Saint Thomas Health Expands Services and Bridges Distances for Rural Patients with Cisco HealthPresence™

Underserved Tennessee residents benefit from next-generation telehealth solution that cuts costs and speeds healthcare delivery to remote locations

HIGHLIGHTS

CUSTOMER PROFILE
- **Client Name:** Saint Thomas Health
- **Region:** Nashville and the surrounding communities of Middle Tennessee
- **Industry:** Healthcare
- **Business Issue:** Install a robust, cost-effective, convenient, and far-reaching telehealth solution for its geographically dispersed population of rural patients

BACKGROUND
- Saint Thomas Health (STHe) is the leading healthcare provider in Nashville and the surrounding area of Middle Tennessee. STHe is part of Ascension Health, America’s largest Catholic hospital system and one of the largest providers of charity care in the nation. To help achieve its mission of “serving all persons,” Saint Thomas sought a next-generation telehealth service that would reduce inefficiencies, raise satisfaction, and lower costs. Under the traditional care delivery system, physicians and patients were forced to drive long distances, sometimes as long as three hours round trip, for routine appointments. The result was an undesirable rate of no-shows and greater difficulty managing outcomes.
  - In 2010, Saint Thomas Health merged with Baptist Hospital and Middle Tennessee Medical Center to become Saint Thomas Health. Its vast network includes the Hospital for Spinal Surgery, Hickman Community Hospital, Baptist Sports Medicine, 13 ambulatory surgery centers, 250 physician practices, and 18 other subsidiaries.
  - But many of the medical center’s patients live in remote areas of Middle Tennessee, as well as over the borders of Alabama and Kentucky. For these patients, everything from routine appointments to follow-up visits entailed major expense and inconvenience. Travel time for physicians and patients frequently took up to three hours round-trip and sometimes resulted in no-shows.

Challenge

Nashville lives in the American imagination as the music capital of the country, but its bigger business is healthcare. The city is home to more than 250 healthcare companies; collectively, they generate US$18 billion a year in revenue and employ more than 90,000 people. When it comes to providing care in the region, which spans 17,000 miles and 40 counties, one name stands out: Saint Thomas Health. Saint Thomas Health is part of Ascension Health and MissionPoint Health Partners, the largest Catholic hospital system in the United States and a top provider of charity care. Collectively, Ascension’s healthcare network consists of 80 hospitals, more than a dozen long-term and specialty hospitals, and other services.

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“Whether you look at it from the perspective of a doctor or a patient, it is an inefficient way of providing care,” says Jason Dinger, CEO of MissionPoint Health Partners.

In 2010, a specially formed team of CIOs, CEOs, and healthcare providers from Ascension, Saint Thomas, and MissionPoint began looking at ways to improve its entire telehealth program. Its findings: Saint Thomas’ legacy telehealth solution did not offer the range, flexibility, video and
acoustical quality, or stability to achieve its objectives for improving rural care. “We wanted to satisfy our promise of care at a distance,” Dinger says. “The problem is that we had telehealth 1.0, when what we needed was telehealth 2.0.”

Ascension, Saint Thomas, and Mission Point teams wanted the telehealth system to do the following:

- Build an innovative telehealth platform that would be a regional showcase for telehealth and position Saint Thomas for future growth and services
- Lower costs associated with excessive travel time for patients and physicians
- Raise satisfaction levels for rural patients
- Support Ascension’s shift to an outcomes-based reimbursement model from a fee-for-service model
- Substantiate and meet treatment requirements of the Health Insurance Portability and Accountability Act (HIPAA), the Patient Protection and Health Care Affordability Act, and federal and state mandates

To achieve all its goals in a single investment, the health-care leader chose Cisco HealthPresence. “We saw it as a unique, robust way to reach out to patients and extend our service radius to 50 or 60 miles from the hospital,” Dinger says.

“The old ways weren’t working. So we shifted our focus to innovative healthcare delivery models that would work.”

