



Prioritized Findings from First Year Cleveland's Action Team #4: Extreme Premature Births

**First Year
Cleveland**

**Virtual Annual Report to the Community-2020
4th in a Series**

September 3, 2020; 2:00 – 3:00 p.m.

 **Better Health**
Partnership
Collaborating for a healthy community

Welcome!

Rita Horwitz

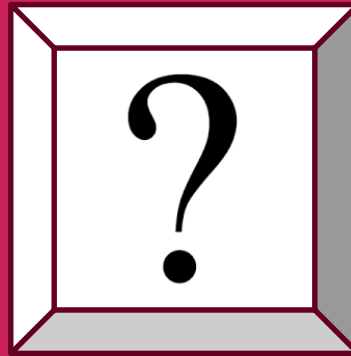
President & CEO

Better Health Partnership

Before we begin...

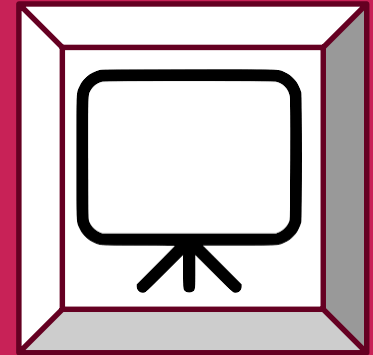


Everyone will be muted.



Submit your questions via the "Chat" window.

We will do Q & A at the end.



Presentations will be posted on our website.



Working together
since 2007....

to collectively
improve health
and reduce health
disparities



**First Year
Cleveland**

 **Better Health**
Partnership

Vision

Northeast Ohio is one of the healthiest places to live and best places to do business



Mission

We bring health care providers, social services, and other sectors together, to share best practices and accelerate data-informed improvements in equitable population and community health.

Better Health Partnership's Population Health Improvement Priorities *"Twinkle to Wrinkle"*

**Infant &
Maternal Health
(2018 - present)**

Extreme Prematurity

**Children's
Health
(2016 - present)**

Obesity, Asthma

Mental/Behavioral
Lead Exposure

**Adult Health
(2007 - present)**

Hypertension
Diabetes
Colorectal Cancer
Screening



First Year Cleveland Action Team 4 Extreme Premature Births

Led by:

**Brian Mercer MD, Chair Ob/gyn, The MetroHealth System
and
Better Health Partnership**

First Year Cleveland's Mobilization Strategy to Reduce Infant Deaths and Racial Disparities



**First Year
Cleveland**

By the end of 2020, our community will reduce Cuyahoga County's IMR from 10.5 in 2015 to 6.0 IMR

Every Baby Deserves to Celebrate their First Birthday

THE ISSUE

IN GREATER CLEVELAND, TOO MANY BABIES DON'T GET THAT CHANCE. IN 2019*...

