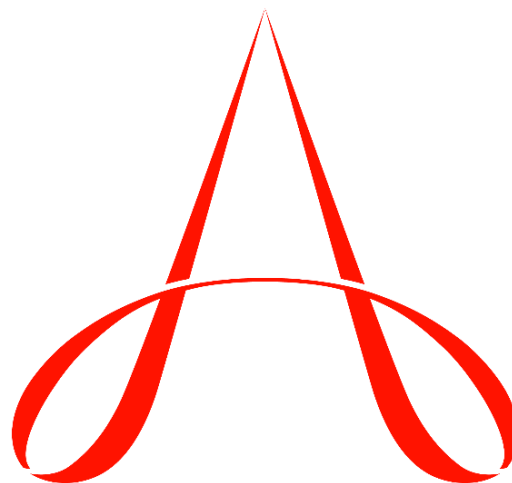# Sleep Medicine Milestones

The Accreditation Council for Graduate Medical Education

A
C G M E

Second Revision: December 2019
First Revision: October 2014

Sleep Medicine Milestones

The Milestones are designed only for use in evaluation of fellows in the context of their participation in ACGME-accredited fellowship programs. The Milestones provide a framework for the assessment of the development of the fellow 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.

Sleep Medicine Milestones

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

American Board of Internal Medicine

ACGME Review Committee for Internal Medicine

Understanding Milestone Levels and Reporting

This document presents the Milestones, which programs use in a semi-annual review of fellow performance, and then report to the ACGME. Milestones are knowledge, skills, attitudes, and other attributes for each of the ACGME Competencies organized in a developmental framework. The narrative descriptions are targets for fellow performance throughout their educational program.

Milestones are arranged into levels. Tracking from Level 1 to Level 5 is synonymous with moving from novice to expert fellow in the specialty or subspecialty. For each reporting period, the Clinical Competency Committee will review the completed evaluations to select the milestone levels that best describe each learner's current performance, abilities, and attributes for each subcompetency.

These levels *do not* correspond with post-graduate year of education. Depending on previous experience, a junior fellow may achieve higher levels early in his/her educational program just as a senior fellow may be at a lower level later in his/her educational program. There is no predetermined timing for a fellow to attain any particular level. Fellows may also regress in achievement of their milestones. This may happen for many reasons, such as over scoring in a previous review, a disjointed experience in a particular procedure, or a significant act by the fellow.

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

Additional Notes

Level 4 is designed as a graduation *goal* but *does not* represent a graduation *requirement*. Making decisions about readiness for graduation and unsupervised practice is the purview of the program director. Furthermore, Milestones 2.0 include revisions and changes that preclude using Milestones as a sole assessment in high-stakes decisions (i.e., determination of eligibility for certification or credentialing). Level 5 is designed to represent an expert fellow whose achievements in a subcompetency are greater than the expectation. Milestones are primarily designed for formative, developmental purposes to support continuous quality improvement for individual learners, education programs, and the specialty. The ACGME and its partners will continue to evaluate and perform research on the Milestones to assess their impact and value.

Some milestone descriptions include statements about performing independently. These activities must occur in conformity to ACGME supervision guidelines as described in the Program Requirements, as well as to institutional and program policies. For example, a fellow who performs a procedure independently must, at a minimum, be supervised through oversight.

A Supplemental Guide is also available to provide the intent of each subcompetency, examples for each level, assessment methods or tools, and other available resources. The Supplemental Guide, 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 www.acgme.org, choose the applicable specialty under the "Specialties" menu, then select the "Milestones" link in the lower navigation bar.

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

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	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 families	Discloses patient safety events to patients and families	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	Participates in local quality improvement initiatives	Demonstrates the skills required to identify, develop, implement, and analyze a quality improvement project	Creates, implements, and assesses quality improvement initiatives at the institutional or community level

Comments:

Not 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 milestones in lower levels have been substantially demonstrated as well as **some** milestones in the higher level(s).