Solution

The delivery model that caught their eye was Cisco HealthPresence. “We wanted a solution that would help us improve alignment with physicians in underserved markets by offering them a way to expand their practice at home with their brand-name partner in Nashville,” Dinger says. “So we went to Cisco headquarters in San Jose to review the technology.”
The Cisco HealthPresence solution integrates high-definition video, advanced audio, medical devices, and collaboration tools to deliver convenient access to efficient, high-quality patient care across any distance. The solution provides:

- Secure, scalable deployment options with high availability
- Choice of interoperable video endpoints
- Integrated workflow features such as appointment queuing, presence, and an API for access to electronic medical records

The hands-on demonstration, which took place in December 2010, convinced the Ascension–Saint Thomas Health team that Cisco HealthPresence could deliver everything that it wanted for a next generation telehealth 2.0 solution.

Two months later, in January 2011, Saint Thomas Health had a pilot program in place. At the time, Saint Thomas was only the fourth organization in North America to use Cisco HealthPresence solution and the first healthcare center to launch a pilot.

“It was great,” Dinger says. “For three months, we vetted the technology in a real-world scenario, and the results were impressive.”

- **4 Virtual Specialty Clinics** (Fayetteville Medical Associates, Columbia, Hickman, and Winchester)
- **10 Virtual Physician Pod Locations** on campuses of Baptist, Saint Thomas, MTMC, and other locations
- **18 Virtual Home Pod Locations** for patient at-home care throughout the Mid-State

In all, the Cisco enterprise video network supports four virtual specialty clinics, 10 virtual physician pod locations, a cloud-based emergency clinic, and 18 virtual home pod locations, which is a huge jump from the 90 cardiology and hypertension patients with which it started. The network is also being used for specialty services in cardiology, primary care, behavioral health, and gastroenterology and is the foundation for Saint Thomas’ first mobile medical clinic, which can travel to patients anywhere throughout the Mid-State area. The clinic, which

“Our goal was to improve by patient care for our remote, underserved patients. Cisco HealthPresence enabled us to achieve that goal and lay a foundation for the future.”

– Jason Dinger, CEO, MissionPoint Health Partners
Dinger calls “the crown jewel” of the system, uses satellite connection for point-to-point contact. “Our mission is to be a high-touch organization,” he says. “This system is enabling us to achieve that.”

In the summer of 2012, Saint Thomas plans to bring a range of new capabilities into the system, including 24 high-definition (HD) precision cameras and Cisco Jabber™ clients, 20 Cisco TelePresence® EX 60 Systems, new sites focused on training and conferencing, and neurology on-call laptops, which will make it possible for neurologists to call inter-remotely or from home.

By 2013, Saint Thomas plans to open virtual neurology and cardiology clinics for its outlying hospitals, virtual clinical educational opportunities, and four virtual consultation carts for Hickman, Loganville, and other sites.

“We also are working with Cisco to evaluate our telehealth network toward integrating electronic medical records into our system,” Dinger says. “We are adding 10 switches and several new network connections specifically for telehealth, with a roadmap to further integrate into existing network upgrades and infrastructure, leveraging shared equipment and cost-saving across the telehealth network.”

Enhanced Patient Focus
According to a six-month follow-up survey of patients and physicians who had used the Cisco HealthPresence solution for appointments and check-ins, patients, including those who were initially wary, expressed widespread satisfaction.

“We’ve been getting strong feedback from patients and physicians,” Dinger says. “To be honest, the results really surprised us: most of the patients rated their experience higher than face-to-face visits.”

“What came out was that physicians do a lot of other things during face-to-face visits,” he continues. “They’re charting, or checking on results on the computer, or having to divide their attention. With the Cisco HealthPresence solution, the physician just honed in on the patient. Patients felt like it was all about them.”

The High-Def Difference
Saint Thomas also found that the high-definition video, clear audio, and connected medical devices made remote visits feel highly immersive. In a video made by Saint Thomas Heart, Dr. Don B. Chomsky, a cardiologist at the hospital, observes that, acoustically, the Cisco solution simulates true to life use of a stethoscope for evaluating heart sounds.
“You can hear things with clarity because the sounds can be amplified,” he says. “And the image quality is unbelievable; you really feel like you’re having a face-to-face.” Dr. Chomsky uses the system to confer with patients in Winchester County from his medical office in Nashville.

Enhanced Collaboration
Another surprising finding of the survey, Dinger says, was how much the solution enhanced collaboration at every point of connection. “The medical staff has shared that they are seeing and hearing things as a result of using the solution. They say it is making care-giving a truly collaborative experience.”

“The same was true for patients,” he continues. “Many of them, including some who were really reluctant to participate in the pilot, have elected to make this their delivery method of choice.”