13,937

babies were born in
Cuyahoga County

120

of these babies didn't
celebrate a first birthday

73%

of these babies were
African American from all
socioeconomic levels

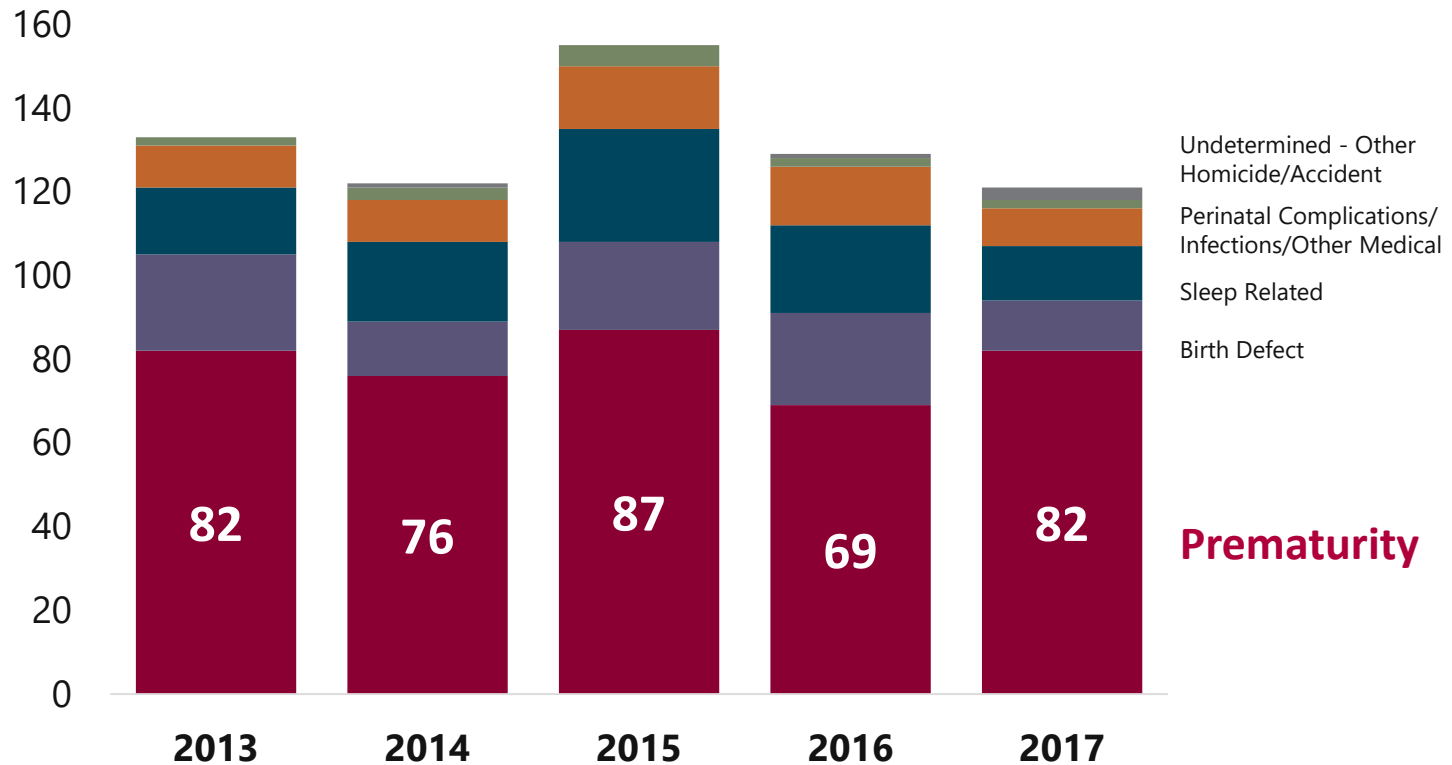
**First Year
Cleveland**

2019 Overall IM Rate: 8.61

2019 Black, non-Hispanic IM Rate: 16.34

(As of August 10, 2020 CCBH Report)

Prematurity: Leading cause of Infant Death Cuyahoga County, 2013-2017



Source: *Protecting our Future*, Cuyahoga County Board of Health; reports from 2013, 2014, 2015, 2016 and 2017.

First Year Cleveland (FYC) Action Team 4 Goals

- Prevent & delay extreme premature births
- Optimize outcomes of peri-viable births
- Reduce disparities



Ensure recognized and effective interventions are completed in a timely fashion for each extreme preterm delivery before 26 weeks of gestation

