My Wake-Up Call: How Data Saves Lives
By Bryan Oshiro

My wake-up call came the day that the medical director of the neonatal intensive care at Intermountain Health Care called me down to the nursery. He pointed out the babies who were on ventilators — and revealed that all of them had been electively delivered before 39 weeks. He said to me, “These kids shouldn’t be in this condition. As the medical director of the Women’s and Children’s service line, you’re to blame.” Well, that lit a fire under me.

At the time, the American College of Obstetricians and Gynecologists stated that physicians really shouldn’t electively induce before 39 weeks, but it was being done anyway. Choosing when to deliver a baby had become a matter of convenience for both patients and OBGYNs.

This was at the time that Drs. Brent James and David Burton were developing and implementing their innovative infrastructure for quality improvement. So my first experience with a truly data-driven, enterprise-wide initiative was the pioneering effort we set up to reduce the number of elective deliveries before 39 weeks — which, by the way, has now become a national benchmark.

In our newly created Women and Newborn Clinical Integration Program, we decided as our initial project to engage our physicians and nurses to improve neonatal outcomes by reducing elective deliveries before 39 weeks. We felt strongly that anyone affected by the initiative — anyone we were asking to change the way they practiced medicine — needed to be involved in the quality-improvement process. So we made presentations about the dangers of early deliveries to our OBGYNs. And what do you think they said? You guessed it: “This is fascinating information, but our patients are different. The data you’re presenting comes from patients in different demographics than ours. Our population is healthier and our outcomes are superior.”
We could not deny that they did have a point. The studies that we presented, did not necessarily reflect their patient population or their particular practice. We then went to our data manager and analyst and asked for two things:

1. Give me all the data you have on normal newborns electively delivered between 36 and 42 weeks gestation to healthy mothers without medical complications and,

2. Tell me if these newborns were (a) admitted to the NICU, (b) had respiratory distress, or (c) were intubated.

When we looked at the data, the results were striking. We sat down again with the physicians with our own data from our own population and were able to show them that babies born after 39 weeks had markedly better outcomes. This was an “a-ha” moment for many OBGYNs.

Now, our engagement effort didn’t stop at that point. Physicians still had questions. We still experienced pushback. (Let’s face it; everyone wants to be an exception.) But when we began to implement and enforce best-practice policies, physicians understood why. They accepted the evidence.

Engaged Physicians Save Lives

The importance of engaging physicians in improving the cost and quality of care cannot be overstated. I speak to physicians often about this topic.

As physicians, we must do our utmost to improve the quality and cost of care. We cannot make excuses about how busy we are or because we do not have control over quality issues. But here’s the thing about quality improvement. Every patient encounter is an opportunity to learn and promote optimal methods of care.

Back in 1999, the Institute of Medicine published its report To Err Is Human, which revealed that as many as 98,000 people die each year in U.S. hospitals due to preventable medical errors. That’s the equivalent of a jumbo jet full of people dying every day. Who would fly if the airlines had such a record? The tolerance we have in the medical community for medical errors is astounding. The truth is that we, as healthcare providers, carry a big burden, and we need to own it.
We should be passionate about improving the quality of healthcare. Every error that leads to patient harm or death has a tremendously negative impact — not only for that patient but for his or her loved ones and the team of providers who were caring for that patient.

Analytics and Data Drive Physician Engagement

Physicians have a very difficult task. Medicine is constantly changing and physicians in addition to taking care of patients, charting, billing and running a practice, must keep abreast of the latest medical updates. In addition, they must learn quality improvement principles, working in teams and utilizing evidenced based protocols, much of which were developed after they had completed training.

It has been my experience that the one thing that helps physicians recognize and accept the need to change the way they practice is data. I’ve been involved in many quality improvement efforts and have had to approach many physicians to inform them that their quality or cost outcomes aren’t measuring up. Without fail, their response is the same: “My patients are sicker. I take on more complicated cases.” For the most part, they are very sincere. They believe that their patients need to be cared for differently, that they need more antibiotics, or that they need to stay in the hospital longer.

This is where the data comes in. You can risk-stratify the patient population and show physicians what their patient profiles are like and how they compare with their peers. Once they can see issues in an objective way, then they consider the possibility that perhaps the way they practice medicine can be improved. The process works even better if you can use the data to offer a solution; to drill down into the data to pinpoint why a certain physician has the better outcomes and then share those best practices.

Tackling quality improvement isn’t necessarily easy. Sometimes you feel like you’re navigating in a dark tunnel. Think of data as the light. You can’t get out of the tunnel without it. It points the way.
Engaging Physicians and Transforming Healthcare

My elective-deliveries experience illustrates just one example of how sustainable quality improvement is achieved. It requires engaged physicians; it requires data; and it requires strong leadership to reach out to physicians and convince them that embracing the initiative is the right thing to do for patients.

I began by stating that physicians carry responsibility for the quality of care they deliver. I want to reach out to all physicians and help them with this burden. That is the main reason I joined Health Catalyst®. I had a wonderful job at a university. It gives me personal pleasure to do research and teach and train medical students and residents. But the work that we’re doing at Health Catalyst can have an even greater influence. It can affect the entire healthcare system. The knowledge and skill I’ve been fortunate to gain over the years can be exponentially transferred to facilities across the United States. It is very rewarding to join a team that can help health systems across the nation implement the most effective methods for improving health care delivery and engaging physicians in data-driven improvement. What a great opportunity! I don’t know if I’m talented enough to do it, but I have an obligation to at least try — because I feel this burden.
About the Author

Bryan Oshiro joined Health Catalyst in January 2014 as the new Medical Director. He received his medical degree and completed his residency in Obstetrics and Gynecology at Loma Linda University School of Medicine and completed his fellowship in Maternal-Fetal Medicine at the University of Texas in Houston before moving to Salt Lake City to join Intermountain Health Care and served as the Medical Director of the Women and Newborn Service line. He also was a member of the department of Obstetrics and Gynecology at the University of Utah. He then joined Loma Linda University where he became the division director of Maternal-Fetal Medicine and the vice-chairman for the department of Obstetrics and Gynecology. He co-chairs the American College of Obstetricians and Gynecologists Patient Safety Committee for District IX and received the Elaine Whitelaw Service Award from the March of Dimes for his work on a 5 state initiative to eliminate elective deliveries less than 39 weeks gestation.

Resources

- To Err is Human [http://www.iom.edu/~media/Files/Reports%20Files/1999/To-Err-is-Human/To%20Err%20is%20Human%201999%20report%20brief.pdf](http://www.iom.edu/~media/Files/Reports%20Files/1999/To-Err-is-Human/To%20Err%20is%20Human%201999%20report%20brief.pdf)

About Health Catalyst

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Health Catalyst’s platform and applications are being utilized at leading health systems including Allina Health, Indiana University Health, Memorial Hospital at Gulfport, MultiCare Health System, North Memorial Health Care, Providence Health & Services, Stanford Hospital & Clinics, and Texas Children’s Hospital. Health Catalyst investors include CHV Capital (an Indiana University Health Company), HB Ventures, Kaiser Permanente Ventures, Norwest Venture Partners, Partners HealthCare, Sequoia Capital, and Sorenson Capital.

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