



## TIMEXTENDER | Balanced Health IT Solutions

# Discovery Hub® helps healthcare network transform utilization of staffing resources and facilities

As one of the largest healthcare providers in the US, this network required a scalable and manageable data estate to support rapid growth and allow for more streamlined analytics.

### SUPPORTING RAPID GROWTH AND SUBSTANTIAL INSIGHTS

With more than one million patients served annually, our customer is the largest healthcare provider servicing a region of over fifteen thousand square miles and a population of three million, containing eight counties with state-of-the-art technology while supporting residency training programs with more than 700 residents each year.

Several disparate clinical and business systems support these services across multiple hospitals and clinics. In addition, high growth through mergers, acquisitions, and partnership adds further complexity to the information backbone of the organization. This results in incomplete and inconsistent information available to manage the efficient utilization of staff and facilities. When it was realized that the growth had exceeded the operating room capacity, they reviewed the utilization of rooms. Gathering and compiling the data manually was a time consuming and labor intensive process, however, they did find that operating rooms were not fully utilized. It was a clear sign that change was needed, in order to do further analysis.

On a practical level, information was gathered from systems including Cerner Electronic Health Records (containing more than 20-years of accumulated health records), Allscripts EPSi, and Lawson ERP. The supporting Oracle and Microsoft SQL Server databases contained most of the information, however, common practice was to extract data from reports into tools like Microsoft Excel – all of which impacted timely data analysis.

Transforming the healthcare network's utilization of resources and facilities required one system of insights that could provide one single version of the truth for improved decision making.

### ONE DATA ESTATE FOR MULTIPLE DISPARATE DATA SOURCES

The decision makers carefully evaluated several tools and selected TimeXtender's Discovery Hub® software platform as the best solution for transforming the healthcare network's analytics environment to help improve operational efficiencies. Once Discovery Hub® was deployed it was used to access the hospital's Cerner Electronic Health Record application data as well as financial and operational data from other major healthcare information technology vendor products.

### HEALTHCARE CUSTOMER BACKGROUND

- Non-profit provider of diagnostic, preventive, remedial and therapeutic services
- Company responsible for 5 hospitals in 8 counties, with 4,800 employees and 80+ outpatient clinics

### CHALLENGES

- Managing several disparate clinical and business systems to support services across multiple hospitals
- Effective handling of high growth through mergers and acquisitions
- Building new data estate with semantic models connected to multiple front-end tools

### SOLUTION

- A new data estate built with Discovery Hub® that enables easy consolidation and modeling of diverse data
- Easy deployment of relational models directly to data visualization front-end tools
- A data architecture that fully supports a "data protection by design and by default" environment under the GDPR legislation

### BENEFITS

- Streamlined process for data management allowing for easier analytics practices
- Discovery Hub® implementation allows for easy future migration to the cloud with Azure
- Drastic reduction in time-to-data and manual coding and writing costs

The Discovery Hub® platform enabled the IT team to cleanse, consolidate, and model this disparate data efficiently. Once the complex data is processed it is used to deploy relational models directly to the data visualization front end for business decision makers.

In addition, Discovery Hub® provides a solid foundation for compliance and helps keep the healthcare network's patient data secure and in accordance with the Health Insurance Portability and Accountability Act (HIPAA).

### **A HEALTHY DATA ARCHITECTURE**

Implementing Discovery Hub® empowers business decision makers and brings together people and data for improved streamlined processes, utilization across the hospitals departments, operational effectiveness and new ways to treat patients more quickly.

Now that the analytics environment is backed by Discovery Hub® performance is drastically improved without having to manually write and maintain many lines of complex scripting. In addition, the development team's ability to preview data before further processing enables faster development without overloading the production data sources.

Implementing Discovery Hub® has enabled a future proof data architecture and it is now positioned well for future migration to the cloud.

### **You're in good company**

TimeXtender's Discovery Hub® provides companies with instant access to data, enabling them to make quality business decisions with data, mind and heart. Because time matters.

To learn more about Discovery Hub® and how the power of automation can move your business forward, visit:

[www.timextender.com](http://www.timextender.com)