



Neurological Surgery Milestones

ACGME International, Inc. (ACGME-I)



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Neurological Surgery Milestones

The Milestones are designed only for use in evaluation of residents and fellows in the context of their participation in ACGME-I-accredited residency and fellowship programs. The Milestones provide a framework for the assessment of the development of the resident or fellow in key dimensions of the elements of physician competence in a specialty or subspecialty. They neither represent the entirety of the dimensions of the six domains of physician competence, nor are they designed to be relevant in any other context.

Understanding Milestone Levels and Reporting

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

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

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

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

Additional Notes

Level 4 is designed as a graduation *goal* but *does not* represent a graduation *requirement*. Making decisions about readiness for graduation and unsupervised practice is the purview of the program director. Furthermore, Milestones 2.0 include revisions and changes that preclude using the Milestones as a sole assessment in high-stakes decisions. Level 5 is designed to represent an expert resident or fellow whose achievements in a subcompetency are greater than the expectation. Milestones are primarily designed for formative, developmental purposes to support continuous quality improvement for individual learners, education programs, and the specialty. ACGME-I 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. 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 conformance with ACGME-I supervision guidelines as described in the applicable Program Requirements, as well as with 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 more context regarding the intent of each subcompetency, as well as examples for each level, assessment methods or tools, and other resources. The Supplemental Guide, like examples contained within the Milestones, is designed only to assist the program director and Clinical Competency Committee; it is not meant to demonstrate any required element or outcome.

The diagram below presents an example set of milestones for one subcompetency in the same format as the ACGME-I Report Worksheet. For each reporting period, a resident's/fellow's performance on the milestones within each subcompetency will be indicated by selecting the Milestones Level that best describes that individual's performance in relation to those milestones.

Systems-Based Practice 1: Patient Safety and Quality Improvement				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of common patient safety events	Identifies system factors that lead to patient safety events	Participates in analysis of patient safety events (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 their families (simulated or actual)	Discloses patient safety events to patients and their 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 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
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments: Not Yet Completed Level 1 <input type="checkbox"/>				

Selecting a response box in the middle of a level implies that milestones in that level and in lower levels have been substantially demonstrated.

Selecting a response box on the line in between levels indicates that milestones in lower levels have been substantially demonstrated as well as **some** milestones in the higher level(s).

Patient Care 1: Brain Tumor				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Performs a history and physical examination in patients with a brain tumor</p> <p>Places an external ventricular drain; assists with set-up, opening, and closing for brain tumor craniotomies</p> <p>Provides routine peri-operative care for brain tumor patients</p>	<p>Explains the risks and benefits of craniotomy for brain tumor</p> <p>Assists with routine craniotomy for brain tumor</p> <p>Recognizes and initiates work-up of routine complications (e.g., air embolism, cerebrospinal fluid (CSF) fistula, hematoma)</p>	<p>Formulates a diagnostic and treatment plan for a patient with a brain or spinal cord tumor</p> <p>Performs routine craniotomy for brain tumor; assists with complex craniotomy for brain tumor</p> <p>Manages routine complications and recognizes complex complications (e.g., refractory cerebral edema, major vascular injury)</p>	<p>Adapts standard treatment plans and techniques to special circumstances (e.g., recurrence, bone marrow suppression)</p> <p>Performs complex craniotomy for brain tumor; assists with advanced craniotomy for brain tumor</p> <p>Manages complex complications</p>	<p>Leads discussion at an interdisciplinary tumor board</p> <p>Performs advanced craniotomy for brain tumor</p> <p>Utilizes patient outcome data for quality improvement or the development of adjunctive therapy protocols</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:			Not Yet Completed Level 1	<input type="checkbox"/>
			Not Yet Rotated	<input type="checkbox"/>

