

Empowering Clinicians:
**The Value of Embedded
Analytics in Your EHR**

Qlik  | Healthcare





Your organization's data can produce significant value, but only if you're able to bring the right insights to light without adding to your staff's workload.

Hospitals and healthcare systems are grappling with the challenge of better managing costs and outcomes. With information coming from internal and external sources, it's more critical than ever to be able to layer and view relevant information in the workflow, uncover new insights, and use those insights to promote better clinical and business decisions.

Are you ready to empower your clinicians with better insights directly within your electronic health records (EHR) system?

Qlik's data analytics platform was built to scale across your organization, delivering actionable insights directly within clinical care and patient management workflows.



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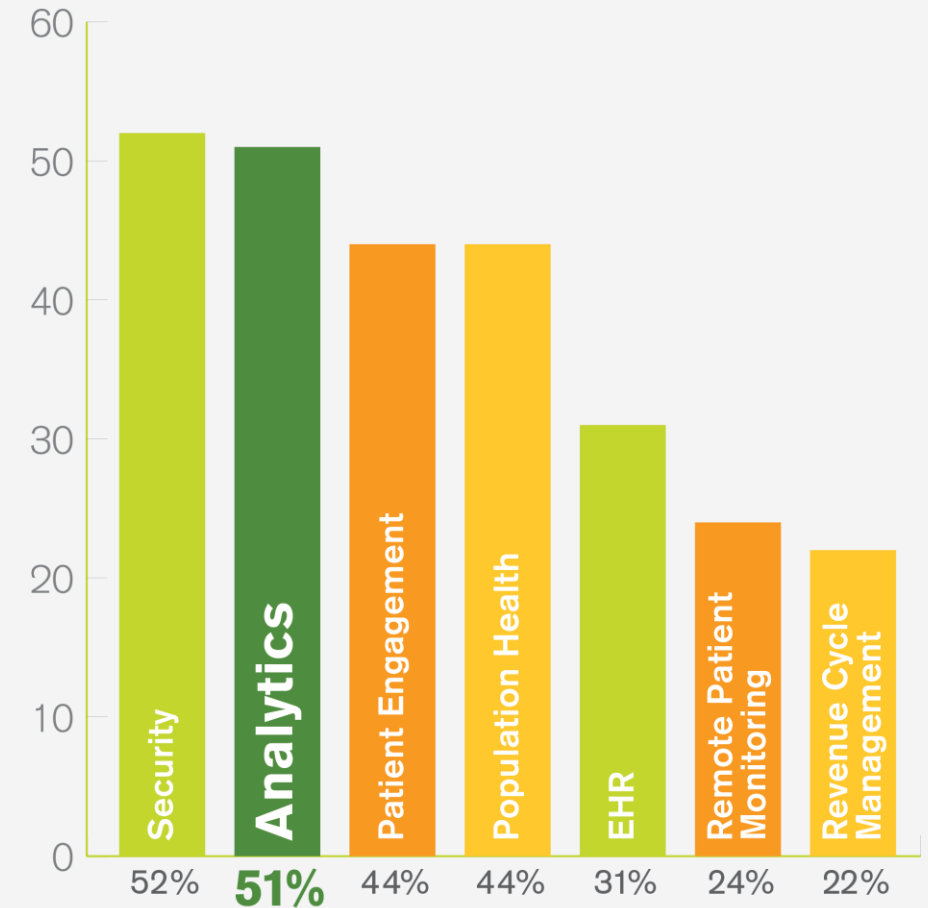
Extending the EHR

Fifty-one percent of healthcare executives plan to upgrade their analytics capabilities this year – proof that data analytics continues to be a strategic investment for healthcare executives as providers tap internal and external data sources to inform best practices, increase operational efficiency, and improve patient outcomes.

Healthcare executives are recognizing the importance of integrating their EHR systems with technologies that empower physicians and nurses with actionable insights throughout the care workflow. However, getting to these insights is not always straightforward. Almost half (46%) of physicians say that EHRs do not have all the data and functionality that they need.*

*Quest Diagnostics, Progress on the Path to Value-Based Care

Which technologies are you planning to upgrade in 2017?





Case Study: Increasing Business Intelligence Adoption

Millions saved by empowering self-service analytics

Nemours Children's Health System embedded Qlik in their EHR to deliver self-service business intelligence to its users. Backed by Qlik's Continuous Classroom program encouraging ongoing education, Nemours achieved more than 70% adoption of business intelligence across the organization. One citizen developer was able to build a billing and claims analysis model that empowered employees across the organization to resolve and reduce the overall volume of denials. This enterprise-wide collaboration found Nemours tens of millions in revenue.

