



California County Deploys New Network Solution to Support the Implementation of a New Electronic Health Record System

Los Angeles County Department of Health Services deploys a Cisco® medical-grade network to digitize its medical records on one standard platform.

Executive Summary

[Los Angeles County Department of Health Services](#)

- **Industry:** Local Government
- **Location:** Los Angeles, California
- **Number of Employees:** 21,000

CHALLENGE

- Prepare and deploy a new electronic healthcare record system (EHRS).
- Upgrade an aged, network infrastructure to a medical-grade network to support the EHRS
- Migrate from a disparate, nonintegrated network to a fully integrated digital network.

SOLUTION

- WAN retrofit to support current and future bandwidth requirements
- High levels of resiliency and redundancy in the LAN, WAN, and wireless network
- Fully integrated and secure wireless network to support the mobile requirements of Department of Health Services (DHS) clinicians and administrative staff

RESULTS

- Fully integrated, fault tolerant environment deployed and tested ahead of implementing the EHRS.
- First time ever all facilities are using one system configured same way, which is unprecedented given the size and scope of the system. DHS healthcare professionals are able to deliver services to patients using a single centralized solution.

Challenge

Los Angeles County is the most populous county in the United States with more than 10 million residents. It makes up roughly 27 percent of the state's total population of 38 million. The county covers nearly 4000 square miles and consists of 88 incorporated cities and 140 unincorporated areas. The Los Angeles County Department of Health Services (DHS) is the second largest municipal health system in the nation.

Through DHS's integrated system, it cares for 670,000 unique patients annually, employs 21,000 people, and has an annual operating budget of \$4 billion. DHS operates four hospitals, three teaching hospitals, one rehabilitation hospital, and 19 health centers.

The DHS mission is to ensure access to high-quality, patient-centered, cost-effective healthcare to Los Angeles County residents through direct services at DHS facilities and collaboration with community and university partners.

The DHSIT team is responsible for IT innovations, initiatives, and services to support DHS' strategic goals. The DHS IT team has three specific goals:

- Transform DHS from an episodic, hospital-focused system into an integrated, high-quality delivery system.
- Create a modern IT system that improves the care of its patients and assures efficient use of resources.
- Foster a culture of empowered staff and community, organized labor and university partners constantly looking for opportunities to improve the services provided to patients.

The IT team needed to comply with a key provision of the American Recovery and Reinvestment Act of 2009. As of January 1, 2014, all public and private healthcare providers and other eligible professionals are required to have adopted and demonstrated "meaningful use" of electronic medical records (EMR) to maintain their existing Medicaid and Medicare reimbursement levels.

The existing DHS IT infrastructure could not support this move on its network and thus looked to its technology partners to help them comply with the mandate.

Solution

The DHS IT team worked with its technology partners to identify areas where it would need to upgrade its infrastructure to support its move to EMR. DHS partnered with Cisco to provide the network foundation to enable reliable, easy-to-use, and secure health data exchange and communication for the Los Angeles County-run health system. By deploying a new Cisco Medical-Grade Network DHS was able to install on top of it securely new collaboration applications that benefit healthcare practitioners and patients.



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“Cisco has been an excellent partner. They’ve been responsive to our very challenging needs in helping to ensure that our infrastructure platform was the solid foundation of our successful EHRS implementation.”

Kevin Lynch
CIO
Los Angeles County DHS

Product List

ROUTING AND SWITCHING

- Cisco Medical-Grade Network

DHS’s Cisco Medical-Grade Network provides an end-to-end framework for its healthcare community. Medical-Grade Network allows integration and interoperability at each functional area, optimizing interactions among healthcare participants, processes, applications, and hardware components. Optimized interactions include areas such as acute care campus networks, ambulatory clinics, remote clinicians, and data centers. In the Medical-Grade Network, diverse business and clinical communications can be facilitated and integrated throughout the continuum of care.

The Medical-Grade Network enables local and remote team collaboration, patient examinations, and consultations. It also provides security, interoperability, and device connectivity, as well as enhancing the integration and management of medical device data in an open, yet secure, environment.

Results

The DHS infrastructure improves the timeliness of care and ubiquitous access to medical information regardless of location, facility, device, or connectivity medium. The infrastructure provides DHS with the agility to support changing requirements driven by the Affordable Care Act, clinical needs, and existing and new healthcare compliance regulations. The DHS infrastructure supports the next-generation applications and allows collaboration among clinicians, patients, and accountable care organizations near and far through a resilient, protected, interactive, and responsive smart and connected health network.

The DHS Online Real-Time Centralized Health Information Database (ORCHID) system is emblematic of the journey DHS is embarking on towards a revolutionary transformation of care provided to the residents of Los Angeles County.

For More Information

To find out more about the Cisco Medical-Grade Networks, visit <http://www.cisco.com/go/network>.