Patient Care 2: Surgical Treatment of Epilepsy and Movement Disorders				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Performs a history and physical examination in patients with epilepsy or movement disorders</p> <p>Performs stereotactic frame placement or frameless navigation registration; assists with set-up, opening, and closing for functional neurosurgical procedures</p> <p>Provides routine peri-operative care for movement disorder and epilepsy patients</p>	<p>Explains the risks and benefits of functional neurosurgical procedures</p> <p>Assists with routine functional neurosurgical procedures</p> <p>Recognizes and initiates work-up of routine complications (e.g., seizures, device infection)</p>	<p>Formulates a diagnostic and treatment plan for a patient with epilepsy or a movement disorder</p> <p>Performs routine functional neurosurgical procedures; assists with complex functional neurosurgical procedures</p> <p>Manages routine complications and recognizes complex complications (e.g., status epilepticus, dystonia)</p>	<p>Adapts standard treatment plans and techniques to special circumstances (e.g., Parkinson's plus, multifocal epilepsy)</p> <p>Performs complex functional neurosurgical procedures; assists with advanced functional neurosurgical procedures</p> <p>Manages complex complications</p>	<p>Leads discussion at an interdisciplinary epilepsy center patient management conference</p> <p>Performs advanced functional neurosurgical procedures, including interpretation of electrophysiological data</p> <p>Utilizes patient outcome data for quality improvement; designs care pathways for epilepsy or movement disorder patients</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				<p>Not Yet Completed Level 1 <input type="checkbox"/></p> <p>Not Yet Rotated <input type="checkbox"/></p>

Patient Care 3: Pain and Peripheral Nerve Disorders				
Level 1	Level 2	Level 3	Level 4	Level 5
Performs a history and physical examination in patients with chronic pain or a peripheral nerve disorder	Explains the risks and benefits of chronic pain and peripheral nerve procedures	Formulates a diagnostic and treatment plan for patients with chronic pain or peripheral nerve disorders	Adapts standard treatment plans and techniques to special circumstances (e.g., cancer pain, deafferentation pain)	Leads discussion at an interdisciplinary case conference or specialty clinic for chronic pain or peripheral nerve disorder patients
Interrogates and programs implanted devices; assists with set-up, opening, and closing for chronic pain and peripheral nerve procedures	Assists with routine chronic pain and peripheral nerve procedures	Performs routine chronic pain and peripheral nerve procedures; assists with complex chronic pain and peripheral nerve procedures	Performs complex chronic pain and peripheral nerve procedures; assists with advanced chronic pain and peripheral nerve procedures	Performs advanced chronic pain and peripheral nerve procedures
Provides routine peri-operative care for chronic pain or peripheral nerve disorder patients	Recognizes and initiates work-up of routine complications (e.g., implanted device failure or infection)	Manages routine complications and recognizes complex complications (e.g., intrathecal drug overdose or withdrawal)	Manages complex complications	Utilizes patient outcome data for quality improvement; designs care pathways for chronic pain or peripheral nerve disorder patients
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:			Not Yet Completed Level 1	<input type="checkbox"/>
			Not Yet Rotated	<input type="checkbox"/>

Patient Care 4: Spinal Neurological Surgery				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Performs a history and physical examination in patients with degenerative, traumatic, or neoplastic spinal disorders</p> <p>Implements spinal bracing or traction; assists with set-up, opening, and closing for spinal surgery procedures</p> <p>Provides routine peri-operative care for spinal surgery patients</p>	<p>Explains the risks and benefits of spinal surgery</p> <p>Assists with routine spinal surgery procedures</p> <p>Recognizes and initiates work-up of routine complications (e.g., pain, surgical site infection)</p>	<p>Formulates a diagnostic and treatment plan for a patient with degenerative, traumatic, or neoplastic spinal disorders</p> <p>Performs routine spinal surgery procedures; assists with complex spinal surgery procedures</p> <p>Manages routine complications and recognizes complex complications (e.g., myelopathy, CSF leak, instrument failure/malposition)</p>	<p>Adapts standard treatment plans and techniques to special circumstances (e.g., spinal deformity, post-irradiated spine, or infection)</p> <p>Performs complex spinal surgery procedures; assists with advanced spinal surgery and reconstructive procedures</p> <p>Manages complex complications</p>	<p>Leads discussion at an interdisciplinary spine case conference or specialty clinic</p> <p>Performs advanced spinal surgery and reconstructive procedures</p> <p>Utilizes patient outcome and registry data for quality improvement and treatment selection</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				<p>Not Yet Completed Level 1 <input type="checkbox"/></p> <p>Not Yet Rotated <input type="checkbox"/></p>

