

Data Governance in Healthcare:

# How Ovaledge and Qlik Helped a Large Healthcare Provider



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02/2021



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## Company Overviews

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**OvalEdge:** OvalEdge equips businesses with cutting-edge data governance tools that inspire and facilitate data-driven innovation. Using a progressive model, OvalEdge enables organizations to implement data governance programs at their own pace, as and when they need them. Founded in 2013, the company's goal is to democratize data and give every employee in an organization the opportunity to develop insights from the data at their disposal.



**Qlik:** Qlik's hugely popular data governance technology is used by more than 50,000 customers globally. Providing data analysis and integration tools, Qlik's data governance toolkit is designed to foster meaningful discoveries and transformative changes through users at every skill level. Qlik delivers an end-to-end service from integration to analytics, to data literacy education.



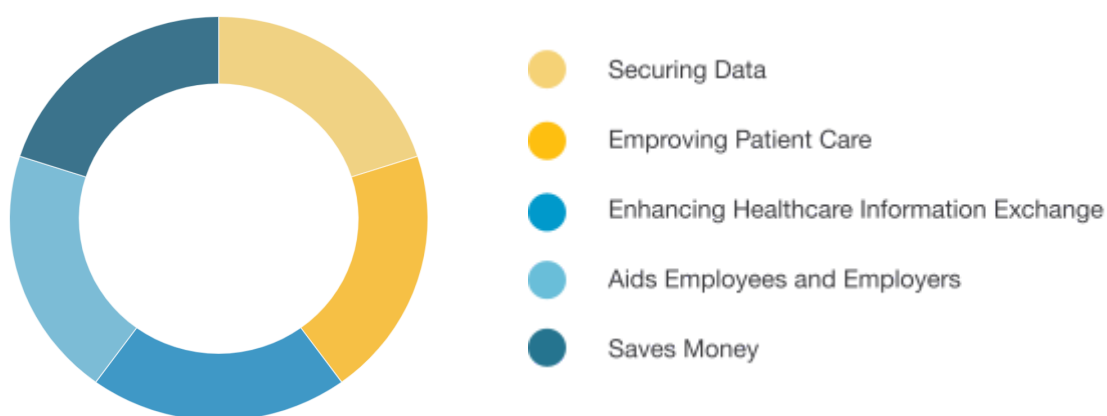
## Data Governance Obstacles in the Healthcare Industry

Data governance knows no boundaries and the tools and platforms required to implement these practices have become an essential part of business intelligence (BI) across all industries. One of the most significant use cases is within the healthcare industry.

Data governance has significant benefits in several areas within healthcare including securing confidential patient data, improving patient care, enhancing the exchange of information between organizations, aiding employees and employers, and saving money.

### ***Benefits of Data Governance in Healthcare***

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## Identifying Fundamental Barriers

With its innovative data integration and analysis tools, Qlik enables its customers to achieve all of these benefits. However, despite the efficiency of the platform a handful of significant obstacles remain. The most significant of these is trustworthiness.

*Qlik customers receive detailed, regular reports from which they can innovate and realize the benefits as described above. However, there is a need to establish the trustworthiness of data used to calculate KPIs. For this to become a reality, there needs to be consistent definitions and solid data lineage provisions in place.*

The issue of trustworthiness is one that centers on the business community, the second key issue is one that directly affects IT operations. Qlik provides a next-generation tool that enables IT teams to analyze data quicker than ever before. However, although a self-service facility exists within Qlik's infrastructure, it needs to be optimized.

Furthermore, Qlik customers are often required to search for information but are unaware that this data already exists. Providing advanced data lineage will enable users to easily query existing legacy reports to find the content they need for analysis and innovation.

In the next section, we will elaborate on the issues present and provide solutions based on OvalEdge and Qlik integration.



## A Four-Step Solution: Integrated Service Proposition

To address these challenges, OvalEdge will integrate its data catalog with Qlik's existing architecture. This partnership will provide Qlik customers with the tools they need to overcome existing hurdles and boost the adoption of Qlik's data governance tools in the healthcare sector.

### Use Case: Business Community

#### ***Solution One: Trustworthiness Through Consistent Definitions***

Standardization is an incredibly important element of data governance, particularly in the healthcare sector. However, unlike banking, for example, there is a lack of consistency. Creating consistent definitions makes it possible to understand, analyze, and collaborate on data.

Without this consistency, it's almost impossible to be able to fully trust the data presented because each user could adopt different definitions to interpret it. The best way to illustrate the problem of non-standardized definitions in the healthcare sector is through a common example. In this instance, we'll focus on the length of stay.

