CAP TODAY Roundtable: AP computer system— 'Look at value versus cost'

February 2021—*What is the one most important thing to look for in an anatomic pathology computer system? That is one of several questions CAP TODAY publisher Bob McGonnagle put to five people in a Dec. 14 call on the AP LIS and more—surgical pathology volumes amid COVID-19, data integration, practice consolidation.*

The roundtable participants were Monica de Baca, MD, of Pacific Pathology Partners, Rick Callahan of NovoPath, Curt Johnson of Orchard Software, Joe Nollar of Xifin, and Mick Raich of Vachette Pathology. Their conversation follows.

CAP TODAY's guide to AP computer systems begins here.

Monica de Baca, what is the latest in your laboratory with COVID? I ask that because there's some indication that people are starting to stand down elective procedures again, which may have a big effect on surgical pathology.
Monica de Baca, MD, founder of MDPath and hematopathologist, Pacific Pathology Partners, Seattle: I work for a private practice in Seattle; we see mostly anatomic pathology that comes from small clients in the surrounding Seattle metropolitan and Pacific Northwest area, and between late March and late June our surgical pathology volumes dropped by about 75 percent. That had large implications for staffing for techs and pathologists alike. The volumes came back up, and the populace of the Seattle area has been good at using distancing and masking precautions, so at this point we haven't started to see a reduction in numbers again. We have already figured out what we will do if the numbers do drop in terms of staffing and how people are going to be "able" to spend a little more time with their families again.

Nollar

Joe Nollar, are you seeing signs of a second round of diminished volumes in surgical pathology?
Joe Nollar, assistant VP, product development, Xifin: No, not yet, but the lab testing volume overall is up with COVID testing. Monica's comments do resonate. One would expect the additional impact and burden on the hospital to have an impact on routine patient care and then a consequential impact on routine laboratory testing and services. But overall we're seeing a significant increase in laboratory testing. We're not at the level where everything is back to normal with routine testing, but across all segments we are looking at about a 94 percent return to normal testing volumes. As hospitals are further impacted by the COVID crisis, it is likely we will see another dip in routine testing.

Mick Raich, can you comment on that from what you're hearing?
Mick Raich, founder, Vachette Pathology: We work with pathology groups across the nation, and two or three of them have said they're preparing to shut down elective surgeries, and we had some health systems talk about shifting things around in case they have to shut down elective surgeries. But I'll agree with Joe's comment: Most of our pathology groups are at about 95 percent of what they were in February. They had a big rebound in July, and they've slipped back down, and depending how things go moving forward, it's going to be interesting to see what early 2021 brings. We do have groups that are getting ready for it, and the health care systems are more prepared for it now.

Monica de Baca, what do you foresee in the quarter ahead, and what concerns are top of mind for you

now in your anatomic pathology operation?
Dr. de Baca (Pacific Pathology Partners): Every day gives us the possibility of a need to reshuffle and rethink. Historically, pathology has been regulated, regimented, consistent—there is a process here and it doesn't change—and the COVID environment has shown that we are more resilient and flexible than we thought. The pathology community deserves enormous kudos for how well it has done in the laboratory response to this pandemic: getting testing up and running, even though what has been broadcast is the negative part—of what didn't happen. It's difficult to have 300 million tests at the ready for a virus we didn't know existed, but within a couple of months we had tests going. It's not only the clinical laboratory that has demonstrated this capacity to be creative and to pivot and still maintain the quality we need but also the anatomic pathology world. We've had to deal with colleagues who have COVID, with a different pattern of workflow in terms of volumes and what kind of specimens are incoming. We are looking, in the next six months, to continue this daily evaluation of what's happening in the world around us, which is changing so quickly, and trying to maintain viability and still support our communities.

Curt Johnson, it strikes me that anatomic pathology systems increasingly need to support more of the high-tech testing that surrounds basic surgical pathology, so a lot of biomarker testing, reference lab testing, which means amended reports, comprehensive reports, and other things. Is there a greater demand for proper code capture and billing, not necessarily because you're billing through your AP system but because the system has to feed that function? Could you give me a sense of what you see going on among your clients in AP and in the questions you're getting from prospective clients?
Curt Johnson, chief operating officer, Orchard Software: COVID has brought advancements and sped up the integration of molecular testing into the laboratory area, and I think we will see more of that as we move into pathology. Where clinical pathology and anatomic pathology overlap will be called molecular medicine, and from an integration point of view, you're talking about different types of data—sometimes a lot of data, other times it's as simple as a reportable result. You have to be in a position and be prepared within your systems to not only integrate that data off of the analyzers and the lab-developed tests but also to integrate the data to the other systems, such as a billing system.

