

## Insights

# Collaborative Approach Helps Minnesota Accelerate Improvement

Many vital systems, such as the lungs and brain, complete their development during a baby's last weeks of gestation. So, when a baby is born preterm (before 37 weeks) there is an [increased risk](#) of health-related complications and infant mortality.



Across the country, efforts are being made to reduce preterm births by increasing gestation lengths in pregnant women.

Because nearly 1 in 10 babies is born preterm in the United States, reducing preterm births is one of six key strategies identified by the NICHQ-led Collaborative Improvement and Innovation Network to Reduce Infant Mortality ([Infant Mortality ColIN](#)) to bring down the country's high infant mortality rate.

Across the country, efforts are being made to reduce preterm births by increasing gestation lengths in pregnant women. Minnesota's Department of Health began working towards increasing the number of full term births in 2015 by focusing efforts to increase awareness and the use of 17-alpha hydroxyprogesterone caproate (17P) in women who have had previous

spontaneous singleton preterm births. [Evidence shows](#) 17P can increase the length of pregnancy and reduce the rate of preterm births by about 40 percent for this population.

In 2014, Minnesota's birth rate was at an "acceptable" 8.7 percent. Yet, when broken down by race, there was a significant racial disparity for black Americans and Native Americans, at 9.6 percent and 12 percent respectively.

"The research and support available through the Infant Mortality CoIIN made the use of 17P an obvious place to start to improve the health equity in our population" says Cecilia Wachdorf, CNM, PhD, who leads the project at the Minnesota Department of Health (MDH).

But sometimes there is a disconnect between knowing what needs to be done and implementing it in practice. And this is where NICHQ plays a vital role in making change.

"The Infant Mortality CoIIN is unique in that it focuses not only on innovation, but working towards actual implementation of evidence-based practices," says NICHQ's Executive Project Director Pat Heinrich, RN, MSN. "It doesn't really help to know the evidence unless you have the opportunity to test and learn the best way to translate that evidence into practice. By using quality improvement methods and facilitating sharing in a huge network of states, they all learn from each other and we are able to scale innovations and accelerate improvements."

For Minnesota, one of the biggest questions was how to get 17P used on a wide scale to affect change and how to measure the results. The answer was to start small and use Plan-Do-Study-Act (PDSA) cycles—a quality improvement tool.

"NICHQ's work with the Infant Mortality CoIIN has served as an impetus for our state to take on this project that initially seemed insurmountable," says Wachdorf. "The work of everyone involved is available to be seen by others, and it's nice to know you don't have to reinvent the wheel."

Through NICHQ's information sharing platform, the Collaboratory, Wachdorf took work done in Hawaii and Oklahoma and "stole shamelessly" to develop a survey to send to all 1,600 obstetric healthcare providers in her state. The survey asked for practice demographics and answers to clinical questions on the care of pregnant women at risk for preterm birth. The survey results showed two major barriers to the use of 17P: cost and physician knowledge of the intervention.

After analyzing the survey results, Wachdorf understood it was first necessary to educate interested providers on the use of 17P. Along with partnering organizations, MDH developed a 1-hour webinar with both clinical education on 17P and participation in small tests of change around increasing use of 17P. After the webinar, three groups—an OB practice in a major metropolitan area, a family physician residency clinic, and a rural obstetric clinic—volunteered to be pilot sites for the project. Because addressing racial disparity in healthcare is inherent to this work, Wachdorf understood the benefit of these diverse clinical sites.

## **Results**

Through a series of monthly face to face meetings, phone calls and additional educational webinars, the pilot sites have screened 97 percent of all patients for preterm birth. Of the women who screened positive for a history of spontaneous preterm birth, a little over half were both

eligible and received the prescription for 17P. Though not all women who received the drug have given birth yet, of those who have, 85 percent have had full term births.

“This is a great improvement,” Wachdorf says. “We are getting longer gestations than if they had not been on [17P] and if we can transition women from preterm into term births, that’s even better. It’s clear we’re moving the bell curve of when babies are born to the right.”

For those women who screened positive for a previous preterm birth, the sites added it onto a mother’s active problem list during her pregnancy, something they hadn’t always done before. Also, sites connected preterm birth with a woman’s permanent health history—providing the opportunity for consistent care during subsequent pregnancies. In addition, Wachdorf worked with the state Medicaid agency to eliminate the need for extensive prior authorization of 17P for the pilot sites which expedited the processing of claims, facilitating access to the drug for more patients. She also connected Indian Health Service and tribal clinics to the Department of Human Services regarding reimbursement for the use of 17P in their patient population.

As for the future, Wachdorf hopes there will be a state-wide collaborative with even more organizations working together to reduce the rate of preterm birth.

“There is an unmistakable synergy when you get everyone working together to facilitate change,” Wachdorf says. “It may start with small numbers, but it shows what can be done if you take the time to figure out what needs to happen and solve it one piece at a time.”