

# Pathology Milestones for Singapore



May 2017

## Pathology Milestones for Singapore

The Milestones are designed only for use in evaluation of residents in the context of their participation in ACGME-I-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 competency in a specialty. 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.

## Milestones Reporting

This document presents milestones designed for programs to use in semi-annual review of resident performance and reporting to the ACGME-I. Milestones are knowledge, skills, attitudes, and other attributes for each of the ACGME-I competencies organized in a developmental framework from less to more advanced. They are descriptors and targets for resident performance as a learner moves from entry into their program through graduation.

For each period, review and reporting will involve selecting milestone levels that best describe each resident's current performance and attributes. Milestones are arranged in numbered levels. Tracking from "Level 1" to "Level 5" is synonymous with moving from novice to expert in the specialty. These levels do not correspond with time in the educational program. Dependent upon previous education and experience, residents may enter a program at varying points in the Milestones.

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).

**Level 1:** The resident is an early learner.

**Level 2:** The resident is advancing and demonstrating additional milestones.

**Level 3:** The resident continues to advance and demonstrate additional milestones; the resident consistently demonstrates the majority of milestones targeted for residency.

**Level 4:** The resident has advanced so that he or she now substantially demonstrates the milestones targeted for residency. This level is designed as the graduation target.

**Level 5:** The resident has advanced beyond performance targets set 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.

## **Additional Notes**

The “Level 4” Milestones are designed as the graduation *target* and *do not* represent a graduation *requirement*. Making decisions about readiness for graduation is the purview of the program director. Study of Milestones performance data will be required before the ACGME-I and its partners will be able to determine whether milestones in the first four levels appropriately represent the developmental framework, and whether Milestone data overall are of sufficient quality to be used for high-stakes decisions.

*Answers to Frequently Asked Questions about Milestones are posted on the ACGME-I website.*

The diagram below presents an example set of milestones for one sub-competency in the same format as the ACGME-I Report Worksheet. For each reporting period, a learner's performance on the milestones for each sub-competency will be indicated by selecting the level of milestones that best describes that learner'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 (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
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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not yet achieved 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: Consultation: Analyzes, Appraises, Formulates, Generates, and Effectively Reports Consultation				
Level 1	Level 2	Level 3	Level 4	Level 5
Understands the implications of and the need for a consultation	Prepares a draft consultative report (verbal or written)	Prepares a full consultative report with a written opinion for common diseases	Independently prepares a full consultative written report with comprehensive review of medical records on common and uncommon diseases	Is proficient in pathology consultations with comprehensive review of medical records
Understands and applies Electronic Medical Record (EMR) to obtain added clinical information	Understands the importance of accurate, timely, and complete reporting of laboratory test results	Answers routine pathology questions, drawing upon appropriate resources	Suggests evidence-based management, prognosis, and therapeutic recommendations based on the consultation	Is proficient in consultation regarding test utilization and treatment decisions based on advanced precision diagnostics and personalized medicine
Understands that advanced precision diagnostics and personalized medicine (e.g., molecular diagnostic testing) may be applied to patient care for genetic, neoplastic and infectious disorders, and population health	Understands the role of specific advanced precision diagnostics and personalized medicine assays, and how results affect patient diagnosis and prognosis, and overall patient care	Effectively communicates preliminary results on cases in progress	Provides consultation, as needed, to clinicians about utilization and interpretation of advanced precision diagnostics and personalized medicine	
		Understands pre-analytic issues and quality control for advanced precision diagnostics and personalized medicine		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

**Suggested Evaluation Methods:** Direct observation, Retrospective peer review, Portfolio, Feedback from clinical colleagues (360 evaluations), Peer review, HIPAA training documentation provided

Patient Care 2: Interpretation and Reporting: Analyzes Data, Appraises, Formulates, and Generates Effective and Timely Reports				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies key elements in the health care record	Uses clinical correlation to interpret and report test results	Limits and focuses a differential diagnosis	Leads discussion on developing a differential diagnosis based upon clinical information	Is proficient in using health care records and clinical information to develop a limited and focused differential diagnosis
Observes and assists in the interpretation and reporting of the diagnostic test	Describes the test platform and methodology	Knows the current and up-to-date literature about the test result	Interfaces with clinical team to recommend tests, based upon current literature	Critically evaluates and applies the current literature
Understands indications for common tests	Accurately interprets and reports the results	Prepares a differential diagnosis for abnormal results	Knows potential confounding factors that may contribute to erroneous results	Is proficient in the interpretation and reporting of clinical pathology test results in the context of the patient's medical condition
	Understands and applies algorithms in the work-up for common diagnoses	Understands and applies algorithms in the work-up for common and uncommon diagnoses	Understands and prudently applies justification for approval of costly testing	Is proficient in algorithms in the work-up for all diagnoses
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

