

PA PRACTICE ANALYSIS REPORT

For Development of

PA(ASCP)

Content Guideline and Examination

for PA Exam Publication July 1, 2022

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INTRODUCTION

The purpose of conducting a practice analysis (a.k.a. job analysis or job task analysis) is to provide the foundation of a certification examination by defining practice in a profession. The practice analysis provides evidence of content validation. It is required by psychometric standards and is considered best practices for high-stakes examination development. It also ensures the certification examination is fair, valid, job-related, and most importantly, legally defensible (Chinn and Hertz 2010)¹. The ASCP Board of Certification (BOC) conducts a practice analysis approximately every five years in accordance with ASCP BOC Policy and requirements of the accrediting body, ANSI (American National Standards Institute), under ANSI/ISO/IEC 17024:2012.

A practice analysis is a formal process for determining or verifying the responsibilities of individuals in the job/profession, the knowledge individuals must possess, and the skills necessary to perform the job at a minimally competent level. The practice analysis process provides a complete and modern understanding of the duties and functions of practicing laboratory professionals. The results of the practice analysis inform the specifications and content of the ASCP BOC certification examinations. The practice analysis process ensures that the examinations are reflective of current practices. It also helps guarantee that individuals who become certified are current and up-to-date on the state of pathologists' assistant practice and are competent to perform as certified laboratory professionals.

PRACTICE ANALYSIS PROCESS

ASCP BOC conducted a practice analysis survey to inform the Pathologists' Assistant (PA) certification examination category.

The process for conducting a practice analysis consists of the following steps:

1. Survey Development
2. Demographics
3. Task Inventory – Knowledge and Skill Questions
4. Rating Criteria
5. Survey Construction
6. Pilot Testing and Revision
7. Survey Distribution
8. Survey Analysis
9. Committee Review and Discussion
10. Examination Content Guideline, Standard Setting, and Exam Publication

SURVEY DEVELOPMENT

During the 2020 ASCP BOC examination committee meeting, the Pathologists' Assistant Examination Committee provided the input and discussion to develop a practice analysis survey. The committee members (subject matter experts) collectively discussed all pertinent aspects of their profession to design a concise survey to extract useful feedback from field professionals while maximizing response rate. The survey had two main components: demographics and task inventory with appropriate rating scales for each.

¹ Chinn, R.N., and N.R. Hertz. 2010. *Job Analysis: A Guide for Credentialing Organizations*. Lexington: Council on Licensure, Enforcement and Regulation (CLEAR).

DEMOGRAPHICS

The demographic questions asked about experience, education, gender, age, job title, work shift, type of facility, work hours, etc. The purpose of these questions was to aid the committee in deciding whether the sample of respondents obtained was representative of the profession in general. The demographic data provided analytic categories that allowed refinement of the survey population to utilize only those responses from individuals at the targeted professional level.

TASK INVENTORY – KNOWLEDGE AND SKILL QUESTIONS

The committee developed a series of job-related task questions that formed the body of the survey.

The survey had three major sections:

- Surgical Pathology
- Autopsy Pathology
- Laboratory Operations

RATING CRITERIA

The rating scale used for the skill-related tasks assessed whether respondents performed the specific task or not in their jobs. If not, respondents indicated whether or not they were expected to have knowledge of the concept or protocol.

SURVEY CONSTRUCTION

The practice analysis survey was created and delivered through Key Survey, an electronic survey vendor. Using an electronic tool allowed survey review and testing via the internet, email tracking of respondents using email addresses, and the ability to send email reminders for completion of the survey.

PILOT TESTING AND REVISION

The Pathologists' Assistant Committee tested a pilot version of the survey. They reviewed and revised different aspects of the survey (e.g., information correctness, grammar/spelling, survey branching, etc.). The pilot testing comments and edits informed the final version of the survey.

SURVEY DISTRIBUTION

The Pathologists' Assistant Committee determined that the survey should be sent to all current PA certificants in the ASCP BOC Personify database. The survey was open for a 3-week period between February 9, 2021 – March 1, 2021. ASCP BOC staff also directly emailed the survey to the Pathologists' Assistant Committee and encouraged the committee membership to disseminate the survey to their colleagues. Additionally, the survey link was posted on AAPA channels and on ASCP social media sites (i.e., Facebook, Instagram, and LinkedIn).

