

The Pathology Milestone Project

A Joint Initiative of

The Accreditation Council for Graduate Medical Education

and

The American Board of Pathology



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The Pathology Milestone Project

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.

Pathology 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 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 a 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 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 Reporting Form diagram on page v below.) A general interpretation of each level for pathology is below:

- Level 1:** The resident is a graduating medical student/experiencing first day of residency.
- 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

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 high stakes decisions.

Some milestone descriptions include statements about performing independently. These activities must occur in conformity to the ACGME supervision guidelines, as well as to institutional and program policies. For example, a resident who performs a procedure independently must, at a minimum, be supervised through oversight.

Answers to Frequently Asked Questions about Milestones are available on the Milestones web page:

<http://www.acgme.org/acqmeweb/Portals/0/MilestonesFAQ.pdf>

ACGME Report Form

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 the milestones *or*
- selecting the “Has not Achieved Level 1” option

MK2: Teaching: Demonstrates ability to interpret, synthesize, and summarize knowledge; teaches others (AP/CP)					
Has not Achieved Level 1	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"/>	<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).

PATHOLOGY MILESTONES
ACGME Reporting Worksheet

PC1: Consultation: Analyzes, appraises, formulates, generates, and effectively reports consultation (AP and CP)					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Understands the implications of and the need for a consultation</p> <p>Observes and assists in the consultation</p> <p>Understands the concept of a critical value and the read-back procedure</p> <p>Understands and applies Electronic Medical Record (EMR) to obtain added clinical information</p> <p>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</p>	<p>Prepares a draft consultative report (verbal or written)</p> <p>Performs timely, clinically useful consultation for requests for products or additional testing</p> <p>Understands rationale for the critical value list</p> <p>Knows the critical value list and participates in the critical value call-back of results</p> <p>Understands the importance of accurate, timely, and complete reporting of laboratory test results</p> <p>Understands the role of specific advanced precision diagnostics and personalized medicine assays, and how results affect patient diagnosis and prognosis, and overall</p>	<p>Prepares a full consultative report with a written opinion for common diseases</p> <p>Prioritizes and presents patient care issues for report after call</p> <p>Answers routine pathology questions, drawing upon appropriate resources</p> <p>Applies the escalation procedure for failed critical value call-backs</p> <p>Effectively communicates preliminary results on cases in progress</p> <p>Understands pre-analytic issues and quality control for advanced precision diagnostics and personalized medicine</p>	<p>Independently prepares a full consultative written report with comprehensive review of medical records on common and uncommon diseases</p> <p>Runs report conference after call</p> <p>Develops a portfolio of clinical consultation experience</p> <p>Recommends new or alternate escalation procedures for failed critical value call-backs as needed</p> <p>Suggests evidence-based management, prognosis, and therapeutic recommendations based on the consultation</p> <p>Provides consultation, as needed, to clinicians about utilization and interpretation of advanced</p>	<p>Proficient in pathology consultations with comprehensive review of medical records</p> <p>Demonstrates an expanded portfolio of clinical and patient care experience with pathology consultation</p> <p>Participates in intuitional processes of generating the critical value list</p> <p>Is proficient in consultation regarding test utilization and treatment decisions based on advanced precision diagnostics and personalized medicine</p>

		patient care		precision diagnostics and personalized medicine						
<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:										

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

PC2: Interpretation and reporting: Analyzes data, appraises, formulates, and generates effective and timely reports (CP)					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Identifies key elements in the health care record</p> <p>Observes and assists in the interpretation and reporting of the diagnostic test</p> <p>Understands indications for common tests</p>	<p>Uses clinical correlation to interpret and report test results</p> <p>Describes the test platform and methodology</p> <p>Accurately interprets and reports the results</p> <p>Understands and applies algorithms in the work-up for common diagnoses</p>	<p>Limits and focuses a differential diagnosis</p> <p>Knows the current and up-to-date literature about the test result</p> <p>Prepares a differential diagnosis for abnormal results</p> <p>Understands and applies algorithms in the work-up for common and uncommon diagnoses</p>	<p>Able to lead discussion on developing a differential diagnosis based upon clinical information</p> <p>Interfaces with clinical team to recommend tests, based upon current literature</p> <p>Knows potential confounding factors that may contribute to erroneous results</p> <p>Understands and prudently applies justification for approval of costly testing</p>	<p>Proficient in using health care records and clinical information to develop a limited and focused differential diagnosis</p> <p>Critically evaluates and applies the current literature</p> <p>Proficient in the interpretation and reporting of clinical pathology test results in the context of the patient's medical condition</p> <p>Proficient in algorithms in the work-up for all diagnoses</p> <p>Writes policies on algorithms for testing</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