Patient Care 1: Gather and Synthesize Information from Sleep Medicine Patients Across the Lifespan				
Level 1	Level 2	Level 3	Level 4	Level 5
Elicits and concisely reports a hypothesis-driven patient history for common patient presentations	Elicits and concisely reports a hypothesis-driven patient history for uncommon patient presentations	Efficiently elicits and concisely reports a hypothesis-driven patient history for complex patient presentations, incorporating pertinent psychosocial and other determinants of health	Obtains relevant historical subtleties, including sensitive information that informs the differential diagnosis	Role models integration of history and physical examination and collateral data
Seeks and obtains data from collateral sources, with guidance	Independently seeks and obtains data from collateral sources	Reconciles current data with collateral sources for common cases	Reconciles current data with collateral sources for uncommon and complex cases	
Performs a hypothesis-driven physical exam for a common patient presentation and attends to patient comfort and safety	Performs a hypothesis driven physical exam for an uncommon patient presentation	Performs a hypothesis-driven physical exam for a complex patient presentation	Elicits subtle findings on physical exam	

Comments:

Not Yet Completed Level 1

Not Yet Assessable

Patient Care 2: Use of Diagnostic Tools in Sleep Medicine Across the Lifespan				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies diagnostic tools used to evaluate patients with sleep disorders	Selects diagnostic tools for patients with common sleep disorders	Selects diagnostic tools for patients with uncommon and complex sleep disorders	Integrates clinical findings and test performance characteristics to obtain the diagnosis	Integrates current and new diagnostic tools in novel ways to further evaluate sleep disorders
Identifies available consumer sleep technologies	Explains common uses of consumer sleep technologies	Identifies limitations of consumer sleep technologies	Incorporates consumer sleep technologies for individual use	Incorporates consumer sleep technologies in novel ways or for population use
☐	☐	☐	☐	☐	☐	☐	☐	☐

Comments:	
	Not Yet Completed Level 1 ☐
	Not Yet Assessable ☐

Patient Care 3: Interpretation of Physiologic Testing in Sleep Medicine Across the Lifespan

Level 1	Level 2	Level 3	Level 4	Level 5
Describes the basic principles of signal acquisition and processing	Identifies common abnormalities and artifacts	Identifies uncommon abnormalities and variants	Identifies the technical basis and limitations of the testing modalities; troubleshoots signal processing	Demonstrates expertise in advanced principles of signal acquisition and processing
Identifies characteristics of normal sleep-wake physiology	Interprets routine testing to identify common sleep-wake disorders	Interprets routine testing to identify uncommon sleep-wake disorders	Interprets advanced testing; interprets testing of complex sleep-wake disorders	Applies current technologies for novel use; incorporates emerging technologies to diagnose and treat sleep-wake disorders

Comments:

Not Yet Completed Level 1 ☐

Not Yet Assessable ☐

Patient Care 4: Management Plan for Sleep Medicine Patients Across the Lifespan

Level 1	Level 2	Level 3	Level 4	Level 5
Implements management plans for common sleep disorders and recommends strategies to maintain and promote sleep health	Implements management plans for uncommon sleep disorders and to maintain and promote sleep health	Develops and implements management plan for complex sleep disorders and to maintain and promote sleep health	Adjusts comprehensive management plans by incorporating psychosocial and other determinants of health and response to therapy	Develops and implements a personalized management plan for patients with subtle presentations, rare or ambiguous sleep disorders

Advocates to maintain and promote sleep health for patients and populations |

☐   ☐   ☐   ☐   ☐   ☐   ☐   ☐   ☐

Comments:

Not Yet Completed Level 1   ☐

Not Yet Assessable   ☐

Patient Care
The fellow is demonstrating satisfactory development of the knowledge, skill, and attitudes/behaviors needed to advance in the training program. He or she 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
*Only required for Internal Medicine based programs

Medical Knowledge 1: Sleep Medicine Clinical Science				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of physiology and pathophysiology of common sleep disorders	Demonstrates knowledge of physiology and pathophysiology of uncommon sleep disorders	Integrates scientific knowledge to address complex sleep disorders	Synthesizes scientific knowledge to address complex or atypical sleep disorders in the context of a patient with comorbid conditions that impact management of the patient's sleep disorder	Demonstrates expertise in sleep science and its application to clinical medicine
☐	☐	☐	☐	☐	☐	☐	☐	☐

Comments:

Not Yet Completed Level 1   ☐

Not Yet Assessable   ☐

Medical Knowledge 2: Therapeutic Knowledge for Sleep Disorders				
Level 1	Level 2	Level 3	Level 4	Level 5
Describes the indications and scientific basis for common therapies for sleep disorders	Analyzes the indications, contraindications, and complications of common therapies for sleep disorders	Demonstrates knowledge of multimodal therapeutic approaches to sleep disorders in the context of a patient's comorbid conditions to formulate treatment options	Synthesizes knowledge of therapeutic options within the clinical context (patient, system, society) to optimize treatment plan and adherence	Demonstrates an understanding of emerging, atypical, or complex therapeutic options
☐ ☐	☐ ☐	☐ ☐	☐ ☐	☐ ☐

