

# The Anesthesiology Milestone Project

*A Joint Initiative of*

The Accreditation Council for Graduate Medical Education  
and  
The American Board of Anesthesiology



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The Milestones are designed only for use in evaluation of resident physicians 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 resident physician 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.

## **Anesthesiology Milestone Group**

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## Milestone Reporting

This document presents milestones designed for programs to use in semi-annual review of resident performance and reporting to the ACGME. Milestones are knowledge, skills, attitudes, and other attributes for each of the ACGME competencies organized in a developmental framework from less to more advanced. They are descriptors and targets for resident performance as the resident moves from entry into residency through graduation. In the initial years of implementation, the Review Committee will examine Milestone performance data for each program's residents as one element in the Next Accreditation System (NAS) to determine whether residents overall are progressing.

For each reporting period, review and reporting will involve selecting the level of milestones that best describes each resident's current performance level in relation to these milestones. Milestones are arranged into numbered levels. Selection of a level implies that the resident substantially demonstrates the milestones in that level, as well as those in lower levels (see the diagram on page v). A general interpretation of levels for anesthesiology is below:

- Level 1:** The resident demonstrates milestones expected of a resident who has completed one post-graduate year of education in either an integrated anesthesiology program or another preliminary education year prior to entering the CA1 year in anesthesiology.
- Level 2:** The resident demonstrates milestones expected of a resident in anesthesiology residency prior to significant experience in the subspecialties of anesthesiology.
- Level 3:** The resident demonstrates milestones expected of a resident after having experience in the subspecialties of anesthesiology.
- Level 4:** The resident substantially fulfills the milestones expected of an anesthesiology residency, and is ready to transition to independent practice. This level is designed as the graduation target.
- Level 5:** The resident has advanced beyond performance targets defined for residency, and is demonstrating "aspirational" goals which might describe the performance of someone who has been in practice for several years. It is expected that only a few exceptional residents will reach this level for selected milestones.

## **Additional Notes**

Level 4 is designed as the graduation *target* but does *not* represent a graduation *requirement*. Making decisions about readiness for graduation is the purview of the residency program director (See the Milestones FAQ for further discussion of this issue: “Can a resident/fellow graduate if he or she does not reach every milestone?”). Study of Milestone performance data will be required before the ACGME and its partners will be able to determine whether Level 4 milestones and milestones in lower levels are in the appropriate level within the developmental framework, and whether Milestone data are of sufficient quality to be used for departmental and accreditation decisions.

Some milestone descriptions include statements about performing independently. These activities must follow ACGME supervision guidelines. For example, a resident who performs a procedure or takes independent call must, at a minimum, be supervised through oversight.

The diagram below presents an example set of milestones for one sub-competency in the same format as the milestone 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 the resident's performance in relation to those milestones
- or
- selecting the "Has not Achieved Level 1" option

Patient Care 6: Triage and management of the critically ill patient in a non-operative setting					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Performs a focused evaluation of the critically ill patient. Monitors patient's clinical status to identify acute changes and trends. Communicates pertinent findings to supervisor</p> <p>Participates in development and initiation of a treatment plan as directed by supervisor</p>	<p>Identifies relevant critical disease processes requiring urgent or emergent intervention. Seeks assistance to identify appropriate care setting (e.g., ICU, transitional care unit)</p> <p>Develops, implements, and appropriately modifies treatment plan based on patient's response with direct supervision</p>	<p>Identifies appropriate care setting and coordinates patient's disposition with direct supervision</p> <p>Prioritizes clinical management of clinical problems with indirect supervision</p>	<p>Identifies appropriate care setting and coordinates patient's disposition with indirect supervision</p> <p>Defines clinically appropriate priorities when resources are limited</p> <p>Integrates management choices taking into account long-term impact of therapeutic decisions with indirect supervision</p> <p>Supervises other members of the health-care team</p>	<p>Coordinates transition of care to appropriate care setting. Sets clinically appropriate priorities when resources are limited</p> <p>Serves as a consultant to other members of the health care team regarding initial evaluation and management of the critically ill patient</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments: <input type="text"/>					

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 columns indicates that milestones in lower levels have been substantially demonstrated as well as **some** milestones in the higher column(s).