Patient Care 5: Vascular Neurological Surgery				
Level 1	Level 2	Level 3	Level 4	Level 5
Performs a history and physical examination in patients with ischemic or hemorrhagic stroke or vascular neurosurgical disorders	Explains the risks and benefits of vascular neurosurgical and endovascular procedures	Formulates a diagnostic and treatment plan for a patient with ischemic or hemorrhagic stroke or vascular neurosurgical disorders	Adapts standard treatment plans and techniques to special circumstances (e.g., vasculitis, ischemic heart disease)	Leads discussion at an interdisciplinary vascular neurosurgical and endovascular surgery case conference or specialty clinic
Manages and obtains CSF samples from external ventricular drains; assists with set-up, opening, and closing for vascular neurosurgical and endovascular procedures	Assists with routine vascular neurosurgical and endovascular procedures	Performs routine vascular neurosurgical and endovascular procedures; assists with complex vascular neurosurgical and endovascular procedures	Performs complex vascular neurosurgical and endovascular procedures; assists with advanced vascular neurosurgical and endovascular procedures	Performs advanced vascular neurosurgical and endovascular procedures
Provides routine peri-operative care for vascular neurosurgical and endovascular patients	Recognizes and initiates work-up of routine complications (e.g., seizure, hydrocephalus)	Manages routine complications and recognizes complex complications (e.g., cerebral vasospasm, herniation syndrome, intra-operative aneurysm rupture)	Manages complex complications	Utilizes patient outcome data for quality improvement; designs care pathways for vascular neurosurgical and endovascular patients
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Completed Level 1 <input type="checkbox"/>
				Not Yet Rotated <input type="checkbox"/>

Patient Care 6: Pediatric Neurological Surgery				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Performs an age-appropriate history and physical examination with developmental assessment, including for non-accidental trauma</p> <p>Performs CSF shunt tap and valve programming; assists with set-up, opening, and closing for pediatric neurosurgical procedures</p> <p>Provides routine peri-operative care for pediatric neurosurgical patients</p>	<p>Explains the risks and benefits of pediatric neurosurgical procedures; adapts diagnoses to age-related variations</p> <p>Assists with routine pediatric neurosurgical procedures</p> <p>Recognizes and initiates work-up of routine complications, including in pre-verbal children (e.g., CSF shunt failure, seizure)</p>	<p>Formulates a diagnostic and treatment plan for a pediatric patient; determines prognosis in severe brain injury and/or diagnoses brain death in infants and children</p> <p>Performs routine pediatric neurosurgical procedures; assists with complex pediatric neurosurgical procedures</p> <p>Manages routine complications and recognizes complex complications (e.g., hematoma, CSF leak)</p>	<p>Adapts standard treatment plans and techniques to special circumstances (e.g., very young children and infants)</p> <p>Performs complex pediatric neurosurgical procedures; assists with advanced pediatric neurosurgical procedures</p> <p>Manages complex complications</p>	<p>Leads discussion at an interdisciplinary pediatric case conference or specialty clinic; counsels expectant parents regarding fetal anomalies</p> <p>Performs advanced pediatric neurosurgical procedures</p> <p>Utilizes patient outcome data for quality improvement; designs care pathways for pediatric neurosurgical patients</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				<p>Not Yet Completed Level 1 <input type="checkbox"/></p> <p>Not Yet Rotated <input type="checkbox"/></p>

Patient Care 7: Traumatic Brain Injury (TBI)				
Level 1	Level 2	Level 3	Level 4	Level 5
Performs a history and physical examination in patients with severe TBI and assigns a Glasgow Coma Scale score	Explains risks and benefits of trauma neurosurgical procedures; evaluates patients with multiple trauma	Selects patients for operative intervention; prioritizes the management of injuries in patients with multiple trauma	Adapts standard treatment plans to special circumstances (e.g., medical comorbidity, coagulopathy)	Leads discussion at interdisciplinary trauma unit rounds and/or conference
Places an intracranial pressure (ICP) monitor; assists with set-up, opening, and closing for neurotrauma procedures	Assists with routine procedures for patients with TBI	Performs routine procedures for patients with TBI; assists with complex procedures for patients with TBI	Performs complex procedures for patients with TBI; assists with advanced procedures for patients with TBI	Performs advanced procedures for patients with TBI
Provides routine peri-operative care for patients with TBI	Recognizes and initiates work-up of routine complications (e.g., sinus injury, air embolus)	Manages routine complications and recognizes complex complications (e.g., cerebral herniation syndrome, persistent CSF fistula)	Manages complex complications	Utilizes patient outcome data for quality improvement; designs care pathways for neurotrauma patients
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Comments:				Not Yet Completed Level 1 <input type="checkbox"/>
				Not Yet Rotated <input type="checkbox"/>