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

PC3: Interpretation and diagnosis: Demonstrates knowledge and practices interpretation and analysis to formulate diagnoses (AP)					
Has not Achieved Level 1	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>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"/>	<input type="checkbox"/>
Comments:					

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

PC4: Reporting: Analyzes data, appraises, formulates, and generates effective and timely reports (AP)					
Has not Achieved Level 1	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>Communicates effectively with family members, when applicable</p> <p>Able to complete synoptic report accurately</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>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

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

PC5: Procedure: Surgical Pathology grossing: Demonstrates attitudes, knowledge, and practices that enables proficient performance of gross examination (analysis and appraisal of findings, synthesis and assembly, and reporting) (AP)					
Has not Achieved Level 1	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>Understands 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>Produces reports that contain all the necessary information for patient management; edits transcribed reports effectively</p> <p>Demonstrates increasing efficiency in grossing specimens</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>Dictates complete, logical, and succinct descriptions</p> <p>Efficient in grossing surgical specimens</p>	<p>Demonstrates an expanded portfolio of competency in grossing specimens of a widely diverse and complex specimen type</p> <p>Proficient in the performance of surgical pathology gross examination</p> <p>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"/>	<input type="checkbox"/>
Comments:					

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

PC6: Procedure: Intra-operative consultation/ frozen sections: Demonstrates attitudes, knowledge, and practices that enables proficient performance of gross examination, frozen section (analysis and appraisal of findings, synthesis and assembly, and reporting) (AP)					
Has not Achieved Level 1	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>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>Able to perform 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>Able to manage competing tasks, especially in time sensitive situations</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

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

PC7: Procedures: If program teaches other procedures (e.g., bone marrow aspiration, apheresis, fine needle aspiration biopsy, ultrasound guided FNA, etc.) (AP/CP)					
Has not Achieved Level 1	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, obtains informed consent, 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>Able to perform the procedure with minimal supervision</p> <p>Understands indications for and/or 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>	Proficient in the performance of the procedure
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Suggested Evaluation Methods: Direct observation, Simulation

MK1: Diagnostic Knowledge: Demonstrates attitudes, knowledge, and practices that incorporate evidence-based medicine and promote life-long learning (AP/CP)					
Has not Achieved Level 1	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"/>	<input type="checkbox"/>
Comments:					

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)

MK2: Teaching: Demonstrates ability to interpret, synthesize, and summarize knowledge; teaches others (AP/CP)					
Has not Achieved Level 1	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"/>	<input type="checkbox"/>
Comments:					

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

MK3: Procedure: Autopsy: Demonstrates knowledge and practices that enable proficient performance of a complete autopsy (analysis and appraisal of findings, synthesis and assembly, and reporting) (AP)					
Has not Achieved Level 1	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>Able to perform 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>Able to plan and perform complex/difficult cases</p> <p>Assists in preparation of presentations for morbidity and mortality (M&M), Clinical Pathologic Conference (CPC), 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&M, CPC, 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>Proficient in the performance of a complete autopsy and in reporting the results in a timely manner</p> <p>Proficient in the presentation of results at M&M, CPC, or other conferences, and in answering clinical questions</p> <p>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"/>	<input type="checkbox"/>
Comments:					

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

SBP1: Patient safety: Demonstrates attitudes, knowledge, and practices that contribute to patient safety (AP/CP)					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Understands the importance of identity and integrity of the specimen and requisition form and verifies the identity</p> <p>Understands the risk inherent in hand-overs</p>	<p>Consistently checks identity and integrity of specimen</p> <p>Independently obtains clinical information when needed</p> <p>Explores other resources such as EMR and radiology</p> <p>Handles deviations from policies (waivers) with supervision</p> <p>Performs hand-overs in an appropriate manner, according to guidelines (e.g., Situation-Background-Analysis-Recommendation [SBAR] or local guidelines)</p>	<p>Trouble-shoots pre-analytic problems, as needed, with minimal supervision, including deviations from policies (waivers)</p> <p>Follows patient safety policies and accreditation requirements</p>	<p>Trouble-shoots patient safety issues (including pre-analytic, analytic, and post-analytic), as needed, without supervision</p>	<p>Models patient safety practices</p> <p>Writes and implements policies on patient safety, as needed</p> <p>Completes an advanced MOC patient safety module</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Suggested Evaluation Methods: Direct observation, Narrative, QA reports (misidentification rates, amended report rates), Transfusion committee results/work-ups, Documentation provided