Comments:

Not Yet Completed Level 1 ☐

Not Yet Assessable ☐

Medical Knowledge
The fellow is demonstrating satisfactory development of the knowledge, skill, and attitudes/behaviors needed to advance in the training program. He or she 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
*Only required for Internal Medicine based programs

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	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 families	Discloses patient safety events to patients and families	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	Participates in local quality improvement initiatives	Demonstrates the skills required to identify, develop, implement, and analyze a quality improvement project	Creates, implements, and assesses quality improvement initiatives at the institutional or community level
☐	☐	☐	☐	☐	☐	☐	☐	☐

Comments:

Not Yet Completed Level 1   ☐

Systems-Based Practice 2: System Navigation for Patient-Centered Care				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of care coordination	Coordinates care of patients in routine clinical situations, performs transitions of care, and effectively uses interprofessional teams	Coordinates care of patients in complex clinical situations, performs transitions of care, and effectively uses interprofessional teams	Role models effective coordination of patient-centered care among different disciplines and specialties	Analyses the process of care coordination and leads in the design and implementation of improvements
Demonstrates knowledge of population and community health needs and disparities	Identifies specific population and community health needs and inequities for their local population	Uses local resources effectively to meet the needs of a patient population and community	Participates in changing and adapting practice to provide for the needs of specific populations	Leads innovations and advocates for populations and communities with health care inequities

Comments:

Not Yet Completed Level 1 ☐

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 health care system are interrelated, and how this impacts patient care	Discusses how individual practice affects the broader system	Manages various components of the 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 and practice models	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	Participates in health policy advocacy activities
Identifies basic knowledge domains for effective transition to practice	Demonstrates use of information technology required for medical practice	Describes core administrative knowledge needed for transition to practice	Analyzes individual practice patterns and professional requirements in preparation for practice	Educates others to prepare them for transition to practice
☐ ☐	☐ ☐	☐ ☐	☐ ☐	☐ ☐

Comments:

Not Yet Completed Level 1   ☐

Systems-Based Practice
The fellow is demonstrating satisfactory development of the knowledge, skill, and attitudes/behaviors needed to advance in the training program. He or she 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
*Only required for Internal Medicine based programs

Practice-Based Learning and Improvement 1: Evidence-Based and Informed Practice				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates how to access and use available evidence, and incorporate patient preferences and values in order to take care of a routine patient	Articulates clinical questions and elicits patient preferences and values in order to guide evidence-based care	Locates and applies the best available evidence, integrated with patient preference, to the care of complex patients	Critically appraises and applies evidence even in the face of uncertainty and conflicting evidence to guide care, tailored to the individual patient	Coaches others to critically appraise and apply evidence for complex patients; and/or participates in the development of guidelines
☐	☐	☐	☐	☐	☐	☐	☐	☐

Comments:

Not Yet Completed Level 1   ☐

Practice-Based Learning and Improvement 2: Reflective Practice and Commitment to Personal Growth

Level 1	Level 2	Level 3	Level 4	Level 5
Accepts responsibility for personal and professional development by establishing goals	Demonstrates openness to performance feedback and other data in order to inform goals	Solicits performance feedback and data episodically, with adaptability for personal growth	Intentionally seeks performance feedback data consistently, with adaptability for personal growth	Role models consistently seeking performance data, with adaptability for personal growth
Identifies the factors which contribute to gaps between expectations and actual performance	Analyzes and reflects on the factors which contribute to gaps between expectations and actual performance	Institutes behavioral changes to narrow gaps between expectations and actual performance	Challenges assumptions and considers alternatives in narrowing gaps between expectations and actual performance	Coaches others on reflective practice
Identifies gaps in knowledge	Designs and implements a learning plan, with prompting	Independently creates and implements a learning plan	Uses performance data to measure the effectiveness of the learning plan and when necessary, improves it	Facilitates the design and implementation of learning plans for others

☐	☐	☐	☐	☐	☐	☐	☐	☐

Comments:

Not Yet Completed Level 1   ☐

Practice-Based Learning and Improvement
The fellow is demonstrating satisfactory development of the knowledge, skill, and attitudes/behaviors needed to advance in the training program. He or she 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
*Only required for Internal Medicine based programs