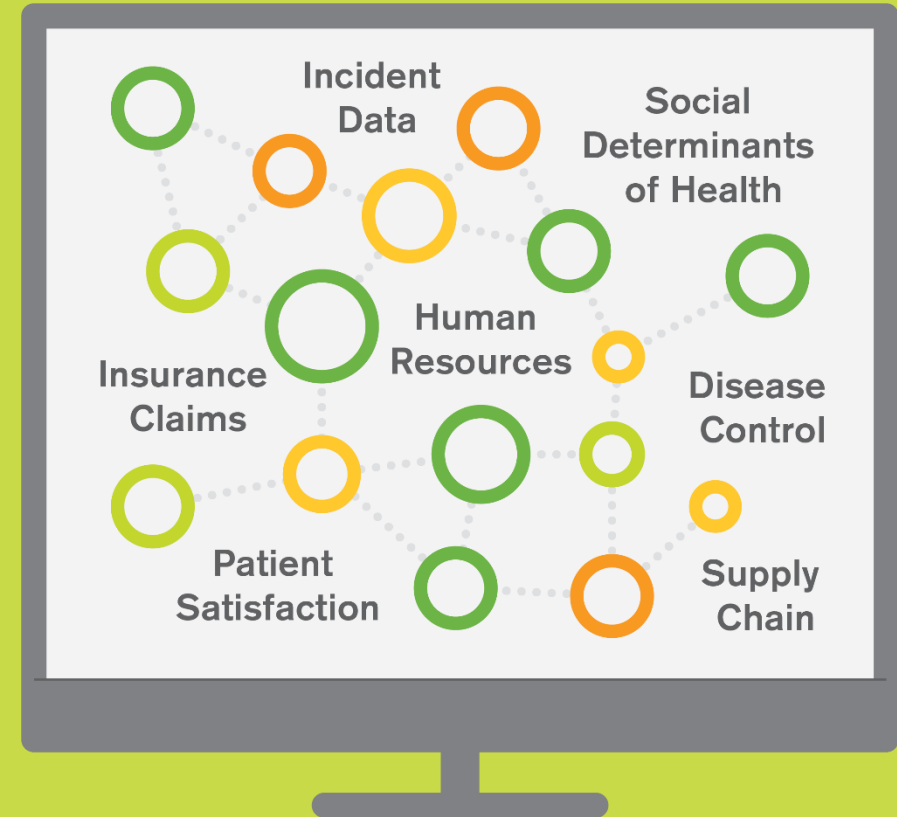
Qlik is enabling Nemours to get to insights faster, innovate their business rapidly, and stay ahead of the curve in providing services to patients.



The Data Complexity Challenge

EHR systems are undoubtedly the most critical source of data across a healthcare organization. However, data complexity, lack of speed and usability, query-based limitations, and time-intensive reporting all hinder the decision-making process.

In addition, many EHRs are challenged when it comes to generating reports and accessing valuable external data sources.



Case Study: Increasing Speed to Insights

The Children's Hospital of Philadelphia (CHOP) embedded Qlik in their EHR – enabling their clinical, finance, and strategy teams to discover population health insights.

Users were able to accurately filter the entire patient population down to a specific cohort, to analyze layered clinical, financial, and demographic data. They gained insights in minutes – compared to the previous weeks-long process of submitting a query to the analytics team and waiting for a complex report.



Embedded Analytics: Insights from within Your EHR

By embedding data analytics within the EHR, clinical care teams are able to access and analyze all data types with a single login.

This functionality allows teams to intuitively explore data, visualize information, and draw immediate insights—all directly within the care workflow.



Improve Patient
Engagement



Reduce
Readmissions



Eliminate
Clinical Variation

Embedded analytics enable users to quickly see how they can improve patient engagement, reduce readmissions, eliminate clinical variation, and more.

Case Study: Decreasing Clinical Variation and Cost of Care

European teaching hospital reduces cost per patient by 11%

Sahlgrenska University Hospital (SUH), the largest teaching hospital in Northern Europe, used Qlik to decrease clinical variation in orthopedic procedures as part of their value-based care program.

The hospital uncovered significant variation in length of stay. They were able to identify and implement standardized best practices – including reducing waiting time for procedures by more than 50 days, reducing the rate of re-operations by 17%, increasing surgical capacity by 44%, and reducing cost per patient by 11%.



The Qlik Associative Engine – Different by Design

At Qlik, we've solved the biggest problem with modern BI tools – restricted linear exploration. Our associative technology brings all your data together without complex data warehouses, and enables users to freely explore in any direction they want.

It's simple. Qlik delivers insights you will miss with other tools.



