

**Entrustable Professional Activities (EPAs) for Pathology Graduate Medical
Education: Recommendations from the College of American Pathologists (CAP)
Graduate Medical Education Committee (GMEC)**

EPAs for Anatomic Pathology:

1. Perform gross dissection of simple and complex specimens
2. Compose a diagnostic report for surgical pathology specimens
3. Perform intraoperative consultations and frozen sections
4. Perform fine needle aspirations (FNA)
5. Perform rapid on-site evaluation (ROSE) for adequacy of fine needle
aspiration (FNA) specimens
6. Compose a diagnostic report for cytology specimens
7. Perform a medical autopsy

EPA: Perform gross dissection of simple and complex specimens (AP)

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| <p>Description and Tasks</p> | <p>Pathologists are able to assess a gross specimen and submit relevant tissue sections to accurately diagnose disease and, when appropriate, stage a neoplastic process.</p> <p>Knowledge and skills required include the ability to:</p> <ol style="list-style-type: none"> 1. Properly identify patient specimen before and throughout the grossing process 2. Communicate with clinical team and consult the medical record to verify pertinent clinical history, confirm proper specimen orientation, correlate radiographic and other studies 3. Submit sections necessary to represent tissue pathology, evaluate margin status, and complete the appropriate cancer case summary requirements where indicated 4. Distribute tissue for ancillary studies as needed (e.g., flow cytometry, culture, cytogenetics, molecular testing) using appropriate transport conditions 5. Prepare/edit a complete and succinct written report that accurately describes gross findings and handling of tissue |
| <p>Relevant Core Competencies and Milestones</p> | <p>Patient Care</p> <ul style="list-style-type: none"> • PC5 <p>Medical Knowledge</p> <ul style="list-style-type: none"> • MK1, MK2 <p>Systems-based Practice</p> <ul style="list-style-type: none"> • SBP1, SBP4 <p>Practice-based Learning & Improvement</p> <ul style="list-style-type: none"> • PBLI1 <p>Professionalism</p> <ul style="list-style-type: none"> • PROF2, PROF3, PROF4 <p>Interpersonal & Communication Skills</p> <ul style="list-style-type: none"> • ICS1 |
| <p>Assessment Methods</p> | <ol style="list-style-type: none"> 1. Direct observation of grossing skills 2. Record review of gross reports and slides 3. 360 degree evaluations (e.g., attending pathologist, physician/pathologist assistant, histotechnologist) |

EPA: Compose a diagnostic report for surgical pathology specimens (AP)

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| <p>Description and Tasks</p> | <p>Pathologists are able to compose a written diagnostic report including diagnosis, microscopic description, interpretation of special studies, and appropriate cancer case summary requirements where indicated for surgical pathology specimens.</p> <p>Knowledge and skills required include the ability to:</p> <ol style="list-style-type: none"> 1. Properly identify microscopic slides to be evaluated ensuring appropriate patient identification 2. Evaluate microscopic slides for pathologic abnormalities 3. Correlate clinical history, radiology findings, biopsy results, intraoperative consultation, frozen sections diagnosis, and gross description with findings on permanent histology slides 4. Obtain ancillary studies as needed for diagnosis of case (e.g., immunohistochemistry, special stains, and molecular studies) 5. Prepare a complete report incorporating gross description, final diagnosis/impression, and documentation and interpretation of ancillary studies 6. Include complete staging information on synoptic reporting of malignancies as per current standard of care (e.g., CAP Cancer Protocols) 7. Report any relevant clinical information or clinical correlations where indicated 8. Communicate and document critical values and urgent diagnoses directly with clinicians as indicated 9. Recognize when expert consultation is needed and obtain and document consultation in final report 10. Appropriately use and report Current Procedural Terminology (CPT) and International Classification of Diseases (ICD) codes for billing purposes |
| <p>Relevant Core Competencies and Milestones</p> | <p>Patient Care</p> <ul style="list-style-type: none"> • PC3, PC4 <p>Medical Knowledge</p> <ul style="list-style-type: none"> • MK1, MK2 <p>Systems-based Practice</p> <ul style="list-style-type: none"> • SBP1, SBP2 <p>Practice-based Learning & Improvement</p> <ul style="list-style-type: none"> • PBLI1, PBLI2 <p>Professionalism</p> <ul style="list-style-type: none"> • PROF2, PROF3 <p>Interpersonal & Communication Skills</p> |

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| | <ul style="list-style-type: none">• ICS1, ICS2 |
| Assessment Methods | <ol style="list-style-type: none">1. Record review (written reports)2. 360 degree evaluations (e.g., attending pathologist, physician/pathologist assistant, histotechnologist, surgeon, other clinicians)3. Performance metrics (e.g., turnaround time statistics, other metrics from quality monitoring program)4. Portfolio |

EPA: Perform intraoperative consultations and frozen sections (AP)

