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How Cone Health is putting data to work: 5 Qs with health economics director Monica Schmidt

As the executive director of health economics at Cone Health — a large health system based in Greensboro, N.C. — Monica Schmidt says her job is to find cost-effective care for patients.

That means care that improves patient outcomes and reduces cost of care.

Becker's Hospital Review recently spoke with Ms. Schmidt about Cone Health's quality improvement and cost savings initiatives, lessons learned and advice for other organizations.

Note: Responses have been edited for length and clarity.

Question: What are the biggest challenges facing health systems like Cone Health today?

Monica Schmidt: Of course, COVID-19 recovery is challenging for every health system and we're still experiencing that. But even before the pandemic, the biggest challenge was and still is the ongoing expectation to improve patient outcomes and reduce costs at the same time.

Q: With this constant focus on quality improvement and cost savings, what has Cone Health done historically to reduce unwarranted variation? What is Cone Health doing now?

MS: Reducing unwarranted variation has always been a big challenge. Historically, to see where we could improve, we had to rely on data from quality vendors that was at times two to six months old.

About four years ago, Cone Health set up our own robust enterprise data warehouse. Our data science team initially used this data warehouse for basic analyses and reporting. We are now using it to find care variation, solve

problems and provide prescriptive analytics. This data warehouse enables us to see data in almost real time. We can identify opportunities to improve outcomes and reduce costs, and can get in front of problems.

Q: Can you give an example of how Cone Health has reduced unwarranted variation?

MS: I can give two examples.

First, we saw a rising incidence of post-operative pneumonia. We realized we had an opportunity to implement chlorhexidine rinses for patients prior to surgery. It's something our guidelines recommended that we weren't consistently doing. We had care variation, as some service lines were doing this rinse and some weren't. So, we included the chlorhexidine rinse in our systemwide order sets, we did education — and over the last three months we've seen our elective postoperative pneumonia rates drop to zero. That's a huge improvement.

The second example is greater use of order sets across the entire system. All order sets are guideline and evidence-based. These order sets walk providers through the right care for the right patient at the right time. Just looking at order sets across four chronic conditions, we've saved $4.1 million per year and have driven down patient mortality. Savings came from reduced length of stay and reduced therapeutic services and drugs.

Q: How has Cone Health engaged clinical and operational leaders in this process?

MS: Initially, clinical providers often said, "Not all patients are the same and I can't practice medicine in a standardized way." But our focus is on decreasing *unwarranted* variation.

We started by first educating clinicians on the influence unwarranted variation has on outcomes and on cost of care. Bringing those two things together is what's really important. Our approach is to use data assets to identify variation and to take that information back to our providers to inspire them. We also have built high-performing teams around quality variation events so we can work to improve outcomes.

Q: What advice would you give to other health systems looking to begin tackling quality improvement?

MS: Don't always rely on the CMS publicly reported metrics. A lot of cases in your health system that are adverse events and safety events may not be included in CMS data or other types of typical quality data. And, that data often lags months behind.

You need to get a more upfront view either through your own enterprise data warehouse or a tool like Strata. We do both. We use data from our enterprise data warehouse and data from Stata to understand and get in front of sentinel events. This can help us, for example, prevent a case of pneumonia from ever happening.

Also, I recommend health systems focus on implementation and create high-performing clinical teams that work together to examine a single event. This helps get input and buy-in from clinical and operational providers. We have had a lot of success by following that strategy.