



Orthopedic Practice Saves Time, Money and Capital with Medweb virtualPACS

For Tom Grogan, MD, an orthopedic surgeon in solo practice, the decision to move to a digital environment was an easy one. The world around him in Santa Monica, Calif., was high-tech, as were many of his patients. As a tech-savvy physician, Dr. Grogan understood the most challenging task would be transforming his practice into a filmless and nearly paperless environment without increasing overhead expenses.

“Most digital solutions would likely help me become more efficient, particularly for storing and delivering X-rays,” Dr. Grogan says. “Yet, I had to find one that was also financially feasible.”

The first step was to document all operational costs and sources of income. A large source of ancillary income was the X-ray system he shared as a co-op with seven other surgeons.



Dr. Thomas Grogan, orthopedic surgeon, is saving nearly \$9,000 dollars by switching from film to Medweb's virtualPACS.

“You have to operate as a business -- know what each patient visit costs and what drives profitability,” Dr. Grogan adds. “We had to determine what it cost to produce and deliver an X-ray,” he explains. “Then, we analyzed this data to identify all expenses associated with acetate film.” This includes the film, processor, chemicals, service costs, film jackets, stickers, and storage. Dr. Grogan then used those total costs as a “budget” for purchasing and implementing digital X-ray and a Picture Archive and Communication System (PACS).

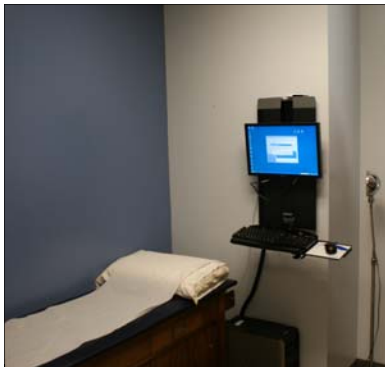
Next, he analyzed workflow. While he acknowledges that most physicians do not get involved in this level of detail, he stresses that they should. “If you assign this task to someone else in your practice, they may not be aware of every impact a digital environment has on workflow.”

Imaging volume also affects workflow and decisions on equipment, he adds. There are two options for converting X-rays to a digital format. Direct radiography (DR) uses a flat panel detector to capture and convert X-rays to an electronic image. This system replaces the X-ray equipment and boasts a higher throughput and faster image display – almost instantaneous – than Computed Radiology (CR). CR takes 40 to 50 seconds to generate an image and, therefore, is typically not an efficient alternative in a busy imaging environment. Yet, CR mimics film-based workflow with cassettes versus film and most models can be retrofitted to existing X-ray equipment. The primary cost is for CR reader, often a fraction of the cost of DR. As a result, CR is often the preferred choice for low-volume imaging facilities, such as office-based X-ray.

Dr. Grogan then turned his attention to PACS. Connectivity inside and outside the office was crucial, he explains, and there are several important questions that orthopedic surgeons

should ask. These include: How will the solution help efficiently communicate with patients and referring physicians, and can they view patient images through a secure portal? Are there multiple offices? Can you access films that someone else has taken? These are all important considerations that will help the orthopedic surgeon communicate with their clients and keep them very satisfied with the quality of service.

Another key PACS consideration is the level of customization the vendor is willing – and able – to provide. “Many PACS are like a car. You look at the model and it has a rigid, set price without a lot of options,” he says. “Yet, for our co-op, we required certain features but not others. We had to find a vendor who could deliver a PACS customized to the specific needs of an orthopedic surgeon.”



Each exam room is equipped with a flat panel monitor for viewing digital images.

Several of the “required” options for the PACS were: wireless transmission; external data storage including disaster recovery and business continuance (DR/BC); ability to link to an EMR; and, access to older, archived records. Dr. Grogan also wanted to provide his patients and referring physicians with access to images through a secure Web portal.

After conducting the initial research on available PACS, Dr. Grogan paired his list to six companies – both large and small – and began discussions to determine which provider could meet his requirements for customization and functionality. One company rose to the top of his list based his discussions with them and their proven ability to provide reliable, customized

PACS throughout the world: Medweb, a leader in Web-based PACS for over 20 years.

“I felt that outside of Medweb, I was buying the scanner and the PACS, but that was it,” says Dr. Grogan. “Medweb was the only company that seemed genuinely focused on making their solution work in *my* office.”

Fast forward one year later, and Dr. Grogan has exactly what he planned for and expected: a PACS that fits his budget of approximately \$28,000 each year for hardware and software, viewers, server, wireless intranet, service contract, external archive with DR/BC, CD Burner and CR system. Medweb’s Web-based PACS is customized to fit his workflow and clinical needs, as well as those of the other 7 surgeons in his co-op. And, most important, Dr. Grogan is *saving nearly \$9,000 each year* by moving from film to PACS.

“The key to successfully implementing PACS within my budget was to understand total costs before investing in the new technology,” he explains. This includes staff training and converting exam rooms into digital rooms. “My patients comment on the “new technology” as I project scans in the exam rooms. They see I am making an investment in technology that will enable me to continue providing them with the best possible care”

About Medweb

Medweb has been setting the standard for telemedicine for over 20 years with the most innovative, easy to use solutions for a variety of government, healthcare and educational institutions. Medweb provides a scalable, patented web-based platform, fully customizable to meet the needs of clinical specialists and administrators. The company’s core products and solutions include distributed RIS/PACS, teleradiology, general telemedicine and specialty applications for teledermatology, teleophthalmology and stroke evaluation. For more information, visit

www.medweb.com.