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| <p>Description and Tasks</p> | <p>Pathologists are able to perform an intraoperative consultation or frozen section, make a diagnosis, and communicate results in a timely manner.</p> <p>Knowledge and skills required include the ability to:</p> <ol style="list-style-type: none"> 1. Properly identify patient specimen before and throughout the frozen section/intraoperative consultation process 2. Determine correct method of tissue preparation needed (e.g., frozen section, cytologic preparation, gross evaluation, etc.) 3. Sample tissue appropriately for diagnosis and evaluation of margins 4. Prepare (e.g., cut frozen sections on cryostat, perform cytologic touch preparations) and stain slides for microscopic evaluation 5. Evaluate and interpret microscopic findings 6. Communicate diagnosis, including limitations of technique or interpretation in a timely manner 7. Apportion tissue for special studies if needed and prepare tissue in appropriate fixative or media for transport, storage, or further processing 8. Appropriately use and report Current Procedural Terminology (CPT) and International Classification of Diseases (ICD) codes for billing purposes |
| <p>Relevant Core Competencies and Milestones</p> | <p>Patient Care</p> <ul style="list-style-type: none"> • PC3, PC4, PC6 <p>Medical Knowledge</p> <ul style="list-style-type: none"> • MK1, MK2 <p>Systems-based Practice</p> <ul style="list-style-type: none"> • SBP1, SBP2, SBP4, SBP5 <p>Practice-based Learning & Improvement</p> <ul style="list-style-type: none"> • PBLI1 <p>Professionalism</p> <ul style="list-style-type: none"> • PROF2, PROF3, PROF4 <p>Interpersonal & Communication Skills</p> <ul style="list-style-type: none"> • ICS1, ICS2 |
| <p>Assessment Methods</p> | <ol style="list-style-type: none"> 1. Direct observation (e.g., tissue selection and cutting, “double-scoping”) 2. Record review of written reports 3. 360 degree evaluations (e.g., attending pathologist, physician assistant, histotechnologist, surgeon) |

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| | 4. Performance metrics (e.g., turnaround time statistics, correlation with permanent section diagnosis, other metrics from quality monitoring program) |
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EPA: Perform fine needle aspirations (FNA) (AP)

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| <p>Description and Tasks</p> | <p>Pathologists are able to perform fine needle aspiration (FNA) biopsy procedures.</p> <p>Knowledge and skills required include the ability to:</p> <ol style="list-style-type: none"> 1. Ensure appropriate supervision and/or credentialing requirements are met to perform the FNA 2. Obtain informed consent for procedure 3. Communicate with clinical team and/or patient to verify pertinent clinical history 4. Perform “time out” or pre-procedure verification to ensure correct patient identification, procedure, and site 5. Perform FNA biopsy as indicated; assess adequacy where appropriate (see associated EPA), and repeat procedure if necessary 6. Manage complications of procedure when indicated 7. Appropriately triage specimen for ancillary studies needed for final diagnosis of case (e.g., cultures, flow cytometry, paraffin block, molecular studies) 8. Appropriately use and report Current Procedural Terminology (CPT) and International Classification of Diseases (ICD) codes for billing purposes |
| <p>Relevant Core Competencies and Milestones</p> | <p>Patient Care</p> <ul style="list-style-type: none"> • PC1, PC3, PC4, PC7 <p>Medical Knowledge</p> <ul style="list-style-type: none"> • MK1 <p>Systems-based Practice</p> <ul style="list-style-type: none"> • SBP1, SBP2, SBP4 <p>Practice-based Learning & Improvement</p> <ul style="list-style-type: none"> • PBLI1 <p>Professionalism</p> <ul style="list-style-type: none"> • PROF1, PROF2, PROF3, PROF4, PROF5, PROF6 <p>Interpersonal & Communication Skills</p> <ul style="list-style-type: none"> • ICS1, ICS2 |
| <p>Assessment Methods</p> | <ol style="list-style-type: none"> 1. Direct observation 2. Record review of procedure notes 3. 360 degree evaluations (e.g., attending pathologist, cytotechnologist; patient) 4. Performance metrics (diagnostic yield of FNA biopsies; correlation of rapid interpretation with final diagnosis) 5. Portfolio or Case Log |

EPA: Perform rapid on-site evaluation (ROSE) for adequacy of fine needle aspiration (FNA) specimens (AP)

