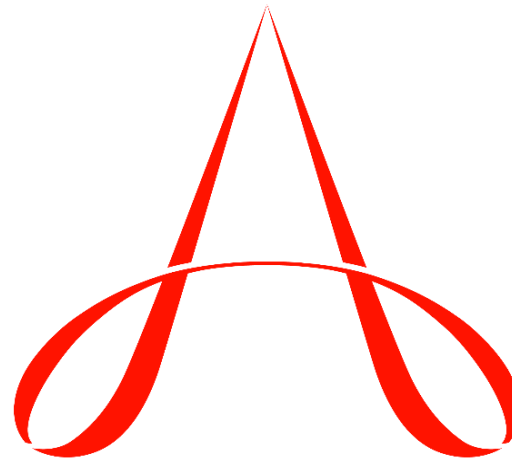# Pediatric Emergency Medicine Milestones

The Accreditation Council for Graduate Medical Education

ACGME

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Pediatric Emergency 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 competence in a specialty or subspecialty. They neither represent the entirety of the dimensions of the six domains of physician competency, nor are they designed to be relevant in any other context.

Pediatric Emergency Medicine Milestones Work Group

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American Board of Emergency Medicine

American Board of Pediatrics

Review Committee for Emergency Medicine

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 resident/fellow performance throughout their educational program.

Milestones are arranged into levels. Tracking from Level 1 to Level 5 is synonymous with moving from novice to expert 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 iv).

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, 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 subcompetency in the same format as the ACGME Report Worksheet. For each reporting period, a fellow's performance on the milestones for each subcompetency 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 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 families	Discloses patient safety events to patients and families	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: Performance of a Focused History and Physical Exam				
Level 1	**Level 2**	**Level 3**	**Level 4**	**Level 5**
Performs and communicates a reliable, comprehensive patient history and physical exam	Performs and communicates a focused, developmentally appropriate patient history and physical exam, tailored to the patient's illness script	Integrates multiple sources of data to perform and communicate a focused, tailored patient history and physical exam	Prioritizes essential components of a patient history and physical exam in limited or dynamic circumstances	Models the skills necessary to perform a focused, tailored patient history and physical exam
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Comments:

Not Yet Completed Level 1   ☐
Not Yet Assessable   ☐

Patient Care 2: Organization and Prioritization of Patient Care				
Level 1	Level 2	Level 3	Level 4	Level 5
Organizes patient care for an individual patient when prompted	Organizes patient care responsibilities by focusing on individual (rather than multiple) patients	Organizes and prioritizes the simultaneous care of patients with efficiency; anticipates and triages urgent and emergent issues	Organizes, prioritizes, and delegates patient care responsibilities, even when patient volume approaches the capacity of the individual or facility	Serves as a role model and coach for organizing patient care responsibilities
☐	☐	☐	☐	☐	☐	☐	☐	☐

Comments:

Not Yet Completed Level 1   ☐
Not Yet Assessable   ☐

Patient Care 3: Differential Diagnosis				
Level 1	Level 2	Level 3	Level 4	Level 5
Constructs a list of potential diagnoses based on the patient's chief complaint and initial assessment	Provides a prioritized differential diagnosis	Integrates clinical facts into a unifying diagnosis(es) and reappraises in real time for patients with common conditions	Integrates clinical facts into a unifying diagnosis(es) and reappraises in real time for patients with complex conditions	Serves as a role model and educator to other learners for deriving diagnoses
☐	☐	☐	☐	☐	☐	☐	☐	☐

Comments:

Not Yet Completed Level 1   ☐
Not Yet Assessable   ☐

Patient Care 4: Diagnostic Studies				
Level 1	Level 2	Level 3	Level 4	Level 5
Determines the need for diagnostic studies	Selects appropriate diagnostic studies and understands their risks, benefits, and contraindications	Prioritizes diagnostic studies based on differential diagnoses	Practices cost-effective ordering of diagnostic studies and identifies alternatives and the likelihood of studies altering management	Educates others about the rationale in selection and interpretation of diagnostic studies in complex cases
Reports results of diagnostic studies	Interprets results of diagnostic testing	Applies clinical significance of diagnostic study results to clinical care	Identifies study limitations and discriminates between subtle and/or conflicting diagnostic results	

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Comments:

Not Yet Completed Level 1 ☐
Not Yet Assessable ☐

Patient Care 5: Patient Management				
Level 1	Level 2	Level 3	Level 4	Level 5
Develops management plans for common conditions	Manages patients with common conditions and other comorbidities	Manages patients with uncommon conditions	Manages patients with complicated and atypical diagnoses, and modifies management plans as necessary	Role models and coaches management of patients with complicated and atypical diagnoses
☐ ☐	☐ ☐	☐ ☐	☐ ☐	☐

Comments:

