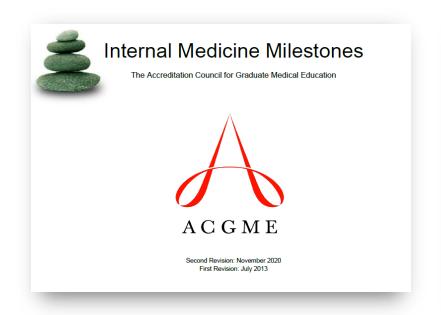
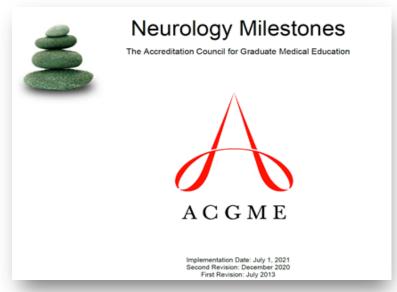
Internal Medicine and Neurology (combined) programs must annually report on **each** set of Milestones.







Internal Medicine Milestones

The Accreditation Council for Graduate Medical Education



Implementation Date: July 1, 2021 Second Revision: November 2020 First Revision: July 2013

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

Eva Aagaard, MD, FACP
Cinnamon Bradley, MD
Fred Buckhold, MD
Alfred Burger, MD, MS, FACP, SFHM
Stephanie Call, MD, MSPH
Shobhina Chheda, MD, MPH
Davoren Chick, MD, FACP
Jack DePriest, MD, MACM
Benjamin Doolittle, MD, MDiv
Laura Edgar, EdD, CAE
Christin Giordano McAuliffe, MD
Neil Kothari, MD

Jonathan Lim, MD
Monica Lypson, MD, MHPE
Allan Markus, MD, MS, MBA, FACP
Bernadette Miller, MD
Attila Nemeth, MD
Jacob Perrin, MD
Raul Ramirez Velazquez, DO
Rachel Robbins, MD
Jacqueline Stocking, PhD, MBA, RN
Jane Trinh, MD
Mark Tschanz, DO, MACM
Asher Tulsky, MD
Eric Warm, MD

Advisory Group

Mobola Campbell-Yesufu, MD, MPH
Gretchen Diemer, MD
Jodi Friedman, MD
Janae Heath, MD
Benjamin Kinnear, MD

Heather Laird-Fick, MD, MPH, FACP

Subha Ramani, MBBS, MMed, MPH
Brijen Shah, MD
C. Christopher Smith, MD
Abby Spencer, MD, MS
Nicole Swallow, MD, FACP

The ACGME would like to thank the following organizations for their continued support in the development of the Milestones:

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: Not Yet 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.		Selecting a response box on the line in between levels indicates that milestone in lower levels have been substantially demonstrated as well as some milestones in the higher level(s).			

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 Not Yet Assessable					

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

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 Not Yet Assessable					

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	

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	mon management plans for management plans for implements value-		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	ans for acute common management plans for an initial management		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

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

Yes	No	Conditional on Improveme	nt

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: Not Yet Completed Level 1 Not Yet Assessable					

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:				ompleted Level 1	

risks, and benefits for common diagnostic risks, and benefits for complex diagnostic diagnostic	cteristics of various te ostic strategies in ts with common stees	est characteristics of various diagnostic	Demonstrates a nuanced understanding of emerging diagnostic test and procedures
	3.5	conditions or multisystem disease	
common diagnostic tests diagnostic data diagnostic	ostic data accurately acch high-probability w	Anticipates and accounts for limitations when interpreting diagnostic data	

Medical Knowledge

Υ	'es	No	Conditional	on l	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

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
,	and inequities for the local	population and		

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

Systems-Based Practice

Yes	No	Conditional on Improvemer	٦t

Practice-Based Learning	and Improvement 1: Evide	ence-Based and Informed P	Practice	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:				
Comments.			Not Yet C	ompleted Level 1

Level 1	Level 2	Level 3	Level 4	Level 5
Accepts responsibility for personal and professional development by establishing goals	Demonstrates openness to performance data (feedback and other input) to inform goals	Seeks performance data episodically, with adaptability, 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