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| <p>Description and Tasks</p> | <p>Pathologists are able to perform rapid on-site evaluation (ROSE) for adequacy of fine needle aspiration (FNA) specimens.</p> <p>Knowledge and skills required include the ability to:</p> <ol style="list-style-type: none"> 1. Properly identify patient and ensure specimens and slides are labeled appropriately with two unique identifiers 2. Communicate with clinical team and/or patient to verify pertinent clinical history 3. Rapidly stain and evaluate slide to determine adequacy and identify diagnostic abnormalities 4. Communicate adequacy assessment and rapid interpretation to members of the clinical team 5. Document communication including diagnosis, clinician notified and by whom, and date and time of notification 6. Appropriately triage specimen for ancillary studies needed for final diagnosis of case (e.g., cultures, flow cytometry, paraffin block, molecular studies) 7. Appropriately use and report Current Procedural Terminology (CPT) and International Classification of Diseases (ICD) codes for billing purposes |
| <p>Relevant Core Competencies and Milestones</p> | <p>Patient Care</p> <ul style="list-style-type: none"> • PC1, PC3, PC4 <p>Medical Knowledge</p> <ul style="list-style-type: none"> • MK1 <p>Systems-based Practice</p> <ul style="list-style-type: none"> • SBP1, SBP2 <p>Practice-based Learning & Improvement</p> <ul style="list-style-type: none"> • PBLI1 <p>Professionalism</p> <ul style="list-style-type: none"> • PROF2, PROF3, PROF4 <p>Interpersonal & Communication Skills</p> <ul style="list-style-type: none"> • ICS1, ICS2 |
| <p>Assessment Methods</p> | <ol style="list-style-type: none"> 1. Direct observation 2. Record review 3. 360 degree evaluations (e.g., attending pathologist, radiologist or other proceduralists, cytotechnologist) |

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| | 4. Performance metrics (e.g., turnaround time statistics, correlation with final diagnosis, other metrics from quality monitoring program) |
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EPA: Compose a diagnostic report for cytology specimens (AP)

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| <p>Description and Tasks</p> | <p>Pathologists are able to compose a written diagnostic report for both gynecologic and non-gynecologic (exfoliative, fine needle aspiration) specimens including diagnosis, microscopic description, and interpretation of special studies where indicated.</p> <p>Knowledge and skills required include the ability to:</p> <ol style="list-style-type: none"> 1. Properly identify microscopic slides to be evaluated ensuring appropriate patient identification 2. Evaluate slides to determine adequacy and identify diagnostic abnormalities 3. Correlate clinical history, radiology findings, biopsy results, etc., with microscopic findings as needed 4. Obtain ancillary studies as needed for evaluation of case (e.g., immunohistochemistry, special stains, molecular studies) 5. Prepare a complete report incorporating final diagnosis including documentation and interpretation of ancillary studies 6. Communicate and document critical values and urgent diagnoses directly with clinicians as indicated 7. Appropriately use and report Current Procedural Terminology (CPT) and International Classification of Diseases (ICD) codes for billing purposes |
| <p>Relevant Core Competencies and Milestones</p> | <p>Patient Care</p> <ul style="list-style-type: none"> • PC1, PC3, PC4 <p>Medical Knowledge</p> <ul style="list-style-type: none"> • MK1, MK2 <p>Systems-based Practice</p> <ul style="list-style-type: none"> • SBP1, SBP2 <p>Practice-based Learning & Improvement</p> <ul style="list-style-type: none"> • PBLI1 <p>Professionalism</p> <ul style="list-style-type: none"> • PROF2, PROF3 <p>Interpersonal & Communication Skills</p> <ul style="list-style-type: none"> • ICS1, ICS2 |
| <p>Assessment Methods</p> | <ol style="list-style-type: none"> 1. Direct observation (e.g., “double-scoping”) 2. Record review of written reports 3. 360 degree evaluations (e.g., attending pathologist, physician assistant, cytotechnologist, ordering clinicians) |

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| | 4. Performance metrics (e.g., turnaround time statistics, correlation with subsequent resection when available, other metrics from quality monitoring program) |
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EPA: Perform a medical autopsy (AP)

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| <p>Description and Tasks</p> | <p>Pathologists are able to perform a complete medical autopsy for the purposes of determining the presence or extent of disease or injury, identifying the cause and manner of death, and evaluating the quality and efficacy of care.</p> <p>Knowledge and skills required include the ability to:</p> <ol style="list-style-type: none"> 1. Review autopsy consent for clarity, validity, and medicolegal jurisdiction 2. Review medical record and consult with clinical colleagues for relevant clinical history and circumstances of death 3. Perform and document external examination of the body 4. Perform gross aspects of autopsy procedure consistent with autopsy consent including cosmetically acceptable opening and closing of body cavities, in situ examination of organs, evisceration and gross dissection and sampling of organs, acquisition of tissue and body fluids for ancillary testing, and documentation of procedure (e.g. written descriptions and measurements, photographic documentation) 5. Prepare a timely and concise preliminary autopsy report with preliminary diagnosis and gross findings 6. Review microscopic and laboratory findings and correlate with gross findings and clinical history 7. Prepare a timely and concise final autopsy report that includes a written description of gross and microscopic findings, an opinion as to the cause of death, and clinical-pathologic correlation. 8. Discuss case with clinical providers or others as needed (e.g., Morbidity and Mortality (M&M) or Clinical Pathologic Conference (CP) conferences) including communication and documentation of any critical values or urgent diagnoses identified during the autopsy |
| <p>Relevant Core Competencies and Milestones</p> | <p>Patient Care</p> <ul style="list-style-type: none"> • PC1, PC3, PC4 <p>Medical Knowledge</p> <ul style="list-style-type: none"> • MK1, MK3 <p>Systems-based Practice</p> <ul style="list-style-type: none"> • SBP1, SBP4 <p>Practice-based Learning & Improvement</p> <ul style="list-style-type: none"> • PBLI1 <p>Professionalism</p> <ul style="list-style-type: none"> • PROF1, PROF2, PROF3, PROF4, PROF5 |

