

Competencies and Interfaces of the Involved Pathologist

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Competencies of the Involved Pathologist

Pathology is a data-driven specialty, and pathologists are information specialists. Pathologists generate data using unique scientific and technological approaches and transform those data into knowledge that is critical to health care providers. Thus, it is common sense that pathologists should develop effective skills to interface with clinicians. An interface is a critical intersection between different individuals or organizations where differences in needs, values, interests, and/or knowledge are most likely to be located. Interfaces are where mutual friction may occur and where opportunities may be created. In the practice of pathology, interfacing involves face-to-face and electronic encounters between pathologists and other health care professionals who often have different needs and expectations. By identifying these interfaces and being aware of others' interests, pathologists can communicate effectively and, by becoming involved, demonstrate their value.¹

To communicate effectively, pathologists must demonstrate that they are practicing physicians whose

ultimate goal is to provide exceptional patient care. Pathologists should demonstrate that they are excellent specialists with both general and core competencies. Pathologists' skills enable them to provide special services that are not only valuable but also essential to patient care.

In the last few decades or so, there have been continuous moves toward outcomes-based or competency-based learning and assessment. Although there are various definitions of the term *competency*, all definitions contain the essentials of knowledge, skills, and attitudes. We like Epstein and Hundert's definition of professional competency, which states that "[competency] is the habitual and judicious use of communication, knowledge, technical skills, clinical reasoning, emotions, values, and reflection in daily practice for the benefit of the individual and community being served."² Pathologists must have diverse competencies beyond technical skills that suit an increasing complexity and interactions of diagnostic services with various stakeholders in their health system. These competencies distinguish excellent from typical managerial performance. They extend beyond the traditional limits of intelligence and technical skills to include emotional and social intelligences. The Institute of Medicine in 2003 called for developing a set of competencies across the health care system, and, in response to that call, the National Center for Healthcare Leadership (NCHL) established an "evidence-based and behaviorally focused" common competency model for health care leadership (Figure 2-1).³ This model encompasses three main domains (transformation, execution, and people) with 18 behavioral and eight technical competencies listed under these domains. Each competency is graded into three to six levels of performance. The competencies, domains, and levels are well defined. For example, transformation is defined as "visioning, energizing and stimulating a change process that coalesces communities, patients, and professionals around new models of health care and wellness." The competencies under this domain include achievement orientation, analytical thinking, community orientation, financial skills, innovative thinking, and strategic orientation. Performance of an individual health care professional on the achievement-focused competency is graded into six levels (L):

- L1: Wants to do the job
- L2: Creates own measure of success
- L3: Improves performance
- L4: Sets and works to meet challenging goals
- L5: Makes cost–benefit analysis
- L6: Takes calculated experimental risks

For details on the domains, competencies, and performance levels for this model, the reader is referred to the National Center for Healthcare Leadership website (nchl.org). The above model defines in a general way the competencies that are needed for any health care professional in managerial or leadership position.

On the other hand, the general physician core (technical) competencies were developed jointly by the Accreditation Council for Graduate Medical Education (ACGME)⁴ and the American Board of Medical Specialties (ABMS)⁵; the ACGME is now referring to “milestones.” The competencies are patient care, medical knowledge, practice-based learning and improvement, interpersonal and communication skills, professionalism, and system-based practice. Recently, The Joint Commission has used these competencies to define and establish requirements for medical staff privileging. These privileging requirements include the development of ongoing professional practice evaluations and focused professional practice evaluations (OPPE/FPPE). The Practice Management Committee of the College of American Pathologists has identified the standards for each competency applicable to the practice of pathology

(Table 2-1).⁶ The Committee has also listed standards and activities that may be useful for complying with the general competencies and with the OPPE and FPPE processes (Appendix 2-1) and has offered a sample privilege delineation form (Appendix 2-2).

Pathologists should also be familiar with the process for maintenance of certification (MOC). All 24 specialties in the American Board of Medical Specialties now require MOC. Pathologists who became certified by the American Board of Pathology after 2005 were issued time-limited certificates, to be renewed in a 10-year cycle. Satisfactory participation in MOC requires documentation of activities at 2-year and 4-year intervals through the cycle. These activities include (1) professional standing and practice setting, (2) participation in lifelong learning and self-assessment programs, (3) a secure closed-book examination at the end of the MOC cycle, and (4) peer attestations of competency and participation in practice performance/improvement programs. Two types of educational activities count toward MOC: American Medical Association (AMA) continuing medical education (CME) credits and self-assessment modules (SAMs). CME credits are in hour units. When provided in an appropriate educational setting, they are referred to as *AMA Physician Recognition Award Category 1 Credits*. They must be provided by an Accreditation Council for Continuing Medical Education–accredited organization or through a state medical society CME provider. Thirty-five Category 1 CME

Figure 2-1. The NCHL Health Leadership Competency Model (v2.1). Copyright 2006. National Center for Healthcare Leadership. All rights reserved.

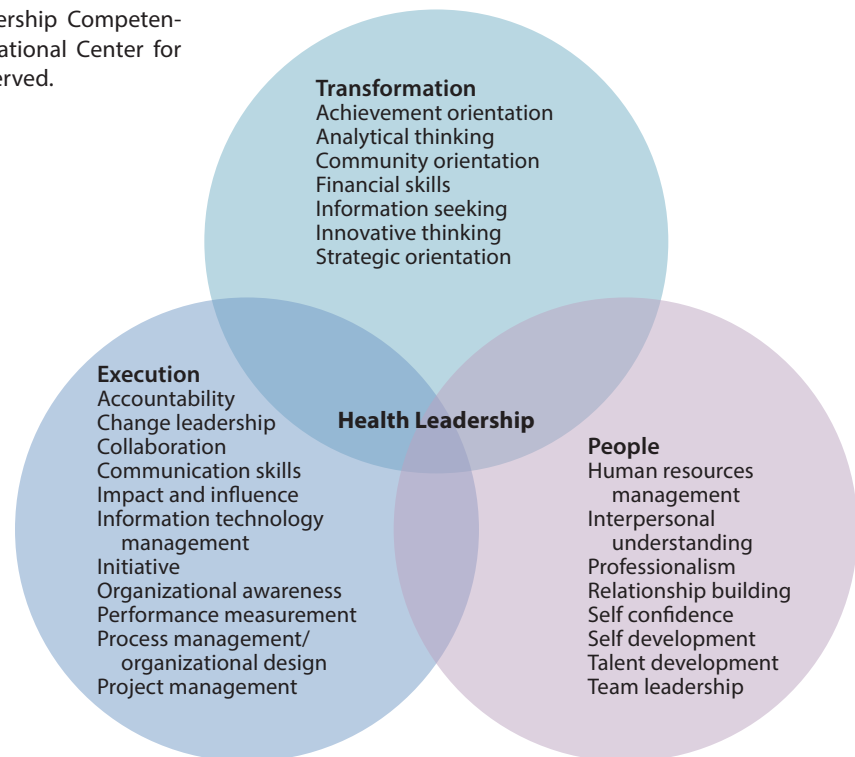


Table 2-1. General Competencies for Pathologists

Patient Care	Pathologists are expected to provide patient care that is compassionate, appropriate, and effective to promote health, prevent illness, treat health problems, and provide end-of-life care.
Medical Knowledge	Pathologists are expected to demonstrate knowledge of established and evolving biomedical, clinical, epidemiological, and social-behavioral sciences and apply this knowledge in patient care and education.
Practice-Based Learning and Improvement	Pathologists are expected to be able to review and evaluate their patient care and laboratory practices, appraise and assimilate scientific evidence, and continuously improve patient care and laboratory practices by constant self-evaluation and life-long learning. Pathologists are expected to develop the skills and habits necessary to achieve goals for themselves and their laboratories.
Interpersonal and Communication Skills	Pathologists are expected to demonstrate interpersonal and communication skills that enable them to establish and maintain professional relationships with patients, patients' families, and other members of health care teams.
Professionalism	Pathologists are expected to demonstrate behavior that reflects a commitment to continuous professional development and ethical practice, an understanding and sensitivity to the diversity of the patient population, and a responsible attitude toward their patients and society.
Systems-Based Practice	Pathologists are expected to demonstrate an awareness and responsiveness to the larger context and systems of health care and be able to call effectively on other resources in the system to provide optimal health care.

From Catalano EW Jr et al.⁶ Adapted with permission from *Archives of Pathology & Laboratory Medicine*. © 2009 College of American Pathologists.

credits per year are required, and at least 10 of the credits must be from SAMs. SAMs typically have three to five questions per hour of education before the educational event, followed by three to five different questions per hour of education at the end of the educational session, so that individual progress can be assessed. Any SAM units of more than the 10 minimum required can be counted toward the 35 required CME credits per year.

