

Case Study

# NorthShore University Health System

**Unleashing Data Potential: How Zylpe Labs Revolutionized Northshore University HealthSystem's Data Landscape**

## **Abstract:**

This case study explores how Zylpe Labs, a cutting-edge technology company specializing in data integration and analytics solutions, partnered with Northshore University Healthsystem to overcome data silos and unlock the true potential of their data. By addressing productivity barriers, streamlining data management processes, and enabling actionable insights, Zylpe Labs revolutionized Northshore's data ecosystem, empowering their teams to make informed decisions and drive transformative outcomes.

## **Introduction:**

In today's data-driven world, organizations face numerous challenges in harnessing the full power of their data. Data silos, disconnected systems, and unoptimized processes hinder effective data utilization, resulting in slower response times, increased costs, and missed opportunities for innovation. Northshore University HealthSystem, a prominent healthcare institution, recognized these obstacles and sought a strategic partnership with Zylpe Labs to transform their data landscape. This case study highlights the journey undertaken by Northshore and Zylpe Labs, showcasing the solutions implemented to overcome data silos and improve productivity in data and analytics roles, manage enterprise data efficiently, and enable actionable insights for driving positive change.

## **Overcoming Data Silos:**

Data silos are a common challenge faced by organizations, limiting data accessibility, hindering collaboration, and impeding decision-making processes. Zylpe Labs undertook a comprehensive approach to break down these silos at Northshore University Healthsystem. By leveraging their expertise



in data integration, Zylpe Labs developed a robust data integration strategy that connected disparate data sources, ensuring seamless data flow across the organization. This initiative eliminated different versions of truth, improved response times, and reduced costs associated with manual data retrieval and reconciliation.

### Productivity Enhancement for Data and Analytics Roles:

Data science and analytics professionals often face significant barriers to productivity due to data inconsistencies, unavailability, and complexity. Zylpe Labs recognized these challenges and implemented solutions to empower Northshore's data and analytics teams. Through a combination of advanced data preparation techniques and automated workflows, Zylpe Labs streamlined the data preparation process, ensuring that data was readily available for business-critical analyses. This enhancement allowed data professionals to focus on value-added activities such as data modeling, predictive analytics, and generating actionable insights, leading to innovation and improved decision-making within the organization.