FYC Action Team #4 Strategies

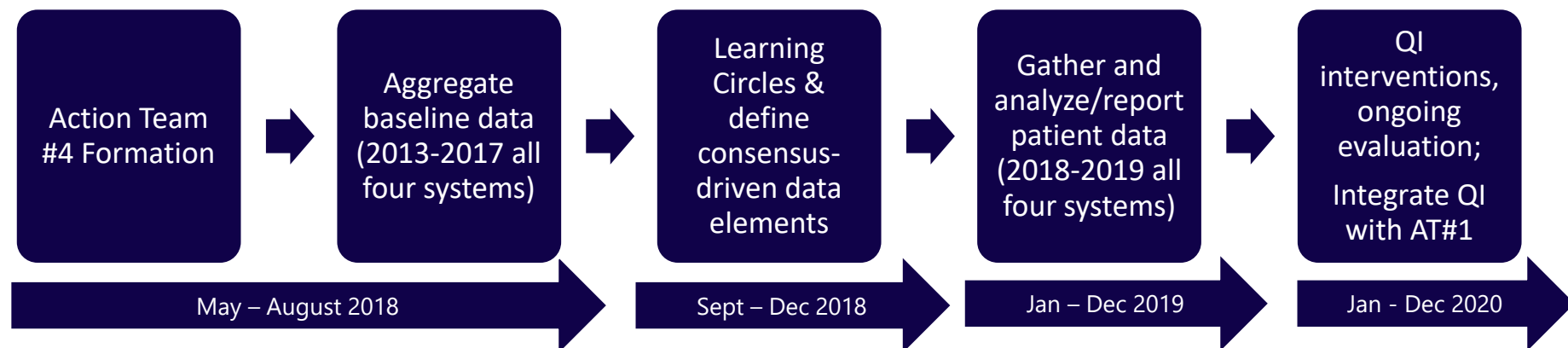
- Collect data and launch learning circles with local birth hospitals and researchers/experts
- Launch QI interventions, monitor progress, identify and spread best practices