Access to All Relevant Data Sources

Easily combine and load data from large numbers of disparate data sources.



Self-service Exploration without Boundaries

Freely explore and probe the possible associations in your data, using interactive selections and global keyword searches, without boundaries or restrictions.



Insights at the Speed of Thought

Empower clinical care teams to immediately interact with and analyze information, at the point of care.

The Associative Difference

In healthcare, there are three primary data scenarios:

1. Community data that resides outside the hospital system, i.e., social determinants of health, CDC data, etc.
2. Hospital data, including financial and operational data that needs to be blended effectively.
3. Individual data from the patient, for example, from a personal fitness tracker, that would add value if it could be integrated into the physician's workflow.

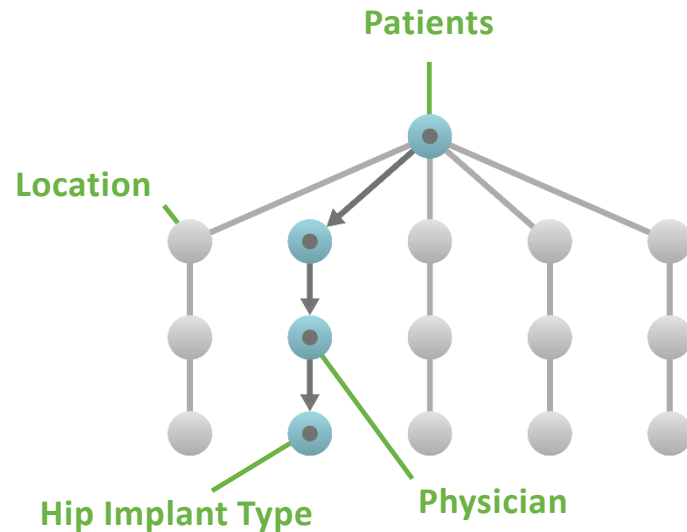
Only Qlik's data analytics platform is driven by powerful associative algorithms that enable you to integrate and search all your data quickly and easily. In contrast to other query-based visualization tools that take a linear approach, Qlik allows you to pivot your thinking based on what you see, to quickly uncover new insights. This means that anyone in your organization – from physicians to administrators – can ask questions and quickly get answers, instead of getting stuck in the “ask, wait, answer” cycle.



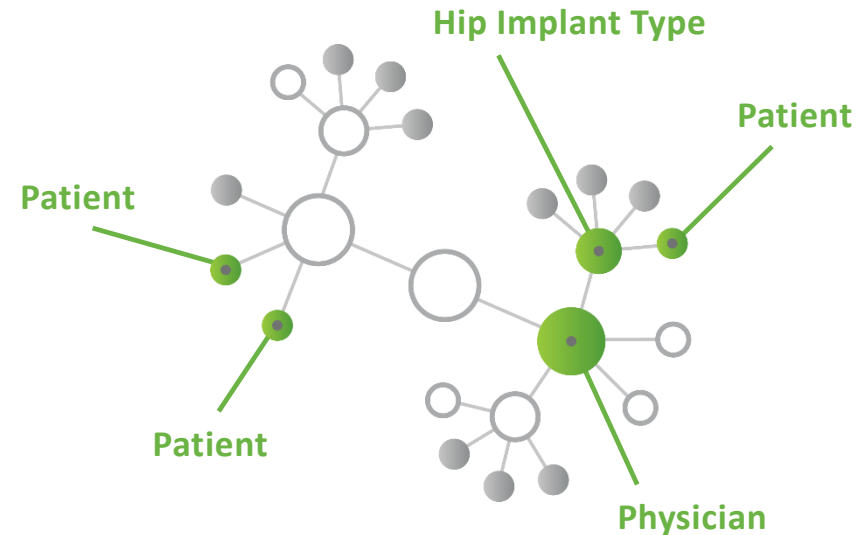
Seeing the Whole Story

For example, a physician can use the Qlik data analytics platform to analyze all patients who have received hip implants. She can see a breakdown of the different implants used, their cost, and patient satisfaction. This data can be further stratified by patient group and location to uncover regional trends in the treatment of hip and joint replacements. Further analysis can reveal correlations between physician training and patient outcomes.

Linear Data Visualization



Qlik's Associative Experience





MELBOURNE HEALTH

Case Study: Improving Patient Safety

Melbourne Health reduces patient falls by 40%

Qlik enabled Melbourne Health, the second largest public health service in Victoria, Australia, to analyze the rate and incidence of patient falls in order to improve patient safety across the organization.

With Qlik, the team was able to analyze incidents by age group and time of day. The data indicated that more falls occurred during shift handovers, break times, and patient meal times. Melbourne Health used this insight to change their shift patterns, reducing the incidence of patient falls by more than 40%.

