Ohio Perinatal Quality Collaborative

Improving Rates of Progesterone Supplementation: Reducing the Risk of Premature Birth

Webinar for All Ohio

Jay D. Iams MD

OB Lead - Ohio Perinatal Quality Collaborative

November 6, 2014

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OPQC Continuing Education Program for Level 1 Hospitals in Ohio:
Improving Rates of Progesterone Supplementation: Reducing the Risk of Spontaneous Preterm Birth

Presenters:

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Wexner Medical Center,
The Ohio State University
Obstetric Lead OPQC

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BEACON Quality Improvement Coordinator

Disclosure: Financial disclosure information (planning committee and presenters): Planning committee members/faculty were determined to have no conflicts of interest pertaining to this activity.

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Continuing Education:

CME:
Cincinnati Children's Hospital Medical Center is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

The Cincinnati Children's designates this live activity for a maximum of *1.0 AMA PRA Category 1 Credit(s)*™. Physicians should claim only the credit commensurate with the extent of their participation in the activity

Social Work:
Cincinnati Children's Hospital Medical Center Social Service is an approved provider of social work continuing education by the State of Ohio Counselor, Social Worker and Marriage and Family Therapist Board (RSX069302). This presentation is approved for 1.0 (one) clock hour.

Objectives:
- Discuss the responsibility of the perinatal team in reducing the Ohio preterm birth rate and related infant mortality.
- Describe effective interventions for early identification of progesterone candidates.
- Reduce barriers to the prescription and administration of progesterone supplementation.

Hardware/Software Requirements**:**
Compatible with Mac and Window users and common web browsers. High-speed access recommended though not required (responsiveness may be noticeably slower using dial-up connection).
Adobe Flash Player 9.x is required and Speakers/headphones required to listen to audio

Provider Contact Information:
If you should have any questions about the content of the meeting, please contact Dr. Jay Iams.
If you should have any questions regarding CME credit, please contact the CME office at cme@cchmc.org.

Jay Iams, MD

Professor Maternal-Fetal Medicine & Obstetrics and Gynecology
Wexner Medical Center,
The Ohio State University
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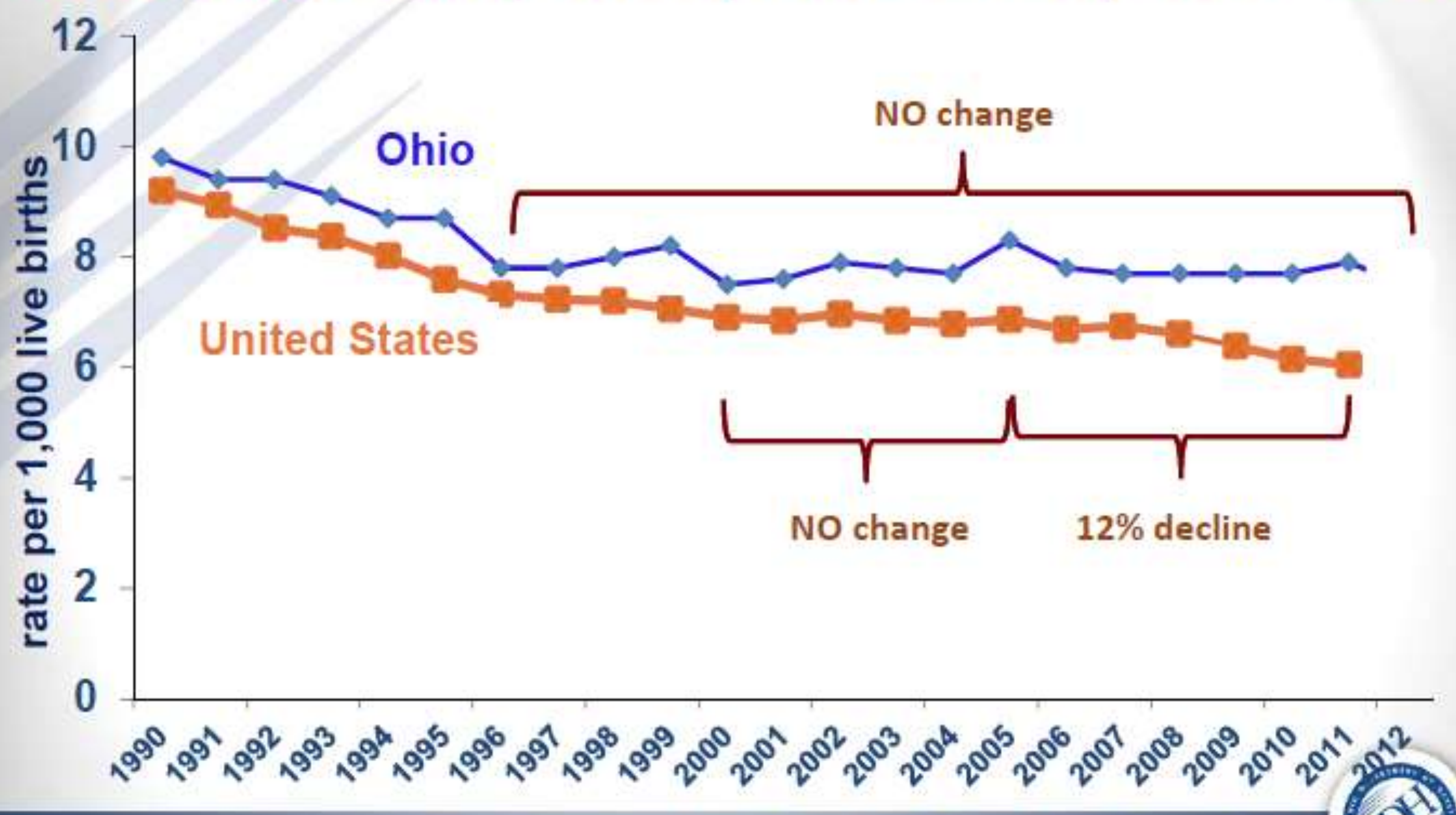
Objectives

At the close of this presentation, I want you to *want & be able* to:

1. **Accept Your Responsibility to Reduce Infant Mortality by Improving Receipt of Optimal Perinatal Care.**
2. **Adopt *Systematic* Steps to Improve Recognition of Women w/ Risk of PTB**
3. **Feel Comfortable Accessing OPQC's Resources to Provide Progesterone**

