



Joseph Randazzo, Manager of Actuarial Services

Excellus BlueCross BlueShield deploys SAS® to lay data foundation for advanced analytics

Industry

Health Insurance

Business Issue

Drastically reduce the time it takes to gather and process data to free employees to analyze data and manage risk.

Solution

SAS Data Integration technology organizes data from multiple databases into one accessible data warehouse.

Benefits

Time spent gathering and preparing data has dropped from 70 percent to 30 percent. Processing time has decreased 40 percent to 70 percent.

The largest nonprofit health plan in upstate New York, Excellus BlueCross BlueShield is awash in data on its 1.7 million members across four upstate regions. But the health plan's actuarial team spent the bulk of its time organizing the data. By deploying SAS Data Integration technology, the team is now freed to analyze data to better manage risk.

"In a typical year, we're dealing with more than 100 million member and claims records," explains Joseph Randazzo, Excellus BCBS Manager of Actuarial Services. "The ability to integrate and crunch data quickly is critical to our ability to successfully analyze our business. The amount of data we have is too large to manage with Access databases. With SAS, you can just kick off a process flow and work on something else while waiting for the results to return." Depending on the process, speed has increased by between 40 percent to 70 percent.

While developing a robust data management platform was crucial to the success of their new membership data mart, Excellus BCBS was also looking for a vendor that would provide powerful analytic capabilities. Health actuaries spend a great deal of time analyzing and forecasting claims expenses and changes in membership. "There are no products that really match SAS in terms of its forecasting capabilities," notes Randazzo. The Excellus BCBS actuaries have combined their Membership Information Nexus Environment (MINE) data solution with

SAS analytic software to streamline and improve their trend and forecast modeling.

Randazzo's team must also deal with multiple legacy data gathering systems – the result of the four separate regional organizations that existed before coming under the Excellus BCBS umbrella. Trying to gather data from each region to analyze and drill into trends was particularly time-consuming. The organization also needed to pull in data from Oracle and DB2 tables, and it needed to consolidate information that, in some cases, resided in different warehouses.

"We were in an environment where we spent 70 to 80 percent of our time scrubbing, extracting, transforming and loading data – with less than 30 percent of time spent on analysis," Randazzo said. "With SAS, in many instances, those numbers have flip-flopped."

Not only can the Excellus BCBS actuarial team spend more time analyzing data, it can deploy staffers in a more efficient way. Data preparation was so time-consuming in the past that analysts would specialize in a certain region or a certain type of analysis. Now analysts can work with data from any region and any type of analysis. In the past, the data went from a reporting tool into Access for filtering and manipulation before being placed in Excel for calculating. Now it can all be done through SAS in a fraction of the time and with greater accuracy.

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Manager of Actuarial Services
Excellus BlueCross BlueShield

The data integration solution Excellus BCBS developed makes it particularly easy to pre-assign members to whatever bucket or buckets they might belong to. An insured person might be assigned by region, type of product, or whether they are covered by a group or individual policy. In the past, analysts spent a lot of time hand-sorting individuals for analysis. “Time spent bucketing members is a non-value-add,” Randazzo explains. “Our time should be spent performing the types of analyses that help us manage risk better for our members and our plan.” One example of this is Excellus BCBS’ Leaver/Stayer model. According to actuarial analyst Ben Palmer, “Instead of spending the majority of time identifying which members have moved in and out of different products, we can now spend the bulk of our time investigating trends and determining if outcomes are aligned with expectations and corporate strategy.”

Working with SAS

Excellus BCBS contracted with SAS partner d-Wise to implement the

foundation of this data integration solution. “Both SAS and d-Wise helped us understand what we were tackling. I was pleasantly surprised at just how good d-Wise was in explaining data integration to a group of non-developers. We went from communicating our requirements to having a first pass in the test phase in three to four months. It moved really, really quickly,” Randazzo said, adding that he felt d-Wise’s consultant, Chris Olinger, really helped optimize the solution. Since the solution has become fully operational, his team has not needed to call tech support and has been able to maintain and add to MINE on its own.

Next steps: Exploring data mining, predictive modeling and forecasting

The Excellus BCBS actuarial group is gearing up to use data mining and predictive modeling to do an even better job of managing risk. “It is relatively easy to identify poor-performing employer groups or individual members with chronic illnesses that are costly. It’s also easy to identify the truly healthy portion of our population with low claims costs.

Populations between those two extremes are those with manageable behaviors or conditions. While improving the bottom line is the main focus of this analysis, identifying this group before they become high-risk is a benefit to everyone involved – health plan, employer group and individual members.”

This advanced analysis is something the actuarial department has been eager to do, but understands can’t be accomplished without a solid data integration platform. “You can’t use these tools without a good source of data. With SAS, those barriers are now gone. We have the data and can spend more time doing what we’re supposed to be doing – advanced analytics that drive decisions and business success.”



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