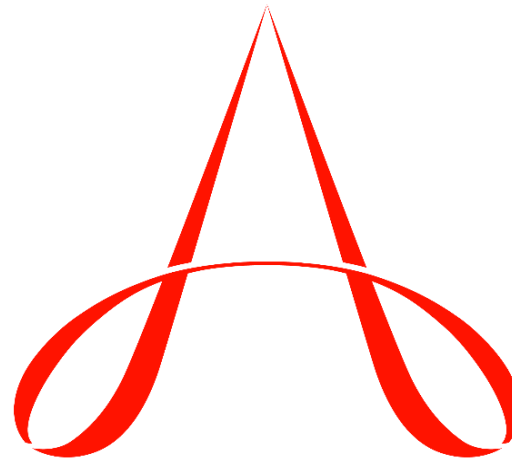# Neonatal-Perinatal Medicine Milestones

The Accreditation Council for Graduate Medical Education

ACGME

Implementation Date: July 2023
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Neonatal-Perinatal Medicine Milestones

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

Neonatal-Perinatal Medicine Milestones Work Group

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American Academy of Pediatrics

American Board of Pediatrics

Council of Pediatric Subspecialties

Organization of Neonatal-Perinatal Training Program Directors

ACGME Review Committee for Pediatrics

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.

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.

A Supplemental Guide is also available to provide the intent of each subcompetency, examples for each level, assessment methods or tools, and other available resources. The Supplemental Guide, like examples contained within the Milestones, is designed only to assist the program director and Clinical Competency Committee, and is not meant to demonstrate any required element or outcome.

Supplemental Guides and other resources are available on the Milestones page of each specialty section of the ACGME website. On 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

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 patients' families (simulated or actual)	Discloses patient safety events to patients and patients' families (simulated or actual)	Role models or mentors others in the disclosure of patient safety events

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: Neonatal and Maternal History				
Level 1	Level 2	Level 3	Level 4	Level 5
Gathers information following a template	Adapts the template to filter and prioritize pertinent positives and negatives or missing data	Gathers and synthesizes the history for uncomplicated or typical presentations	Gathers and synthesizes the history, including protected family health information, for complicated or atypical presentations	Synthesizes and reappraises the history, incorporating subtle clues for potentially rare presentations
□ □ □ □ □ □ □ □ □				
Comments:				
Not Yet Completed Level 1 □				
Not Yet Assessable □				

Patient Care 2: Physical Exam				
Level 1	Level 2	Level 3	Level 4	Level 5
Performs a physical examination based on a template	Performs a complete physical examination and identifies variants and abnormal findings	Adapts the physical examination based on gestational age, patient status, and clinical acuity, and interprets findings to build a differential diagnosis	Synthesizes and reappraises information gathered via the physical examination to narrow the differential diagnoses	Detects and integrates subtle physical examination findings to distinguish nuances among competing diagnoses
☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐				

Comments:

Not Yet Completed Level 1   ☐
Not Yet Assessable   ☐

Patient Care 3: Organization and Prioritization of Patient Care				
Level 1	Level 2	Level 3	Level 4	Level 5
Organizes patient care for an individual patient	Organizes patient care responsibilities for multiple patients	Prioritizes and delegates the simultaneous care of patients; triages urgent and emergent issues	Efficiently prioritizes and delegates patient care responsibilities, maintains situational awareness, and anticipates urgent and emergent issues	Serves as a role model and coach for balancing patient care responsibilities and unit needs

☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐

Comments:

Not Yet Completed Level 1 ☐
Not Yet Assessable ☐

Patient Care 4: Clinical Reasoning				
Level 1	Level 2	Level 3	Level 4	Level 5
Uses pattern recognition to formulate a broad differential diagnosis	Develops illness scripts and formulates a holistic patient assessment	Refines illness scripts, while using strategies to identify cognitive bias	Reappraises illness scripts in real time while using strategies to minimize cognitive bias	Serves as a role model in clinical reasoning and strategies to minimize cognitive bias
☐	☐	☐	☐	☐	☐	☐	☐	☐

Comments:

