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Breaking Up Is Hard to Do — Transferring Archives Can Be a Challenge, So Plan for It Before You Sign

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Upgrading your PACS often requires switching vendors —often a daunting task.

“There are lots of replacements going on from one PACS vendor to another with varying degrees of success,” says **Ken Rosenfeld**, worldwide general manager of the PACS and Enterprise Archiving Software Business Division for Kodak’s Health Group in Rochester, N.Y.

Edward Heere, president and CEO of CoActiv Medical Business Solutions, a PACS provider in Ridgefield, Conn., says leaving one PACS vendor for another can be even messier than when people divorce. “It certainly can be as emotionally trying and as expensive as a human divorce,” he says.

PACS Prenup

The key to a reasonably smooth transition, say vendors and those who have made a switch, is to plan your exit strategy even before you marry your first PACS. As funny as it may sound, they agree that you want to have a prenuptial agreement in place when you install a system.

“You should be thinking about moving PACS from the day you install your first one,” says R. L. “Skip” Kennedy, MSc, assistant director for radiology informatics in the North Valley service area of Kaiser Permanente in Sacramento, Calif. “One of your first questions should be, ‘How do I make this mobile?’”

Having an exit strategy is important, Kennedy says, even if you’re perfectly happy with your PACS vendor. “Times change. Markets change. Products change,” he says. “One day you go to the Radiological Society of North America [RSNA] and you come back and your CEO says, ‘We just signed a tremendously large deal with a company that also makes light bulbs. We would like to make a deal with that light bulb company for all our radiology components as well...’”

Heere points out that even if you are on the best of terms, your current vendor is not going to be happy about your leaving, so anything you can do to counteract its unhappiness will help.

“If you turn this into a completely negative scenario with your current vendor, you could have some problems,” he says. “If you’re leaving them, it’s probably become a negative already. Chances of them giving you full cooperation are pretty slim. They don’t want you to leave. They’re not going to make it easy for you to leave, but whatever is in the contract is what governs. So be sure to put specifics in the contract.”

Luke Bernier, director of business systems at Borg Imaging Group, which operates eight imaging centers in the greater Rochester area, realizes now that the group should have negotiated its exit before it bought its first PACS from a small vendor three years ago. Having outgrown the capacity of its original PACS, the group upgraded its system approximately one year ago. Its original system had its images stored on DVD but at that time no one thought about the future need to upgrade or change PACS vendors. “DVD-based storage limited our options,” Bernier says. “Transmitting the data to our new PACS is extremely slow,” Bernier says. “We’re still migrating a year later.”

Neverending Relationship

Kennedy helped Kaiser switch vendors a little more than two years ago. He agrees that it’s critical to maintain as much of a relationship with your first partner as possible. “You may be back to that vendor at some point and you don’t want to burn any bridges,” he cautions. Never, he advises, speak unkindly of your old vendor even if you are at your wits’ end because it could come back to haunt you.

A PACS archive typically has a life cycle of four to eight years. Some healthcare organizations can generate as many as 500,000 radiology exams per year. In one year, they can accumulate more than 100 terabytes of data. Even smaller facilities can generate enormous amounts of data. The biggest challenge when moving from one PACS vendor to another is migrating your old data to your new system. “The single biggest problem is, ‘What do I do with my exams now?’” Heere says.

Legally, Heere says, the images are the property of the facility that did the procedure, not those storing or archiving them. Many facilities assume that they won't have issues with retrieving stored data as long as their images are stored in DICOM format. However, Heere says, many PACS companies maintain proprietary archives and proprietary storage solutions to lock in a client and make it difficult to leave.

That issue is where a "prenup" could help. The contract should specify that all exams will be kept in a standard DICOM format so they are accessible to a third party if needed. "We put that right in our original contract," Heere says. "At any time they choose to leave, the exams will be made available to them in standard DICOM format in a media of their choice within 24 hours."

Kennedy says migrating data can be so complex that even if you're not thinking about leaving your PACS vendor, it may be worth investigating how much it would cost and how long it would take. "Something worthwhile trying is spending money to bring companies in and find out what the actual throughput of data leaving your system would be and how long it would take," he says. "PACS vary tremendously in that. If you find it will take you four years to move the data, your old archives might not be as bad as you thought."

Because of the growing need, companies that specialize in data migration are starting to emerge. "Very few companies have a lot of interest in providing a service moving one of their existing companies to another competitor," Kennedy says. "So you're starting to see a market for professional services that will come in and say, 'We will help move your 2.5 terabytes from PACS vendor A to PACS vendor B.'"

Parallel Systems

Migrating your data to the new system is one option. Maintaining your old archives for a period of time may be another. You may want to investigate the cost of maintaining your old archives vs. migrating all your data to your new system, Kennedy says. "Sometimes it's easier just to leave it in place." If you are going to maintain your old archives, determine the legal requirements for your practice model, Kennedy says. "You need to ascertain your minimum retention requirements in your state." For example, in California, where Kennedy works, it's seven years for general radiology. The requirements for pediatrics and mammography are different.

