

# AP-LIS vendors talk reports, interfaces, protocols

**Anne Ford**

**February 2018**—*Customer demand, cancer protocols, and consolidation of pathology practices are some of what CAP TODAY asked about when it spoke in January with four anatomic pathology computer system companies. Their AP systems and those of 17 other companies are profiled [in the anatomic pathology computer systems interactive product guide](#). “It’s a really good time for our market right now,” says Joe Nollar of Xifin, “and systems providers need to be creative in helping their clients get the solutions they need to be scalable, competitive, and profitable.” Here is more of what they told writer Anne Ford.*

## **How are your reports submitted, and how do they appear in your clients’ electronic medical records?**

*Lisa-Jean Clifford, CEO, Psyche Systems:* We have three options: direct interfaces, if we have a client who’s using just one or two client EMRs; an EMR hub, which allows them to do one to many, and that’s a very cost-effective measure if they have multiple physician offices with a lot of disparate EMR systems; and then we offer a clearinghouse module as well, which serves them very well if they have several clients who are on the same EMR system.

*Rick Callahan, vice president of sales and marketing, NovoPath:* More and more, we’re seeing requests to have reports pushed out of the AP-LIS directly into the EMR, if the EMR can accept a PDF. In our world, after the report is finalized and signed off by the pathologist, there is an application that makes

it so that, in a designated time frame, the report is sent automatically over the Web to the clinician. This is a big difference from the past when clinicians used to have to log in with a secure password and pull the report down. With NovoPath the report is automatically ending up in the clinicians' computers or on their printers in their offices. With some of the EMRs we've been working with, the EMR may not be able to accept a PDF embedded in an HL7 message. In this case, NovoPath will embed a link in the HL7 message going into the EMR, allowing the clinician to access the pathology report through the EMR and pull the PDF directly into their patient's EMR folder.

*Leigh Boje, anatomic pathology product manager, Orchard Software:* Our ideal preference would be for us to submit to them a PDF or a file format where the pathologist has final say over the format of the report. However, we do have discrete and nondiscrete reporting options. We also see more of our clients establishing their own physician portals, maybe as part of the EMR or maybe as a separate Web portal. Those are reference labs, mostly. We also have the ability to install a piece of software that will directly print to a local printer, and our system will send that print instruction over the Internet with all the formatting instructions, so it prints out the way the lab wants it to print.

**Are you seeing consolidation of pathology practices? If so, what are the implications for you as an anatomic pathology system vendor?**

*Boje (Orchard):* Yes, we're seeing quite a bit of consolidation. One of the hallmarks of our software is that it is a single database platform, so we can incorporate hybrid comprehensive reports. We can take quantitative data, text, and images, and we can create these complex reports that are so much becoming the norm.

*Callahan (NovoPath):* Absolutely we're seeing consolidation. And we're starting to see a request for increased functionality from these labs that they have not had in the past. As an example, we're getting requests for optical character recognition, which will help streamline the accessioning process. NovoPath can actually import information directly from an EMR-generated requisition. We're also seeing, since these labs are consolidating, requests to schedule pathologists' workloads throughout the day. If you have four or five labs consolidating, you might have 15 or 20 pathologists. Some of them have areas in which the pathologists are more skillful at interpreting results. We now can schedule different types of tests to be sent to different pathologists who are working that particular day.

*Joe Nollar, associate vice president of product development, Xifin:* We're seeing a lot of lab consolidation. Years ago, we developed a multi-entity architecture for our LIS that allows a lab organization to run multiple performing labs on a single platform. So as labs consolidate, they can very quickly configure a new lab entity and get those users up and operational on a standard platform. We've seen a lot of clients, especially super-regional labs that are merging with other practices, take advantage of this feature.

*Clifford (Psyche):* We are seeing a lot of consolidation. It tends to be more region-based or test-type based. Obviously, we think it's an artifact of the reimbursement models and the change in the CMS reimbursement rates. But for us as a vendor, what we're seeing is that through the consolidation, we're being exposed to more laboratories and having the opportunity to have a bigger footprint within a lab if it is consolidating. A lot of times we win in those scenarios. So we're not generally losing a customer; we're often gaining a customer or gaining more users.

## **How has customer demand in general been changing?**

*Nollar (Xifin):* The biggest demand right now is the expansion into molecular testing and next-generation sequencing and the need to integrate the associated devices and analytics software. Last year, we released a new next-gen module providing more robust wet lab processes for next-gen labs. Part of that process is integrating with the latest next-gen devices and analytics platforms that are either standard off-the-shelf solutions—Illumina, Thermo Fisher—or a homegrown solution within the lab, which may have a proprietary genetic assay it's running.

*Callahan (NovoPath):* I think the interfacing tool of laboratory equipment is always a need. From our perspective, nothing has changed. Everybody wants us to act as middleware, and we do. In the past, we used to see pushback based on pricing, but nowadays it seems like laboratories are more accepting of the need to interface to software and hardware in an effort to streamline their workflow and reduce errors.

### **What are the latest ancillary or middleware needs of an AP system? What is the demand like for instrument interfaces?**

*Boje (Orchard):* Digital pathology—having some sort of steps where the LIS can support a digital pathology workflow. And then FISH and flow cytometry, middleware, and integrating the results of those analysis tools back into the report. Instrument interfaces in autostainers. We've been doing autostainers for a very long time in a wide variety of manufacturers on almost every project. As far as molecular analyzers, we're seeing more and more brands of those. Gyn and cytology, we're seeing plenty of those, and now more and more molecular testing for non-gyn sample types and histology sample types.

*Callahan (NovoPath):* We're seeing an uptick in interface demand to whole-slide scanners, and we are happy to comply. Across the entire spectrum, we're starting to see requests for interfacing to equipment in molecular labs, to

EMRs, and to instruments such as flow cytometers and stainers.

*Nollar (Xifin):* My recollection is that 20 years ago in the AP world, it was somewhat rare to do interfacing to autostainers and a lot of the histology equipment, but of course it's routine now. If it's an individual autostainer or a histology automation system, it's very common to interact with those devices. And then of course in more complex lab testing with FISH, flow, molecular, and next-gen devices and analytics solutions, it's routine to provide an automated interface.

So the demand continues to grow for instrument interfaces. That's why I think for LIS providers, leveraging robust connectivity solutions such as Data Innovations or other is important for clients who want to scale quickly. Obviously, as an LIS provider, we do point-to-point interfaces all the time, but if you can come out of the gate with a library of interfaces that can be implemented relatively quickly via middleware, it's much more cost-effective for the client and faster for implementation.

**What recommendations do you make to clients for use of the CAP cancer protocols and cancer checklists? And how has this area of customer practice been changing?**

*Nollar (Xifin):* I think every client looking for an LIS asks about this. The cancer checklists are a critical part of formalizing the diagnosis and making sure that all the information is adequately captured and transmitted to registry, so we're huge proponents of that. We always encourage folks to go with the formal CAP-approved process for generating those reports. Of course, we offer the cancer checklist through our configurable text macro dropdowns, but whenever we can, we encourage clients to consider CAP eFRM because the synoptic reports are integrated and automatically updated.

*Boje (Orchard):* We've seen a steady increase in use of the cancer protocols.

Breast cancer has seen the number one adoption rate, but we're seeing an uptick in other body sites as well, particularly thyroid.

*Clifford (Psyche):* We have customers who are interested in taking advantage of the synoptic capabilities of the LIS, and many of them enjoy the dynamic report creation capabilities, so we definitely recommend that they integrate with the CAP cancer checklists for increased functionality. And then when we demonstrate the functionality to them, they're definitely interested, especially the pathologists.

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