Practice-Based Learning and Improvement

Yes	No	Conditional	on I	mprovement

Professionalism 1: Profe	essional 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: Ethic	cal 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: Acco	untability/Conscientiousne	ess		
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 C	ompleted Level 1

Professionalism 4: Know	ledge of Systemic and Ind	ividual Factors of Well-Bei	ng*	
Level 1	Level 2	Level 3	Level 4	Level 5
Recognizes the importance of getting help when needed to address personal and professional well-being	Lists resources to support personal and professional well-being Recognizes that institutional factors affect well-being	With prompting, reflects on how personal and professional well-being may impact one's clinical practice Describes institutional factors that affect well-being	Reflects on actions in real time to proactively respond to the inherent emotional challenges of physician work Suggests potential solutions to institutional factors that affect well-being	Participates in institutional changes to promote personal and professional well-being
Comments:				ompleted Level 1

Professionalism

Yes No Conditional on Improvement

^{*}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.

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

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

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	

Interpersonal and Communication Skills

Yes	No	Conditional on Improvemen

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.



Neurology Milestones

The Accreditation Council for Graduate Medical Education



Implementation Date: July 1, 2021 Second Revision: December 2020 First Revision: July 2013

Neurology 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.

Neurology Milestones

Work Group

Diana Barratt, MD, MPH, FAAN

Nicole Chiota-McCollum, MD, MEd

Jeffrey Dewey, MD, MHA

Laura Edgar, EdD, CAE

Laurie Gutmann, MD

Shannon Kilgore, MD

Steven L. Lewis, MD

Jeffrey McClean, MD

Sonja Potrebic, MD, PhD

Anita Shelgikar, MD, MHPE

Bryan Walker, MHS, PA-C

Jayne Ward, DO

The ACGME would like to thank the following organizations for their continued support in the development of the Milestones:

American Board of Psychiatry and Neurology

American Osteopathic Board of Neurology and Psychiatry

Consortium of Neurology Program Directors

Review Committee for Neurology

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 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:			Not Yet C	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.			Selecting a response box on the line in between levels indicates that milestones in lower levels have been substantially demonstrated as well as some milestones in the higher level(s).	

Patient Care 1: History				
Level 1	Level 2	Level 3	Level 4	Level 5
Obtains a basic neurologic history	Obtains a complete and relevant neurologic history	Obtains an organized neurologic history, including collateral information as appropriate	Efficiently obtains an organized hypothesis-driven neurologic history	Serves as a role model in obtaining a hypothesis-driven neurologic history
Comments:			Not Yet Co	ompleted Level 1

Patient Care 2: Neurologic Exam					
Level 1	Level 2	Level 3	Level 4	Level 5	
Performs some components of a neurologic exam	Performs a standard neurologic exam accurately	Performs a relevant neurologic exam incorporating additional appropriate maneuvers	Performs a hypothesis- driven neurologic exam	Serves as a role model for performing a hypothesis-driven, complete, relevant, and organized neurologic exam	
Comments:				ompleted Level 1	

Patient Care 3: Formulation				
Level 1	Level 2	Level 3	Level 4	Level 5
Summarizes history and exam findings	Generates a broad differential diagnosis based on history, exam, and localization	Synthesizes relevant information to focus and prioritize diagnostic possibilities	Continuously reconsiders diagnosis in response to changes in clinical circumstances and available data	Serves as a role model for clinical reasoning by demonstrating sophisticated formulation in complex presentations
Comments:			Not Yet Co	ompleted Level 1

Patient Care 4: Diagnosi	s and Management of Neur	ologic Disorders in the Ou	tpatient Setting	
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies typical presentations of commonly encountered neurologic conditions	Diagnoses commonly encountered neurologic conditions	Identifies atypical presentations of commonly encountered neurologic conditions	Diagnoses uncommon neurologic conditions	Identifies atypical presentations of uncommon neurologic conditions
	Develops an initial treatment plan for commonly encountered neurologic disorders	Individualizes management and follow- up plan for commonly encountered neurologic disorders, considering risks, benefits, and non- pharmacologic strategies	Adapts management plan based upon patient response and complications of therapy; identifies when to change acuity of care	Longitudinally manages uncommon neurologic conditions
Comments: Not Yet Completed Level 1 Not Yet Assessable				

