



**NOVARAD
SOUTH**

WHITE PAPER

**Invest In the Right PACS Now Or
Be Forced To Buy the Right System Later!**



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Introduction

Between 2002 and 2008, the number of Picture Archiving and Communications Systems (PACS) installed in hospitals, clinics, imaging centers, radiology groups, and other healthcare enterprises was staggering. At the same time, the number of PACS providers bubbled. The bubble began to burst in 2007 with a number of important mergers and acquisitions reducing to total number of PACS providers.

Largely, the bursting PACS provider bubble was the result of a maturing market. According to an online article in *Healthcare Informatics* (January 1, 2009), "The deployment of PACS technology in U.S. health care has penetrated nearly 90 percent of the large hospital and academic medical center market, according to a report from market research firm Research & Markets." The figure for community hospitals is about 65 percent.

As remaining hospitals and other healthcare providers acquire PACS and early-adopter facilities begin to replace their original PACS with the more robust systems available today, they find themselves in the driver's seat of a buyer's market. Though the overall number of PACS providers has shrunk, the remaining choices are plentiful and, to a large degree, it is difficult to discern the differences between PACS offerings.

A PACS is a PACS is a PACS. Right?

Wrong.

According to *Imaging Economics*, March 2009: "For community hospitals, budgets are tight. Equipment and technology acquisition is a big challenge. Because community hospitals don't have a robust replacement cycle for equipment, the key is "getting it right the first time out," said Brock Slabach, senior vice president for member services at the National Rural Health Association and a former community hospital administrator. "There is no room for error when it comes to choosing the equipment or the vendor," Slabach said.

"So how can community hospitals looking to invest in their first PACS prepare for the purchasing process?"

"Experts also say it is wise to look at the long-term before making any major purchase—whether a CT scanner or a PACS. 'Underbuying can be just as problematic as overbuying,' Slabach said. 'It's important to explore the options that could add more value over the long haul for an incrementally small amount of money.'"

The balance of cost and value is the number one criteria when considering a new PACS purchase. The features and functionalities of various PACS offerings have become increasingly homogenized since 2002. Window and leveling,

annotation tools, radiologist-defined hanging protocols, while distinctive features of many systems, are no longer dramatically different across comparable PACS solutions as these features once were when PACS was still emerging as a new radiology tool.

Obviously, you need to select a PACS that seems intuitive to the way you prefer to read radiology studies. The truth is, however, it is no longer difficult for the buyer to find more than one PACS solution that “feels right” in terms of efficiently conducting reads. We recommend that when you consider your PACS purchase take a broader view that includes more than just workflow features. Only then will the true value of the solutions you are considering become apparent.

Ask for References Now or Your Money Back Later

You will find out more about any given PACS by discussing the experiences of previous users of a given solution. You should ask questions not only about how satisfied they are with the performance of the PACS but also about the PACS support team, the frequency of updates, and about each of the categories featured in this white paper.

Something many buyers forget to inquire about is how the implementation and training process went for the reference account. References who have been with a provider for a number of years tend to forget about this stage of their PACS acquisitions, as they are more caught up in the performance of the PACS within the context of their daily workflow. But, we found there are often wide discrepancies between how the PACS performs after it has been adopted by a particular practice’s work culture and the experience of that practice when the PACS was initially installed. You want a smooth transition with adequate training just as much as you want a quality PACS that can handle the images you will be reading later. Avoid the pitfall of poor installations if possible. It is certainly expensive not only in terms of cost, productivity, and emotional wear and tear.

Be sure that your references are similar to your practice in terms of numbers and types of studies. A facility that handles mostly MRIs may not be comparable to one that is more balanced between CTs, MRIs, and US’s. Obviously, the specific needs of mammography, orthopedics, and cardiologists should be addressed in terms of the references you are given by a potential provider.

Disaster Recovery Should Be a Premeditated Process

“Health care systems across the world are living everyday with a potential disaster waiting to happen - your computer networks. How are your computer systems being backed up and - better yet - where is your data? In case of an emergency, such as a major earthquake, fire, flood, cyber-attack or even a catastrophic power failure, what would happen to all of that important information? Would your digital medical records be safe? The answer is probably

no. Which is why they better be backed up locally and also separately, as well, somewhere much further away with offsite imaging storage.

“Failures of electronic medical records and PACS are not a common occurrence but that doesn’t mean you shouldn’t have a contingency plan set in place. Planning in advance for such a disaster can have a tremendous effect on the overall impact on your clinical operations. The safest course of action is to make certain that backups of your patient record archives are stored in an offsite imaging storage location, while keeping your medical office in compliance with Federal HIPAA regulations.” – Dicomblog.com, July 2009

Customization: “Practice Workflow and Efficiency is Key”

Make sure the PACS you consider is founded upon a philosophy about how you read studies within the structure of a digitized environment that requires minimal change from the way you currently do reads. Choose a PACS that is flexible enough to “learn” your way of doing business, rather than forcing you to learn a new way of doing business from the PACS. Usually this is an indication of poor, myopic design concepts.

You want to choose a solution that can adapt to the way you do reads on a variety of levels. The PACS should fit the overall business model of how your practice interprets studies. Beyond this, you should offer preference toward systems that allow for individuation within your department or practice. Settings for views, hanging protocols, functions of navigation devices, etc. should not be forced upon each radiologist unless that is the policy of the practice. Radiologists have different ways of approaching any given studies so the PACS you choose should accommodate the differences in preferences between these distinct methods of interpreting studies.

Obsolescence Protection For Your Practice

In recent years there has been a lot written about “planning” for Technology Obsolescence. Information Technology experts advise that failure to plan for technology obsolescence puts you at risk of losing valuable business intelligence and encountering unforeseen expenses down the road. You can anticipate obsolescence by monitoring and tracking industry technology changes. But, that usually requires that you have a dedicated IT department or that you devote a lot of personal time to keep abreast of changes in the industry.

