



# Memorial Medical Center of West Michigan achieves cost-effective throughput and security with a next-generation 802.11n Motorola wireless network



“The Motorola 802.11n wireless LAN is a cost-effective solution for throughput and security at Memorial Medical Center. The Motorola solution provides physicians, staff, and patients with secure, high-performance wireless and is a stable, scalable foundation as we address regulatory compliance and electronic health record requirements down the road.”

— Daryl Crowley, Director of Information Services, Memorial Medical Center

## The company: Memorial Medical Center of West Michigan

Founded in 1906, Memorial Medical Center (MMC) is a 98-bed independent acute care hospital located in Ludington, Michigan. The regional medical center provides a wide variety of inpatient and outpatient services including surgical, obstetrical, critical care, 24-hour emergency care, diagnostic and laboratory. In addition to serving residents of several counties along the shore of Lake Michigan, the hospital also provides care for thousands of tourists during the summer months.

## The challenge: Improving wireless performance and security compliance

With approximately 500 employees, MMC is the largest employer in Mason County, Michigan. Each year, MMC has about 3,500 inpatients and handles approximately 80,000 outpatient visits. To better serve its patients, physicians and staff, the hospital needed to upgrade its legacy wireless network.

“We had implemented 802.11a some time ago, and we were using WEP. During our semi-annual security audit we were ‘dinged’ on that aspect of our wireless network, and rightly so,” said Daryl Crowley, Director of Information Services, Memorial Medical Center. “That provided the impetus to investigate upgrading to 802.11n to enhance security, improve performance, and provide a backbone for future applications,” he said.

## Customer profile



### Company

Memorial Medical Center (MMC) of West Michigan

### Location

Ludington, Michigan (USA)

### Industry

Healthcare

### Motorola products

- Motorola RFS6000 Wireless LAN Switches
- Motorola AP-7131 802.11n Wireless Access Points
- Motorola AirDefense Enterprise Wireless Intrusion Prevention System

### Applications

- Secure 802.11n wireless LAN meeting the diverse needs of a regional medical center

### Partner

- Lowry Computer Products, Inc.

### Benefits

- Reliable, secure high-performance wireless
- Mobility for clinical applications, guest access for patients, visitors, and vendors without comprising network security
- Scalable backbone for future applications and requirements



As Crowley and his team evaluated options for upgraded wireless, another parallel initiative was taking place. An employee-volunteer project was looking into providing guest wireless for patients and visitors.

“Guest wireless is becoming more of an expectation from patients, and it was not something we could provide at that time. So, when we talked with wireless vendors, we piggybacked the goals of the two projects,” Crowley explained..

**The solution: Next-generation Motorola wireless**

MMC evaluated solutions from leading wireless vendors based on several key criteria, including advanced security, complete reliability, strong healthcare and wireless expertise, and total cost of ownership. Based on the evaluation process, MMC chose a solution from Motorola to support their move to a state-of-the-art 802.11n wireless network.

“The Motorola people really brought a lot to the table and showed that they are looking closely at health care requirements,” Crowley noted. “As we face new rules and regulations for healthcare IT in the future, we know that by selecting Motorola we’ll be with a company that is already thinking about these issues.”

The 802.11n wireless network at MMC includes Motorola RFS6000 Wireless LAN Switches and Motorola AP-7131 Wireless Access Points. The integrated sensor tri-radio design of the AP-7131 provides excellent value by eliminating the need for multiple hardware purchases and extra cabling.

The Motorola AirDefense Enterprise Wireless Intrusion Prevention System protects the network against threats and unauthorized devices while providing performance monitoring and troubleshooting. This is critical for meeting HIPAA regulations and ensuring that unauthorized personnel do not gain access to patient records and other patient data. “My tech team is very impressed with AirDefense and they’re enthusiastic about exploring its wide range of capabilities,” Crowley said.

Motorola and Lowry Computer Products, Inc. supported the implementation. “It went very smoothly,” Crowley said. “I’ve been pleasantly surprised by the excellent level of service we’ve gotten from Motorola. The Motorola team had answers to everything we brought up and also raised things we hadn’t thought of—they were very responsive to our needs,” Crowley said.

Today MMC has a reliable, secure, high-performance wireless solution that meets all of its wireless

requirements on patient floors, in conference rooms and in board rooms. There is access throughout the three-story hospital and associated medical offices.

"We've had no problems with the Motorola solution. It has been stable, requires very little maintenance, and my tech staff are pleased with its capabilities," Crowley said.

As MMC plans new surgery applications and a new computer system in the surgery suite, the new wireless solution will expand easily to support them. "Of course, Motorola wireless will play a key role there because everything needs to be mobile," Crowley said.

