



Nonprofit hospital improves care and saves money

Daughters of Charity Health System automates processes and virtualizes IT, improving services, protecting its mission to serve the poor and saving more than \$1 million



“Working with Dell Managed Services has allowed our organization to focus on the mission of providing the highest quality of care to those we serve.”

Dick Hutsell, Vice President and Chief Information Officer, Daughters of Charity Health System

Customer profile



Daughters of Charity
Health System

Company	Daughters of Charity Health System (DCHS)
Industry	Healthcare
Country	United States
Employees	7,000
Website	www.dochs.org

Challenge

To provide quality patient care and focus on serving everyone, regardless of their ability to pay, DCHS needed to streamline data access, simplify workflow and comply with federal regulations.

Solution

DCHS worked with its onsite Dell™ Managed Services team to deploy an electronic medical records system, single sign-on for 200 applications, virtualized desktops and servers, bring-your-own-device (BYOD) capabilities and new data security.

Benefits

- Hospital simplifies data access to improve care and meet regulations
- Clinicians can spend more time with patients
- Doctors gain anytime, anywhere data access with BYOD
- Organization increases protection of patient data
- DCHS can now deliver new services in hours and has saved more than \$1 million

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Established in California in 2002, Daughters of Charity Health System (DCHS) provides medical care to the sick and those living in poverty. Delivering high-quality services requires DCHS to simplify processes and minimize costs wherever possible. To achieve its IT goals, the organization depends on Dell Managed Services. Most recently, DCHS needed its Dell team to streamline workflow, speed data access, improve physician mobility and boost security.

“With BYOD capabilities supported by the Dell Cloud, physicians no longer have to call up the hospital and ask for information that’s in a patient’s chart, which is especially important when they’re on call.”

Dan Robins, Dell Managed Services consultant, Daughters of Charity Health System

DCHS Gets On-Demand IT Services From Dell to Meet Evolving Challenges

DCHS is a not-for-profit organization that operates six hospitals along the coast of California, from San Francisco to Los Angeles. The organization’s relationship with Dell Managed Services dates back to 2002, when DCHS had just six months to separate from a six-year merger with Dignity Health. The IT transition went so smoothly that DCHS has worked ever since with Dell Managed Services. A team of about 130 Dell consultants now compose the core IT department at DCHS. Dick Hutsell, vice president and chief information officer at DCHS, says, “Our joint efforts with Dell Managed Services have yielded an 11-year relationship that has consistently delivered higher performance levels at remarkably cost-effective prices.”

Organization Created a Plan to Simplify Processes and Boost Care

The team’s most recent IT challenges stemmed from the use of both paper-based processes and digital systems. Clinicians recorded patient information and medical orders in paper charts. Employees also used many applications to facilitate diagnostic tests and workflow in departments such as cardiology, imaging, pharmacy and finance. Because patients’ information resided in numerous formats and locations, accessing it was often cumbersome and time-consuming. Not only did clinicians have to manually enter a unique user name and password for each application that contained patient data, but they often had to walk to a different location in the hospital to obtain information.

And when a physician was on call, they usually had to contact a staff member at the hospital to collect the information needed to help a patient.

To simplify the use of so many different tools, improve patient care and reduce expenses, DCHS needed to eliminate paper charts and deploy an electronic medical records (EMR) system. At the same time, the organization would need to establish new safeguards to protect digitized patient information, especially on staff laptops, and increase the flexibility of its infrastructure so that it could be easily scaled to support

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[VMware® Horizon View™](#)

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the organization's rapidly changing requirements. With its new solution, DCHS would also facilitate compliance with federal regulations including the Health Information Technology for Economic and Clinical Health (HITECH) Act and the Health Insurance Portability and Accountability Act (HIPAA). Thinking of ways to help ease the transition for clinicians, DCHS also wanted its new solution to support virtual desktops, single sign-on for applications and bring-your-own-device (BYOD) capabilities.

DCHS Can Deliver New Services in Hours and Has Saved More Than \$1 Million

To provide a consolidated foundation for its new solution, Dell Managed Services migrated the organization's physical server infrastructure to a virtual one in the Dell Cloud. By doing so, DCHS significantly enhanced IT agility and simplified the implementation of new IT capabilities. Dan Robins, Dell Managed Services consultant at DCHS, says, "We can now deploy services in an hour rather than weeks or months, because we can add new virtual servers so quickly in the Dell Cloud." Today, the organization's IT infrastructure is supported by 800 virtual servers that run on VMware® vSphere® and 350 Dell PowerEdge servers. Hutsell says, "By moving our traditional infrastructure to the Dell Cloud, we estimate our savings from hardware, power consumption and cooling, and floor-space costs have already exceeded 1 million dollars."