The required core competencies vary among different pathology specialty organizations and in some ways reflect an organization's personality. The core competencies are interpreted by the College of American Pathologists, the American Society for Clinical Pathology, the United States and Canadian Academy of Pathology (USCAP), and other professional organizations. The core competencies are incorporated into their educational materials for pathologists in different ways. Thus, a review of educational products typically identifies the core competencies that are addressed in a product, and an individual pathologist can select programs based on individual needs for updates and education.

A pathologist in a community hospital should provide excellent skills in surgical pathology and be recognized for these skills by clinicians, administration, and staff. Pathologists should be able to provide clear, accurate, anatomic pathology diagnoses during intraoperative consultations and rapid on-site interpretation (ROSE) as well as in final reports. Clinical pathologists, in particular, must have knowledge and experience in clinical medicine and should be able to provide clinical

consultations and use of the laboratory to make diagnoses and institute therapy. Pathologists in a larger hospital or in referral laboratories may be required to have more specialized core competencies in areas such as cytopathology, transfusion medicine, and microbiology. If pathologists perform procedures, competencies in bone marrow aspiration/biopsy, fine-needle aspiration biopsy, and other types of procedures should be established.

Laposata's consultative service for coagulation testing serves as one model that simultaneously demonstrates pathologists' special competencies, affirms their role as physician, and highlights their laboratories' involvement in clinical care.⁷ In this service, the pathologists applied the same kind of analysis to clinical laboratory data that they did to radiology and anatomic pathology data. Laposata's model has been quite successful for some types of esoteric testing but has not been applicable across the entire spectrum of pathology services. Given better interfaces, pathologists could provide similar support for the interpretation of complex diseases, such as endocrine disorders and neurologic diseases, and educate clinicians for appropriate laboratory test utilization.

A current trend in community-based pathology consists of one pathology group providing services to several hospitals. In such a group, one specialty-trained pathologist—who is certified in transfusion medicine, for example—might supervise the blood bank services in each of the group's laboratories. The pathologist may also serve on the transfusion committee at each of the hospitals. Even in a moderately sized community

hospital, obtaining the services of a specialist is possible by contracting someone outside the hospital to provide the expertise, such as a faculty member from a local medical school or larger institution in the community.

As part of the general competencies, the director of the pathology laboratory must be aware of the clinical problem-solving from a clinician's perspective. Pathologists need to understand how health care economics affects physicians' use of laboratory services. To be respected by nonphysician management, the laboratory director must have sufficient management, administrative, and computer skills. Finally, the laboratory director needs to be aware of the environment outside the laboratory, which includes external financial and charitable resources and their role in the community, as well as opportunities to provide services for a larger social and professional network. Overall, the laboratory director must be an excellent communicator. Once pathologists establish their competencies as pathologists and knowledgeable medical directors, and their authenticity as practicing physicians, they can consider the other side of the interface: the "customers" of the pathology laboratory, whether they are other pathologists, nonpathologist health care providers, or medical, laboratory, or administrative staff members.

Interfacing With Clinicians

Pathologists must remember that clinicians have a different perspective from that of pathologists. Clinicians approach problems differently. They are more concerned with patients' reactions to their diseases than the scientific basis of the diseases. Clinicians are more "psychological" and less "molecular." Pathologists must understand the clinicians' perspective and respect it. Ideally, pathologists should have some experience in clinical medicine and recognize the time and economic constraints placed on clinicians. Pathologists should also recognize that clinicians are admitting that they do not know something when they ask questions and must handle such interfaces with empathy and humility by seeing the communication as one between colleagues rather than as one between a pedagogue and student. Pathologists can do several things to enhance their interfaces with clinicians (based, in part, on the "Triple A" concept of accuracy, availability, and affability by Richard J. Hausner, MD, of Houston [see chapter 12, *The Pathology Position*]).⁷

- Pathologists should be available. They should establish an open-door policy and reply to all queries promptly, regardless of whether they have an answer. They should reply to all emails quickly, come in to work early, and stay late if needed. In community settings, it is important that pathologists be visible on weekends. Pathologists should serve as the reference library for their clinician

colleagues and recommend recent books or websites in casual conversations. Often, pathologists find it easier to reside in a basement corner, hide behind the microscope, and interact as infrequently as possible; however, daily interaction is essential for pathologists to be truly effective and acknowledged as an important asset by their clinician colleagues.

- Pathologists should be affable. For example, they should meet clinicians for lunch instead of eating lunch in their offices alone. They should acknowledge important events in clinicians' lives, such as births and marriages, appropriately. Pathologists should learn the names of laboratory and administrative staff members, acknowledge these people in hallways and at meetings, and attend medical staff social and administrative functions. In addition, pathologists should never gossip or criticize and should avoid a reputation for this type of behavior.
- Pathologists should visit the physicians' dining room and the surgeons' lounge every day. Pathologists cannot be significant if they are invisible to clinicians. Such venues are where pathologists will learn what clinicians require or deem important, receive requests for consultations, and discuss early warnings of problems in the laboratory.
- Pathologists should report important surgical pathology and cytology diagnoses to the surgeon and/or referring primary care physician as soon as possible.
- Pathologists should establish a computerized system of critical or panic values and proactively call the attending physician with test results as required by the Clinical Laboratory Improvement Amendments of 1988 (CLIA). In addition, to address potential follow-up issues, pathologists must know the sensitivity, specificity, predictive values, and interfering substances of the test.
- Pathologists should periodically meet with clinicians to discuss appropriate laboratory use and allow for feedback about the laboratory.
- Pathologists should enhance their social skills and participate in medical staff social activities, such as fundraisers and staff dinners. Ignoring an invitation may be interpreted as an affront and will not enhance one's reputation with clinicians and hospital administration.

Interfacing With the Medical Staff

The successful practice of pathology depends not only on collegial interfaces but also on pathologists' participation in the medical staff affairs. Although recent pathology residency graduates generally know very little

about the medical staff organization, they tend to learn about it early in their careers, typically in the course of applying for medical staff privileges—that is, the privilege, or permission, to practice within a certain health care setting while adhering to the rules and regulations of the medical organization. A defined medical staff organization, which is typical of institutions (usually hospitals) that provide patient care, is composed of licensed physicians and sometimes other licensed health care professionals, such as oral surgeons and chiropractors. The medical staff organization oversees the application and approval of medical staff privileges and, given that capacity, also oversees the professional quality management of the institution. The medical staff organization periodically reviews applications for privilege renewal, often on a biannual basis. (See Appendix 2-2.)

When applying for or renewing medical staff privileges, pathologists must provide proof of licensure, board certification, and competencies. For a first-time applicant, a probation period may be required; in hospital settings, a probation is mandated by The Joint Commission. During the probationary period, practicing pathologists who are already on the medical staff observe the new pathologist to confirm competencies in various areas of anatomic and clinical pathology.

The functions of the medical staff organization include the following:

- Making recommendations to the institution's chief executive officer (CEO) and administration for the establishment, maintenance, and continuing improvement of professional standards
- Reviewing, analyzing, and evaluating the clinical practices of all medical staff members
- Determining the quality of medical care the hospital provides
- Establishing a mechanism for reporting the quality of professional medical care to the administration
- Making recommendations for enforcing professional standards and implementing corrective action when necessary
- Making recommendations concerning the appointment and reappointment of physicians to the medical staff and the delineation of privileges for each appointee
- Supervising and ensuring compliance with medical staff bylaws and regulations and hospital policies
- Exercising necessary discipline within the authority of the medical staff organization
- Providing input on the budget process
- Assisting in planning hospital goals to meet community needs
- Maintaining educational programs
- Monitoring and supervising postgraduate trainees if the hospital has a medical training program

At Parkland in Dallas they are called “Ambassadors”; in Burbank we called them “Liaisons.” They are a critical adjunct to the interface between the laboratory and the nursing service. A supervising or higher level medical technologist, preferably one who had been working in the laboratory for some time, is assigned as the Ambassador or Liaison to a ward or nursing station. They are encouraged to have lunch with the nursing supervisor from that ward at least once a month, go up to the ward on occasion, and invite the nurse to come to the laboratory. Whenever there is a problem or complaint of any kind, they are the main contact between nursing and the laboratory. They are available to address the problem, fix it if possible, or see to it that it is triaged to the appropriate person so it can be fixed. The nursing service loves this arrangement; when they have a problem, they have a special number they can call, and there is someone there that they know who will know them—so much better than a faceless voice! And if the laboratory has a problem, the reciprocal situation applies.

Several organizations oversee medical staff performance. The Joint Commission is the Centers for Medicare and Medicaid Services–appointed accreditation agency for hospitals and other patient care facilities; there are also other accrediting agencies. Also included are the National Committee for Quality Assurance (NCQA), the American Medical Accreditation Program (AMAP), the American Accreditation Healthcare Commission/Utilization Review Accreditation Commission (AAHC/URAC), and the Accreditation Association for Ambulatory Health Care (AAAHC).⁸

The Joint Commission, being the largest of them, recognizes the medical staff organization as the means through which professional quality is managed and assessed. Therefore, it is important for pathology departments to have representation on the primary medical staff oversight committee. Pathologists are not only well versed and active in daily quality management activities, they also provide an important patient care service; thus, their skills and leadership are often required to evaluate medical staff functions. It is essential for the laboratory director of anatomic pathology and/or the division director of laboratory medicine to be a standing or ex officio member of the medical staff executive committee.