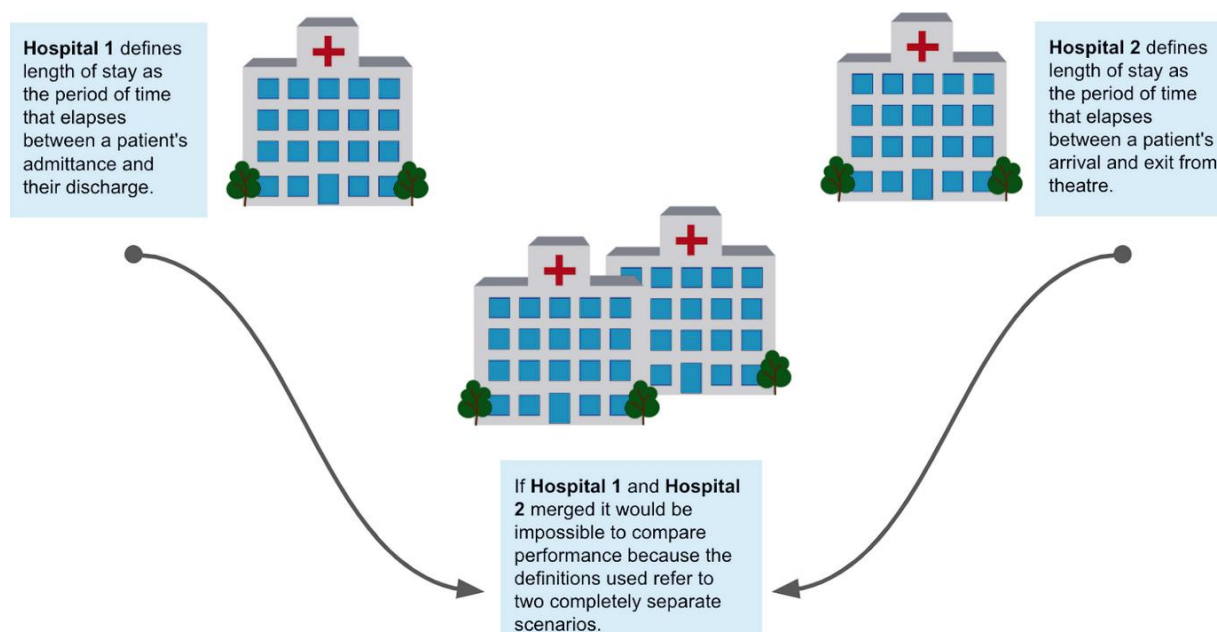
In healthcare, KPIs surrounding length of stay is generally not standardized even though they are one of the most important data points to track. Hospitals are forced to use the data they have to create definitions, but this is rarely consistent.

This is because length of stay is an especially fluid KPI. For example, some analysts may begin recording patient stays from the time they were admitted to the time they leave a hospital bed. Alternatively, others might record this denominator from the moment a patient enters and leaves an operating theatre.



Hospitals can only work with the data they have available to them and in many cases the availability of this data varies from department to department. Everybody is required to conduct analysis on length of stay based only on the data points they have and develop their definitions based on this information.

When two separate hospitals attempt to merge these findings to compare performance it can't be done because there are no consistent definitions in place. And the result? It can make a hospital look as though it is failing to reach performance targets even if they are. Furthermore, as these reports are present on the Qlik platform and include conflicting definitions, it can make this information appear untrustworthy.



The solution to creating consistent definitions across the spectrum of a healthcare organization starts with data literacy, and this can happen in two parts. If no definitions have yet been decided then the process is very straightforward. Data governance teams then just need to approach and ask employees directly about their preferences.



Once this has been decided via consensus the results can be published in a business glossary. The exact formula is documented and everyone is made aware, or made literate. From then on all users are required to follow the same standard.

Unfortunately, this ideal scenario isn't possible for most organizations. Many healthcare providers have been acquired through merger and acquisition processes and, as a result there are already numerous definitions in place. This is where OvalEdge comes in.

*OvalEdge helps by crawling databases and finding these existing definitions. Once located and cataloged, Qlik users have an overview of the entire governance process and can easily develop and manage consistent definitions.*

The following example shows how OvalEdge can work with Qlik in this instance.



OvalEdge can track the data lineage of various systems and identify the definitions used across them.



For the purpose of this example, let's say 13 different versions are being used for length of stay across two hospitals that have recently merged. Whilst identifying these 13 different definitions, analysts can also determine who the consumers of this information are.



In an organization with 10,000 plus employees, it turns out that just 20 executives are significantly consuming these KPIs through Qlik reports.



Now we have identified who are using these reports, the objective is to ensure they become members of the steering committee. It's this committee that will decide on a single definition for length of stay that will be used to correct and standardize other formulas or KPIs.





Sometimes it's not possible to determine a single definition and reach consensus, instead, a committee may come up with several. Under these circumstances, you can use the OvalEdge data catalog to name the different terms.

Although there is no single standard definition, these multiple definitions are documented within the OvalEdge catalog so it's then very easy to understand what the definitions are and compare them.

This makes the data trustworthy and is how OvalEdge is working alongside Qlik to provide a solution to inconsistent definitions in healthcare data management systems.

### ***Solution Two: Flawless Source Identification***

As well as consistent definitions, trust in data is encouraged when users are given the ability to track and confirm its source. For example, if you are building a record of patient information you need to be able to confirm whether you are accessing the right data. Maybe information on this patient is spread across three different data warehouses. If so, how do you know which one has the information you need?

