

# Mobile Imaging Company Centralizes Image Storage and Routing with ImageGrid™ PACS

## The Customer

Advanced Imaging Services (AIS) is a San Antonio-based company delivering comprehensive imaging services to long-term care patients. Using its fleet of Scion xB vehicles equipped with mobile X-ray and Ultrasound systems, AIS provides advanced diagnostic imaging services, 24 hours a day, to nursing homes and assisted living centers in rural communities in southern and central Texas.

With its various digital imaging modalities and 17 mobile imaging vehicles, AIS averages more than 43,000 exams per year and offers 46 different types of imaging services, including diagnostic X-ray and Ultrasound, electrocardiogram, bone density and vascular Doppler testing.

Since it targets communities located far from imaging centers and hospitals, AIS is able to dramatically increase healthcare access for long-term care patients who are disabled or unable to afford transportation. These high-tech house visits also spare patients the stress of traveling and the lengthy wait time typically associated with imaging examinations.

## The Challenge

With plans to expand its service statewide, AIS was challenged with meeting the needs of its increasing patient load, as well as referring physicians and radiologists who require timely, secure access to the images collected from the mobile imaging vehicles.

According to AIS President Philip Rathbun, the previous film-based image-management process required time-intensive travel and cumbersome manual operation. "We needed a system that was more streamlined and centralized. Our image-management process required the technician to drive to a nursing home or other patient location, conduct the image examinations, and then drive back to headquarters with film cassettes – often in heavy traffic. The cassettes then had to be processed, digitally scanned and made available to referring physicians. In some cases, the entire process took as long as six hours," said Rathbun.

AIS faced the additional challenges of managing the cost associated with storing the high volumes of film cassettes and complying with the Health Insurance Portability and Accountability Act (HIPAA) governing patient record retention requirements.



*"I doubt that our competitors have explored the ImageGrid as an option for their image-management needs. Instead, they are investing in costly PACS that are not designed for mobile imaging applications.*

*The money we saved by using the ImageGrid enabled us to purchase two additional CR-equipped mobile vehicles."*

Philip Rathbun, President, AIS

## Location

San Antonio, Texas

## Services

Mobile Imaging – diagnostic X-ray and Ultrasound, electrocardiogram, bone density and vascular Doppler testing.

## Key Business Challenges

Managing an increasing patient load and meeting the needs of referring physicians who require timely access to image data.

Digital image-management solution offering scalable capacities and HIPAA compliance to meet future growth plans.

## ImageGrid™ 1000 Key Benefits

scalable, cost-effective and feature-rich image-management solution for mobile applications.

Automated rule-based remote replication for HIPAA compliance.

## The Solution

To meet future patient load demands and HIPAA compliance requirements, AIS implemented a new image-management strategy consisting of computed radiography (CR) X-ray systems, a other digital imaging modalities, and remotely transmitted images and data via the wireless Internet portals to a centralized digital image-management solution offering scalable capacities and secure, HIPAA-compliant image access and routing.

As the CR X-ray systems were being installed in the Scions, AIS, together with Dicom Solutions, Inc., of Aliso Viejo, Calif., selected the Candelis ImageGrid™ 1000 PACS appliance, to centralize and manage its entire library of medical images. The ImageGrid also was used to route images and data to offsite physician and radiology groups.

“Candelis offered the simplest and most cost-effective solution for our new digital mobile imaging service,” says Rathbun. “The ImageGrid was easy to install and implement – and its DICOM compatibility and advanced archiving features centralized our image management and made it seamless.”

More importantly, the ImageGrid enabled AIS to efficiently meet HIPAA requirements by using an automated, rule-based system for secure routing of medical images.

## The Results

AIS realized immediate benefits with the ImageGrid image-management system. The ImageGrid significantly improved overall productivity with always-online access to images and data, and lowered AIS' image-management costs by eliminating manual handling of images on film cassettes.

“The ImageGrid has significantly increased our per-unit productivity and decreased our turnaround time,” claims Rathbun. “Instead of taking hours to process an imaging examination, we can provide near-immediate access to images and reports to referring physicians and radiologists. It also has reduced administrative costs required to manually process and retrieve film, and maintain storage space. In a matter of a few hours, we streamlined our workflow with the ImageGrid PACS appliance.”

AIS estimates that its new ImageGrid-centric digital image-management workflow has reduced its image production turnaround time by 75 percent, and provided the company with a key competitive advantage by allowing it to avoid the high installation and maintenance costs associated with any other PACS solution in the market today.

## On-site Portable X-Rays

Once the X-rays are taken, the images are transmitted via a wireless connection to the the ImageGrid PACS. Images are then accessible to a remote radiologist to read and create a diagnostic report within 24 hours.

Laptop Computer with Verizon Wireless card with Global VPN client using the OREX CR unit



Mobile X-Ray Unit

Send images via wireless connection to Corporate HQ

VPN Access

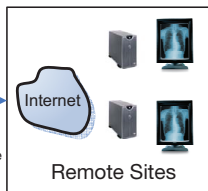


Viewing workstation

Film Scanner

DOCScan with Canon Scanner  
Scans the Reports back to the Archive Server which is attached to the Patient Study

Route Images to remote Radiologist in Florida



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