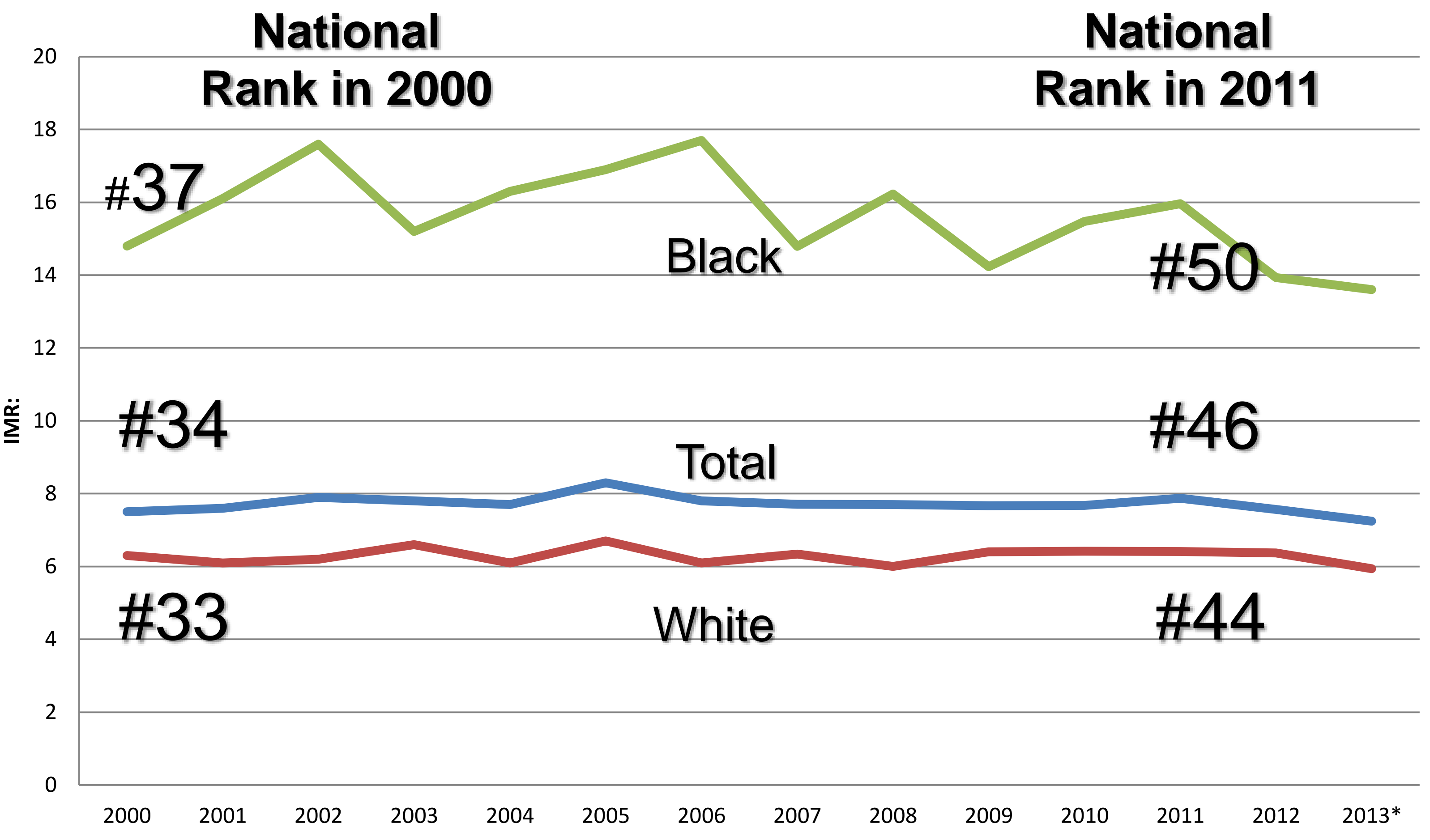
Infant mortality rates, Ohio & US, 1990-2012



Source: Office of Vital Statistics, Ohio Department of Health *2012 data preliminary
NCHS, *US 2011 data preliminary

Slide Courtesy of Dr. Beth Conrey
Ohio Department of Health

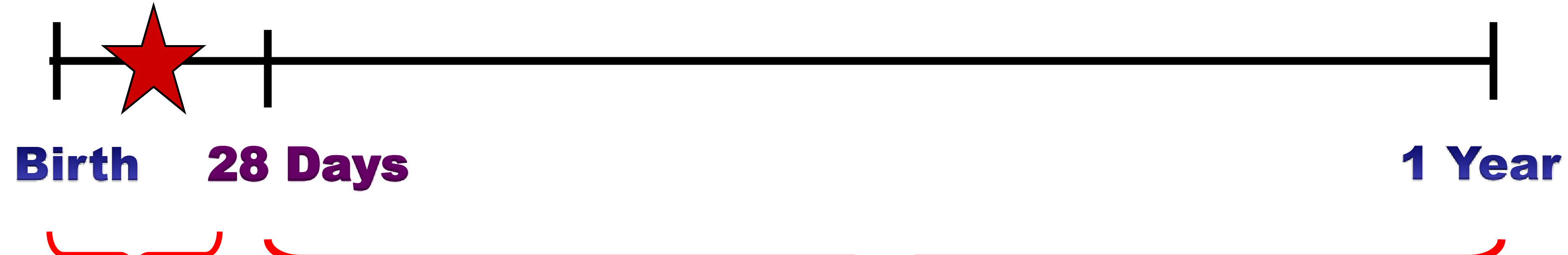
Ohio Total, White, and Black IMR: 2000-2013*



* As of 06/2014: 2013 data is preliminary. For births and deaths, still awaiting out of State files (Ohio residents who had their babies in other States) to be completed.

The Timeline of Infant Mortality

When & Why Do Babies Die?



