



Mobile video consultations take expert care directly to the patient to save critical minutes

Lee Memorial Health System:

Size: More than 11,000 employees

Industry: Healthcare

Location:

United States

North Fort Myers, Florida

Solutions

- Provide a connected patient experience with mobile, high-quality, remote video consultations
- Connect physicians with reliable, high-speed, mobile access to hospital's EMR CT system and PACS
- Increase physical doctor-patient time while maintaining business efficiency

For More Information

For more information on Cisco healthcare solutions visit <http://www.cisco.com/c/en/us/solutions/industries/healthcare.html>

On average, there are 795,000 stroke cases in America every year, and 130,000 cases of those cases are fatal. Accelerated identification, diagnosis, and treatment by the right experts are key components in winning the war against strokes. With four acute care hospitals and two specialty hospitals, known for their specialized treatment of stroke patients, throughout five counties, Lee Memorial's team of dedicated healthcare specialists serve one million patients every year through its acute care, emergency care, rehabilitative, and diagnostic services, health and wellness education, community outreach, and advocacy programs.

Challenge: Improving Remote Care Services

The health system's top goal was to expand stroke care services in the emergency departments across all four acute care hospitals. With a world-class neurology team already in place, Lee Memorial needed to connect the right physicians to geographically dispersed patients in need of care. As part of their engagement, the physicians also needed a way to quickly access patients' medical records and imaging systems from remote locations to accelerate their ability to diagnose stroke patients.

Connecting newly arrived emergency room (ER) patients and their diagnostics with on-call physicians helps Lee Memorial save crucial minutes in reestablishing blood flow to the affected brain tissues and potentially improve their recovery.

Connecting with Digital Capabilities

The solution was dynamic on-the-go access to the right experts. Partnering with Cisco® engineers, Dimension Data was able to help Lee Memorial meet the challenge securely, reliably, and with ease of use. The healthcare staff at Lee Memorial uses a mobile telestroke cart to take medical care right to the patient. Digital technology on the cart enables physicians with ready access to secure patient medical records. Remote Cisco video conferencing and Jabber technology connect remote doctors directly to their patients to ensure trustful, human connections.

Lee Memorial can confidently deploy mobile applications and services on the cart with the addition of a wireless connection and Cisco Unified Communications solutions, while meeting rigorous compliance standards for data privacy and security. Equipped with a laptop computer and a 12x pan-tilt-zoom (PTZ) video camera, the mobile telestroke

With Cisco solutions, Lee Memorial Health System:



Reduced time to diagnose and provide care by 10 to 45 minutes



Reduced travel costs and impact to on-call physicians



Increased access to medical specialists and enriched patient experiences

cart can be transported by healthcare staff anywhere in the hospital while connecting to the hospitals' EMR system, high-speed CT systems, and PACS. The result is a combination that includes a clinically rich, deeply beneficial solution for patients, doctors, and hospital staff.

Enabling Fast Remote Consultation

Lee Memorial's new telestroke solution provides the mobility and efficiency to connect physicians to their patients and to the rest of their clinical staff. Today, Cape Coral Hospital and Lee Memorial Hospital are both designated primary stroke centers, and the Gulf Coast Medical Center is a comprehensive stroke center.

Saving Critical Minutes

As a stroke patient arrives in the ER and undergoes a CT scan, the ER physician alerts the on-call neurologist and provides a brief overview of the patient's condition. At the same time, a technician sets up the telestroke cart. As patients return from their scans, their results are available for a neurologist to review.

Neurologists can evaluate a patient within minutes of the ER physician's call from any remote location. After assessing

the available information, a neurologist is immediately accessible through video conferencing on the telestroke cart to consult with the care team with evidence-based protocols to provide immediate, expert care.

Accelerating Critical Care

With Cisco video conferencing and Cisco Jabber technology, secure collaboration between disperse medical staff is easier and more efficient.

"There are obvious benefits to our community in the level and speed of care we're able to provide," says Dr. William Carracino, neurologist, of Lee Memorial Health System. "It cuts down on time spent in the car getting to the hospital. If I'm at home and get a call at 8:30 p.m., Cape Coral Hospital is at least 25 minutes away. Now I can make my assessment within about 10 minutes of the patient presenting to the ER."

Providing Better Insight

According to Michael W. Smith, chief information officer (CIO) at Lee Memorial Health System, part of the key to high-quality care is making the patient's electronic medical record available to the on-call

Products and Services

Routing and Switching

- Cisco 2900, 3900, 4400 Series Integrated Services Routers
- Cisco Catalyst® 3700, 3800, 4500 Series Switches

Wireless

- Cisco 5508 Wireless Controller
- Cisco Industrial Wireless 3702 Access Point

Network Management

- Cisco Prime™ Infrastructure 3.0

Data Center

- Cisco Unified Computing System™ (Cisco UCS®)

Unified Communications

- Cisco Jabber technology
- Cisco Unified Workspace Licensing (UWL)

Collaboration Endpoints

- Cisco Unified IP Phone 7900 Series
- Cisco TelePresence SX20 Quick Set

Customer Collaboration

- Cisco Unified Contact Center Express

Conferencing

- Cisco WebEx® Meeting Center

“Physicians at home can see the video and the CT scan that was taken two minutes ago. That can make the difference between the patient walking out of the hospital or suffering a range of less desirable outcomes.”

Michael W. Smith
CIO, Lee Memorial Health
System

physicians at home. Cisco switching, routing, and wireless technologies provide the foundation for reliable, remote access to patient information to help staff spend less time scrambling for important data and more time assessing the patient’s unique situation.

“Physicians at home can see the video and the CT scan that was taken two minutes ago,” says Smith. “Sometimes that can make the difference between the patient walking out of the hospital or suffering a range of less desirable outcomes.”

Delivering Focused Attention

The telemedicine solution gives patients more time with the doctor. Typically, direct doctor-patient time is about 5 minutes. Patient intake, including obtaining vital signs, precedes meeting with the doctor, who consults and then traverses to the next patient.

Now, with video consultation, patients receive direct connections for at least 10 or 15 minutes with their doctors, in parallel to intake. Doctors spending less time traversing and more time with physicians creates a better patient experience. Lee Memorial has found that after patients have a video consultation, they appreciate the enhanced connection with their doctors and want more direct contact with their doctors. By easily connecting physicians with patient

data across its entire healthcare system, Lee Memorial is improving its processes while enhancing the patient experience.

What’s Next?

At Lee Memorial Health System, critical stroke care is now available across the system. This kind of care allows for more personal connections between physicians and their patients through video conferencing.

Physicians now have reliable, secure access to patient information anytime from anywhere. This new technology accelerates quality medical care, which can often make the difference between patients suffering debilitating effects and leaving the hospital in good health.

Big data analysis also is a priority on the roadmap for the system. “We have a lot of billing, lab results, treatment, and other data, but we have not yet had a way to synthesize and analyze it,” says Smith. “I’m sure that there is good, cool stuff we can do with all of this data, and it will be the next learning curve for healthcare.”



Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV Amsterdam,
The Netherlands

Cisco has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the Cisco Website at www.cisco.com/go/offices.

Cisco and the Cisco logo are trademarks or registered trademarks of Cisco and/or its affiliates in the U.S. and other countries. To view a list of Cisco trademarks, go to this URL: www.cisco.com/go/trademarks. Third party trademarks mentioned are the property of their respective owners. The use of the word partner does not imply a partnership relationship between Cisco and any other company. (1110R)