

# Executive Dialogue

## The Role of the Pathologist

in Diagnosis, Quality and Patient Safety

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# The Role of the Pathologist in Diagnosis, Quality and Patient Safety

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Pathologists are critical members of the health care team, intersecting nearly all aspects of patient care, from diagnostics to prevention and primary care. Pathologists improve patient outcomes, helping to determine the right test at the right time for the right patient. Health Forum convened a panel of pathologists and health care executives Nov. 4 in Chicago to discuss the role of pathology in diagnosis, quality and patient safety. Health Forum thanks the College of American Pathologists for sponsoring this event.





**MODERATOR** (Bob Kehoe, Senior editor, *Hospitals & Health Networks*, Health Forum): How can pathologists play a more visible role in improving quality and safety in hospitals and health systems?

**WENDY LEUTGENS, R.N.** (Chief Operating Officer, Loyola University Medical Center and President, Loyola University Medical Center): From my perspective, the clinical leadership, which includes the chair of pathology, needs to be at the table for decision-making. That's how we've structured things at our organization. From a

quality perspective, everybody has to be there and participate. Engagement in committees where decisions are made is very important.

**EVA WOJCIK, M.D.** (Chair, Department of Pathology, Loyola University Medical Center): To follow-up on Wendy's comments, as chair of pathology, it is my responsibility to be present at almost every key committee. We have to be there, like it or not. As pathologists, it's often against our nature. We have to become more active and visible. We have to get out from behind the microscopes and be part of the team. It should be part of the training for all pathologists, and not just for those in leadership roles.

**CAREY AUGUST, M.D.** (Medical Director, Anatomic Pathology, Advocate Illinois Masonic Medical Center): As pathologist leaders, we have to be optimistic and persistent. Our discipline is focused on standards and quality. We participate in the College of American Pathologists accreditation program, which is very detailed. We are good at following rules, and know they are largely designed for patient safety. We need to do a better job explaining some of our requirements to other hospital departments. We're not trying to make processes complex; we are focused on making processes safe. And we have to be optimistic that we can affect change, because generally we can.

**RITU NAYAR, M.D.** (Professor of Pathology, Northwestern University Feinberg School of Medicine/Northwestern Memorial Hospital): We need to play a greater role in education, particularly around appropriate test utilization. I don't personally consider this gatekeeping, as much as doing our job as part of a multidisciplinary team. If someone orders the incorrect test, we need to provide an explanation as to why it's not the right test for the patient. It's important that we stay on top of advances in medicine, so we are familiar with new tests and



**Other disciplines look to pathology for expertise.**  
**Wendy Leutgens, R.N.**

treatments. It's all about the right test for the right patient at the right time.

**LEUTGENS:** The 'why' is very important. Other disciplines look to pathology for expertise. By explaining why a test is not appropriate, it can lead to better understanding and improved quality of care. If clinicians understand the rationale, it will be easy to get them on board.

**NAVAY:** The challenge, of course, is avoiding information overload. It behooves us to go out and provide educational sessions. I've found that surveying clinicians is a useful tool. When I want to push for appropriate test utilization, I conduct a pre-session survey on clinician practices. During the session, I show them their data and it's very informative. These kinds of discussions highlight to the clinicians that it is really important to make sure that every member of the team is on board.

**ROBERT ZADYLAK, M.D.** (Chief Medical Officer and Vice President of Medical Management, Advocate Illinois Masonic Medical Center): I believe that most clinicians do not understand the detailed requirements that you have in pathology, or how meticulous pathologists are in their work. Pathologists are perceived as too persnickety. Until we can overcome this stereotype, it will be hard to be able to completely integrate into those complicated operating systems.

Technology has hampered this integration in some ways. Not long ago, clinicians would have to review slides with the pathologist. Now the process is automated and that interaction is lacking. How can we facilitate greater interaction among pathologists and other disciplines? We're more connected than ever, but also more isolated.

