



**THE SINGLE SOURCE OF TRUTH:
MEASURE FACTORY REVOLUTIONIZING
DATA ANALYTICS FOR HEALTHCARE**

Written by Jennifer Bresnick



INTRODUCTION

The healthcare industry's movement towards value-based reimbursement has produced a number of challenges for organizations that wish to thrive in a high-pressure financial and clinical environment.

Eliminating administrative waste, getting ahead of negative clinical outcomes, and consistently delivering exceptional patient experiences require more than just laying out a strategic roadmap leading away from fee-for-service care.

Success requires organizations to have access to speedy, reliable, and truly actionable data-driven insights across every facet of the organization—insights that can help them move forward along the path to better outcomes, lower costs, and higher satisfaction for patients and their care providers.

Only a select few healthcare organizations have thus far cracked the code of leveraging data management and analytics to inform business decisions and guide quality improvement initiatives.

They may differ in size, type, and setting, but they all share one thing in common: they have all focused on developing a single source of truth that allows them to use their existing data assets to remain nimble and drive positive changes throughout the enterprise.

With Diver®Platform and Measure Factory® from Dimensional Insight®, healthcare providers can leverage a single location to define and apply validated, documented, and consistent business rules.

Measure Factory allows for key stakeholder collaboration on definitions for all key metrics and measures and acts as a centralized repository for the measures.

This capability, combined with Diver Platform's award-winning analytics functionality, fosters a trustworthy, democratic data environment that allows organizations to generate and apply actionable insights to their pressing business problems.



*"That's a game-changer for us. We're very lucky that our physicians really love their data. **They love being able to look at something they can trust in as close to real-time as possible, and use those insights in order to meet a goal.**"*

—Beth Grimes, RN, BSN, the Director of Enterprise Data Analytics at Gwinnett Medical Center in Lawrenceville, Georgia

TRANSPARENCY AND GOVERNANCE SUPPORT DECISION-MAKING AT BEACON HEALTH SYSTEM

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At Beacon Health System, a quickly expanding non-profit health system serving several communities in northern Indiana, aggregating data from disparate health IT systems used to be a perennial challenge.

“Like almost everyone else in this industry, we’ve been working with a lot of non-standardization, and a lot of data siloes that have made it difficult to get visibility into what we could act upon,” said Colin Nolan, data architect.

“If there is no way to clearly see everything you need in order to make decisions, then every component of the organization is going to be working off different assumptions. And that is going to reduce the ability to make truly informed and trustworthy decisions.”

Nolan works alongside Darrel Yoder, manager of business intelligence, to ensure the health system doesn’t fall victim to scattered data and conflicting insights. This is especially important where patient outcomes are concerned.

“If we are looking at specific populations, such as a set of stroke patients or pneumonia patients, and using data to make decisions about their care, we must make sure everyone interacting with that group of patients and their data can agree on the same definitions around why they’re included and what has to happen,” Yoder stressed.

“Diver Platform’s Measure Factory from Dimensional Insight lets us define those criteria and share them with our data analysts, data scientists, and business users, so that anyone who is trying to work with that data is using exactly the same cohort—and everyone else

who touches that data anywhere down the line is seeing the same thing, too. Transparency throughout the enterprise is absolutely key.”

A data governance council that includes stakeholders from across the organization also helps to foster transparency and trust, Yoder added, while giving all members of the team a chance to identify and solve potential pain points in the analytics process.

“It can sometimes get a little bit sticky if finance is looking at a metric using the posting date, but the clinical informatics team is looking at the numbers based on the service date,” noted Yoder. “It’s the same data, in essence, but it’s going to look very different if you don’t realize that each party is using its own definitions.”

A platform that allows organizations to develop a shared vision is essential for fostering collaboration and eliminating confusion, agreed Nolan.

“If you can set up your dashboards so you can see all the relevant parameters on one page, and allow people to illustrate what they mean when they use a certain definition, you’re going to have fewer misunderstandings about the data and what it represents to different groups,” he said.

“You have to have some type of tool—and an organizational structure to complement it—so that you can start pulling your data together, defining it, and governing it in a way that lets you maximize your data’s value.”



CENTRALIZED DATA ANALYTICS ALLOW GWINNETT MEDICAL CENTER TO ACT FAST ON REQUESTS FOR DATA

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Beth Grimes, RN, BSN, the director of enterprise data analytics at Gwinnett Medical Center in Lawrenceville, Georgia, also saw similar opportunities to bring stronger data management and governance into her organization.

Before Grimes was tapped to lead a new data analytics department, reports were usually generated ad hoc by individuals looking for specific answers in their areas of practice, without much communication with others who might have similar needs.

“When you have pockets of analytics throughout the organization, with each little project conducted independently, you end up with a dozen different people using their own definitions and parameters, even if they are all trying to work towards the same goals,” Grimes said.

“It was sometimes problematic when two people had different results coming from what they assumed was the same data set. That can be very limiting when an organization is trying to work towards quality improvement.”

With more than 4,200 staff members across two acute care hospitals, a maternity and newborn hospital, an extended care center, and a rehabilitation center, the busy health system could not afford to risk discrepancies in the interpretation of key metrics.

Gwinnett Medical Center is fortunate to have an executive leadership that is fully supportive of the data analytics team, said Grimes.

“The first thing my CIO does every morning is look at her data dashboard,” she said. “If there is ever some kind of issue or delay, I will absolutely get a phone call at 8:30 AM asking what the situation is and when it will be resolved, because that’s how valuable it has become to have access to these insights.”

“It’s very important to have that type of buy-in from your executive leaders, because they can help to move important initiatives forward.”