### **The benefits: Secure, reliable high-performance wireless**

Although MMC is a small hospital, Crowley recognized the emerging need for a high-bandwidth network based on the 802.11n standard, to meet new and future application needs

"Without laying out a lot of money, we're serving physicians and patients better and we've put down a foundation for future plans. Motorola wireless has increased security and performance, and those were our primary goals to start with," Crowley stated.

"Our bench tests indicate improved throughput with 802.11n and clearly the security issues we had with our old network are now eliminated," Crowley said. "People are going about their jobs and the Motorola wireless network is increasing safety and efficiency."

"Our guest wireless is a big plus. Physicians, visitors, vendors and patients can come in to the hospital and use their own laptops. We don't need to worry about security issues on personal laptops, and they have the convenience of high-speed wireless," Crowley said.

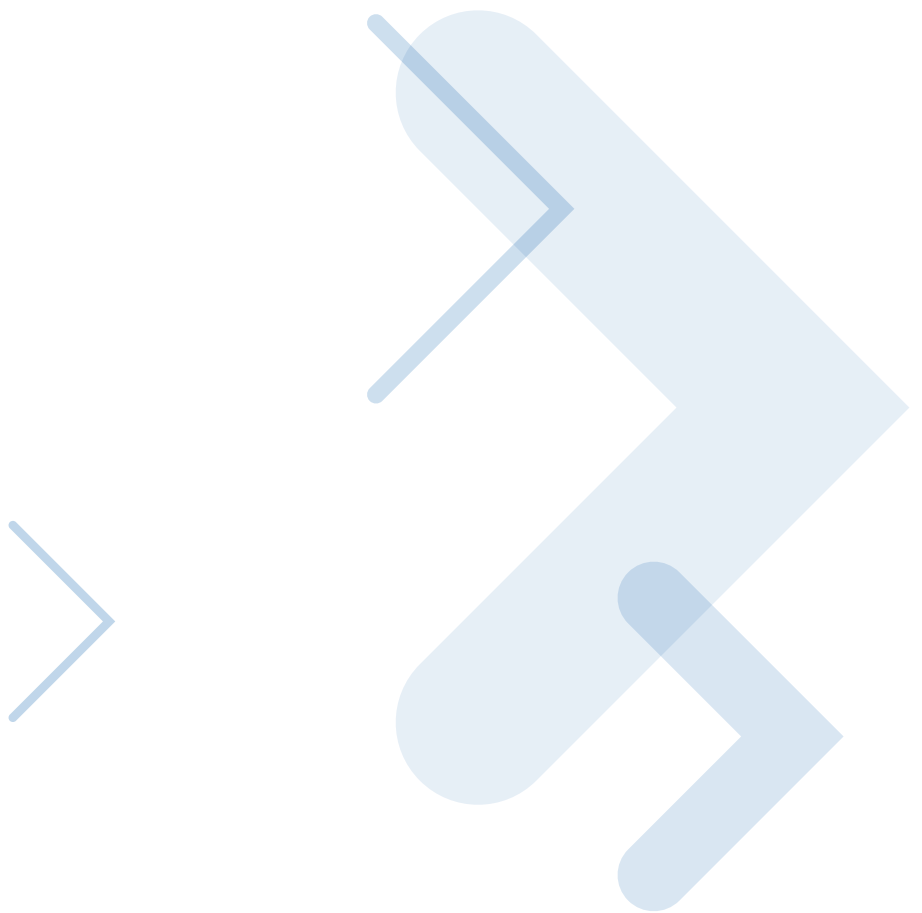
As Motorola provides an effective solution for throughput and security today, it also provides a foundation for the future, according to Crowley. One example is the U.S. government mandate for electronic health records (EHR) across all healthcare organizations. "Motorola wireless will definitely help as we pursue EHR here at MMC. Increased numbers of physicians will need to use computers and many will want to use their own devices. Our high-speed wireless will allow us to let them do that without compromising network security."

For Memorial Medical Center of West Michigan, the benefits of a next-generation Motorola wireless solution include:

- Reliable, secure high-performance wireless
- Mobility for clinical applications
- Guest access for patients, visitors, and vendors without comprising network security
- Scalable backbone for future applications and requirements

### **About Motorola**

Motorola is known around the world for innovation in communications and is focused on advancing the way the world connects. From broadband communications infrastructure, enterprise mobility and public safety solutions to high-definition video and mobile devices, Motorola is leading the next wave of innovations that enable people, enterprises and governments to be more connected and more mobile. Motorola (NYSE: MOT) had sales of US \$30.1 billion in 2008. For more information, please visit [www.motorola.com](http://www.motorola.com).



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