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	Describes when and how to appropriately report professionalism lapses, including strategies for addressing common barriers	Takes responsibility for own professionalism lapses	Recognizes situations that may trigger professionalism lapses and intervenes to prevent lapses in self and others	Coaches others when their behavior fails to meet professional expectations
Demonstrates knowledge of the ethical principles commonly identified in sleep medicine	Recognizes and manages straightforward ethical situations	Identifies need to seek help in managing complex ethical situations	Uses appropriate resources for managing and resolving ethical dilemmas	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
Responds promptly to requests or reminders to complete tasks and responsibilities; takes responsibility for incomplete tasks	Completes tasks and responsibilities in a timely manner	Recognizes barriers that may impact self or others' ability to complete tasks and responsibilities in a timely manner	Proactively implements strategies for timely task completion to ensure that the needs of patients, teams, and systems are met	Takes ownership of system outcomes
☐ ☐	☐ ☐	☐ ☐	☐ ☐	☐

Comments:

Not Yet Completed Level 1   ☐

Professionalism 3: Self-Awareness and Help-Seeking				
Level 1	Level 2	Level 3	Level 4	Level 5
Recognizes the status of personal and professional well-being	Demonstrates appropriate help-seeking behaviors	With assistance, proposes a plan to optimize personal and professional well-being	Independently develops, reassesses and modifies plans 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 fellow's well-being, but to ensure each fellow has the fundamental knowledge of factors that impact well-being, the mechanisms by which those factors impact well-being, and available resources and tools to improve well-being.

Professionalism
The fellow is demonstrating satisfactory development of the knowledge, skill, and attitudes/behaviors needed to advance in the training program. He or she 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
*Only required for Internal Medicine based programs

Interpersonal and Communication Skills 1: Patient- and Family-Centered Communication				
Level 1	Level 2	Level 3	Level 4	Level 5
Uses language and nonverbal behavior to demonstrate respect and establish rapport	Establishes a therapeutic relationship in straightforward encounters using active listening and clear language	Establishes a therapeutic relationship in challenging patient encounters	Easily establishes therapeutic relationships, with attention to patient/family concerns and context, regardless of complexity	Mentors others in situational awareness and critical self-reflection to consistently develop positive therapeutic relationships
Identifies the need to individualize communication strategies based on patient/family expectations and understanding	Communicates compassionately with patient/family to clarify expectations and verify understanding of the clinical situation	Communicates medical information in the context of patient/family values, uncertainty, and conflict	Uses shared decision making to align patient/family values, goals, and preferences with treatment options	Role models shared decision making in the context of patient/family 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	Identifies complex barriers to effective patient care	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　　☐

Interpersonal and Communication Skills 3: Interprofessional and Team Communication				
Level 1	Level 2	Level 3	Level 4	Level 5
Respectfully receives and requests consultations	Clearly and concisely responds to and requests consultations	Assesses understanding of recommendations when providing and receiving consultations	Coordinates recommendations from different members of the health care team and consultants to optimize patient care	Role models flexible communication strategies that value input from all health care team members and consultants, resolving conflict when needed
Uses language that values all members of the health care team	Communicates information effectively with all health care team members	Uses active listening to adapt communication style to fit health care team needs		
Receptive to feedback on performance as a member of the health care team	Solicits feedback on performance as a member of the health care team	Communicates concerns and provides feedback to peers and learners	Communicates feedback and constructive criticism to supervisors and faculty members	

☐	☐	☐	☐	☐	☐	☐	☐	☐

Comments:

Not Yet Completed Level 1   ☐

Interpersonal and Communication Skills 4: Communication within Health Care Systems				
Level 1	Level 2	Level 3	Level 4	Level 5
Accurately records information in the patient record in a timely manner	Demonstrates organized diagnostic and therapeutic reasoning through notes in the patient record	Concisely and clearly reports diagnostic and therapeutic reasoning in the patient record in a manner that reflects level of service	Communicates anticipatory guidance in the patient record	Role models exemplary communication and facilitates secure information sharing within the broader health care system
Safeguards patient personal health information and communicates through appropriate channels as required by institutional policy	Documents required data in formats specified by institutional policy	Appropriately selects direct and indirect forms of communication based on context	Is effective in direct and indirect forms of communication	Facilitates dialogue regarding systems communication issues among larger community stakeholders

Comments:

Not Yet Completed Level 1   ☐

Interpersonal and Communication Skills
The fellow is demonstrating satisfactory development of the knowledge, skill, and attitudes/behaviors needed to advance in the training program. He or she 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
*Only required for Internal Medicine based programs

Overall Clinical Competence

This rating represents the assessment of the fellow'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.

*Only required for Internal Medicine based programs