**WOJCIK:** It has to be a two-way street. A common complaint among pathologists is that no one reaches out to talk to them anymore. But are they making the effort to enhance communication? Let's face it, we feel comfortable sitting behind a microscope. We are not the ones who will explain the results to the patient, but maybe we should be part of the explanation. We definitely need to improve communication with our clinical colleagues. They are overwhelmed. I'm sure they would welcome our help.

**ROBERT DECRESE, M.D.** (Chair, Department of Pathology, Rush University Medical Center): We can't lose sight of the fact that pathologists are physicians. Our training is probably a little different than most positions. Pathologists receive more management training than people in other disciplines. Quality is embedded in what we do. We grew up on it. Physician engagement is critical on all levels. It's important for physicians to see you as a physician-colleague, rather than as a technician or a technical person. That plays a big role. As Eva said, pathologists must become more visible within their organizations.

**STEPHEN RUBY, M.D.** (4path Ltd. Pathology Services): Pathology is paddling upstream to get to the right place today. In the past, pathologists typically were scientifically trained and less clinically trained. Many pathologists trained in this way feel more secure working behind closed doors. It created a protective barrier around the laboratory, keeping it safe and secure. But, unfortunately, closing that laboratory door also closed off the rest of the health care environment. Now we're fighting that upstream battle of trying to reconnect to the clinical area, and I think we're succeeding. The newer generation of pathologists seems very willing to step out and communicate with their peers.

**JUDY ELLESON** (Administrative Director, Department of Pathology, Northwestern Faculty Foundation/Northwestern Medicine): Pathologists have a wealth of knowledge and data and have a great deal to offer in terms of improving quality and patient safety, as well as improving costs and enhancing efficiencies. One of the challenges that I see is that pathologists suffer from lack of information technology resources. Although they may be data-rich, they lack the support to mine the data and produce useful reports. Administrators and physicians want to see data. But it's difficult for pathologists to get that information out of the system, unless they have somebody with that expertise to rely on. Laboratory managers probably could get at that information if they had the time, but most often they do not.

**MODERATOR:** How are you working with administration to elevate the role of pathology within your organization?



We need to play a greater role in education, particularly around appropriate test utilization.  
Ritu Nayar, M.D.

**AUGUST:** This doesn't speak directly to administration, but we do need to revisit physician training. We grew up in an era when physicians from other specialties would come and spend a month's rotation in the pathology department learning what we do. Now, residents in other specialties have so much to learn on their own, there's less time available to learn about other disciplines. Unfortunately, it's not part of their training any more. So we already have a generation of physicians who have no idea how

we do what we do. That's unfortunate. It would be great if this kind of training were part of the curriculum of physicians and other specialties.

**MODERATOR:** Is that an administrative function or a leadership function?

**ZADYLAK:** It's graduate medical education and administrative. It's a national issue, from my point of view. I frequently hear from my pathologist peers that clinicians do not

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The newer generation of pathologists seems very willing to step out and communicate with their peers.  
Stephen Ruby, M.D.

understand how to appropriately order lab or radiology services. They don't understand the underlying science, the appropriateness of the tests or their usefulness.

**DECRESE:** Half the tests that are ordered are useless. The problem is, I don't know which half. Students don't learn about lab testing in medical school. Most residents learn by seeing what tests other residents and their attending physicians order. That's the bulk of their learning.

**AUGUST:** So they tend to order everything.

**DECRESE:** That's correct. It goes back to evidence-based medicine. Take genetic testing, for example. It's expensive, so we have genetic counselors. When someone orders a genetic test, counselors will look at the order and provide their input on the appropriateness of that test. Pathologists can play a similar role. They can provide feedback to clinicians about the appropriateness of an order. I find clinicians to be very receptive to my feedback. But it's a lot of work. We have focused on the most expensive tests because it's easier. There's a huge opportunity to eliminate tests that don't add value to the patient and sometimes make things worse.

**ZADYLAK:** How can we bring about that change? What do you think would leverage that change, though? Until they order a test, and you do the pushback, there's no outreach to you from the non-pathologist.