Pathologists can interact with medical staff in numerous informal ways. For example, pathologists can establish a presence as clinicians. Often, pathologists are out of sight, residing in their offices and interacting with others as infrequently as possible. However, to be truly effective managers and leaders, and to be acknowledged by clinicians as important assets and adding value, pathologists must interact daily with other health

care professionals. Pathologists should also be available to provide clinical knowledge, sometimes in “curbside consultations.” Although it may seem superficial, wearing scrubs may serve as an important visual cue for the pathology service. Above all, regularly interacting with clinicians teaches young pathologists the importance of being diplomatic and sensitive to clinicians’ needs and helps all pathologists understand that everything they do is intimately tied to patient care.

Two special aspects of interacting with medical staff are complaint management and conflict resolution. When a clinician brings a complaint to the attention of the laboratory director, the complaint often reflects more than a single unwanted occurrence and deserves special attention. The laboratory director should respond promptly to all complaints. If the pathologist needs to understand the depth of the complaint and believes that further investigation is warranted, he or she should let the clinician know that more time is required, by saying, for example, “I will get back to you shortly”; however, if the problem could cause patient harm, the laboratory director should address the complaint immediately—transfusion medicine is one area in which an immediate response may be required. The pathologist should use all available resources to determine the problem, what caused the problem, how to correct the problem, and how to prevent the problem in the future (ie, corrective actions). It is appropriate for the laboratory director to use all resources, including laboratory supervisors and managers, to solve a problem, but the laboratory director should never delegate the responsibility of responding to the complaining clinician to another employee. The saying “the customer is always right” plays an important role in addressing complaints from clinicians. When confronted with a complaint, the pathologist should always say, “Thank you for bringing this to my attention.”

One strategy pathologists can use to enhance their interface with the medical staff is to volunteer for medical staff committees and educational functions. Generally, pathologists are expected to help lead the infection control, tissue, and transfusion committees, and serve on other medical staff committees and/or subcommittees; therefore, pathologists must have proficiency in chairing committees (see Appendix 2-3). Pathologists should also be eager to organize meetings, such as clinical-pathologic correlation conferences, tumor boards, and morbidity and mortality reviews (see Appendix 2-4). Other strategies pathologists can use to enhance their interface with the medical staff include participating in medical staff oversight functions, such as utilization review, peer review, and outcomes research. Volunteering to edit the medical staff newsletter (see Appendix 2-5) and participating in medical staff social events (eg,

dances and golf tournaments) are other important activities. Pathologists and clinicians can build new bridges once the medical staff leadership understands that pathologists are both helpful and reliable.

Interfacing With the Hospital or System Administration

Typically, a president or chief executive officer leads the administration of a hospital or health care system. In some hospitals, the CEO is a physician; in other circumstances, the CEO is a nonphysician health care administrator. To designate specific high-level leadership and functions, the hospital or health care organization may use a series of chiefs, including (1) the chief operating officer, who oversees all aspects of operations, often including the laboratory; (2) the chief nursing officer, who oversees the nursing staff; (3) the chief financial officer; (4) the chief medical officer (CMO), who may be a hospital employee and/or a member of the medical staff; and (5) the chief information officer, who usually oversees the institution’s computer systems. (Other institutions use titles such as president, vice president, or executive vice president to describe similar positions.) Pathologists may have significant interaction with each of these chiefs. The chief operating officer may be an important resource for understanding laboratory staffing requirements and laboratory budgets. The chief financial officer may interact with the pathology department to develop budgets and capital programs. The chief information officer may be a major player in assessing laboratory information systems and computer services. The CMO may be an important link to the medical staff or other clinicians; in some hospitals, hospital-based physicians in pathology, radiology, and/or emergency medicine may report to the administration through the CMO. The chief nursing officer may provide perspective on the quality of laboratory services and point-of-care testing. In larger institutions, laboratory technologists and technicians may report to an associate or assistant administrator. To establish and maintain effective interfaces with the administration, the pathology laboratory director must be aware of the critical economic and regulatory issues facing hospitals, and must be knowledgeable in health care economics. The director should also know what the administration expects. For example, are administrators only interested in the bottom line? Are they influenced by clinician complaints? Do they value excellence and the science that pathology brings to the hospital?

The pathologist must, of course, be thoroughly conversant in the day-to-day business and economic operations of the laboratory (see chapter 10, *Financial Management of the Laboratory*). The pathology laboratory director and the administrator to whom the laboratory staff report should meet at least monthly to discuss the

status and needs of the laboratory, as well as current events in the hospital, new or emerging plans for the institution, and the hospital's expectations for the pathology group. The agenda for such meetings should include discussion of (1) workload and productivity statistics; (2) budget and financial performance; (3) human resource issues; (4) professional accomplishments, such as publications and awards; (5) the results of inspections, complaints, and other incidents; and (6) information about hospital planning. In addition to these regular meetings, pathologists should conduct informal administrative rounds by visiting various administrators' offices to just say "hello" or to invite the administrators to a coffee break.

Nonmedical staff committees that demand pathologists' participation and input include committees on patient safety, bioethics, equipment, utilization review, performance measurement, and budget and finance. Pathologists who do not volunteer in the hospital budgeting process or in the hospital equipment decision-making process basically allow others to make decisions for the laboratory. If the hospital also has a local governing body or board, it behooves the pathology laboratory director to establish rapport with at least some of its members. Financial contributions by the laboratory director or pathology group to the hospital would definitely facilitate such an interface. Another strategy pathologists can use to facilitate hospital or administrative interface is to prepare an annual report (see Appendix 2-6). Other hospital administration activities include contributing reports to or editing medical staff or hospital newsletters, participating in hospital social events, volunteering to be active in charitable activities, and contributing to the hospital's fund-raising campaigns.

It is critical that pathologists interface with the nursing service. In the majority of community hospitals, the nursing service is the fulcrum upon which all patient care rests. A pathologist, usually with the chief technologist or laboratory manager, should visit each nursing station in the hospital at least once a month to determine whether laboratory services are satisfactory, any questions can be answered, or any problems can be averted. Conducting these nursing rounds helps pathologists establish a relationship with the rest of the hospital; they provide pathologists with the opportunity to show the nurses and physicians on the wards who is in charge of the laboratory and that the laboratory director cares about how inpatient services operate. Furthermore, pathologists should volunteer to participate in in-service educational programs for nurses and other hospital personnel, such as seminars aimed at educating chaplains about autopsies. Another critical interface is with the decedent affairs office, which is usually a function of the nursing service. A decedent affairs office

with knowledgeable and sensitive staff is essential for maintaining a useful autopsy function in the pathology department. Autopsy authorization obtained from the decedent's next-of-kin by an effective decedent affairs coordinator not only increases the autopsy rate but also improves public relations, increases organ donations, and facilitates risk management.

In some hospitals, pathologists volunteer to be the medical information officer for the hospital's information system. No physicians are better suited than pathologists to fill this role because pathologists tend to be experts in computers, automation, quality control, and quality assurance. Also, pathologists are conversant in disease presentation and practice management. The essence of the administrative interface is to maintain a high level of visibility; administrators should be continually reminded that pathologists are critical to the operation of one of the hospital's largest departments. The pathologists' many roles beyond diagnostic pathology must be emphasized. Staff education, research support, utilization statistics, and revenue generation and savings are important pathology contributions. Lastly, the pathologist's responsibilities in the clinical laboratory extend beyond clinical consultation and include test selection and validation, personnel selection and performance, quality assurance, accreditation, and compliance.

Interfacing With the Laboratory Staff

Perhaps the pathologist's most important interface is with the laboratory staff. No other medical specialty is so dependent upon its technical associates; in no other medical specialty is the physician legally and ethically responsible for the work of others without necessarily personally overseeing the performance of an individual procedure. To interface with the laboratory staff, pathologists must know who they are, their education and training, and their needs and agendas. Pathologists must also understand how the staff is organized within the laboratory.