A Mobile First
Using Cisco HealthPresence with interoperable video endpoints, Saint Thomas was able to build its first mobile medical unit. “The new mobile medical unit is an innovation that will give the organization the ability to reach underserved communities by leveraging satellite connectivity or other transport mechanisms,” Dinger says.

The success of the mobile medical unit raises a whole host of possibilities for the group’s larger operations, Dinger says. “Whether it’s delivering a specialty resource in a rural community or responding to a devastating act of nature, this tool with help us in expanding specialty care to the entire Nashville area.”

“The mobile unit would never have been created without the hours of collaboration invested in the prep work and pilot,” he adds. “This wouldn’t be a success story without dedicated Cisco resources and a team effort to deliver all aspects of the solution.”

Saving Time and Money
Getting patients and physicians out of their cars has generated not only good will but also savings for Saint Thomas. Cisco HealthPresence also made it easier to bring routine care and follow-up visits into patients’ homes, a valuable service to the area’s elderly, frail, and chronically ill patients.

Reimbursement
In the healthcare debates preceding passage of the Patient Protection and Affordable Healthcare Act of 2010, the national conversation centered on evidence-based medicine and outcomes-based reimbursement. For Ascension, which has been shifting from the old fee-for-service/pay-for-interventions model to an outcomes-based one, the introduction of Cisco HealthPresence has made reimbursement easier.

“The rules for the Center for Medicare and Medicaid services stipulate that if you provide telehealth care in a medical-shortage county, you can treat that as a normal visit and introduce originating site fees,” Dinger says. “We were able to successfully bill Medicare for appropriate payments for telehealth consultations,” Dinger continues.

“Cisco HealthPresence proved to be a unique and robust way to reach out to patients and extend our services radius.”
– Jason Dinger, CEO, MissionPoint Health Partners

“Cisco HealthPresence has helped us save money on travel for physicians and patients. Over time, we also expect it to lead to scalable outcomes and enhanced collaboration.”
– Jason Dinger, CEO, MissionPoint Health Partners
Setting a Standard
With so many rural patients, and a mission of “serving all persons with special attention to those who are poor and vulnerable,” Ascension needed to find new ways to reach out to rural, remote, and housebound patients. First on its list for changes was Nashville’s premiere health center, Saint Thomas Health. The old ways of doing things, with an antiquated telehealth system and no good alternatives to face-to-face visits, were no longer working. Long drives were straining resources, elevating costs, and lowering satisfaction.

To remedy this, and to position itself as a leader in innovative long-distance care, Saint Thomas implemented Cisco HealthPresence, a comprehensive telehealth solution with multiple video endpoints, integrated workflow options, and high-definition video and audio. “MissionPoint Health and Saint Thomas Health are solving the access challenge using technologies that enable clinicians to provide complete consultations and exams from Nashville to our patients in the communities where they live, no matter the distance,” Dinger says.

The system is already helping the healthcare provider lower costs, boost productivity, offer new services, enhance collaboration, improve patient outcomes, and bridge long distances. Indeed, the solution has been so successful that the group is looking at expanding it beyond Tennessee and Saint Thomas Health, possibly even making it into a national center for long-distance care.

“What started as a vision and pilot of offering new models of care facilitated by technology to help serve the underserved markets in Tennessee has blossomed into a successful care-at-a-distance initiative at Saint Thomas Health,” Dinger says.

That conclusion received national affirmation at the 2012 Nashville Health Care Council and Bipartisan Policy Center conference, where Mission Point Health Partners/Saint Thomas was one of five regional health centers being recognized for innovative approaches to healthcare delivery enabled by IT. “Policymakers and health industry stakeholders across the country and across the political spectrum understand the critical role that health IT plays in achieving better health, improved delivery of care, and lower costs,” former Senator Tom Daschle told the crowd. “While federal investment has been substantial, increased public/private collaboration and leadership is necessary to promote greater utilization of healthcare IT.”


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A Future Look at Saint Thomas Health’s Cisco HealthPresence Solution
- June 2012. Open Virtual Specialty Clinics with multidiscipline follow-up visit services and consultations that are CMS reimbursable, convenient for patients, and help keep travel or ancillary dollars in the outlying community’s or family’s pockets.
- July 2012. Begin piloting Cisco video devices used as “home pods” for consulting or supporting chronically ill patients at home.