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| | <p>Interpersonal & Communication Skills</p> <ul style="list-style-type: none">• ICS1, ICS2 |
| Assessment Methods | <ol style="list-style-type: none">1. Direct observation (e.g., evisceration/gross dissection; “double-scoping”)2. Record review of written reports3. 360 degree evaluations (e.g., attending pathologist, physician assistant, histotechnologist, ordering clinicians)4. Performance metrics (e.g., turnaround time statistics)5. Case Log |

**Entrustable Professional Activities (EPAs) for Pathology Graduate Medical
Education: Recommendations from the College of American Pathologists (CAP)
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EPAs for Clinical Pathology:

1. Compose a diagnostic report for clinical laboratory testing requiring pathologist interpretation
2. Evaluate and report adverse events involving the transfusion of blood components
3. Evaluate and report critical values in the clinical laboratory
4. Perform other procedures (e.g., bone marrow aspiration and biopsy, apheresis)

EPA: Compose a diagnostic report for clinical laboratory testing requiring pathologist interpretation (CP)

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| <p>Description and Tasks</p> | <p>Pathologists are able to review and interpret clinical laboratory findings and data and compose a written diagnostic report for clinical laboratory testing requiring pathologist interpretation (e.g. body fluid or peripheral blood smear, bone marrow biopsy, molecular pathology testing, flow cytometry, SPEP/UPEP, antibody identification, etc.)</p> <p>Knowledge and skills required include the ability to:</p> <ol style="list-style-type: none"> 1. Verify proper identity of patient diagnostic material (e.g. slides or specimens) or laboratory data (e.g. instrument printouts, electrophoresis gel, etc.) before interpretation and reporting 2. Evaluate/interpret diagnostic material or laboratory data and formulate diagnosis 3. Correlate clinical history, radiology findings, other laboratory data, etc. with clinical laboratory findings 4. Prepare a complete written report with diagnosis, methodology (e.g., for molecular testing), and clinical correlation 5. Communicate and document urgent diagnoses directly with clinical providers if indicated 6. Appropriately use and report Current Procedural Terminology (CPT) and International Classification of Diseases (ICD) codes for billing purposes |
| <p>Relevant Core Competencies and Milestones</p> | <p>Patient Care</p> <ul style="list-style-type: none"> • PC1, PC2 <p>Medical Knowledge</p> <ul style="list-style-type: none"> • MK1 <p>Systems-based Practice</p> <ul style="list-style-type: none"> • SBP1, SBP2 <p>Practice-based Learning & Improvement</p> <ul style="list-style-type: none"> • PBLI1, PBLI2 <p>Professionalism</p> <ul style="list-style-type: none"> • PROF2, PROF3 <p>Interpersonal & Communication Skills</p> <ul style="list-style-type: none"> • ICS1, ICS2 |
| <p>Assessment Methods</p> | <ol style="list-style-type: none"> 1. Direct observation 2. Record review of written reports |

EPA: Evaluate and report adverse events involving the transfusion of blood components (CP)

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| <p>Description and Tasks</p> | <p>Pathologists are able to diagnose and manage adverse reactions related to blood component transfusion.</p> <p>Knowledge and skills required include the ability to:</p> <ol style="list-style-type: none"> 1. Provide direction for laboratory evaluation of adverse reaction related to blood component transfusion 2. Assess and evaluate patient clinical history, signs and symptoms, radiology findings, and laboratory testing to determine the cause of the adverse reaction 3. Provide recommendations for treatment interventions to manage adverse reactions if indicated 4. Compose a written report documenting the adverse event and workup, classifying the reaction, providing guidance for additional transfusions, and documenting communication with clinical providers regarding the adverse reaction 5. Effectively communicate handoff information for unresolved issues (e.g., pending testing) with fellow pathologists, clinicians, or laboratory technologists 6. Determine the need to report adverse events to the appropriate regulatory authority |
| <p>Relevant Core Competencies and Milestones</p> | <p>Patient Care</p> <ul style="list-style-type: none"> • PC1, PC2 <p>Medical Knowledge</p> <ul style="list-style-type: none"> • MK1, MK2 <p>Systems-based Practice</p> <ul style="list-style-type: none"> • SBP1, SBP2 <p>Practice-based Learning & Improvement</p> <ul style="list-style-type: none"> • PBLI1 <p>Professionalism</p> <ul style="list-style-type: none"> • PROF2, PROF3, PROF5 <p>Interpersonal & Communication Skills</p> <ul style="list-style-type: none"> • ICS1, ICS2 |
| <p>Assessment Methods</p> | <ol style="list-style-type: none"> 1. Direct observation 2. Record review of written reports/chart audits 3. Portfolio |