**RUBY:** That's a great question. As Carey mentioned, we used to have people rotate through, so we had a tight connection. Everybody understood the role of pathology and how we did things. When that went away, the connection with the laboratory went away. And when the connection from the laboratory went away, the communication also went away. We need to reinstate that connection. We need to be our own cheerleaders and we need to market ourselves. Maybe the pathology department should have a newsletter that goes out to all of the other departments that provides fun facts and a small amount of laboratory information to build a connection.

**AUGUST:** We have this discussion all of the time.

The hospital actually produces brief videos that are distributed via email. It's a good way of getting the message across to our physician population. But we can't guarantee that everyone will watch them.

**RUBY:** The use of video is cutting edge. Even if only 10 percent of your physicians are watching, that's a great start. If the videos are interesting and compelling, word of mouth will spread and more physicians will watch.

**LEUTGENS:** From an administration perspective, the transition from volume to value is top of mind. Hospitals won't get paid for unnecessary tests, so it's in everybody's best interest to get it right. The focus is on high-quality care in the right setting. The medical staff won't know about utilization unless pathology tells them. Our director of microbiology has closely analyzed our blood culture data and found an overutilization and that our residents were ordering the bulk of the unnecessary tests. It's an opportunity for the institution to provide better care for the patient at a lower cost and bring it to the medical staff and GME committees. Once they see the data, it will be easier to get buy-in and build things into the EHR to help people order correctly. Decision support is absolutely necessary; otherwise it's a free-for-all. But pathologists have to take the lead because they're the ones who are seeing the data.

**AUGUST:** We have a group of pathologists at Advocate who are examining our test utilization. They are looking to determine what tests are overutilized and are of no value to the patient. The plan is to educate clinicians to support appropriate utilization.

**WOJCIK:** This is an incredible time for pathology, because this is our time. This is our opportunity. We really should be stewards for the patients, for the hospitals and for health care. We are the ones in charge of the data. We need to share the data in a meaningful way. Appropriate utilization, for example, is not just a matter of money; it's a patient care issue. Patients can suffer unnecessary side effects from unnecessary procedures and tests. It has a domino effect. It's really up to us.

**DECRESE:** One of our biggest challenges is that most of the patient testing is done in the outpa-

tient setting. It's much easier to communicate and work with hospital-based physicians. We know them. It's much harder to work with physicians in the community whom I don't know.

**NAVYAR:** Direct communication is important. I'm sure most of us are doing this already. It actually falls in the lap of pathology to inform clinicians about critical, notifiable results. We all have definitions about what is critical and what is notifiable, in what time period that information must be delivered and personally communicated to the clinical health care provider. Physicians are busy. It's not uncommon for them to order a test and not look at the result. And then there are other issues. A patient may come to the emergency department and be under one physician's care, but when a critical result is realized, the patient may no longer be under that physician's care. There's a surprising number of tests that are critical that don't make it to the physician who's caring for the patient.

**ZADYLAK:** That is a huge issue.

**NAVYAR:** We have to take the lead. Among other things, it's a big liability issue because it falls back in the lap of pathology if something happens. One of the things that we've been trying to do is to talk to physicians face-to-face and via our department and medical staff newsletters about guidelines and management expectations. Additionally, one of our ongoing professional practice evaluations is that physicians are supposed to answer their pages. And too often our pages don't get answered. Of course, the physician may be in the operating room, or with a patient, but often the call is not

returned after several days. So, we file a quality improvement report and I share it with the medical staff office. Clinicians, as members of the team, need to be accountable.

**ZADYLAK:** That's a struggle we've gone through with critical result reporting. We've tried to find an electronic means of doing it and we've had some partial success. Everyone is so connected via technology — they have three to five phone numbers and multiple email addresses and yet, we can't reach them. This is a huge barrier to providing safe, high-quality care. We are still trying to find the best solution.

**NAVYAR:** We have a decision-making tree in our procedure, so a physician-in-training who's on-call can follow a defined protocol to communicate urgent results. Just recently, one of our residents had to share a critical result with a patient directly because, despite going through a number of options, he was unable to reach a member of the team caring for the patient. The patient's physician was upset, but the resident followed the guidelines.