Not Yet Completed Level 1 ☐
Not Yet Assessable ☐

Patient Care 6: Emergency Stabilization				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies unstable patients and performs basic interventions	Identifies patients at risk for clinical deterioration and initiates advanced resuscitation measures while escalating care	Reassesses and intervenes on patients after stabilizing interventions	Leads resuscitations, including critical decision-making and integration of family and support services	Engages in systems-based approaches to optimize management of critically ill patients
□ □	□ □	□ □	□ □	□

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

Patient Care 7: Reassessment and Disposition				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies the need for patient re-evaluation	Monitors performance of necessary diagnostic and therapeutic interventions	Identifies changes in a patient's clinical status and evaluates effectiveness of diagnostic and therapeutic interventions at timely intervals	Considers additional diagnoses and performs appropriate further diagnostic and therapeutic interventions	
Describes basic disposition resources available	Makes disposition decisions for patients needing minimal resources	Makes appropriate and timely disposition decisions for patients requiring varying levels of resources	Coaches others on disposition decisions for requiring varying levels of resources	Participates in the development of materials, protocols, and systems to enhance patient education
Describes basic patient education plans	Educates patients on simple discharge and admission plans	Educates patients regarding diagnosis, treatment plan, medication review, and primary care physician/consultant appointments	Educates patients on complex discharge, admission, and transfer plans	

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

Patient Care 8: General Approach to Procedures

Level 1	Level 2	Level 3	Level 4	Level 5
Identifies indications for a procedure and pertinent anatomy and physiology	Assesses indications, risks, benefits, and alternatives in low- to moderate-risk situations and obtains informed consent	Assesses indications, risks, and benefits and weighs alternatives in high-risk situations	Acts to mitigate modifiable risk factors in high-risk situations	
Performs basic procedures, with guidance	Performs and interprets basic procedures independently	Performs and interprets advanced procedures, with guidance	Performs and interprets advanced procedures independently	Teaches advanced procedures and independently performs rare, time-sensitive procedures
	Recognizes common complications	Manages common complications	Independently recognizes and manages complex and uncommon complications	Performs procedural peer review

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Comments:

Not Yet Completed Level 1   ☐
Not Yet Assessable   ☐

Patient Care 9: Provision of Appropriate Supervision				
Level 1	Level 2	Level 3	Level 4	Level 5
Provides supervision that aligns with patient care needs in simple scenarios, with guidance	Provides supervision that aligns with patient care needs in complex scenarios, with guidance	Tailors supervision to patient care, staff member, and learner needs	Continually adjusts supervision to optimize patient safety and learner/staff member education	Models reflective, flexible, and supportive supervision that optimally balances safe patient care with learner/staff member competence and professional development needs
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Comments:

Not Yet Completed Level 1 ☐
Not Yet Assessable ☐

Medical Knowledge 1: Scientific Knowledge/Clinical Knowledge				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates basic medical knowledge	Links basic medical knowledge to clinical scenarios	Applies medical knowledge to common and typical scenarios to guide patient care	Integrates medical knowledge that includes complicated and atypical conditions to guide patient care	Pursues and integrates new and emerging knowledge
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Comments:

Not Yet Completed Level 1   ☐
Not Yet Assessable   ☐

Medical Knowledge 2: Clinical Reasoning				
Level 1	Level 2	Level 3	Level 4	Level 5
Recognizes cognitive errors, with substantial guidance	Applies clinical reasoning principles to retrospectively identify cognitive errors	Continually re-appraises one's clinical reasoning to prospectively minimize cognitive errors and manage uncertainty	Coaches others to recognize and avoid cognitive errors	Engages in systems-based approaches to mitigate cognitive errors
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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)	Engages in systems-level processes 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)	Leads disclosures or discloses patient safety events to patients and patients' families (simulated or actual)	Models and 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 emergency department-specific quality improvement initiatives	Participates in emergency department-specific quality improvement initiatives	Demonstrates skills for identifying, developing, implementing, and analyzing emergency department-specific quality improvement projects	Creates, implements, and assesses quality improvement initiatives at the institutional or community level
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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	In routine clinical situations, effectively coordinates patient care, integrating the roles of interprofessional team members with consideration of the patient's and patient's family's needs and goals	In complex clinical situations, effectively coordinates patient care by integrating the roles of interprofessional team members and incorporating the patient's and patient's family's needs and goals	Models and effectively coordinates 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 of safe and effective transitions of care/hand-offs	Performs safe and effective transitions of care/hand-offs in routine clinical situations	Performs safe and effective transitions of care/hand-offs consistently in complex clinical situations	Models and advocates for safe and effective transitions of care/hand-offs within and across health care delivery systems	Contributes to improvements in quality of transitions of care/hand-offs within and across health care delivery systems to optimize patient outcomes

