

Raymond D. Aller, MD, and Hal Weiner

[Vendor neutral archives: A fit for the pathology lab?](#)

[Philips to collaborate with hospitals on digital pathology](#)

[Ortho marketing new version of middleware](#)

[Siemens Healthineers and iSpecimen integrate offerings](#)

[Voicebrook introduces VoiceOver PRO](#)

Vendor neutral archives: A fit for the pathology lab?

Whether the initialism VNA will become as recognizable as the acronym PACS in the pathology field remains to be seen, but pathologists and vendors alike are considering how vendor neutral archives may benefit the pathology lab.

Do a Google search on VNAs and you'll find that the term began popping up with regularity a little more than a decade ago as a way to rectify problems with departmental picture archiving and communication systems and for health care institutions to take ownership of their image data. Standard definitions varied based on product features, but, in essence, an enterprise-class VNA was described as a solution from which images and data created by different departments, using proprietary applications, and stored centrally could be accessed by users throughout an institution.

At last year's Pathology Informatics Summit, Chris Garcia, MD, then director of clinical informatics at the Medical College of Wisconsin, Milwaukee, offered a more expansive definition of the technology, calling VNAs "an enterprise solution for management, storage, retrieval, and query of images in health care." (Dr. Garcia is now medical director of clinical informatics for LabCorp.)

While radiology, cardiology, and some pathology departments traditionally have managed their images through PACS, interoperability issues between PACS means that moving from one to another can necessitate costly data migration. But "once you move to a VNA, you never have to migrate that data again," says Bill Lacy, vice president of medical informatics at FujiFilm Medical Systems U.S.A., which sells the Synapse VNA. "So VNAs have generally come into a health system as a detached archive for PACS. We still see the VNA come in to serve radiology and cardiology, since that is about 70 percent of the imaging in a health system. But in the last five years, health systems have come to see the value in having images from multiple areas centralized in the VNA and connected to the EHR."

In some health care systems, a universal viewer embedded in the EHR allows the user to access all of the content within the VNA for a specific patient. "It would be very inefficient for me to simply open up a viewer connected to the VNA and have to go find a particular patient," says Harold Welch, vice president of technical solutions worldwide for Novarad, marketer of the Ncompass Universal Archive VNA. "But if I'm looking at that patient's record in the EHR, I can click on a link, launch my universal viewer, and see that this patient has images from radiology, from the ER, and from surgery. Then I can choose what I want to see." Being able to view data in the VNA from the EHR greatly benefits physicians, concurs Lacy. Physicians now "have a more complete record for the patient and much faster access to the patient's records."

The ability to store the metadata associated with each object is a key feature of Novarad's VNA offering, says Welch. In addition to, for example, looking at an image from a pathology study, he explains, "I can also see that

the patient was a male, age 45, with no prior history. This cumulative intelligence can allow you to define trends in the data, not just from a pixel perspective but from a demographic or predictive perspective.”

Although VNAs are increasingly being adopted by dermatology, emergency rooms, and other areas using point-of-care ultrasound, both Lacy and Welch say uptake by pathology departments is lagging. Alexis Carter, MD, physician informaticist, pathology and laboratory medicine, Children’s Healthcare of Atlanta, points out that “while, supposedly, pathology images are incorporated in an estimated six percent of cases, I’m not personally aware of anyone who is actively using a VNA in their pathology practice.”

Incorporating pathology images into a VNA, or a PACS for that matter, can be difficult for pathology departments that capture and import images manually, Dr. Carter says. Manual image capture and naming is labor intensive and open to errors from incorrect data entry, and manual image import is time-consuming, she explains. But the greatest barrier, Dr. Carter maintains, is the lack of DICOM-compliant image-capture devices for pathology. “The only devices that I am aware of that capture DICOM-compliant images in pathology are whole slide imagers, and these images typically represent less than one percent of the entire population of images captured in many laboratories.” Images from gross cameras, handheld autopsy cameras, and photomicrographic cameras, for example, are not DICOM compliant, she adds. And “most VNAs want the images to already have DICOM wrappers around them because it facilitates their incorporation.”

FujiFilm products support both DICOM and non-DICOM imaging, says Lacy, “but supporting non-DICOM does not mean we can easily interoperate with proprietary file sets. Non-DICOM files are typically just other open standards for content portability, like JPEG, PDF, or video file formats. DICOM WSI is not yet widely adopted by vendors, and there continues to be investigation toward a new better standard capable of compressing whole slide pathology and establishing an easier path to system-level interoperability.”

In his Pathology Informatics Summit presentation, Dr. Garcia acknowledged that VNAs have largely been a radiology solution, but he pointed out their advantages for pathology, including the ability to interface with multiple institutions and systems and to share infrastructure with radiology. The flip side of that shared infrastructure, he noted, is that “you’re going to have some governance issues to work out and possibly some turf wars around who gets the resources and the priorities on it.”