Patient Care 8: Critical Care				
Level 1	Level 2	Level 3	Level 4	Level 5
Performs a history and physical examination in critically ill patients	Manages transient intracranial hypertension (e.g., hyperosmolar agents, CSF drainage)	Manages refractory intracranial hypertension (e.g., cerebral perfusion pressure directed therapy, advanced monitoring, decompressive craniectomy)	Diagnoses and initiates management of acute respiratory distress syndrome	Leads a multidisciplinary neurocritical care team
Inserts arterial and central venous catheters	Assists with routine neurocritical care unit procedures; manages airway and performs endotracheal intubation	Performs routine and assists with complex neurocritical care unit procedures; manages difficult and emergency airways	Performs complex and assists with advanced neurocritical care unit procedures; manages or initiates management of surgical airways	Performs advanced neurocritical care unit procedures; performs bronchoscopy
Manages neurocritical care unit admissions and discharges	Recognizes and initiates work-up of routine systemic complications (e.g., pneumonia, infection, pulmonary embolus, cardiac dysrhythmia, myocardial infarction)	Manages routine systemic complications and prioritizes simultaneous critical clinical events	Manages metabolic and nutritional support for critically ill patients	Manages complex critically ill patients (e.g., septic shock, organ failure); designs care pathways for critically ill patients
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Comments:			Not Yet Completed Level 1	<input type="checkbox"/>
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Medical Knowledge 1: Information Gathering and Interpretation				
Level 1	Level 2	Level 3	Level 4	Level 5
Correlates normal neuroanatomy and physiology with function	Correlates pathological neuroanatomy and physiology with function	Identifies anatomical and temporal patterns of disease occurrence	Interprets unusual variations in patterns of disease occurrence	Effectively teaches anatomic-pathologic correlation
Gathers, interprets, and reports basic diagnostic test results (e.g., serology, chest radiograph, brain and spine computed tomography (CT))	Describes indications for standard diagnostic testing	Prioritizes, orders, and interprets diagnostic tests appropriate to clinical urgency and complexity	Prioritizes, orders, and interprets complex diagnostic studies (e.g., SPECT [single-photon emission computerized tomography, cerebral perfusion, MR [magnetic resonance] tractography)	Utilizes complex diagnostic approaches in novel situations
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Comments:				Not Yet Completed Level 1 <input type="checkbox"/>
				Not Yet Rotated <input type="checkbox"/>

Medical Knowledge 2: Critical Thinking for Diagnosis and Therapy				
Level 1	Level 2	Level 3	Level 4	Level 5
Lists a differential diagnosis for common clinical presentations	Provides a comprehensive differential diagnosis for a wide range of clinical presentations	Provides a focused differential diagnosis based on individual patient presentation	Interprets anomalous presentations and rare disorders	Studies and reports challenging diagnostic presentations
Lists therapeutic options for common clinical presentations	Explains advantages and drawbacks of standard therapeutic options	Justifies optimal therapeutic option based on individual patient presentation	Adapts therapeutic choice to anomalous or rare patient presentations	Creates new or modifies existing therapeutic options
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Completed Level 1 <input type="checkbox"/>
				Not Yet Rotated <input type="checkbox"/>

Systems-Based Practice 1: Patient Safety and Quality Improvement				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of common patient safety events	Identifies system factors that lead to patient safety events	Participates in analysis of patient safety events (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 their families (simulated or actual)	Discloses patient safety events to patients and their 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 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
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Comments: <div style="text-align: right;">Not Yet Completed Level 1 <input type="checkbox"/></div>				

Systems-Based Practice 2: System Navigation for Patient-Centered Care				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of care coordination	Coordinates care of patients in routine clinical situations, effectively utilizing the roles of the interprofessional teams	Coordinates care of patients in complex clinical situations, effectively utilizing the roles of the interprofessional teams	Role models effective coordination of patient-centered care among different disciplines and specialties	Analyzes the process of care coordination and leads in the design and implementation of improvements
Identifies key elements 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, including outpatient settings	Improves quality of transitions of care within and across health care delivery systems to optimize patient outcomes
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				
				Not Yet Completed Level 1 <input type="checkbox"/>