Neonatal Death

- Anomalies
- **Preterm Births**
- 2/3 of infant deaths

Post-Neonatal Death

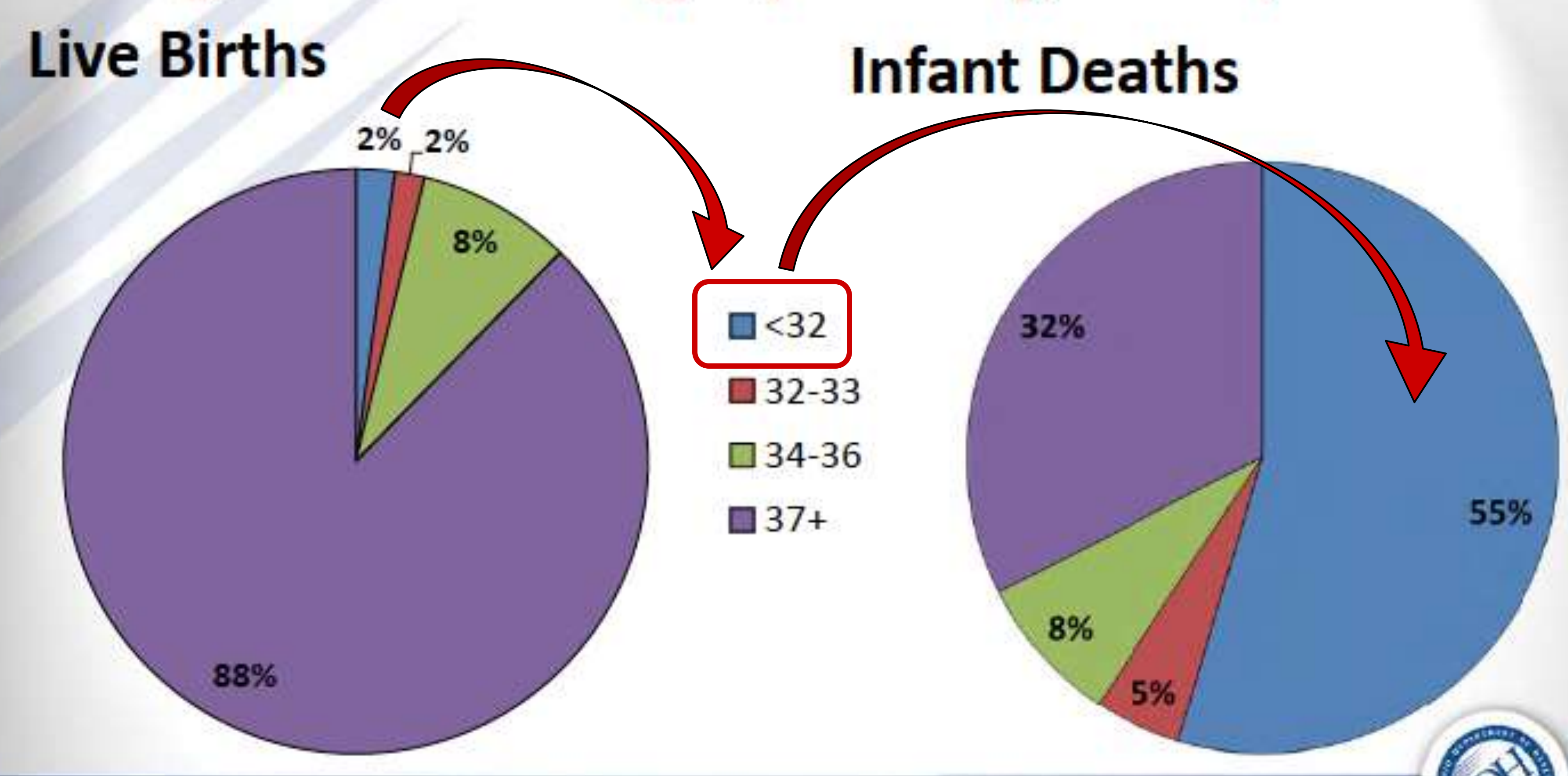
- Sudden Unexpected Infant Death
- 1/3 of infant deaths

Infant Death

Slide courtesy of
Dr Arthur James

2/3 of all Childhood Deaths (birth -18 yrs) occur during the first year of life
Infant Mortality

Percent of births and infant deaths by gestational age (weeks), Ohio, 2008



Source: Ohio Department of Health Vital Statistics linked birth/infant death data set

Slide Courtesy of Dr. Beth Conrey
Ohio Department of Health

The Infant Mortality Rate Varies Across Ohio

Infant Mortality Rate**
by County and Selected Cities
of Ohio, 2006-2010

WILLIAMS* 6.72
FULTON* 4.92
LUCAS
TOLEDO
OTTAWA 6.49
DEFIANCE* 6.8
HENRY* 5.59
WOOD 6.16
SANDUSKY 5.45
ERIE 8.32
LORAIN 7.57
CLEVELAND
CUYAHOGA 9.66
LAKE 5.03
GEAUGA 4.44
ASHTABULA 9.17
TRUMBULL 8.55
PAULDING* 6.44
PUTNAM* 4.41
HANCOCK 6.83
SENECA 7.05
HURON 6.35
MEDINA 3.5
SUMMIT
AKRON 9.28
PORTAGE 6.99
MAHONING 8.9
VAN WERT* 5.43
ALLEN 7.19
WYANDOT* 7.85
CRAWFORD* 7.6
RICHLAND 7.79
ASHLAND* 5.12
WAYNE 6.4
STARK
COLUMBIANA 6.55
MERCER* 3.27
AUGLAIZE* 5.61
HARDIN* 5.01
MARION 6.14
MORROW* 6.81
HOLMES 7.44
CARROLL* 7.92
TUSCARAWAS 5.84
JEFFERSON 6.86
SHELBY 6.69
LOGAN* 6.24
UNION 8.78
DELAWARE 4.26
KNOX 6.46
COSHOCTON* 8.28
HARRISON* 7.99
DARKE* 5.66
MIAMI 6.37
CHAMPAIGN* 6.24
COLUMBUS
FRANKLIN 8.49
LICKING 6.75
MUSKINGUM 7.74
GUERNSEY* 5.35
BELMONT 5.94
CLARK 7.41
MADISON 8.67
MONTGOMERY
PREBLE* 4.92
DAYTON 9.26
GREENE 6.31
FAYETTE* 6.13
PICKAWAY 6.42
FAIRFIELD 5.21
PERRY* 6.16
MORGAN* 4.85
NOBLE* 3.91
MONROE* 3.87
BUTLER 7.01
WARREN 6.25
CLINTON 9.12
ROSS 6.81
HOCKING* 5.2
ATHENS* 5.67
WASHINGTON 9.36
HAMILTON
CINCINNATI 12.68
CLERMONT 6.1
HIGHLAND 6.92
VINTON* 9.49
MEIGS* 9.22
PIKE* 9.41
JACKSON* 8.74
BROWN 9.89
ADAMS* 9.53
SCIOTO 9.54
GALLIA* 6.85
LAWRENCE 9.75

Infant Mortality Rate***
(Standard Deviations)

- Less than 4.46 (less than -1.5)
- 4.46 - 6.06 (-1.5 to -0.50)
- 6.07 - 7.68 (-0.50 to 0.50)
- 7.69 - 9.29 (0.50 to 1.5)
- 9.30 and above (above 1.5)

Grade for Preterm Birth Rate*

- A
- B
- C
- D
- F

View national report card

WA MT ND MN OR ID WY SD WI MI NY ME NV UT CO NE IA IL IN OH PA CA KS MO KY WV VA AZ NM OK AR TN NC SC TX MS AL GA LA FL AK HI PR

CT VT NJ NH DE MA MD RI DC

March of Dimes 2013 Report Card

Premature Birth Rate

When Can Preterm Birth Be Attacked?