Not Yet Completed Level 1 ☐
Not Yet Assessable ☐

Patient Care 5: Disease Management in Neonatal Care				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
Develops and implements care plans for patients with a low level of acuity/complexity	Develops and implements care plans for patients with a high level of acuity/complexity	Coordinates and implements multidisciplinary care plans for patients with a high level of acuity/complexity	Manages patients with multiple levels of acuity/complexity while anticipating future needs and minimizing long-term consequences	Role models and coaches others in the management of patients requiring complex multidisciplinary care, while anticipating future needs and minimizing long-term complications

Comments:

Not Yet Completed Level 1 ☐
Not Yet Assessable ☐

Patient Care 6: Procedures				
Level 1	Level 2	Level 3	Level 4	Level 5
Performs simple procedures with assistance Recognizes common complications	Performs complex procedures with assistance Recognizes uncommon complications	Performs complex procedures Anticipates, recognizes, and manages common complications	Adapts technique based on patient acuity and anatomy Anticipates, recognizes, and manages uncommon complications	Is recognized as a procedural expert
☐ ☐ ☐	☐ ☐	☐ ☐	☐ ☐	☐
Comments:				

Not Yet Completed Level 1 ☐

Not Yet Assessable ☐

Patient Care 7: Emergency Stabilization				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies unstable patients and performs basic interventions	Identifies patients with acute deterioration and initiates advanced resuscitation measures	Leads resuscitations, including critical decision making and anticipates next steps	Integrates family and support services while leading resuscitations	Coaches others to lead resuscitations while integrating family and support services

Comments:

Not Yet Completed Level 1 ☐

Not Yet Assessable ☐

Patient Care 8: Discharge from the Neonatal Intensive Care Unit

Level 1	Level 2	Level 3	Level 4	Level 5
Identifies patient readiness and prepares the patient for discharge	Makes discharge decisions for patients with low-complexity needs and addresses family resources	Partners with the patient's family in discharge planning and provides education for a patient with moderate complexity, while anticipating and coordinating multidisciplinary follow-up care	Partners with the patient's family in discharge planning and provides education for a patient with high-complexity needs, while anticipating and coordinating multidisciplinary follow-up care	Role models partnering with patients' families in discharging and providing education for patients with high-complexity needs

Comments:

Not Yet Completed Level 1 ☐

Not Yet Assessable ☐

Medical Knowledge 1: Neonatal-Perinatal Medical Knowledge				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates basic knowledge of normal maternal-fetal and neonatal physiology	Demonstrates knowledge of maternal-fetal and neonatal pathophysiology	Applies knowledge of pathophysiology of common and typical conditions to guide patient care	Integrates knowledge of pathophysiology of complicated and atypical conditions to guide patient care	Is recognized as an expert in maternal-fetal and neonatal pathophysiology
☐ ☐	☐ ☐	☐ ☐	☐ ☐	☐

Comments:

Not Yet Completed Level 1   ☐
Not Yet Assessable   ☐

Medical Knowledge 2: Diagnostic Evaluation

Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of diagnostic evaluations	Demonstrates knowledge of risks, benefits, indications, and alternatives to common diagnostic evaluations	Applies knowledge of diagnostic evaluations based on risks, benefits, indications, alternatives, and limitations to patient care	Applies knowledge of diagnostic evaluations, including pre-test probability, to prioritize testing to achieve high-value care	Role models diagnostic evaluation that achieves high-value care
☐	☐	☐	☐	☐	☐	☐	☐	☐

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 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 families (simulated or actual)	Discloses patient safety events to patients' families (simulated or actual)	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:

Not Yet Completed Level 1   ☐

Systems-Based Practice 3: System Navigation for Patient-Centered Care – Coordination of Care				
Level 1	Level 2	Level 3	Level 4	Level 5
Lists the various interprofessional individuals involved in the patient's care coordination	Coordinates care of patients in routine clinical situations, incorporating interprofessional teams with consideration of patient and family needs	Coordinates care of patients in complex clinical situations, effectively utilizing the roles of interprofessional teams, and incorporating patient and family needs and goals	Coordinates interprofessional, patient-centered care among different disciplines and specialties, actively assisting families in navigating the health care system	Coaches others in interprofessional, patient-centered care coordination