**AUGUST:** You have to do the right thing for the patient.

**NAVYAR:** Yes. We did the right thing for the patient, but the clinician wasn't happy because the patient wasn't happy with the clinician.

**MODERATOR:** How can pathologists facilitate the identification and reporting of errors? How can they participate in the quality improvement efforts of the organization?

**DECREESE:** We spend a great deal of time looking



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Judy Elleson



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M.D.

for errors, specimen misidentification, overutilization of blood cultures, etc. It's important to have a process in place to look for errors. We also benchmark with other hospitals, so we get a sense of how we're doing.

**RUBY:** In pathology, there's no level of acceptable error, but there's an understandable level of error. It's always going to be there, but we can never accept it and we need to always try to prevent it. Our philosophy, as pathologists, has been to detect it, correct it and then monitor for it. Pathologists are proactive individuals about correcting, disclosing and helping to prevent future errors.

**WOJCIK:** At the same time, I believe we are just scratching the surface. We still have a great deal of work to do. We report errors, for example, but what do we do when we find a near-miss. That information is often lost, and not shared as a potential learning opportunity. Let's start talking about this openly. It's going to be difficult, but it's important.

**MODERATOR:** How do you look at the issue of sharing data?

**ELLESON:** If you have a good data miner who can pull information from an electronic data warehouse that stores clinical and financial data, you can produce reports based on diagnosis and sorted by clinician to review test utilization and ordering patterns. Pathologists can then analyze this data to determine if the tests being ordered are appropriate. Are the tests being ordered going to produce the intended clinical information? Will the care rendered to the patient based on the result be appropriate? The pathologist can then engage in a conversation with clinicians about ordering patterns, the efficiency of the tests being ordered and propose test alternatives that could provide the best information for patient care. The data can then be monitored to determine if the conversations have had an impact on clinical behavior. It goes back to having the ability to pull the needed information, sharing it with the pathologist who can identify the issues and have a dialogue with clinicians to improve test utilization.

**DECRESCE:** If we really focus, we can change the culture of pathology and further enhance safety. We have great examples from the air-

line industry, and even anesthesiology. Major safety improvements can be made. What we're all trying to do is find the best way to do it in pathology.

**MODERATOR:** Is this something that has to encompass the leadership throughout the organization or interdepartmentally?

**LEUTGENS:** Both, I think. There are improvements to be made inside the lab, validating results, among other things. But there's also the organization or systemwide quality review that needs to occur. As Eva said, we can learn as much from a near miss as we can from an error. So, we do need to expand our reporting. Process improvement must happen at the organizational level with most things regarding lab and radiology because we are part of nearly every patient encounter.

**WOJCIK:** We have to be the leaders in this process. Quality control within our labs is well-established, but many of the errors occur before the specimen comes to the lab by way of mislabeled slides, etc. One way we can educate everyone is by reporting errors and near-misses to raise awareness across the organization. We are not the policemen of the institution; we are here to help.

**ZADYLAK:** But we become policemen on many of these issues. We're the primary ones who are bringing it forward.

**RUBY:** The laboratory often has a separate quality assurance program from that of the rest of the hospital. I would bet that in most places, the quality assurance program in the hospital doesn't include pathology to a significant extent. These programs need to be integrated if we are to achieve significant improvement.

**MODERATOR:** What's it going to take in terms of creating infrastructure or systems and processes to make sure that this level of integration occurs?

**NAYAR:** Fear of litigation is one of the key drivers of inappropriate ordering. Clinicians are practicing defensive medicine. Until we can achieve significant changes in tort reform, we won't be able to make a sufficient dent. It's a huge challenge.



# KEY FINDINGS



Pathologists are essential participants in team-based care, providing clinical expertise in diagnostic and predictive medicine.



Pathology plays a significant role in population health and value-based care, providing actionable data to ensure the delivery of effective, efficient patient care.