If you're going to be integrating new testing from a billing perspective, it's becoming more imperative that the LOINC codes, the SNOMED codes, all that information is not only captured but also able to be transmitted and integrated. One of the values we will find from all of this is that the vast amount of compiled data, from integration and analytical points of view, will lead us into the future to where, when these things happen, we can minimize the time from when it hits to the time we have solutions based on what we're learning now. And that will take place in the integration of these systems along with using discrete data, which means having the right SNOMED and LOINC codes as we go forward.

Callahan

Rick Callahan, you and I have spoken often about the increasing complexity around anatomic pathology and the fact that many of your clients are integrating a lot of clinical pathology results into their system. Would you care to comment on the same question I posed to Curt?
Rick Callahan, VP of sales and marketing, NovoPath: Yes, the requests for combining multiple results from the clinical lab and anatomic lab onto one report have increased in frequency. Thus, we do interface to the clinical pathology modules and bring those results back into our system, or we would send our results to the clinical pathology module so they're all in one report. Recently this has been an increasingly popular trend. Regarding integration, in the past we've always integrated to various types of instruments, so that hasn't changed. However,

the type of instruments that we're now integrating with is changing and becoming more and more important to our clients. As the newer instruments—such as those used in molecular testing—come out, we're quickly learning to integrate to them and to then pull the results into one report.

Regarding the capture of charges, it has always been an important part of the laboratory to make sure the charge is captured. We've historically done that. What we're seeing now is more analytics going on with the charges, so we are providing tools to aid in these analyses.

Is it fair to say that the bar is being set ever higher for the vendors of anatomic pathology lab information systems?
Rick Callahan (NovoPath): It's an expectation now. In the past I believe we've done a good job at integrating, and the development of interfaces to the newer instruments is expected to continue.

Dr. de Baca

Monica de Baca, can you comment on this increasing expectation for functionality in what we call traditionally AP systems?
Dr. de Baca (Pacific Pathology Partners): First I would agree that a lot of headway has been made in terms of integration and opening systems for interoperability. Hematopathology is everyone's nightmare because we use information from the clinical laboratory, from flow cytometry, molecular diagnostics, cytogenetics, and the AP side. At my institution that means I create an integrated report. I am opening data strings or finding data on about eight different platforms, and I use cut and paste a lot, which is not the ideal way to do it. There are many other institutions or health systems where there is much more integration. I like the idea of merging the clinical and anatomic pathology realms. That's why I like hemepath: It stands with its foot in all camps. But just as a person can be thought of as many different, separate organs, the development of information technologies can be viewed similarly.

We're arriving at a place where our knowledge of disease is demonstrating that the logical silos we made in the early phase of a computerized worldview of medicine are going to have been the first baby steps to getting to where we need to be, which is an integrated view of diseases, not only at the medical level but also to follow with the data so that it's obtainable and easily integrated. Cut and paste allows me to provide a lot more information for the clinician than not cut and paste, but if I had ways to do trending analysis, for instance, on a certain parameter, let's say a blast count in acute myelogenous leukemia, and create a graph that I could easily put into the report, that might take information from a historical perspective that I don't have now. If I wanted to do that, I would have to not only create my own trend from data but also have to try to figure out if it were possible to create a graph in the reporting styles I have available to me.

The opportunities are amazing, and we're at a place where every silo now is well enough established that creating the links among them is going to be the logical next step.

Mick Raich, if a pathology group calls you out of the blue, they know generally what you do in consulting and billing and your expertise in that area, and you begin to talk with them. How soon do you ask them, "What sort of an AP system do you have?" Does that happen right away, or is that down the road?
Mick Raich (Vachette): That's down the road. Usually when we get into auditing, for example, we'll look at when the case was collected, when was it finalized.

About molecular pathology and where we're going with that and how it's tied into AP, I look at it from the revenue side. The molecular interpretation code G0452 goes up more than 100 percent. That's great. But if we look at the overall budget, and this is my fear, and I mentioned this years ago, we're going to have great technology, great diagnoses, and great interpretations, but at what point does the government stop paying for all this? I'm fearful that we'll be able to have these great diagnoses, but there will come a tipping point where we won't be able to afford to do it because the compensation will be so low.