Patient Care 5: Diagnosi	s and Management of Neur	ologic Disorders in the Inp	atient Setting	
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies typical presentations of commonly encountered neurologic conditions	Diagnoses commonly encountered neurologic conditions	Identifies atypical presentations of commonly encountered neurologic conditions	Diagnoses uncommon neurologic conditions	Identifies atypical presentations of uncommon neurologic conditions
	Develops an initial treatment plan for commonly encountered neurologic disorders	Individualizes management plan, ensuring the appropriate level of care throughout hospitalization and upon discharge	Adapts management plan based upon treatment response, disease progression, and complications of therapy	Leads the management of patients with complex and uncommon neurologic conditions
Comments: Not Yet Completed Level 1 Not Yet Assessable				

Patient Care 6: Diagnosis	s and Management of Neur	ologic Emergencies		
Level 1	Level 2	Level 3	Level 4	Level 5
Describes the typical presentation of neurologic emergencies	Recognizes when a patient's presentation is a neurologic emergency	Diagnoses neurologic emergencies, using appropriate diagnostic testing	Re-appraises diagnostic considerations based on treatment response, disease progression, and complications of therapy	Serves as a role model for management of neurologic emergencies
Seeks assistance and conveys pertinent details during a neurologic emergency	Initiates management for a neurologic emergency	Manages patients with common neurologic emergencies	Manages complex neurologic emergencies	
Comments: Not Yet Completed Level 1 Not Yet Assessable				

Patient Care 7: Determination of Death by Neurologic Criteria					
Level 1	Level 2	Level 3	Level 4	Level 5	
Demonstrates knowledge of medical and legal significance of death by neurologic criteria	Lists the components for determining death by neurologic criteria	Describes supplemental testing used to determine death by neurologic criteria	Accurately performs determination of death by neurologic criteria	Educates others in the determination of death by neurologic criteria, including appropriate use of supplemental testing, as well as controversies	
Comments:				ompleted Level 1	

Level 1	Level 2	Level 3	Level 4	Level 5
Identifies basic neuroanatomy on brain and vascular anatomy of the head and neck magnetic resonance (MR) and computed tomography (CT)	Identifies major abnormalities of the brain and cerebrovascular system on MR and CT Identifies basic anatomy of the spine and spinal	Interprets typical abnormalities of the brain and cerebrovascular system on MR and CT Identifies abnormalities of the spine and spinal cord	Interprets subtle abnormalities of brain and cerebrovascular system on MR and CT Interprets MR and CT of the spine	Interprets advanced neuroimaging
	cord on MR and CT	on MR and CT		

Patient Care 9: Electroencephalogram (EEG)				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies patients for whom EEG is appropriate	Recognizes normal EEG features, including common artifacts, in children and adults	Recognizes patterns of status epilepticus, normal EEG variants, and common abnormalities in children and adults	Interprets common EEG abnormalities and patterns that could represent status epilepticus	Interprets uncommon EEG abnormalities and creates a report
Comments:			Not Yet Co Not Yet As	ompleted Level 1

Patient Care 10: Nerve Conduction Study/Electromyogram (NCS/EMG)					
Level 1	Level 2	Level 3	Level 4	Level 5	
Identifies patients for whom NCS/EMG is appropriate	Identifies NCS/EMG findings for common disorders	Correlates NCS/EMG results to patient presentation, including identification of potential study limitations	Formulates basic NCS/EMG plan and interprets data for common clinical presentations	Performs, interprets, and creates a report for NCS/EMG	
Comments:				ompleted Level 1	

Patient Care 11: Lumbar Puncture					
Level 1	Level 2	Level 3	Level 4	Level 5	
Lists the indications, contraindications, and complications for lumbar puncture	Performs lumbar puncture under direct supervision	Performs lumbar puncture without direct supervision and manages complications	Performs lumbar puncture on patients with challenging anatomy	Performs lumbar puncture using image guidance	
Comments:	Comments: Not Yet Completed Level 1 Not Yet Assessable				