A starting point for learning about personnel categories is to review the categories as described in the 1988 and 2003 CLIA regulations (Table 2-2).⁹ (Categorical responsibilities are described in chapter 4, *Personnel Management*.) It is somewhat confusing that the titles used for these various personnel categories do not necessarily match the titles used in all clinical laboratories. In states that require individual licenses, the licensure requirements provide additional information about the requirements for certain positions (eg, testing personnel). In some circumstances, pathologists may find it helpful to supplement the organizational chart with a diagram that cross-references the titles used in their laboratories with the federal CLIA titles.⁹

Table 2-2. Centers for Medicare and Medicaid Services CLIA Personnel Categories

Title	Training Requirements
<i>Moderate-Complexity Personnel</i>	
Laboratory director	MD, DO, or PhD (specialties); state licensure and board certification
Technical consultant	Laboratory director can serve as technical consultant for moderate complexity; licensure and board certification as required by states MD, DO, or PhD (specialties); may have master's/bachelor's degree with 2 years' experience; licensure and board certification as required by states
Clinical consultant	MD, DO, diplomate, or laboratory director qualifications; licensure and board certification as required by states
Testing personnel	MD, DO, PhD, master's, or bachelor's; board certification if applicable; licensure if required by a given state; high school diploma plus experience acceptable in some states
<i>High-Complexity Personnel</i>	
Laboratory director	MD, DO, or PhD (specialties); state licensure and board certification
Clinical consultant	MD, DO, diplomate, or laboratory director qualifications
Technical supervisor	MD, DO, or PhD (specialties); may have master's/bachelor's degree with 2 years' experience; licensure and board certification as required by states
General supervisor	Laboratory director or technical consultant qualifications or master's/bachelor's degree; licensure if required by a given state
Testing personnel	Laboratory director or technical consultant qualifications or master's/bachelor's degree; licensure if required by a given state

CLIA, Clinical Laboratory Improvement Amendments.

Colloquial titles that may represent different categories include clinical laboratory scientist, medical technologist, or laboratory technologist (usually testing personnel); laboratory technician or laboratory assistant (who may not be qualified to perform testing but are qualified for phlebotomy, specimen handling, and specimen processing); laboratory manager, chief technician, or even technical director (who is usually a qualified laboratory technologist with additional management training and/or experience); laboratory supervisor or section supervisor (usually a qualified laboratory technologist); and specialist (who qualifies as a laboratory technologist but often has additional specialty training in hematology, chemistry, etc). As testing personnel, many laboratory technologists also acquire or may be required (depending on the state) to have American Society for Clinical Pathology or other CMS-approved board certification.

In addition to knowing who works in the laboratory, pathologists must know and influence the organizational structure of the laboratory staff itself. Organizational structure is commonly presented in an organizational chart, which diagrams how an organization's tasks are

divided and coordinated to achieve its goals. A sample hierarchical organizational chart is shown in Figure 2-2.

This hierarchical functional structure pressures the operations to become more rigid; however, it also conveys a clear understanding of responsibility and authority. Communication among different laboratories may be limited. This type of structure may make it more difficult to cross-train technologists. Other types of organizational charts are also used occasionally. The self-contained unit structure (Figure 2-3) is organized around a common domain—a discipline (eg, microbiology), service type (eg, core laboratory), or location—and is less descriptive of authority and responsibilities.

A matrix organizational chart accounts for different lines of authority; for example, if an existing laboratory is restructured into a core laboratory, a stat laboratory, and point-of-care testing facility, pathologists may perform technical direction from the various division directors with a matrix organizational diagram (Figure 2-4).

Most institutions' organizational structure has "flattened" over the past 20 years; typically, large businesses have fewer than half the levels of management that they had two decades ago.¹⁰ Some of these changes have been attributed to an increase in the use of so-called highly

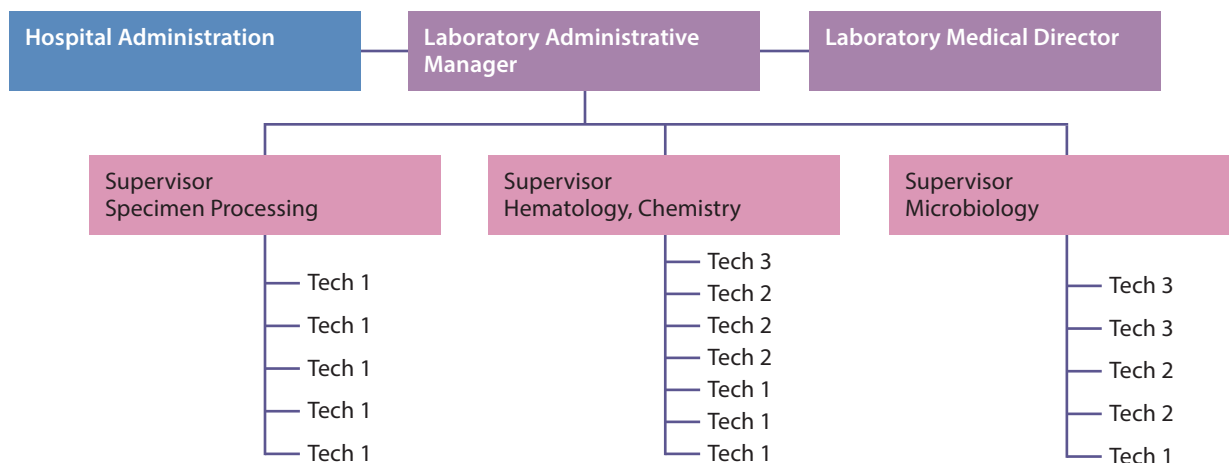


Figure 2-2. Sample hierarchical or multilayered organizational chart.

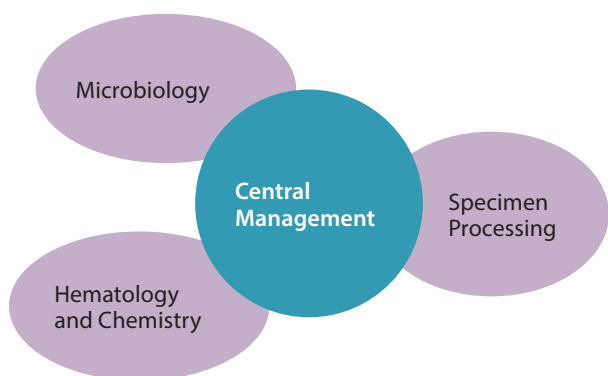


Figure 2-3. Self-contained organizational chart with overlapping circles of expertise.

trained and educated *knowledge workers*, such as radiology and laboratory technologists, who resist command-and-control models. In addition, the economics of service industries that are populated by workers with a high degree of education and training and consequently higher salaries (eg, health care) also necessitates a more efficient management structure.

One unique issue in laboratory organization is the coexistence of two supervisory hierarchies: professional supervision via the pathologists and doctoral scientists, and technical or administrative supervision via the laboratory manager or chief technician. Regardless of the organization, as stated by Peter Drucker, “the best structure will not guarantee results and performance, but the wrong structure is a guarantee of nonperformance.”¹⁰

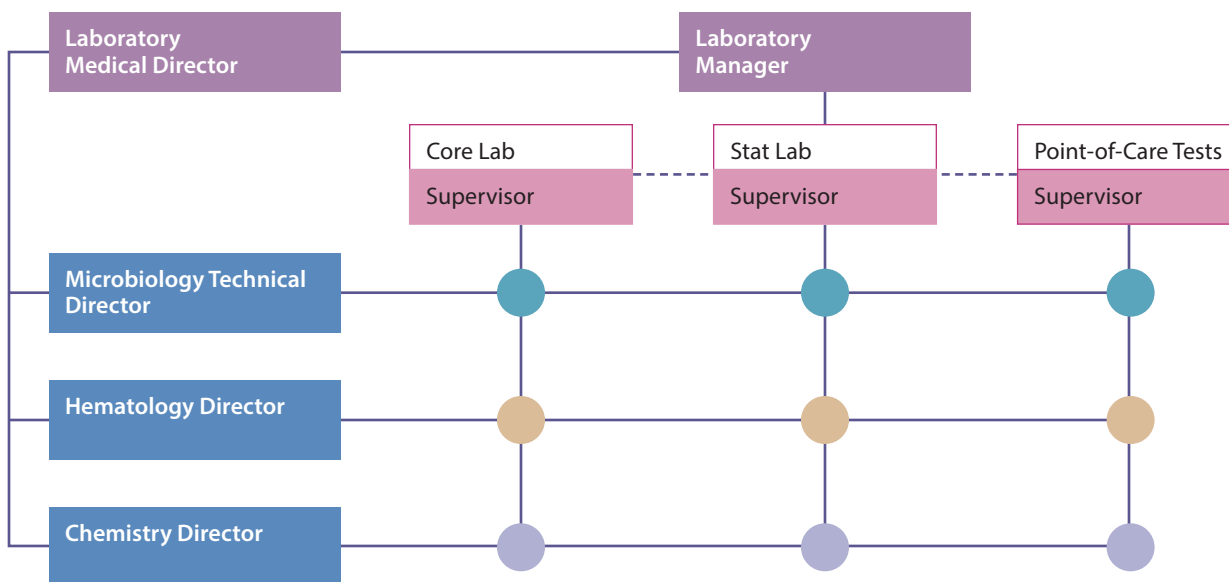


Figure 2-4. Matrix organizational chart. Circles represent testing functions. Solid lines represent direct reporting. Dashed lines can be used for indirect reporting.

