



INDUSTRY

Healthcare

CHALLENGE

Rapid growth had created numerous issues around availability, performance, management, and support

SOLUTION

Two Vblock® Systems 340, two Vblock® Systems 540 with XtremIO flash storage arrays, Dell EMC Avamar and Data Domain, and RecoverPoint

RESULTS

- Unplanned downtime has been eliminated.
- 12 data centers have been reduced to four—saving time and money.
- VMs can be provisioned in minutes.
- Upgrades are seamlessly applied.
- IT is delivering real business value.

PROMEDICA

Dell EMC Converged Platforms help ProMedica roll out its Epic EHR and improve patient care while efficiently supporting growth

12 DATA CENTERS CONSOLIDATED TO FOUR AND UNPLANNED DOWNTIME ELIMINATED FOR 24/7 CARE

[ProMedica](#) is a locally owned, nonprofit health system providing quality healthcare services to people living and working in northwest Ohio and southeast Michigan. The health system operates a network of a dozen hospitals, six ambulatory surgery centers, specialty clinics and facilities, plus its own insurance company. The staff of more than 17,000 includes 2,100 physicians at over 900 providers that see over 4.7 million patients annually.

ProMedica is a recognized innovator within the healthcare industry. Its [Market on the Green](#) at the ProMedica Ebeid Institute in Toledo is a full-service grocery market designed to increase access to affordable, healthy food as well as nutritional education. And ProMedica has partnered with local provider, [Harbor](#), to deliver a full-range of community-based behavioral healthcare services—including inpatient psychiatric care.

“IT used to be viewed solely as a cost center and support partner. Now, thanks to Dell EMC Vblock® Systems, no project happens without us being involved early in the design and implementation. We’re delivering real value to the business.”

— Anshul Pande, Vice President and Chief Technology Officer, ProMedica

THE CHALLENGE

ProMedica had grown rapidly over the past 15 years through the integration of smaller hospital systems and the opening of specialty clinics and facilities. This led to costly IT sprawl, with up to 12 data centers.

Many hospitals and clinics had their own electronic health record (EHR) solutions, making it slow and inefficient to share patient and other critical data. In addition, ProMedica’s IT infrastructure was supplied by multiple vendors. This had created serious issues around availability, performance, management, and support—making it hard for clinicians to provide responsive care and impacting essential business functions such as registration, scheduling, and billing.

THE SOLUTION

ProMedica initially invested in two Dell EMC Vblock® Systems 340. Then, to implement its new system-wide Epic EHR and support growth and stability at scale, ProMedica created a private cloud based on two Vblock® Systems 540 with Dell EMC all-flash XtremIO storage arrays. The high IOPS of the Vblock 540 ensures that needed information is always at providers’ fingertips. The platform also supports a cost-efficient 250-seat virtualized desktop infrastructure (VDI) capable of supporting 1,500 concurrent sessions in Epic and up to 800 sessions in other applications. Altogether, ProMedica is running approximately 300 applications on Dell EMC Converged Platforms.

In addition, ProMedica relies on Dell EMC Avamar and Data Domain for backup and data protection, and RecoverPoint for continuous replication of essential patient data for easy, efficient point-in-time recovery.

THE RESULTS

ProMedica has realized a variety of benefits from its implementation of Dell EMC’s Converged Platforms and Solutions:

- Downtime has been limited to 20 minutes in one instance—with no customer impact due to the application design—so clinicians can reliably access patient information 24x7, 365 days of the year.
- Updates can be made with complete confidence, thanks to Dell EMC Release Certification Matrix (RCM)—which ensures tested and validated patches, fixes, and upgrades across the complete stack.
- The number of data centers has been reduced from 12 to four. This consolidation makes more effective use of ProMedica’s IT investments by eliminating task repetitiveness while saving on power, cooling, and floor space.
- The Vblock® Systems deliver outstanding agility and scalability—virtual machines (VMs) can be provisioned in minutes for new or expanding services or facilities.
- The Dell EMC team served as a good partner—working closely with Epic to ensure that ProMedica’s EHR was tailored to meet its specific needs, including protection against future security requirements by supporting encryption of all data at rest while exceeding performance expectations.
- ProMedica has been collecting and assimilating data such as patient-risk profiles into a core data warehouse for future Big Data applications to improve decision-making.
- Solution allows for regular system maintenance to occur during the day without customer impact.

