

Pulling It All Together — Large Practice Integrates New Imaging, Information Technology with Existing Systems

Founded by the first cardiologist to practice in the state of Alabama, CardioVascular Associates (CVA) continues the tradition of dedication, skill and compassion that Dr. John B. Burrett instilled when he began CVA in 1946. Over the course of 50-plus years, the practice has grown steadily, becoming an industry leader by adding nationally recognized experts and additional locations to provide patients with better access to the latest in cardiovascular care.



CardioVascular Associates in Alabama operates more than 10 facilities and is one of the largest private cardiology practices in the Southeast.

With 28 physicians on staff, CVA offers a full spectrum of cardiology treatment options in addition to participating in cardiac research and focusing on heart disease prevention. It is one of the largest private cardiology practices in the Southeast with offices located at Brookwood Medical Center, Montclair Baptist Medical Center and HealthSouth Medical Center in Birmingham; Coosa Valley Baptist Medical Center in Sylacauga; and Citizens Baptist Medical Center in Talladega. Physicians also see patients at several outreach locations including Childersburg, Oneonta, Pell City and Pelham. Unique diagnostic services include ultrasound imaging of the heart, PET/CT for cardiac stress testing to assess heart function and outpatient cardiac catheterization.

Recently, the practice set about implementing an overall diagnostic image and information management solution for its entire enterprise. In March of 2005, CVA selected ScImage's PicomEnterprise PACS solution as part of its overall strategy. The Web-based solution employs an electronic patient folder (EPF) to store images and related information. This data may be retrieved using hierarchical access protocols that only allow users to see the data they are authorized to review.

CVA selected ScImage for this project based on several criteria. The practice required a tight integration with its electronic medical record (EMR) solution, Encite. The Encite product is also linked with the practice's document imaging solution from ImpactMD and its practice management system, Groupcast, from IDX. CVA needed to address key workflow considerations that include post-acquisition conflict resolution and interfacing with the IDX practice management system. The practice also needed to convert its existing archive of images.

Through a tight integration to these systems, ScImage is making the information stored among them available through a single point of access. The vendor is also providing redundancy for the organization via an automatic failover hot-site at CVA's Greenway business office for all applications, including the cardiac PACS solution. This is accomplished through ScImage's scalable single database architecture that can be accessed by multiple facilities.

"One of the key considerations in our decision to go with ScImage was their scalable Web-based architecture," said Eric Two Bears, CVA CIO. "Moreover, since it was installed, we have found their solution to be far more efficient than our previous [system] when it comes to network resources. The result has been lower demand on our infrastructure and faster data throughput."

Understanding that workflow and data migration were also key considerations in designing a solution for CVA's needs, ScImage began developing a solution to tie together the various data gathered by numerous systems. The final solution must make information from these numerous systems available to CVA physicians at various points of care — wherever and whenever the physician needs that information.


Based on these criteria, the vendor worked closely with the practice administrators and key physician staff to create a master Web-based repository for all diagnostic imaging and reporting data. The challenge: creating an end-state solution that continued to leverage the existing application base and current infrastructure — all imaging and related reporting had to be tied together when complete. ScImage was even able to gather much of the practice's ECG-based stress tests, Holter monitoring and pacemaker analysis using document parsing technology that appends the data to the appropriate patient's medical record.

In addition, CVA required integrated echo measurement auto-capture utilities in order to import measurements directly into its Web-based diagnostic reporting application developed by senior CVA staff member, Percy J. Colon, III, M.D. Working closely with Dr. Colon, ScImage developed a solution that ports all measurements obtained by the ultrasound technicians directly into CVA's reporting system.

"A great deal of effort has gone into developing a comprehensive diagnostic reporting application that augments the way we practice medicine at CVA," said Dr. Colon. "ScImage was able to integrate our reporting application with their image and information management solution. The result is that information obtained from the ultrasound machine is captured, processed and dispatched into the final report with less effort and greater efficiency."



Physicians review images in one of CVA's cath labs. Doctor input was key in developing a master Web-based repository for all diagnostic imaging and reporting data.

Senior CVA staff member, Michael E. McKinney M.D., FACC, agrees: "Because CVA is a comprehensive practice with more than 10 facilities in the greater Birmingham area, the organization required a solution that could make a variety of clinical data available to any practitioner, anywhere, anytime. Our integrated solution does just that." 

For More Information

866.724.6243

www.scimage.com