SBP2: Lab Management: Regulatory and compliance: Explains, recognizes, summarizes, and is able to apply regulatory and compliance issues (AP/CP)

Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Knows that laboratories must be accredited</p> <p>Can define appropriate disclosure of protected health information (PHI) as defined by the Health Insurance Portability and Accountability Act (HIPAA)</p>	<p>Knows accrediting agencies of the laboratory</p> <p>Is aware of requirements for institutional review for human experimentation (research) and biospecimen donation</p> <p>Understand and apply policies and procedures in PHI as defined by HIPAA</p>	<p>Understands the components of lab accreditation and regulatory compliance (Clinical Laboratory Improvement Amendments [CLIA] and others), either through training or experience</p> <p>Confirms institutional review board approval prior to biospecimen procurement</p> <p>Completes laboratory inspector training</p> <p>Understands ICD9 (ICD10) coding and the need to document appropriately in reports</p> <p>Teaches allied health professionals and clerical staff as necessary about the policies and procedures of PHI as defined by HIPAA</p>	<p>Understands the components and processes for credentialing and privileging</p> <p>Participates in an internal or external laboratory inspection</p> <p>Able to correctly use Current Procedural Terminology (CPT) and ICD9 (ICD10) codes for billing purposes; understands elements of a compliance plan</p> <p>Assists colleagues as needed with policies and procedures of PHI as defined by HIPAA</p>	<p>Participates in and complies with ongoing and focused competency assessment</p> <p>Participates in or leads internal or external laboratory inspections</p> <p>Participates in institutional review process, as needed</p> <p>Creates and follows a compliance plan</p> <p>Uses best practices for billing compliance</p>

Comments:

Suggested Evaluation Methods: Direct observation, Portfolio, Simulation, Examination, Team leader performance evaluation, Portfolio review, Quality management; Peer evaluation

SBP3: Lab Management: Resource Utilization (personnel and finance): Explains, recognizes, summarizes, and is able to apply resource utilization (AP/CP)					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Interprets an organizational chart and is aware of employment contracts and benefits</p> <p>Describes a budget</p>	<p>Knows the personnel and lines of reporting in the laboratory</p> <p>Recognizes different budget types (i.e., capital vs. operating budget)</p> <p>Understands the basics of pathology practice finance (e.g., Part A and Part B, Centers for Medicare & Medicaid Services [CMS])</p>	<p>Understands and describes the process of personnel management and employment laws (e.g., interview questions, Family and Medical Leave Act, termination policies)</p> <p>Understands key elements of hospital and laboratory budgets</p>	<p>Creates a basic job description and participates in employee interviews/performance evaluation (real or simulated experiences)</p> <p>Participates in a budget cycle exercise (draft, defend, and propose logical cuts and/or additions)</p>	<p>Manages personnel effectively</p> <p>Develops and manages a laboratory budget</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Suggested Evaluation Methods: Direct observation, Portfolio, Simulation, 360 evaluation, Analysis of resident evaluations (meeting, employee interview, difficult conversations)

SBP4: Lab Management: Quality, risk management, and laboratory safety: Explains, recognizes, summarizes, and is able to apply quality improvement, risk management and safety issues (AP/CP)					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	Participates in basic safety training (e.g., Occupational Safety and Health Administration [OSHA], blood borne pathogen, personal protective equipment)	Participates in laboratory specific safety training (e.g., sharps disposal, proper equipment utilization) Understands when and how to file an incident or safety report Understands the concept of a laboratory quality management plan	Interprets quality data and charts and trends Understands continuous improvement tools, such as Lean and Six Sigma Understands serious reportable events (SREs) and appropriate reporting, and participates in root cause analysis (RCA) Demonstrates a knowledge of proficiency testing and its consequences Attends and participates in quality improvement meetings	Has completed a quality improvement project Reviews and analyzes proficiency testing results Participates in department and hospital-wide quality, risk management, and safety initiatives	Utilizes continuous improvement tools, such as Lean and Six Sigma Manages laboratory quality assurance and safety
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Suggested Evaluation Methods: Direct observation, Portfolio, Simulation, Narrative, Examination, 360 evaluations

