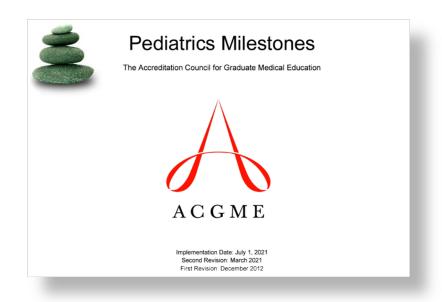
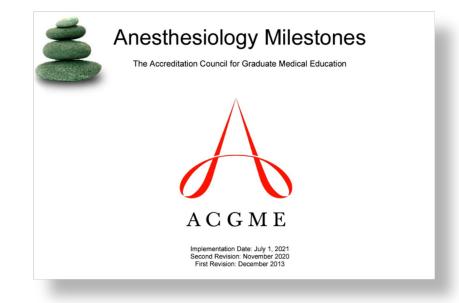
Pediatrics and Anesthesiology (combined) programs must annually report on **each** set of Milestones.







# **Pediatrics Milestones**

The Accreditation Council for Graduate Medical Education



Implementation Date: July 1, 2021 Second Revision: March 2021 First Revision: December 2012

# **Pediatrics 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 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.

## **Pediatrics 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 Pediatrics Association of American Medical Colleges Association of Osteopathic Directors and Medical Educators Association of Pediatric Program Directors Council of Pediatric Subspecialties Review Committee for Pediatrics

## **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.

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 <u>www.acgme.org</u>, 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 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.

1: Patient Safety			
Level 2	Level 3	Level 4	Level 5
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
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)	Role models or mentors others in the disclosure of patient safety events
		Not Yet C	ompleted Level 1
onse box in the	Selecting a re	esponse box on the line	e in
middle of a level implies that			
			ally
substantially			
	Level 2 Identifies system factors that lead to patient safety events Reports patient safety events through institutional reporting systems (actual or simulated)	Level 2     Level 3       Identifies system factors that lead to patient safety events     Participates in analysis of patient safety events (simulated or actual)       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)       Image: Description of the institutional reporting systems (actual or simulated)     Participates in disclosure of patient safety events to patients and families (simulated or actual)       Image: Description of the implies that t level and in lower substantially     Image: Description of the in lower level demonstrated	Level 2Level 3Level 4Identifies system factors that lead to patient safety eventsParticipates in analysis of patient safety events (simulated or actual)Conducts analysis of patient safety events and offers error prevention strategies (simulated or actual)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 patient safety events to patient safety events to patient sand families (simulated or actual)Not Yet C onse box in the implies that t level and in lowerNot Yet C between levels indicates that milesto in lower levels have been substantia

Patient Care 1: History					
Level 1	Level 2	Level 3	Level 4	Level 5	
Gathers information strictly following a template	Adapts template to filter and prioritize pertinent positives and negatives based on broad diagnostic categories or possible diagnoses	Filters, prioritizes, and synthesizes the history to develop a differential diagnosis in real-time for uncomplicated or typical presentations	Filters, prioritizes, and synthesizes the history to develop a differential diagnosis in real time for complicated or atypical presentations	Recognizes and probes subtle clues from patients and families; distinguishes nuances among diagnoses to efficiently drive further information gathering	
Comments: Not Yet Completed Level 1					

Patient Care 2: Physical Exam				
Level 1	Level 2	Level 3	Level 4	Level 5
Performs fundamental physical examination	Performs complete physical examination and identifies variants and abnormal findings	Performs complete or focused physical examination, as indicated, and interprets normal variants and abnormal findings	Performs complete or focused physical examination, as indicated, and selects advanced maneuvers to distinguish between diagnoses	Detects, pursues, and integrates key physical examination findings to distinguish nuances among competing, often similar diagnoses
Performs a rote physical examination using a strict head-to-toe approach	Performs a physical examination considering appropriate adaptation for age and development	Performs a physical examination with consistent use of a developmentally appropriate approach	Performs a physical examination using strategies to maximize patient cooperation and comfort	Performs a physical examination that consistently and positively engages the patient
Comments: Not Yet Completed Level 1				

Patient Care 3: Organize	and Prioritize Patient Care	)		
Level 1	Level 2	Level 3	Level 4	Level 5
Completes tasks 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	Organizes, prioritizes, and delegates patient care responsibilities even when patient volume approaches the capacity of the individual or facility; anticipates and triages urgent and emergent issues	Serves as a role model and coach for patient care responsibilities
Comments:				Completed Level 1