**Suggested Evaluation Methods:** Direct observation, Simulation, Feedback from clinical colleagues (360 evaluations), Retrospective peer review, Quality management results

Patient Care 3: Interpretation and Diagnosis: Demonstrates Knowledge and Practices Interpretation and Analysis to Formulate Diagnoses				
Level 1	Level 2	Level 3	Level 4	Level 5
Recognizes the importance of a complete pathology report for patient care	<p>Begins to make connections between clinical differential diagnosis, gross, and microscopic pathologic findings</p> <p>Generates a list of next steps (ancillary testing; has awareness of options available) needed to refine differential in the clinical context</p> <p>Distinguishes normal from abnormal histology and recognizes confounding factors</p>	<p>Correlates the clinical differential diagnosis with gross and microscopic pathologic findings</p> <p>Recognizes appropriate ancillary tests and refines knowledge of "next steps" and proper utilization for application to differential</p> <p>Consistently recognizes and correctly identifies common histopathologic findings (develops a "good eye"); able to troubleshoot (e.g., tissue artifacts, processing and sampling issues)</p>	<p>Analyzes complex cases, integrates literature, and prepares a full consultative written report with comprehensive review of medical records</p> <p>Interprets ancillary testing results in clinical context</p> <p>Makes accurate diagnoses reliably, appreciates the nuances of diseases, and is able to independently troubleshoot confounding factors</p>	<p>Assesses, analyzes, and is able to distinguish subtle differences in difficult cases</p> <p>Is proficient in interpretation with comprehensive review of medical records</p> <p>Seeks appropriate consultations</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

**Suggested Evaluation Methods:** Direct observation, Simulation, Feedback from clinical colleagues (360 evaluations), Examination

Patient Care 4: Reporting: Analyzes Data, Appraises, Formulates, and Generates Effective and Timely Reports				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Applies prior knowledge and draws on resources to learn normal gross anatomy, histology, and special techniques</p> <p>Recognizes the role of the surgical pathologist in the management of patients, including the utilization of cancer staging</p>	<p>Attends and contributes to gross and microscopic conferences</p> <p>Brings clinical/ancillary information to sign-out (e.g., radiology, prior cases, reading about case)</p> <p>Generates preliminary report and/or Preliminary Autopsy Diagnosis (PAD) (for autopsy) prior to sign-out with attending staff/responsible physician</p> <p>Is aware of accepted standards for turn-around time</p> <p>Becomes familiar with synoptic reporting</p>	<p>Reliably applies knowledge of gross and histologic features in formulating a diagnosis for common entities; able to present at gross conference</p> <p>Selects, orders, and interprets clinical/ancillary information to refine a differential diagnosis</p> <p>Composes a complete and accurate report on common specimens</p> <p>Able to generate a cause of death and manner of death for autopsy</p> <p>Completes routine preliminary and final reports within standards for turn-around time</p> <p>Knows when synoptic reporting/template required</p>	<p>Reliably applies knowledge of gross and histologic features in formulating a diagnosis for common and uncommon entities</p> <p>Seeks appropriate consultations</p> <p>Integrates clinical/ancillary information into report</p> <p>Composes a complete and accurate report on common and uncommon specimens, including autopsies</p> <p>Completes complicated preliminary and final reports within standards for turn-around time</p>	<p>Participates in intradepartmental peer review consultation with colleagues</p> <p>Manages ambiguity and uncertainty in result interpretation and ancillary testing</p> <p>Produces timely reports with complete accurate gross and histopathologic findings, including ancillary studies; integrates evidence-based medicine/current literature and knowledge</p> <p>Ensures communication of results to appropriate audiences</p> <p>Keeps current with evolving standards of synoptic reporting</p>

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			Communicates effectively with family members, when applicable	
			Able to complete synoptic report accurately	
<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:				Not Yet Achieved Level 1 <input type="checkbox"/>