Systems-Based Practice 3: Physician Role in Health Care Systems				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies key components of the 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 and transition of care
Describes the principles of cost-effective care	Delivers care with consideration of each patient's payment model	Engages with patients in shared decision making, informed by cost-effective care principles	Advocates for patient care needs (e.g., community resources, patient assistance resources) regardless of ability to pay	Participates in health policy advocacy activities
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments: <div style="text-align: right;">Not Yet Completed Level 1 <input type="checkbox"/></div>				

Practice-Based Learning and Improvement 1: Evidence-Based and Informed Practice				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates how to access and use available evidence, and incorporate patient preferences and values in order to take care of a routine patient	Articulates clinical questions and elicits patient preferences and values in order to guide evidence-based care	Locates and applies the best available evidence, integrated with patient preference, to the care of complex patients	Critically appraises and applies evidence, even in the face of uncertainty and conflicting evidence, to guide care tailored to the individual patient	Coaches others to critically appraise and apply evidence for complex patients, and/or participates in the development of guidelines
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments: <div style="text-align: right;">Not Yet Completed Level 1 <input type="checkbox"/></div>				

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) in order to inform 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 gap(s) between expectations and actual performance	Analyzes and reflects on the factors which contribute to gap(s) between expectations and actual performance	Analyzes, reflects on, and institutes behavioral change(s) to narrow the gap(s) between expectations and actual performance	Challenges assumptions and considers alternatives in narrowing the gap(s) between expectations and actual performance	Coaches others on reflective practice
Actively seeks opportunities to improve	Designs and implements a learning plan, with prompting	Independently creates and implements a learning plan	Uses performance data to measure the effectiveness of the learning plan and, when necessary, improves it	Facilitates the design and implementation of learning plans for others
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				
Not Yet Completed Level 1 <input type="checkbox"/>				

Professionalism 1: Professional Behavior and Ethical Principles				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies and describes potential triggers for professionalism lapses	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 self and others	Coaches others when their behavior fails to meet professional expectations
Describes when and how to appropriately report professionalism lapses, including strategies for addressing common barriers	Takes responsibility for own professionalism lapses	Recognizes need to seek help in managing and resolving complex ethical situations	Recognizes and utilizes appropriate resources for managing and resolving ethical dilemmas as needed (e.g., ethics consultations, literature review, risk management/legal consultation)	Identifies and seeks to address system-level factors that induce or exacerbate ethical problems or impede their resolution
Demonstrates knowledge of the ethical principles underlying informed consent, surrogate decision making, advance directives, confidentiality, error disclosure, stewardship of limited resources, and related topics	Analyzes straightforward situations using ethical principles	Analyzes complex situations using ethical principles		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				
Not Yet Completed Level 1 <input type="checkbox"/>				

Professionalism 2: Accountability/Conscientiousness				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Takes responsibility for failure to complete tasks and responsibilities, identifies potential contributing factors, and describes strategies for ensuring timely task completion in the future</p> <p>Responds promptly to requests or reminders to complete tasks and responsibilities</p>	<p>Performs tasks and responsibilities in a timely manner with appropriate attention to detail in routine situations</p> <p>Recognizes situations that may impact own ability to complete tasks and responsibilities in a timely manner</p>	<p>Performs tasks and responsibilities in a timely manner with appropriate attention to detail in complex or stressful situations</p> <p>Proactively implements strategies to ensure that the needs of patients, teams, and systems are met</p>	<p>Recognizes situations that may impact others' ability to complete tasks and responsibilities in a timely manner</p>	<p>Takes ownership of system outcomes</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Comments:</p> <p style="text-align: right;">Not Yet Completed Level 1 <input type="checkbox"/></p>				

