

STAND-ALONE VS. INTEGRATED AP SYSTEMS

Proponents of each share their experiences and offer words of wisdom.

By Nancy Stoker, CLS(NCA)

As the manager of a busy laboratory, you can anticipate investigating and actively participating in the decision-making process of at least one laboratory information system (LIS) acquisition during your tenure, and possibly more.

Laboratory managers use their analytical acumen to meticulously organize the selection process, select competent LIS coordinators, oversee the building of the database and implementation of the software, and manage the software within the laboratory environment. During the installation, interfaces to external systems—hospital information (HIS), electronic medical record (EMR), practice management (PMS) and billing systems—are monitored for exceptions.

By the end of this process, most laboratory managers have established close working relationships with the information technology (IT) staff of their facilities. As such, they're often called upon for additional IT-related projects, such as setting up outreach order entry and report delivery mechanisms to remote locations. In this scenario, your pathologist/medi- ▶



cal director could inform you that it's time to look at Anatomic Pathology (AP) modules and wants you to head up the project.

While you may have selected an LIS with an integrated AP module available, your medical director will more than likely ask you to include stand-alone AP systems for consideration. The seemingly obvious solution may be to push for the integrated AP module of your LIS system because it is easier to manage one system than two, but proceed with caution; there are several issues to consider before jumping to conclusions.

Managing Workflows

There may be more challenges to the histology, cytology and pathology department workflow than realized, and each of these departments has very different ideas about how the software should manage their workflows. Start at the top by shadowing your pathologist. If there are multiple pathologists in your institution, talk to them all. If you have access to pathologists at outside facilities, ask for a short interview and have them list feature priorities.

Some prefer mature, stand-alone AP systems that are word-processor-based, while others want to bring in software modules that are integrated to their LIS. These modules might not be as mature, but they do incorporate LIS features that have been successful in their institutions, such as Web outreach, data mining tools and easy access to clinical results. Pathologists who select newer applications appreciate the more current tools that these modules bring to the table, and they are eager to help develop the product.

Stand-alone Module Proponent

Rodney Markin, MD, PhD, president of Physician Group Practice at the University of Nebraska Medical Center, is a proponent of the mature, stand-alone AP module. Dr. Markin oversees the practice at a 600-bed hospital with 22 clinics. The pathology department employs 28 pathologists and performs 33,000 surgical pathology, 30,000 cytologies and 100 autopsies annually.

The facility is a bone marrow and liver transplant center and has 450 full- and part-time physicians on faculty. Dr. Markin selected their AP module in 1988 “because the company really understood the pathol-

ogy culture.” He adds that the software flows with the pathology department by allowing easy processes for accessioning, frozen sections, gross examination, microscopic examination and diagnoses, adjustable formatting/templates and final reports that provide the surgeon with requested formats.

Dr. Markin identifies key elements of an AP system: easy accessioning, easy entry of text data and electronic signature and flexible formatting of reports and billing rules that allow for the split of professional and technical components.

On Web outreach for anatomic pathology, Dr. Markin says he is not fielding requests for that type of access from the physicians in his system. “Our physicians are not interested in accessing yet another system, and though it sounds good, it would take too much effort to use.” He interfaced the AP module with the EMRs because of the number of results generated by pathology.

Dr. Markin's strongest piece of advice to someone purchasing an AP module today is “the software must work like the pathologists' practice, or they will dislike the system.” He emphasizes that pathologists cannot be slowed down, and attempts to make the AP module a carbon-copy of the LIS will be met with resistance.

Lyle Barksdale, MD, of Pathology Services, PC in North Platte, NE, performs 12,000 surgical pathology and 22,000 GYN cytologies annually. Dr. Barksdale says ease and speed of report signing and issuing is a top priority. “If it takes too many steps to finalize and issue a report, it is frustrating.” Flexibility of report formatting to meet the needs of her many clients is a must.

Integration System Proponent

Dave Glenn, CEO for Pathology Services, points out several areas of concern when dealing with a stand-alone system, including difficulty of combining clinical and pathology results on a single report (i.e., bone marrows), interfacing challenges and the inability to automatically fax or Web deliver results.

In pathology reference laboratories, priorities include the ability to integrate the AP module into outside client LIS and/or EMR systems. Integration to outside systems is imperative if the reference lab is to ▶

keep pace in the highly competitive market. Since LIS systems have experience in interfacing to outside systems, AP modules that are part of an LIS system will have the benefit of the interface experience.

Management reports and ad hoc reports requiring robust data-mining tools are also necessary to provide reference laboratory clients with necessary quality assurance reports. Pathology reference laboratories will often request a billing package in conjunction with the AP module acquisition, so be prepared to bring your billing department in to evaluate billing modules.

Busy cytology departments find that the word-processor-based stand-alone AP systems that work well for surgical pathology do not have the data mining tools necessary to perform quality assurance monitors. Ad hoc reporting mechanisms and full data mining capabilities are of top priority to cytologists and supervising QA cytology staff. The number and complexity of quality assurance monitors are ever increasing, and the AP module must be able to easily pull necessary data. Cytology laboratories appreciate the benefits that a robust data mining tool can provide.

Considerations, Precautions

Before making a decision, consider the following: Even if the pathologist is making the final decision,

make your recommendation on which you prefer and explain why. If a stand-alone module is chosen, be prepared for the task of trying to make the software perform certain tasks that your LIS does. You must also be prepared to maintain two systems and may need more help. Be sure you consider how much “hands-on” management the AP module will require. Is your histology or cytology manager willing to help maintain the system? Your LIS coordinator may be willing to jump in with both feet. Make sure to allow that individual enough time to work on two systems.

Does your pathologist dictate all portions of the pathology report? If your pathologist is considering voice recognition software for any part of the process, be sensitive to the secretary during this process; you may meet some resistance.

Some AP systems have been purchased by LIS vendors, then integrated to the existing system. Even though you are experienced at maintaining your LIS, there are no guarantees that what you know will apply to the AP module because it may be built on a different platform. Building and maintaining the AP database may be less daunting if you have a relationship with your LIS vendor, but be prepared for additional challenges. ■