 Cleveland Clinic



 **Better Health**
Partnership

Action Team #4 Timeline

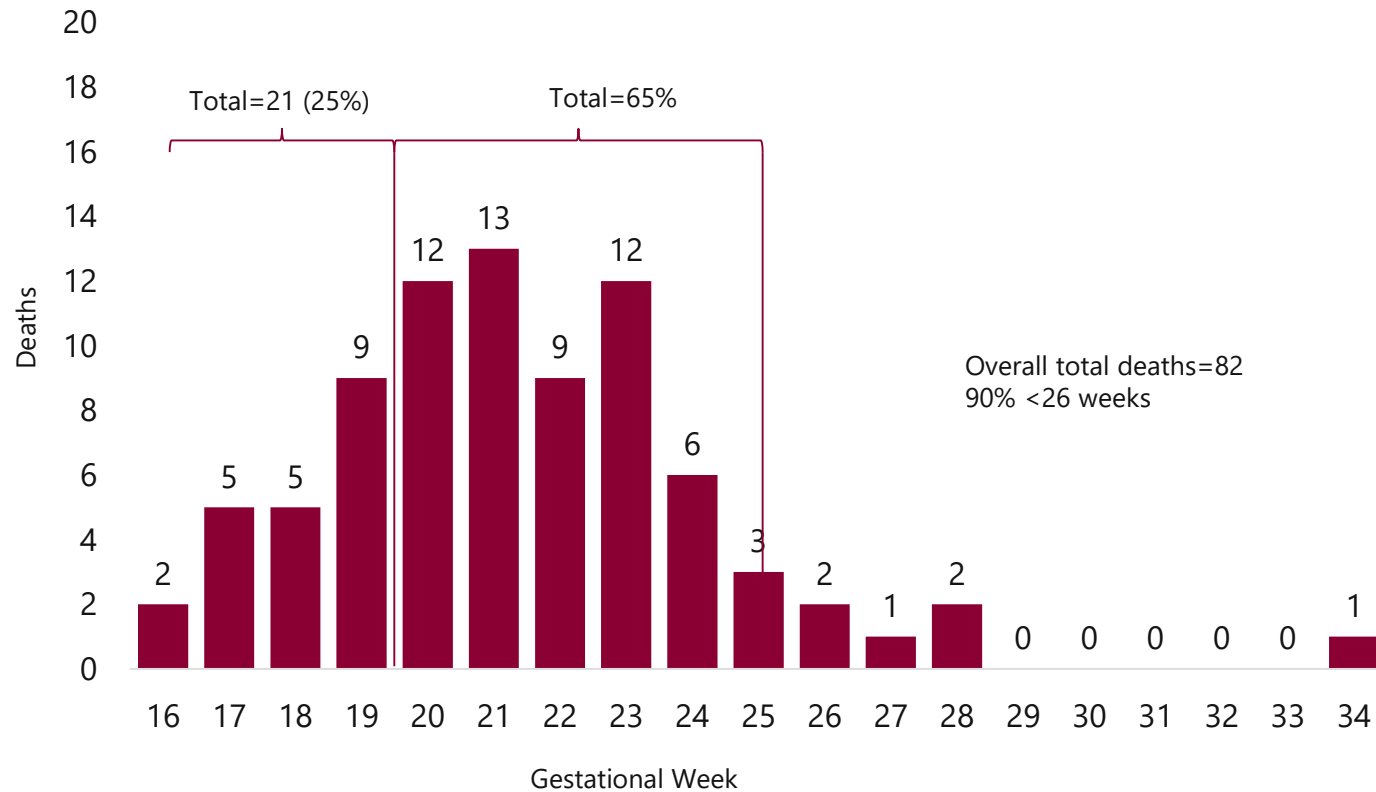


**Brian Mercer MD, Chair Ob/gyn
The MetroHealth System**

**Findings and Recommendations
from Action Team #4**

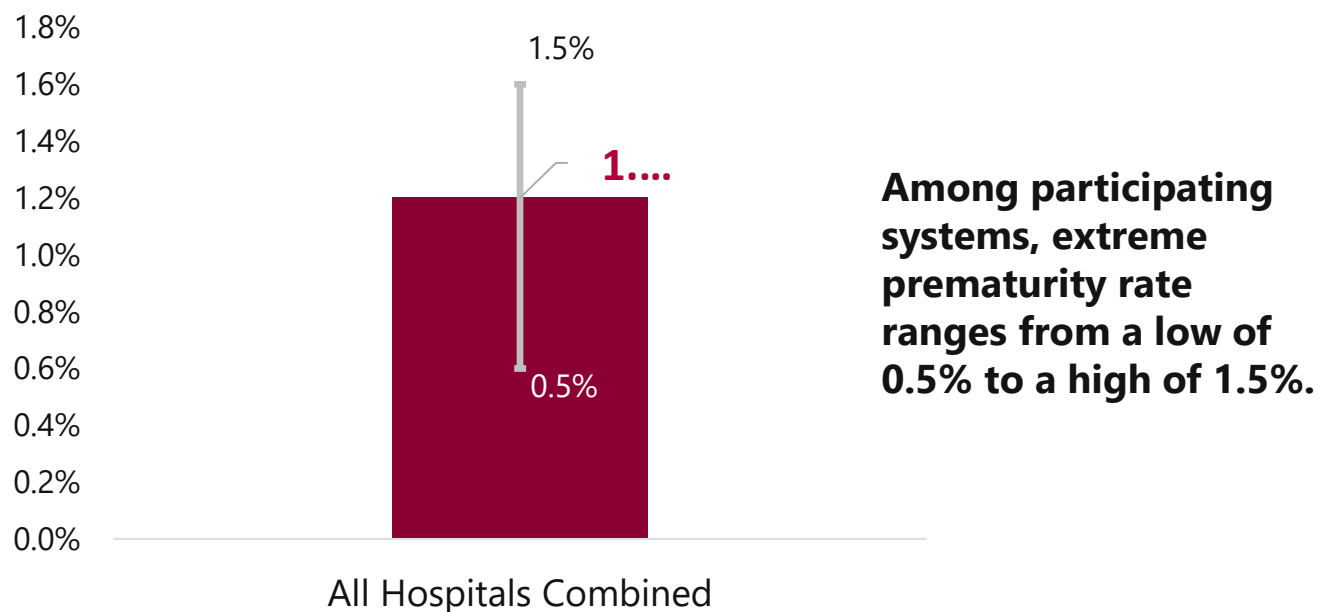
2013-2017
Hospital Aggregate Baseline Data
“guided our focus”

Infant Mortalities Related to Prematurity by Gestational Week Cuyahoga County, 2017