**ANESTHESIOLOGY MILESTONES  
ACGME Report Worksheet**

<b>Patient Care 1: Pre-anesthetic Patient Evaluation, Assessment, and Preparation</b>					
<b>Has not Achieved Level 1</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>
	<p>Performs general histories and physical examinations</p> <p>Identifies clinical issues relevant to anesthetic care with direct supervision</p> <p>Identifies the elements and process of informed consent</p>	<p>Identifies disease processes and medical issues relevant to anesthetic care</p> <p>Optimizes preparation of non-complex patients receiving anesthetic care</p> <p>Obtains informed consent for routine anesthetic care; discusses likely risks, benefits, and alternatives in a straightforward manner; responds appropriately to patient's or surrogate's questions; recognizes when assistance is needed</p>	<p>Identifies disease processes and medical or surgical issues relevant to subspecialty anesthetic care; may need guidance in identifying unusual clinical problems and their implications for anesthesia care</p> <p>Optimizes preparation of patients with complex problems or requiring subspecialty anesthesia care with indirect supervision</p> <p>Obtains appropriate informed consent tailored to subspecialty care or complicated clinical situations with indirect supervision</p>	<p>Performs assessment of complex or critically-ill patients without missing major issues that impact anesthesia care with conditional independence</p> <p>Optimizes preparation of complex or critically-ill patients with conditional independence</p> <p>Obtains appropriate informed consent tailored to subspecialty care or complicated clinical situations with conditional independence</p>	<p>Independently performs comprehensive assessment for all patients</p> <p>Independently serves as a consultant to other members of the health care team regarding optimal pre-anesthetic preparation</p> <p>Consistently ensures that informed consent is comprehensive and addresses patient and family needs</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Patient Care 2: Anesthetic Plan and Conduct					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Formulates patient care plans that include consideration of underlying clinical conditions, past medical history, and patient, medical, or surgical risk factors</p> <p>Adapts to new settings for delivery of patient care</p>	<p>Formulates anesthetic plans for patients undergoing routine procedures that include consideration of underlying clinical conditions, past medical history, patient, anesthetic, and surgical risk factors, and patient choice</p> <p>Conducts routine anesthetics, including management of commonly encountered physiologic alterations associated with anesthetic care, with indirect supervision</p> <p>Adapts to new settings for delivery of anesthetic care</p>	<p>Formulates anesthetic plans for patients undergoing common subspecialty procedures that include consideration of medical, anesthetic, and surgical risk factors, and that take into consideration a patient's anesthetic preference</p> <p>Conducts subspecialty anesthetics with indirect supervision, but may require direct supervision for more complex procedures and patients</p>	<p>Formulates and tailors anesthetic plans that include consideration of medical, anesthetic, and surgical risk factors and patient preference for patients with complex medical issues undergoing complex procedures with conditional independence</p> <p>Conducts complex anesthetics with conditional independence; may supervise others in the management of complex clinical problems</p>	<p>Independently formulates anesthetic plans that include consideration of medical, anesthetic, and surgical risk factors, as well as patient preference, for complex patients and procedures</p> <p>Conducts complex anesthetic management independently</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					



Patient Care 3: Peri-procedural pain management					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	Recognizes and initiates management of common pain states; seeks advice for management of pain that does not respond to routine therapies	Manages uncomplicated peri-procedural pain with indirect supervision; requires direct supervision for complex pain situations	Manages complex peri-procedural pain with indirect supervision; consults with a pain medicine specialist when appropriate	Manages complex peri-procedural pain for all patients, including those with chronic pain, with conditional independence  Recognizes the need to consult a pain medicine specialist to address complex pain management issues or co-existing chronic pain states that are not responsive to usual management strategies	Independently manages peri-procedural pain states
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Patient Care 4: Management of peri-anesthetic complications									
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5				
	Performs patient assessments and identifies complications associated with patient care; begins initial management of complications with direct supervision	Performs post-anesthetic assessment to identify complications of anesthetic care; begins initial management of peri-anesthetic complications with direct supervision	Identifies and manages peri-anesthetic complications unique to subspecialty or medically complex patients, and requests appropriate consultations with indirect supervision	Identifies and manages all peri-anesthetic complications with conditional independence	Independently identifies and manages all peri-anesthetic complications				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:									

