

# Tackling the Biggest Data Governance Barriers Impeding Healthcare Providers

## With OvalEdge and Sisense integration



AUTHORS:

Sharad Varshney, Kieron Allen

12/2020



# Tackling the Biggest Data Governance Barriers Impeding Healthcare Providers

## With OvalEdge and Sisense Integration

### Table of Contents

- **Company Overviews**

---
- **Addressing Key Data Governance Challenges in the Healthcare Industry**  
*Critical Obstacles*

---
- **Providing an Integrated Solution**  
*Business Case*
  - Stage One: Building Trust Through Standardization
  - Stage Two: Data Lineage Tools*IT Ops*
  - Stage One: A Self-Service Platform
  - Stage Two: Optimizing Legacy Reports

---
- **Conclusion**



## Company Overviews

---



OVAL**EDGE**

**OvalEdge:** OvalEdge is a data catalog and data governance tool that virtually centralizes all of a company's data into a single repository or catalog. With OvalEdge, companies grow into not out of their data governance strategy. This is because OvalEdge provides a progressive approach to data governance, helping companies to:

- **Catalog**
- **Collaborate**
- **Comply**

OvalEdge runs on **lean infrastructure**. Also, since it is architected with an open framework, it can be seamlessly integrated with other applications.



**SISENSE**

**Sisense:** Sisense is a cutting-edge business analytics and visualization platform that slashes the time it takes to build reports and dashboards.

Sisense's client list, which includes Phillips, Verizon, and Motorola, is a who's who of major players across multiple industries. Yet, the Sisense team had identified several matters that required some blue-sky thinking.



## Addressing Key Data Governance Challenges in the Healthcare Industry

Data governance tools have become an indispensable component of business intelligence (BI) across all sectors. But the healthcare industry, in particular, has benefitted from these technological advances.

Numerous healthcare practices have benefitted from modern data governance strategies. These improvements have led to better patient care, secure systems for storing confidential patient data, more fluid information exchange between organizations, employee and employer benefits, and money saved.

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

---





---

## Critical Obstacles

Although data is critical, organizations often find that teams spend too much time navigating the complexities of ensuring that information is secure yet accessible to verified users.

From untrustworthy datasets to redundant reports made due to a lack of transparency in many cases, the data belonging to an organization may be causing it more problems than it is solving.

You need to use consistent definitions and track the journey of data using advanced data lineage to confirm that it is trustworthy. The trouble is, many organizations fail to do this. Trustworthiness is a critical concern for the business community. The other significant issue is one that affects IT operations.

As the need for data grows in an organization, it can lead to more people creating the same reports. Navigating duplicated content is a drain on IT resources, but users need a reliable self-service platform to take the responsibility away from data and IT teams.

*Coming up, we'll elaborate on these two key obstacles and provide resolutions based on OvalEdge and Sisense integration.*



## Providing an Integrated Solution

To tackle these hurdles, OvalEdge will combine its advanced data catalog with Sisense's current infrastructure. Firstly, this integration will provide Sisense customers with the tools they need to address existing challenges. Secondly, the partnership will encourage more healthcare professionals to use Sisense's data governance toolkit.

## Business Case

### *Stage One: Building Trust Through Standardization*

The use of standard terms and definitions is vital in data governance and especially significant in the healthcare industry. Nevertheless, there is a distinct absence of consistency.

When you present users with consistent definitions, they have the means to interpret, examine, and collaborate on data. When there is no consistency in place, it becomes virtually impossible to trust available data because everyone must decipher it independently.

Length of stay is an excellent example to explain the negative effect of non-standardized definitions in the healthcare industry.