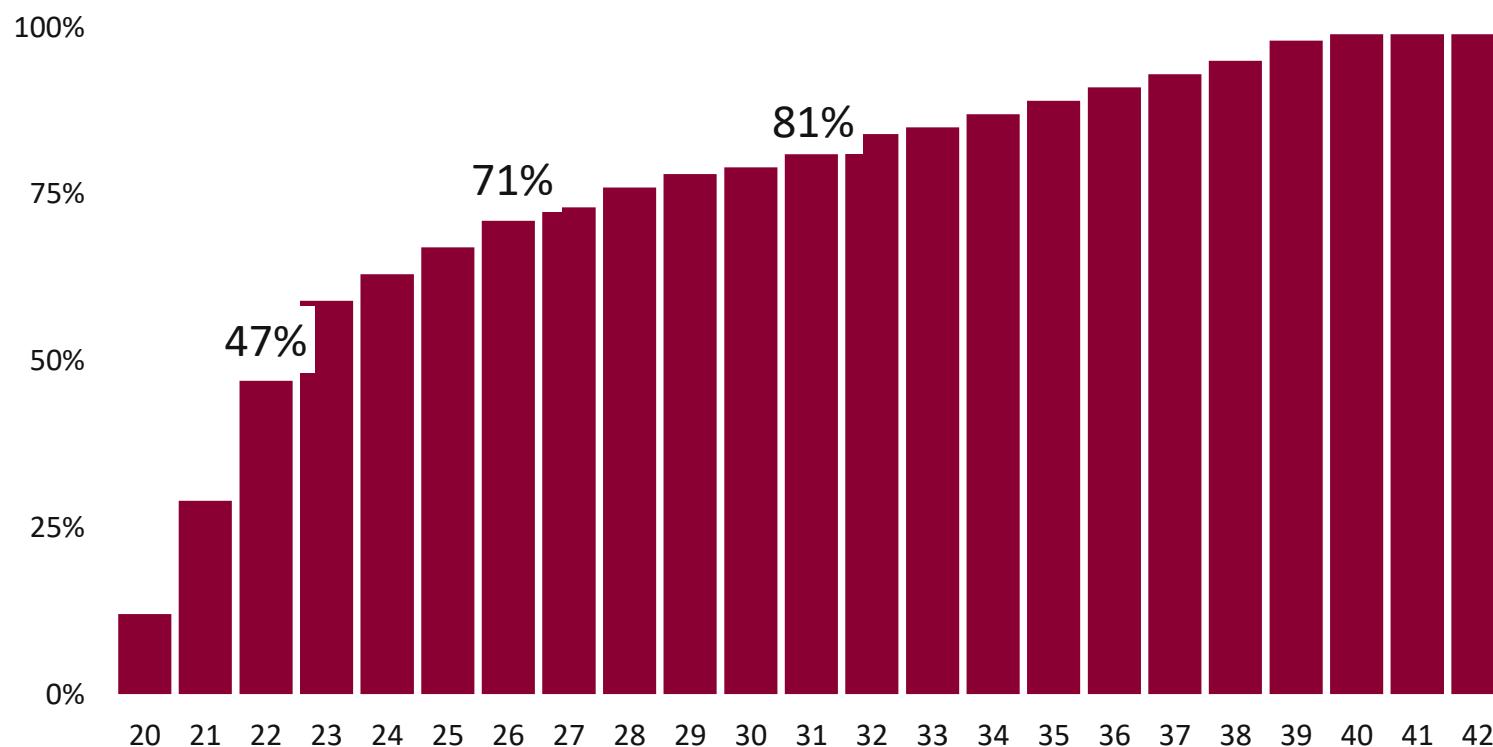
Source: Cuyahoga County Board of Health

Proportion of Live Birth That Are Extremely Premature (< 26 weeks) All Live Births, 2013-2017