Patient Care 5: Crisis management									
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5				
	Recognizes acutely ill or medically deteriorating patients; initiates basic medical care for common acute events; calls for help appropriately	Constructs prioritized differential diagnoses that include the most likely etiologies for acute clinical deterioration; initiates treatment with indirect supervision and seeks direct supervision appropriately	Identifies and manages clinical crises with indirect supervision; may require direct supervision in complex situations	Identifies and manages clinical crises appropriately with conditional independence; assumes increasing responsibility for leadership of crisis response team	Coordinates crisis team response				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:									

Patient Care 6: Triage and management of the critically-ill patient in a non-operative setting					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Performs a focused evaluation of the critically-ill patient; monitors patient's clinical status to identify acute changes and trends; communicates pertinent findings to supervisor</p> <p>Participates in development and initiation of a treatment plan as directed by supervisor</p>	<p>Identifies relevant critical disease processes requiring urgent or emergent intervention; seeks assistance to identify appropriate care setting (e.g., ICU, transitional care unit)</p> <p>Develops, implements, and appropriately modifies treatment plan based on patient's response with direct supervision</p>	<p>Identifies appropriate care setting and coordinates patient's disposition with direct supervision</p> <p>Prioritizes clinical management of clinical problems with indirect supervision</p>	<p>Identifies appropriate care setting and coordinates patient's disposition with indirect supervision</p> <p>Defines clinically appropriate priorities when resources are limited</p> <p>Integrates management choices taking into account long-term impact of therapeutic decisions with indirect supervision</p> <p>Supervises other members of the health care team</p>	<p>Coordinates transition of care to appropriate care setting; sets clinically appropriate priorities when resources are limited</p> <p>Serves as a consultant to other members of the health care team regarding initial evaluation and management of the critically-ill patient</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Patient Care 7: Acute, chronic, and cancer-related pain consultation and management					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Performs targeted history and physical examination for patients with pain, including the use of common pain scales</p> <p>Initiates non-interventional, routine therapy for common pain problems with indirect supervision</p>	<p>Diagnoses common acute and chronic pain syndromes; evaluates efficacy of current medication regimen</p> <p>Implements non-interventional pain treatment plans with indirect supervision</p> <p>Performs simple interventional pain procedures (e.g., trigger point injections, scar injections, lumbar interlaminar epidural steroid injection [ESI], intravenous [IV] regional blocks) with direct supervision</p> <p>Identifies structures seen on ultrasound and basic fluoroscopy</p>	<p>Formulates differential diagnoses of acute and chronic pain syndromes; identifies appropriate diagnostic evaluation</p> <p>Participates in complex procedures (e.g., thoracic ESI, medial branch blocks, radiofrequency procedures, sympathetic blocks) for alleviating acute, chronic, or cancer-related pain, under direct supervision</p> <p>Prescribes initial therapy for pain medication, and adjusts ongoing medication regimens with indirect supervision; uses ultrasound and fluoroscopy with direct supervision</p>	<p>Acts as consultant for acute pain management to junior residents and other health care providers with conditional independence</p> <p>Consults with non-anesthesiologist specialists regarding pain management as appropriate</p> <p>Recognizes treatment failures and obtains appropriate consultations, including with a pain medicine specialist</p>	<p>Participates in coordination of care for patients with complex pain problems</p> <p>Serves as a consultant to other members of the health care team regarding initial evaluation and management of the patient with acute, chronic, or cancer-related pain</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Patient Care 8: Technical skills: Airway management					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Recognizes airway patency and adequacy of ventilation based on clinical assessment</p> <p>Positions patient for airway management; places oral and nasal airways; performs bag-valve-mask ventilation</p>	<p>Applies knowledge of the American Society of Anesthesiologist (ASA) difficult airway algorithm to prepare equipment and supplies for airway management</p> <p>Performs basic airway management in patients with normal airways, including endotracheal intubation, supraglottic airways, and videolaryngoscopy</p> <p>Recognizes need for assistance and/or equipment and seeks help</p>	<p>Prepares appropriate equipment and supplies for management of difficult airways, including cricothyroidotomy</p> <p>Performs advanced airway management techniques, including awake intubations, fiberoptic intubations, and lung isolation techniques</p>	<p>Identifies and corrects problems and complications associated with airway management (e.g., hypoxemia during one-lung ventilation, airway hemorrhage) with conditional independence</p> <p>Manages all airways, including under special situations (e.g., trauma, patients with tracheostomies, loss of