**Suggested Evaluation Methods:** Direct observation, Narrative, Feedback from clinical colleagues (360 evaluations), Retrospective peer review

Patient Care 5: Procedure - Surgical Pathology Grossing: Demonstrates Attitudes, Knowledge, and Practices that Enable Proficient Performance of Gross Examination (Analysis and Appraisal of Findings, Synthesis and Assembly, and Reporting)				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Understands common surgical procedures and the resultant specimens</p> <p>Recognizes the importance of grossing for the interpretation of histology and management of patients</p> <p>Applies prior knowledge and draws on resources to learn normal gross anatomy</p>	<p>Demonstrates familiarity with the gross manual or a similar reference book</p> <p>Ensures and maintains the integrity of specimens to avoid cross-contamination or identity mix-up</p> <p>Correctly describes and appropriately samples common surgical specimens, including necessary tissues for ancillary studies in correct media/fixative</p> <p>Correlates clinical and/or radiological information</p> <p>Demonstrates the components of an appropriate and complete report</p> <p>Develops time management skills</p>	<p>Applies principles of grossing to newly encountered specimen types</p> <p>Correctly describes and appropriately samples common and uncommon surgical specimens</p> <p>Recognizes when additional gross sampling is necessary for diagnosis or staging</p> <p>Demonstrates increasing efficiency in grossing specimens</p> <p>Produces reports that contain all the necessary information for patient management; edits transcribed reports effectively</p>	<p>Has a portfolio of grossed specimens that demonstrates competency across a range of complex specimens</p> <p>Correctly describes and appropriately samples all specimen types</p> <p>Efficient in grossing surgical specimens</p> <p>Dictates complete, logical, and succinct descriptions</p>	<p>Demonstrates an expanded portfolio of competency in grossing specimens of a widely diverse and complex specimen type</p> <p>Is proficient in the performance of surgical pathology gross examination</p> <p>Is proficient in the production of complete, logical, and succinct descriptions</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

**Suggested Evaluation Methods:** Direct observation, 360 evaluation, Periodic self-assessment, Narrative, Portfolio, Quality management

Patient Care 6: Procedure - Intra-Operative Consultation/Frozen Sections: Demonstrates Attitudes, Knowledge, and Practices that Enable Proficient Performance of Gross Examination, Frozen Section (Analysis and Appraisal of Findings, Synthesis and Assembly, and Reporting)				
Level 1	Level 2	Level 3	Level 4	Level 5
Understands common surgical procedures and the resultant specimens and potential intra-operative consultation/frozen section/intra-operative cytology (IOC/FS)	<p>Is aware of indications and contraindications for IOC/FS and follows protocols and regulations</p> <p>Procures tissue for diagnosis under supervision</p> <p>Prepares IOC/FS that are of good interpretive quality</p> <p>Understands and follows correct call-back guidelines</p> <p>Is aware of limitations of techniques and interpretation</p>	<p>Discusses with pathology attending staff member(s) any requests that are contraindicated</p> <p>Correctly selects tissue for frozen section diagnosis independently</p> <p>Performs high quality IOC/FS on technically difficult and multiple specimens; performs IOC/FS within turn-around time standards</p> <p>Effectively communicates the diagnosis and is cognizant of the impact of diagnosis on patient care, even in ambiguous situations</p> <p>Demonstrates knowledge of the limitations of techniques and interpretation</p>	<p>Appropriately and professionally discusses with requesting provider any IOC/FS that is contraindicated</p> <p>Responds appropriately to the concerns of the surgeon</p> <p>Given discussion of the case with the attending staff member(s), communicates appropriately with surgeon, asking appropriate questions that influence diagnosis</p> <p>Communicates limitations of techniques and interpretation to clinicians</p>	<p>Proficient in the performance of IOC/FS</p> <p>Manages competing tasks, especially in time sensitive situations</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

**Suggested Evaluation Methods:** Direct observation, Narrative, Feedback from clinical colleagues (360 evaluations), Retrospective peer review, Portfolio, Quality management