EPA: Evaluate and report critical values in the clinical laboratory (CP)

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| <p>Description and Tasks</p> | <p>Pathologists are able to evaluate and manage reporting of critical values generated in the clinical laboratory, especially in instances where initial notification attempts have failed.</p> <p>Knowledge and skills required include the ability to:</p> <ol style="list-style-type: none"> 1. Understand laboratory procedure defining critical values and notification requirements (e.g., time-frame of notification, caregiver to notify, etc.) 2. Assist laboratory staff in management of failed critical value notifications by identifying other responsible caregivers for notification, reviewing clinical history and other laboratory results to determine urgency or necessity of notification, and determining need for direct contact of patient 3. Communicate with care-giver to relay critical value and obtain read-back of result by care-giver 4. Communicate with patient to convey critical value and medical advice regarding follow up when required by failed notification of caregiver 5. Ensure appropriate documentation of notification (caregiver or patient) including first and last name, date, time, read back, and other comments as needed 6. Follow up on patient outcomes with failed notifications and update notification procedure if necessary |
| <p>Relevant Core Competencies and Milestones</p> | <p>Patient Care</p> <ul style="list-style-type: none"> • PC1, PC2 <p>Medical Knowledge</p> <ul style="list-style-type: none"> • MK1 <p>Systems-based Practice</p> <ul style="list-style-type: none"> • SBP1, SBP4 <p>Practice-based Learning & Improvement</p> <ul style="list-style-type: none"> • PBLI1 <p>Professionalism</p> <ul style="list-style-type: none"> • PROF2, PROF3, PROF5 <p>Interpersonal & Communication Skills</p> <ul style="list-style-type: none"> • ICS1, ICS2 |
| <p>Assessment Methods</p> | <ol style="list-style-type: none"> 1. Direct observation 2. Record review of laboratory reports for read-back notification |

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| | <ol style="list-style-type: none">3. 360 degree evaluations (e.g., attending pathologist, laboratory technologists)4. Review of on call activities5. Portfolio |
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EPA: Perform other procedures (e.g. bone marrow aspiration and biopsy, apheresis) (CP)

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| <p>Description and Tasks</p> | <p>Pathologists are able to perform diagnostic or therapeutic procedures including bone marrow aspiration and biopsy and apheresis.</p> <p>Knowledge and skills required include the ability to:</p> <ol style="list-style-type: none"> 1. Ensure appropriate supervision or credentialing requirements are met to perform the procedure in question 2. Obtain informed consent for the procedure 3. Communicate with clinical team and/or patient to verify pertinent clinical history 4. Perform “time out” or pre-procedure verification to ensure correct patient identification, procedure, and site 5. Perform procedure as indicated 6. Manage complications of procedure as needed 7. Obtain appropriate primary testing and ancillary studies for bone marrow biopsies (e.g., evaluation, immunophenotyping, molecular or cytogenetic studies, culture, etc.) 8. Appropriately use and report Current Procedural Terminology (CPT) and International Classification of Diseases (ICD) codes for billing purposes |
| <p>Relevant Core Competencies and Milestones</p> | <p>Patient Care</p> <ul style="list-style-type: none"> • PC1, PC7 <p>Medical Knowledge</p> <ul style="list-style-type: none"> • MK1 <p>Systems-based Practice</p> <ul style="list-style-type: none"> • SBP1, SBP2, SBP4 <p>Practice-based Learning & Improvement</p> <ul style="list-style-type: none"> • PBLI1 <p>Professionalism</p> <ul style="list-style-type: none"> • PROF1, PROF2, PROF3, PROF4, PROF5, PROF6 <p>Interpersonal & Communication Skills</p> <ul style="list-style-type: none"> • ICS1, ICS2 |
| <p>Assessment Methods</p> | <ol style="list-style-type: none"> 1. Direct observation 2. Record review of procedure notes 3. 360 degree evaluations (e.g., attending pathologist, laboratory technologist; other clinicians; patient) 4. Simulation 5. Portfolio or Case Log |

**Entrustable Professional Activities (EPAs) for Pathology Graduate Medical
Education: Recommendations from the College of American Pathologists (CAP)
Graduate Medical Education Committee (GMEC)**

Common EPAs for Anatomic and Clinical Pathology:

1. Provide guidance for the resolution of pre-analytical testing issues
2. Provide pathologist support for interdisciplinary conferences
3. Provide patient care consultations