airway), with conditional independence</p>	<p>Independently assesses and manages the airway for all clinical situations utilizing appropriate advanced airway techniques, including cricothyroidotomy</p> <p>Independently supervises and provides consultation to other members of the health care team for airway management</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Patient Care 9: Technical skills: Use and Interpretation of Monitoring and Equipment					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Demonstrates the correct use of standard monitoring devices, including blood pressure (BP) cuff, electrocardiogram (ECG), pulse oximeter, and temperature monitors</p> <p>Interprets data from standard monitoring devices, including recognition of artifacts</p>	<p>Performs pre-anesthetic equipment and machine checks</p> <p>Inserts arterial and central venous catheters with direct supervision</p> <p>Demonstrates use of ultrasound for placement of invasive catheters</p> <p>Interprets data from arterial and central venous catheters</p> <p>Recognizes and appropriately troubleshoots malfunctions of standard ASA monitoring equipment and anesthesia machines</p>	<p>Inserts arterial catheters with conditional independence and central venous catheters with indirect supervision</p> <p>Performs advanced monitoring techniques for assessing cardiac function (e.g., pulmonary artery catheterization, transesophageal echocardiography) with direct supervision</p> <p>Applies data from advanced monitoring devices (e.g., electroencephalogram [EEG], motor evoked potentials [MEPs], somatosensory evoked potentials [SSEPs], fetal monitors) with indirect supervision</p> <p>Recognizes and appropriately troubleshoots malfunctions of advanced monitoring equipment</p>	<p>Obtains vascular access in complex or difficult situations with conditional independence</p> <p>Performs advanced monitoring techniques for assessing cardiac function (e.g., pulmonary artery catheterization, transesophageal echocardiography) with indirect supervision</p> <p>Supervises other members of the health care team in the placement and interpretation of monitoring techniques</p> <p>Recognizes equipment malfunctions and troubleshoots appropriately</p>	<p>Independently selects and uses basic and advanced monitoring techniques</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Patient Care 10: Technical skills: Regional anesthesia					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Demonstrates sterile technique</p> <p>Administers infiltrative local anesthetics for procedures under direct supervision</p> <p>Identifies physiologic changes associated with local anesthesia administration and seeks help appropriately</p>	<p>Applies appropriate monitors and prepares resuscitative equipment prior to performing regional anesthesia procedures</p> <p>Performs spinal and epidural anesthesia under direct supervision</p> <p>Recognizes problems or complications associated with regional anesthesia, and manages them with direct supervision</p>	<p>Performs peripheral nerve blocks and regional anesthesia under direct supervision, including both upper and lower extremity blocks and thoracic epidurals</p> <p>Uses ultrasound or nerve stimulator guided techniques appropriately</p> <p>Performs common pediatric regional anesthetics (e.g., caudal blockade) with direct supervision</p> <p>Recognizes problems or complications associated with regional anesthesia and manages them with indirect supervision</p>	<p>Performs spinal, epidural, and peripheral nerve blocks with conditional independence</p> <p>Supervises junior residents in performing regional anesthetics and other health care providers on issues related to regional anesthesia</p> <p>Manages problems or complications associated with regional anesthesia with conditional independence</p>	<p>Independently performs peripheral and neuraxial regional anesthesia techniques</p> <p>Independently manages problems or complications associated with regional anesthesia</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Medical Knowledge 1: Knowledge of biomedical, clinical, epidemiological, and social-behavioral sciences as outlined in the American Board of Anesthesiology Content Outline					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Demonstrates knowledge of the etiology, pathophysiology, diagnosis, and treatment of common medical and surgical problems</p> <p>Has passed Steps 1 and 2 of the United States Medical Licensing Examination (USMLE) or the Comprehensive Osteopathic Medical Licensing Examination (COMLEX)</p>	<p>Achieves satisfactory Medical Knowledge rating by the Clinical Competence Committee (CCC) related to the anesthetic care of healthy patients undergoing routine procedures</p> <p>Achieves a program-defined score on the In-Training Examination administered by the American Board of Anesthesiology (ABA) or American Osteopathic Board of Anesthesiology (AOBA)</p> <p>Has passed all steps of USMLE or COMLEX</p>	<p>Achieves satisfactory Medical Knowledge rating by the CCC related to the anesthetic care of subspecialty or medically-complex patients</p> <p>Achieves a program-defined score on the In-Training Examination administered by the ABA or AOBA</p>	<p>Achieves satisfactory Medical Knowledge rating by the CCC related to anesthetic care of all patients</p> <p>Achieves a program-defined score on the In-Training Examination administered by the ABA or AOBA</p> <p>Becomes a candidate for the Advanced Examination by the ABA or for the Written Examination for the AOBA</p>	<p>Becomes certified by the ABA or AOBA</p> <p>Participates in Maintenance of Certification</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					