Some PACS vendors offer additional value for their solution by providing for future obsolescence as part of their product offering. This may include software only or also hardware obsolescence. Software will include all updates and upgrades as part of the original user agreement. Hardware might include such things as free replacement of equipment whether due to a fault in the

components or simply due to the equipment no longer being sufficient to run the PACS as it evolves through time.

Such policies are certainly not universal, but PACS providers that offer such value deserve a serious look as this clearly offers you a cost savings in the long run. Conversely, if you are forced to manage your own obsolescence this could lead to additional expenses down the road that are much more difficult to project and budget for.

Support is More Than Answering The Phone

Perhaps there is no single area in determining the potential value of a PACS solution more important than verifying the quality of the support staff that your practice will deal with after the sale. You can ascertain the quality of support for a given PACS provider on a variety of levels. Promptness of answering support calls, quality of support answers, availability of support 24/7, whether the support is outsourced overseas or available within the US, professionalism of the support staff, etc. are all important considerations. Ideally you want to choose a PACS provider that will be able to adequately address all kinds of post-implementation questions that will inevitably arise. Does the support allow for the possibility of follow-up training? Does the provider guarantee to have a support staff member on-site if necessary? Do they offer this value in terms of hours or days from the time your need for an on-site visit has been determined?

Beyond the usual support issues and capabilities, you can gauge a provider's commitment to customer support by the other communications options they make available to you. Ideally, you want to invest in a PACS that offers not only the usual telephone support but also useful ancillary venues of communication such as customer web portals that allow for direct access to the support services, or internet forums where customers and support team members can interact in ways where authorized forum members can read threads of topics of interest and thereby learn from the inquires and experiences of others.

The best PACS providers also offer some sort of User Group events. Are these held annually? Are they available nationally or regionally? Do they allow for hands-on training and experimentation with upcoming products features? These are all signs of a provider that not only has a stake in producing a quality PACS solution but also a quality environment that will ensure you maximize your investment and continue to grow in your knowledge of the solution as that PACS continues to evolve in the course of future updates.

PACS Investment Industry Rating

The KLAS Report is the industry standard for professional statistical analysis of the many PACS providers and their ratings on a variety of levels including price, functionality, support, and update. The report produces a hierarchy of PACS

providers. It is important not to grant too much weight to the actual ranking of a given PACS. The difference in the actual ratings (as opposed to *rankings*) of the number 1 and the number 10 solution is often quite small on a percentage basis. Consider the differences in price between a solution that might rank 3 or 4 points higher in the KLAS or other independent industry buyer's guides with the price of the slightly lower ranked solution. If the higher ranked product costs more then ask yourself if the difference in price is really worth the difference in rating. Often price can be considerably more for a product that really offers only incremental improvements in features that may not translate into significant benefit to your business model.

PACS Price - Must Equal Value

More so than ever before, price is a driving consideration in the PACS acquisition process. While we see price as an important factor in making your short list of final PACS competitors, in the end please keep in mind the advice of Brock Slabach mentioned earlier in this paper. "Underbuying" can create a different set of problems than "overbuying". In the first case, you are not receiving the full accompaniment of important benefits as outlined in this white paper. In the second case, you are paying too much for what you are receiving.

An excellent article in the January 2009 issue of *Radiology Today* puts it this way: "Define cost. Think about it in broader terms than just the number of dollars required to acquire and implement a system in your organization.

"If you are the person tasked with making such a decision, part of any sane cost definition includes sleep lost, radiologists angered, service response headaches, system reliability, disruption of care in your facility, nights disturbed, weekends ruined, and hair pulled out. Those are real costs, even if your accounting department may not recognize them. The lower those types of costs, the more dollars you are willing to spend and still consider the transaction a bargain.

"While smart management will pay more to get a quality PACS that meets its needs, no one likes paying more than is needed for anything. While there tends to be truth in the adage "you get what you pay for," you don't necessarily have to pay more for essentially the same features, functionality, and reliability in a PACS.

"High price does not automatically mean high quality.

"If you talk with imaging colleagues about replacing a PACS in their facility, their stories will focus on poor functionality, workflow, or support far more often than cost. You certainly can't ignore cost, but when purchasing or replacing an imaging network, the first step is finding the one that will best do what you need it to and then using your best negotiating skills to obtain it at the best price you can. PACS isn't like that ill-fitting sweater you received as a holiday gift; you can't just exchange a PACS because you have the receipt."

PACS Investment Conclusion

Investing in PACS is a business necessity not an afterthought in today's healthcare marketplace. With rising healthcare and practice labor costs, and increased government intervention, PACS systems help physicians and department managers improve their operational efficiency and practice patient satisfaction. Make the PACS right investment now or suffer practice inefficiencies later.

About Us

NovaRad South (NRS) is a leading strategic advisement firm serving over 100 clients throughout the southern United States. Since 1998, NRS has helped healthcare providers manage costs, increase productivity, and drive sustainable growth and profitability. We specialize in medical workflow analysis, business model revitalization, and maximizing revenue capture opportunities. NRS is uniquely qualified to provide strategic and tactical advice that will produce measureable value and prolonged results that are consistent with client expectations and goals. We are focused on assisting providers in successfully navigating their toughest issues and providing them with the tools they need to thrive.

Denny Phillips is the president of NovaRad South. Mr. Phillips has over 20 years experience in assisting clients in their achievement of maximum ROI on their investment in technology delivery systems. Since 1998, he has specialized in the challenges confronting healthcare and how technology can best be integrated within this industry to enhance profitability, efficiency, and provide better quality care.