Patient Care 4: Clinical Reasoning					
Level 1	Level 2	Level 3	Level 4	Level 5	
Presents clinical facts (e.g., history, exam, tests, consultations) in the order they were elicited	Generates an unfocused differential diagnosis based on the clinical facts	Organizes clinical facts to compare and contrast diagnoses being considered, resulting in a prioritized differential diagnosis	Integrates clinical facts into a unifying diagnosis(es); reappraises in real time to avoid diagnostic error	Role models and coaches the organization of clinical facts to develop a prioritized differential diagnosis, including life threatening diagnoses, atypical presentations, and complex clinical presentations	
Comments: Not Yet Completed Level 1 Not Yet Assessable					

Patient Care 5: Patient Management					
Level 1	Level 2	Level 3	Level 4	Level 5	
Reports management plans developed by others	Participates in the creation of management plans	Develops an interdisciplinary management plan for common and typical diagnoses	Develops and implements informed management plans for complicated and atypical diagnoses, with the ability to modify plans as necessary	Serves as a role model and coach for development of management plans for complicated and atypical diagnoses, with the ability to modify plans as necessary	
Comments: Not Yet Completed Level 1					

Medical Knowledge 1: 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 a breadth of medical knowledge that includes complicated and atypical conditions to guide patient care	Teaches at multiple levels, drawing from a breadth of medical knowledge that spans the continuum of simple to complex problems	
Comments:				ompleted Level 1	

Medical Knowledge 2: Diagnostic Evaluation				
Level 1	Level 2	Level 3	Level 4	Level 5
Lists basic evaluation (e.g., diagnostic testing and consultation) for common diagnoses, with prompting	Recommends broad evaluation based on an unfocused differential diagnosis	Recommends focused evaluation based on a prioritized differential diagnosis	Prioritizes and optimizes evaluation based on risks, benefits, indications, and alternatives to clarify the diagnosis(es)	Educates others about risks, benefits, indications, and alternatives to guide diagnostic decision making
Reports results of diagnostic studies	Identifies clinically significant diagnostic study results, with guidance	Interprets clinical significance of diagnostic study results	Interprets clinical significance of diagnostic study results while considering study limitations	Teaches others to interpret clinically significant results and consider study limitations
Comments: Not Yet Completed Level 1				

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 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
Comments:			Not Yet C	ompleted 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 C	ompleted Level 1

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

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, including transitions to adult care	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 C	ompleted Level 1	

Systems-Based Practice 6: Physician Role in Health Care Systems				
Level 1	Level 2	Level 3	Level 4	Level 5
Engages with patients 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 C	ompleted Level 1

Practice-Based Learning	and Improvement 1: Evide	ence-Based and Informed F	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 C	completed Level 1

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

Professionalism 1: Profe	ssional 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 pediatrics as a vocation/career	Demonstrates accountability for patient care as a pediatrician, 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 pediatrician beyond the care of patients by engaging with the community, specialty, and medical profession as a whole	
Comments:	Comments: Not Yet Completed Level 1				

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

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 C	ompleted 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 C	ompleted Level 1

This subcompetency is not intended to evaluate a resident's well-being, but to ensure each resident has the fundamental knowledge of factors that impact wellbeing, the mechanisms 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
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 patient/family expectations	Adjusts communication strategies as needed to mitigate barriers and meet patient/family expectations	Communicates with sensitivity and compassion, elicits patient/family values, and acknowledges uncertainty and conflict	Uses shared decision making with patient/family to make a personalized care plan	Models and coaches others in patient- and family-centered 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

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



# **Anesthesiology Milestones**

The Accreditation Council for Graduate Medical Education



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

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## Anesthesiology Milestones

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## **Anesthesiology Milestones**

## **Work Group**

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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 Anesthesiology American Osteopathic Association American Osteopathic College of Anesthesiologists Review Committee for Anesthesiology Society for Education in Anesthesia

## **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.

Supplemental Guides and other resources are available on the Milestones page of each specialty section of the ACGME website. On <u>www.acgme.org</u>, 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 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.