Patient Care 12: Psychiatric and Functional Aspects of Neurology				
Level 1	Level 2	Level 3	Level 4	Level 5
Recognizes contributions of common psychiatric disorders and their treatment to neurologic diseases	Develops a treatment plan that considers psychiatric comorbidities and side effects of psychiatric medications	Accurately differentiates psychiatric or functional contributions to neurologic symptoms	Leads a discussion with a patient and/or caregiver that explains the psychiatric or functional contribution to the patient's neurologic symptoms	Develops a shared management plan that addresses the psychiatric or functional contribution to neurologic symptoms
Comments: Not Yet Completed Level 1 Not Yet Assessable				

Medical Knowledge 1: Localization					
Level 1	Level 2	Level 3	Level 4	Level 5	
Recognizes the role of localization in neurologic diagnosis	Localizes lesions to general regions of the nervous system	Localizes lesions to specific regions of the nervous system	Localizes lesions to discrete structures of the nervous system	Consistently demonstrates sophisticated and detailed knowledge of neuroanatomy in localizing lesions	
Comments:			Not Yet Co	ompleted Level 1	

Medical Knowledge 2: Diagnostic Investigation					
Level 1	Level 2	Level 3	Level 4	Level 5	
Discusses a general diagnostic approach appropriate to clinical presentation	Lists indications, contraindications, risks, and benefits of diagnostic testing	Prioritizes and interprets diagnostic tests appropriate to clinical urgency and complexity	Uses complex diagnostic approaches in uncommon situations	Demonstrates sophisticated knowledge of diagnostic testing and controversies	
Comments: Not Yet Completed Level 1 Not Yet Assessable					

Systems-Based Practice 1: Patient Safety				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of commonly reported patient safety events	Identifies system factors that lead to patient safety events	Participates in analysis of patient safety events	Conducts analysis of patient safety events and offers error prevention strategies	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	Participates in disclosure of patient safety events to patients and patients' families	Discloses patient safety events to patients and patients' families	Role models or mentors others in the disclosure of 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 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:	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	Coordinates care of patients in routine clinical situations effectively using the roles of the interprofessional team members	Coordinates care of patients in complex clinical situations effectively using the roles of the interprofessional team members	Role models effective coordination of patient- centered care among different disciplines and specialties	Improves quality of transitions of care within and across health care delivery systems to
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	Supervises transitions of care by other team members	Role models safe and effective transitions of care/hand-offs within and across health care delivery systems, including outpatient settings	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 and community	Effectively uses local resources to meet the needs of a patient population and community	Adapts practice to provide for the needs of specific populations	Leads innovations in adapting practice and systems for populations and communities with health care disparities
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
Describes basic health care payment systems, (e.g., government, private, public, uninsured care) and practice models	Delivers patient-centered care, considering the patient's economic constraints	Engages with patients in shared decision making, informed by each patient's payment models	Uses available resources to promote optimal patient care (e.g., community resources, patient assistance resources) considering each patient's payment model	Advocates for systems change that enhances high-value, efficient, and effective patient care
Identifies basic knowledge domains for effective transition to practice (e.g., information technology, legal, billing and coding, financial, personnel)	Demonstrates use of information technology required for medical practice (e.g., electronic health record, documentation required for billing and coding)	Consistently demonstrates timely and accurate documentation, including coding and billing requirements	Implements changes in individual practice patterns in response to professional requirements and in preparation for practice	Educates others to prepare them for transition to practice
Comments: Not Yet Completed Level 1				

Practice-Based Learning and Improvement 1: Evidence-Based and Informed Practice				
Demonstrates how to access and use available evidence, and to incorporate patient preferences and values to care for a routine patient	Articulates clinical questions and elicits patient preferences and values to guide evidence-based care	Level 3 Locates and applies the best available evidence, integrated with patient preference, to the care of complex patients	Level 4 Critically appraises and applies evidence, even in the face of uncertainty, and interprets conflicting evidence to guide care, tailored to the individual patient	Level 5 Coaches others to critically appraise and apply evidence for complex patients, and/or participates in the development of guidelines
Comments: Not Yet Completed Level 1				

Level 1	Level 2	Level 3	Level 4	Level 5
Accepts responsibility for personal and professional development by establishing goals	Demonstrates openness to performance data (feedback and other input) to inform goals	Seeks performance data sporadically, with adaptability and humility	Seeks performance data consistently	Role models 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	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

