



## **Michigan Knee and Shoulder Institute**

Doctors Boost Patient Load and Still Get Home for Dinner with Microsoft-based System

### **Business Needs**

The Michigan Knee and Shoulder Institute, of Auburn Hills, Michigan, is a leading sports-medicine practice in the region, staffed by two board-certified orthopedic surgeons. Before adopting a first generation electronic medical record (EMR) system, the institute's physicians needed to document each patient interaction in detail through paper-based notes and dictation costing the practice \$30,000 to \$50,000 a year in transcription fees. Storage space requirements for paper charts were growing. Doctors were staying late at the office each night, completing their dictation. Some would go home for dinner with their family and then return to the office for several more hours to catch up on their work. Of high importance as well was that, without an effective EMR application, surgeons at the institute were limited in the number of patients they could see each day in the clinic. This fact reduced their ability to grow their revenue. To comply with impending legislation demanding electronic medical records and to gain a more efficient and profitable practice, the Michigan Knee and Shoulder Institute sought a powerful and secure EMR that could be supported by local service providers.

### **Solution**

The institute found the features it sought in gloEMR, an electronic medical records system offered by gloStream of Bloomfield Hills, Michigan. gloEMR 4.0 is a highly flexible and customizable system that dynamically retrieves patient-specific information from the clinical database. With one click, the physician has a complete patient history at his or her fingertips, showing medications, lab tests, orders and more.

gloEMR is built on the Microsoft.NET framework. It employs a range of Microsoft technology, including the Microsoft Windows Vista operating system, Microsoft Office Word 2007, Microsoft SQL Server 2005, Microsoft Visual Studio 2005 and 2008, Microsoft Windows Server 2003 and Microsoft Exchange Server (for practice management).

To migrate from the institute's previous EMR solution, gloStream wrote scripts that transferred Microsoft SQL Server data from one system to the other and that converted XML data to WinWord documents. The migration began on a Saturday and, by Monday, the Michigan Knee and Shoulder Institute went live with its new EMR solution.

To align its workflow with the capabilities of gloEMR, the doctors began ensuring that a medical assistant was present in the exam rooms at the clinic. The assistant would take all patient histories and document current medications before the physician entered the room. The assistant then recorded the history of the present illness during the doctor's examination of the patient, checking off the findings on a customized electronic template. This method allowed doctors to focus exclusively on the patient.

Further, whereas the physician previously would dictate notes on the patient at the end of the day and those tapes then would be sent out for transcriptions, gloEMR's industry-leading voice-recognition capabilities allowed the physicians to dictate directly to a computer. The spoken words were transformed automatically into text, eliminating transcriptions altogether.

**"With Microsoft-based gloEMR, the Michigan Knee and Shoulder Institute doctors were able to see more patients each day, increase their revenue, eliminate paper charts and records storage, improve compliance and still shorten their work day." - Mike Sappington**

President and CEO gloStream

### **Benefits**

With Microsoft-based gloEMR, the Michigan Knee and Shoulder Institute physicians were able to see more patients each day, increase their revenue, eliminate paper charts and storage, improve compliance and still shorten their work day.

- Physicians are seeing 14 percent more patients on clinic days without increasing their staffing levels.
- This increase in patient encounters has resulted in the scheduling of more surgeries and a corresponding increase in revenues from surgeries. • Improved documentation has led to faster, more complete billings for a greater patient load. • The labor costs associated with "chasing" paper charts of patients was eliminated.
- The practice has been able to slash the cost of transcription services and storage space for paper charts.
- With the greater accuracy inherent in electronic medical records, the practice has a higher degree of confidence in its documentation and, therefore, in its compliance with government health and privacy regulations.

Doctors have reduced the time they previously spent on end-of-day paperwork allowing them to get home and spend more time with their families.