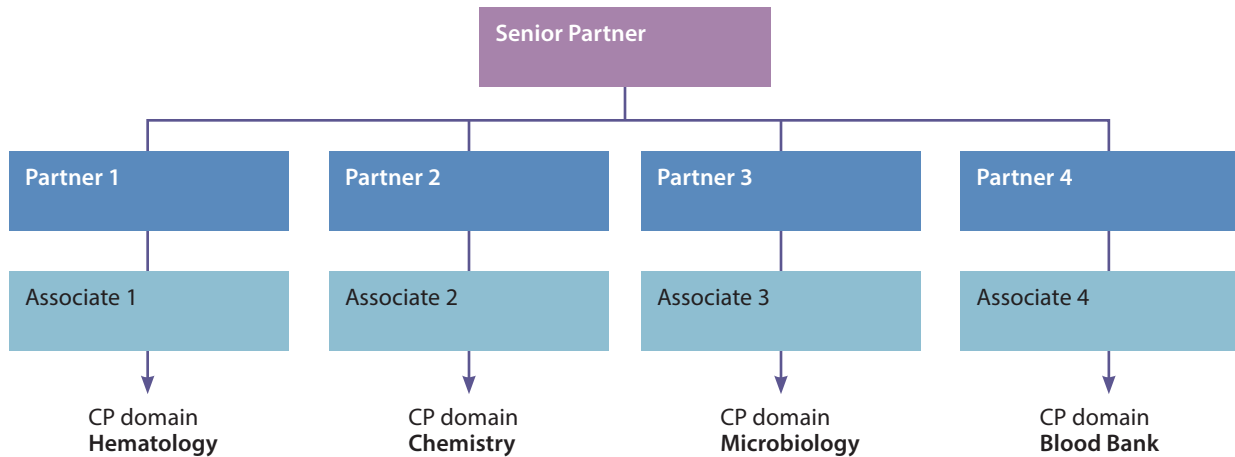


Figure 2-5. Pathology group organizational chart showing partner relationships to associates and domains.

Pathologists must know the categories of personnel in their institutions and understand the working relationships of the various categories within and among the sections of the laboratory. Division directors or section chiefs must meet regularly with the laboratory staff to discuss operational and technical issues. More frequent meetings are required to validate new tests, select instruments, restructure programs, and allocate space. The laboratory director must also meet regularly with laboratory managers or supervisors from all areas to review similar operational and technical projects.

The pathologist in charge of each laboratory section should huddle with the laboratory supervisor daily to review overarching matters. Typical structures for pathologists' interactions with the laboratory are shown in Figures 2-2, 2-4, and 2-5. In addition, they should make daily rounds to get a sense of any workload or staffing issues and discuss any problems or interesting cases. Pathologists must have a purpose when walking through laboratories—for example, a discussion about the hematology or chemistry instrumentation; by having a purpose for walking through the laboratory, pathologists demonstrate that they are interested in and knowledgeable about the laboratory activities. If possible, pathologists should become familiar with the evening, night, and weekend shifts. When appropriate, department resources can be used to provide recognition for work well done—for example, the laboratory technologists can be surprised with pizzas from time to time.

One of the prime goals of interfacing with the laboratory staff is to constantly remind the staff of the importance of their work in patient care. Pathologists are responsible for emphasizing this linkage. Given the physical distance between the laboratory and patient care, it can be difficult to motivate the staff and emphasize the meaningfulness of their work. Most testing personnel are highly skilled and well-educated workers who can exchange their jobs and easily be recruited by

neighboring institutions. The impression a pathologist leaves with laboratory staff also reflects on the staff's perception of his or her leadership qualities. Finally, pathologists' participation in staff social events facilitates communication and enhances leadership. Pathologists should not only attend but should consider sponsoring events, such as a party celebrating all birthdays in a month, an annual holiday party, or an annual softball game.

Interfacing With the Pathology Group

The professional practice group provides the framework for one's professional, financial, and emotional satisfaction or discontent. Group members are the pathology peers and doctoral scientists who work with pathologists, sharing cases, expertise, and administrative responsibilities. Pathologists spend more waking hours with their practice group than with their families. (The financial aspects of the professional practice group are discussed in detail in chapter 11, *Financial Management of the Pathology Practice*.) This section focuses on variations in practice group organization and interfaces within the practice group. The prime prerequisites for group success are that (1) the group be composed of excellent pathologists, (2) the pathologists have respect for one another, (3) the group includes leaders and followers who are comfortable in their respective roles, and (4) all members are good communicators. Other prerequisites include the following:

- A formal organizational plan for the pathology group, describing domains, authority, and reporting relationships
- A designated director with a written position charter or job description to which all members of the group agree, as well as a succession plan for the directorship
- Written position charters or job descriptions for all group members, including partners, associates,

employed pathologists, per diem employees, and postdoctoral scientists

- A formal decision-making process that defines directorship, hierarchies, domain leadership, and empowerment and involvement in the development of policies and procedures
- A formal, written, financial planning and control mechanism for preparing budgets, establishing a salary schedule, and monitoring contracts
- A shared sense of participation in group decision making
- Consensus on the group's as well as the laboratory's mission statements and strategic plans
- Consistency and fairness in group operations
- A "one for all and all for one" philosophy, because a single pathologist who "keeps score" can destroy the group

Every group needs structure. In academic medical centers and in large health care organizations (such as Kaiser Permanente), the professional practice group may be centrally managed by a board with representation from each specialty. In community hospitals, the more common format is for each specialty group to contract separately with the hospital and manage its own professional practice. Some hybrid forms exist, with centralized billing services managed by individual practices. In some cases, hospital administration performs both professional and technical billing for hospital-based clinician services, such as radiology, pathology, emergency medicine, and anesthesiology.

Depending on the nature of the contractual relationship with the hospital, a community hospital pathology practice group may be a partnership of several pathologists, a partnership of professional corporations, a single professional corporation, or an entity wholly owned by one pathologist. In some places, several pathologists working in a hospital may each have separate contracts with the hospital. Regardless of the organization's structure, the structure must be clearly defined in writing in the form of a letter of agreement, a partnership agreement, or corporate bylaws. Such written agreements among pathologists practicing in an association are essential and must be prepared by a qualified attorney. They should also be reviewed and approved by all members of the group. An organizational chart distinct from the laboratory organizational chart that shows the structure, function, and reporting and professional relationships is also useful.

An organizational chart for a simplified partnership of five partner pathologists and four associate pathologists in a general, hospital-based, clinical pathology practice is shown in Figure 2-5. The organizational chart may also designate laboratory domains for which individual partners have oversight. The partner-associate

relationship also may indicate a mentoring component in which associate pathologists are considered for future partnership.

The head or the director of the pathology practice group may be determined by the nature of the hospital contract or elected by the group. In either case, there should be a written position charter or job description that formalizes the director's responsibilities and authority, and is agreed to by all members of the group.

There may also be an elected or designated secretary and/or treasurer, in which case formal documents should delineate these officers' responsibilities and authority. Although rare in community practice, a position charter or job description for each member of the professional practice group—such as partner, associate, per-diem employee, or postdoctoral scientist—is useful. It defines expectations and guides performance evaluation (see Appendix 2-7).

Certain tasks also need to be accomplished within the group. These tasks include establishing a scheduling system and calendar that are used to assign on-call, autopsy rotation, frozen section, surgical center, teaching, and committee duties fairly. These calendars should be published monthly. A formal written vacation policy that defines priorities and privileges of rank and tenure should also be established. Domains should be assigned on the basis of competencies and experience. A system of peer review within the group must be established. In addition, a culture of informal daily communication should be encouraged—if nothing else, one should say "good morning" when one comes in to work and "good-bye" when one departs. Finally, there should be biweekly or monthly formal group meetings with set agendas that include recurrent items such as fiscal review, operations review, incident discussions, schedules, and peer review, as well as open agendas that include topics that any member of the group can introduce. Such meetings should be mandatory for all group members. A dinner meeting with food and drink may make the process less painful.

Every group should obtain the services of two consultants, namely, an attorney and an accountant, who can solve problems in their areas of expertise and periodically attend the weekly group meetings. Pathology groups with internal disagreements may consider engaging an industrial psychologist to solve interpersonal or interface problems.

Interfaces Beyond the Hospital or System

Although not always evident, a professional life exists beyond the laboratory. Achieving excellence beyond the laboratory makes pathologists more valuable—even indispensable—in the professional hospital setting. The prerequisites for interfacing outside the hospital include

an awareness of and a willingness to engage in communication. The first and possibly the easiest step to enter the external environment is to become involved in medical professional organizations, local and state medical associations, and the AMA. If the majority of clinicians in a community belong to the local medical association, it is important that the pathologist become a member as well; membership in such associations clearly demonstrates collegiality, mutual support, and respect. Membership in the local, state, and national pathology societies is also essential, and active involvement in the committees and governance of such specialty societies carries an enormous reward of knowledge and prestige (see Appendix 2-8).

