

## Minnesota Perinatal Quality Collaborative (MNPQC)

### Minnesota Preterm Birth Reduction with Progesterone (MN 17P) Quality Improvement Project

#### Infant health burden:

Prematurity is the second leading cause of infant death in Minnesota (MN) and is associated with 24.7% of infant deaths from 2012-2016. In 2017, 6,112 MN babies were born prematurely, which represented 8.9% of all births. Significant health disparities by race and ethnicity also exist. American Indian (15.2%) and Black (9.7%) women have higher rates of preterm birth than White (8.6%) women (MDH infant mortality reduction initiative, 2018).

The costs of prematurity are high. Personal and parental relationships can be disrupted and lifelong health problems in the infants can arise. Furthermore, healthcare costs associated with prematurity are staggering. The average medical costs for a baby born at term are \$4,389 compared to \$54,194 for a premature baby (MOD). These costs translate to a \$300 million excess expenditure for MN in 2017. The prevention of preterm birth is critical to supporting long-term infant health, promoting health equity, and controlling healthcare costs.

#### Recommendations:

The American College of Obstetricians & Gynecologists (ACOG) and the Society for Maternal-Fetal Medicine (SMFM) have recommended injectable 17-alpha hydroxyprogesterone (17P) use for women with singleton pregnancies with a prior spontaneous preterm singleton birth. Women with this past pregnancy history are a high-risk population that must be identified to actively manage future pregnancies. Research has shown that in women with a history of previous preterm birth, 17P can reduce the recurrence risk of preterm birth by ~33%, irrespective of race and ethnicity. *However, this intervention continues to be underutilized.*

#### The role of Minnesota Perinatal Quality Collaborative (MNPQC):

The Minnesota Perinatal Quality Collaborative (MNPQC) is sponsoring a statewide quality improvement project to increase the accessibility and use of 17P in MN by utilizing lessons learned from a small initial cohort of participating clinics. The MNPQC is a network of organizations, medical providers, content experts and community voices led by Minnesota Perinatal Organization (MPO) in partnership with the Minnesota Department of Health (MDH).

#### MN 17P Project

The goal of MN 17P Quality Improvement Project is to reduce premature birth and improve pregnancy outcomes for MN women and their families by increasing utilization of 17P. Three to five health systems in MN will be accepted into the second cohort and lessons learned from the first cohort and tools developed by the MNPQC will be freely shared to facilitate access to and increase use of 17P.

#### Learnings from first cohort MN 17P project:

1. Increased clinician awareness result in improved identification of eligible patients
2. The number of eligible patients receiving the therapy increased over time in the first cohort
3. Implementation of a method to track patients receiving 17P facilitated follow up
4. The need for prior authorization is a barrier to access

#### For more information, please contact

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### **Objectives for second cohort MN 17P project:**

1. Assess individual health system barriers and opportunities to facilitate solutions to improve the process of 17P utilization
2. Assess provider knowledge of progesterone and appropriate uses
3. Utilize the Electronic Medical Record (EMR) to identify candidates for 17P
4. Implement a standardized Order Set for 17P through the EMR
5. Streamline procurement of 17P by centralizing prior authorization
6. Implement a standardized process for evaluation of cervical length in 17P candidates

### **Benefits to participation in the MN 17P project:**

- Receive personalized assistance with streamlining implementation of 17P into the healthcare system using information gained from prior 17P learning collaboratives and tools created by MNPQC
- Participate in educational activities offering continuing education (CME/CEU) credits
- Access to QI education within each learning collaborative meeting
- Identification of your health systems specific QI measures
- Opportunity to obtain Maintenance of Certification (MOC) credit
- Facilitated 17P ordering and administration using Order Sets and Smart Sets in EMR

### **Expectations of health systems that participate in the MN 17P project:**

- Ability to actively participate during the project period - estimated 1 year
- Assemble a team within health system, with at least the following three members:
  - Project champion within the health system: leadership; provider; quality manager
  - Administrative lead to disseminate information regarding 17P within the health system
  - Informatics support to assist in any EMR modifications/orders and to provide monthly reports
  - Additional recommended members include: pharmacy or specialty pharmacy leadership, home health care services team
- Receive support of project from Medical Director of Obstetric services and/or Clinic Management
- Available clinic and/or home care capacity to administer weekly 17P injections
- Team members including project champion, administrative lead and one other participant to attend two day-long, in person learning collaboratives, three webinars and at least four conference calls
- Commitment to convene team for monthly QI project meetings to implement and monitor project
- Provide monthly data reports to MNPQC through project phases (baseline, implementation, evaluation). Examples of data requested:

<ul style="list-style-type: none"><li>○ # of new OB visits</li><li>○ # of women screened for:<ul style="list-style-type: none"><li>▪ Previous PTB</li><li>▪ Positive for PTB eligible to receive 17P</li></ul></li><li>○ Gestational age of prior PTB</li></ul>	<ul style="list-style-type: none"><li>○ # of eligible women who:<ul style="list-style-type: none"><li>▪ Received 17P prescription</li><li>▪ Received 17P injection</li></ul></li><li>○ Gestational age at delivery for each woman receiving 17P</li></ul>
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The MNPQC looks forward to engage health system partners to address the role of 17P in preventing recurrent preterm births across our MN communities.

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