While you may not need to retrieve a lot of data from your old archives, Kennedy says, "when you need it, you need it." And so you need a reliable way of retrieving it.

Additionally, you will need to negotiate a service contract with your old vendor, not only for access to the data but possibly also for the workstations to view the data. "You typically don't have the same time requirements for encapsulated archives as you do for live archives," Kennedy says. "You don't need it on weekends. So you can downscale your service agreement and that can make it a little more attractive."

Another solution is a PACS neutral solution such as CoActiv's EXAM -Vault Archiving Solution, which is compatible with most industry PACS. It comes as part of CoActiv's enterprise PACS, but CoActiv also makes it available to clients using other PACS products. Exams are stored for a period of time on the local site and simultaneously on redundant off-site archive centers and are also copied to redundant DVDs, one of which is returned to the client and one kept by CoActiv in a secure storage vault. Such a solution "eliminates the need to migrate exams should you decide to switch PACS vendors eliminating the biggest single problem in a PACS divorce," Heere says.

Yet another option is to move some data but not all. "In the past, it's been all or nothing," Rosenfeld says. "You'd have to migrate everything or leave it there and support it. Maintaining those old systems can get increasingly expensive as they age."

Kodak, for example, now has its Versatile Intelligent Patient Archive (VIParchive) software platform as part of its PACS System 5 platform and CARESTREAM Information Management Solutions. The VIParchive software supports automatic, intelligent information lifecycle management. The software reads the metadata associated with archived information and applies site- and content-specific storage plans to it. In some cases, the location and description of archived data is included in the VIParchive index, but the content is not moved to new storage platforms until it is requested for use. This platform enables healthcare facilities to gradually phase out older PACS archives without migrating all the data, Rosenfeld says.

Key Questions

Whether you migrate all or some of the data, you have many issues to consider and discuss with the new vendor or with the company that is going to help you retrieve your data, Heere says. "The same questions apply to your current dictation

system,” Heere notes. The following questions, Heere says, must be understood and answered up front if the migration is to work:

- Are your existing exam key image sets (montages, collages, summary series) able to be imported to the new archive as well? If they are not, is that acceptable?
- Are reports stored with the exams? If so, can they be imported into the new archive? If not, what are your options? What format are your reports in? Are they stored in open or proprietary format?
- Can the old prior reports be imported into the new archives? If not, what can you do about it?
- Are you keeping the same RIS or replacing that as well as the older PACS? Can the new PACS be easily integrated with the old RIS?

The cost of migrating current archived exams, exam reports, current RIS, and dictation systems should also be spelled out in advance, Heere says. You may want to determine the cost to accomplish all this. An open pocketbook can easily be plundered by the new PACS vendor, the old PACS vendor, or a third-party consultant who will be doing the migration, he warns.

Hardware Issues

Additional areas of concern include modality integration, existing PACS hardware and existing IT infrastructure compatibility, and your exam distribution systems, including to referring physicians.

Switching vendors can raise questions about your connections to existing imaging modalities and DICOM or network printers, Heere says.

Also, Heere says, you must determine which, if any, of your existing hardware —exam servers, CD burning systems, etc.— will need to be replaced as well. Diagnostic workstations can cost \$50,000 to \$100,000 each and you may not want to replace them if you don’t have to, he says. You may have similar issues with your existing IT infrastructure. You will want to ask about the compatibility of the new PACS with your existing routers, switches, firewalls, etc. You will also need to know whether your current local area network and wide area network are capable of supporting the new PACS. Whether you have adequate bandwidth for the new system could be yet another issue, Kennedy adds.

Another major consideration when you’re putting in a new PACS is how you are getting your images to referring physicians, Heere says. “If you’re changing over to new PACS, chances are you have to change your method of getting reports to referring doctors. You could have 100, 200, or 300 outside doctors that are going to have to be changed over to a new system and the last thing they want is something they’re used to using being changed over.”

The key here is not to surprise your referring physicians, Heere says. “It’s important that you make sure they are going to be comfortable with what you’re doing. So you need to get marketing and your prime contact people to the referring doctors and discuss this with them up front. Let them know it’s going to make it easier and better and faster for them to do their thing. You’re going to have to sell them on it.”

Once you’ve determined you’re making the switch, you have to plan the break. Most facilities go to a new PACS with some level of overlap, Kennedy says. “Very few people are successful with the big bang —where they say, ‘OK, Monday, we all just start on the new workstations.’” Most hospitals take it department by department, similar to installing their initial PACS.

Limit Transition Time

On the other hand, Kennedy says, you don’t want the transition to take forever. “Riding it out over two to three years is very dysfunctional. You don’t want to run two parallel systems for too long. A few months is a reasonable transition period.”

Luke Bernier says Borg Imaging Group may have found a way to speed its transition. “What we’re doing,” he says, “is looking for incentives for our original PACS vendor to complete the migration sooner. They’re coming up with projections when this project will be completed and, hopefully, we’ll entice them to finish it sooner.”

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