Systems-based Practice 1: Coordination of patient care within the health care system									
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5				
	<p>Identifies the roles of patients, families, health care providers, and systems in health care delivery and outcome</p> <p>Identifies priorities when caring for multiple patients</p> <p>Coordinates the care of an individual patient within the health care system effectively and safely</p>	<p>Prioritizes multiple patient care activities with indirect supervision for routine procedures</p> <p>Uses system resources to facilitate cost-effective and safe non-subspecialty anesthesia care</p>	<p>Prioritizes multiple patient care activities with indirect supervision for patients undergoing common subspecialty procedures</p> <p>Uses system resources to facilitate cost-effective and safe subspecialty anesthesia care</p>	<p>Manages multiple patient care activities with conditional independence</p> <p>Uses system resources to facilitate and optimize cost-effective and safe longitudinal peri-operative care</p>	<p>Effectively coordinates the management of multiple patient care activities</p>				
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:									

Systems-based Practice 2: Patient Safety and Quality Improvement					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Describes common causes of errors</p> <p>Describes team-based actions and techniques designed to enhance patient safety</p> <p>Participates in established institutional safety initiatives</p> <p>Follows institutional safety policies, including reporting of problematic behaviors or processes, errors, near misses, and complications</p> <p>Incorporates national standards and guidelines into patient care</p>	<p>Uses the safety features of medical devices</p> <p>Participates in team-based actions designed to enhance patient safety, (e.g., briefings, closed-loop communication)</p> <p>Identifies problems in the quality of health care delivery within one's institution and brings this to the attention of supervisors</p> <p>Incorporates anesthesiology-specific national standards and guidelines into patient care</p>	<p>Describes and participates in systems and procedures that promote patient safety</p> <p>Identifies departmental and or institutional opportunities to improve quality of care</p> <p>Participates in quality improvement activities as a member of an inter-professional team to improve patient outcomes</p> <p>Takes patient preferences into consideration while promoting cost-effective patient care that improves outcomes</p>	<p>Applies advanced team techniques designed to enhance patient safety (e.g., 'assertiveness')</p> <p>Participates in formal analysis (e.g., root cause analysis, failure mode effects analysis) of medical error and sentinel events with direct supervision</p> <p>Identifies opportunities in the continuum of care to improve patient outcome and reduce costs</p>	<p>Leads multidisciplinary teams (e.g., human factors engineers, social scientists) to address patient safety issues</p> <p>Provides consultation to organizations to improve personal and patient safety</p> <p>Proactively participates in educational sessions prior to using new advanced medical devices for patient care</p> <p>Defines and constructs process and outcome measures, and leads quality improvement projects</p> <p>Effectively addresses areas in anesthesiology practice that pose potential dangers to patients</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Practiced-based Learning and Improvement 1: Incorporation of quality improvement and patient safety initiatives into personal practice					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	Has knowledge that patient safety issues exist in medicine and that they should be prevented (e.g., drug errors, wrong site surgery)	Identifies impact of one's decisions on patient outcomes  Identifies patient safety issues within one's practice, and develops a quality improvement plan to address deficiencies with direct supervision	Identifies patient safety issues within one's practice, and participates in quality improvement plans to address them	Carries out most steps of a quality improvement project	Routinely carries out all steps of quality improvement projects to enhance patient safety
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Practiced-based Learning and Improvement 2: Analysis of practice to identify areas in need of improvement					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	Identifies critical incidents or potentially harmful events pertaining to one's patients, and brings them to the attention of the supervisor	Identifies adverse events and near misses, and analyzes personal practice to determine the reason they occurred  Modifies personal practice to minimize likelihood of recurrence of adverse events related to routine anesthesia care  With support from faculty members, compares personal performance and outcomes to those of peers  Uses multi-source (peer, faculty member, nurses, other) feedback to improve practice with faculty member guidance	Identifies adverse events and near misses related to subspecialty rotations, and modifies personal practice to minimize likelihood of recurrence of adverse events related to sub-specialty anesthesia care  Compares personal performance and patient outcomes to accepted standards and comparative data, and uses data to improve practice	Analyzes personal practices to determine potential risk of adverse outcomes and develops strategies to reduce likelihood of recurrence  Prospectively assesses clinical practices and identifies alternative approaches to clinical management to minimize likelihood of adverse events based on currently published data, and comparison of personal practice to peers and supervisors  Uses multi-source feedback to independently improve practice	Uses comparative benchmark data about outcomes and clinical practice patterns within the department, facility, or health system to analyze performance of self and group
