

# Reducing Preterm Birth in Minnesota: The 17P Quality Improvement Project

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## Introduction

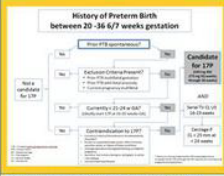
- One in 11 live births (8.9%) in MN are preterm<sup>1</sup>
- Increased risks to mother and newborn
- Leading cause of neonatal death and second leading cause of infant mortality<sup>1</sup> in the US
- Long-term health problems include cerebral palsy, chronic lung disease, hearing loss, blindness, and intellectual disabilities<sup>2</sup>

- 17-hydroxyprogesterone (17P) is an evidence-based intervention to reduce recurrent preterm birth (PTB)<sup>3</sup>
- Historically, fewer than 10% of eligible women in MN received 17P
- Up to 50% of women with a history of singleton preterm birth may have a second premature delivery<sup>4</sup>



## 17P Guidelines

17P injections are recommended by the American College of Obstetrics and Gynecology and the Society for Maternal-Fetal Medicine (SMFM)<sup>5</sup> to reduce the risk of recurrent preterm birth.



Developed by Dr. Yasuko Yamamura MD based on SMFM guidelines

## 17P Quality Improvement Project Description

- Project Objective: Reduce prematurity through use of 17P in MN**
- Cohort One: implement 17P using evidence based guidelines and identify challenges and barriers to administration of 17P
    - 3 clinics - 1 large urban, 1 urban family practice, 1 small rural family practice

- Cohort One Goals:**
- Screen all pregnant women receiving prenatal care for history of spontaneous PTB
  - Increase rate of eligible women who actually receive 17P by 50%



## Interventions

- Early prenatal scheduling, universal screening for PTB, treatment with 17P for eligible women, follow up and problem solving
- Implementation support through the 17P Quality Improvement Project
  - Two learning collaboratives
    - Train clinics in QI method (PDCA), develop clinic work flow document to facilitate universal PTB screening
    - Assess workflow and plan for expanding implementation beyond initial three clinics
  - Three webinars: support, technical assistance and training, review data
  - Mainly phone contact: technical assistance/problem solving
- Focus
  - Provider and patient education and feedback on barriers and challenges
  - Address challenges including screening for history of PTB, determining eligibility for 17P, prescribing and obtaining 17P, assuring weekly injections, recording treatment and outcome data
  - Work with payers and 17P suppliers, establishing partnerships (WIC, home care, pharmacies)

## Outcomes

- Goal One:** 97.3% screened for history of PTB
- Goal Two:** 56% of eligible women received a prescription for 17P; 85% of those women started injections. Of the 10 births that occurred, 60% received complete treatment with 19 or 20 doses.
- Additional outcomes:**
  - Provider and staff education at all clinic sites
  - Data collected at 9 data points
  - Clinics shared data, successes, challenges, problem solving
  - Implemented screening protocol for PTB, 17P guidelines, tracking, follow up
  - Identified challenges in EHR and modified it to support 17P, patient education, and maintain "history of PTB" history of PTB
  - Established workflow to follow up on women who screened + for previous PTB
  - Demonstrated protocol for 17P tracking, follow up
  - Compounded 17P is no longer available; clinics shared information on obtaining Makina™, shared information on 17P use, billing, coding, access. Continuing to increase involvement in 17P work at clinic sites
  - Collaboration between clinics and DHS to expedite 17P prior authorization at these clinics

## Birth Outcomes

- Previous PTB gestation of age range: 16 weeks to 36 weeks+3 days
- 9 live births
- 7 term
- 2 Preterm
  - 1 miscarriage at 17 weeks (1 dose)
  - 16 women still pregnant, 12 receiving 17P
- \*29 weeks (previous PTB at 21 weeks)
- 30+ weeks (stopped 17P after 13 doses)

## Challenges

Challenges	Solutions
Identification of eligible patients	Provider education through online webinar
Financial issues with Federally subsidized clinics/Indian Health Services	Ongoing issue
Change from compounded to Manufactured 17P	Clinics adjusting procurement processes, ongoing efforts to facilitate access
Weekly clinic visits for injections	Working with DHS to support community based options

## Next Steps

A systems-level Cohort Two project underway to expand on Cohort 1. Focus on system-level change in large health care systems across Minnesota.

Will support system-wide implementation and streamlining of clinical workflow for administration of 17P

- Sharing of tools developed based on outcomes of Cohort 1:
- 17P Clinic Systems Inventory tool
  - 17P Clinic Process Flowchart
  - 17P Clinical Guidelines Flowchart
  - 17P FAQ
  - Support for EHR updates
- Future plans to expand intervention to throughout the state including smaller clinical groups and Federally subsidized clinics.

## References

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## Acknowledgements

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