

Business intelligence helps Maryland facility thrive with value-based care

By [Greg Slabodkin](#) | Published July 06 2016, 6:35am EDT

As the healthcare industry looks to adopt alternative payment models based on quality rather than quantity, Western Maryland Health System in Cumberland, Md., has shifted from a fee-for-service to a value-based care model using business intelligence technology.

In the process, the healthcare organization has received \$1.3 million in quality-based reimbursements from Maryland's Health Services Cost Review Commission (HSCRC), which reviews and approves "reasonable" hospital rates and publicly discloses information on the costs and financial performance of hospitals in the state.

At the same time, the health system went from dead last out of 46 Maryland hospitals in terms of in quality-based reimbursement measures to first in the state. Maryland was the first state to be granted a waiver from Medicare rules, giving it flexibility to implement its own quality-based program under the HSCRC.

Colby Lutz, business intelligence analyst for Western Maryland Health System, credits the Diver platform from Dimensional Insight with helping the 205-bed hospital identify ways to reduce costs while improving health outcomes for patients.

"Previously, we had different pieces of health data in different systems, and couldn't bring it together to show patient care across the entire healthcare spectrum," says Lutz. "What having Dimensional Insight has allowed us to do is create a central repository where we can utilize data from each of their own

databases, bring it together, perform calculations and output whatever we need on a real-time basis to make real-time changes.”

The data platform enables the health system to make crucial adjustments through analytics that reflect care delivery trends and optimize quality-based reimbursement as well as the overall quality of patient care.

“It’s put us into a position where we can focus more on population health,” observes Lutz. “From the ground up, it was fairly easy to implement. It took us approximately four months to go live from the start of the implementation. It required a little bit of database background so that we could then pull what we needed from the right tables and right systems.”

Lutz helped create a data governance committee to determine the measures that would be tracked across the entire health system. “We’ve been able to internally develop reports with more real-time data,” he says. For instance, the organization is able to create “discharge disposition” reports that compare data from multiple systems, highlighting and resolving patient inconsistencies while enhancing the integrity of the data. Before implementing such a report, there were about 150 patient mismatches per month. However, those kinds of errors have now been eliminated, and that’s resulted in improved follow-up care with patients, he adds.

“We can make sure that we’re not missing anyone, so it’s actually increased our data integrity a great deal,” says Lutz. “We’ve received a lot less corrections or data issues back from HSCRC. Across the board, it’s been good.”

To reduce hospital readmissions, the organization leverages a “readmission risk analysis tool” using the Diver platform to conduct the necessary patient interventions. Because Western Maryland was able to reduce readmissions, it has avoided penalties from HSCRC, which has a Readmission Reduction Incentive Program that uses a continuous preset payment scale to provide rewards and penalties in proportion to each hospital’s improvement in their case-mix adjusted readmission rate.

“It’s not our goal to keep people out of the hospital. It’s our goal to provide healthcare in the most appropriate setting at the most appropriate time for the patient,” Lutz says.

To further improve care and respond to quality incentives, Western Maryland Health System created the Center for Clinical Resources to provide patients with support in managing chronic medical conditions such as diabetes, heart failure and chronic obstructive pulmonary disease. The aim of the center is to effectively manage patients who have a chronic disease in an outpatient setting and to reduce their use of emergency department and inpatient services.

Compared with the rest of the country, Maryland's readmission rates are high. To address this problem, the Center for Medicare and Medicaid Innovation All-payer model demonstration contract—which began on Jan. 1, 2014—has established Medicare readmission reduction targets that require Maryland hospitals to be equal or below rates of national Medicare readmissions by 2018.