SBP5: Lab Management: Test utilization: Explains, recognizes, summarizes, and is able to apply test utilization (AP/CP)					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	Is aware of the test menu and rationale for ordering	Organizes basic data for utilization review Identifies key elements of ordering practices Able to understand appropriate ordering or inappropriate ordering and over-utilization	Able to interpret charts and graphs that demonstrate utilization patterns Intervenes in inappropriate or over-utilization situations	Able to create charts and graphs that demonstrate utilization patterns (simulated or real experiences) Maintains a portfolio that includes experience in test utilization reviews and interventions that drive change	Demonstrates a broad portfolio of analyses for utilization reviews in complex scenarios and team management to drive change in areas both within and outside of the department
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Suggested Evaluation Methods: Direct observation, Portfolio, 360 analysis, Simulation

SBP6: Lab Management: Technology assessment: Explains, recognizes, summarizes, and is able to apply technology assessment (AP/CP)					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	Understands the value of new technology	Understands the need for a process in implementing new technology Aware of cost-benefit analysis for new technology	Understands and describes the process of implementing new technology Able to perform a cost-benefit analysis	Participates in new instrument and test selection, verification, implementation, and validation (including reference range analysis) and maintains a portfolio of participation in these experiences	Acts as primary assessor for new technology and is able to lead efforts to optimize test utilization and resource management
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Suggested Evaluation Methods: Direct observation, Portfolio, Simulation

SBP7: Informatics: Explains, discusses, classifies, and applies clinical informatics (AP/CP)					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	Demonstrates familiarity with basic technical concepts of hardware, operating systems, and software for general purpose applications	Understands lab specific software, key technical concepts and subsystems on interfaces, workflow, barcode application, automation systems (enterprise systems architecture)	Applies informatics skills as needed in project management (data management, computational statistics)	Participates in operational and strategy meetings, apprentices troubleshooting with IT staff, applies informatics skills in laboratory management and integrative bioinformatics (able to aggregate multiple data sources and often multiple data analysis services)	<p>Is proficient in medical informatics systems</p> <p>Able to assess and purchase a laboratory information system for anatomic and/or clinical pathology laboratories</p> <p>Able to utilize medical informatics in the direction and operation of the laboratory</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Suggested Evaluation Methods: Direct observation, 360 evaluation, Portfolio data

PBL1: Recognition of errors and discrepancies: Displays attitudes, knowledge, and practices that permit improvement of patient care from study of errors and discrepancies. (AP/CP)					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	Acknowledges and takes responsibility for errors when recognized	Recognizes limits of own knowledge Initiates self-reflection process, (e.g., as evidenced in self-assessment interviews with program director)	Reflects upon errors in a group setting (such as M&M type conference setting) Participates in root cause analysis (RCA)	Demonstrates significant awareness of own blind spots Participates in or leads communication of error/discrepancies to clinicians	Models use of errors and discrepancies to improve practice Provides immediate communication of error/discrepancies to clinicians
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Suggested Evaluation Methods: Self-assessment (written and verbal), Direct observation, Narrative

PBLI2: Scholarly Activity: Analyzes and appraises pertinent literature, applies scientific method to identify and interpret evidence-based medicine and apply it clinically (AP/CP)					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Utilizes and applies basic texts</p> <p>Uses presentation software, online literature databases, and searches as needed</p> <p>Demonstrates working knowledge of basic statistical analysis</p>	<p>Develops knowledge of the basic principles of research (demographics, Institutional Review Board [IRB], human subjects), including how research is conducted, evaluated, explained to patients, and applied to patient care</p>	<p>Critically reads and incorporates the medical literature into presentations and lectures</p> <p>Applies knowledge of the basic principles of research</p> <p>Adds to a portfolio of scholarly activities, which may include manuscript preparation, abstract presentation at a local, regional or national meeting, or other scientific presentation</p>	<p>Critically examines literature for study design and use in evidence-based clinical care</p> <p>Identifies gaps in the currently available knowledge</p> <p>Has a well developed portfolio of scholarly activities</p>	<p>Proficient in critical evaluation of the literature and participates in life-long learning</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Suggested Evaluation Methods: Direct observation and evaluation of presentations by participants, Portfolio, Examination