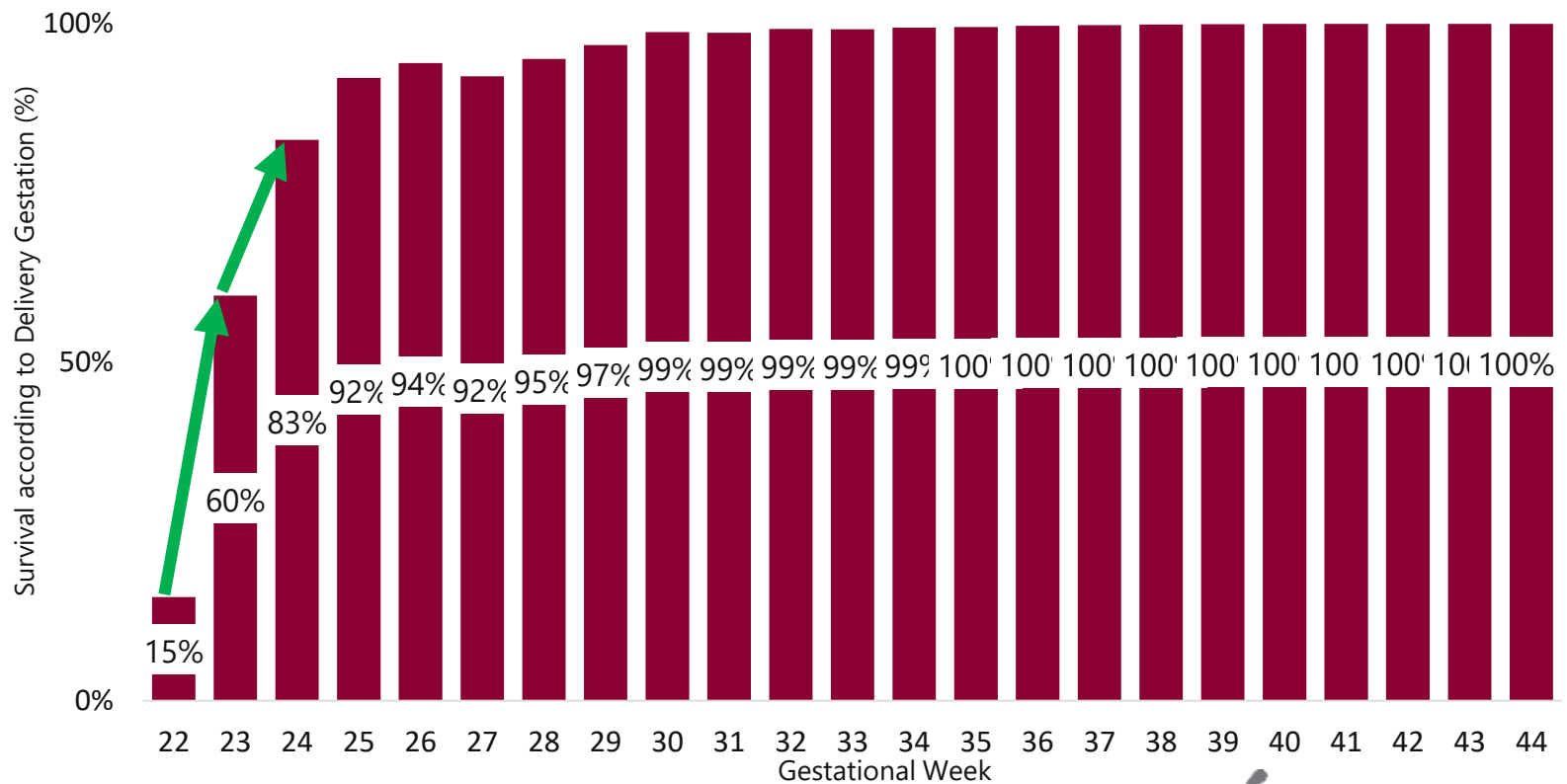


- Extreme premature births are a problem for every hospital system in Cuyahoga County.

Cumulative Newborn Death before discharge by Week (%)



% of Live Births Which Survived to Discharge (All Systems combined, 2013-2017) by Gestational Week



Action Team #4 2018 Findings

Prioritized Areas for Data Collection and Evaluation

Access to Early Care, Risk Identification and Follow-up

- 1: Early identification of risk for extremely preterm birth
- 2: Timely antenatal consultation for those at risk
- 3: Appropriate follow-up after ED evaluation

Access to Timely Consultation and Intervention

- 4: Timely access to Progesterone
- 5: Timely access to history and ultrasound indicated cerclage
- 6: Collaborative consultative care for twin/multifetal gestation

Coordinated Counseling and Care Planning at Admission

- 7: Systemwide guidelines regarding counseling and care for anticipated extremely preterm birth