But a pathology department that uses a VNA, says Dr. Carter, may benefit from “more robust image management, with better image identification, storage, backups, and retrieval.”—*Jan Bowers*

Philips to collaborate with hospitals on digital pathology

Royal Philips has announced that Massachusetts General Hospital and Brigham and Women’s Hospital will implement the Philips IntelliSite Pathology Solution as part of an undertaking to advance the adoption of digital pathology nationwide.

“The framework of the collaboration will include establishment of digital pathology centers, each defined and structured around common underlying themes that span the entire digital pathology space, including user interface design, analytics, education, and the economics of digital pathology,” according to a press release from Royal Philips. “Specific skills and resources will be assembled to promote effective execution of projects in these different areas and will include collaboration of Partners personnel and Philips engineers and scientists.”

IntelliSite, the only digital pathology system marketed for primary diagnostic use in the United States, is designed to help pathologists manage, scan, store, present, and review information and share it across labs and lab networks. Philips’ agreement with the hospitals, which are members of the Partners HealthCare network, involves using IntelliSite to enhance collaboration between pathologists and access to expert opinions on patient cases, as well as to develop training sets to educate pathologists about digital pathology.

“Determining how to integrate intelligent technology into workflows is a first step to change how pathologists work on a day-to-day basis and to allow for the introduction and development of artificial intelligence in diagnostic

anatomic pathology,” David Louis, MD, pathologist-in-chief at Massachusetts General Hospital, said in a press release.

[**Philips**](#), 800-722-9377

Ortho marketing new version of middleware

Ortho Clinical Diagnostics’ Ortho Connect V2.0 middleware system has received FDA 510(k) clearance and is commercially available.

Ortho Connect allows laboratorians to manage multiple instruments through a central terminal and integrates the

Ortho Vision and Ortho Vision Max immunohematology analyzers, which test blood for transfusion compatibility, with a hospital’s laboratory information system.

Ortho Connect V2.0 is validated for up to 24 instruments through a single LIS connection. Using this latest version, labs can route Ortho Connect to multiple LISs within a hospital network and users can maintain Ortho Connect within their own information technology environment.

[**Ortho Clinical Diagnostics**](#), 800-828-6316

Siemens Healthineers and iSpecimen integrate offerings

Siemens Healthineers and iSpecimen reported that they will help laboratories generate sources of revenue by integrating Siemens’ laboratory automation systems with iSpecimen’s biospecimen marketplace.

Participating labs can use Siemens’ CentraLink data-management system and Aptio automation solution to automate the retrieval of samples that medical researchers have requested via the iSpecimen marketplace. “Soon-to-be discarded patient samples create an opportunity for laboratories to generate recurring revenue, while iSpecimen’s network of laboratories helps researchers gain access to precisely the specimens and data they need for their biomedical research,” Andy Olen, senior vice president of laboratory diagnostics, North America, at Siemens Healthineers, said in a press release.

The iSpecimen technology interfaces with electronic health records and laboratory information systems to extract relevant, de-identified data on available samples, making them searchable by researchers. Along with a driver being developed for Aptio, rules will be created in CentraLink to help identify which samples in laboratories’ inventories are available for research. These select samples, which would otherwise be disposed of after clinical testing, will be stored in refrigerated storage modules until they are ordered and then shipped to researchers.

[**Siemens Healthineers**](#), 888-826-9702

Voicebrook introduces VoiceOver PRO

Voicebrook has released VoiceOver PRO Pathology Reporting Optimized software, which comprises PRO Report Builder and PRO Assistant, for creating pathology reports.

The product’s Report Builder component displays the entire pathology report, including gross description, diagnosis, and CAP content, in one window. Customizable templates allow users to speed through the reporting process using discrete data fields that automatically advance, eliminating unnecessary commands. Report Builder also provides tools for synoptic reporting and structured data capture.

The software’s PRO Assistant functionality works in the background, employing smart behaviors, such as automatic part placement and automatic formatting, and inserting relevant data from the gross description into the microscopic section, which eliminates redundant dictation.

“With field validation, automatic calculation, and the ability to show reference material in the Report Builder window, the PRO Assistant allows users to easily create patient reports while ensuring accuracy and patient safety,” according to a press release from Voicebrook.

VoiceOver PRO also offers dictation options, such as downtime reporting and digital recording for front-end capture and third-party editing.

[Voicebrook](#), 866-864-2397

[hr]

Dr. Aller teaches informatics in the Department of Pathology, University of Southern California, Los Angeles. He can be reached at raller@usc.edu. Hal Weiner is president of Weiner Consulting Services, LLC, Eugene, Ore. He can be reached at hal@weinerconsulting.com.