SURVEY ANALYSIS

The PA tasks were divided amongst three major sections (Surgical Pathology, Autopsy Pathology, and Laboratory Operations). Respondents answered only the questions in the Surgical Pathology and Autopsy Pathology survey sections if they indicated that they currently work in those areas. All survey respondents answered the questions in the Laboratory Operations survey section.

Any individuals not currently practicing (e.g., retired, unemployed, or simply not working as a pathologists' assistant) were removed from the practice analysis survey.

COMMITTEE REVIEW AND DISCUSSION

During the 2021 examination committee meeting, the Pathologists' Assistant Committee reviewed the practice analysis results. They agreed that the demographic results accurately reflected the PA population (**Appendix A**).

In general, tasks performed by at least 40% of the respondents were retained on the task list and considered valid to be on the examination. The committee reviewed all tasks performed by less than 40% of the respondents. If the committee determined that these tasks were critical to patient care and/or were up-and-coming in practice, then the task was retained on the task list and considered valid for the examination. If the task was considered outdated or too esoteric, then it was removed from the task list and the exam. The committee decisions were compiled into the Final Task List for PA (**Appendix B**) which informed the exam content guideline and the content for the certification exam.

EXAMINATION CONTENT GUIDELINE, STANDARD SETTING, AND EXAM PUBLICATION

The committee revised the PA exam content guideline to reflect the practice analysis results. They reviewed the exam content area percentages and decided where to set them based on the results of the practice analysis. The committee reviewed the exam database according to the new content guideline and deleted or revised questions accordingly. They wrote new questions to fulfill the new content guideline, and reclassified questions according to the new guideline. After this work was completed, the committee set a new standard for the exam, and the new exam database was published.

PATHOLOGISTS' ASSISTANT (PA) DEMOGRAPHIC ANALYSIS

Usable respondents: 276

Usable individual respondents met the following criteria:

- Currently employed in a laboratory setting as a pathologists' assistant

Summary:

- Certifications:
 - 100% are PA certified
- Education:
 - 17% have a baccalaureate degree or post-baccalaureate program certificate
 - 83% have a master's degree or higher
- Experience:
 - Mean is 12 years
 - Median is 10 years
 - Range is 1 – 40 years
- Geographic Distribution: there are respondents from across the U.S., and states with the highest response rate include:
 - 11% from California
 - 9% from New York
 - 6% from Illinois
 - 5% each from Michigan and Texas
- Facility:
 - 89% work in hospitals
 - 8% work in independent labs
 - 3% work in other facilities
- Age:
 - Mean is 39 years
 - Median is 37 years
 - Range is 24 – 63 years
- Gender:
 - 77% are female
 - 22% are male
 - 1% are other

PATHOLOGISTS' ASSISTANT (PA)

FINAL TASK LIST (TOPICS KEPT ON EXAM BASED ON PRACTICE ANALYSIS RESULTS)

SURGICAL PATHOLOGY
PREANALYTICAL TASKS
Ensure proper specimen collection and submission prior to accessioning
Accession specimens and/or verify unique patient identifiers
Review/obtain pertinent clinical information and history (e.g., x-rays, scans, laboratory data, etc.)
DESCRIPTION AND DISSECTION OF THE FOLLOWING SURGICAL SPECIMENS
88300 - Gross only (e.g., hardware, prosthesis, foreign bodies)
88302 – Simple (e.g., plastic surgery, fallopian tubes for sterilization)
88304 – (e.g., debridement, skin tags, appendix, gallbladder)
88305 – (e.g., biopsies, uterus for prolapse, skin excisions)
88307 – (e.g., non-neoplastic uteri, simple mastectomy, colon non-tumor, third trimester placenta)
88309 – Complex (e.g., Whipple, neoplastic uteri, colon tumor, bone resection)
TISSUE SAMPLING FOR
Frozen sections
Permanent sections
Immunofluorescence
Electron microscopy
Flow cytometry
Microbiology
Tissue banks or research
Cytogenetics/microarray
Specimen radiography
Controls for histology
SURGICAL PATHOLOGY PROCEDURES
Cutting/staining frozen sections
Muscle biopsy freezing
Kidney biopsy evaluation for glomeruli and adequacy
Nerve biopsy orientation and preparation
Bone marrow aspirate/biopsy preparation
Lymphoma protocol
Touch preparation
Brain biopsy squash preparation
Fine needle aspiration
Tumor mapping
Multiple gestation placenta vascular injection technique
Ordering of special stains and immunohistochemistry

