Michigan's collaborative quality improvement program cuts costs, improves patient care

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In a paper published today in the professional health care journal, *Health Affairs*, Blue Cross Blue Shield of Michigan and the University of Michigan Health System report that their model for collaborative health care quality improvement has measurably improved safety and quality in several clinical areas, and has saved millions in health care costs.

Collaborative quality initiatives, the term given to the payer-hospital initiatives aimed at improving safety and quality of specific surgical procedures and clinical practices, have been shown to outpace the positive results of similar, national programs.

For example, an initiative aimed at reducing 30-day post-surgical complication rates accomplished faster improvement in Michigan from 13.1 percent to 10.5 percent than a similar national program that saw a smaller drop from 12.5 percent to 11.5 percent.

The CQI model also produces cost savings from the decrease in complications and improvements in safety. Analysts estimate the Michigan reduction in surgical complications resulted in a reduction of $20 million annually, far exceeding the $5 million annual cost to administer the initiative.

"This model works because it is a true collaboration among participating hospitals and physicians. The structure encourages participants to share

information, determine what works to improve patient outcomes and put that knowledge into practice," says lead author David Share, MD, MPH, vice president, Value Partnerships, Blue Cross Blue Shield of Michigan.

Blue Cross Blue Shield of Michigan, the state's largest insurer, provides the foundation and the funding to administer the CQIs. Each initiative has a data registry, maintained by a third party coordinating center. The University of Michigan Health System, which serves as the coordinating center in nine of the 10 CQIs, collects and analyzes the data for the surgical CQIs discussed in the paper. The data are confidential and not accessible to Blue Cross.

"The role of an independent, clinical coordinating center is very important to the success of this model. Clinical leaders and the Michigan Blues recruit hospitals throughout the state for participation," says Marianne Udow-Phillips, director of the Center for Healthcare Research and Transformation and co-author.

"The University of Michigan, the coordinating center for most of the collaboratives, maintains the confidentiality of the data which helps participating hospitals to share opportunities for improvement without concerns about how a payer might use the information, she says.

"This model works because Michigan hospitals and physicians are collaborating, not competing with each other," says John Birkmeyer, MD, director of the Center for Healthcare Outcomes & Policy, University of Michigan and co-author. "Hospitals and physicians are not only getting feedback on their performance. They are learning best practices from each other and from the robust clinical data collected by the programs."

The published paper also reports the following outcomes and results from the collaborations:

o In the bariatric surgery initiative, overall complication rates from bariatric surgery in Michigan declined from 8.7 percent to 6.6 percent from 2007 to 2009.

o The rate of death following bariatric surgery in Michigan fell from 0.21 percent in 2007 to 0.02 percent in 2009. This rate of improvement exceeds other states.

o Overall complication rates from cardiac procedures to treat diseased arteries declined in Michigan from 3.8 percent to 2.3 percent from 1998 to 2002.

o As a result of data sharing and best practice discussions, a change in practice in bariatric surgery saves payers more than $4 million each year.

Overall, the collaborative quality improvement model has achieved more substantial clinical improvement than similar, national models. The authors believe that the CQI model has great potential to impact clinical quality and safety for large populations of patients.

As the country moves toward "population-level" health management and accountable care organizations, the authors predict the CQI model will be particularly relevant.

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