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## **Custom Solution Drastically Improves Workflow for Spinal Group**

### The Client and Their Challenge

A fast-paced, specialized spinal surgery practice with more than 18 locations throughout New Jersey, New York and Florida, had a critical need to access patient images 24 hours a day, 7 days a week, 365 days a year. Their inability to do so was causing surgeries to be cancelled at the last minute, resulting in unhappy patients and staff, major workflow inefficiencies and constant emergencies. The staff lost critical time as they searched for necessary imaging information stored in different locations and scrambled to reschedule patients in pain.

Already a Managed Service client, the surgical center asked ACT to evaluate their current Picture Archive and Communication System (PACS) and offer an immediate resolution. PACS systems are the backbone for all digital imaging storage (such as X-rays, MRIs, and CT scans).

#### **How ACT Solved the Image Management Problem**

ACT began by assessing the needs and objectives of the entire practice, including every location. Understanding the practice's culture and history—both in business and technology—allowed for recommendations that were realistic for their environment. Short, medium and long-term goals were discussed, prioritized and planned for.

Understanding that human nature is resistant to change, ACT first sat with key stakeholders and listened carefully to their exact needs and wishes. It became apparent the solution needed to incorporate a Mac OSX-based PACS viewer, as the surgeons already had a deep familiarity and comfort with this DICOM viewer.

Although it is a powerful, full-featured and easy-to-use DICOM viewer, the server functionality within the basic package does not provide for strong centralized management and administration, and lacks some troubleshooting and auditing features that a normal PACS would provide. However, by upgrading to the enterprise edition and customizing it further, it not only fit the needs of the practice, but also their budget.



Another important factor was that surgeons, medical technologists and clinical staff needed secure access from anywhere, at any time.

With so many different locations, doctors, technicians, personalities and objectives, the ACT team knew they had to create administrative procedures which were easy to understand, relatively painless to implement, affordable, and perhaps most importantly, both manageable and sustainable. It was the only way to ensure the project's full acceptance and continued utility.

The server was built on the most powerful iMac available, with the internal storage supplemented with an external RAID enclosure for redundancy and high availability. Scripts and administrative controls were put in place to make the iMac operate similar to a true purpose-built server.

Access to the new server was provided via SSLVPN, enabling easy and secure remote connectivity from Macs and iPads. Dedicated VPN connections were established to key locations for convenience and performance.

The ACT team helped the practice develop procedures, protocols and workflow. These standard operating procedures were formalized and distributed to all locations and users.



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### **Daily Proof of a Measurable Impact**

Since deploying the server, the practice has seen a considerable reduction in the number of cancelled surgeries. They can quickly and easily access the images they need, from anywhere and at any time. Surgeons are using iPads for consultations and preparation, as well as operating with images viewable on iMacs and PCs. This ensures up-to-date images are being used and allows for easy sharing, should a surgeon require a consultation from a colleague.

The adoption of the PACS server has enabled other careimproving features, such as the ability for referrers and patients to securely transfer studies directly into the PACS system. Utilizing these capabilities reduces time-to-treatment, as well as being important under MACRA's ACI framework, as much of ACI focuses on utilizing secure electronic communications for clinical information.

### **Planning for a Future of Possibilities**

Implementation of the PACS server was only a first step.

As ACT continues to work with the surgeons and staff, additional time-saving methods for using the system have been discovered and additional procedures have been created, formalized and documented. Work is also underway to make the practice even more cutting-edge, incorporating elements of the PACS system into their Intranet site.

ACT is confident the practice will continue to experience more meaningful results every day.

Learn how ACT can improve your practice's efficiency and profitability. Give us a call at (973) 758-0500.