**EPA: Provide guidance for the resolution of pre-analytical testing issues.
(AP/CP)**

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| <p>Description and Tasks</p> | <p>Pathologists are able to evaluate and manage questions, problems, errors, and policy deviations related to the pre-analytical phase of testing.</p> <p>Knowledge and skills required include the ability to:</p> <ol style="list-style-type: none"> 1. Identify and follow laboratory policies establishing pre-analytical testing requirements addressing specimen collection, labeling, transport, and handling 2. Evaluate questions, problems, errors, or policy deviations (e.g., unlabeled or mislabeled specimens, deviations in transport or handling conditions, hemolyzed samples, insufficient sample volume, etc.) related to the pre-analytical testing phase based on laboratory policy, communication with ordering providers, and evaluation of the patient medical record 3. Manage resolution of pre-analytical specimen issues (e.g., add appropriate preservative pending specimen analysis, reject inappropriate specimen types, contact clinician for recollection, etc.) 4. Document resolution in the medical record including name, date, and time of clinician contact, reason for cancellation, effect of deviation on validity of testing, etc. 5. Follow up on pre-analytical issues by monitoring patient outcomes, updating procedures, reporting patient safety issues, and training staff as indicated |
| <p>Relevant Core Competencies and Milestones</p> | <p>Patient Care</p> <ul style="list-style-type: none"> • PC1, PC2 <p>Medical Knowledge</p> <ul style="list-style-type: none"> • MK1, MK2 <p>Systems-based Practice</p> <ul style="list-style-type: none"> • SBP1, SBP4, SBP5 <p>Practice-based Learning & Improvement</p> <ul style="list-style-type: none"> • PBLI1 <p>Professionalism</p> <ul style="list-style-type: none"> • PROF2, PROF3, PROF4 <p>Interpersonal & Communication Skills</p> <ul style="list-style-type: none"> • ICS1, ICS2 |
| <p>Assessment Methods</p> | <ol style="list-style-type: none"> 1. Direct observation 2. 360 degree evaluations (attending pathologists, laboratory technologists, ordering clinicians) 3. Review of on call activities |

EPA: Provide pathologist support for interdisciplinary conferences (AP/CP)

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| <p>Description and Tasks</p> | <p>Pathologists provide diagnostic opinions and relevant clinical expertise in interdisciplinary settings such as tumor boards, morbidity and mortality (M&M) conferences, infection prevention and transfusion committees, and clinical pathologic conferences (CPC).</p> <p>Knowledge and skills required include the ability to:</p> <ol style="list-style-type: none"> 1. Identify pertinent clinical history and laboratory values through review of the medical record and communication with ordering clinician 2. Review relevant slides, pathology reports, and ancillary testing results 3. When indicated, review relevant literature to provide complete and current pathologic input in the interdisciplinary conference setting 4. Communicate relevant pathology information in a succinct and accessible format while actively participating in the conference 5. Provide expert guidance on clinical utility and cost-effectiveness of additional ancillary testing 6. Document and report pathologic findings and clinical communications related to conference participation as needed |
| <p>Relevant Core Competencies and Milestones</p> | <p>Patient Care</p> <ul style="list-style-type: none"> • PC1, PC2, PC4 <p>Medical Knowledge</p> <ul style="list-style-type: none"> • MK1, MK2, MK3 <p>Systems-based Practice</p> <ul style="list-style-type: none"> • SBP4, SBP5 <p>Practice-based Learning & Improvement</p> <ul style="list-style-type: none"> • PBLI1, PBLI2 <p>Professionalism</p> <ul style="list-style-type: none"> • PROF2, PROF3, PROF4, PROF5 <p>Interpersonal & Communication Skills</p> <ul style="list-style-type: none"> • ICS2 |
| <p>Assessment Methods</p> | <ol style="list-style-type: none"> 1. Direct observation 2. 360 degree evaluations (e.g., attending pathologist, medical technologists, other physicians) 3. Portfolio |

EPA: Provide patient care consultations (AP/CP)

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| <p>Description and Tasks</p> | <p>Pathologists are able to provide timely and effective verbal or written clinical consultations in response to clinical provider inquiries.</p> <p>Knowledge and skills required include the ability to:</p> <ol style="list-style-type: none"> 1. Define the clinical question posed by the consultation request 2. Evaluate patient clinical history, signs and symptoms, ancillary findings, and laboratory tests pertinent to the consult request 3. Review the literature and identify outside resources necessary to manage the clinical consultation 4. Prepare a differential diagnosis and generate recommendations to address the consultation question 5. Communicate the results of the consult verbally and/or compose a written report documenting the findings and recommendations as appropriate 6. Hand off information to a responsible technologist or pathologist as appropriate for consult requests that cannot be resolved in the time frame available 7. Follow up as needed on handoffs or unresolved issues regarding the clinical consult, including monitoring patient outcomes and addressing any laboratory issues related to the consult |
| <p>Relevant Core Competencies and Milestones</p> | <p>Patient Care</p> <ul style="list-style-type: none"> • PC1, PC2, PC4 <p>Medical Knowledge</p> <ul style="list-style-type: none"> • MK1, MK2 <p>Systems-based Practice</p> <ul style="list-style-type: none"> • SBP1, SBP5 <p>Practice-based Learning & Improvement</p> <ul style="list-style-type: none"> • PBLI1, PBLI2 <p>Professionalism</p> <ul style="list-style-type: none"> • PROF2, PROF3, PROF4, PROF5 <p>Interpersonal & Communication Skills</p> <ul style="list-style-type: none"> • ICS1, ICS2 |
| <p>Assessment Methods</p> | <ol style="list-style-type: none"> 1. Direct observation 2. 360 degree evaluations (e.g., attending pathologist, medical technologists, other physicians) 3. Review of on call activities 4. Portfolio |

