 3	Level 4	Level 5
Uses electronic health record (EHR) for routine patient care activities	Expands use of EHR to include and reconcile secondary data sources in patient care activities	Effectively uses EHR capabilities in managing acute and chronic care of patients	Uses EHR to facilitate achievement of quality targets for patient panels	Leads improvements to the EHR
Identifies the required components for a telehealth visit	Performs assigned telehealth visits using approved technology	Identifies clinical situations that can be managed through a telehealth visit	Integrates telehealth effectively into clinical practice for the management of acute and chronic illness	Develops and innovates new ways to use emerging technologies to augment telehealth visits
Comments:			Not Yet Co Not Yet As	ompleted Level 1

Patient Care

The resident is demonstrating satisfactory development of the knowledge, skill, and attitudes/behaviors needed to advance in the training program. The resident is demonstrating a learning trajectory that anticipates the achievement of competency for unsupervised practice that includes the delivery of safe, effective, patient-centered, timely, efficient, and equitable care.

Yes <u>No</u> Conditional on Improvement

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Medical Knowledge 1: Applied Foundational Sciences				
Level 1	Level 2	Level 3	Level 4	Level 5
Explains the scientific knowledge (e.g., physiology, social sciences, mechanism of disease) for normal function and common medical conditions	Explains the scientific knowledge for complex medical conditions	Integrates scientific knowledge to address comorbid conditions within the context of multisystem disease	Integrates scientific knowledge to address uncommon, atypical, or complex comorbid conditions within the context of multisystem disease	Demonstrates a nuanced understanding of the scientific knowledge related to uncommon, atypical, or complex conditions
Comments:				ompleted Level 1

Medical Knowledge 2: Therapeutic Knowledge				
Level 1	Level 2	Level 3	Level 4	Level 5
Explains the scientific basis for common therapies	Explains the indications, contraindications, risks, and benefits of common therapies	Integrates knowledge of therapeutic options in patients with comorbid conditions, multisystem disease, or uncertain diagnosis	Integrates knowledge of therapeutic options within the clinical and psychosocial context of the patient to formulate treatment options	Demonstrates a nuanced understanding of emerging, atypical, or complex therapeutic options
Comments:			Not Yet C Not Yet A	ompleted Level 1

Medical Knowledge 3: Knowledge of Diagnostic Testing				
Level 1	Level 2	Level 3	Level 4	Level 5
Explains the rationale, risks, and benefits for common diagnostic testing	Explains the rationale, risks, and benefits for complex diagnostic testing	Integrates value and test characteristics of various diagnostic strategies in patients with common diseases	Integrates value and test characteristics of various diagnostic strategies in patients with comorbid conditions or multisystem disease	Demonstrates a nuanced understanding of emerging diagnostic tests and procedures
Interprets results of common diagnostic tests	Interprets complex diagnostic data	Integrates complex diagnostic data accurately to reach high-probability diagnoses	Anticipates and accounts for limitations when interpreting diagnostic data	
Comments: Not Yet Completed Level 1				

Medical Knowledge

The resident is demonstrating satisfactory development of the knowledge, skill, and attitudes/behaviors needed to advance in the training program. The resident is demonstrating a learning trajectory that anticipates the achievement of competency for unsupervised practice that includes the delivery of safe, effective, patient-centered, timely, efficient, and equitable care.

_____ Yes _____ No _____Conditional on 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	Contributes to the analysis of patient safety events (simulated or actual)	Conducts analysis of patient safety events and offers error prevention strategies (simulated or actual)	Leads 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)	Models 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)	Contributes to local quality improvement initiatives	Demonstrates the skills required to identify, develop, implement, and analyze a quality improvement project	Creates, implements, and assesses sustainable quality improvement initiatives at the institutional or community level

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 by effectively engaging interprofessional teams in routine clinical situations	Coordinates care of patients by effectively engaging interprofessional teams in complex clinical situations	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	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 disparities	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
Comments:				

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 health care system	Describes how components of a complex health care system are interrelated, and how this impacts patient care	Discusses how individual practice affects the regional and national health care system	Manages various components of the complex health care system to provide efficient and effective patient care	Advocates for or leads systems change that enhances high-value, efficient, and effective patient care	
Describes basic health payment systems	Delivers care with consideration of each patient's payment model	Engages with patients in shared decision making, informed by each patient's payment models	Advocates for patient care needs with consideration of the limitations of each patient's payment model	Actively engaged in influencing health policy through advocacy activities at the local, regional, or national level	
Comments:	Comments: Not Yet Completed Level 1				

Systems-Based Practice

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_____ Yes _____ No _____ Conditional on Improvement

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, categorize, and analyze clinical evidence, with guidance	Articulates clinical questions and elicits patient preferences and values to guide evidence- based care	Critically appraises and applies the best available evidence, integrated with patient preference, to the care of complex patients	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 to patient care		
Comments:			Not Yet C	ompleted Level 1		

Level 1	and Improvement 2: Refle	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, and humility	Seeks performance data consistently with adaptability, and humility	Models consistently seeking performance data with adaptability and humility	
Identifies the factors that contribute to gap(s) between ideal and actual performance, with guidance	Analyzes and reflects on the factors which contribute to gap(s) between ideal and actual performance, with guidance	Institutes behavioral change(s) to narrow the gap(s) between ideal and actual performance	Challenges one's own assumptions and considers alternatives in narrowing the gap(s) between ideal and actual performance	Coaches others on reflective practice	
	Actively seeks opportunities to improve	Designs and implements an individualized learning plan, with prompting	Independently creates and implements an individualized learning plan	Uses performance data to measure the effectiveness of the individualized learning plan and when necessary, improves it	
Comments:	Comments:				

Practice-Based Learning and Improvement

The resident is demonstrating satisfactory development of the knowledge, skill, and attitudes/behaviors needed to advance in the training program. The resident is demonstrating a learning trajectory that anticipates the achievement of competency for unsupervised practice that includes the delivery of safe, effective, patient-centered, timely, efficient, and equitable care.