Pathologists should also have intellectual pursuits, including teaching and research. No specialist is better positioned than a pathologist to provide overviews and updates in the clinical sciences. If a medical school is nearby, the community pathologist may obtain a voluntary clinical faculty appointment, volunteer to teach medical students or residents, and/or volunteer to provide medical student or resident rotations through the laboratory. Several years ago, for example, both the University of Southern California (USC) and the University of California, Los Angeles (UCLA), provided their pathology residents with collaborative programs with community hospitals. The USC program was an elective 3-month rotation in which fourth-year residents shadowed the director of a community hospital laboratory, sitting in his office, listening to his phone calls, attending meetings, making rounds, performing frozen sections, reviewing cases, and handling laboratory crises. The UCLA program, which had a similar format, collaborated with several community hospitals to provide fourth-year medical students with a 1-month elective that concentrated on anatomic pathology. Both programs were very popular at one time but were eventually eliminated because the community pathologists were facing increasing workloads and decreasing reimbursement, and found the programs to be very time consuming.

Research in the community hospital is possible. Pathologists can conduct clinical or translational research in collaboration with clinicians; in some instances, such research may be supported by the community hospital's foundation. Because the community hospital is a rich source of study materials, it is not uncommon for community hospital pathologists to collaborate on university research projects. Obviously, interfaces in an academic position require a research interface that may range from clinical or translational research to basic research programs. However, familiarity with research is an important adjunct to routine laboratory activities such as validating tests and determining reference ranges. Basic

research skills also apply to these important laboratory functions required of the community pathologist.

A pathologist should also have outside civic pursuits that include supporting local schools, community institutions, and events. Pathologists may serve on the school board, participate in the hospital's speaker's bureau, or support community-sponsored activities. Pathologists should also have a political agenda that supports the advancement of the profession of pathology. The AMA and the College of American Pathologists provide training programs that teach pathologists how to speak to the press or converse with politicians comfortably. Finally, the pathologist must have a philanthropic agenda. Every hospital has a foundation or other fund-raising entity, and pathologists must be major and significant contributors to that entity. Hospital administrators are always members of their hospitals' foundation boards, and they know the financial status of their hospitals' pathologists. If a pathologist's contribution is minimal, the next contract negotiation might not be so easily accomplished. On the other hand, if the pathologist not only contributes generously but also becomes involved in the fund-raising activities and governance of the foundation, he or she will become truly indispensable to the institution.

Strategies for Improving Interfaces

Interfaces outside the laboratory can represent an obstacle for both the clinical laboratory and the pathologist. Pathology laboratories have become a "black box" from which clinicians expect certain services. The breadth of graduate medical education often leaves clinicians with relatively little training in pathology and laboratory medicine; thus, their expectations may not be based on what can actually be performed in the laboratory. Also, the rapid rate of knowledge expansion means that many clinicians may not be aware or knowledgeable of emerging tests and technologies. There is a perception that pathologists are more introverted than clinicians. This may or may not be true. However, because of their physical location in the institution (frequently in the basement) and their somewhat isolated practice, pathologists may find it difficult to interface with hospital administration, medical staff, and other key members of the health care community and should make conscious efforts to overcome this.

One way for pathologists to create better interfaces is to become more involved in clinical care. An example is laboratory consultative services for coagulation testing and clinical chemistry, described by Laposata⁷ and Lim.¹¹ Laposata noted that many clinicians were ordering coagulation tests without much knowledge regarding the proper sequence and interpretation of the test results. He implemented a system in which clinical laboratory data in coagulation are systematically interpreted by a

physician-pathologist who writes a patient-specific narrative as a consultative note.⁷ However, the quality of the comments or interpretations is of utmost importance. Lim et al reviewed comments added by the Royal College of Pathologists of Australasia to clinical chemistry interpretations and found that the quality of the added comments varied considerably and in some cases were inappropriate and/or misleading.¹¹ They concluded that should such a system be put in place, the pathologists who provide comments should have clear expertise. With better interfaces, pathologists could conceivably provide similar support for the interpretation of complex diseases, such as endocrine disorders and neurologic diseases.

Pathologists can increase their effectiveness in interfacing with patient care to more directly identify with the patient. Twenty years ago, anesthesiologists did not typically see patients before entering into a procedure. Recognizing that their professional billing practice was plagued by patients' ignorance of their services, anesthesiologists started meeting with patients before the procedure to explain their role in the surgery. By clearly demonstrating that they are physicians and part of the surgical team, anesthesiologists have vastly improved their patients' satisfaction.¹² Likewise, pathologists can identify opportunities to interface with patients more directly. Fine-needle aspiration and bone marrow procedures provide excellent opportunities for pathologists to introduce themselves to patients. In addition, many hospitals provide educational programs for patients who undergo complex procedures or receive complicated services. Pathologists who become part of these educational programs can meet with patients and explain some of the aspects of tissue management as well as when the patients can expect their physicians to have pathology reports.

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Appendix 2-1. **Options for Satisfying Pathologists’ General Competencies and for Ongoing and Focused Professional Practice Evaluation (OPPE and FPPE)**

Laboratory Accreditation

Proficiency testing
Laboratory inspection

Maintenance of Certification

Record of activities
Global ratings
Self-assessment
Certification and recertification

Continuing Education

35 Category 1 continuing medical education (CME)
credits per 2-year period
State CME requirements

Quality Assurance and Improvement

Peer review and attestation
Volume and turnaround data
Discrepancy rates
Proficiency testing
Incident report response
Q-Probes, Q-Tracks, lab testing modules

Participation in the Profession

Governance of the practice
Medical staff functions
Medical and specialty society functions

Maintenance of Licensure

Satisfaction Surveys

Source: Catalano EW, Ruby SG, Talbert ML, Knapman DG; for the Members of the Practice Management Committee, College of American Pathologists. College of American Pathologists consideration for the delineation of pathology clinical privileges. *Arch Pathol Lab Med.* 2009;133:613-618.

Resource: Volmar KE, McCall SJ, Schiffman RB, et al. Professional practice evaluation for pathologists: the development, life, and death of the Evalumetrics Program. *Arch Pathol Lab Med.* 2017;141:551-558.

Appendix 2-2. **Model Privilege Delineation Form**

I. Documentation

- A. Education and training
- B. Licensure
- C. Impairment
- D. Specific training for requested privileges
- E. Professional liability insurance

II. Certification

- A. Primary anatomic pathology and/or clinical pathology
- B. Subspecialty
- C. Recertification

III. Request for Privileges

- A. Basic privileges
 - 1. Anatomic: list all sections requested
 - 2. Clinical: list all sections
- B. Procedural privileges
 - 1. Bone marrow aspiration/biopsy
 - 2. Fine-needle aspiration/biopsy
 - 3. Phlebotomy
 - 4. Apheresis
 - 5. Isotope injection
 - 6. Other privileges
 - 7. Prescribing blood products

IV. General Competencies

- A. Patient care
- B. Medical knowledge
- C. Practice-based learning and improvement
- D. Interpersonal and communication skills
- E. Professionalism
- F. Systems-based practice

Source: Catalano EW, Ruby SG, Talbert ML, Knapman DG; for the Members of the Practice Management Committee, College of American Pathologists. College of American Pathologists consideration for the delineation of pathology clinical privileges. *Arch Pathol Lab Med.* 2009;133:613-618.

Appendix 2-3. How to Conduct a Meeting

Among his many contributions to the science, art, and practice of pathology, Paul Bachner, MD, professor and former chair of pathology at the University of Kentucky and former president of the College of American Pathologists, taught us how to conduct meetings, how to make them meaningful, how to use committee meetings to achieve consensus, how to use them to establish control, how to get things done, and, most important, how to make attendees feel that they have accomplished something.

Prerequisites

- Become familiar with parliamentary procedure—no one else will!
- Define the committee's charge and objectives in writing.
- Define the committee's policies and procedures in writing.
- Develop position charters or job descriptions for the chairperson and members.
- Determine the membership of the committee: regular, ex officio, invited guests, and troublemakers (eg, a surgeon who consistently violates "sterile" procedures should be on the Infection Control Committee). When asking people to serve on a committee, show them the committee's charge, objectives, policies, procedures, and the members' job descriptions so they know what will be expected of them and of the committee.

Premeeting

- First ask if you really need this meeting. Could email or a conference call do as well? What if the meeting were not held?
- Develop a preliminary agenda with the committee staff.
- Circulate the preliminary agenda to members, asking for input.
- Distribute the final agenda with necessary handouts or other documents at least 48 hours before the scheduled meeting time. Never distribute lengthy documents or handouts at the meeting—they will not be carefully read or considered and will be a distraction.
- Arrive early and check out the room: Are there enough chairs? Is the white board clean? Does the projector and other equipment work? Has the food arrived?

Meeting

- The location of a meeting is very important. It must be easily accessible to the attendees and must be in a pleasant place, preferably one with windows, nice

décor, comfortable chairs, and modern audiovisual equipment.