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Laboratory Management EPAs for Anatomic and Clinical Pathology:

1. Optimize test utilization
2. Improve quality and patient safety
3. Evaluate and choose a new test or instrument
4. Implement a new assay or test system
5. Perform a laboratory accreditation inspection

EPA: Optimize Test Utilization (AP/CP Laboratory Management)

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| <p>Description and Tasks</p> | <p>Pathologists are able to apply test utilization data to best deploy institutional resources and provide better patient care.</p> <p>Knowledge and skills required include the ability to:</p> <ol style="list-style-type: none"> 1. Address specific test utilization questions on an individual patient based on clinical history and testing rationale 2. Find areas for improvement in test utilization for a system by understanding ordering rationale and clinical utility for specific patient populations 3. Generate and interpret laboratory test utilization data using the electronic medical record and laboratory information systems to address system utilization questions 4. Identify inappropriate utilization (under- or overutilization) and intervene to improve cost-effectiveness, appropriate use of resources, and quality of patient care 5. Communicate with ordering providers to guide appropriate clinical testing 6. Work with other healthcare personnel to drive both departmental and institutional change |
| <p>Relevant Core Competencies and Milestones</p> | <p>Patient Care</p> <ul style="list-style-type: none"> • PC1, PC2, PC4 <p>Medical Knowledge</p> <ul style="list-style-type: none"> • MK1, MK2 <p>Systems-based Practice</p> <ul style="list-style-type: none"> • SBP1, SBP5, SBP7 <p>Practice-based Learning & Improvement</p> <ul style="list-style-type: none"> • PBLI2 <p>Professionalism</p> <ul style="list-style-type: none"> • PROF3, PROF4, PROF5 <p>Interpersonal & Communication Skills</p> <ul style="list-style-type: none"> • ICS1, ICS2 |
| <p>Assessment Methods</p> | <ol style="list-style-type: none"> 1. Direct observation 2. 360-degree evaluation 3. Simulation 4. Portfolio 5. Written or verbal presentations of projects |

EPA: Improve quality and patient safety (AP/CP Laboratory Management)

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| <p>Description and Tasks</p> | <p>Pathologists must be able to analyze their own individual practice and performance as well as that of the laboratory to improve quality of care and patient safety. Quality improvement in the laboratory entails coordinated and systematic actions that yield measurably better services, patient care, and safety.</p> <p>Knowledge and skills required include the ability to:</p> <ol style="list-style-type: none"> 1. Address specific quality and safety issues (e.g., diagnostic errors, laboratory errors, and “near misses”) for individual patients, including steps such as communication of error to clinicians, reporting of incident or error as per system policy, documentation of error, and investigation of processes leading to error (e.g., root cause analysis) 2. Identify areas for improvement in quality and safety at the systems level by evaluating and interpreting quality data (e.g., laboratory quality monitor plan, Lean/six sigma projects, root cause analysis) 3. Participate in quality improvement meetings, risk management activities, safety initiatives, and proficiency test miss investigations 4. Generate and interpret quality and safety data using the electronic medical record and laboratory information systems to address systems utilization questions 5. Work with other healthcare personnel to drive both department and institutional change |
| <p>Relevant Core Competencies and Milestones</p> | <p>Patient Care</p> <ul style="list-style-type: none"> • PC1 <p>Medical Knowledge</p> <ul style="list-style-type: none"> • MK1 <p>Systems-based Practice</p> <ul style="list-style-type: none"> • SBP1, SBP4, SBP7 <p>Practice-based Learning & Improvement</p> <ul style="list-style-type: none"> • PBLI1 <p>Professionalism</p> <ul style="list-style-type: none"> • PROF2, PROF3, PROF4 <p>Interpersonal & Communication Skills</p> <ul style="list-style-type: none"> • ICS1, ICS2 |
| <p>Assessment Methods</p> | <ol style="list-style-type: none"> 1. Direct observation 2. Record review of written reports 3. 360-degree evaluation 4. Simulation 5. Portfolio 6. Written or verbal presentations of projects |

EPA: Evaluate and choose a new test or instrument (AP/CP Laboratory Management)

