Case Study:
GWINNETT MEDICAL CENTER

Gaining Insight into Surgery Utilization
to Improve Satisfaction

Quick Facts:

Organization: Gwinnett
Medical Center (GMC)

Industry: Healthcare

Location: Metro Atlanta, Georgia

Revenue: $809 million

Beds: 553

Employees: 5,500

Customer since: 2015

Website:
www.gwinnettmedicalcenter.org

Solution: Diver Platform®
with Measure Factory®,
Surgery Advisor™

KEY TAKEAWAYS

❏ *Diver® and Measure Factory® provide Gwinnett Medical Center with trusted,
well-understood data across the organization.*

❏ *Dimensional Insight®'s Surgery Advisor™ has enabled GMC to better understand
procedure start and end times, as well as turnaround times.*

❏ *The data has allowed the organization to better anticipate surgery add-ons, which
the hospital hopes will improve associate satisfaction and improve retention.*

BACKGROUND

Gwinnett Medical Center (GMC) is a 553-bed
medical system based 30 miles northeast
of Atlanta. The organization employs more
than 880 physicians and 5,500 associates. It
has more than 30,000 inpatient visits and
630,000 outpatient visits each year. The
hospital's mission is to provide quality
health services to its community. GMC's
values include: safety first and foremost, the
patient is at the center of everything the
hospital does, respect for the individual, the
pursuit of excellence, promotion of positive
change, and service to the community.

As part of how it lives its values, GMC
strives to identify new and better ways
of accomplishing its goals through
responsible risk-taking, creativity,
continual learning, and collaboration.

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time of day that all you're doing is making people work 10 and 12-hour days, Surgery Advisor helps give me a
better handle on what we are actually doing in terms of volume so we can match the resources to the work load.
It also helps me see if I need to look at something differently or if I should be asking for additional employees in
certain areas."*

— Greg Giddens, System Director of Surgical Services at GMC

> "*I need to make sure I have the right amount of resources, whether it be personnel or equipment, at the right time of day. And we're doing that by looking at the data in Surgery Advisor.*"
>
> —Greg Giddens, System Director of Surgical Services at GMC

THE CHALLENGE

Located so close to Atlanta, GMC is in an area with a very competitive healthcare market. This means that the organization has to not only provide top-quality medical services to attract patients, but it also has to provide its employees with the right benefits, work-life balance, and job satisfaction so they want to stay at the hospital and not move to one of the many other institutions in the area. GMC believes that happy associates lead to happy patients.

With many new surgical centers opening up that offer more regular hours, GMC needs to find ways to staff its surgery blocks in a more dependable manner. Associates need to better understand what their shifts will look like instead of being surprised at the end of the day with a number of "add-ons" (trauma or emergent surgeries that must be done within a certain window of time) at the end of a surgical block. In addition, GMC needs to be able to measure the efficiency of its surgical blocks. Are surgeries starting on time? What is the total time of each procedure? What is the turnaround time between procedures? The hospital wanted to better understand these metrics to both improve the associate experience as well as find opportunities to reduce costs associated with inefficiencies.

Finally, GMC has data from multiple sources across the organization. This includes clinical, financial, and operational data. The hospital found it was difficult to bring this data together and to ensure that all the organization's departments were looking at the same data in the same way.

THE GOAL

GMC wanted to implement a data management and analytics platform that would enable it to:

❏ *Bring its clinical, financial, and operational data into one location and provide a trusted source of data that all of its departments can rely on.*

❏ *Provide insight into its surgical operations that would enable the organization to accurately staff surgery rooms.*

❏ *Maximize the efficiency of its surgery blocks and ensure that providers are starting on time.*

❏ *Provide staff with a self-service analytics platform that they can use to ask questions and improve their decision-making process.*

THE SOLUTION

GMC implemented Dimensional Insight's Diver Platform in 2015 in order to gain greater insight into its data and provide users with dashboards for improved decision-making. One of the first uses of Diver was to support a new intensivist program that GMC started in its four ICUs in early 2016. Diver provided the organization with a baseline to show how the hospital and individual physicians performed on a variety of measures. It could then use this information to determine best practices in the ICU and measure physician performance.