- Before Pregnancy
  - Social Determinants
    - Medical Care
- Early Pregnancy
  - Early Prenatal Care
- Mid - Late Pregnancy ?
  - Progesterone
  - Antenatal Corticosteroids
  - Scheduled Births
- Infancy
  - NICU Care

85%

15%

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The Ohio Perinatal Quality Collaborative

Obstetrics

39-Week Scheduled Deliveries without medical indication

ANCS for women at risk for preterm birth

($24^{0/7}$ - $33^{6/7}$)

Done → Transition to BC

Surveillance

2013-2015

Progesterone for Preterm Birth Risk

Increase Birth Data Accuracy & Online modules

Spread to all maternity hospitals in Ohio

Neonatal

BSI:

High reliability of line maintenance bundle

Use of human milk in infants 22-29 weeks GA

Neonatal Abstinence Syndrome

OPQC 39 Weeks Project in Sustain Phase

Decreasing Non-Medically Indicated Scheduled Deliveries Between 37 and 39 Weeks Gestation

Percent with no medical indication

Sep. 2008: 39-Week project begins

Jan. 2010: Ohio Hospital Compare launch

5% Goal

01/01/06 (n=3289)

04/01/14 (n=2670)

07/01/14 (n=3002)

Data From All Ohio Maternity Hospitals

January '06 → July '14

105 of 107 Hospitals Participated in the OPQC 39 Week Project

Source: Ohio Department of Health, Vital Statistics

Monthly Percent — Baseline Average Percent — Control Limits

DEPARTMENT OF HEALTH

Birth Registry Documentation of Antenatal Steroid Use Aggregate Rate in 19 OPQC Sites 2006 - 2014

Percent

100
90
80
70
60
50
40
30
20
10
0

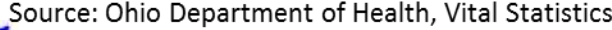
Red Arrow:
ODH's *Ohio Hospital Compare*

Blue Arrow:
OPQC ANCS Project

86.5%

2006-Q1 (n=858)
2006-Q2 (n=922)
2006-Q3 (n=876)
2013-Q4 (n=816)
2014-Q1 (n=771)
2014-Q2 (n=837)
2014-Q3 (n=766)

Birth Registry Data 2006 → 2014



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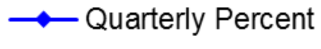


Control Limits

SMFM
April
2012

SMFM CLINICAL GUIDELINE www.AJOG.org

Progesterone and preterm birth prevention: translating clinical trials data into clinical practice

Society for Maternal-Fetal Medicine Publications Committee, with the assistance of Vincenzo Berghella, MD

Common Theme: Find More & Rx Progesterone

ACOG
October
2012

PRACTICE BULLETIN

CLINICAL MANAGEMENT GUIDELINES FOR OBSTETRICIAN–GYNECOLOGISTS

NUMBER 130, OCTOBER 2012

(Replaces Practice Bulletin Number 31, October 2001 and Committee Opinion No. 419, October 2008)

Prediction and Prevention of Preterm Birth

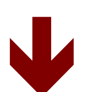
Progesterone to Prevent PTB in Singletons

- Keirse ‘90 Meta-Analysis - 40% ↓
- Fonseca ‘03 RCT Vag P at risk- 35% ↓
- Meis ‘03 RCT 17P Hx SPTB – 35% ↓
- Fonseca ‘07 RCT Vag P Cx ≤ 15mm – 45% ↓
- O’Brien ‘07 RCT Vag P Hx PTB – No effect
- Hassan ‘11 RCT Vag P Cx 10-20 mm- 45% ↓
- Grobman ’12 RCT 17 P Cx < 30 mm - No effect

Goals of The Ohio Progesterone Project

- Reduce Ohio PTB Related Infant Mortality
- Find Women with Risk Histories
- Expand Use of Cervical Sonography
- Make it Easy to Get Progesterone
- Outcome Measures
    - Births < 32, 35, and 37 Weeks
    - Infant Mortality Rate !

Pilot in Big 20



Spread to All Ohio

MedTAPP

PROGESTERONE PROJECT KEY DRIVER DIAGRAM

Revision Date: 09-19-14

SMART AIM

BY July 1, 2016, DECREASE THE RATE OF PREMATURE BIRTHS in Ohio less than 37 weeks by 10%, and less than 32 weeks by 10%

GLOBAL AIM

REDUCE INFANT MORTALITY IN OHIO BY REDUCING PREMATURE BIRTHS

DRIVERS

Consistent and early recognition of prior preterm birth

Adopt a cervical length ultrasound screening protocol

Expedite progesterone supplementation

Use patient-centered medication management

INTERVENTIONS

- Screen women for OB history of preterm birth
- Align and communicate with EDs, WIC, etc. to screen and refer when history of preterm birth
- Facilitate rapid new OB appointments
- Postpartum counseling on progesterone for those eligible in next pregnancy

- Use sonographers trained in cervical length measurement
- Develop a practice protocol to selectively or universally screen cervical length (consider population risk)

- Create a written protocol for identified candidates
- Start progesterone as soon as possible (according to ACOG and SMFM guidelines) after identification of eligible woman
- Follow up with women to check on continued use of progesterone as prescribed

- Educate on benefits of progesterone and use evidence-based counseling methods (e.g. Motivational Interviewing) if there are concerns
- Involve key support individuals
- Connect women to insurance, home care, social services, etc. to ensure progesterone available &administered

Key message: Women at risk of preterm birth are a high-risk population that needs to be identified and actively managed.