In another scenario, two different KPIs might be using two different sets of patient information. These two different databases could have two very different outcomes. Healthcare data is often full of inconsistencies like this, so measures must be taken to clarify sources to build trust.

This can be done through a certification program developed by a data governance committee. The aim is to establish certified patient information, so although multiple records exist users can differentiate certified and non-certified data. And to do this you need to know the data lineage.

By integrating OvalEdge's lineage capabilities with the Qlik platform, users can very easily understand where the data they are using comes from and whether or not it has been certified. The data's trustworthiness increases because users can go back and look at the actual data sources.



## Use Case: IT Operations

### ***Solution One: Facilitating and Encouraging Self-Service***

Qlik is a next-generation data governance tool that enables users to analyze data far more quickly than with the earlier instruments like business objects and reports built independently for specific purposes. One of the defining elements of the Qlik platform is that it is accessible through self-service.

Through this method, business users can ask questions themselves based on the data they have at their disposal. The trouble is, even though legacy reports are available, in many cases customers simply don't know if they exist or not and instead ask IT departments to create them.

Building these reports can take days of developer time but if they were available and searchable this process could be done within the hour via self-service. OvalEdge enables users to make report requests using familiar fields available through the Qlik platform, this will increase adoption of Qlik and save money on development time.

Instead of creating reports, again and again, IT teams can point users to the correct fields on the Qlik platform encouraging self-service.

In the next paragraph, we'll explain how OvalEdge legacy reports can be easily identified and incorporated into Qlik's self-service platform.

### ***Solution Two: Identifying and Incorporating Legacy Reports***

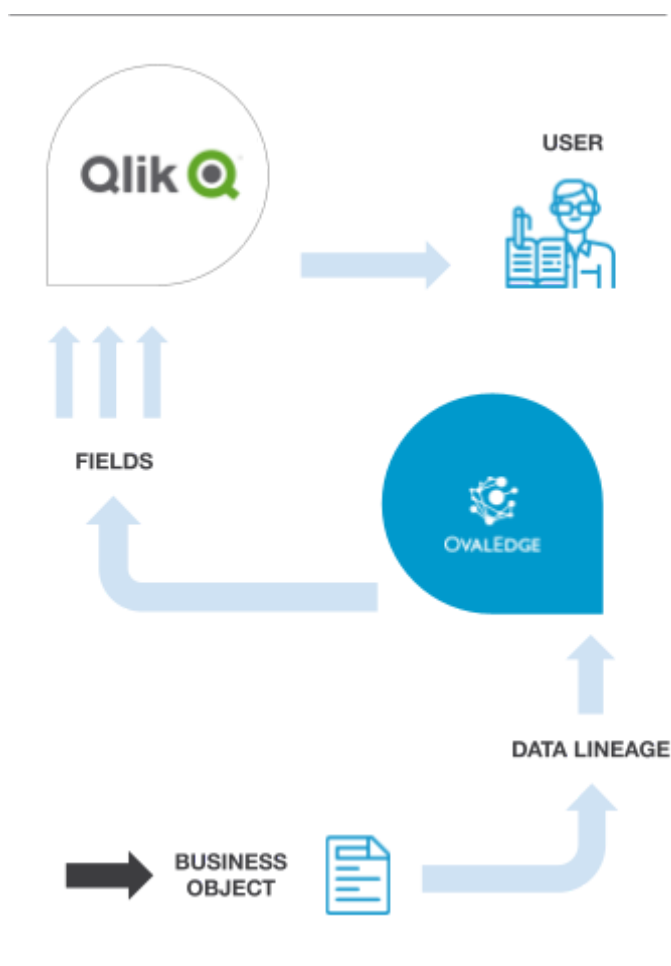


In many cases, the information a user may be searching for may be contained in an existing legacy report and business object, but it may be very difficult to determine that it exists on the Qlik platform. The process of confirming this requires a lot of maintenance from IT teams.

It's important to understand who the consumers of these old business objects and reports are so they can be directed to Qlik and access the content via self-service. Once this precedent is set these legacy business objects and reports can be retired.

Once again the key is data lineage. OvalEdge will enable Qlik to create a pathway that they can use to identify and migrate the legacy systems to Qlik using data lineage. Using advanced data lineage tools, old data repositories can be assigned fields and incorporated onto the Qlik platform so users can easily determine what the definitions are, what the real data points are, and whether the information they need is available.

With this system in place, countless reports in the Business Objects tool can be combined using specific search fields. Information can then be consumed directly from Qlik and IT teams needn't maintain the hundreds of different reports in a system. This saves a lot of money from an IT perspective and enables users to migrate to an easier platform.





## Conclusion

The healthcare sector is a key business area for data governance providers. Effective data governance in this sector not only improves patient care but through innovation, can enable medical teams to operate to the best of their abilities under optimum conditions.

Together, OvalEdge and Qlik are refining Qlik's existing healthcare provisions, developing an industry-leading process that combats the most significant obstacles in data governance for healthcare providers.