Flactice-Dased Learning	and improvement z. Rene	cuve Fractice and Commu	ment 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 data (feedback and other input) in order to form goals	Seeks performance data episodically, with adaptability and humility	Intentionally seeks performance data consistently with adaptability and humility	Role models consistently seeking performance data with adaptability and humility
Identifies the factors which contribute to performance deficits	Analyzes and acknowledges the factors which contribute to performance deficits	Institutes behavioral change(s) to improve performance	Considers alternatives to improve performance	Models reflective practice
Actively seeks opportunities to improve	Designs and implements a learning plan, with prompting	Independently creates and implements a learning plan	Integrates performance data to adapt the learning plan	Facilitates the design and implementation of learning plans for others
Comments:		_	Not Yet C	ompleted Level 1
middle of a le milestones in	sponse box in the vel implies that that level and in lower een substantially	i	Selecting a response bo between levels indicates in lower levels have been demonstrated as well as milestones in the higher	that milestones n substantially <b>some</b>

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

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Patient Care 1: Pre-Anesthetic Evaluation				
Level 1	Level 2	Level 3	Level 4	Level 5
Performs basic chart review	Performs focused chart review, with indirect supervision	Interprets chart review information to assess need for further work-up	Evaluates diagnostic data and provides risk stratification based on comorbidities and anesthetic implications	
Conducts patient interview, with direct supervision	Interviews the patient and gathers pertinent information, with indirect supervision	Interprets information collected during patient interview, with assistance	Independently identifies the need for additional evaluation and suggests therapeutic interventions	
Conducts and interprets a physical examination, with direct supervision	Conducts a focused physical examination, with indirect supervision	Identifies comorbidities on physical examination that may require further evaluation, with indirect supervision	Independently identifies concerning physical exam findings that require further evaluation	Independently identifies a previously undiagnosed condition
Comments:	Comments: Not Yet Completed Level 1 Not Yet Assessable			

Patient Care 2: Peri-Operative Care and Management				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies the components of an anesthetic plan	Develops an anesthetic plan for a healthy patient undergoing uncomplicated procedures	Develops an anesthetic plan for patients with well- controlled comorbidities or undergoing complicated procedures	Develops an anesthetic plan for patients with multiple, uncontrolled comorbidities, and undergoing complicated procedures	
Identifies the components of a pain management plan	Implements simple peri- operative pain management plan	Identifies patients with a history of chronic pain who require a modified peri-operative pain management plan	Implements the anesthetic plan for patients with complex pain history and polypharmacy	In collaboration with other specialists, develops protocols for multimodal analgesia plan for patients with a complex pain history and substance use disorder
Identifies potential impact of anesthesia beyond intra-operative period	Identifies patient specific risks factors for long-term anesthetic effects	Develops the anesthetic plan based on risk factors to mitigate the long-term impact of anesthesia	Implements the anesthetic plan to mitigate the long-term impact of anesthesia	Develops departmental or institutional protocols for reduction of the long-term impact of anesthesia
Comments: Not Yet Completed Level 1				

Level 1	Level 2	Level 3	Level 4	Level 5
Identifies standard monitors	Independently selects central and arterial catheters based on patient comorbidities and procedure	Selects advanced monitors based on patient comorbidities and procedure, with supervision	Independently selects advanced monitors based on patient comorbidities and procedure	
Applies standard monitors to patients	Inserts central and arterial catheters, with supervision	Inserts or applies advanced monitors, with supervision	Independently inserts or applies advanced invasive monitors	Functions as a consultant for difficult advanced monitor placement
Interprets standard monitoring data	Addresses malfunctions in standard monitors and interprets data from central and arterial lines, with supervision	Recognizes and addresses malfunctions in advanced monitors and interprets data, with supervision	Independently interprets data, recognizes, and addresses malfunctions in monitors and other anesthesia equipment	Participates in the research and/or development of protocols for monitoring technology

Patient Care 4: Intra-Operative Care					
Level 1	Level 2	Level 3	Level 4	Level 5	
Assists in the initiation of the anesthetic	Plans and initiates the anesthetic for healthy patients undergoing uncomplicated procedures	Plans and initiates the anesthetic in a patient with well-controlled comorbidities, or undergoing complicated procedures	Independently plans and initiates the anesthetic in a patient with multiple, uncontrolled comorbidities undergoing complicated procedures		
Assists in maintenance of anesthetic care	Manages expected events during anesthetic care, with supervision	Independently manages expected events during anesthetic care	Independently manages unexpected events during anesthetic care	Manages rare events during anesthetic care	
Assists with emergence from anesthesia	Anticipates and manages expected events during emergence, with supervision	Anticipates and manages unexpected events during emergence, with supervision	Independently anticipates and manages unexpected events during emergence	Manages rare events during emergence	
Comments:	Comments:  Not Yet Completed Level 1				