Identification of Candidates for Progesterone

Why, Who, How, and When?

- **Why?**
  - Preterm Birth → Largest Contributor to Infant Mortality
  - Preterm Birth → Largest Driver of Disparity in PTB
- **Who?**
  - Women with a Prior Preterm Birth
  - Women with Very Short Cervical Length
- **How?** ***Find & Rx Candidates for Progestogens***
- **When?** ***ASAP – in Ohio & in Each Pregnancy***

Identification of Candidates for Progesterone

Why, Who, How, and When?

Find a Progesterone Protocol You Like And Use It.

Here's One.

Find One That Fits Your Practice.

Initial Prenatal Visit
Comprehensive Obstetrical History
Ultrasound Confirmation of Dates and Plurality

Is There a History of Spontaneous Preterm Birth?
[1] Defined as a singleton live birth at $16^{0/7}$ -36 $^{6/7}$ weeks or stillbirth before 24 weeks presenting as labor, ruptured membranes, or advanced cervical dilation or effacement

Yes → Rx 17-OHPC 250 milligrams IM weekly [2] from $16^{0/7}$ $36^{0/7}$ weeks of gestation → [3] TV CL Q 14 days between 16 – 24 weeks Q 7 days if CL < 30 mm → If TV CL ≤ 25 mm before 24 weeks, [4] Consider Cerclage Suture, especially if prior SPTB < 28 weeks or visible membranes and [5] Continue Progestogen Rx

[1] *Maybe* → Rx 17-OHPC; Transvaginal CL Performed by [6] Credentialed Sonographer

No → Is this a singleton pregnancy?
- [1] No: This protocol is not applicable
- Yes → [2] Does the patient have signs + symptoms of parturition: persistent pelvic pressure, cramps, spotting, &/or vaginal discharge ?
  - Yes → Transvaginal CL Performed by [6] Credentialed Sonographer
  - No → [2] Suggested Site-specific Screening Algorithms

[2] Suggested Site-specific Screening Algorithms
- [3] Selective TV CL screening of women w/ risk factors
  e.g., Prior PTB < 34 weeks of ? Cause or of Twins; Hx GU Infection; Conception with Fertility Rx; African American race/ethnicity; Cervical surgery; BMI < 19.6 or > 35; Periodontal disease
  Or
- [4] Universal TA CL screening at 18-24 → CL < 35 mm
  Or
- [5] Universal TV CL screening at 18-24 weeks

→ Transvaginal CL Performed by [6] Credentialed Sonographer

Transvaginal CL Performed by [6] Credentialed Sonographer
- TV CL > 25 mm → Routine Prenatal Care
- [8] TV CL 21-25 mm Repeat x 1 in 7-14 days → Routine Prenatal Care, or → [7] TV CL ≤ 20 mm
- [7] TV CL ≤ 20 mm → Rx Vaginal Progesterone daily as 200 milligram capsules or suppositories or 90 milligrams vaginal gel until 36 weeks

Iams Obstet Gynecol 2014

Identification of Candidates for Progesterone

Why, Who, How, and When?

Fundamental Principles

- Only You Can Prevent Preterm Birth
- Every Pregnancy Has Some Risk of PTB
- Preterm Parturition Starts Early in 1st or 2nd Trimester
- Short Cervix = Preterm Parturition
- Progesterone Can *Slow* Preterm Parturition
  - ***It does not prevent the process***
- Starting Progestogen Rx ASAP is Very Important
- Finding & Treating Requires Time, So HURRY UP

Identification of Candidates for Progesterone

Why, Who, How, and When?

What Formulations of Progestogens Should Be Used?

- **Standard Answers:**
  - **Hx SPTB:** 17-OHPC 250 mg IM Q 7d 16 → 36 wks
  - **Short Cx ≤ 20 mm:** Vag P, 200 mg QHS, Dx → 36 wks
- **But Life is Not That Simple**
  - 17-OHPC – Manufactured vs. Compounded
    - Cost vs. Hassle
  - Vaginal P – multiple formulations - which to Rx?
  - *Who pays for what, when, & after how much hassle?*

Identification of Candidates for Progesterone

Why, Who, How, and When?

- **Initiate Progesterone ASAP for Hx SPTB**
  - Accelerated 1st Prenatal Visit
  - Presumptive Eligibility for Antenatal Care
- **Adopt a Local Management Protocol**
  - For Hx SPTB
  - For Short Cervix
  - ***Test them via OPQC !***
- **Make "Screen for PTB Risk" ≈ GBS, Rh, GDM**

Initial Prenatal Visit

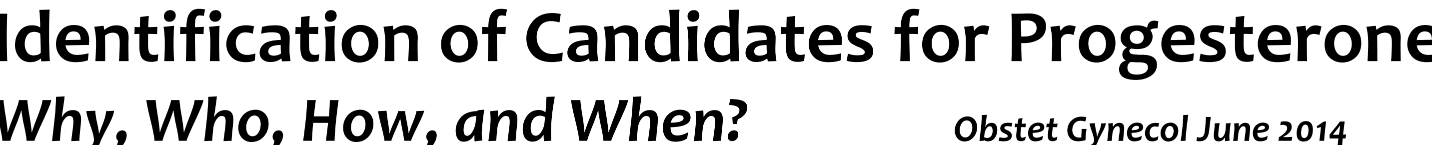
Comprehensive Obstetrical History

Ultrasound Confirmation of Dates and Plurality

OB History – Adopt a Broad Definition of Prior PTB.

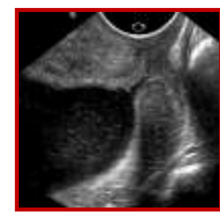
Why?

- Spontaneous vs. Indicated is not that simple.
- Gestational age window = 16 – 36 weeks.
    - Liveborn and Stillbirths at 16 – 24 weeks.
- **When in doubt, choose Rx or Cervical Surveillance**



What About Women with No Prior Preterm Birth?

