

# CASE STUDY: Self-Service Reporting is a Myth

## EXECUTIVE SUMMARY

Health Systems are always poised to provide exceptional patient care. However, they face increasing regulatory and compliance demands from organizations such as the Healthcare Information and Management Systems Society (HIMSS), Centers for Medicare and Medicaid Services (CMS), the Department of Health and Human Services (HHS), and other government agencies. These requirements necessitate that support staff access information from various disparate systems and obtain permissions from legal, human resources, and department directors. This process is often cumbersome and time-consuming, with significant cybersecurity and legal implications. To address their challenges in managing regulatory and compliance requirements, we implemented a comprehensive solution utilizing their existing ServiceNow and Azure DevOps platforms, integrated with stored procedures in their SQL Server Databases. Our approach streamlined the process of accessing information from disparate systems and obtaining necessary permissions, significantly reducing the time and effort required.

## SITUATION

Our case study is a Health System with over 12,000 employees, including hospitals, outpatient facilities, emergency centers, and specialty care clinics. The system also offers residency and fellowship programs in medical and surgical specialties. When patient or staff-related compliance data is required for auditing or mandatory reports to external regulatory agencies, policies and procedures affect the delivery and development of the report. The length of time and the number of staff members significantly affect the report's outcome. Their process before our solution ranged from 1 week to 5 weeks, depending on the data requested.

## CHALLENGES

- **Complexity of Data Management:** With multiple facilities and a large workforce, managing and consolidating patient and staff-related compliance data from various sources can be highly complex and time-consuming.
- **Regulatory Compliance:** Ensuring that all data meets the stringent requirements of various regulatory agencies (e.g., CMS, HHS) involves meticulous attention to detail and adherence to numerous policies and procedures.
- **Resource Allocation:** Gathering, verifying, and reporting compliance data often requires significant time and effort from multiple staff members, which can strain resources and impact other critical operations.
- **Timeliness:** The time required to compile and verify data can delay the delivery of reports, potentially leading to non-compliance with regulatory deadlines and penalties.
- **Data Accuracy and Integrity:** Ensuring the accuracy and integrity of the data is crucial, as errors or inconsistencies can lead to incorrect reporting and subsequent legal or financial repercussions.
- **Interdepartmental Coordination:** Effective communication and coordination between different departments (e.g., legal, HR, clinical) are essential to gathering all necessary information, which can be challenging in a large organization. The health system was in the process of learning how to implement a Data Governance Framework.
- **Technology Integration:** Integrating various systems and databases to streamline data collection and reporting processes can be technically challenging and may require significant investment in IT infrastructure and training.
- **Security and Privacy:** Protecting sensitive patient and staff information from cybersecurity threats while ensuring compliance with privacy regulations (e.g., HIPAA) adds another layer of complexity to the data management process.

Addressing these challenges requires a comprehensive approach that includes robust data management systems, clear policies and procedures, effective resource allocation, and strong interdepartmental collaboration.

## SOLUTION

Teams gradually adapted to new data management practices as they developed and refined their framework. We only engaged authorized staff members where data points applicable to their business policies were required. We created a seamless and efficient system by leveraging ServiceNow for workflow automation and Azure DevOps for continuous integration and deployment. We automated the creation of the reports after the attestation process was completed using Azure DevOps to consume the data points requested. A developer validates the request and applies the ServiceNow variables to create a table view. If no new measures exist, then parameters are fed into their RDBMS. Otherwise, new measures need to be developed and applied. A table view is made, and a sample set of the report is visible to all parties involved. When all parties involved approve of the data set, the solution is added to the data pipeline, which securely distributes the information. Our solution ensures robust data management and retrieval, enhancing the overall efficiency and security of the process.

## RESULTS

Our solution significantly improved the health system's data management and reporting processes from 1 to 5 weeks to 3 to 5 days. By leveraging ServiceNow for workflow automation and Azure DevOps for continuous integration and deployment, we achieved the following results:

- **Shorter Delivery Period:** The automated processes and streamlined workflows reduced the time required to generate and deliver compliance reports.
- **Quality Data Reported:** The robust data management practices ensured the data reported was accurate, reliable, and met regulatory standards.
- **Utilized Less Labor Resources:** By automating key aspects of the data collection and reporting process, we minimized the need for manual intervention, allowing staff to focus on other critical tasks.
- **Scalability:** Despite an increase in complex demands, our solution scaled effectively to meet the evolving needs of the business, ensuring continued efficiency and compliance.

## Technologies Used

- ServiceNow
- Azure DevOps
- Azure SQL Server
- Azure Data Fabric

## Recommendation

We recommend adopting an integrated solution approach to improve operational efficiency, ensure compliance with regulatory requirements, and mitigate cybersecurity and legal risks. This approach simplifies the management of complex processes and empowers support staff to focus on delivering high-quality patient care. By using Symply Data's resources and talents, your financial and business efficiency will significantly improve.