Pathology needs to be reinstated into clinical education, so that all clinicians have an understanding of the discipline, as well as the appropriateness and efficacy of the tests they order.

**AUGUST:** It is a huge challenge. We can share data and educate clinicians, but the real change must be a cultural one. There has to be a shift within our institutions away from blame and fear. And we need regulatory change, as well.

**ZADYLAK:** It seems that too many clinicians are on autopilot when they place an order. Have we come to the point where it should become a separate privilege for clinicians to order tests? Take oncology drugs, for example. Only oncologists can order oncology drugs. My fear is that pathology has evolved to the point that it's become so complicated, and medical training has become so inundated, that clinicians are not receiving adequate training. Should certain physicians, with documented training, be able to order certain bundles of tests? It's something to consider.

**MODERATOR:** Health care is undergoing a significant transformation, from volume to value. What role does the lab play in the transformation to value-based care?

**LEUTGENS:** It gets back to what we were talking about earlier — appropriate utilization, eliminating unnecessary costs and tests that do not

benefit the patient. Pathology can play a role in addressing these issues.

**RUBY:** Right now, the lab is working in a silo. We're looking at utilization within the lab, rather than at the big picture. We have to build systemwide efficiencies. We have the data and the ability to do so. It's up to us to get it done.

**LEUTGENS:** That's correct. The cost per test may be higher because we brought in a new technology, but the end result may shorten the length of stay. So, our costs, in fact, go down. We have to look at the overall value, and not just the cost in the lab.

**AUGUST:** A good example is how pathologists have led the way in studying the cost-benefit ratio of prospective genetic testing for colon and endometrial cancers. It's often viewed as a waste of money, but studies have proven that the savings for each patient who tests positive for abnormalities, justifies doing it in a systematic, reflexive fashion. From a cost-utilization standpoint, it might seem wasteful, but when you put the cost savings in the context of the big picture, it has tremendous value.



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Eva Wojcik, M.D.

**WOJCIK:** That brings us back to team-based care. We have to eliminate the silos and work together as a team. New technology may be expensive, but if it can provide a test result in a few hours vs. a few days, it may decrease length of stay and improve patient satisfaction. It has a big impact downstream. Despite the initial cost, it may be a better solution long-term.

**MODERATOR:** Where do you see the greatest opportunities for pathologists to improve team-based care, and how can hospitals and health systems capitalize on those?

**AUGUST:** Our breast tumor board always includes a pathologist and a radiologist. We are active members of the team. It requires an investment of our time, and our organization has multiple tumor boards, but it's important for us to participate. It's a valuable group.

**LEUTGENS:** Cancer treatment is one area in which we have become fully integrated into the medical team. How can we replicate that in other areas? There must be other opportunities to integrate diagnostics into the patient care team.

**NAYAR:** Our greatest opportunity lies with enhanced communication. We need to be front and center regarding the pre- and post-testing components. We can do a great job testing, but if we don't communicate the results appropriately, it won't make a difference. For example, I worked with IT to help combine our Pap and HPV tests. It was a long process, but now we have a combined report. It's decreased the potential for error and increased clinician satisfaction. It's just one of the many ways we can add value to the care delivery process.

**AUGUST:** The College of American Pathologists is working to help prepare pathologists for improved communication with other disciplines. Once a year, CAP hosts a program in which people are trained to speak and to deliver messages to different types of audiences, such as to the patient or the C-suite. We have a good number of pathology residents that take part in the program.

**MODERATOR:** Are there areas beyond cancer care where you see opportunities for involvement by pathologists in team-based care?

**DECRESE:** Going forward, I see pathologists playing an important role in interdisciplinary medicine, particularly around some of the new pharmaceutical agents coming to market. Pathology can help to determine whether a medication is right for a patient. Pathologists are generally in the center of that process. Personalized medicine is on the rise, and pathologists will be at the forefront.