Comments:

Not Yet Completed Level 1   ☐

Systems-Based Practice 4: System Navigation for Patient-Centered Care – Transitions in Care				
Level 1	Level 2	Level 3	Level 4	Level 5
Uses a standard template for transitions of care/hand-offs	Adapts a standard template, recognizing key elements for 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, and ensures closed-loop communication	Performs and advocates for safe and effective transitions of care/hand-offs within and across health care delivery systems	Coaches others in improving transitions of care within and across health care delivery systems to optimize patient outcomes
☐	☐	☐	☐	☐	☐	☐	☐	☐

Comments:

Not Yet Completed Level 1   ☐

Systems-Based Practice 5: Population and Community Health				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates awareness of population and community health needs and disparities	Identifies specific population and community health needs and disparities; identifies local resources	Uses local resources effectively to meet the needs and reduce health disparities of a patient population and community	Adapts practice to provide for the needs of and reduce health disparities of a specific population	Advocates at the local, regional, or national level for populations and communities with health care disparities
☐	☐	☐	☐	☐	☐	☐	☐	☐

Comments:

Not Yet Completed Level 1   ☐

Systems-Based Practice 6: Physician Role in Health Care Systems				
Level 1	Level 2	Level 3	Level 4	Level 5
Engages with families and other providers in discussions about cost-conscious care and key components of the health care delivery system	Identifies the relationships between the delivery system and cost-conscious care and the impact on the patient care	Discusses the need for changes in clinical approaches based on evidence, outcomes, and cost-effectiveness to improve care for patients and families	Advocates for the promotion of safe, quality, and high-value care	Coaches others to promote safe, quality, and high-value care across health care systems
☐	☐	☐	☐	☐	☐	☐	☐	☐

Comments:

Not Yet Completed Level 1   ☐

Practice-Based Learning and Improvement 1: Evidence-Based and Informed Practice				
Level 1	Level 2	Level 3	Level 4	Level 5
Develops an answerable clinical question and demonstrates how to access available evidence, with guidance	Independently articulates clinical question and accesses available evidence	Locates and applies the evidence, integrated with patient preference, to the care of 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

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
Participates in feedback sessions	Demonstrates openness to feedback and performance data	Seeks and incorporates feedback and performance data episodically	Seeks and incorporates feedback and performance data consistently	Role models and coaches others in seeking and incorporating feedback and performance data
Develops personal and professional goals, with assistance	Designs a learning plan based on established goals, feedback, and performance data, with assistance	Designs and implements a learning plan by analyzing and reflecting on the factors which contribute to gap(s) between performance expectations and actual performance	Adapts a learning plan using long-term professional goals, self-reflection, and performance data to measure its effectiveness	Demonstrates continuous self-reflection and coaching of others on reflective practice
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Comments:

Not Yet Completed Level 1　☐

Professionalism 1: Professional Behavior				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies expected professional behaviors and potential triggers for lapses	Demonstrates professional behavior with occasional lapses	Maintains professional behavior in increasingly complex or stressful situations	Recognizes situations that may trigger professionalism lapses and intervenes to prevent lapses in self and others	Models professional behavior and coaches others when their behavior fails to meet professional expectations
Identifies the value and role of neonatology as a vocation/career	Demonstrates accountability for patient care as a neonatologist, with guidance	Fully engages in patient care and holds oneself accountable	Exhibits a sense of duty to patient care and professional responsibilities	Extends the role of the neonatologist beyond the care of patients by engaging with the community, specialty, and medical profession as a whole

Comments:

Not Yet Completed Level 1 ☐

Professionalism 2: Ethical Principles				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of the ethical principles underlying informed consent, surrogate decision making, advance directives, confidentiality, error disclosure, stewardship of limited resources, and related topics	Applies ethical principles in common situations	Analyzes complex situations using ethical principles to address conflict/controversy; seeks help when needed to manage and resolve complex ethical situations	Manages and seeks to resolve ethical dilemmas using appropriate resources (e.g., ethics consultations, literature review, risk management/legal consultation)	Called upon by others to consult in cases of complex ethical dilemmas; identifies and seeks to address system-level factors that induce or exacerbate