40%

Reduction in
falls



Capabilities Across the Spectrum

Qlik delivers a full spectrum of analytics capabilities across a number of diverse industries and use cases, from structured reporting to the most complex algorithms and analytics. This allows the platform to handle a broad set of advanced analytics use cases without the need for additional tools.

Advanced analytics integration in Qlik Sense allows users to leverage the power of external analytics engines and machine learning algorithms, such as R, Python, Matlab, Spark, and more. Server-side extension APIs directly integrate the Qlik Associative Engine and third-party tools with data exchanged in real time as the user performs analyses.



Corporate
Reporting



Guided
Analytics



Ad-hoc
Analysis



Data
Visualization



Advanced
Calculations



Statistics/
Algorithms



Modeling/
Mining



Scenario
Analysis



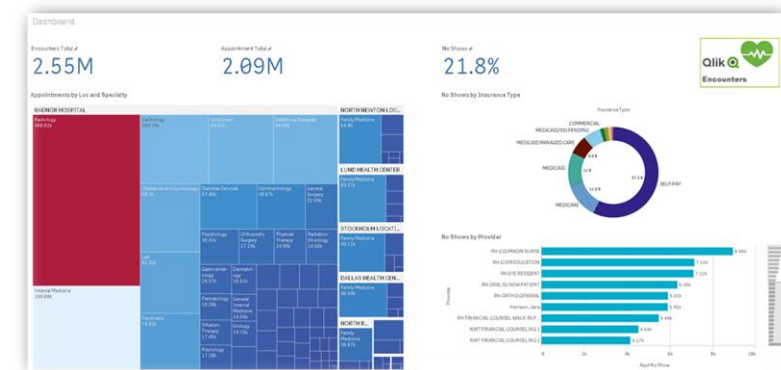
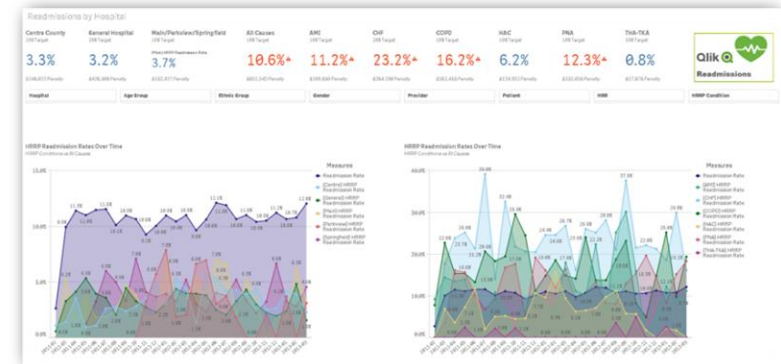
Insights at the Point of Care

With embedded analytics in the EHR, Qlik empowers teams to reduce readmissions and clinical variation, improve population health, efficiently benchmark goals, and more.

Qlik has 30+ use cases for healthcare including:

Clinical variation
Diabetes discovery
Labor and productivity
Supply chain
Emergency department
Readmissions
Encounters and scheduling

Clinic throughput
Surgical performance
Revenue cycle management
CMS Hospital Compare
Epic Willow Generic Meds
Epic ASAP ED Real-time Trackboard



Case Study: Improving Population Health

The University of Pittsburgh Medical Center (UPMC), a global nonprofit health system with more than 30 hospitals, used Qlik to identify people at risk for prediabetes – a first step in closing care gaps and improving population health.

Ninety percent of people with prediabetes are undiagnosed. Getting a 360-degree view of patients' health – including social determinants of health – makes it much easier to pinpoint those at risk of developing diabetes.

Having social determinants data allows providers to incorporate risk factors that might otherwise be missed, such as access to quality food, and where someone lives or works in relation to the closest clinic or hospital.

With Qlik embedded in UPMC's EHR, its teams were able to view these social determinants of health side by side with clinical data – without having to dig through multiple reports or dashboards.



About Qlik

Qlik is a Gartner Magic Quadrant Leader for the seventh year in a row. We deliver intuitive data analytics solutions to more than 2,500 healthcare customers across the globe.

Our world-class industry solutions, combined with our comprehensive consulting, training, and support services, ensure our customers get the most from their Qlik implementations. We bring specific healthcare industry and functional-level experience to our customers, driving rapid understanding of your unique clinical and business problems.

Qlik's Value



Layer financial, clinical, and operational data for quick and easy analysis



Build governed self-service visualizations



Integrate dashboards seamlessly within the clinical workflow



Empower users to gain insights quickly, so they can improve the quality of care delivery



Contact Us

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