With the backing of the C-suite, the enterprise data analytics department started to implement data governance protocols and position itself as the go-to source for actionable insights.

“It’s important to create a balance between democratizing data access and creating strong governance,” Grimes explained. “We like to think of ourselves as the hub for answers. Anyone can ask for what they need. But because it’s all coming from one place using one definition, they can also trust that they are getting the same results based on the same data as the people before and after them in the queue.”

“That’s a game-changer for us,” she continued. “We’re very lucky that our physicians really love their data. They love being able to look at something they can trust in as close to real-time as possible, and use those insights in order to meet a goal.”

Grimes gets new requests for data on a daily basis, and her department prides itself on the ability to deliver trustworthy, timely, and

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accurate reports with a turn-around time that still surprises and delights the staff.

“We don’t want our clinicians and administrators waiting around for their data. It might impact care, or the lack of insight might affect a decision in the wrong way,” she said.

“Diver Platform’s Measure Factory solves that problem by making everything transparent, making it standardized, and making it simple

for everyone to agree upon a foundation of truth—and get access to that truth when and where they need it. With that baseline level of trust in place, it is so much easier to be sure that our organization is in sync with itself and that we can move forward together.”

COVENANT HEALTHCARE KEEPS ITS INDEPENDENCE WITH DEEP INSIGHTS INTO HOSPITAL READMISSIONS

*“Dimensional Insight helps lessen that development time, **which in turn takes a lot of burden off your team.**”*

Independent hospitals are facing some of the strongest challenges in a rapidly changing financial and clinical environment. But at Covenant HealthCare, a 640-bed stand-alone hospital in Saginaw, Michigan, access to meaningful insights isn’t one of them.

Nearly a decade after adopting an electronic health record, Covenant HealthCare decided to increase its focus on data in order to maintain its edge in a competitive setting. Establishing an analytics department was a logical next step for the hospital—and doing so revealed more opportunities than the organization initially expected.

“Because we didn’t have a centralized business intelligence team until about two years ago, we were a little bit used to getting three or four different answers depending on who you asked and what criteria they were using,” said Kenneth Arnold, RPh, manager of analytics.

Inflated readmissions numbers may lead to inaccurate fines and penalties while eroding organizational trust about the reliability of key reports.

“When we looked deeper into the problem, we saw that the previous tool had some patients in the numerator for readmissions and Dimensional Insight did not. We checked the discrepancies and found Diver was right,” Arnold explained.

“We know now that our readmissions data is solid, and we can make decisions with much more confidence. It was a very good lesson about the importance of having a single source of truth.”

Just like at Gwinnett Medical Center, the data analytics team at Covenant HealthCare enjoys strong executive support and broad organizational buy-in.

“The fact that our board is completely behind us allows us to instill confidence in our users that we have the answers they’re looking for. They know that they can ask us when they need some insight into a particular problem,” said Arnold.

“It’s important to make sure that the right people have access to reliable information when and where they need it. Under our old



system, only certain people had access to this data, and it was very difficult to run reports that might help them identify opportunities to improve.”

With Measure Factory, Arnold and his team can share reports much more widely, and can drill down into the details of readmissions for specific conditions, including stroke, COPD, heart failure, and knee and hip replacements.

“The definitions are aligned with CMS criteria, and we know that the results will help us improve patient safety and care quality,”

Arnold said. “Many organizations that have a homegrown solution are constantly tweaking and changing their tools to meet criteria that are updated every year.”

“Dimensional Insight helps lessen that development time, which in turn takes a lot of burden off your team. It’s fast and it’s easy to work with. Once you get your business rules in there and validate them, it just works. That’s fairly rare when it comes to health IT, and it’s very nice to experience.”

CONCLUSION

For healthcare providers looking to break down data siloes and improve collaborative decision-making across their organizations, a single source of truth is essential. Shared definitions that produce trustworthy results can enable organizations to move beyond patchwork analytics projects and unclear ownership of business intelligence initiatives.

Organizations working toward quality improvement goals or financial targets should consider unifying their data analytics efforts under a single team or department as a first step towards using their data assets to solve common business problems.

Implementing a strong data management and governance framework and adopting a health IT platform that can assist with the challenge of creating, maintaining, and deploying standardized measures can set healthcare organizations on the path to leveraging actionable insights to support the delivery of high-quality patient care.

With Dimensional Insight as a partner, healthcare organizations can make the right decisions at the right time with an unprecedented level of confidence in their data-driven insights.

Consistency brings clarity, and Measure Factory simplifies the process of eliminating discrepancies between data definitions, allowing teams to collaborate more effectively, remain nimble in a changing environment, and achieve high-quality results across the entire enterprise.

ABOUT DIMENSIONAL INSIGHT

Dimensional Insight® is a leading provider of analytics, data management, and performance management solutions, offering a complete portfolio of capabilities ranging from data integration and modeling to sophisticated reporting, analytics, and dashboards. The company is a seven-time Best in KLAS winner in healthcare business intelligence and analytics, most recently ranking #1 in 2020. Founded in 1989, Dimensional Insight has thousands of customer organizations worldwide. Dimensional Insight consistently ranks as a top performing analytics organization by customers and industry analysts in its core market segments including healthcare, manufacturing, and beverage alcohol.

For more information, please visit <https://www.dimins.com>.

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Jennifer is the lead editor for HealthITAnalytics.com. She is a graduate of Mount Holyoke College with a major in history. In addition to her interests in healthcare data management and systematic improvement, she is a novelist, amateur target archer, and avid crochet enthusiast.