Professionalism 1: Professional Behavior and Ethical Principles				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies and describes potential triggers for professionalism lapses and how to report Demonstrates knowledge of ethical principles related to patient care	Demonstrates insight into professional behavior in routine situations and takes responsibility Analyzes straightforward situations using ethical principles	Demonstrates professional behavior in complex or stressful situations Analyzes complex situations using ethical principles	Intervenes to prevent professionalism lapses in oneself and others Recognizes and uses appropriate resources for managing and resolving ethical dilemmas as needed	Coaches others when their behavior fails to meet professional expectations Identifies and seeks to address system-level factors that induce or exacerbate ethical problems or impede their resolution
Comments: Not Yet Completed Level 1				

Professionalism 2: Accountability/Conscientiousness				
Level 1	Level 2	Level 3	Level 4	Level 5
Takes responsibility for failure to complete tasks and responsibilities, identifies potential contributing factors, and describes strategies for ensuring timely task completion in the future	Performs tasks and responsibilities in a timely manner with appropriate attention to detail in routine situations	Performs tasks and responsibilities in a timely manner with appropriate attention to detail in complex or stressful situations	Recognizes situations in which one's own behavior may impact others' ability to complete tasks and responsibilities in a timely manner	Develops or implements strategies to improve system-wide problems to improve ability for oneself and others to complete tasks and responsibilities in a timely fashion
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		
Comments: Not Yet Completed Level 1				

Professionalism 3: Well-Being				
Level 1	Level 2	Level 3	Level 4	Level 5
Recognizes sense 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				

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

Interpersonal and Comm	unication Skills 1: Patient-	and Family-Centered Com	munication 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 the patient's/patient's family's concerns and context, regardless of complexity	Mentors others in situational awareness and critical self-reflection to consistently develop positive therapeutic relationships
Identifies the need to individualize communication strategies based on the patient's/patient's family's expectations and understanding	Communicates compassionately with the patient/patient's family to clarify expectations and verify understanding of the clinical situation	Communicates medical information in the context of the patient's/patient's family's values, uncertainty and conflict	Uses shared decision making to align the patient's/patient's family's values, goals, and preferences with treatment options	Role models shared decision making in the context of the patient's/patient's family's values, uncertainty and conflict
Comments: Not Yet Completed Level 1				

Interpersonal and Communication Skills 2: Barrier and Bias Mitigation							
Level 1	Level 2	Level 3	Level 4	Level 5			
Identifies common barriers to effective patient care (e.g., language, disability)	Identifies complex barriers to effective patient care (e.g., health literacy, cultural)	Recognizes personal biases and mitigates barriers to optimize patient care, when prompted	Recognizes personal biases and proactively mitigates barriers to optimize patient care	Mentors others on recognition of bias and mitigation of barriers to optimize patient care			
Comments: Not Yet Completed Level 1							

Level 1	Level 2	Level 3	Level 4	Level 5	
Respectfully requests a consultation	Confirms understanding of consultant recommendations	Clearly and concisely formulates a consultation request	Coordinates recommendations from different members of the health care team to optimize patient care	Role models and facilitates flexible communication strategies that value input from all health care team	
Recognizes the role of a neurology consultant	Respectfully accepts a consultation request	Clearly and concisely responds to a consultation request	·	members, resolving conflict when needed	
Uses language that	Communicates	Uses active listening to	Solicits and		
values all members of	information effectively	adapt communication	communicates feedback		
the health care team	with all health care team members	style to fit team needs	to other members of the health care team		

Interpersonal and Communication Skills 4: Communication within Health Care Systems						
Level 1	Level 2	Level 3	Level 4	Level 5		
Documents accurate and up-to-date patient information	Demonstrates diagnostic reasoning through organized and timely notes	Communicates the diagnostic and therapeutic reasoning	Demonstrates concise, organized written and verbal communication, including anticipatory guidance	Guides departmental or institutional communication policies and procedures		
Communicates in a way that safeguards patient information	Communicates through appropriate channels as required by institutional policy	Selects optimal mode of communication based on clinical context	ganaanoo			
Comments: Not Yet Completed Level 1						