

with Ben Noy, President, OptiMed Technologies, Inc.

37

Q: How has the decision-making process changed within cath labs/cardiology departments regarding CIIMS/Cardiac PACS?

The decision-making process for a Cardiac PACS system for the Cath lab is now more elaborate than ever. Today's systems provide more advanced capabilities than just replacing the old cine film standard. Cardiology departments demand a more comprehensive patient imaging record that ties Cath Lab images with Echo, Nuclear Medicine, Hemodynamic data, HIS and even Radiology PACS systems. Most system RFPs request these capabilities and are willing to accept them as future deliverables. So several departments and levels of hospital personnel may be involved to make sure that all corresponding department requirements are satisfactorily met. We frequently deal with a selection committee that includes IT, Biomedical, Cardiology, Radiology and Administration personnel.

Q: What are important IT considerations for cath labs?

Connectivity and system architecture have become a central focus in the system evaluation process for hospitals. The ability to share information using dedicated review stations directly connected to the network, as well as the requirements for Intranet / Internet access to patient records, is rapidly becoming an industry standard. Furthermore, the implementation of an SQL-type database provides the ability to search for and retrieve patient records from different modalities and display them in a comparative format on a common review station. This "universal work station" concept provides information access benefits well beyond the boundaries of the cath lab. The most common way of implementing such a requirement is through the use of DICOM connectivity or HL7 interfaces to all of the required components on the network. System architecture can impact everything from system expansion flexibility to ease of service. A well-conceived system architecture allows the use of multiple types or brands of components without compromising system performance or incurring unreasonable expense. Similarly, open system software architecture using an industry-standard operating system such as Windows NT, Windows2000, or Windows XP will simplify the process of adding users, security features, software enhancements or expanding the system to encompass other departments and locations.

Q: How can OptiMed address these changes?

OptiMed's OptiCor Image Management System features open system architecture, allowing for optimum hardware, software and system expansion flexibility. In addition, the system's modular structure allows easy integration of other modalities and data sources within the hospital framework. The OptiCor system provides acquisition, storage and display of patient records in all imaging modalities found in the Cardiology department, including the Cath Lab, Echo department and Nuclear Medicine. A common (SQL) database ties all of the modalities together. OptiMed's standard review stations are capable of displaying any imaging modality with a DICOM source. A dynamic DICOM server module interfaces to all DICOM modalities found in Cardiology, as well as Radiology. OptiMed's Clinical Interface module provides connectivity to all major Hemodynamic systems. The Administrative Interface Module provides HL7 connectivity between the OptiCor system and HIS, CIS, data repositories, and other HL7-based components.

Our Storage Module provides local storage on DVD or MOD media managed by a variety of jukebox configurations. We also support ASP off-site storage solutions and installed storage silos.

OptiMed's Web Server provides solutions for Intranet as well as Internet connectivity. The Web Server includes OptiMed's InstaVu capability, which allows instant access to patient historical records dating back ten years or more. The retrieval time is instantaneous, with no associated download time. The Web Server is independent

of the Archive (DICOM) Server, includes built-in redundancy and provides the ability for referred interventional centers to view real-time patient files.

The Report Module provides real-time, on-line generation of clinical reports for the Cath Lab, Echo Lab and Nuclear Medicine. The Report Module operates directly from any Review Station utilizing the optional dual monitor design whereby the clinical study images are displayed on one monitor, while the report auto populates and is displayed on the second monitor. In this manner, a report can be generated instantly while a case is being reviewed. The e-Mining feature provides for the generation of statistical reports that are assembled using database query commands.

Q: What is OptiMed's vision of the role of CIIMS/Cardiac PACS within cardiology?

OptiMed strongly believes that information, in the form of data or images, is the key to expedient, accurate patient care. With this in mind, we believe that the "Cardiac PACS" system is vital to the efficient operation of a Cardiology department and to the attainment of the highest possible standards of patient diagnosis and treatment. The system should provide ease of use, near-immediate access to images and data, diagnostic quality images, and the ability to adapt easily and inexpensively to the specific work flow requirements of the physicians, technicians and other system users.

We developed one of the earliest "Cardiac PACS" systems almost ten years ago, and have since installed over 140 systems in the United States and other regions of the World. We have accumulated a great deal of experience installing and integrating our system with a multitude of equipment, hospital networks, off-site and multiple hospital configurations. OptiMed strives to educate the customer hospitals with a consulting approach that extends throughout the process of implementation for a Cardiac PACS system. This includes advice in planning, hardware selection, network definition, interface specification, and implementation. We are poised to advise the hospital in selecting and installing the most cost-effective solution.

Q: Will remote viewing capabilities change the quality of healthcare from both the physician and patient perspective?

Remote viewing will enhance the quality of healthcare in many ways. With the appropriate system design, a cardiologist can access patient files from any location in the world. This can be of critical importance when medical advice is needed quickly for a patient in distress. Patient images and diagnostic reports can be retrieved instantly and reviewed over the Internet or Intranet, without the need for the primary physician to be physically present at the hospital. The cardiologist can instantly review historical images, patient reports, clinical data, and related images from other modalities from their private offices, thus enabling them to consult with the attending physician on-site.

In addition, referring physicians can access clinical reports and images directly or through e-mail, thereby eliminating the time, risk and expense normally associated with the transfer of patient records. This feature can positively impact Cath Lab or hospital profitability by encouraging nearby hospitals to refer Cardiology cases for diagnosis and treatment, while retaining the ability to track their referred patients quickly and easily through remote Internet access.



Ben Noy is a co-founder and the President of OptiMed Technologies, Inc., a leading provider of patient image and data management/archival systems for cardiology modalities since 1993. Mr. Noy has over 25 years of extensive experience in sales, marketing and product development of proprietary medical imaging equipment.

For More Information

973-575-9911

www.optimedtech.com