Hospital Simplifies Data Access to Improve Care and Meet Regulations

To improve patient care and comply with HIPAA and HITECH, Dell Managed Services helped implement an EMR system that runs in the Dell Cloud. The EMR transforms workflow because it automates patient charting. The solution also provides a single point of access to the organization's 200 disparate applications. Robins says, "By deploying the EMR in the Dell Cloud, a physician now has all of the information about a

patient at his or her fingertips, including notes from appointments, physicians' orders, notes from staff about when orders were carried and by whom, and all test results." To facilitate information sharing between the EMR and the organization's systems, Dell Managed Services developed 520 interfaces.

Staff Get the Support Needed for a Seamless Transition From Paper to Digital

Because clinicians use the EMR to care for patients, DCHS needed to minimize any learning curve for physicians. Twelve Dell Managed Services consultants held classes for hundreds of clinicians before the initial go-live date at the hospital in Los Angeles. The same 12 consultants are providing hands-on, "at the elbow" assistance for 12 months. "If a doctor is trying to document or place patient orders, members of the Dell Managed Services team are available throughout the hospital to help the doctor," explains Robins.

Clinicians Can Spend More Time With Patients

Rather than maintaining hundreds of stand-alone workstations, DCHS is also deploying a virtual desktop infrastructure (VDI) solution that includes Dell Wyse thin and zero clients, Imprivata® OneSign® Single Sign-On software and VMware Horizon View™ virtual desktop software. With the solution, each employee has a dedicated virtual desktop that runs independently of end devices. Justin Johnson, network design senior advisor at DCHS, says, "What sets our Dell Wyse VDI solution apart is its integration with Imprivata OneSign, because it allows us to provide users with one-click access to a virtual desktop that runs in the Dell Cloud. Employees can tap their badge on a scanner and within 8 to 10 seconds, they have their virtual desktop presented to them anywhere in the hospital — and it appears just as it did when they left the previous location." To support the initial deployment phase, Dell Managed Services set up virtual

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Justin Johnson, Network Design Senior Advisor, Daughters of Charity Health System



desktops for clinicians at one of the Los Angeles hospitals and deployed 200 Dell Wyse P25 and 100 Dell Wyse P20 zero clients, and 150 Dell Wyse D90D7 thin clients. The other five DCHS hospitals will begin to use the solution over the next six months.

IT Staff Save Time and Money — and Boost Control

With VDI, IT personnel streamline maintenance processes because engineers no longer have to manage hundreds of stand-alone desktop environments. The solution also provides a central management console and built-in capabilities to boost performance and security. "By using Dell Wyse, VMware and Imprivata, we create a desktop environment that we can manage and control far better than we've ever been able to before, while also saving money," says Johnson. "We can also optimize end user experiences and simplify the management of endpoints because VMware has new features including radius support for strong authentication and improved PC-over-IP performance."

Doctors Gain Anytime, Anywhere Data Access With BYOD

DCHS has also implemented BYOD capabilities for physicians so that they can access their desktop using any internet-connected device including tablets, smartphones and home computers. "With BYOD capabilities

supported by the Dell Cloud, physicians no longer have to call up the hospital and ask for information that's in a patient's chart, which is especially important when they're on call," says Robins. To facilitate BYOD, Dell Managed Services personnel deployed a Citrix XenApp solution in the Dell Cloud.

DCHS Increases Protection of Patient Data

To provide an extra layer of data protection, Dell Managed Services deployed Dell Credent Technologies Mobile Guardian. Robins explains, "Securing patient-identifiable information is critical in the healthcare environment, and so we've used Dell Credent Mobile Guardian software to encrypt all of our laptops." IT staff use one central console to manage the laptops, including software updates and audit reports, as required by HIPAA and HITECH.

Organization Can Care for All

Daughters of Charity plans to continue depending on its Dell Managed Services team to help achieve its goals. "We have the best IT staff that I have ever been associated with," says Hutsell. "Working with Dell Managed Services has allowed our organization to focus on the mission of providing the highest quality of care to all members of the community, without the typical distractions and problems from IT."

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