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Practiced-based Learning and Improvement 3: Self-directed learning					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Completes assigned readings and prescribed learning activities</p> <p>Uses clinical opportunities to direct self-learning</p> <p>Develops a learning plan relevant to clinical practice</p>	<p>Reviews the literature and information relevant to specific clinical assignments</p> <p>Periodically modifies learning plan based on analysis of multi-source feedback, quality data, examination performance, and self-reflection with program guidance</p>	<p>Differentiates evidence-based information from non-evidence-based resources to address specific patient management needs</p> <p>Incorporates experiences from subspecialty rotations to modify learning plan</p>	<p>Incorporates evidence-based medicine practices into patient management</p> <p>Takes responsibility for integrating past experience, multiple learning activities, and self-reflection to direct lifelong learning independently</p>	<p>Refines clinical practice based on evolving medical evidence</p> <p>Continually analyzes personal practice to focus self-directed lifelong learning</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Practiced-based Learning and Improvement 4: Education of patient, families, students, residents, and other health professionals					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Discusses medical plans and responds to questions from patients and their families</p> <p>Acknowledges limits and seeks assistance from supervisor</p>	<p>Explains anesthetic care to patients and their families</p> <p>Teaches basic anesthesia concepts to students and other health care professionals</p>	<p>Effectively explains subspecialty anesthetic care to patients and their families</p> <p>Teaches anesthesia concepts to students and other residents</p>	<p>Explains anesthesia care and risk to patients and their families with conditional independence</p> <p>Teaches anesthesia concepts, including subspecialty care, to students, other residents, and other health professionals</p>	<p>Serves as an expert on anesthesiology to patients, their families, and other health care professionals, (locally or nationally)</p> <p>Participates in community education about anesthesiology</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Professionalism 1: Responsibility to patients, families, and society					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Acts responsibly and reliably with commitment to patient care as expected for level of experience</p> <p>Completes most assigned clinical tasks on time, but may occasionally require direct supervision</p> <p>Recognizes a patient's right to confidentiality, privacy, and autonomy, and treats patients and their families with compassion and respect</p> <p>Seeks assistance appropriate to the needs of the clinical situation while taking into consideration one's own experience and knowledge</p> <p>Displays sensitivity and respect for the needs of diverse patient populations and challenges associated with limited access to health care</p>	<p>Completes routine tasks reliably in uncomplicated circumstances with indirect supervision</p> <p>Identifies issues of importance to diverse patient populations and how limited resources may impact patient care and resource allocation</p>	<p>Completes tasks reliably in complex clinical situations or unfamiliar environments, utilizing available resources, with indirect supervision</p> <p>Identifies options to address issues of importance to diverse patient populations, and creates strategies to provide care when patient access or resources are limited</p>	<p>Completes all work assignments reliably and supports other providers to ensure patient care is optimized; supervises and advises junior residents on time and task management with conditional independence</p>	<p>Manages the health care team to ensure patient care is the first priority while considering the needs of team members</p> <p>Completes all work assignments reliably, and independently supports other providers to ensure patient care is optimized</p> <p>Demonstrates leadership in managing multiple competing tasks</p> <p>Manages the health care team in a manner that is respectful of patient confidentiality, privacy, and autonomy, and ensures that patients and their families are treated with compassion and respect</p> <p>Demonstrates mentorship and role modeling regarding responsibilities to diverse patient populations and optimizing patient care when resources are limited</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Professionalism 2: Honesty, integrity, and ethical behavior					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Is truthful in all forms of communication</p> <p>Addresses ethical issues relevant to entry-level rotations with direct supervision</p> <p>Takes responsibility for the care they provide and seeks help appropriately</p>	<p>Addresses ethical issues common to anesthesiology with direct supervision (e.g., Jehovah's Witnesses)</p>	<p>Addresses ethical issues in complex and challenging circumstances, including in the subspecialties of anesthesiology, with indirect supervision</p>	<p>Develops a systematic approach to managing ethical dilemmas in clinical care settings with conditional independence</p>	<p>Serves as a role model and mentors others about bioethical principles; works within the team setting to develop a systematic approach to managing ethical dilemmas</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					