**RUBY:** The wealth of what pathology can bring is limited only by our own ingenuity. There are few specialties that interact with as many specialties as pathology. So, the value that we bring to any community is not just the expertise in that one area, but our expertise across the entire continuum of care. For example, when we meet with a tumor board, we're not just bringing our expertise in cancer, we're bringing our expertise in clinical endocrinology and infectious disease.

As far as areas in which pathology can play a greater role in team-based care, psychiatry is one of them. Pathologists have the potential to conduct molecular drug analysis, or drug metabolism tests, to help determine which medications patients may be resistant to, allowing patients to bypass a six- or eight-week trial-and-error period. It can save valuable time and money, as well as potential suffering. We can help to find the right treatment for the patient.

**WOJCIK:** The new Institute of Medicine report, "Improving Diagnosis in Health Care," highlights the need for greater teamwork and improved education for health care professionals in the diagnostic process. Pathology and radiology are at the center of the diagnostic decision-making process. We have a great opportunity to change care delivery going forward in a way that will benefit clinicians and patients.

**ZADYLAK:** Getting back to clinical training, there's really no competency taught about proper lab ordering. Attending physicians and senior residents typically train new physicians. We need to build in basic competencies of appropriate laboratory ordering to improve patient care.

**LEUTGENS:** Pathologists are used to working as a team in the lab. So, in theory, can't pathologists



We can share data and educate clinicians, but the real change must be cultural change.  
Carey August,  
M.D.



## We need to bring back greater exposure to pathology during medical training.

Robert Zadylak, M.D.

teach others how to work in teams?

**RUBY:** That's an interesting observation. That's how pathologists work. In a difficult case, a pathologist doesn't look at the slide and make a final determination if they are unsure of the diagnosis. Rather, they will often consult another pathologist, usually in their group, and ask for an opinion, and, if necessary, they will ask another and develop a team consensus.

**NAVYAR:** As a result, quality assurance is stronger than in many other medical specialties.

**MODERATOR:** How is pathology engaged with the organization's quality efforts? What are you doing within your organizations?

**NAVYAR:** At Northwestern, much of it comes through the medical staff quality management committee. The committee comprises representatives from every specialty. It's a good forum to see what everyone is doing to improve quality and make institutionwide quality-related decisions. We also have an institutional critical care evaluation committee that discusses quality and risk-related issues from all areas of the hospital once a week. Pathology is often present as part of the root-cause analysis. Those are just two more examples of pathology's involvement in ensuring quality and patient safety.

**ZADYLAK:** With accountable care, maybe this is the time pathology can leverage its expertise to add value to the care delivery process. Patient care is important, but we also need to look at the value of the care provided, including the cost of care. Pathology can play an important role in process improvement, helping to enhance efficiencies and quality. We also need to consider the cost element to the equation.

**DECRESCE:** Pathology has always been data-oriented and we produce reports all the time. We have a long-term, systematic and quantitative look at things. It's harder to do in some other areas of the hospital, but it's gaining traction. Pathology can provide a good model for other departments on data collection and reporting. We have several models that we share with administration.

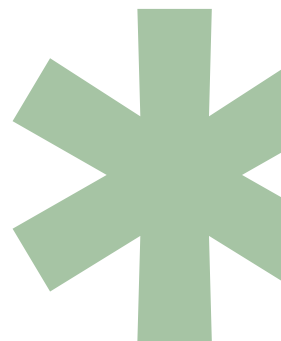
**ZADYLAK:** Are the dashboards visibly present every month for the senior administration by utilization of lab and appropriateness?

**DECRESCE:** Yes, we have reports on different aspects of what we do. Some of them are simply process measurements. It would be better, however, if we could provide more outcome measurements, but I don't think we're there yet. We'd like to focus not just on process, but the outcome.

**AUGUST:** Within the laboratory, we measure turnaround times and how often we call critical results, among other things. We share those data across the organization. But we need to provide other metrics that affect the health care system as a whole, such as utilization and appropriateness of tests ordered because now that information is mostly an anecdotal observation or occurrence.

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# THANKS

Health Forum would like to thank the panelists for taking part in  
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