- Options for Cervical Length Screening
  - Select ***IN*** - Women with Risk Factors
    - G-U Infections, Cx Dysplasia, Fertility Rx, Hx ≥ 2 EAbs, Fam Hx PTB, African Americans, Depression, extremes of BMI, …
  - Select ***OUT*** - Low Risk Women
    - All but Multiparas w/ > 1 Term Birth or Cx > 35 on TA Scan
  - ***Universal*** – Screen all between 18 - 24 weeks



- ***None have been tested in the real world***
  - *Philadelphia – **1.1%** of w/o Hx PTB had Cx ≤ 20 mm*

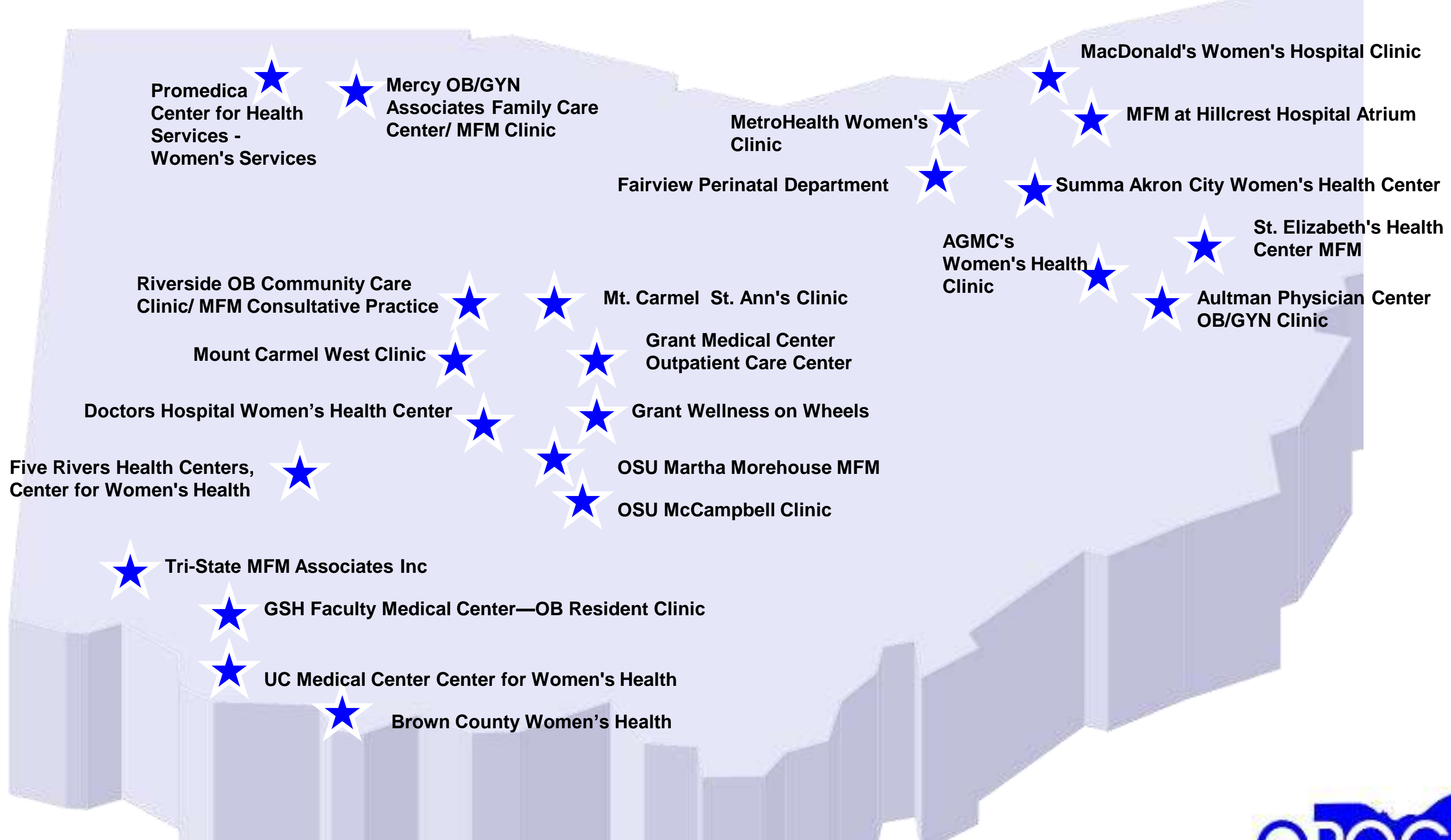
- **Kickoff Learning Session January 2014**
- **Sites Recruited from Prior OPQC Projects**
  - Engaged New QI Teams from Outpatient Care Sites at Ohio's 20 Largest Maternity Hospitals
- **1st Learning Session June 2014**
  - ***What Have We Learned?***
  - ***Where Are the Problems?***

    😐Late to Prenatal Care

    😐Pharmaceutical Fears

    ☺Insurance / Medicaid Coverage

OPQC Progesterone Project Pilot Clinics 2014



Why Are We Missing P-Eligible Women?

What Have Sites Told OPQC About That?

- Do Providers Know About Progesterone? **Yes**.
- Do Providers Know What to Rx? **Yes, mostly**.
- Do Providers Know the Rx Gets to Patient?

  Not So Much.
- Do Providers Know Why Women Don't Seek Care 'til It's Too Late? **Yes, mostly**.
  - Do Providers Know What They Can Do To Overcome That? **Not So Much**.

What Can We Do About "Late for Care" ?

- **No Appointment Needed!**
  - 1st Visits Welcomed Anytime in Cincinnati
- **Community Open Houses with Food Prep**
  - "Moms2B" in Columbus Builds Social Networks
- **Business Community Involvement**
  - Ohio Metro Counties Have High Infant Mortality
    - High Infant Mortality = A Measure of Community Health
  - Bring Your Business Here? *No Way! Goin' to Georgia!*
- **Hospital Geographic Responsibility for Health**

Improving Access to Progesterone in Ohio

OPQC

- Drive Community Changes to Increase Awareness of PTB as Cause of Infant Mortality
- Increase Avenues to Enter Prenatal Care
- Recognize Candidates at First Contact
- Accelerate Appts & THEN get detailed OB Hx
- Track Receipt of Progesterone After Rx
- Think Outside the Medical Paradigm to Find Eligible Women Late To Prenatal Care

What Can You Do to Reduce Infant Mortality Related to Preterm Birth?