Level 1	Level 2	Level 3	Level 4	Level 5
Performs basic airway assessment	Uses the airway exam and identifiable risk factors to formulate a patient-specific plan	Devises airway management plans that address contingencies, with supervision	Independently devises airway management plans that address contingencies	
Performs bag-mask ventilation in uncomplicated airway	Prepares basic equipment and manages an uncomplicated airway	Prepares and incorporates advanced equipment in the management of a complicated airway, with supervision	Independently prepares and incorporates advanced equipment in the management of a complicated airway	Functions as an expert in an airway crisis for complicated airways

Patient Care 6: Point-of-Care Ultrasound				
Level 1	Level 2	Level 3	Level 4	Level 5
Lists and explains the basic science and terminology of ultrasound	Selects ultrasound equipment for procedures, with supervision	Selects ultrasound equipment for a patient with difficult anatomy, with supervision	Independently selects proper ultrasound equipment and settings for indicated scenarios	Participates in research of emerging ultrasound procedures
Identifies relevant anatomy using ultrasound	Conducts point-of-care ultrasound, with supervision	Interprets point-of-care ultrasound, with supervision	Independently conducts and interprets point-of- care ultrasound	Participates in the development of institutional protocols for point-of-care ultrasound
Uses ultrasound for vascular access in routine situations, with supervision	Uses ultrasound for vascular access in routine situations	Uses ultrasound for vascular access in complex situations, with supervision	Independently uses ultrasound for vascular access in complex situations	
Comments:			Not Yet Co Not Yet As	ompleted Level 1

Patient Care 7: Situational Awareness and Crisis Management				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates vigilance during clinical care	Demonstrates awareness of case flow and developments throughout a procedure	Demonstrates awareness of case flow and developments throughout a procedure, including those outside of one's own immediate control, with supervision	Independently demonstrates awareness of case flow and developments throughout a procedure, including those outside of one's own immediate control	
Articulates causes of common peri-operative crisis situations	Recognizes crisis situations; calls for help	Anticipates impending crisis and identifies possible etiologies with supervision	Independently anticipates impending crisis and identifies possible etiologies	
Responds to crisis situations as a reliable	Participates in management during crisis	Initiates management and resolves crisis situations,	Independently initiates management and	Leads the health care team in the management
team member	situations	with supervision	resolves crisis situations	of crisis situations
Comments:	Comments: Not Yet Completed Level 1			

Patient Care 8: Post-Operative Care				
Level 1	Level 2	Level 3	Level 4	Level 5
Outlines post-operative disposition options for patients	Plans disposition for uncomplicated procedures	Identifies unexpected changes in patient status meriting change in disposition, with supervision	Independently identifies unexpected changes in patient status meriting change in disposition	Develops protocols for disposition based on procedure and patient comorbidities
Lists complications commonly encountered post-operatively	Diagnoses, manages, and documents commonly encountered complications arising from anesthetic care, with supervision	Diagnoses, manages, and documents uncommon complications arising from anesthetic care, with supervision	Independently diagnoses, manages, and documents uncommon complications arising from anesthetic care	
Comments: Not Yet Completed Level 1 Not Yet Assessable				

Patient Care 9: Critical Care				
Level 1	Level 2	Level 3	Level 4	Level 5
Acquires data for the care of the critically-ill patient	Interprets routine diagnostic data in the care of critically-ill patients	Interprets advanced diagnostic data in the care of critically-ill patients, with supervision	Independently interprets advanced diagnostic data in the care of critically-ill patients	
Recognizes when a patient is critically ill	Prioritizes the care of the critically-ill patient	Prioritizes the care of multiple critically-ill patients, with supervision	Independently prioritizes the care of multiple critically-ill patients	Leads and deploys resources in the care of the critically-ill patient
	Implements the care team's plan for a critically- ill patient	Develops and implements a comprehensive plan of care for the critically-ill patient, with supervision	Develops and implements a comprehensive plan of care for the critically-ill patient	Functions in a supervisory role managing all patients in a unit and the unit's resources
Comments: Not Yet Completed Level 1				