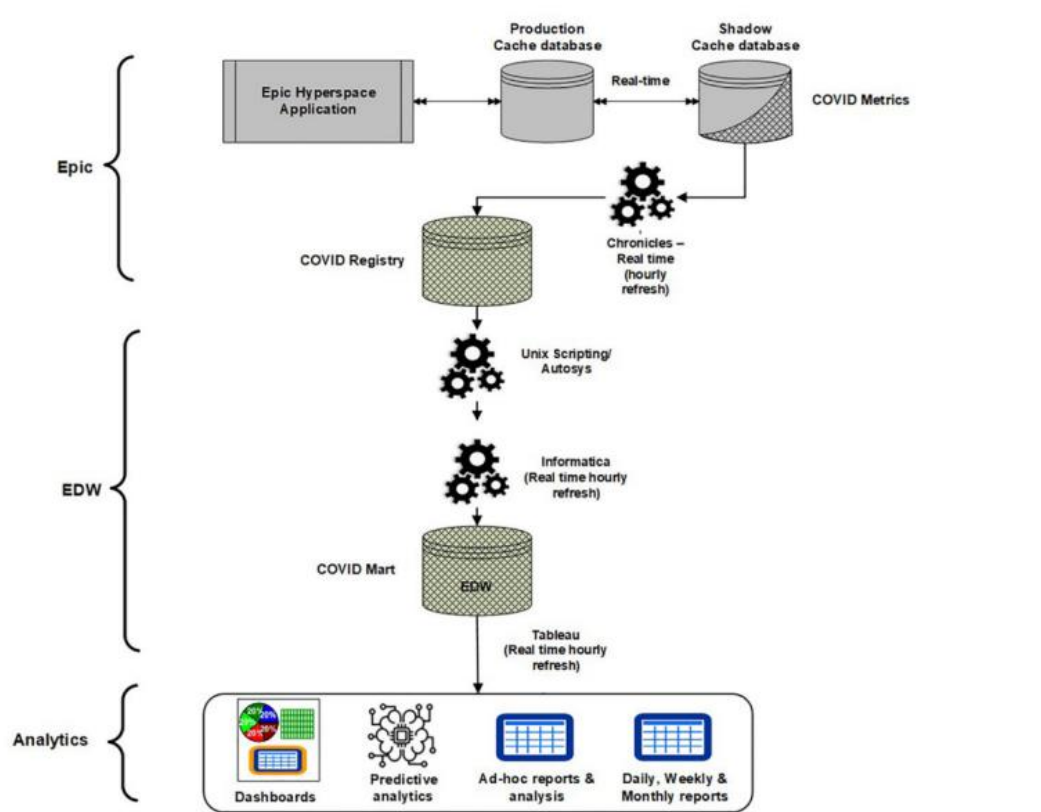


Figure 1. The data flow architecture. Laboratory data, originating in SoftLab, flows in to the Epic EHR where clinical and business rules are applied to transform the data in to meaningful information and metrics inside of the COVID registry, which feeds analytics and reporting within the EHR and then in to our Enterprise Data Warehouse (EDW) where further business and clinical rules and external data integration occurs. The primary analytics tools are fed from the COVID data mart in the EDW. HER indicates electronic health record.



### **Streamlining Data Management:**

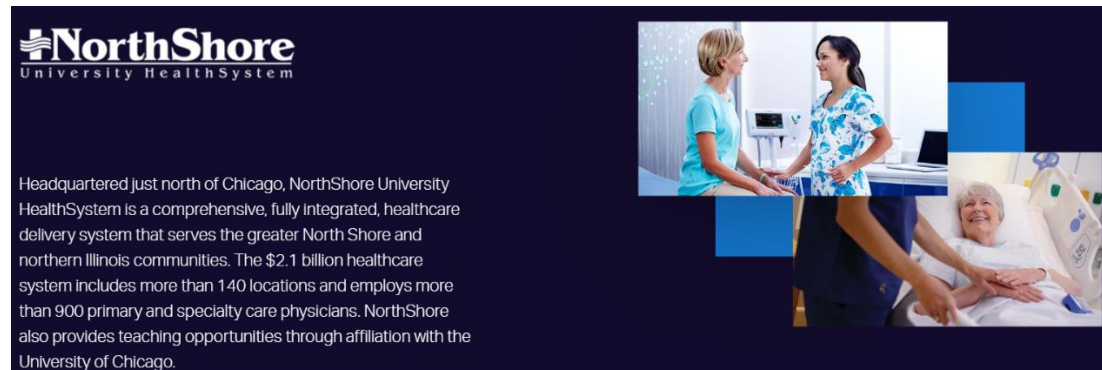
Modern data ecosystems encompass a vast array of data sources, including reports, notebooks, cloud stores, and unstructured data. Managing these diverse data sources efficiently is crucial for organizations aiming to eliminate redundancies, improve interdependencies, and find relevant datasets effectively. Zylpe Labs collaborated closely with Northshore University HealthSystem to develop a robust data management framework. Leveraging their expertise in data governance, metadata management, and data cataloging, Zylpe Labs implemented cutting-edge tools and technologies to enable seamless data discovery, reduce duplication, and enhance data lineage visibility. This streamlined data management approach allowed Northshore to gain a comprehensive understanding of their data landscape, driving improved data quality and informed decision-making.

### **Enabling Data-Driven Action:**

The proliferation of reports and manual analytics often hinders organizations from leveraging data to drive meaningful action. Zylpe Labs recognized this challenge and introduced a new generation of self-service reporting and augmented analytics tools to Northshore University HealthSystem. These innovative solutions empowered business users across the organization to access and analyze data effortlessly, uncovering insights and patterns that were previously inaccessible. With user-friendly dashboards, interactive visualizations, and advanced analytics capabilities, Northshore's teams were equipped to make data-driven decisions, accelerate process improvements, and drive positive change across various departments.

### **Conclusion:**

By partnering with Zylpe Labs, Northshore University HealthSystem successfully overcame data silos, enhanced productivity for data and analytics roles, streamlined data management processes, and enabled actionable insights. Through a comprehensive approach encompassing data integration, advanced analytics, and self-service reporting, Zylpe Labs revolutionized Northshore's data ecosystem, transforming it into a powerful asset for driving innovation and improving patient care. This case study demonstrates the value of strategic partnerships and advanced data solutions in unlocking the true potential of data, empowering organizations to thrive in today's data-centric landscape.

The image block contains the NorthShore University HealthSystem logo in the top left corner. Below the logo is a paragraph of text describing the organization. To the right of the text is a collage of three photographs: two healthcare workers in scrubs talking, a healthcare worker attending to a patient in a hospital bed, and a close-up of a patient's face. The background of the entire block is dark blue with light blue geometric shapes.

**NorthShore**  
University HealthSystem

Headquartered just north of Chicago, NorthShore University HealthSystem is a comprehensive, fully integrated, healthcare delivery system that serves the greater North Shore and northern Illinois communities. The \$2.1 billion healthcare system includes more than 140 locations and employs more than 900 primary and specialty care physicians. NorthShore also provides teaching opportunities through affiliation with the University of Chicago.