Comments:

Not Yet Completed Level 1

Professionalism 3: Accountability/Conscientiousness				
Level 1	Level 2	Level 3	Level 4	Level 5
Performs tasks and responsibilities, with prompting	Performs tasks and responsibilities in a timely manner in routine situations	Performs tasks and responsibilities in a thorough and timely manner in complex or stressful situations	Coaches others to ensure tasks and responsibilities are completed in a thorough and timely manner in complex or stressful situations	Creates strategies to enhance others' ability to efficiently complete tasks and responsibilities

Comments:

Not Yet Completed Level 1

Professionalism 4: Well-Being				
Level 1	Level 2	Level 3	Level 4	Level 5
Recognizes the importance of addressing personal and professional well-being	Describes institutional resources that are meant to promote well-being	Recognizes institutional and personal factors that impact well-being	Describes interactions between institutional and personal factors that impact well-being	Coaches and supports colleagues to optimize well-being at the team, program, or institutional level
☐ ☐	☐ ☐	☐ ☐	☐ ☐	☐
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.

Interpersonal and Communication Skills 1: Family-Centered Communication				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates respect and attempts to establish rapport	Establishes a therapeutic relationship in straightforward encounters	Establishes a culturally competent and therapeutic relationship in most encounters	Establishes a therapeutic relationship in straightforward and complex encounters, including those with ambiguity and/or conflict	Mentors others to develop positive therapeutic relationships
Attempts to adjust communication strategies based upon family expectations	Adjusts communication strategies as needed to mitigate barriers and meet family expectations	Communicates with sensitivity and compassion, elicits family values, and acknowledges uncertainty and conflict	Uses shared decision making with family to make a personalized care plan	Models and coaches others in family-centered communication

☐   ☐   ☐   ☐   ☐   ☐   ☐   ☐   ☐

Comments:

Not Yet Completed Level 1   ☐

Interpersonal and Communication Skills 2: Interprofessional and Team Communication				
Level 1	Level 2	Level 3	Level 4	Level 5
Respectfully requests a consultation, with guidance	Clearly and concisely requests consultation by communicating patient information	Formulates a specific question for consultation and tailors communication strategy	Coordinates consultant recommendations to optimize patient care	Maintains a collaborative relationship with referring providers that maximizes adherence to practice recommendations
Identifies the members of the interprofessional team	Participates within the interprofessional team	Uses bi-directional communication within the interprofessional team	Facilitates interprofessional team communication	Coaches others in effective communication within the interprofessional team

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
Records accurate information in the patient record	Records accurate and timely information in the patient record	Concisely documents updated, prioritized, diagnostic and therapeutic reasoning in the patient record	Documents diagnostic and therapeutic reasoning, including anticipatory guidance	Models and coaches others in documenting diagnostic and therapeutic reasoning
Identifies the importance of and responds to multiple forms of communication (e.g., in-person, electronic health record (EHR), telephone, email)	Selects appropriate method of communication, with prompting	Aligns type of communication with message to be delivered (e.g., direct and indirect) based on urgency and complexity	Demonstrates exemplary written and verbal communication	Coaches others in written and verbal communication

☐	☐	☐	☐	☐	☐	☐	☐	☐

Comments:

Not Yet Completed Level 1   ☐

Interpersonal and Communication Skills 4: Complex Communication with Patients' Families around Serious News

Level 1	Level 2	Level 3	Level 4	Level 5
Delivers serious news and prognostic information to a patient's family	Delivers serious news to a patient's family while assessing what the patient's family understands about the clinical condition	Delivers serious news and prognostic information while adjusting communication based on the patient's family's understanding about the clinical situation	Tailors communication of serious news to a patient's family based on the patient's family's needs and preferences and the degree of clinical uncertainty	Role models empathic communication of serious news and serves as a peer resource for others

Comments:

Not Yet Completed Level 1 ☐