

Enterprise-Wide Solution Integrates Cardiac and Radiographic Studies, Enabling Facility to Practice Collaborative Medicine

Founded in 1937, the 222-bed Alton Memorial Hospital located in Alton, IL, served more than 90,000 patients in 2003. The local leader in cardiology services and a member of BJC HealthCare based in St. Louis, Alton Memorial Hospital opened the region's first diagnostic cardiac catheterization lab in 1988 and the first balloon angioplasty program in 2000. The hospital provides numerous other heart care services, including enhanced external counterpulsation and a complete cardiac rehabilitation program that features state-of-the-art exercise and monitoring equipment.

Alton Memorial Hospital performs approximately 900 diagnostic cardiac cath cases per year and also performs more than 70,000 radiology exams annually.



Alton Memorial Hospital, Alton, IL

Recently, Alton Memorial Hospital announced an enterprise-wide digital imaging initiative. The hospital intends to implement the project in multiple phases, with the initial phase beginning with cath, echo and

EKG capture, information analysis, integrated reporting and system management for the Cardiac Services Group.

Assisting Alton with their digital initiative is Los Altos-based ScImage. The enterprise PACS provider will serve both radiology and cardiology to provide a single point of access for patient studies and information generated in both the cardiology and radiology departments. Once all phases of the project are completed, ScImage's enterprise-wide PACS, PICOMEnterprise, will give caregivers at Alton Memorial — and eventually at other institutions in BJC — an overall centralized integrated solution with the means for accessing data collected in multiple departments. As part of the digital initiative, ScImage will also integrate the capture of reports from legacy reporting systems and use PICOMEnterprise's Web-enabled Electronic Patient Folder to store those reports alongside patient images to provide a more complete record of patient exams for both attending and referring physicians. Once in place, physicians will be able to access all available patient images and the associated information from a single login.

About the Hospital

Founded in 1936, Alton Memorial Hospital is a JCAHO-accredited, full-service hospital serving the River Bend area of southwestern Illinois. Recognized for its heart services, orthopedic surgery, oncology services, women's health services, outpatient surgery and testing, gastroenterology, pain management, pulmonary medicine, rehabilitation and sports medicine, the hospital also provides numerous health education and wellness programs to the people of Alton, IL and the surrounding communities. In addition to boasting the area's only balloon angioplasty program, Alton Memorial Hospital offers open MRI through Twin Rivers MRI Center, CT services, PET imaging, nuclear medicine and cardiac and pulmonary rehabilitation. The hospital operates a 24-hour emergency center and the area's only hospital-based ambulance service. 225 medical staff members and 596 FTEs provide these services.

Phase two will connect all of the DICOM compatible modalities in the Radiology Services Group so that digital images can be captured, stored and distributed throughout the enterprise. Integration with the hospital's radiology infor-

mation system (RIS) was critical to Alton's digital imaging initiative. In addition to storage for the hospital's images, ScImage will also provide a means for managing workflow and patient scheduling via an HL7 interface to the hospital's Siemens Novius RIS. The integration will provide the hospital a way to reduce data entry errors by utilizing patient demographics that were entered at the time of admission. This second phase of the project will begin in the fall of 2004 and will also include conflict resolution and DICOM modality worklist functionality.




Clinicians now have a single point of access for all patient studies

Phase three will bring the remainder of the modalities in the Radiology Services Group up to the DICOM standard and also add computed radiography modalities to enable standard films to be read digitally. During this phase, the hospital will also add high-powered radiology review stations for use by the reading radiologists. Once phase three is complete, the hospital's vision includes connecting the system to BJC HealthCare's multiple campuses for image and information access.

"We took a lot of time to evaluate different vendors including extensive site visits to narrow the search that brought us to choose ScImage," stated Al Hibbett, manager of Cardiopulmonary Services. "In the end, it was an easy decision because they were able to meet our requirements of cost effectiveness, use of non-proprietary hardware and satisfy multiple service lines all under just one roof."

In addition to the web-enabled Electronic Patient Folder, PICOMEnterprise also employs ScImage's ForeverOnline architecture. ForeverOnline is a low-cost, high-availability solution that employs intelligent image routing to serve high-volume, centralized reading environments. This configuration of PICOMEnterprise combines a powerful multi-processor server with a highly scalable storage solution that eliminates the wait for image and information retrieval by keeping everything online. Alton Memorial Hospital will also coordinate its digital initiative using ScImage PicomOnline Web-based disaster recovery hot site for both secondary secure storage and backup application delivery for teleradiology and remote access.

"We selected ScImage because this project will be critical to the ongoing success of the hospital and we knew that they could meet our aggressive requirements for integration," stated Jack Wepler, manager of Medical Imaging Services at Alton Memorial Hospital.

PICOMEnterprise will allow multiple departments to store and distribute patient information both inside and outside the hospital. This will allow attending and referring physicians at Alton Memorial Hospital to practice collaborative medicine, which will ultimately lead to better patient care. 

For more information, visit www.scimage.com or call 866.SCIMAGE