Joe Nollar, can you comment on the same question?
Joe Nollar (Xifin): Monica's comments were wonderful. We really have that approach; we call it integrating pathology into the care team. The diagnostics are incredibly important. For example, you're creating IHC data, flow data, FISH data, molecular data, next-gen data, and the clinical data, of course, and making consolidated summary reports that are much more meaningful. The next step is extending that data into more robust systems. And with the rise of precision medicine tools and much better data analytic tools, we can extend that data in a more meaningful way to the care teams themselves for better data collaboration and treatment planning for the patient.

Certainly, that's the direction Xifin is moving in. It's a direction that will benefit patients in the future. And the market is dictating that, too. Having better analytics, better diagnostic and financial data collectively brought together for more meaningful reporting will help in the value add that will be needed to prove clinical utility and justify billing and reimbursement.

If it weren't for COVID, one of the dominant themes of our roundtable today would be the consolidation of pathology practices. Rick Callahan, can you bring us up to date on where we are with the consolidation of practices and where you expect it to go?
Rick Callahan (NovoPath): I haven't seen a recent increase in the consolidation of practices. In the past it's been an ongoing process, where the labs would combine and reduce their resources and standardize their testing and so on, but I haven't seen COVID impact that much. I've seen that many of the existing labs will be adding COVID testing, and they can't add it too quickly. As soon as COVID hit and the testing became available, many of our clients wanted us to be able to integrate to the instruments and to bring the results into NovoPath. But I haven't seen a recent uptick in consolidation.

Raich

Mick Raich, what have you seen? You have a good window on how groups might be moving around.
Mick Raich (Vachette): We've done four or five in which a health system will take seven hospitals with five different pathology groups and make them one group. Since COVID hit, we've had two of those deals. Health systems have other issues they're worried about; they're not pushing this. It's going to push into late '21 or maybe early '22. My theory is that if hospitals take a 10 percent pay cut across the board because of COVID, they're going to look at things, and it's going to drive change. We'll see some health system mergers. With the pathology pay cuts coming on, I'm betting we're going to see more of those mergers. Some of the smaller practices will merge into the larger practices, and they'll be ripe for acquisition going forward.

Curt Johnson, have you seen evidence of changes in the trend line on consolidation of pathology practices?
Curt Johnson (Orchard): COVID put a pause on it. We have had some consolidation this year. Some of our practices purchased some of their smaller associates in their region. A couple of our practices sold to larger ones in the same way, but nothing at the accelerated pace it was in the past.

When it comes to the financial side of it, we have to look into the future at when and where on the spectrum anatomic pathology will fall as we move from a fee-for-service business to a value-based business. For the practices that can show their value other than by the number of CPT codes and fee-for-service billing and can work their way into integrated delivery networks to show the value of laboratory medicine against the whole cost of health care, I don't exactly know where that's going to go yet or how it's going to integrate, but it will be critical for the success long term of some of these groups. How do they show their value versus just the revenue versus expenses of today? When we can start to use laboratory medicine to bend that health care cost downstream, whether it's in the pharmacy, whether it's hospital inpatient reductions, wherever that savings is going to be, the practices that figure that out first and can use the molecular testing and the anatomic pathology and clinical testing combined, they're going to be the winners and leaders in the future of pathology.

Monica de Baca, we know now who some of the key people will be in the Biden cabinet in terms of health care. What are your thoughts as you look into 2021, perhaps past the COVID crisis, and what it means for anatomic pathologists?
Dr. de Baca (Pacific Pathology Partners): That's an interesting question, and there was already an intricate set of possible answers before you even said "what it means for anatomic pathologists." The first item at hand in dealing with our health care system and its needs is to have a populace that is healthy; that will stimulate economic growth. After that, one of the things that would have been first on an agenda of this incoming government would have been the shoring up and expansion of the ACA, and that would have had an impact on pathology. Those endeavors are likely to be delayed as a result of the more immediate need to roll out a national vaccination and COVID mitigation program.

