DEVELOPING AN ENTERPRISE WIDE DATA WAREHOUSE FOR A COMMERCIAL HEALTH BENEFITS COMPANY CUT COSTS

Abstract

A large commercial health benefits company retired disparate operational systems and warehouses with an integrated enterprise wide data warehouse, in partnership with Infosys. The availability of this enterprise asset delivered a single pool of trusted data and also helped reduce administrative cost and improve quality of services.
The Client
A commercial health benefits company in the United States, the client has a large network of best physicians, specialist and hospitals and offers services including dental coverage, life insurance and pharmacy benefits.

Business need
- Large number of transaction systems, multiple product lines and multiple customer engagement required the healthcare payer to have multiple systems to deal with common enterprise functions such as underwriting, member enrollment, billing, claim processing, sales, marketing etc.
- In addition to the functional complexity, the client used multiple platforms ranging from mainframe to specialized applications and different database technologies.
- The structural and functional fragmentation lead to a situation where it was increasingly difficult to obtain a single version of truth which was reliable & accurate enough to make business decisions.
- Large part of the enterprise were dependent on the accuracy and efficacy of the information and its availability and delivery for efficient decision making.
The client thus wanted to build an enterprise wide data warehouse that would help integrate data across claims, membership, provider, product, sales, premiums etc from all the transaction systems into a consolidated data mart.
Leveraging its healthcare domain expertise to build BI/DW propositions and experiences with strategic BI alliances, Infosys became the partner of choice for the client’s enterprise data warehousing engagement.

Advantages of the Enterprise Data Warehouse
- An enterprise wide data warehouse was conceptualized for tactical and strategic business decisions and to help improve client’s competitive positioning.
- The enterprise wide data warehouse was tasked to simplify information access and standardize it across source systems, enhance partner trust by providing simplified data interchange.
- A consolidated data mart provides enterprise view of the organization’s business for advanced analytics and reporting.
- With fewer processes and systems to support, maintenance of systems would be less demanding.

Infosys solution and approach
Infosys demonstrated total ownership of the integration program, right from defining the integration strategy to creating the single data mart required for tactical and strategic business decisions.
- Leveraging its extensive experience across large healthcare organizations, Infosys team was able to immediately gain visibility into the customer’s requirements to develop the enterprise wide data warehouse. The team quickly came up with a scalable and flexible architecture keeping in view the enormous data growth expected in the overall IT industry and healthcare in specific.
- Infosys team devised the integration strategy which included data profiling at source, mapping of each source to target based on business requirements, comparing across sources to ensure consistency, data conflict resolution, end user involvement from beginning and quick wins by phasing the warehouse project.
- The team also implemented the various grouper tools (DRG, ETG, etc) to better manage hospital service lines and measure health care quality and cost across the enterprise.
- Infosys team implemented the National Provider Identifier (NPI) into the enterprise warehouse helping in better provider claim management.
Business Benefits
Following were the benefits to the payer client from the Enterprise Data Warehouse:

- Before the evolution of EDW, client had to access multiple sources with no standard rules. The availability of this enterprise asset eliminated redundancy thus delivering a single version of truth. This resulted in better business decision making capability, simplified information access, and helped the healthcare payer be competent in the industry.

- With enterprise data warehouse, the client was able to contain administrative costs associated with maintaining multiple warehouses, and achieved considerable cost savings.

- Enterprise view of data at one place helped the healthcare payer’s affiliated hospitals get real-time patient information for emergency care.

- Grouper implementation helped client to compare hospital service lines, measure quality and cost of health care and help in provider incentives for better care.

- NPI implementation helped in better provider claim management.

- Enterprise warehouse simplified data exchange process which helped provide accurate enterprise data to vendors.