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| <p>Description and Tasks</p> | <p>Pathologists must be able to evaluate and choose new assays, test systems, and instruments for the clinical laboratory.</p> <p>Knowledge and skills required include the ability to:</p> <ol style="list-style-type: none"> 1. Review clinical utility and performance characteristics of assays, test systems, and instruments to identify technology that meets the needs of the laboratory and patient population served 2. Communicate with clinical providers to determine patient care and testing needs in evaluating suitability of new technology 3. Prepare or review cost-benefit analysis data (e.g., return on investment) to determine economic feasibility of new assays or technology 4. Evaluate personnel and workflow requirements of new technology to determine fit and feasibility of implementation 5. Complete environmental evaluation to determine adequacy of space and physical plant requirements for new instrumentation 6. Work with information technology staff to evaluate system requirements of new instruments and determine compatibility with current laboratory information systems 7. Work with an interdisciplinary team including laboratory staff and administrators to review all data to select new testing platforms |
| <p>Relevant Core Competencies and Milestones</p> | <p>Patient Care</p> <ul style="list-style-type: none"> • <p>Medical Knowledge</p> <ul style="list-style-type: none"> • MK1 <p>Systems-based Practice</p> <ul style="list-style-type: none"> • SBP2, SBP3, SBP6, SBP7 <p>Practice-based Learning & Improvement</p> <ul style="list-style-type: none"> • PBLI2 <p>Professionalism</p> <ul style="list-style-type: none"> • PROF3 <p>Interpersonal & Communication Skills</p> <ul style="list-style-type: none"> • ICS1, ICS2 |
| <p>Assessment Methods</p> | <ol style="list-style-type: none"> 1. Direct observation 2. 360-degree evaluation 3. Simulation 4. Portfolio 5. Written or verbal presentations of evaluation projects |

EPA: Implement a new assay or test system (AP/CP Laboratory Management)

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| <p>Description and Tasks</p> | <p>Pathologists must oversee the implementation of new assays, test systems, and instruments in a way that meets regulatory compliance and ensures accurate patient results.</p> <p>Knowledge and skills required include the ability to:</p> <ol style="list-style-type: none"> 1. Identify the regulatory status of the test or equipment to be implemented (e.g., waived, FDA cleared or approved, laboratory developed test), develop a verification or validation plan with all required elements (e.g., accuracy, precision, reference range, reportable range, limit of detection, linearity, etc.), oversee verification or validation studies, and sign off on final summary demonstrating adequacy of test system for use in patient testing 2. Oversee and approve preparation of the written procedure for the new assay or test system, including instructions for specimen collection, instrument operation, test performance, reporting criteria, and troubleshooting 3. Develop quality control and quality monitoring plans for new test system, including plans for internal/external quality control testing, proficiency testing, training, management of hazardous materials, and instrument maintenance 4. Work with information technology staff to integrate new test instrument or test system with current laboratory information systems 5. Finalize reporting of test results, including reference ranges, all possible result values, and methodology, and approve final report format 6. Develop billing process for new test system and confirm accuracy of billing and reporting in LIS/EMR 7. Add test to websites, test menus, physician order entry, and requisitions 8. Update test menu with accrediting agency for inspection and proficiency testing purposes 9. Inform ordering providers of addition to test menu or change in methodology and provide needed information regarding specimen collection, ordering, test characteristics, and turnaround time |
| <p>Relevant Core Competencies and Milestones</p> | <p>Patient Care</p> <ul style="list-style-type: none"> • PC2, PC4 <p>Medical Knowledge</p> <ul style="list-style-type: none"> • MK1 <p>Systems-based Practice</p> <ul style="list-style-type: none"> • SBP2, SBP4, SBP5, SBP6, SBP7 <p>Practice-based Learning & Improvement</p> <ul style="list-style-type: none"> • PBLI2 <p>Professionalism</p> <ul style="list-style-type: none"> • PROF2, PROF3 <p>Interpersonal & Communication Skills</p> |

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| | <ul style="list-style-type: none">• ICS1, ICS2 |
| Assessment Methods | <ol style="list-style-type: none">1. Direct observation2. 360-degree evaluation3. Simulation4. Portfolio5. Written or verbal presentations of implementation projects |

EPA: Perform a laboratory accreditation inspection (AP/CP Laboratory Management)

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| <p>Description and Tasks</p> | <p>Pathologists are able to serve as laboratory inspectors as part of the peer inspection process for deemed accrediting organizations</p> <p>Knowledge and skills required include the ability to:</p> <ol style="list-style-type: none"> 1. Complete appropriate training as per applicable accrediting organization 2. Review checklists and other supporting documentation for assigned inspection area 3. Complete on-site inspection of laboratory section 4. Complete written inspection documentation as required by accrediting organization 5. Present findings as required by accrediting organization (i.e., summation conference) |
| <p>Relevant Core Competencies and Milestones</p> | <p>Patient Care</p> <ul style="list-style-type: none"> • <p>Medical Knowledge</p> <ul style="list-style-type: none"> • MK1 <p>Systems-based Practice</p> <ul style="list-style-type: none"> • SBP2, SBP4 <p>Practice-based Learning & Improvement</p> <ul style="list-style-type: none"> • <p>Professionalism</p> <ul style="list-style-type: none"> • PROF2, PROF3, PROF4 <p>Interpersonal & Communication Skills</p> <ul style="list-style-type: none"> • ICS1 |
| <p>Assessment Methods</p> | <ol style="list-style-type: none"> 1. Review of training documentation 2. Direct observation of inspection process (internal or external) 3. 360 degree evaluation (e.g., inspection team members or team leader) |