PROF1: Licensing, certification, examinations, credentialing: Demonstrates attitudes and practices that ensures timely completion of required examinations and licensure (AP/CP)					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	Completes and passes Step 2CK and 2CS of United States Medical Licensing Examination (USMLE)	Completes and passes Step 3 of USMLE Performs at expected level on objective examinations Begins assembling portfolio of experiences, including case log and participation in administrative tasks	Performs at expected level on objective examinations Demonstrates expanded portfolio and reviews with program director at semi-annual evaluation	Applies for full and unrestricted medical license Demonstrates complete portfolio and reviews with program director at semi-annual evaluation	Obtains full and unrestricted medical license Board-eligible/Board-certified and begins to participate in maintenance of certification (SAMS, etc.) Maintains portfolio
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Suggested Evaluation Methods: Documentation provided

PROF2: Professionalism: Demonstrates honesty, integrity, and ethical behavior (AP/CP)					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Behaves truthfully and understands the concepts of ethical behavior, occasionally requiring guidance; seeks counsel when ethical questions arise</p> <p>Understands the concepts of respect, compassion, and empathy</p>	<p>Is truthful, acknowledges personal near misses and errors, and puts the needs of patients first</p> <p>Engages in ethical behavior</p> <p>Observes patient confidentiality</p> <p>Manifests sensitivity to patient's fears and concerns</p> <p>Demonstrates respect, compassion, and empathy to all</p>	<p>Demonstrates truthfulness to all members of the health care team</p> <p>Identifies, communicates, and corrects errors</p> <p>Demonstrates respect, compassion, and empathy, even in difficult situations</p>	<p>Exemplifies truthfulness to all members of the health care team</p> <p>Serves as a role model for members of the health care team in accepting personal responsibility</p> <p>Puts the needs of each patient above his or her own interests</p> <p>Promotes respect, compassion, and empathy in others</p>	<p>Models truthfulness to all members of the health care team; is viewed as a role model in accepting personal responsibility by members of the health care team; and always puts the needs of each patient above his or her own interests</p> <p>Models respect, compassion, and empathy, in complex situations</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Suggested Evaluation Methods: Direct observation, 360 evaluation

PROF3: Professionalism: Demonstrates responsibility and follow-through on tasks (AP/CP)					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	Completes assigned tasks on time	Dependably completes assigned tasks in a timely manner Assists team members when requested Respects assigned schedules	Anticipates team needs and assists as needed	Anticipates team needs and takes leadership role to independently implement solutions	Exemplifies effective management of multiple competing tasks, including follow-through on tasks Is source of support/guidance to other members of health care team
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Suggested Evaluation Methods: Direct observation, 360 evaluation, Portfolio data (e.g., autopsy TAT)

PROF4: Professionalism: Gives and receives feedback (AP/CP)					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	Receives feedback constructively	Accepts feedback constructively and modifies practice in response to feedback	Able to provide constructive feedback	Exemplifies giving and receiving constructive feedback Encourages and actively seeks feedback to improve performance	Models giving and receiving constructive feedback Encourages and actively seeks feedback to improve performance
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Suggested Evaluation Methods: Direct observation, 360 evaluation, Role-play or simulation, Resident experience narrative

PROF5: Professionalism: Demonstrates responsiveness to each patient’s unique characteristics and needs (AP/CP)					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	Respects diversity, vulnerable populations, and patient autonomy	Embraces diversity and respects vulnerable populations Is aware of potential for bias or cultural differences to affect clinical care	Demonstrates cultural competency Identifies and avoids biases, and recognizes cultural differences that may affect clinical care	Exemplifies cultural competency Identifies and avoids biases, and recognizes cultural differences that may affect clinical care	Models cultural competency Works with peers to avoid biases Recognizes cultural differences that may affect clinical care
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Suggested Evaluation Methods: Direct observation, 360 evaluation, Role-play or simulation, Resident experience narrative

