

Hospital Delivers Superior Care Through Integrated Communications

Kaweah Delta Health Care District depends on its Cisco Medical-Grade Network to improve patient care and reduce operations costs.

EXECUTIVE SUMMARY

KAWEAH DELTA HEALTH CARE DISTRICT

- Healthcare
- Visalia, California
- Licensed Capacity — 490 Beds

BUSINESS CHALLENGE

- Separate and outdated voice and data communications networks hamper exchange of patient records between facilities and impede patient care.

NETWORK SOLUTION

- Cisco Medical-Grade Network with Cisco Unified Communications lets Kaweah Delta cost-effectively bring all its communications together into a single manageable system.

BUSINESS RESULT

- Integrated communications improves patient care, helps ensure regulatory compliance, and reduces costs of operations and maintenance.

Challenge: Deliver Timely, Accurate Information to Improve Patient Care

It is the middle of the night. A crash on the highway results in multiple serious injuries. You need several specialists to arrive at your hospital for an emergency triage event immediately. If you are a hospital system operating in a rural, thinly populated area, faced with a crisis, how do you make sure that you get the right information to the right healthcare professionals in time?



For the Visalia, California-based Kaweah Delta Health Care District, the ability to provide timely access to information in a hospital can truly mean the difference between life or death.

“Increasingly, communication systems are viewed as part of the diagnostic tools of a hospital,” says Dave Gravender, vice president and chief information officer at Kaweah Delta. “They are often part of a physician’s ability to diagnose and treat accurately and in a timely fashion, to help ensure the best medical outcomes.”

The rural, not-for-profit community hospital system in the heart of California’s Central Valley was saddled with an outdated and expensive communications system. Its two separate voice and data networks made the network unreliable and difficult to manage.

Kaweah Delta needed a solution that could give physicians and other healthcare providers immediate access to electronic medical records and to one another. The solution would also have to provide fast, reliable access to that same clinical information for healthcare providers working from the hospital’s various outlying clinics and emergency facilities.

Like many healthcare providers, Kaweah Delta also faced changing needs and growing costs of a rapidly aging and ethnically diverse patient population. Its new network would need to be cost-effective, yet scalable to support new patients and applications.

Solution: An Informed, Mobile Healthcare Staff

After exploring a variety of options, Kaweah Delta chose to replace both its aging network and private branch exchange (PBX) with a Cisco® Medical-Grade Network featuring Cisco Unified Communications, which unites voice, video, and data communications on a single, secure IP network. “We moved from the idea of having telephones and data systems to the idea of having a communications network,” says Nick Volosin, director of information systems at Kaweah Delta Health Care District.

The Cisco Medical-Grade Network is designed to address the life-or-death requirements of healthcare providers. The solution gives medical personnel anytime, anywhere access to patient information, providing the knowledge that they need to treat patients more quickly. Using Cisco Aironet® Wireless Access Points, caregivers can take advantage of the most up-to-date information when they are at a patient’s bedside.

“Our wireless network gives technicians the flexibility of having a portable device, whether it is a computer on wheels, a tablet, a personal digital assistant, or a phone,” says Volosin. “They can have that information at the point of care.”

The wireless network also supports phones, enabling the hospital’s staff to work together when they are on the move.

“The nurses and physical therapists all have Cisco IP Phones to communicate with one another and physicians,” says Volosin. “Instead of having to run back to the nursing stations and make phone calls, or play phone tag, they are able to make contact the first time. It is all about getting a fast response for the patient.”

“Our Cisco Medical-Grade Network enhances our operational efficiency and our effectiveness in delivering high-quality healthcare.”

—Lindsay Mann, CEO, Kaweah Delta Health Care District

Designed to support even high-bandwidth medical images, the Cisco solution also lets caregivers share information over the network, so that they can make informed diagnostic decisions in a more timely fashion.

“In the past, we would deliver physical images from an imaging department to an outlying hospital,” says Lindsay Mann, chief executive officer with Kaweah Delta Health Care District. “Today, we can simply push a button, and that information is immediately conveyed. It makes very sophisticated, high-level information available across our network of healthcare sites.”

Patient privacy is always an issue, and the Cisco Medical-Grade Network includes built-in security to help Kaweah Delta comply with stringent healthcare regulations.

“We were committed to comply with HIPAA (Health Insurance Portability and Accountability Act) regulations to help ensure patient privacy,” says Mann. “We knew that we could develop this system with the necessary security systems to be certain that we had confidentiality.”

Result: Better Patient Care and Cost Control

Whether they are working in the emergency room or operating out of the most distant rural healthcare clinic, the doctors and nurses of the Kaweah Delta Health Care District depend on the

Cisco solution to provide the information that they need - at the right time, in the right format. The end result is superior care for patients.

“Our Cisco Medical-Grade Network enhances our operational efficiency and our effectiveness in delivering high-quality healthcare,” says Mann.

“Our physicians are making more informed decisions, and I think that turns into better outcomes,” says Gravender.

The upgrade to a Cisco Medical-Grade Network has resulted in not only dramatically enhanced communications capabilities, but significant cost savings as well.

“In the past, we had phone technicians and data technicians to support our two networks. That redundancy was cost-ineffective,” says Gravender. “Now we have a single team doing both voice and data through the converged network, and it is not hard to see the time and cost savings that it brings. We were able to purchase completely new equipment for the same cost as maintaining our old equipment.”

PRODUCT LIST

Routing and Switching

- Cisco Catalyst® 6509 Series Switches
- Cisco Catalyst 4503 Series Switches
- Cisco Catalyst 3750 Series Switches
- Cisco 3825 and 3845 Series Routers
- Cisco Aironet 1200 Series Access Points
- Cisco 3800 and 2800 Series Routers with SRST

Voice and IP Communications

- Cisco Unified CallManager
- Cisco Unity®
- Cisco Unified MobilityManager
- Cisco Unified IP Phones 7900 Series

Given the success that Kaweah Delta has had with its initial deployment, it is no surprise that the health provider is already making plans to adapt its Cisco solution to support additional clients and healthcare applications. Because Cisco solutions are designed to grow and evolve over time, Kaweah Delta can easily expand and continue to upgrade its Medical-Grade Network as its needs change in the future.

For More Information

To find out more about Cisco Unified Communications, visit <http://www.cisco.com/go/cuc>



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