Patient Care 7: Procedures: Other (e.g., Bone Marrow Aspiration, Apheresis, Fine Needle Aspiration (FNA) Biopsy, Ultrasound Guided FNA, etc.)				
Level 1	Level 2	Level 3	Level 4	Level 5
Recognizes the role of the procedure	<p>Participates in simulated experience in the procedure, including slide preparation and staining, if applicable</p> <p>Observes and assists on the procedure</p> <p>Observes or participates in providing support to other service providers performing the procedure</p> <p>Is aware of potential complications of the procedure and need to obtain informed consent</p>	<p>Discusses with pathology attending staff member(s) any requests that are contraindicated and is able to assess specimen and procedure adequacy</p> <p>Performs a "time-out" according to standard procedures; performs the procedure; procures adequate specimens, if applicable</p> <p>Provides an accurate adequacy assessment and triages specimens for appropriate ancillary studies, if applicable</p> <p>Obtains informed consent</p> <p>Recognizes and understands the management of complications of the procedure</p>	<p>Appropriately and professionally documents procedure and discusses with clinical team and manages complications</p> <p>Performs the procedure with minimal supervision</p> <p>Understands indications for and performs ultrasound guided fine needle aspiration biopsy (FNAB) and/or core needle biopsy, if applicable</p> <p>Provides appropriate provisional assessment</p> <p>Manages complications of the procedure or refers to the appropriate health care professional</p>	Is proficient in the performance of the procedure
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

**Suggested Evaluation Methods:** Direct observation, Simulation

Medical Knowledge 1: Diagnostic Knowledge: Demonstrates Attitudes, Knowledge, and Practices that Incorporate Evidence-Based Medicine and Promote Lifelong Learning				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies the resources for learning in pathology	Assimilates medical knowledge in pathology from various learning sources  Demonstrates textbook-level diagnostic knowledge for pathology	Performs scientific literature review and investigation of clinical cases to inform patient care (evidence-based medicine) and improve diagnostic knowledge of pathology	Applies and synthesizes medical knowledge from scientific literature review and investigation to inform patient care (evidence-based medicine)  Presents and discusses cases  Demonstrates competence in diagnostic knowledge of pathology	Contributes to medical knowledge of others and participates in life-long learning through literature review, continuing medical education (CME), and Self-Assessment Modules (SAMs)  Demonstrates proficiency in knowledge of pathology
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

**Suggested Evaluation Methods:** Direct observation, Pre- and post-test, Rotation exams, Narrative, 360 evaluation, Board examination, Maintenance of certification/SAMs, Resident In-Service Examination (RISE) and Pathologist Recertification Individualized Self-Assessment Exam (PRISE)

Medical Knowledge 2: Teaching: Demonstrates Ability to Interpret, Synthesize, and Summarize Knowledge; Teaches Others				
Level 1	Level 2	Level 3	Level 4	Level 5
Participates in active learning	Understands and begins to acquire the skills needed for effective teaching  Teaches medical students, as needed	Teaches peers as needed	Teaches across departments and at all levels, including to clinicians, patients, and families	Models teaching across departments and at all levels, including for clinicians, patients, and families
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

**Suggested Evaluation Methods:** Direct observation, 360 evaluations, Teaching evaluations, Student performance on exams, Simulations, Conference presentation evaluation portfolio

**Medical Knowledge 3: Procedure - Autopsy: Demonstrates Knowledge and Practices that Enable Proficient Performance of a Complete Autopsy (Analysis and Appraisal of Findings, Synthesis and Assembly, and Reporting)**

Level 1	Level 2	Level 3	Level 4	Level 5
<p>Understands the principles of confidentiality, universal precautions, chemical hazards, and personal protective equipment</p> <p>Understands the value of an autopsy</p>	<p>Properly identifies the decedent and verifies consent and limitations to extent of the autopsy</p> <p>Performs all seven aspects of a routine autopsy</p> <p>Concisely reviews and presents clinical records/history; contacts the clinical team in advance of the case and summarizes questions posed by the clinical team</p> <p>Is aware of reporting regulations, such as legal jurisdiction, statutes regarding authorization to perform autopsy (medical examiner), device reporting, communicable diseases</p>	<p>Plans and performs complex/difficult cases</p> <p>Assists in preparation of presentations for morbidity and mortality (M&amp;M), Clinical Pathologic Conference (CPatient Care), or other conferences</p> <p>Understands chain of custody, the elements of scene investigation, trace evidence, and court testimony</p>	<p>Performs uncomplicated gross dissection within four hours</p> <p>Presents results at M&amp;M, CPatient Care, or other conferences, and effectively answers clinical questions</p> <p>Assesses and applies chain of custody, interprets the elements of scene investigation, trace evidence, and court testimony</p>	<p>Is proficient in the performance of a complete autopsy and in reporting the results in a timely manner</p> <p>Is proficient in the presentation of results at M&amp;M, CPatient Care, or other conferences, and in answering clinical questions</p> <p>Is proficient in the discussion of the chain of custody, and interpretation and assessment of the elements of scene investigation, trace evidence, and giving court testimony</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<p>Comments:</p>				<p>Not Yet Achieved Level 1 <input type="checkbox"/></p>

