GROUP HEALTH

Group Health Delivers Key Insights Through Automating the Data Warehouse



"The new data warehouse is delivering more analytic and reporting capabilities and supports our reporting, governance and compliance efforts."

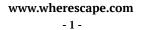
About Group Health

Founded in 1947 and based in Seattle, Washington, Group Health is a member-governed, nonprofit health care system that coordinates care and coverage for more than 600,000 residents of Washington and North Idaho. Group Health was acquired by Kaiser Permanente in a transaction that will close later in 2016.

WhereScape talked with Enterprise Data Warehouse Director Rhonda Ogilvie, responsible for Group Health's EDW functions, including business analysis, data modeling and architecture, data integration and quality assurance, as well as the Teradata platform. Ogilvie discussed Group Health's use of WhereScape RED to build and deploy a fully documented Enrollment and Membership subject area for its Teradata data warehouse. The new data warehouse is delivering more analytic and reporting capabilities and supports the healthcare provider's reporting, governance and compliance efforts.

Can you tell us about the history of data warehousing at Group Health?

Group Health has extensive experience in data warehousing and with Teradata as it database platform--Group Health's legacy Teradata warehouse was migrated from an old Sybase system. We ceased development on our first Teradata data warehouse in early 2014 and started green field. The second iteration was built using hand coding instead of an ETL tool. Then we developed and deployed our third Teradata data warehouse utilizing Wherescape in late February 2016, which is the subject of this case study. We manage about 4.5 TBs of data, approximately 200 databases and more than 6,000 tables.



Key Benefits:

- Group Health builds native Teradata objects within WhereScape RED, dramatically reducing hand-coding
- The entire data warehouse lifecycle resides in WhereScape RED so no other tools are required for modeling and deployment
- IT is delivering more analytic and reporting capabilities to business users
- Group Health utilizes WhereScape RED as an ELT solution-the legacy ETL tool is sidelined
- WhereScape RED provides a fully documented solution at deployment

"The true selling point was everything WhereScape had done in our POC had been fully documented—with both technical and business versions. Our legacy ETL tool had little to no documentation."

What does your user community look like?

There are 500 frequent users who access the enterprise data warehouse—we expect that number to rise as more subject areas are added. We are currently working to further build out our analytics group to further take advantage of our new data warehouse capabilities.

What were the drivers for developing the new data warehouse?

Compliance and data governance were key drivers for this new project. Having data consistency, complete data lineage, metadata management, as well as a supportable infrastructure were very important.

In addition, in our previous warehousing environment we had a manual legacy process that existed in SAS—60,000 lines of code with one person possessing the knowledge of how to change it. Every month we had to do significant manual processing to get that data out the door. We knew that process had to change to something more sustainable.

Why did you stop your development efforts in late 2014?

Our previous Teradata development effort utilized our legacy ETL tool and involved complex and tedious development due to our data architecture. Our development efforts simply had not progressed satisfactorily since the warehouse was initially deployed. What we were doing wasn't working for us in terms of throughput and we were struggling to keep up with our business customers in a timely way. We investigated whether there were places we could spend less time in development but still make the presentation layer and the data look all the same. We needed data consistency according to our stringent standards, with an end goal is to build quickly release iteratively and get projects done.

What kind of proof of concept (POC) did you employ?

We knew this was a critical development project for us, so we picked a crucial slice of the project for the POC so we could effectively test the solutions to see what they are truly capable of in our real-world environment. Group Health did a bake off between WhereScape RED for Teradata, a data warehouse automation solution, and Informatica, our legacy ETL tool. In our 1.5 day POC, WhereScape was significantly ahead in the development process. The true selling point was everything WhereScape had done in that 1.5 days had been fully documented—with both technical and business versions. Our legacy ETL tool had limited/minimal documentation. We selected WhereScape after the results of the POC were analyzed.

How are you utilizing WhereScape RED?

Group Health is utilizing WhereScape RED as an ELT solution for data integration, sidelining its legacy ETL tool for this development effort.

What have been your results with WhereScape?

Group Health used WhereScape RED to develop a fully documented Enrollment and Membership subject area for its new data warehouse with complete data lineage, governance and Teradata best practices. Group Health now has a very clean environment and architecture with WhereScape RED and the Data Vault data model. The data warehouse contains five years of history on members demographics, what specific health plan they have, and what contract they have coverage under (Boeing, for example). The data warehouse now rolls up into better and



more robust reporting and analytics capabilities, providing our user community more data at their disposal that they can utilize to analyze, report and predict.

Group Health reports:

- WhereScape RED is so embedded in Teradata we built all of our native Teradata objects within RED, dramatically reducing handcoding
- We no longer do any manual processing of data—a huge win for the EDW and the organization
- The whole data warehouse lifecycle is now in WhereScape RED so we no longer have to rely on other tools to do modeling and deployment
- We are delivering more analytic and reporting capabilities to business users
- We can now analyze our membership by specific line of business and five-year history
- We utilize WhereScape RED as an ELT solution—Group Health's legacy ETL tool is sidelined
- WhereScape's automation capabilities works in concert with Group Health's agile methodology
- WhereScape RED provides a fully documented solution (IT and business) at deployment. In our previous data warehouse environment, documentation was often only in our developers' heads.

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What's next?

We will break our eight person Enrollment and Membership development team into two smaller teams; the first team will enhance the just deployed subject area, and the second team will build out an improved subject area for Claims, which will involve a migration from an old Sybase data warehouse. We will also begin recreating and enhancing legacy EDW content, including:

- Data mart for analytics on provider productivity
- Data mart of pharmacy transactions, previously handcoded on Teradata
- Common Dimensions (fork lifted from the Sybase DW)
- EDW objects/processes that support enterprise Quality Reporting

We will also acquire and integrate data sets from a growing number of applications that were previously not on our near-term roadmap due to the time/effort required using the old approach. By the end of 2016, we plan to have a large percentage of the new EDW rebuilt using WhereScape RED.



About WhereScape

The pioneer in data warehouse automation software, WhereScape empowers organizations constrained by time, money or lack of resources, to deliver business value from their decision support infrastructure – including enterprise data warehouses, business facing data marts, and big data solutions. WhereScape has global operations in the USA, UK, Singapore, and New Zealand. www.wherescape.com