Professionalism 3: Commitment to institution, department, and colleagues					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	Complies with institutional policies and regulations, including work schedule rules	<p>Acts as a reliable team member, recognizing the impact of one's own work responsibilities on the institution and on one's colleagues</p> <p>Volunteers to assist colleagues, when appropriate, to cover illnesses/absences in order to ensure quality patient care</p> <p>Completes requested evaluations (e.g., faculty member, program, peers, ACGME Resident Survey) in a timely manner</p>	Serves as a resource and counselor to medical students regarding their professional choices and behaviors	Serves as a resource and counselor to junior residents regarding their professional choices and behaviors	Models responsibility and accountability in one's professional choices and behaviors
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Professionalism 4: Receiving and giving feedback										
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5					
	Accepts constructive feedback, but occasionally demonstrates resistance to feedback while providing patient care	Provides constructive feedback in a tactful and supportive way to medical students to enhance patient care  Accepts feedback from faculty members and incorporates suggestions into practice	Consistently seeks feedback, correlates it with self-reflection, and incorporates it into lifelong learning to enhance patient care  Seeks out feedback from faculty members and other members of the care team	Provides constructive feedback in a tactful and supportive way to physician and non-physician members of the patient care team to enhance patient care	Effectively provides feedback in challenging situations (e.g. when there is resistance, there are adverse outcomes , or an experienced practitioner is involved)					
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:										