- Seating assignment can be very important. For example, if you wish to have a sense of collegiality and collaboration, the committee chairperson should sit toward the middle of a rectangular table; on the other hand, if you want a more authoritarian format, the chairperson should sit at the end of the table. If there are windows, the chairperson should always sit with their back to the windows, especially if it is bright outside. Any troublemakers should be seated facing the window.
- Attendance can be assured if good food is present; however, if the meeting is a luncheon or dinner meeting, the food should be simple, not require a lot of table space or implements, and be fine even if not hot.
- Always begin the meeting on time. If there are not sufficient members to conduct the meeting, cancel it immediately. The next time people will be on time.
- Start by introducing yourself. If it is the committee's first meeting, ask people to introduce themselves and say where they are from, why they are on the committee, and what they hope to accomplish. Then introduce any guests or visitors and describe their role at the meeting.
- If it is a hospital or medical staff committee, begin the meeting by reviewing the hospital's mission and strategic plan. If it is a laboratory committee, review the laboratory's mission and vision.
- Review the committee's charge, policies, and procedures. This should be done every time the committee meets. Most institutions have many committees that are not well defined. By reviewing the committee's charge and policies, the committee members can focus on the job to be done, and extraneous comments or diatribes can be averted.
- Ask if there are any changes or additions to the agenda—for example, "Does anyone have to leave early and wish to move some items up the agenda?"
- Review the minutes of the previous meeting; ask for changes and approval.
- Review the assignment list from the previous meeting.
- Conduct the business of the committee.
- Schedule the next meeting.
- It is most important to recap the discussion and the decisions made. The chairperson should make notes during the meeting of what transpired and what conclusions were reached, and then present a verbal summary. The chairperson should also ask if anything was left out or if there are other interpretations of what happened.
- Finally, recapitulate the assignment or "to do" list and establish who will accomplish each item and when.

- It is imperative that you finish on time! Never go over the scheduled time—people will become annoyed, will not pay attention, and will not want to come to future meetings.

Postmeeting

- Circulate the preliminary minutes and assignment list among the committee members. Although a knowledgeable committee staff person can take minutes, it is essential that the chairperson review the preliminary minutes before they are sent out. Ask for corrections from the members and clarify that no response to their suggestions implies agreement.
- Correct the minutes based on errors noted by participants reviewing the draft minutes.
- Distribute the final minutes.
- Implement assignments.

Resources:

Lencioni P. *Death by Meeting*. San Francisco, CA: Jossey-Bass; 2004.
Sturgis A. *Standard Code of Parliamentary Procedure*. 3rd ed. New York, NY: McGraw-Hill; 1988.

Appendix 2-4.

How to Give a Talk

An essential component of interfacing is giving a talk. It may be a formal lecture, the delivery of a paper, a presentation at grand rounds, or a short comment at tumor board. All talks require preparation and practice.

Before Preparing the Talk

- Why are you speaking? To inform, convince, provoke?
- Why you and not someone else? Are you the expert?
- Know the subject.
- Know who else will be speaking.
- Know who the audience will be.
- Know the length of the talk.
- Prepare an outline, a slide list, and reminder notes.
- At the end of the talk, can anyone ask: “So what?”

Prepare the Talk to Match the Audience

- To scientists: Follow the format of a scientific paper: introduction, hypothesis, materials and methods, results, statistical analysis, discussion, and conclusion.
- To physicians: Follow the format of a patient encounter: history, physical exam, laboratory test results, images, diagnosis, treatment, course.
- To a tumor board: Follow the synoptic report format: operation, gross, microscopic description, special studies, stage, grade.
- To the nonmedical public: Know the level of knowledge. Emphasize signs and symptoms, give the disease incidence, know the audience’s main concerns.

How to Talk

- Take a public-speaking course.
- Learn about your voice. Can it be heard? Practice projecting your voice to the back of the room. Keep your voice relaxed, calm, and composed. How is it perceived? Is it appropriate to the audience? Listen to an audio recording of your voice—how does it sound? Get critiques.
- Is the vocabulary of the talk geared to the audience?
- Speak slowly, simply, and clearly.
- Never read a script. Do not memorize your talk—use reminder notes.
- Maintain eye contact with the audience, but look around the room. Don’t fixate on one member of the audience exclusively.
- Don’t look at the screen; look at the audience.
- Pretend that you are speaking to a friend.
- Don’t freeze behind the podium; move around and gesture naturally.

Before the Talk

- Review the venue, audiovisual equipment, seating, temperature.
- Load your talk into the audiovisual equipment; make sure everything works.
- Are handouts available? Carry an extra copy of any handouts you distribute.
- Carry an extra copy of your presentation slides on a flash drive.
- Rehearse your talk, obtain critiques, rehearse your talk again, edit your talk, and rehearse your talk again.

The Introduction

- Who are you, and what are your credentials?
- Why are you speaking to this group?
- What are you going to tell the group? Why should they care?
- What is in it for the audience if they listen to you?

Text Slides

- The audience is there to listen to you, not to look at slides.
- Slides should support the spoken presentation.
- PowerPoint makes slides, not presentations.
- PowerPoint should not distract, but enhance.
- Do not use fancy backgrounds, animation, or fly-ins; these are distractions that prevent the audience from concentrating on your talk.
- Keep text slides simple: Five lines per slide, five words per line, 40-point font for titles, 30-point font for text.
- Use few slides. A rate of 90 seconds per slide is fast (20 slides for 30-minute talk). Generally allow 2 minutes per slide.

- Edit slides ruthlessly, both in number and content.
- When using text slides, give the audience time to read the slide before you comment or expand on what is shown.
- Never read text slides; look at the audience.

Tables and Graphs

- Tables and graphs should illustrate your talk.
- Tables and graphs must be kept simple and made specifically for the talk.
- Never copy a table or graph from a publication.
- Do not make more than two or three points per slide.
- Never say: “I know you can’t read this, but . . .”

Pathology Slides

- The slides should illustrate your talk. No one is interested in pictures of your children or your recent vacation.
- Never begin with a high-power immunohistochemistry (IHC) slide.
- Start with a gross photo, then a low-power hematoxylin-eosin (H&E), then an intermediate-power H&E, and, finally, a high-power H&E.
- Show special stains and IHC only after H&E.
- If showing a new technique, explain how it is done and what it means. Assume the audience does not know the technique.

Handouts

- Handouts can be distributed before or after the talk.
- Handouts should be a copy of the talk’s slides, not a text version of the talk.
- Handouts should include your name and email address and a copyright symbol (©).

Concluding the Talk

- It is better to finish early than to go over time. Never go over time!
- Acknowledge those who helped without using long lists or pictures.
- Recapitulate why you gave the talk, what your main points were, and why the talk is significant for the specific audience.
- Thank the audience members for their attention and ask if they have any questions or comments.
- When responding to questions or comments, first restate the question.
- Answer questions by reiterating a point from your talk. Keep eye contact with the questioner. If you do not know the answer, say so. If a comment is nasty or provocative, don’t respond in kind.

Resource: Pearce T. *Leading Out Loud*. San Francisco, CA: Jossey-Bass; 2003.

Appendix 2-5. Assembling a Medical Staff Bulletin

Interfacing with the medical staff is essential for the involved pathologist and entails volunteering for a variety of committees and tasks. One “job” that often is hard to fill is editor of the professional staff bulletin. The job may seem daunting, but the editor is at the center of medical staff activities and knows everything that is going on in the institution. Remember, knowledge is power! But editing, like speaking, must be learned. Here are some tips for getting started.

Take a course about newsletter editing or an online tutorial that covers the following:

- Soliciting, editing, and writing articles
- Planning and scheduling the content
- Design and layout
- Distribution

Monthly features:

- Lead article
- Notes from the chief of staff
- Notes from the administrator
- Calendar of events
- Nursing notes
- Executive Committee actions
- Library notes (eg, new books)
- Pharmacy notes (eg, new drugs)
- Laboratory notes (eg, new tests)
- Case of the month
- Scientific papers
- New technology
- Editorial

Other recurring features:

- Letters to the editor
- 25 and 50 years ago
- Book reviews
- Physician of the month
- Hospital employee of the month
- Doctor’s office employee of the month
- Spouse of the month
- Managed care news
- Talent on the staff
- Abstracts of papers published by staff members
- Biographies of new staff members
- Mediquiz
- Cartoon

Appendix 2-6. Annual Report of a Pathology Department

A hospital's administration, governing body, and medical staff may not be aware of the pathologist's role in or the laboratory's contributions to high-quality patient care. An annual report can highlight the clinical and financial impact of the laboratory and the pathologist's various roles. In addition to reporting laboratory operations in relation to prior goals and objectives, the annual report is a powerful management tool that describes achievements, laments failures, identifies needs, and delineates future goals and objectives. The distribution of the annual report should coincide with the budget approval process so that administrators have full knowledge of the laboratory's past performance and future needs. The report should be distributed to the hospital's governing body, hospital administration, medical staff officers, committee chairpersons, nursing directors, and other hospital services. It is important that the report be distributed to each laboratory employee to foster an esprit de corps.