**Suggested Evaluation Methods:** Direct observation; Feedback from clinical colleagues (360 evaluations), Narrative, Portfolio review, Quality management; Peer evaluation

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 (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
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 Achieved Level 1 <input type="checkbox"/>

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 their 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
Demonstrates knowledge of population and community health needs and disparities	Identifies specific population and community health needs and inequities for their local population	Uses local 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	Leads innovations and advocates for populations and communities with health care inequities
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved 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 components of the complex health care system	Describes the physician's role and how the interrelated components of complex health care system impact patient care	Analyzes how personal practice affects the system (e.g., length of stay, readmission rates, clinical efficiency)	Manages the interrelated components of the complex health care systems for efficient and effective patient care	Advocates for or leads change to enhance systems for high-value, efficient, and effective patient care
Describes basic health payment systems, including government, private, public, and uninsured care and different practice models	Delivers care informed by patient-specific payment model	Utilizes shared decision making in patient care, taking into consideration payment models	Advocates for patient care understanding the limitations of each patient's payment model (e.g., community resources, patient assistance resources)	Participates in advocacy activities for health policy to better align payment systems with high-value care
		Identifies resources and effectively plans for transition to practice (e.g., information technology, legal, billing and coding, financial, personnel)	Describes basic elements needed to transition to practice (e.g., contract negotiations, malpractice insurance, government regulation, compliance)	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

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:				Not Yet Achieved Level 1 <input type="checkbox"/>

Practice-Based Learning and Improvement 2: Reflective Practice and Commitment to Personal Growth				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Accepts responsibility for personal and professional development by establishing goals</p> <p>Identifies the factors that contribute to gap(s) between expectations and actual performance</p> <p>Actively seeks opportunities to improve</p>	<p>Demonstrates openness to performance data (feedback and other input) in order to inform goals</p> <p>Analyzes and reflects on the factors that contribute to gap(s) between expectations and actual performance</p> <p>Designs and implements a learning plan, with prompting</p>	<p>Seeks performance data episodically, with adaptability and humility</p> <p>Analyzes, reflects on, and institutes behavioral change(s) to narrow the gap(s) between expectations and actual performance</p> <p>Independently creates and implements a learning plan</p>	<p>Intentionally seeks performance data consistently, with adaptability and humility</p> <p>Challenges assumptions and considers alternatives in narrowing the gap(s) between expectations and actual performance</p> <p>Uses performance data to measure the effectiveness of the learning plan and, when necessary, improves it</p>	<p>Role models consistently seeking performance data, with adaptability and humility</p> <p>Coaches others on reflective practice</p> <p>Facilitates the design and implementation of learning plans for others</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:			Not Yet Achieved Level 1	<input type="checkbox"/>

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

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  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:				Not Yet Achieved Level 1 <input type="checkbox"/>

Interpersonal and Communication Skills 1: Patient- and Family-Centered Communication				
Level 1	Level 2	Level 3	Level 4	Level 5
<p>Uses language and non-verbal 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 an 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 practice while identifying teaching a contextual approach to minimize communication barriers</p> <p>Role models shared decision making in patient/family communication in situations with a high degree of uncertainty/conflict</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

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	Communicates feedback and constructive criticism to superiors	Facilitates regular health care team-based feedback in complex situations
Uses language that values all members of the health care team	Communicates information effectively with all health care team members  Solicits feedback on performance as a member of the health care team	Uses active listening to adapt communication style to fit team needs  Communicates concerns and provides feedback to peers and learners		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>

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, in a timely manner, 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	Appropriately selects direct (e.g., telephone, in-person) and indirect (e.g., progress notes, text messages) forms of communication based on context	Produces written or verbal communication (e.g., patient notes, e-mail, etc.) 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)	Documents required data in formats specified by institutional policy  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 (e.g., institution, health care system, field)
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:				Not Yet Achieved Level 1 <input type="checkbox"/>