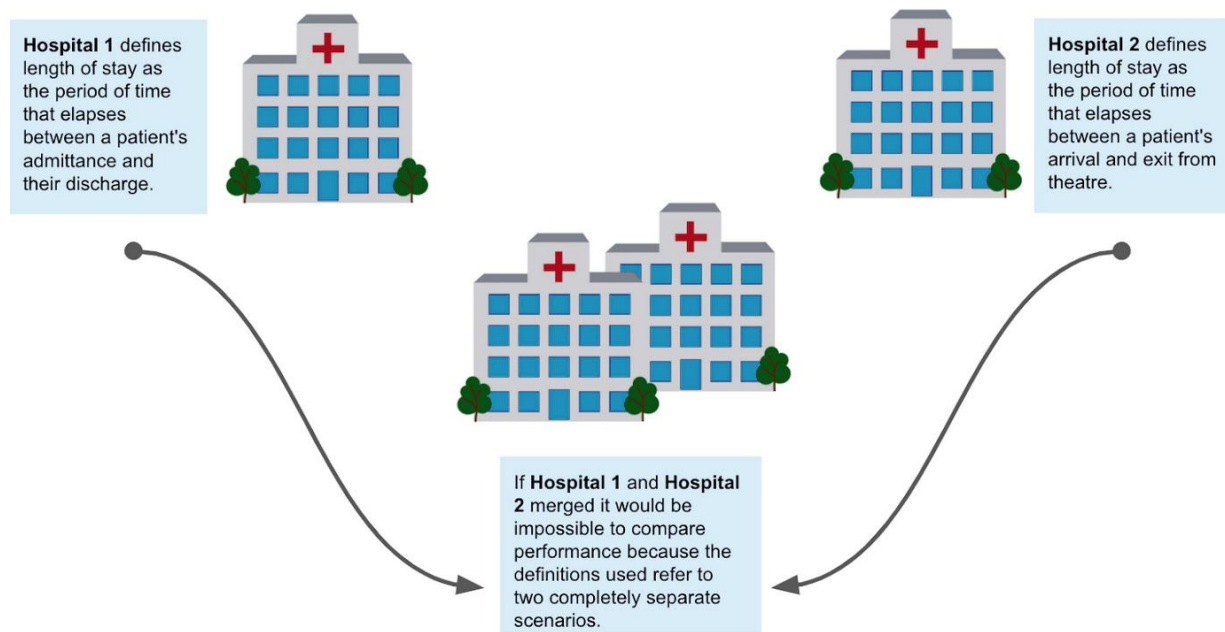
KPIs developed around the length of stay are not usually standardized—despite how important they are. Instead, Hospitals must use the data available to them to produce definitions. Unfortunately, there is hardly ever any consistency.

And why? Because the length of stay is a changeable KPI. For example, one data analyst may decide to record how long a patient stays at a hospital from when they are admitted to the time they are discharged. However, another may decide that it's more accurate to record the time it takes for a patient to enter and leave an operating theatre.



Medical professionals can only analyze data if they have access to it, and this access can vary dramatically across departments. It's only possible to develop definitions regarding the length of stay based on the data they have access to.

So, when hospitals try to consolidate their conclusions for comparative analysis, it can't be done because standardized definitions don't exist. As a result, a hospital could appear to be under-achieving in regards to performance, even if this isn't the case. Moreover, because the Sisense platform holds reports with conflicting definitions, it can appear to be providing users with untrustworthy data.



Data literacy is the key to building consistent, universally accepted definitions within healthcare institutions, and it usually happens in two distinct parts. If there are no definitions in place, then the procedure is relatively easy. Data governance teams can ask employees directly about their preferred terms.





After consensus, definitions are published in a business glossary. The exact formula is recorded, and everyone is notified—made literate. Moving forward, everyone will follow the rules.

Regrettably, this outcome isn't attainable for the majority of healthcare organizations. Many healthcare institutions have gone through a process of merger and acquisition. Consequently, numerous, conflicting definitions are already in place.

And this is where OvalEdge comes in.

*OvalEdge crawls databases seeking out these existing definitions. After they are located, they are cataloged, enabling Sisense users to have an overview of the whole data governance process. With this insight, users can develop and manage consistent definitions with ease.*

The following example shows how OvalEdge can work with Sisense 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 Sisense 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.





When it's not possible to define a single definition and reach a consensus, a committee may come up with more than one. In this scenario, the OvalEdge data catalog can be used to describe the different terms.

So, although there is no single standard definition in place, multiple definitions are documented within the OvalEdge catalog making it easy to understand what the definitions are and compare them with one another.

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

## ***Stage Two: Data Lineage Tools***

Along with consistent definitions, you can encourage trust in data by giving users the ability to track and validate data sources. For example, if you intend to create a patient information record, you must be able to confirm whether the data you are accessing is correct. It could be that a patient's information is dispersed over multiple data warehouses. If that's the case, how can you determine which one has the data you're looking for?

In another example, two KPIs might be referring to two different collections of patient data. These two databases could have two vastly different consequences. As a result, healthcare information is often riddled with discrepancies of this nature, so sources must be verified to build trust in the data.

This can be achieved through a dedicated certification program developed by a company's in-house data governance committee.

With certified patient information, users can distinguish certified and non-certified data even if multiple records exist. However, this is unachievable unless the data lineage is available.

When OvalEdge's lineage capabilities are combined with the Sisense platform, it becomes very easy for users to discover where their data comes from and if it's been certified. And, because users can refer to genuine data sources, the trust in the data increases.