_____Yes _____No _____Conditional on Improvement

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Professionalism 1: Professional Behavior						
Level 1	Level 2	Level 3	Level 4	Level 5		
Demonstrates professional behavior in routine situations	Identifies potential triggers for professionalism lapses and accepts responsibility for one's own professionalism lapses	Demonstrates a pattern of 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		
Comments:			Not Yet C	ompleted Level 1		

Professionalism 2: Ethical Principles						
Level 1	Level 2	Level 3	Level 4	Level 5		
Demonstrates knowledge of basic ethical principles	Applies basic principles to address straightforward ethical situations	Analyzes complex situations using ethical principles and identifies the need to seek help in addressing complex ethical situations	Analyzes complex situations and engages with appropriate resources for managing and addressing ethical dilemmas as needed	Identifies and seeks to address system-level factors that induce or exacerbate ethical problems or impede their resolution		
Comments:			Not Yet C	ompleted Level 1		

Professionalism 3: Accountability/Conscientiousness						
Level 1	Level 2	Level 3	Level 4	Level 5		
Performs administrative tasks and patient care responsibilities, with prompting	Performs administrative tasks and patient care responsibilities in a timely manner in routine situations	Performs administrative tasks and patient care responsibilities in a timely manner in complex or stressful situations	Proactively implements strategies to ensure that the needs of patients, teams, and systems are met	Creates strategies to enhance other's ability to efficiently complete administrative tasks and patient care responsibilities		
Comments: Not Yet Completed Level 1						

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	With prompting, reflects on how personal and professional well-being may impact one's clinical practice	Reflects on actions in real time to proactively respond to the inherent emotional challenges of physician work	Participates in institutional changes to promote personal and professional well-being
	Recognizes that institutional factors affect well-being	Describes institutional factors that affect well- being	Suggests potential solutions to institutional factors that affect well- being	

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

Professionalism

The resident is demonstrating satisfactory development of the knowledge, skill, and attitudes/behaviors needed to advance in the training program. The resident is demonstrating a learning trajectory that anticipates the achievement of competency for unsupervised practice that includes the delivery of safe, effective, patient-centered, timely, efficient, and equitable care.

_____Yes _____No _____Conditional on Improvement

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Level 1	Level 2	Level 3	Level 4	Level 5
Uses language and non- verbal behavior to demonstrate respect and establish rapport	Establishes and maintains a therapeutic relationship using effective communication behaviors in straightforward encounters	Establishes and maintains a therapeutic relationship using effective communication behaviors in challenging patient encounters	Establishes and maintains therapeutic relationships using shared decision making, regardless of complexity	Coaches others in developing and maintaining therapeutic relationships and mitigating communication barriers
	Identifies common barriers to effective communication	Identifies complex barriers to effective communication, including personal bias	Mitigates communication barriers	Models the mitigation of communication barriers

Interpersonal and Communication Skills 2: Interprofessional and Team Communication						
Level 1	Level 2	Level 3	Level 4	Level 5		
Respectfully requests and responds to a consultation	Clearly and concisely requests and responds to a consultation	Checks own and others' understanding of recommendations when providing or receiving consultation	Coordinates recommendations from different consultants to optimize patient care	Facilitates conflict resolution between and amongst consultants when disagreement exists		
Uses verbal and non- verbal communication that values all members of the interprofessional team	Communicates information, including basic feedback with all interprofessional team members	Facilitates interprofessional team communication to reconcile conflict and provides difficult feedback	Adapts communication style to fit interprofessional team needs and maximizes impact of feedback to the team	Models flexible communication strategies that facilitate excellence in interprofessional teamwork		
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 documents comprehensive and current information	Documents clinical encounter, including reasoning, through organized notes	Documents clinical encounter through concise and thorough notes	Documents clinical encounter clearly, concisely, timely, and in an organized form, including anticipatory guidance	Guides departmental or institutional communication policies and procedures	
Communicates using formats specified by institutional policy to safeguard patient personal health information	Selects direct (e.g., telephone, in-person) and indirect (e.g., progress notes, text messages) forms of communication based on context, with assistance	Appropriately selects direct and indirect forms of communication based on context	Models effective written and verbal communication		
Comments:			Not Yet C	ompleted Level 1	

Interpersonal and Communication Skills

The resident is demonstrating satisfactory development of the knowledge, skill, and attitudes/behaviors needed to advance in the training program. The resident is demonstrating a learning trajectory that anticipates the achievement of competency for unsupervised practice that includes the delivery of safe, effective, patient-centered, timely, efficient, and equitable care.

_____ Yes _____ No _____ Conditional on Improvement

Overall Clinical Competence

This rating represents the assessment of the resident's development of overall clinical competence during this year of training:

___Superior: Far exceeds the expected level of development for this year of training

____Satisfactory: Always meets and occasionally exceeds the expected level of development for this year of training

Conditional on Improvement: Meets some developmental milestones but occasionally falls short of the expected level of development for this year of training. An improvement plan is in place to facilitate achievement of competence appropriate to the level of training.

____Unsatisfactory: Consistently falls short of the expected level of development for this year of training.