

Children's Healthcare of Atlanta revolutionizes information delivery with QlikView

"QlikView goes beyond traditional BI tools to provide our users with direct access to intelligence that can immediately impact quality of care, influence clinical research and improve operational efficiencies."

Michael Thompson, Director of Business Intelligence, Children's Healthcare of Atlanta

Managing more than half a million patient visits annually at three hospitals and 16 neighborhood locations, <u>Children's</u>
<u>Healthcare of Atlanta</u> (CHOA) is one of the largest clinical care providers for children in the country. CHOA offers access to more than 30 pediatric specialties and is ranked among the top children's hospitals by *Parents* magazine and *U.S. News & World Report*.



Many Business Intelligence tools, yet few answers available to users

As an organization committed to enhancing the lives of children through excellence in patient care, research and education, CHOA wanted to ensure that its doctors, researchers and management team were always armed with the right answers for informed and precise decision making. But years of providing analysis and reports with nearly all of the "leading Business Intelligence (BI) platforms" had left the CHOA BI team with expensive implementation schedules, scope reductions and a dissatisfied user base, which ultimately led to a strained relationship between IT and Business.

"Our BI approach consisted primarily of static and ad hoc reports, which did very little to help our organization in its desire to explore and understand the data," explained Michael Thompson, Director of Business Intelligence. "Our user base was clamoring for more empowerment capabilities: dimensional analysis, self-service data exploration, user-oriented queries, data mashups, and interactive dashboards with visualizations. In addition, our overall technology data strategy was driving a reduction in redundant data sources and a single access point."

Meanwhile, CHOA's cardiology unit, Sibley Heart Center Cardiology, evaluated and selected QlikView to replace IBM Cognos. When CHOA management saw that Sibley users were able to run reports and analysis in minutes rather than waiting a week for answers, they decided to conduct a proof-of-tool project with QlikView partner IPC Global. Still hesitant about QlikView's capabilities to manage the organization's hundreds of millions of records on par with the "big BI vendors," the team gave QlikView 30 days to see if it could replace its current vendor's OLAP cube.

"The other vendor's initial cube took nine months to build and still lacked a suitable presentation layer for the end user community," said Thompson. "Working

Solution Overview

Children's Healthcare of Atlanta

One of the largest clinical care providers for children in the U.S.

Industry

Healthcare

Function

Executive, Operations, Finance, R&D

Geography

United States

Challenges

- Enable exploration and understanding of data for informed and precise decision making
- Fulfill user requests for dimensional analysis, self-service data, user-oriented queries, data mashups and interactive dashboards

Solution

Children's Healthcare of Atlanta (CHOA) is deploying QlikView to 500 employees. In less than one month, CHOA was able to develop financial applications that took nine months with previous BI tools. With QlikView, CHOA now analyzes revenue management, service line spending, research hypotheses and cost effectiveness. With QlikView Server (64-bit) and QlikView Publisher, CHOA easily supports security and visibility while handling the large data volume of over 100 million records.

Renefits

- Gained visibility of the answers needed to reduce costs, increase quality, ensure compliance and improve outcomes
- Reduced reporting time by more than 65%
- Decreased constant reliance on IT for reporting and analysis
- Eliminated 10-12 day waiting period for research-related queries

Data Source Systems

Application: Lawson, Alliance, Epic **DW/BI**: Oracle, SQL Server

Database: Mumps database, SQL, Access,

Excel

Hardware: Intel

QlikTech Partner IPC Global



with the QlikView development team from IPC Global, we were able to extract data, create business logic and provide a presentation layer that made the end users happy. And we did it in 30 days – a fraction of the time it would have taken with any of our other tools."

The team made an instant decision based on the success of the pilot and QlikView's speed to deploy, sophisticated analytics and intuitive data exploration capabilities.

Revenue Management & Service Line Spending: 50 reports that would have taken 1,500 hours to build before OlikView

Upon selecting QlikView, the CHOA BI team first set out to replace — and improve — the existing financial reporting process. Because achieving revenue cycle success requires management decisions based on projections, actual performance and trending analysis, CHOA developed a dashboard that would provide a holistic view of revenue management. The dashboard integrates records from four different data sources, all updated daily.

Equivalent to the information previously available in 50 different static reports, CHOA executives, directors and managers now have a single view of revenue billed each day, by each of its three hospitals, by each service line within those hospitals, by sub-service line, and against targeted goals, disease codes and acting physicians. Before QlikView, each report would have taken approximately 30 hours to build. Now, all of that detail — and more — is available in a dashboard that was built in a month.

"We are really just getting started with QlikView, but initial feedback has been extremely positive. They love the dashboard because the underlying data would have come from four different systems in the past," said Thompson.

Another financial dashboard analyzes expenses for each service line, a level of detail that would have been impossible to compile in the past given the numerous data sources. This QlikView application targets variances and highlights how to gain efficiencies and improve service.

New visibility for more targeted research studies

As one of the largest hospital networks for children's visits in the U.S., CHOA is a preeminent research enterprise for pediatrics. Integrating data that dates back to 1985, QlikView now enables CHOA research users to query across multiple databases for population identification, diseases, demographics, visits, lab orders and results.

In the past, researchers and physicians had to wait 4-6 weeks for the reports and detail they needed for their grant proposals. Today, they can instantly access a portal that offers a complete picture of the clinical experience, especially the diagnosistreatment-outcome relationship, and better target research studies. Users can even bookmark each query for easy access once a grant is approved.

Putting true intelligence in the hands of end users

CHOA has also developed an application for waste reduction and cost effectiveness analysis. Using historical data from clinic management and accounting systems, it allows management to better pinpoint areas of ineffectiveness and maximize staffing schedules based on cycle times, labor operations and supplies utilization.

While CHOA already had a significant BI





presence and investment in traditional tools, the organization recognizes the tremendous value QlikView has brought to its end users in only four months, and expects to expand from 500 to 1000 users in the next year.

"QlikView not only allows us to cut reporting time to a third of what it was in the past, but it gives our end users the true visibility they've wanted for so long," said Thompson. "I've been working with BI tools for over 20 years, and this is the first time I've seen business users embrace the technology instead of avoiding it."

"In four months of using QlikView, we developed more applications and dashboards than we had in two years with other BI tools."

Michael Thompson, Director of Business Intelligence, Children's Healthcare of Atlanta