Professionalism 5: Responsibility to maintain personal emotional, physical, and mental health					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Demonstrates basic professional responsibilities, such as reporting for work rested and prepared, with appropriate professional attire and grooming</p> <p>Demonstrates knowledge of basic requirements related to fatigue management, sleep deprivation, and principles of physician well-being</p> <p>Recognizes the need to balance patient, personal, institutional, and societal needs when providing health care</p> <p>Complies with training on physician impairment</p> <p>Identifies departmental and institutional resources available for assistance with concerns about an impaired health care provider</p>	<p>Complies with requirements to assist with preservation of health and mitigation of fatigue (e.g., work hours rules)</p> <p>Demonstrates the ability to balance personal, institutional, and societal goals with professional responsibilities</p> <p>Complies with systems intended to prevent physician impairment, (e.g., controlled substance policies)</p>	<p>Reports concerns about the health or well-being of colleagues to a more experienced individual</p>	<p>Reinforces to junior colleagues the importance of compliance with systems to prevent impairment</p>	<p>Serves as a resource for the development of organizational policies and procedures regarding professional responsibilities</p> <p>Serves as a resource for the development of institutional policies on work-life balance</p> <p>Serves as a resource for the development of organizational policies and procedures for impaired physicians</p> <p>Assists with or leads management of suspected impaired colleagues</p> <p>Serves as monitor/resource for colleagues returning from treatment for impairment</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Interpersonal and Communications Skills 1: Communication with patients and families					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Demonstrates empathy for patients and their families</p> <p>Communicates routine information in straight forward circumstances with indirect supervision</p> <p>Recognizes situations where communication of information requires the assistance of another individual and asks for help</p> <p>Identifies situations where patient and family conflicts exist and appropriately seeks assistance with resolution</p> <p>Discloses medical errors or complications with direct supervision</p> <p>Recognizes that institutional resources are available to assist with disclosure of medical errors</p>	<p>Ensures that communication of information requiring the assistance of another individual occurs in a timely and effective manner</p> <p>Negotiates simple patient and family conflicts</p> <p>Participates in root cause analysis for issues regarding patients for whom he or she has provided care</p> <p>Discloses medical errors or complications independently as allowed by their institution, if not allowed by their institution demonstrates the ability to disclose medical errors or complications independently, e.g. simulation patient experiences</p>	<p>Communicates challenging information and addresses complex circumstances with indirect supervision</p> <p>Consults appropriate institutional resources with indirect supervision</p> <p>Negotiates and manages patient and family conflicts in complex situations (e.g., psychiatric issues, blood transfusions, cultural factors) with indirect supervision</p>	<p>Communicates challenging information and addresses complex circumstances with conditional independence</p> <p>Consults appropriate institutional resources with conditional independence</p> <p>Negotiates and manages patient and family conflicts in complex situations, including end-of-life issues, with conditional independence</p>	<p>Consistently ensures effective communication and resolution of concerns occurs with patients and/or families</p> <p>Independently negotiates and manages patient and family conflicts in all situations</p> <p>Independently discloses medical errors or medical complications</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Interpersonal and Communications Skills 2: Communication with other professionals					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Communicates effectively and with respect for the skills and contributions of other members of the health care team</p> <p>Identifies interpersonal conflicts and ineffective communication with other members of the health care team, and participates in their resolution as appropriate to level of education</p> <p>Communicates patient status to supervisors and other providers effectively, including during hand-offs and transitions of patient care</p> <p>Provides legible, accurate, complete, and timely documentation in written and electronic forms</p> <p>Respects patient privacy in all environments</p> <p>Identifies and discloses medical errors or complications to the healthcare team</p>	<p>Identifies institutional resources to assist in conflict resolution</p> <p>Effectively communicates relevant patient issues during transitions or transfers of care</p> <p>Uses the medical record to document medical decision making and facilitate patient care</p> <p>Documentation is clear and concise, addressing key issues relevant to the care of the patient</p>	<p>Adapts communication to the unique circumstances, such as crisis management and subspecialty anesthesia care</p> <p>Uses institutional resources to assist in conflict resolution</p>	<p>Communicates effectively in crises and contentious situations</p> <p>Participates in conflict resolution with conditional independence</p>	<p>Mentors other members of the health care team to improve communication skills</p> <p>Effectively manages conflict in all situations</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Interpersonal and Communications Skills 3: Team and leadership skills					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Recognizes and respects the expertise of other members of the health care team</p> <p>Functions effectively as a member of the health care team</p>	<p>Identifies the care team member with appropriate expertise to address a clinical issue</p> <p>Participates actively in team-based conferences or meetings related to patient care</p>	<p>Coordinates team-based care in routine circumstances</p>	<p>Demonstrates leadership skills in relationships with members of the anesthesia and other patient care teams</p> <p>Facilitates team-based conferences or meetings related to patient care</p>	<p>Effectively contributes to and leads team-based decision making and clinical care</p> <p>Participates in and provides leadership in the practice of team-based care</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					