The Computerworld Honors Program

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Final Copy of Case Study

LOCATION:
Woburn, MA, US

ORGANIZATION:
University of Utah Health Center

YEAR:
2011

ORGANIZATION URL:
http://healthcare.utah.edu/index.php

STATUS:
Laureate

PROJECT NAME:
Managing Storage Growth, Enabling 'One Patient One Record'

CATEGORY:
Business Responsiveness

PROJECT OVERVIEW

In order to complete the institution-wide implementation of a number of new systems (Scheduling, Registration, Billing, and Health Plans) and integrate them with the EpicCare Electronic Medical Record system, the University of Utah Health Center (UUHC) needed a scalable and reliable storage architecture to handle new streams of data. In a data-rich industry quickly modernizing with electronically stored information and data, updating their storage setup was key to the Health Center's IT goals. The UUHC's goals for this project were large and varied. The hospital needed to implement a new financial system to replace the Registration, Billing, Scheduling, and Professional Billing functions of prior solutions. Scheduling, Registration, and Billing systems also needed to be consolidated and their workflows standardized to provide efficiency for employees while supporting the UUHC's initiative to provide an Exceptional Patient Experience. Further goals included consolidating patient statements in order to reduce the number of statements each patient could receive from around 25 down to two. Consolidation of the hospitals customer service area was also important, and a Single Patient Billing Office for patient responsibility balances was to be created. With these changes and new systems, the UUHC hoped to improve patient satisfaction, enhance workflow productivity and end-user satisfaction, and improve their billing processes. The hospital also wanted to put itself into a position for growth of both data and more new systems in the years ahead, and to ensure that Meaningful Use requirements could be met. The UUHC was able to meet their goals within their timetable thanks to storage solutions from Hitachi Data Systems. Thanks to Hitachi storage virtualization across IT and the flexible tiered data mobility it brings, the UUHC was able to address data growth requirements and quickly adapt to business changes through a nimble IT infrastructure. By implementing storage hardware like the Hitachi Universal Storage Platform V (USP-V) and software like Hitachi Dynamic Provisioning and Hitachi Tiered Storage Manager, as well as other storage solutions from HDS, the UUHC was able to implement new business critical applications (and the new sources of electronic data they represent) without any disruption of the business or these new applications. Specifically, Hitachi

Tiered Storage Manager ensured business continuity during data movement and migrations, resulting in 0% downtime since implementation, which was key for providing consistent, quality patient care. In looking to the future, this tiered storage setup from HDS has allowed the UUHC to handle 20% annual growth in data storage and agile data movement. This allows the only academic health care system between the Rocky Mountains, the Cascades and the Sierra Nevada Mountains in the Western United States to ensure business continuity and compliance with Meaningful Use requirements for years to come.

SOCIETAL BENEFITS

As the only academic health care system between the Rockies and the Sierra Nevada Mountains, the UUHC's medical records, patient data, and research are vital to the well being of a large population of the US. Thanks to storage solutions from HDS, these are constantly accessible during data migrations.

PROJECT BENEFIT EXAMPLE

Flexible and scalable storage solutions from HDS allowed the UUHC to easily implement new billing and scheduling applications, which was key to realizing a "one patient, one record" system. This system helps streamline hospital operations and ensure a consistent, high level of patient care for its constituents. The employees and end-users within the UUHC benefited from increased productivity and satisfaction. As this new storage infrastructure allowed for 20% annual growth, meeting Meaningful Use regulations moving forward is guaranteed – this ensures Meaningful Use reimbursements, which can have major implications on a hospital's revenue.

IS THIS PROJECT AN INNOVATION, BEST PRACTICE? Yes