PROF6: Professionalism: Demonstrates personal responsibility to maintain emotional, physical, and mental health (AP/CP)					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Is aware of importance of emotional, physical, and mental health and issues related to fatigue/sleep deprivation</p> <p>Exhibits basic professional responsibilities, such as timely reporting for duty rested, readiness to work, and being appropriately dressed</p>	<p>Manages emotional, physical, and mental health and issues related to fatigue/sleep deprivation</p> <p>Recognizes signs of impairment, and seeks appropriate help when needed</p>	<p>Manages emotional, physical, and mental health and issues related to fatigue/sleep deprivation, especially in stressful conditions</p>	<p>Recognizes signs of impairment in self and others, and facilitates seeking appropriate help when needed</p> <p>Anticipates and avoids behaviors that might lead to impairment</p>	<p>Accesses institutional resources to address impairment, and initiates seeking appropriate help when needed</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Suggested Evaluation Methods: Direct observation, 360 evaluation, Role-play or simulation, Resident experience narrative

ICS1: Intra-departmental interactions and development of leadership skills: Displays attitudes, knowledge, and practices that promote safe patient care through team interactions and leadership skills within the laboratory (AP/CP)					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Demonstrates respect for and willingness to learn from all members of the pathology team</p> <p>Is aware of the significance of conflict in patient care</p>	<p>Works effectively with all members of the pathology team</p> <p>Attends laboratory, departmental, or institutional committee meetings</p> <p>Aware of the mechanisms for conflict resolution</p> <p>Participates in a cytopathology team with cytopathologists, cytotechnologists and lab assistants, or surgical pathology team with surgical pathologists, histotechnicians and lab assistants or clinical pathology team with the pathologist, clinical laboratory scientists and lab assistants</p>	<p>Understands own role on the pathology team, and flexibly contributes to team success through a willingness to assume appropriate roles as needed</p> <p>Understands the basics of running a meeting</p> <p>Utilizes mechanisms for conflict resolution and helps to defuse and ameliorate conflict</p> <p>Participates in groups to accomplish goals</p>	<p>Helps to organize the pathology team to facilitate optimal communication and co-education among members</p> <p>Demonstrates the ability to lead and run an effective meeting</p> <p>Participates effectively in conflict resolution</p> <p>Demonstrates ability to lead groups to reach a consensus and accomplish goals</p>	<p>Leads the pathology team effectively</p> <p>Models respect for others</p> <p>Models effective conflict prevention and resolution skills</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Suggested Evaluation Methods: Direct observation, 360 evaluation, Narrative

ICS2: Inter-departmental and Health care Clinical Team interactions: Displays attitudes, knowledge, and practices that promote safe patient care through interdisciplinary team interactions (AP/CP)					
Has not Achieved Level 1	Level 1	Level 2	Level 3	Level 4	Level 5
	<p>Recognizes the importance of clinical input in formulating a differential diagnosis and composing a final diagnosis</p> <p>Is aware that multi-disciplinary conferences are used to further appropriate patient care</p> <p>Is aware of pathologist's role in the clinical team</p> <p>Understands utility of communication with other members of the clinical team</p>	<p>Participates through observation and active interaction with clinicians to obtain relevant clinical and/or radiologic data</p> <p>Attends multidisciplinary conferences</p> <p>Recognizes the importance of timely production of a final diagnosis and the role it plays in patient care</p> <p>Appropriately triages requests for information from the clinical team</p> <p>Is aware of the limitations of own knowledge</p>	<p>Assesses, analyzes, and interprets pathology reports and is able to discuss findings in consultation with clinical colleagues</p> <p>Prepares and presents cases at multidisciplinary conferences</p> <p>Responds to inquiries from the clinical team to contribute to patient care</p> <p>Effectively communicates clinically significant or unexpected values, including critical values</p> <p>Is aware of the limitations of medical knowledge</p>	<p>Routinely interfaces with clinical colleagues to formulate a narrow differential diagnosis and arrive at a final diagnosis</p> <p>Can lead multidisciplinary conferences</p> <p>Knows how subtleties may impact or alter patient care; recognizes and uses nuances in the proper wording in the discussion of pathology findings</p> <p>Participates in or leads communication with the clinical team to contribute to patient care</p> <p>Communicates the limitations of medical knowledge</p>	<p>Fully participates as a member of the health care team, and is recognized as proficient by peers and clinical colleagues</p> <p>Organizes and is responsible for multidisciplinary conferences</p> <p>Serves as a consultant to the health care team</p>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comments:					

Suggested Evaluation Methods: Direct observation, 360 evaluation, Narrative