- **Educate Yourselves, Your Team and Patients, Before and After Pregnancy, About PTB + IM**
  - Posters – Websites – Handouts – Progest + LARC
- **Find Risk Factors Before & During Pregnancy**
- **Adopt a Protocol to Find P-Eligible Women**
- **Promote Breast Milk = Medicine for Preterm**
- **Promote LARC as Post Partum Contraception**

OPQC Education for Consumers

Preventing Preterm Birth

A Guide for Pregnant Women

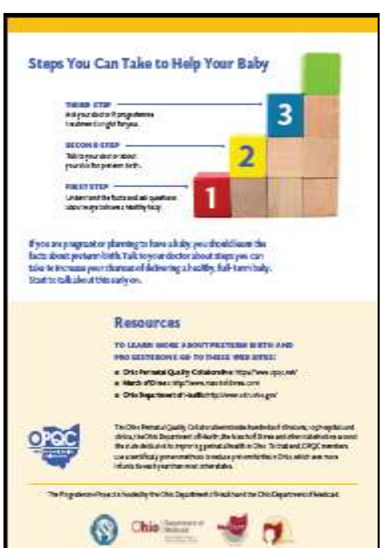
The Facts about Birth Before 37 Weeks

Preterm birth occurs when a baby is born before 37 weeks of pregnancy. Full-term birth is 40 weeks.

Questions and Answers about Preterm Birth

Progesterone May Help You Prevent an Early Birth

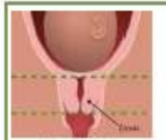
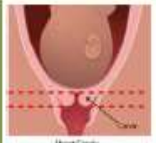
Knowing the Facts Can Help Your Baby



Short Cervix: What Does It Mean? Should I Be Worried?

The cervix is the lower end of the uterus that opens into the vagina. It is normally about 35 mm or 1 1/2 inches long. The cervix is considered to be 'short' if the length of the cervix is less than 20 mm long before 24 weeks of gestation. The chances for having a preterm birth are higher in women who have a shortened cervix but it does <u>not</u> mean you will definitely deliver early.

During pregnancy the cervix remains closed and long. It acts like a supportive door and also helps keep infection out. Later in pregnancy, around 30 weeks, your cervix normally begins to soften and shorten. This is called effacement. A vaginal ultrasound is used to measure the cervical length and is measured in millimeters (mm) or centimeters (cm). After your bladder is emptied, an ultrasound probe is placed into the vagina and a picture is taken of the cervix.

 Normal Length Cervix	The length of your cervix is measured from the inside of the uterus to its external opening into the vagina. A normal length is ~35mm.
 Short Cervix http://www.nichd.nih.gov/news/releases/Pages/040611-progesterone-and-preterm-birth.aspx The National Institutes of Health Sept 18, 2014	The cervix is labeled 'short' if the length is less than 20 mm long before 24 weeks of pregnancy. A short cervix increases the chance that you will deliver early. The shorter your cervical length the higher the chance of having a preterm birth. This is just one of the risk factors of early birth. A previous preterm delivery, smoking, and other risk factors may also increase your chances of delivering preterm.

Depending on your personal risk factors, your doctor may recommend **Progesterone** and/or a cervical stitch (cerclage). It's very important to tell your doctor or nurse promptly if you have any warning symptoms such as cramps, pelvic pressure, thin/watery/pink/mucous discharge, persistent low backache, or "not feeling right" as this may change your plan of care.

OPQC Progesterone Education for Providers

Reducing Preterm Birth

Evidence-Based Strategies to Improve Outcomes

Progesterone treatment and cervical length measurement screening are key tools to lowering Ohio's high infant mortality rate

Cervical Length Measurement

A Vital Tool in Reducing Preterm Birth in Ohio

PROBLEM
Preterm birth is the leading cause of newborn death in Ohio.

RISK FACTORS
Pregnant women with a previous spontaneous preterm birth or with a short cervix in their current pregnancy.

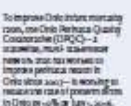
SOLUTION
Progesterone, a treatment backed by national guidelines from the American College of Obstetricians and Gynecologists (ACOG) and the Society for Maternal-Fetal Medicine (SMFM) can reduce the risk of preterm birth by 50% for women with either a previous spontaneous preterm birth or a short cervix. Progesterone should be part of the solution, along with smoking cessation and other traditional efforts, to reduce prematurity.

CONCLUSION
Identifying pregnant women at risk for preterm birth who are candidates for progesterone treatment requires the use of transvaginal ultrasound (TVU) to measure cervical length. Standardized sonographer training in TVU is essential to determine accuracy of the cervical length measurement to estimate—and reduce—the risk of preterm birth.

Risks for Preterm Birth

- Previous preterm birth or miscarriage
- Short cervix
- African American race
- Pregnant with twins or triplets
- Infections during pregnancy
- Very overweight or underweight
- Smoking, poor diet or stress
- Gum disease or certain other health problems

To improve Ohio infant mortality rates, the Ohio Perinatal Quality Collaborative (OPQC)—a statewide, multi-stakeholder network that has worked to improve perinatal health in Ohio since 2007—is working to reduce the rate of preterm births in Ohio by [illegible] by July 1, [illegible].



Transvaginal Ultrasound (TVU): A Breakthrough in Preterm Birth Prevention

Ohio has fallen to [illegible] of 50 states in infant mortality, fueled by high preterm birth rates. Effective strategies to reduce the incidence of spontaneous preterm births are now available, including progesterone for women with:

- Prior preterm birth and/or
- A short cervix

Cervical length measurement using TVU during the 2nd term of pregnancy is an important tool for identifying women at risk for preterm birth. ACOG supports the use of TVU to identify women with an increased risk for preterm birth who may benefit from progesterone prophylaxis.

Transvaginal Ultrasound Requires a Level of Technical Expertise

To prevent quality-assurance concerns with cervical ultrasound screenings, it is important that the sonographers on which your practice or clinic depends are properly trained. An improperly performed TVU cervical length measurement can result in a needed treatment or a missed opportunity to prevent preterm birth. While sonography training often does include the technical details that TVU requires for accurate cervical length measurement, there are additional education and credentialing opportunities available to help sonographers improve their skills.

Improve Accuracy with Cervical Length Accreditation

An October [illegible] study in the American Journal of Obstetrics & Gynecology concluded that "increased attention to standardized education and credentials is warranted for persons who perform ultrasound examinations of the cervix in pregnancy."

It's important that sonographers are properly trained in cervical length measurement. Two such programs are available through the Cervical Length Education and Review (CLEAR) program and the Fetal Medicine Foundation (FMF).

