Delivering Value with Self-Service Membership and Claims Processing Analytics at Blue Cross Blue Shield of North Carolina

In 2015, Sarah Golnik Roberts and the Operational Analytics team at Blue Cross Blue Shield of North Carolina (BCBS NC) faced a multi-million data-point problem. The largest insurer in the state, BCBS NC served 3.81 million members and was generating over 7 million calls and a staggering 53 million claims annually. Roberts and her colleagues were inundated; they had access to a wealth of information without the tools to deliver valuable insights.

"At best, we were an ad hoc reporting team – not an analytics team," said Roberts. "We received so many requests that we had little time to do anything else."

Roberts' team wanted to use analytics proactively. But to do that, they needed to develop standardized reporting across the organization. "We wanted to foster an environment where our internal customers could make data-driven decisions quickly and not have to wait for us to run a query for them." In 2016, they found the solution they needed in Alteryx. Since then, BCBS NC has reduced ad hoc requests by 80%, lowered customer wait times from 17 business days to 4 minutes, standardized

their claims relevant reporting and delivered a 360-degree view of their claims processing process. They saw measurable cost savings of over $3 million within the first 10 months.

Getting started by confronting challenges

In a perfect world, Roberts' team would have started right away in 2015 to remedy their operational analytics workflows. But, their central pain point comprised many different challenges they needed to address. For starters, Roberts' team had to confront their multi-system reality. On average, BCBS NC's customer service representatives were using 15 different systems to respond to a single phone call. Nothing was integrated or standardized. "With multiple disparate systems, analysts had become specialists of their own systems," Roberts pointed out.

Furthermore, the internal stakeholders requesting reports often didn't know what they actually wanted from Roberts' department. They would ask for a query and then after that query came back, realize they needed to consider additional criteria. Roberts also

explained how it was common for stakeholders – lacking basic data analysis skills – to reach out to analysts to help summarize the data for them. This back-and-forth was not only time-consuming, but it also contributed to a backlog of requests. Often, a report that should have taken two to three hours to deliver took weeks to close.

Roberts said the idea of creating a suite of self-service tools seemed colossal at times. "It was easy to get overwhelmed by the enormity of the project," she said. "So, it was a revelation when we discovered Alteryx in 2016." Alteryx's dedication to creating accessible analytics platforms for any data worker caught Roberts' eye. She felt it was the only solution that could help her empower BCBS NC's internal customers to engage with their own data queries.

After selecting Alteryx, Roberts' team then set about creating the conditions for their path forward. They analyzed two years' worth of ad hoc data and report requests and categorized it all by business area, request type, data sources and necessary output fields. They simplified their categories and ranked the data in order so the first tool iterations would fulfill the network's most-requested data needs.

Small steps to significant victories

The first-generation analytics tool they built was a simple workflow based on the most requested data they had: membership. Membership professionals wanted to verify they had loaded all BCBS NC members in the group correctly with the right benefits. "It seemed like a simple, small request," Roberts said. "But, it was also the largest number of requests we received through our intake."

The timeline after that was swift. BCBS NC discovered Alteryx in October and by Dec. 1, 2016, they deployed this first workflow. By March 2017, they had it into production for membership. By April of that year, they had more complex systems-integrated claims tools into production. And, in October 2017, Roberts' team transitioned ad hoc reporting out of operational analytics and into the business itself. This came with significant victories: In 2016, their average turnaround time was 13.38 days – but now the turnaround time was 4.3 minutes. After the first three quarters using these production tools, BCBS NC had recouped over $41,000 in resource savings.

Andy Dé, Senior Director, Healthcare Solutions Strategy and Marketing at Alteryx, said these wins shouldn't be understated. "Most analytics organizations spend 80% of their time normalizing and prepping the data and only 20% of the time using analytics for value-based reporting," he said. "Our clients have now flipped that equation with the Alteryx Analytic Process Automation (APA) Platform, with 80% of their time now available for advanced analytics, which is far more value-added for the business."

Catching the $3 million error

Roberts shared two use cases that exemplify the added value of their initiative. The first addressed those maddening ad hoc requests: Her team created a set of self-service tools that enabled users to pull their own operations data in real-time. These tools consisted of 13 Alteryx analytic apps deployed to an Alteryx server and then shared with users through eight collections based on role-necessary data access permissions. "So, when we'd have a systems issue, managers would pull up my self-service tools and run a query within minutes," Roberts said. Since 2018, this service has replaced almost 9,000 queries that would have generally gone to Roberts' department to be managed manually. The new system equaled over $1 million and 27,000 hours of customer wait time in resource savings.

Roberts' second use case involved improving BCBS NC's mass claims adjustment process. This analytics tool from Alteryx was used to pull necessary data for a list of claim numbers for mass claims adjustment. Once the adjustment tool was running, the list could be fed through the tool again to get adjusted claims information, understand the change in payments and capture claims that didn't adjust for manual intervention.

The impact was significant in the first week: Roberts' team identified $3 million in mass claims adjustment errors. Since coming into full operation in 2018, this tool has been run almost 4,500 times, according to Roberts. "It's saved over $1 million in resources, over 26,000 hours of analysts' time and over 67,000 days of wait time," she said.

'Think data'

Of course, privacy was a top concern for Roberts and her team. By using Alteryx Gallery, users were required to have internal network access and their Gallery collections controlled access to sensitive data. The platform also allowed analysts to add messages and links to their privacy office website to every tool with an output containing protected health information.

With all of these successes, there was no going back for BCBS NC. In 2018, they created a new data and analytics division, for which Roberts is now a product developer. She said the company has gone even further, making a new organization-wide value, "Think Data."

"We now have new talent, structures and self-service initiatives in place, such as a Data Visualization Center of Excellence (COE)," said Roberts. "We've internally developed a product catalog and intake system and are working on maturing our technology skills for product development."

According to Dé, this is the mission behind Alteryx's APA platform for healthcare providers and payers. "We seek to empower our clients to amplify their outputs and deliver measurable value through analytic process automation. It's about democratizing access to data: We strive to help organizations deploy descriptive, predictive analytics and prescriptive analytics in a code-free and code-friendly way."

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> **SARAH GOLNIK ROBERTS**

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