DATA ANALYTICS

CUSTOMER STORY

Rapid time to value for healthcare providers

Not-for-profit organization sees the benefits of an innovative solution that uses Qlik data analytics to increase efficiency





CUSTOMER STORY

"One of the first apps we built with IPC Global's inProcess CDW is for in-patient analytics. It looks more closely at length of stay and Case Mix Index (CMI) information. This enables us to make sure we are managing the patients properly and not keeping them too long."

Director of Decision Support Systems, USA-based healthcare provider

Need for swifter data access

Electronic health records (EHR) have transformed the delivery of healthcare by providing accurate, up-to-date and complete patient information that can be readily accessed to deliver coordinated healthcare.

Epic, a leading EHR provider, says that its software currently holds the records of 250 million patients and its Epic Caboodle Data Warehouse (CDW) is specifically designed for the storage and retrieval of large amounts of clinical data. This can be used for all manner of reports that can help support care decisions, manage costs and identify trends. Headquartered in Atlanta, Georgia, Qlik Elite Partner IPC Global is a leading enterprise systems integrator of data, analytics and cloud solutions that has an intimate knowledge of Epic, gathered over many years.

The company wanted to provide healthcare organizations with more efficient access to every record they have ever created. It also aimed to help them combine data from both inside and outside their organization for vital analysis that can help them solve healthcare problems.

IPC Global's solution leverages Qlik business intelligence and Amazon Web Services (AWS) cloud, along with inProcess CDW, a Qlik extension for healthcare master data management. The system sidesteps the challenges of a traditional data warehouse approach to provide easier and quicker access to the data held in Epic.

Because it deals with patients' wellbeing, the healthcare industry needs to deliver swift service. According to IPC Global's Managing Partner, Mark Meersman, traditional ticketing systems for data queries can produce an overlap in communications that results in lost time.

Solution Overview

Customer Name

US-based healthcare provider

Partner: IPC Global

Industry

Healthcare

Geography

USA

Function

Finance, IT

Challenges

- Eliminate the IT bottlenecks of traditional data warehouse interrogation
- Give healthcare providers speedy access to every record they have created
- Enable hospitals to use data analysis to solve their healthcare problems

Solution

With its intimate knowledge of Epic electronic health record systems, IPC Global has used Qlik Sense to develop inProcess CDW, which comes with 134 pre-loaded subject areas that can help support care decisions, manage costs and identify trends.

Results

- Delivers the 'time to value' that is an overriding need of the healthcare sector
- Eliminates the cumbersome processes of traditional data warehouse operations
- Provides in-depth data analysis for better decision making, financial forecasting and improved patient care

Automation brings rapid results in Georgia

A not-for-profit healthcare provider in the USA became one of the first health authorities to use inProcess CDW. Its Director of Decision Support Systems and his team have built a number of apps using Qlik Sense and the inProcess CDW extension. These include in-patient analysis that takes a closer look at length of stay and Case Mix Index (CMI) data to see where opportunity exists for some patients to be discharged earlier. Another app delivers analysis of costs and profitability of surgery.

"We are spending millions of dollars a year on supplies. Having a product that allows us to tie in other data sources easily and look more closely at that spend is a huge benefit," says the Director of Decision Support Systems. "We now have 60 users of the solution and a lot of happy analysts. Every time I train somebody new, they are just blown away by what they can achieve."

Meersman adds: "Because we have so much experience with Epic, we can pinpoint many repeating themes and have automated the creation of 134 subject areas that enable people to obtain rapid results. With Qlik, we have removed the IT bottleneck. Users can ask any question without having to call IT and ask them to put it in the data warehouse."

Backed by education and training

IPC Global accompanies the delivery of inProcess CDW with an in-depth data literacy and education program leveraging Qlik's Continuous Classroom.

Meersman explains: "What we typically do is sit shoulder to shoulder with our clients, either virtually or physically, and educate them until they take over the keyboard from us."

Speed and financial foresight

IPC Global applications can include up to 45 dashboards covering many topics such as in-patient stays, out-patient visits, surgery and diagnosis.

In the USA, finance is one area where inProcess CDW provides healthcare with a capability it didn't have before.

"In healthcare, no-one knows whether they are making or losing money until about four months later because of the way the revenue cycle works," says Rusty Lacy, Enterprise Solution Architect at IPC Global. Qlik data analysis now enables them to create 'expected payments' analyses which can improve the financial management of their business.

Referring to a customer for whom he provided this service, Lacy adds: "We made the predictions, and did in one month what they couldn't do in a year. They were on a tricycle and with Qlik, we had a high-speed Harley Davidson."

Improved patient care

Qlik analysis delivers more information to healthcare staff and, at the end of the day, that translates into better service for patients, as Meersman explains: "Clinical staff can quickly answer questions they otherwise could not answer. That means patients get better service because they are being communicated with and the ways they are treated can move and change."

Free service to combat pandemic

More dramatic evidence of the usefulness of inProcess CDW came with the COVID-19 pandemic when IPC Global and AWS teamed up to offer a free service.

"We stand up a private cloud on AWS, load both internal and external data and publish 120 or more applications for our clients. With Qlik, we create a virtual data warehouse that is automatically updated. By showing a granular number of cases, trends, geography and risk factors, we can provide visual representations of the latest COVID-19 situation anywhere in the USA," says Meersman.

Analysis could reduce length of stay

Back at the not-for-profit healthcare provider in the USA, the organization's Director of Decision Support Systems is impressed by Qlik's ability to pull in data from many different and often external sources without input from technical IT and database specialists, enabling non-technical people to dive deep, ask questions and get quick answers.

"The biggest single benefit was very quick access to all the data, giving us useful information for senior management and visibility into many areas that help us manage the business operation better," he says.

The keys to success



45

dashboards covering many health topics



134

subject areas for decision support

"The overall concept is to access all the data inside and outside your organization, rapidly formulate it so that it is discoverable and useful, then work through the data literacy process so all users can tailor it to their unique situation."

Mark Meersman, Managing Partner, IPC Global



About Qlik

Qlik's vision is a data-literate world, one where everyone can use data to improve decision-making and solve their most challenging problems. Only Qlik offers end-to-end, real-time data integration and analytics solutions that help organizations access and transform all their data into value. Qlik helps companies lead with data to see more deeply into customer behavior, reinvent business processes, discover new revenue streams, and balance risk and reward. Qlik does business in more than 100 countries and serves over 50,000 customers around the world.

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