## IT Ops

### ***Stage One: A Self-Service Platform***

A cutting-edge data governance tool, Sisense empowers users to interpret data at much greater speeds than with traditional instruments, like standard reports, produced separately for distinct objectives.

Users can access the Sisense platform through self-service, and this is one of its defining features. Using this approach, business users can pose queries independently using data they have in their possession. Yet, even though legacy reports are there, many users won't know that they exist, so IT teams will inevitably be asked to build them.

Compiling these reports can take a long time—sometimes days of development. However, if they were accessible and could be searched for, this process could be completed using self-service in a matter of hours, or less.

OvalEdge allows users to submit report requests using fields they are familiar with through the Sisense platform. This integrated process will increase the adoption of Sisense and save money thanks to reduced development time.

Rather than building reports continually, IT departments can instead point users to the fields they require on the Sisense platform so they can complete the request independently using self-service.

Next, we'll explain how to easily incorporate OvalEdge legacy reports into Sisense's self-service platform.

### ***Stage Two: Optimizing Legacy Reports***

Often, the data user is looking for already exists in a legacy report and business object. However, it may be tough to ascertain whether it is present on the Sisense platform.



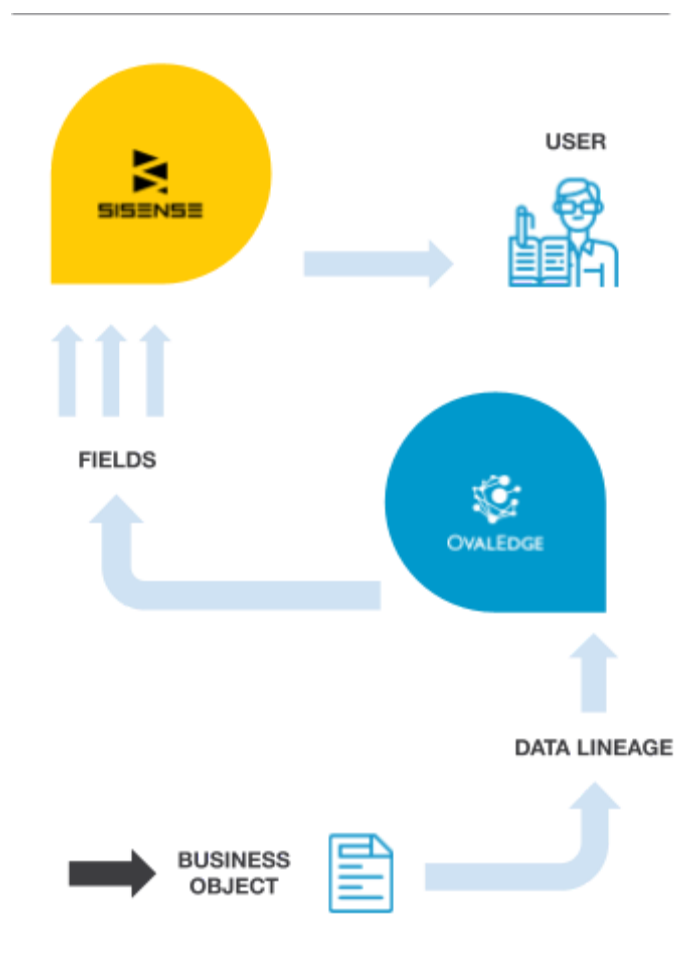
The process of confirming this demands a great deal of support from IT teams.

It's vital that IT teams can determine who the users of these early reports are so they can be steered toward Sisense where they can access the content through self-service.

Soon this model will become standard practice and legacy business objects and reports can be withdrawn.

Again, the solution is data lineage. With advanced data lineage tools, old data repositories can be designated fields and consolidated into the Sisense platform so users can quickly discover what the common definitions are, what the genuine data points are, and if the data they need is accessible.

Using this system, many reports in a business object tool can be consolidated using precise search fields. Data can then be consumed immediately from Sisense and IT departments don't need to maintain the numerous reports in a system. This process saves a lot of money that would be spent on IT and allows users to transfer to a more simple platform.





## Conclusion

The healthcare industry is a critical business area for data governance providers. Efficient data governance in this area not only enhances patient care but through innovation, can facilitate medical professionals to work to the best of their capabilities under optimal circumstances.

Together, OvalEdge and Sisense are improving Sisense's current healthcare offerings, creating a cutting-edge method that tackles the most important barriers in data governance for healthcare providers.