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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
Identifies basic health systems and payment models	Describes how health care systems and payment models impact individual patient care and provider practice	Applies health care systems and payment knowledge to individual patient care and practice	Advocates for cost-conscious, effective, efficient, and equitable practices in daily practice	Coaches others to promote cost-conscious, effective, and efficient care
Recognizes structural factors and social determinants contributing to health inequities	Translates knowledge of health inequities to specific patient populations	Utilizes local resources to address structural and social determinants of health		Contributes to innovations to reduce structural inequities in health care at the departmental and/or institutional level

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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
Demonstrates how to access and use available evidence	Articulates clinical questions necessary to guide evidence-based care	Locates and applies the best available evidence, integrating it with the patient's preferences	Critically appraises and applies evidence, even when conflicting or in the face of uncertainty, tailored to the individual patient	Coaches others to critically appraise and apply evidence and/or participates in the development of evidence-based guidelines
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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
Demonstrates an openness to performance data	Uses performance data to develop individual professional goals	Intentionally seeks performance data to develop individual professional goals	Uses performance data to reassess and continually improve towards one's goals	Role models and coaches use of performance data for goal setting and behavior change
With guidance, identifies limitations in knowledge and skill, and factors contributing to gaps in clinical practice	Independently self-monitors to identify limitations and factors contributing to gaps in clinical practice	With guidance, engages in help-seeking or corrective behaviors during clinical practice	Independently institutes real-time help-seeking and corrective behaviors in challenging clinical situations	Coaches 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 oneself and others	Models professional behavior and coaches others
Identifies the value and role of pediatric emergency medicine as a vocation/career	Demonstrates accountability for patient care as a pediatric emergency physician, 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 pediatric emergency physician 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 patient care	Analyzes simple situations using ethical principles	Analyzes complex situations using ethical principles to address conflict/controversy; seeks help when needed to manage and resolve complex ethical situations	Manages and resolves ethical dilemmas using resources, as appropriate	Identifies and addresses system-level factors that either induce or exacerbate ethical problems or impede their resolution
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Comments:

Not Yet Completed Level 1   ☐

Professionalism 3: Accountability/Conscientiousness				
Level 1	Level 2	Level 3	Level 4	Level 5
In routine situations, performs tasks and responsibilities 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, performs tasks and responsibilities in a timely manner with appropriate attention to detail	Recognizes situations that might impact others' ability to complete tasks and responsibilities	Contributes to developing systems that enhance others' ability to efficiently complete patient care tasks and responsibilities
Responds promptly to requests and reminders to complete tasks and responsibilities	Takes responsibility for failure to complete tasks and responsibilities	Recognizes situations that might impact one's ability to complete tasks and responsibilities in a timely manner, and describes strategies for ensuring timely task completion in the future	Proactively implements strategies to ensure that the needs of patients, teams, and systems are met	

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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 burnout and well-being	Lists available resources to prevent burnout and promote well-being	Develops and advocates for a personal plan for burnout prevention and promotion of well-being	Contributes to programmatic interventions for burnout prevention and promotion of well-being	Contributes to departmental or institutional interventions for burnout prevention and promotion of well-being
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Comments:

Not Yet Completed Level 1 ☐

This subcompetency is not intended to evaluate a fellow's well-being. Rather, the intent is to ensure that each fellow 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 Communication Skills 1: Patient- and 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 therapeutic relationship in most encounters, with cultural humility	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 on the patient's/patient's family's expectations	Adjusts communication strategies as needed to mitigate barriers and meet the patient's/patient's family's expectations	Communicates with sensitivity and compassion, elicits the patient's/patient's family's values and acknowledges uncertainty and conflict	Uses shared decision-making with the patient/patient's family to make a personalized care plan	Models and coaches others in patient- and family-centered communication

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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
Addresses consultants and other members of the health care team professionally	Communicates effectively with consultants and members of the health care team	Solicits and integrates recommendations made by members of the health care team to optimize patient care	Demonstrates flexible communication strategies, and resolves conflict when needed	
Receives feedback in an open manner	Solicits feedback on performance	Communicates concerns and provides feedback to peers and learners	Facilitates interprofessional team communication	Acts as a role model and coach for communication skills necessary to lead or manage health care teams
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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 in a timely manner	Documents and updates patient information in an accurate and organized fashion	Concisely documents updated and prioritized, diagnostic and therapeutic reasoning in the patient record	Concisely documents updated and prioritized, diagnostic and therapeutic reasoning in the patient record, including providing anticipatory guidance	Models and coaches others in completing appropriate documentation
Identifies the importance of, and responds to, multiple forms of communication	Selects appropriate methods of communication, with prompting	Selects appropriate methods of communication independently	Demonstrates exemplary communication	Models and coaches others in communication skills

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Comments:

Not Yet Completed Level 1   ☐