Meriter Health Services is a Wisconsin-based healthcare provider committed to using information technology for delivering efficiencies and improving patient care. Recently named one of the nation’s “most wired” healthcare organizations, Meriter deployed a “self-serve” business intelligence (BI) solution based on the Microsoft BI stack to extend the value of its electronic health record solution. As a result, the hospital helps orthopedic surgeons provide more effective patient care and saves more than US$1 million yearly on the purchases of implant devices. With the solution, the hospital also helps individual physicians develop more standardized practices and protocols, a key component of quality.

Summary

With a workforce of 3,300 people, Meriter Health Services provides healthcare services to the people of Madison, Wisconsin, through a 448-bed hospital and a growing network of community clinics. In recent years Meriter has won multiple accolades, including listings in Thomson Reuters’ Top 100 Hospitals and in Hospitals and Health Networks’ Most Wired healthcare organizations, and a Platinum eHealthcare Leadership Award from Strategic Health Care Communications.

In keeping with its embrace of information technology, the organization recently deployed a BI solution based on Microsoft SQL Server 2008 data management software and other technologies in the Microsoft BI stack. Deployed with the help of Microsoft Partner Network member Perficient, the solution integrates data from analytics and electronic health record (EHR) systems at Meriter and delivers it to administrative and clinical employees through an existing collaboration environment based on Microsoft SharePoint Server 2010.

With the BI solution, Meriter is providing orthopedic surgeons accurate benchmark data and hospital recommendations on implant-device purchases. This enables the surgeons to more easily select the device that is most appropriate for a given patient while helping the hospital to use precious healthcare dollars more effectively—including savings of nearly a million dollars in the first eight months following deployment of the solution.

Meriter is also using the BI solution to enable physicians to closely monitor and track their practices and processes. This helps the physicians to deliver care tailored for a given patient while developing protocols that are more standard and consistent across the hospital.

“In only eight months, the Meriter orthopedics practice has saved more than $900,000 on implant devices. That’s 18 to 20 percent of the practice’s implant expenditures.”

Sue Erickson, Vice President of Professional Services, Meriter Health Services
The Full Story

The Value of Data

Meriter Health Services has been caring for the people of Madison, Wisconsin, and surrounding areas for more than 100 years. Since its founding in 1898, the organization has grown to encompass a 448-bed hospital, nearly a dozen community clinics, home-health and laboratory services, a nonprofit foundation, and part ownership in an insurance provider. Meriter Hospital has twice been named among the nation’s “top 100” hospitals by the highly respected Thomson Reuters program and among the nation’s “most wired” hospitals by Hospitals and Health Networks magazine.

According to Heidi Rozmiarek, Manager of Business Applications at Meriter Health Services, one of the initiatives that helped her organization win the “most wired” recognition was the opening of a new data center in 2010. As part of that initiative, Rozmiarek and other Meriter IT executives committed the organization to optimizing and extending the role of its electronic health records (EHR) system in helping the hospital to make smarter decisions on matters ranging from supply-chain standardization to clinical quality and productivity.

In so doing, Meriter wanted to make it easier for physicians and other clinicians to access the information they need to provide optimal care for patients, without having to engage IT professionals to prepare specialized reports.

Orthopedics provides an excellent example, Rozmiarek says.

“Orthopedic surgeons are committed to providing the most suitable and effective implant devices for treating patients with hip, knee, and spinal injuries,” Rozmiarek points out. “But in the past, these physicians had to make their selection based almost exclusively on their individual experience, because the hospital had no easy way of giving them clear and comprehensive data on how the devices compared with one another.”

An Integrated Experience

Starting in 2009, Rozmiarek and her colleagues decided to address these and related challenges by making the information generated by Meriter’s analytics and EHR systems more timely and accessible through an integrated business intelligence (BI) solution. The team considered deploying SAP Business Objects and other tools, but ultimately decided on a solution based on Microsoft SQL Server 2008 and other technologies in the Microsoft BI stack.

As Rozmiarek explains, her team decided on a Microsoft-based solution because they wanted to provide clinicians and other users a seamless, “self-serve” environment.

“We wanted to deliver the BI experience to users through our existing collaboration environment, developed on Microsoft SharePoint Server 2010,” Rozmiarek says. “We also wanted users’ interactions with the BI solution to be a natural part of their everyday work experience, which has long been based on Microsoft Office, most recently Microsoft Office 2010.”

For help with the deployment, Meriter engaged Perficient, a local-area member of the Microsoft Partner Network with Gold competencies in business intelligence and other disciplines. Specialists from Perficient gathered objectives, defined scope, and worked side by side with Rozmiarek and her team to deploy the BI solution in late 2011 to the orthopedics practice at Meriter Hospital and to the Meriter Medical Group, which administers the clinics. Meriter plans for an enterprisewide deployment by early 2014.

Nearly $1 Million in Savings in Eight Months

With deployment of the BI solution in the Meriter orthopedics practice, surgeons have accurate benchmark data on the performance of the various implant devices and timely information on which devices the hospital recommends.

“Physicians finally have an easy way of accessing data on the various devices and hospital recommendations on which device is best-suited for a given patient and clinical scenario,” says Dr. Richard Lemon, Orthopedic Surgeon at Meriter. “This helps physicians maintain their focus where they want it to be—on giving their patients the best care possible.”

Patients also benefit when hospitals use precious healthcare dollars most effectively, and by standardizing its purchase process for implant devices Meriter is doing that, as well. “In only eight months, the Meriter orthopedics practice has saved more than [US]$900,000 on implant devices,” reports Sue Erickson, Vice President of Professional Services at Meriter Health Services. “That’s 18 to 20 percent of the practice’s implant expenditures.”

Beyond helping orthopedic physicians select the most appropriate implant device for patients, the BI solution helps physicians develop and maintain a more consistent and standard set of protocols. “With the BI solution, physicians can easily see how their practices compare with those of their colleagues,” Lemon explains. “Physicians can then make their practices more standardized across the hospital, a key component of quality.”

Support for Growth

Deployment of the BI solution in the Meriter Medical Group has also shown positive results, as financial analysts are finding it easier than ever to determine and calculate compensation packages for physicians.

“This helps us compete more effectively for the talented physicians and other clinical professionals who care for patients at our growing network of clinics,” Rozmiarek says. “That is central to our efforts to bring care closer to patients throughout our community.”