



Phelps Memorial Hospital

EMC SAN technology enables rural hospital to offer leading-edge clinical services

For nearly 40 years, the residents of rural south-central Nebraska have been served by Phelps Memorial Hospital, a progressive, 25-bed critical access facility. Despite its size and location, Phelps Memorial Hospital provides the same advanced clinical services and quality care found in larger, more metropolitan healthcare facilities.

Since the early 1990s, EMC® CLARiiON® storage has been a part of the hospital's IT environment, supporting clinical excellence through advanced information management technology. Recently, a powerful new 32.5-terabyte EMC CLARiiON CX series-based SAN was deployed to accommodate an upgrade to the hospital's MEDITECH Health Care Information System (HCIS) and pave the way for an in-house PACS environment.

"Over the years, CLARiiON has been an extremely stable platform," says Andrew Van Campen, Network Administrator. "We felt comfortable with it and we knew the new CLARiiON CX series system would be able to provide the performance, reliability, and scalability to support our entire network environment—for anything we wanted to store."

A Dell shop, the hospital was influenced in its decision by a strong EMC/Dell partnership and its extensive and proven collaborative success related to integration, implementation, and coordinated service.

The advantages of a digitized environment

Focused on bringing advanced radiology services to the area, Phelps Memorial Hospital has replaced film processing and filing rooms with a highly efficient PACS environment where online images are securely stored, yet immediately accessible to those who require them to make a diagnosis.

A state-of-the-art AMICAS PACS application, along with EMC CLARiiON CX series storage and new radiology equipment have broadened the range of radiological services at Phelps Memorial. As a small hospital, the facility relies exclusively on offsite radiologists for diagnostics. Previously, patients had to travel anywhere from 35 to 180 miles away for certain diagnoses. Now, once a study is done at the hospital, it can be instantly accessed and interpreted by these diagnosticians as if they were onsite.

"Clinicians have consistent and rapid access to the records required for prompt diagnosis and quality care, and our patients no longer have to travel to more distant locations for these services," says Van Campen.

“Over the years CLARiiON has been an extremely stable platform. We felt comfortable with it and we knew the new CLARiiON CX series system would be able to provide the performance, reliability, and scalability to support our entire network environment—for anything we wanted to store.”

Andrew Van Campen,
Network Administrator

Storage on demand, faster backups

Used for more than just PACS and MEDITECH applications, the EMC CLARiiON CX series platform has become the hospital's enterprise storage system. As such, its flexibility is considered a valuable and strategic asset in accommodating both the hospital's current and future storage needs which are continuously influenced by new and updated applications as well as expanding volumes of patient and administrative records.

“You never know what kind of applications or storage demands are going to come up,” says Van Campen. “We're always growing and the flexibility of our CLARiiON platform keeps us prepared. In fact, we could probably integrate it with any application, and the HBA cards that go on the Dell PowerEdge servers are all that is needed to expand or re-allocate storage on demand.”

The exceptional performance of the EMC CLARiiON CX series-based SAN also has helped the hospital facilitate a faster backup-to-tape process. The previous backup solution, which used DLT1 tapes and ran over the network, was considerably slower than the hospital's new tape library. The new solution uses high-performance LTO3 tape technology and runs through the fabric, enabling it to be backed up through the SAN.

“We're still a little old-fashioned in that we want to have some kind of hard copy in case something happens,” says Van Campen. “Our EMC SAN and the LTO3 tapes have made it possible for us to cut our backup-to-tape window in half.”

Phelps Memorial Hospital also plans to deploy EMC SnapView™ backup-to-disk and recovery software to support MEDITECH's integrated serverless backup as well as network backups.

“You can never have too much backup,” says Van Campen. “SnapView will give us an added layer of protection.”

Proactive response ensures business continuity

With EMC's automated and remote call-home diagnostic service continuously monitoring the environment, a disk failure doesn't mean down time. In addition to hot spares, which are set up to take over if a disk failure occurs, the call-home service facilitates rapid problem resolution to ensure maximum uptime.

“EMC's call-home service is fantastic,” says Van Campen. “They know when there is a problem or potential issue even before we do, and they call either home or work to alert us. We have a four-hour response time, but from our experience another disk is usually waiting at the front desk in less than two hours.”

On time, under budget, and expert training

Coordinated through Dell, the EMC CLARiiON CX deployment took just two weeks from rack-and-stack time to actual integration and implementation. The added benefit was that it cost less than expected.

“Ease and efficiency of implementation were major benefits,” says Van Campen. “Rather than having to deal with multiple vendors, we had one point of contact, which helped simplify the process.”

A three-day training class offered though Dell at its facilities in Austin, Texas, enabled the hospital's IT personnel to learn how to quickly configure the EMC CLARiiON CX system for optimized operation and easily zone the fabric using powerful EMC Navisphere® management software.

“We thought the training was excellent,” says Van Campen. “It was hands-on and they had multiple CX series systems to work with so we got a feel for the range of hardware. The classes were small so it felt like one-on-one training.”

A goal realized

Considered key facilitators, EMC's and Dell's field expertise, integrated solutions, and proactive service have helped Phelps Memorial Hospital bring advanced clinical technology to the rural community it serves, and also flexibly positioned its IT infrastructure to support future developments.

"EMC's stability and performance provide security for us, and Dell has an excellent service model, which we were able to leverage," says Van Campen. "The partnership between the two companies is a strong one, and we have benefited from their joint solutions and service. They have helped us further our goals."



EMC Corporation
Hopkinton
Massachusetts
01748-9103
1-508-435-1000
In North America 1-866-464-7381

EMC², EMC, CLARiiON, Navisphere, and where information lives are registered trademarks and SnapView is a trademark of EMC Corporation. All other trademarks used herein are the property of their respective owners.

© Copyright 2006 EMC Corporation.
All rights reserved. Published in the USA. 8/06

Customer Profile

H2343