The annual report should include the following categories:

- Workload and turnaround times, with comparisons of actual to budgeted performance and comparison to previous years' workload and turnaround times
- Budget and financial performance, showing comparisons and trends over 3 to 5 years, with emphasis on the laboratory's impact on the hospital's financial success
- Operational metrics: descriptions of new tests and procedures and their impact on diagnosis, therapy, length of stay, or facilitation of emergency department disposition, and so forth; description of education provided for physicians and other health care workers
- Personnel costs and performance, including productivity and efficiency metrics
- Supply and expense costs, including the major expense categories such as equipment rental, maintenance, depreciation, reagent costs, reference laboratory send-out test costs, utilities, and allocated expenses
- Any new equipment acquired, including a description of its function
- New construction
- Satisfaction surveys, including results from both patients and physicians
- Achievement of prior goals and objectives; explanation of why certain prior goals and objectives, if any, were not achieved
- Employee development, employee turnover, new personnel, retiring personnel, employee awards/

recognition, employee participation in hospital and medical staff committees (eg, Infection Control Committee)

- Educational activities: school of medical technology, continuing medical education, seminar or course attendance
- Professional activities: physicians' and doctoral researchers' academic appointments, participation in hospital and medical staff committees, participation in educational programs, published papers, awards, and activities in local and national medical organizations
- Inspections and accreditations: results of the various inspections and proficiency testing programs
- Incidents: accidents, injuries, patient errors, and so forth, with an emphasis on remediation and corrective actions; in particular, descriptions of risk avoidance activities, such as efforts to reduce errors
- Required changes and enhancements: next year's goals and objectives, new tests or procedures, new equipment required to improve efficiency and decrease costs

Source: Horowitz RE. Annual report of a pathology department. *Pathologist*. 1983;37:184-186.

Appendix 2-7. Pathologist Performance Evaluations

In this era of documentation and requirements for ongoing evaluation, a guide to the performance evaluation of pathologists might be useful, if only to establish uniformity and consistency within a pathology group.

Maintenance of Competence Elements

- Professional standing: licensure, certification, recertification, hospital privileges
- Continuing medical education (CME) and periodic self-assessment
- Cognitive expertise (an examination)
- Performance in practice

General Competencies (see Appendix 2-1)

- Patient care
- Medical knowledge
- Practice-based learning and improvement
- Interpersonal and communication skills
- Professionalism
- Systems-based practice

Performance Elements

- Mastery of the fundamentals of anatomic and clinical pathology
- Appropriate use of special studies
- Work output and turnaround time
- Use of scientific literature and scientific accomplishments

- Innovation and creative ability
- Teaching ability
- Skill in chairing committees and presenting conferences
- Personal skills: ability to apply self, determine priorities, complete work in a timely fashion, work and remain calm under pressure, take failure or handle mistakes gracefully, demonstrate emotional maturity
- Interpersonal skills: integrity; reliability; honesty; ability to work harmoniously with peers, subordinates, and superiors; ability to accept others' points of view; willingness to volunteer assistance; ability to accept responsibility; ability to empathize with clinicians
- Decision skills: ability to reason well, capacity for logical thinking, ability to make good decisions
- Communication skills: clear, concise, convincing oral communication; sensitive listening; good written communication

Summary

- Performing at advanced level: ready for promotion, partnership, or bonus
- Performing satisfactorily in present assignment
- Needs additional training, development, or experience (specify any additional work or experience needed, how it will be assessed, and the time frame for completing the work or obtaining the experience)

Appendix 2-8.

Laboratory Specialty Societies

Presented in alphabetical order. Descriptions are derived from society websites.

AABB (formerly known as American Association of Blood Banks) is an international association dedicated to the advancement of science and the practice of transfusion medicine and related biological therapies whose membership consists of institutions and individuals, including physicians, scientists, administrators, medical technologists, nurses, researchers, blood donor recruiters, and public relations personnel. (aabb.org)

American Association for Clinical Chemistry (AACC) is an association of professional laboratory scientists, including MDs and PhDs, whose members develop and perform tests conducted in hospital laboratories, clinics, medical centers, and other health care settings. (aacc.org)

American Association of Clinical Chemistry (AACC) Academy is the official academy for clinical chemistry. Its membership consists of doctorate-level scientists involved in developing the scholarship and practice of laboratory medicine. (aacc.org/community/aacc-academy)

American Association of Bioanalysts (AAB) is a professional association whose members are clinical laboratory directors, owners, supervisors, managers, medical technologists, medical laboratory technicians, physician office laboratory technicians, and phlebotomists. AAB also has three specialized membership sections for laboratory professionals: the College of Reproductive Biology (CRB), the Environmental Biology and Public Health section (EBPH), and the National Independent Laboratory Association (NILA). (aab.org)

American Association of Tissue Banks (AATB) is a professional, nonprofit, scientific and educational organization. AATB is the premier standard setting body promoting the safety and use of donated human tissue. (aatb.org)

American Clinical Laboratory Association (ACLA) is an organization that represents national, regional, and local independent clinical laboratories, providing its members with representation in federal and state governments, private health plans, education, information, and research. (acla.com)

American Society of Cytopathology (ASC), founded in 1951, is a distinguished national professional society of physicians, cytotechnologists, and scientists who are dedicated to the cytologic method of diagnostic pathology. The ASC's diverse membership includes representatives from other countries who share a vision of education, research, and continuous improvement in the standards and quality of patient care. The ASC is a unique society that provides a forum where physicians and cytotechnologists can interact and network with each other on both a personal and professional level. (cytopathology.org)

American Society for Clinical Laboratory Science (ASCLS) is a nonregistry professional society representing nonphysician clinical laboratory practitioners, whose members include clinical laboratory directors, managers, supervisors, hematologists, immunologists, educators, clinical chemists, microbiologists, phlebotomists, and other professionals. (ascls.org)

American Society for Clinical Pathology (ASCP) is a medical specialty society representing pathology and laboratory medicine whose members are board-certified pathologists, other physicians, clinical scientists (PhDs), medical technologists, and technicians. (ascp.org)

American Society for Investigative Pathology (ASIP) is a society of biomedical scientists who investigate mechanisms of disease. ASIP advocates for the practice of investigative pathology and fosters the professional career development and education of its members. (asip.org)

American Society for Microbiology (ASM) is a life science society comprising scientists and health professionals whose mission is to advance the microbiological sciences and the profession of microbiology by disseminating information and stimulating research and education. (asm.org)

American Society of Hematology (ASH) is a professional society concerned with the causes and treatment of blood disorders whose mission is to further the understanding, diagnosis, treatment, and prevention of disorders of the blood, bone marrow, and the immunologic, hemostatic, and vascular systems. (hematology.org)

Association for Molecular Pathology (AMP) promotes clinical practice, basic research, and education in molecular pathology, with a mission to represent and unify practitioners of molecular pathology. (amp.org)

Association for Pathology Informatics (API) promotes the field of pathology informatics as an academic and a clinical subspecialty of pathology. (pathology-informatics.org)

Canadian Society for Medical Laboratory Science (CSMLS) is the national certifying body and professional society for medical laboratory professionals. Its members include medical laboratory technologists, medical laboratory assistants, educators, and scientists who work in public and private laboratories. (csmls.org)

Canadian Society of Clinical Chemists (CSCC) is a scientific and professional society representing clinical biochemists across Canada that provides leadership in the practice of clinical biochemistry and clinical laboratory medicine through service, education, and research. (csccl.ca)

Clinical and Laboratory Standards Institute (CLSI), formerly NCCLS, promotes quality health care through consensus standards, guidelines, and best practices. (clsi.org)

Clinical Laboratory Management Association (CLMA) is an international professional association of health care managers who are responsible for the operations of laboratories and clinical services provided by hospitals and other health care organizations. (clma.org)

College of American Pathologists (CAP) is an organization of board-certified pathologists whose mission is to serve patients, pathologists, and the public by fostering and advocating excellence in the practice of pathology and laboratory medicine. (cap.org)

International Society for Biological and Environmental Repositories (ISBER) is a global biobanking organization that creates opportunities for networking, education, and innovations, and harmonizes approaches to evolving challenges in biological and environmental repositories. (isber.org)

National Accrediting Agency for Clinical Laboratory Sciences (NAACLS) is committed to being the premier international agency for accreditation and approval of education programs in the clinical laboratory sciences and related health care professions. NAACLS provides leadership in fostering innovative educational approaches and actively supports cooperative efforts with other agencies. (naaccls.org)

United States and Canadian Academy of Pathology (USCAP) is a global leader in the transmission of knowledge in the field of pathology, providing pathology education via its faculty and programs and fostering ongoing innovation and scientific breakthroughs for the field of pathology. (uscap.org)