Gross photography
Microscopic photography
Review of microscopic slides for section adequacy
Participation in case sign-out
Verification and editing of CPT codes
Handling of medicolegal specimens and devices
Ophthalmic specimen handling
AUTOPSY PATHOLOGY
PROSECTION OF THE FOLLOWING AUTOPSIES AND/OR MANAGEMENT OF DECEDENTS
Adult
Neonatal/perinatal
Pediatric
Medicolegal/forensic
Biohazard (e.g., prion disease)
PREANALYTICAL TASKS
Ensure proper autopsy authorization, permission, and release
Review/obtain pertinent clinical information and history (e.g., X-rays, scans, laboratory data)
TISSUE SAMPLING FOR
Frozen sections
Permanent sections
Immunofluorescence
Electron microscopy
Flow cytometry
Microbiology
Tissue banks or research
Cytogenetics/microarray
Specimen radiography
Controls for histology
Toxicology
Metabolic studies
AUTOPSY PATHOLOGY PROCEDURES
Obtaining blood/body fluids for clinical pathology testing
Cutting/staining frozen sections
Bone marrow sampling
Spinal cord removal
Temporal bone removal
Corneal removal and/or orbital enucleation
Long bone removal
Leg vein dissection
Ordering of special stains and immunohistochemistry

Gross photography
Microscopic photography
Review of microscopic slides for section adequacy
Participation in case sign-out
Prosection
Evisceration only
Forensic-specific protocols
PREPARATION OF THE FOLLOWING REPORTS
Clinical summary
Preliminary autopsy diagnosis (PAD)
Gross description
Microscopic description
Final summary/CPC
Final autopsy diagnosis (FAD)
LABORATORY OPERATIONS
REGULATORY
Inspection preparation
Procedure writing, review, and revision
Monitoring of compliance with regulatory agencies (e.g., TJC, CAP, state and local)
Shipping of biological specimens
QUALITY IMPROVEMENT
Preparation and maintenance of quality assurance monitors (e.g., frozen section/permanent correlation, turnaround-time reports)
Participation in quality assurance activities
SAFETY
Monitoring of compliance with regulatory agencies (e.g., OSHA)
Monitoring of radiation exposure
Monitoring of formalin and xylene exposure
Participation in safety training (e.g., chemical hygiene, infection control)
ANCILLARY DUTIES
Specimen storage and disposal
Equipment maintenance (e.g., calibrate, performance checks, identify malfunctions)
Assessment of new technology for possible implementation
Validation of new tests/instruments
Reagent preparation and dilution
Quality control (e.g., stain checks, temperature checks)
Communication with medical staff (clients)
Ordering of supplies/purchasing/inventory
Coordination of tissue banking (e.g., obtain consents, tissue storage, release of tissues, review of protocols)

Telepathology (e.g., image acquisition and/or transmission)
LABORATORY INFORMATION SYSTEM (LIS)
Development
Implementation
Maintenance (e.g., system dictionaries and source codes, templates)
Troubleshooting
MANAGEMENT ACTIVITIES
Workflow assessment, scheduling, productivity
Financial duties (e.g., budgeting, equipment utilization, budget requisition and proposals, staffing justifications)
Review/resolve specimen billing (e.g., review of part type)
Personnel management (e.g., hiring, discipline, job descriptions, performance evaluations)
Preparation and/or facilitation of sectional/institutional meetings
Education/training (e.g., new employees, students, residents, technical staff)
Conference preparation (e.g., tumor boards, grand rounds, morbidity and mortality)
Development, implementation, and evaluation of a competency testing program
Development, assessment, and implementation of diversity and inclusivity in the workplace