Level 1	Level 2	Level 3	Level 4	Level 5
Describes anatomy relevant to regional anesthesia	Describes indications and contraindications for regional anesthesia	Develops a patient- and procedure-specific regional anesthesia plan, with supervision	Independently develops a patient- and procedure-specific regional anesthesia plan	
Prepares the patient and the equipment for common regional anesthesia techniques	Performs regional anesthesia techniques, with direct supervision	Performs regional anesthesia techniques, with indirect supervision	Independently performs regional anesthesia techniques	Serves as a consultant on advanced or difficult regional techniques
Describes potential complications of regional anesthesia	Recognizes and manages complications of regional anesthesia, with direct supervision	Recognizes and manages complications of regional anesthesia, with indirect supervision	Independently recognizes and manages complications of regional anesthesia	Develops institutional protocol for using regional anesthesia and managing complications
Comments:				

Medical Knowledge 1: Foundational Knowledge				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of pathophysiology and treatment of medical and surgical conditions	Demonstrates knowledge of common medical and surgical disease, treatments, and populations as it relates to anesthetic care	Demonstrates knowledge of complex medical and surgical disease, treatments, and populations as it relates to anesthetic care	Demonstrates comprehensive knowledge of medical and surgical disease as it relates to the full spectrum of the patient's peri-operative care	Demonstrates scientific knowledge of uncommon, atypical, or complex conditions as it relates to the full spectrum of the patient's peri-operative care
Identifies medications used to treat common comorbidities	Demonstrates knowledge of pharmacology of medications routinely used in anesthetic care	Demonstrates knowledge of medications used in subspecialty areas (e.g., cardiac, obstetrics)	Demonstrates comprehensive knowledge of pharmacology in the setting of complex comorbidities	Participates in research related to pharmacology
Comments:   Not Yet Completed Level 1   Not Yet Assessable				

Medical Knowledge 2: C	linical 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
Lists types of clinical reasoning errors	Identifies clinical reasoning errors within patient care, with guidance	Retrospectively applies clinical reasoning principles to identify errors	Continually re-appraises one's 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
Demonstrates knowledge of common events that impact patient safety	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 departmental quality improvement initiatives	Participates in department 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 level or above

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	Analyzes the process of care coordination and participates 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	Role models and advocates for safe and effective transitions of care/hand-offs within and across health care delivery systems	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 their local population	Uses institutional 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	Advocates for populations and communities with health care inequities in the peri-operative setting

Systems-Based Practice	3: Physician Role in Healtl	n Care Systems		
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies key components of the complex health care system (e.g., hospital, skilled nursing facility, finance, personnel, technology)	Describes how components of a complex health care system are interrelated, and how this impacts patient care	Discusses how individual practice affects the broader system (e.g., length of stay, readmission rates, clinical efficiency)	Manages various components of the complex health care system to provide efficient and effective patient care and transition of care	Advocates for or leads systems change that enhances high-value, efficient, and effective patient care
States factors impacting the costs of anesthetic care	Documents anesthetic detail to facilitate accurate billing and reimbursement	Explains the impact of documentation on billing and reimbursement	Practices and advocates for cost- effective patient care	Engages in external activities related to advocacy for cost- effective care
Comments:			Not Yet C	Completed Level 1

Practice-Based Learning	and Improvement 1: Evide	ence-Based and Informed P	Practice	_
Level 1	Level 2	Level 3	Level 4	Level 5
Accesses and uses evidence in routine patient care	Articulates clinical questions and elicits patient preferences and values to guide evidence- based care	Locates and applies the best available evidence, integrated with patient preference, to the care of complex patients	Appraises and applies evidence, even in the face of uncertainty and conflicting evidence, to guide individualized care	Coaches others to appraise and apply evidence for complex patients and/or participates in the development of guidelines
Comments:			Not Yet C	ompleted 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 data (feedback and other input) to form goals	Seeks performance data episodically, with adaptability and humility	Intentionally seeks performance data consistently, with adaptability and humility	Role models consistently seeking performance data, with adaptability and humility
Identifies the factors that contribute to performance deficits	Analyzes and acknowledges the factors that contribute to performance deficits	Institutes behavioral change(s) to improve performance	Considers alternatives to improve performance	Models reflective practice
Actively seeks opportunities to improve	Designs and implements a learning plan, with prompting	Independently creates and implements a learning plan	Integrates performance data to adapt the learning plan	Facilitates the design and implementation of learning plans for others
Comments:			Not Yet C	ompleted Level 1