	Fetal Medicine Foundation (FMF)	Cervical Length Education and Review (CLEAR)
Website	[illegible]	[illegible]
Duration	[illegible]	[illegible]
Cost	[illegible]	[illegible]
[illegible]	None	[illegible]

[illegible]

Sonographers getting properly trained in cervical length measurement is a critical piece in reducing Ohio's preterm birth rate by [illegible] by July 1, [illegible].

Watch Hyagriv Simhan, MD, University of Pittsburgh Medical Center's Magee-Women's Hospital, explain in a 3-minute video how TVU can help prevent preterm birth at https://opqc.net/patients-providers/%20Preterm%20Birth%20and%20Prevention.

Clinical Expert Series

Identification of Candidates for Progesterone

Why, Who, How, and When?

Jay D. Iams, MD

The NEW ENGLAND JOURNAL of MEDICINE

CLINICAL PRACTICE

Caren G. Solomon, M.D., M.P.H., *Editor*

Prevention of Preterm Parturition

Jay D. Iams, M.D.

Fact Sheet

17 Alpha-hydroxyprogesterone caproate (17P)

Making the Case for 17P

Nearly 500,000 babies are born preterm in the United States each year.[1] Preterm birth (PTB), or birth less than 37 weeks gestation, puts infants at a higher risk of death and is the leading cause of long-term neurological disability in children. Additionally, PTB-related health expenses cost the U.S. healthcare system more than $26 billion each year.[2] Preventing PTB is critical to fostering the long-term health and development of infants across the country.

Universal or selective cervical length screening?

Doing nothing is no longer an option, say the authors. Cervical length assessment should be provided to a larger population of women to identify and treat those with cervical shortening.

BY **KARA B. MARKHAM, MD,** AND **JAY D. IAMS, MD**

The short cervix and preterm birth: 8 key questions and evidence-based answers

An expert review of screening, identification, and management for both nulliparous women and those with a history of spontaneous preterm birth

Tracy A. Manuck, MD

Spreading the Progesterone Project Throughout Ohio

https://opqc.net/projects/progesterone%20joining

Interested in Joining OPQC's Progesterone Project?

OPQC Progesterone Efforts and Next Steps

OPQC is currently working with 25 outpatient clinics affiliated with the 20 OPQC charter sites. These sites are enthusiastically testing ways to reduce preterm births through the appropriate use of progesterone in women at risk of preterm birth. We are learning about barriers, challenges, and how to streamline data forms for tracking improvement.

By early winter 2015, OPQC expects to invite additional practices to join this work. In the meantime, we encourage all OB practices to learn with us in the following ways:

- Talk with other clinicians at your practice about your current processes for putting patients on Progesterone using the Prediction and Prevention of Preterm Birth ACOG Practice Bulletin 130 October 2012 as a guide.
- Use the same resources and materials* that our pilot sites use to inform their efforts.
- Use the same data forms that our pilot sites use as part of OPQC quality improvement efforts:
    - Keep a Progesterone Log and use the Progesterone Candidate Form and Monthly Form to collect data for quality improvement.
    - The OPQC Progesterone measurement table will help you to calculate improvements in identification and treatment of women eligible for Progesterone.
- Document any Administrative Barriers to Progesterone using the easy on-line form. Results are confidential and will help us work with statewide agencies to accelerate results.

Please sign up here if you would like to participate in the next Progesterone quality improvement project, join an informational call or ask to receive information about the next Wave.

Questions or more information? Email us at opqc@cchmc.org.

*** Materials List (click on name to view)**

Prevention of Preterm Parturition by Jay D. Iams, M.D. (N Engl J Med 2014; 370:254-261January 16, 2014)

Project Description

Key Driver Diagram

Preparing Your Improvement Team

Identifying Your Team's Aim

The Model for Improvement YouTube Videos

January 2014 Learning Session Presentations

Action Period Presentations

Clinic Systems Inventory Tool

Recommendations

- **Publish The Data for Your County & Your State:**
  - **Infant Mortality, Preterm Birth, & Smoking.**
  - **Scheduled Births < 39 Weeks – 1% goal.**
  - **Multi-fetal Pregnancy Rates.**
  - **Antenatal Corticosteroids.**
  - **Include Racial Disparity Rates for All the Above.**
- **Track All Over Time – Use Graphs, Not Tables.**
- **Promote Public Awareness**
  - Risks of Preterm Birth
  - Prevention with Progesterone

  - Availability of Cervical Ultrasound

OPQC Ohio Perinatal Quality Collaborative

OPQC
Important Contact Information

- **Our web site: www.opqc.net**
  - Home page: Announcements! Training Information! Sign up for our newsletter!
  - Patients & Providers: Providers → Preterm birth & Progesterone
  - Projects: Progesterone
- **Jay Iams – jay.iams@osumc.edu**
- **Hetty Walker – hetty.walker@osumc.edu**
- **Want more information? info@opqc.net**
- **Follow us on Twitter: opqc@OhioPQC**
- **Join us on Facebook: www.facebook.com/ohioperinatalqualitycollaborative**

Identification of Candidates for Progesterone

Why, Who, How, and When? *Obstet Gynecol June 2014*

Citations

1. Iams JD. Prevention of preterm parturition. N Engl J Med 2014;370:254-61.
2. Iams JD. Identification of candidates for progesterone. Why, who, how, and when? Obstet Gynecol 2014; 123:1317–26.
3. McManemy J, Cooke E, Amon E, et al. Recurrence risk for preterm delivery. Am J Obstet Gynecol 2007;196:576.e1-576.e6.
4. Laughon SK, Albert PS, Leishear K, Mendola P. The NICHD Consecutive Pregnancies Study: recurrent preterm delivery by subtype. Am J Obstet Gynecol. 2014;210;131.e1–131.e8.
5. Edlow AG, Srinivas SK, Elovitz MA. Second trimester loss and subsequent pregnancy outcomes: what is the real risk? Am J Obstet Gynecol 2007;197:581.e1- 581.e6.
6. Stillbirth Collaborative Research Network Writing Group. Causes of death among stillbirths. JAMA 2011;306:2459–68.
7. Markham K, Walker H, Lynch CD, Iams JD. Preterm birth rates in a prematurity prevention clinic after adoption of progestin prophylaxis. Obstet Gynecol 2014;123:34–9.
8. Iams JD, Goldenberg RL, Mercer BM, et al. The Preterm Prediction Study: recurrence risk of spontaneous preterm birth. Am J Obstet Gynecol 1998;178:1035-40.

OPQC's Partners