

Minnesota Perinatal Quality Collaborative Charter (MNPQC)

Minnesota Preterm Birth Reduction Initiative

Background: 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 Center for Health Statistics, 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 (March of Dimes). 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.

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 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). This work is based in the experience of a prototype group of clinics who participated in a 17 P project where we learned:

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

Aim

Increase by 25% or more the accessibility and use of 17P in five health care systems in MN by April 2020 and by 50% by October 2020 so that:

- 95% or more of women are assessed for preterm singleton birth at first perinatal visit up to the 24th week of pregnancy
- 95% or more of eligible women based on the preterm term treatment algorithm are offered 17P

For more information, please contact

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- 95% or more women are explicitly asked what matters most to them about their pregnancy and birth
- 95% or more of all women with preterm singleton birth history are offered teach back on value of 17P
- The time between prescribing and administration of first 17P dose is reduced to 10 days or less
- Adherence increases to 80% or more of eligible 17P doses
- 90% or more of women receiving 17P have a follow up “touch” at internals coproduced by care team and the woman

Family of Measures

Outcome measures

- Percentage of eligible women offered 17P based on a preterm term treatment algorithm
- Percentage of women with a previous preterm birth asked “What matters most to you about your pregnancy and birth?”

Process measures

- Percentage of women assessed for preterm singleton birth at first perinatal visit up to the 24th week of pregnancy
- Percentage of women offered 17P who are offered a formal teach back
- Time between prescribing and administration of first 17P dose
- Percentage of women who adhere to 17P
- Percentage of women receiving 17P with a follow up “touch” based on an interval coproduced by the care team and the woman

Balancing measures

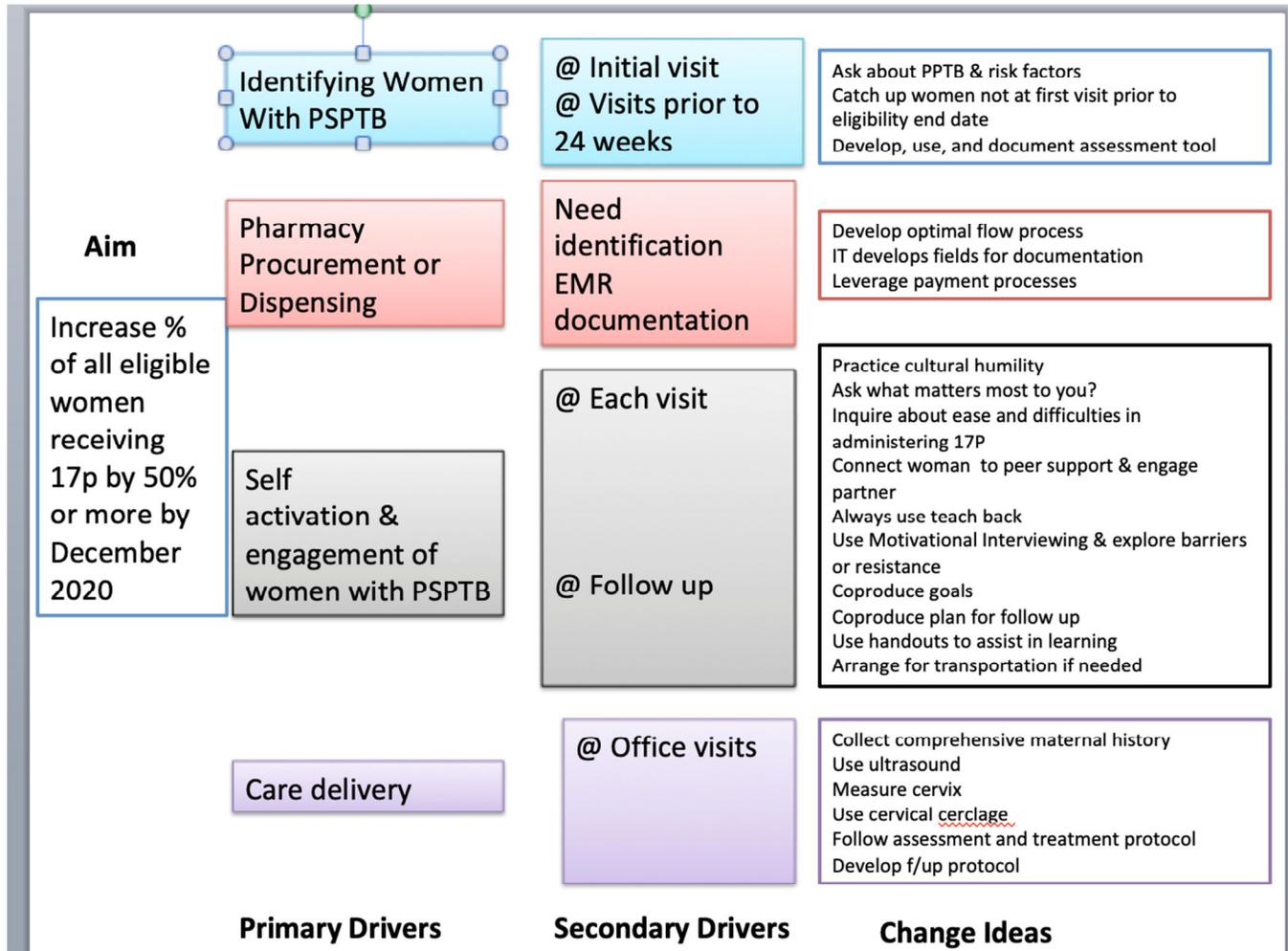
- Gestational birth week of babies born to mothers with a previous premature birth who adhere to 17 P

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Theory of Change



Objectives for second cohort MN 17P project:

1. Assess individual health system barriers and facilitate solutions to improve the process of 17P utilization
2. Assess and increase provider knowledge of progesterone and appropriate uses
3. Utilize the Electronic Medical Record (EMR) to identify candidates for 17P and track administration
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 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 and the opportunity to obtain Maintenance of Certification (MOC) credit

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- Access to QI education within each learning session
- Facilitate 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 including forming a team with members that attend all learning sessions, monthly report of progress including data and short narrative; attendance on monthly webinars, the ability to test changes using Deming's Plan Do Study Act cycles
- Assemble a team within health system, with at least the following three members:
 - Project clinical and nursing leader within the health system
 - 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, or quality manager
- Receive support of project from Medical Director of Obstetric services and/or Clinic Management
- Make available clinic and/or home care capacity to administer weekly 17P injections
- Participate as team members including project champion, administrative lead and one other participant in person learning sessions, and monthly webinars
- Commitment to convene team for monthly QI project meetings to test, implement and monitor project
- Provide monthly data reports to MNPQC through project phases (baseline, testing and implementation, development of a spread plan, and evaluation).

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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