If we do move from fee-for-service to value-based payment in a new iteration of the ACA, I think those are some wonderful opportunities. In the Venn diagrams of the house of medicine, pathology is the hub. We are the only physicians whose practices touch every other domain of medicine, and we are also the people who create the greatest volume of data. Some 70 to 80 percent of the data in the electronic health record is generated by clinical or anatomic pathology, and as such, it should be a no-brainer about the kind of service we provide for the rest of medicine. Pathology is the foundation on which the house is built, and without us, there are a lot of "supposes" but not a lot of definitive diagnoses. There's no way to make diagnoses, monitor drug levels, and there's no way to continue to evaluate for conditions that might recur.

So, the challenge we have as pathologists and as pathology-associated software or data people is to create a cogent message that makes it clear that while we use only three percent of the medical dollar to do what we do, this house of cards could come falling down if pathology is weakened by not being reimbursed as it should be. It doesn't matter how much your car cost if all of a sudden your plugs aren't sparking, and no one thinks of the lowly spark plug as an important part of the car—although I'm not equating pathology to spark plugs. It's time for all of us as pathologists, and as the ancillary data people around pathology, to leave the basement and grab the podium. We have to talk about how important what we do is, and if COVID isn't a good steppingstone to starting that conversation, I don't know what is.

Mick Raich, what are your thoughts on the new cabinet members?
Mick Raich (Vachette): Xavier Becerra, Biden's pick to lead Health and Human Services, has a pretty aggressive stance. I think he's going to push hard to make the Affordable Care Act stronger. I don't think we slip into a national health care program in the next three to five years, but we do look at lowering the age of Medicare or a program for Medicare for All, and when we do this, it'll probably be administered by the big five or seven health plans, all of which are publicly traded and unregulated and have huge clout on the Hill. There are unique angles to how this could take place.

Let's imagine, Monica, that a colleague called you and said, "Tell me what the single most important thing is that I should look for in an anatomic pathology system." I know you're going to say, "I can't do that," but I'd like to know what would be the first thing you would mention?
Dr. de Baca (Pacific Pathology Partners): The integration part is a pivotal factor. If someone were looking for a new system, I would assume a lot of the other things that are important are standard. But if I were looking to put

special wheels or lights on my car, it would be integration.

Fair enough. Mick Raich, what's your answer?
Mick Raich (Vachette): I would say the human-software interface, usability. That's the one I hear complaints about the most.

Joe Nollar, same question to you.
Joe Nollar (Xifin): I would say user configurability—the ability for a user to go into the user interface and configure a test, a workflow, the full end-to-end process for standing up a new testing method, and also the ability to configure the data elements, screen layouts, workflow, and final report. In the age of COVID in which a lab must stand up new testing modules within days, we had to quickly react and start reporting out that case type. That became a key component for our customers—that ability to configure a testing module quickly so they could provide the marketplace with that testing capability within the test validation timeline. The next round of testing in the marketplace will be to test how patients are responding to the vaccination. I think we'll see an uptick in that type of testing in the coming months and years.

Johnson

Curt Johnson, same question.
Curt Johnson (Orchard): It comes down to two things that have been mentioned: integration and analytics. On the integration side, as Monica said, you need a system that can take in one system clinical pathology, molecular pathology, and anatomic pathology. They're converging faster than they ever have, and it needs to be in one database. In addition to that integration, you have to be able to communicate that laboratory information to other systems. The pathology system is no longer a standalone system designed to create just a paper report. Those reports have to be integrated into a larger health system. The final integration Mick mentioned is the human interaction and interface. All of those integrations have to be top of mind in where you're headed.

The analytics side deals with the other part of this conversation we've been having. The key to success in our health care system is using the data to improve patient care, and you have to be able to do that cost-effectively. So as our system continues to evolve financially, different models, where the government takes us, discrete data that can be mined and analyzed through an analytical component, will be critical not only for the lab-developed tests, not only for where we take medicine, not only for our patient but also for how we do this in an economical way.

Rick Callahan, what's your view on this question?
Rick Callahan (NovoPath): Everyone is dead on in their comments. We need to sum it up and look at the value that the system brings to the laboratory versus the cost of the LIS. When purchasing an LIS, look at how the lab process is streamlined, whether it's the workflow or through interfaces to the flow cytometer, whether it's looking at scheduling workloads or balancing the workloads among the laboratory staff. How will we integrate the various instruments to bring information into the system? Look at the value it brings to the lab managing the human resources available. So my advice would be to look at the value versus the cost.