Based on its success with Diver, in 2017, Gwinnett sought to expand its analytics implementation. Dimensional Insight had introduced Measure Factory, which provides

organizations with hundreds of measures based on CMS standards. For Gwinnett, the trust provided by Measure Factory was critical.

"I wanted all of our analytics in one place," says Beth Grimes, director of enterprise analytics at GMC. "That's important not just for our data team so we're building in the same place, but it's also important for user access. If all the data is in one system, it makes it very easy for our users to access the data and use it to make decisions."

One of GMC's main analytics applications is in the surgery department. The hospital is using Dimensional Insight's Surgery Advisor, built on Diver technology. Surgery Advisor enables GMC to better manage

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—Beth Grimes, RN, BSN, the Director of Enterprise Data Analytics at GMC

the efficiency of its 25 operating rooms at the main Lawrenceville campus and 10 operating rooms at the Duluth location.

As Greg Giddens, system director of surgical services at GMC explains, the hospital has a good understanding of its surgery block time – those procedures that are blocked out ahead of time by surgeons – but it needs to better understand its add-on surgeries, which are those that need to get done within a certain window of time.

"What I'm being asked to do is look at metrics on how I should try to staff," says Giddens. "I need to make sure I have the right amount of resources, whether it

be personnel or equipment, at the right time of day. And we're doing that by looking at the data in Surgery Advisor."

With Surgery Advisor, Giddens and his team are able to understand and predict add-ons based on the data that's already been collected. This understanding enables him to more reliably staff operating rooms so he is minimizing the number of times he has to ask associates to stay at the last minute. This is critical for associate satisfaction.

"You can burn people out if you're understaffed, or if you're staffed well but you run resources so high at the wrong time of day that all you're doing is making people work 10 and

12-hour days," says Giddens. "Surgery Advisor helps give me a better handle on what we are actually doing in terms of volume so we can match the resources to the work load. It also helps me see if I need to look at something differently or if I should be asking for additional employees in certain areas."

In addition, the surgery team is able to examine start times and turnaround times in Surgery Advisor. This helps the organization see if there are certain surgeons who are less punctual in starting surgeries, and can help the team reallocate resources to match actuals. By verifying the total time of surgeries, the hospital can ensure that it is billing and reimbursing staff correctly.

THE RESULTS

While GMC is still in the early stages of deploying Measure Factory and Surgery Advisor, the early results are promising. Grimes says the trust in data provided by Measure Factory is invaluable.

"Measure Factory has given us a shift in data utilization," says Grimes. "The really big win is that our users are now able to immediately see the data. They don't have to manipulate and manage the data – they're able to look at it and glean trends and make decisions more quickly."

With Surgery Advisor, GMC has been able to gather accurate data on surgery start and end times, as well as turnaround times. This has enabled the organization to have discussions about how to increase on-time starts as well as gain efficiencies in the OR. In addition, the data has enabled the organization to better understand its add-on utilization. While this will never be a perfect science since GMC can't fully anticipate the unexpected, it has helped the hospital towards its goal of having satisfied associates. As Giddens says, "A happy associate will bring you a happy patient."

WHAT'S NEXT

As GMC looks towards the future, the organization is looking to bring more of its data into Diver and Measure Factory. Grimes envisions having one central location, from which users throughout the organization can access data that is trusted and well-understood.

She is also hoping the data can help Gwinnett figure out how to deal with a growing population in the area without increasing the hospital's physical footprint. "This is still a very big, growing community," Grimes says. "How do we keep patients here locally without them going to other hospitals? And how do we manage our ER wait times with our capacity constraints? Those are some of the big questions we're thinking about right now."

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 an eight-time Best in KLAS winner in healthcare business intelligence and analytics, most recently ranking #1 in 2021. 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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