

Reducing the Risk of Recurring Preterm Birth in North Carolina

The North Carolina 17P Project aims to reduce the risk of recurring preterm birth in the state by ensuring that all women who meet the clinical criteria for 17P have the ability to access the intervention.

The preterm birth rate in North Carolina has increased 27 percent since 1982, with one in seven infants (one in five African American infants) being born prematurely. It is currently the leading cause of infant death in the state. The causes of preterm birth (PTB) are complex. However, the most significant known risk factor is a history of PTB. Women who have had a previous PTB are 21 percent to 45 percent more likely to have another preterm infant compared to other women. A synthetic form of progesterone, 17 alpha-hydroxyprogesterone caproate (17P), has been shown to reduce the recurrence of preterm birth once a woman is pregnant again. 17P is commonly administered to women with singleton gestations and a previous history of spontaneous PTB (20-36 weeks) through weekly injections beginning at 16-21 weeks through 36 weeks gestation. The North Carolina 17P Project evolved from the growing concern about the increasing number of babies born too soon. As a result of this project, 17P has become a standard of care in North Carolina.

Steps Taken:

- Beginning in 2005, maternal fetal medicine specialists from across the state approached the North Carolina General Assembly Child Fatality Task Force's Perinatal Health Committee regarding their growing concern about low-income women who were not able to take advantage of 17P treatment to reduce their risk of a recurring preterm birth. North Carolina already had a significant gap in birth outcomes, and providers feared that this gap would only widen if all women did not have access to this medication.
- The Perinatal Health committee and the full North Carolina Child Fatality Task Force agreed to support this issue as a priority.
- The North Carolina General Assembly began appropriating non-recurring funds in 2006 to reduce PTB by improving access to 17P and ensuring its appropriate use.
- An advisory council was formed to guide the 17P project's implementation. The council included key opinion leaders within the OB/GYN community, along with public health leaders, pharmacists, and patient advocates.
- The North Carolina Division of Public Health and the University of North Carolina's Center for Maternal & Infant Health used the appropriations to educate physicians and consumers about 17P and increase access to the medication by making it available to low-income women free of charge.
- By spring 2007, leadership from the North Carolina Division of Medical Assistance (DMA, Medicaid) agreed to reimburse providers for using 17P on mothers with Medicaid who met the American Congress of Obstetricians and Gynecologists' protocol for its use. NC DMA has been a key partner in this initiative, and its support was critical because the General Assembly was then able to reduce its

- North Carolina's new Pregnancy Medical Home program has increased screening for 17P eligibility, provided care managers to support women receiving 17P, monitored compliance with treatment, and facilitated partnerships among prenatal providers to ensure that all women have access to this treatment.
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investment to only providing coverage to uninsured women and basic support for ongoing provider and patient education.

- The 17P quality improvement initiative was launched in 2009 in 22 clinics across the state to assess the implementation of the program and to provide additional information about the project. The initiative included screening pregnant women, counseling women about 17P treatment, and providing support to women who accepted the treatment. The initiative also uncovered challenges that clinics faced as they implemented 17P and opportunities to address these issues.
- Several local infant mortality coalitions also undertook promoting 17P. The Forsyth County Infant Mortality Reduction Coalition played a particularly strong role in educating local providers and women about 17P. In conjunction with Triad Baby Love Plus (local healthy start site), Forsyth County Infant Mortality Reduction Coalition filmed a patient education [video](#), which they made available for free to the 17P project.
- In April 2011, the Pregnancy Medical Home (PMH) program was launched through collaboration among NC DMA, the North Carolina Division of Public Health, Community Care of North Carolina, and a workgroup of more than 25 maternal and child health leaders. This initiative aims to enhance the quality of maternity care, improve outcomes for mothers and babies, and reduce healthcare costs by providing comprehensive, coordinated maternity care to pregnant Medicaid patients. One of the four initial performance measures PMH practices are expected to meet is screening women for possible PTB and then offering and providing 17P to eligible patients.

Results:

- More than 95 clinics from across the state requested free 17P for uninsured patients. Most clinics reported only a few uninsured patients each year.
- Outreach for the program and education for patients and providers has been successful.
 - The [17P section](#) of www.mombaby.org receives more than 30,000 web hits, and the uninsured portal has nearly 2,200 hits annually.
 - More than 30,000 patient education booklets in [English](#) and 15,000 in [Spanish](#) have been distributed.
 - Three editions of the provider education [practice bulletins](#) have been developed since 2006. These have been widely distributed in paper and electronic formats. The bulletins provide information on the current science around 17P, billing and ordering information, algorithms and tips for incorporating 17P into practice, and other related resources for providers and patients.
- The new PMH program has increased screening for 17P eligibility, provided care managers to support women receiving 17P, monitored compliance with treatment, and facilitated partnerships among prenatal providers to ensure that all women have access to this treatment. The use of 17P has become a standard of care in North Carolina.
- There has been an increased partnership between local health departments and high-risk obstetrics clinics to co-manage low-income women who are receiving 17P. This is essential to support compliance with the weekly treatment. Travel to specialty clinics is particularly difficult for many women in rural areas.
- The North Carolina General Assembly has supported this initiative by appropriating funds (state and Maternal and Child Health Block Grant) to provide the drug for free to uninsured women, as well as educating physicians and patients. While continued funding by the General Assembly for the program for FY14 is not certain (the budget is currently being set), the partnerships developed over

time remain strong and will ensure ongoing collaborative efforts to realize our goal that all women eligible for this treatment receive it in our state.

Lessons Learned:

- Although it is important for clinicians to feel comfortable screening for PTB and prescribing a new treatment, engaging office managers, clinic nurses, and other providers, such as case managers, is essential. Details around how to order 17P, billing and payment, drug storage, and how to administer the treatment are important.
- Clear and open communication with patients is key. 17P treatment is a weekly commitment, and the injection can be painful. Women need support both in understanding the importance of complying with the treatment and in making it as convenient for them to receive 17P as possible. Women need encouragement and positive reinforcement for doing what they can to ensure a healthy pregnancy and baby.
- Providers must continue to counsel mothers about other risks for poor birth outcomes, including tobacco use and infection.
- It is important to monitor data to make sure that 17P is being given and accepted equally among population groups.
- Clear and open communication among healthcare providers at tertiary care facilities and local clinics is essential. Specialty clinics need to communicate with local clinics that may feel uncomfortable serving high-risk patients. Putting policies in place that require local clinics to provide 17P treatment may also be necessary to facilitate local care for these women.
- A successful 17P program for low-income women requires open and consistent communication between physician opinion leaders, Medicaid, public health, and managed care networks (as applicable).

For more information:

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