Professionalism 3: Self-Awareness and Help-Seeking				
Level 1	Level 2	Level 3	Level 4	Level 5
Recognizes status of personal and professional well-being, with assistance	Independently recognizes status of personal and professional well-being	With assistance, proposes a plan to optimize personal and professional well-being	Independently develops a plan to optimize personal and professional well-being	Coaches others when emotional responses or limitations in knowledge/skills do not meet professional expectations
Recognizes limits in the knowledge/skills of self or team, with assistance	Independently recognizes limits in the knowledge/skills of self or team and demonstrates appropriate help-seeking behaviors	With assistance, proposes a plan to remediate or improve limits in the knowledge/skills of self or team	Independently develops a plan to remediate or improve limits in the knowledge/skills of self or team	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments: <div style="text-align: right;">Not Yet Completed Level 1 <input type="checkbox"/></div>				

Interpersonal and Communication Skills 1: Patient and Family-Centered Communication				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Uses language and nonverbal behavior to demonstrate respect and establish rapport</p> <p>Identifies common barriers to effective communication (e.g., language, disability) while accurately communicating own role within the health care system</p> <p>Identifies the need to adjust communication strategies based on assessment of patient/family expectations and understanding of their health status and treatment options</p>	<p>Establishes a therapeutic relationship in straightforward encounters using active listening and clear language</p> <p>Identifies complex barriers to effective communication (e.g., health literacy, cultural)</p> <p>Organizes and initiates communication with patient/family by introducing stakeholders, setting the agenda, clarifying expectations, and verifying understanding of the clinical situation</p>	<p>Establishes a therapeutic relationship in challenging patient encounters</p> <p>When prompted, reflects on personal biases while attempting to minimize communication barriers</p> <p>With guidance, sensitively and compassionately delivers medical information, elicits patient/family values, goals, and preferences, and acknowledges uncertainty and conflict</p>	<p>Easily establishes therapeutic relationships, with attention to patient/family concerns and context, regardless of complexity</p> <p>Independently recognizes personal biases while attempting to proactively minimize communication barriers</p> <p>Independently, uses shared decision making to align patient/family values, goals, and preferences with treatment options to make a personalized care plan</p>	<p>Mentors others in situational awareness and critical self-reflection to consistently develop positive therapeutic relationships</p> <p>Role models self-awareness while identifying a contextual approach to minimize communication barriers</p> <p>Role models shared decision making in patient/family communication, including those with a high degree of uncertainty/conflict</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Comments:</p> <p style="text-align: right;">Not Yet Completed Level 1 <input type="checkbox"/></p>				

Interpersonal and Communication Skills 2: Interprofessional and Team Communication				
Level 1	Level 2	Level 3	Level 4	Level 5
Respectfully requests a consultation	Clearly and concisely requests a consultation	Checks own understanding of consultant recommendations	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
Respectfully receives a consultation request	Clearly and concisely responds to a consultation request	Checks understanding of recommendations when providing consultation		
Uses language that values all members of the health care team	Communicates information effectively with all health care team members	Uses active listening to adapt communication style to fit team needs		
	Solicits feedback on performance as a member of the health care team	Communicates concerns and provides feedback to peers and learners	Communicates feedback and constructive criticism to superiors	Facilitates regular health care team-based feedback in complex situations
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments: <div style="text-align: right;">Not Yet Completed Level 1 <input type="checkbox"/></div>				

Interpersonal and Communication Skills 3: Communication within Health Care Systems				
Level 1	Level 2	Level 3	Level 4	Level 5
Accurately records information in the patient record	Demonstrates organized diagnostic and therapeutic reasoning through notes in the patient record	Concisely reports diagnostic and therapeutic reasoning in the patient record	Communicates clearly, concisely, timely, and in an organized written form, including anticipatory guidance	Models feedback to improve others' written communication
Safeguards patient personal health information	Demonstrates accurate, timely, and appropriate use of documentation shortcuts Documents required data in formats specified by institutional policy	Appropriately selects direct (e.g., telephone, in-person) and indirect (e.g., progress notes, text messages) forms of communication based on context	Achieves written or verbal communication (e.g., patient notes, email) that serves as an example for others to follow	Guides departmental or institutional communication around policies and procedures
Communicates through appropriate channels as required by institutional policy (e.g., patient safety reports, cell phone/pager usage)	Respectfully communicates concerns about the system	Uses appropriate channels to offer clear and constructive suggestions to improve the system	Initiates difficult conversations with appropriate stakeholders to improve the system	Facilitates dialogue regarding systems issues among larger community stakeholders (institution, health care system, field)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments: <div style="text-align: right;">Not Yet Completed Level 1 <input type="checkbox"/></div>				