Level 1	Level 2	Level 3	Level 4	Level 5
Identifies potential triggers for professionalism lapses	Demonstrates insight into professional behavior in routine situations	Demonstrates professional behavior in complex or stressful situations	Recognizes situations that may trigger professionalism lapses and intervenes to prevent lapses in oneself	Coaches others when their behavior fails to meet professional expectations
Describes when and how to report lapses in professionalism	Takes responsibility for one's own professionalism lapses	Recognizes need to seek help in managing and resolving complex interpersonal situations	Actively solicits help and acts on recommendations to resolve complex interpersonal situations	
Demonstrates knowledge of the ethical principles underlying patient care	Analyzes straightforward situations using ethical principles	Analyzes complex situations using ethical principles	Recognizes and utilizes 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

Level 1	Level 2	Level 3	Level 4	Level 5
Responds promptly to requests or reminders to complete tasks	Performs tasks and responsibilities in a timely manner	Performs tasks and responsibilities in a timely manner with appropriate attention to detail in routine situations	Prioritizes tasks and responsibilities in a timely manner with appropriate attention to detail in complex or stressful situations	
Takes responsibility for failure to complete tasks	Recognizes situations that may impact one's own ability to complete tasks and responsibilities in a timely manner	Takes responsibility for tasks not completed in a timely manner and identifies strategies to prevent recurrence	Proactively implements strategies to ensure that the needs of patients, teams, and systems are met	Designs and implements an institutional systems approach to ensure timely task completion and shared responsibility

Professionalism 3: Well-	Being	_		
Level 1	Level 2	Level 3	Level 4	Level 5
Recognizes the importance of addressing personal and professional well-being	Lists available resources for personal and professional well-being Describes institutional resources that are meant to promote well-being	With assistance, proposes a plan to promote personal and professional well-being Recognizes which institutional factors affect well-being	Independently develops a plan to promote personal and professional well-being Describes institutional factors that positively and/or negatively affect well-being	Creates institutional-level interventions that promote colleagues' well-being Describes institutional programs designed to examine systemic contributors to burnout
Comments:			Not Yet C	ompleted 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.

Level 1	Level 2	Level 3	Level 4	Level 5
Communicates with patients and their families in an understandable and respectful manner	Customizes communication in the setting of personal biases and barriers with patients and patients' families	Explains complex and difficult information to patients and patients' families	Facilitates difficult discussions with patients and patients' families	Mentors others in the facilitation of crucial conversations
Provides timely updates to patients and patients' families	Actively listens to patients and patients' families to elicit patient preferences and expectations	Uses shared decision making to make a personalized care plan	Effectively negotiates and manages conflict among patients, patients' families, and the health care team	Mentors others in conflict resolution

Level 1	Level 2	Level 3	Level 4	Level 5
Respectfully requests or receives consultations	Clearly, concisely and promptly requests or responds to a consultation	Uses closed-loop communication to verify understanding	Coordinates recommendations from different members of the health care team to optimize patient care	Role models flexible communication strategies that value input from all health care team members, resolving conflict when needed
Uses language that values all members of the health care team	Communicates information effectively with all health care team members	Adapts communication style to fit team needs	Maintains effective communication in crisis situations	Leads an after-event debrief of the health care team
Respectfully receives feedback from 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 constructive feedback to superiors	Facilitates regular health care team-based feedback in complex situations
Comments:				

Level 1	Level 2	Level 3	Level 4	Level 5
Accurately records information in the patient record; demonstrates judicious use of documentation shortcuts	Accurately records information in the anesthetic record for basic cases	Accurately records information in the anesthetic record and communicates complex care decisions for complex cases	Uses medical record functionality to highlight challenges in anesthetic care to facilitate future peri-operative management	Explores innovative uses of the medical record to facilitate peri-operative management
Safeguards patient personal health information	Documents required data in formats specified by institutional policy	Appropriately selects direct and indirect forms of communication based on context	Models exemplary written or verbal communication	Guides departmental or institutional policies and procedures around communication
Communicates through appropriate channels as required by institutional policy	Respectfully communicates concerns about the system	Respectfully communicates concerns about the system and contributes to solutions	Uses appropriate channels to offer clear and constructive suggestions to improve the system	Initiates difficult conversations with appropriate stakeholders to improve the system