



CareGroup, Inc.

Creating **Electronic Access** for **Physicians, Providers, and Patients**

Customer Profile



“Having Cisco as a strategic networking partner has been vital in making our network the most advanced in health care east of the Mississippi and in having CareGroup IT selected as the seventh most innovative company in the nation by Ernst & Young/Cap Gemini.”

John Halamka, MD
—Chief Information
Officer, CareGroup

A Web-based network has enabled this New England health-care provider to save over \$12 million annually, while increasing patient satisfaction and meeting strict new HIPAA privacy requirements.

CareGroup encompasses six hospitals and 3,000 doctors, and serves or delivers care to more than 1 million patients covering a 500-square mile area in eastern Massachusetts. The organization has demonstrated the dramatic benefits of networking technology for health-care providers.

The Challenge—Myriad Connectivity Requirements

“Ours is a very heterogeneous environment,” explains Dr. John Halamka, CareGroup’s Chief Medical Information Officer and also a practicing emergency room physician.

“Along with our six hospitals, we have more than five-hundred primary care practices extending from urban to very remote rural areas. Therefore, providing ubiquitous connectivity for physicians, patients, and providers who use myriad hardware solutions can be a real challenge. We need to provide secure access to data via all sorts of connections, from cable modems to wireless.”

Although long a pioneer in technology, CareGroup’s network had “a little of this and a little of that” when Dr. Halamka was appointed its CMIO almost two years ago. He quickly recognized that to implement advanced applications such as an electronic medical record (EMR), which create cost efficiencies as well as greater patient satisfaction, he needed to build a consistent, solid network infrastructure. An infrastructure that would offer reliable, secure connectivity for everyone, everywhere, all the time.

Cisco Chosen as Strategic Networking Partner

Dr. Halamka spent his first year making sure the CareGroup network had secure connectivity, a solid data center, highly reliable servers, and capable desktop components. It chose Cisco Systems as a strategic partner because of its broad range of proven networking solutions, market leadership position, and highly responsive customer service. Cisco technology provided the foundation for CareGroup’s virtual private network (VPN) with Cisco firewalls as well as wireless capability—both critical elements in creating ubiquitous yet secure network access. As a result of these efforts, Dr. Halamka estimates that CareGroup’s network administrative costs have been reduced by 40 percent.

Today: Dramatic Cost Benefits, Happier Patients, and HIPAA Compliance

CareGroup's EMR system—which provides secure, seamless access to a single electronic patient medical record for physicians, providers, payers, and patients alike—has created powerful functionality. Today, doctors and providers in the system can access not just a patient's administrative data, but also clinical records such as X-ray images.

Along with more efficient care, CareGroup has enjoyed substantial economic benefits. For example, the organization has enhanced its income because more patients are now referred to doctors within the CareGroup system. It has increased revenue collection as a result of identifying patient eligibility for medical services up front. CareGroup also has measurably reduced its medical errors because it can share clinical data across the network. All told, CareGroup has documented more than \$12 million a year in direct savings or increased revenues.

Patients can also access their EMRs right on the Web, enabling them to actively monitor and take greater control of their own care. Not surprisingly, this has made them enthusiastic supporters as well. In an August, 2000 survey of CareGroup patients conducted by Opinion Dynamics Corporation, nearly 20 percent said they would actually switch doctors in order to get access to an e-enabled medical records system. And, as part of HIPAA (the Health Insurance Portability Act), CareGroup has enabled participating doctors to conduct secure messaging of benefits eligibility and referral authorization transactions with payer organizations in the northeast. In fact, CareGroup

was able to meet the strict new HIPAA patient privacy mandates before they were passed into law.

Tomorrow: Physician Order Entry, Expanded Wireless Access and IP Telephony

Dr. Halamka views the CareGroup network as a solid foundation that will enable the organization to deliver even more applications to its physicians, providers, and patients in the near future. CareGroup hopes to implement a physician order entry system. Halamka also considers "cutting more of the wires" an important trend, with Web-based applications delivered not only to the desktop, but to laptops, PDAs, and other wireless devices. And, with the differences between voice and data transmission rapidly diminishing, he envisions an IP telephony solution in the not-too-distant future, using Cisco AVVID (Architecture for Integrated Voice, Video and Integrated Data) technology to transmit voice, video, and data over a single network.

The Cisco Advantage

"I'm not aware of a lot of companies that could supply us with wireless networking, a secure VPN to meet new HIPAA requirements, and the 24/7 support that Cisco provides," said Dr. Halamka. "There simply aren't a lot of folks who do what Cisco does. Plus, I know that if we ever have a problem, day or night, someone can call and get a real person on the line. Having Cisco as a strategic networking partner has been vital in making our network the most advanced in health care east of the Mississippi and in having CareGroup IT selected as the seventh most innovative company in the nation by Ernst & Young/Cap Gemini."



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