Appropriate Access to Critical Newborn Interventions and Comfort Care

- 8: Coordinated care for imminent extremely preterm birth
- 9: Evaluation of appropriateness of resuscitation absent parental request for comfort care

Mother's Characteristics

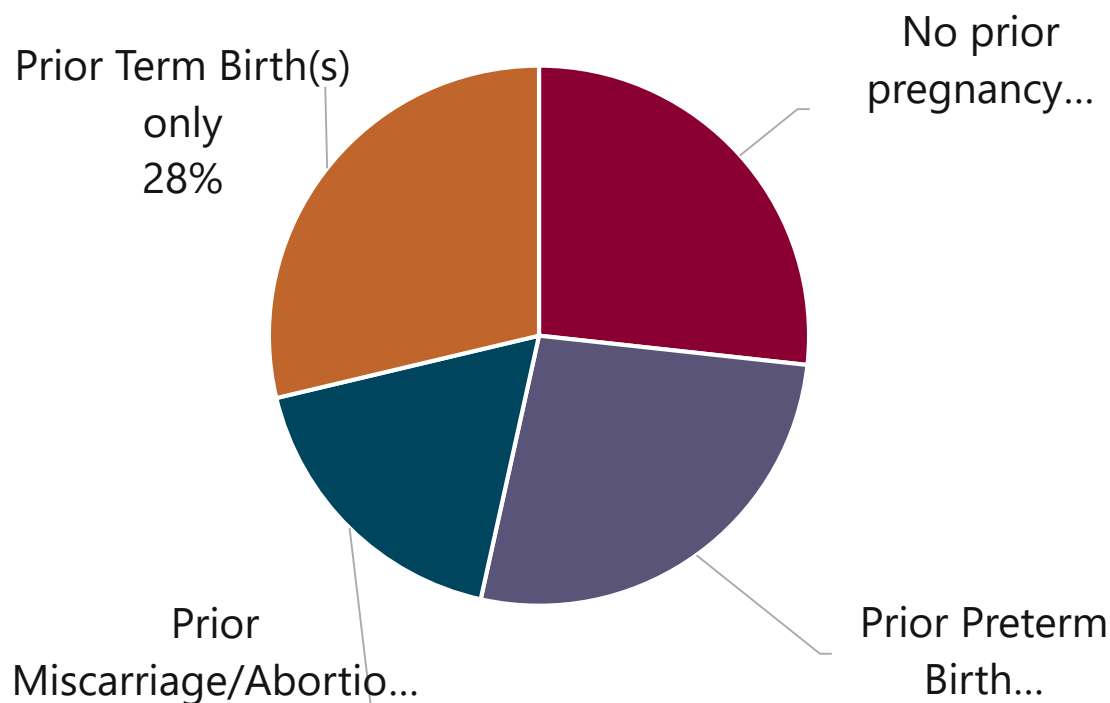
	Black - African American	White	Other-Unknown	Total
Total	81 (48%)	66 (39%)	23 (14%)	170
Nulliparous	22%	32%	26%	27%
Teen (<20 years old)	4%	12%	0%	7%
Advanced Maternal Age (35+)	10%	21%	39%	18%
High School Graduate	80%	93%	94%	87%
Living with Partner	60%	85%	74%	73%
Other (non-partner) adults in home	12%	9%	0%	9%
Frequent Address Change	3%	2%	0%	2%
Shelter / Homeless	1%	2%	0%	1%
Tobacco use	15%	15%	13%	15%
Alcohol use	4%	2%	0%	3%
Illicit drug use	7%	6%	4%	7%
Underweight	0%	2%	0%	1%
Obese	60%	38%	44%	49%

Mother's Characteristics

	Black - African American	White	Other-Unknown	Total
Total	81 (48%)	66 (39%)	23 (14%)	170
Infertility Rx	1%	14%	13%	8%
Surrogate	0%	2%	0%	1%
Multiple Gestation	6%	15%	17%	11%
Prior Uterine Surgery (incl. D&C)	11%	9%	4%	9%
Prior Cervical Surgery	10%	2%	9%	7%

Prior Obstetric History

N=170

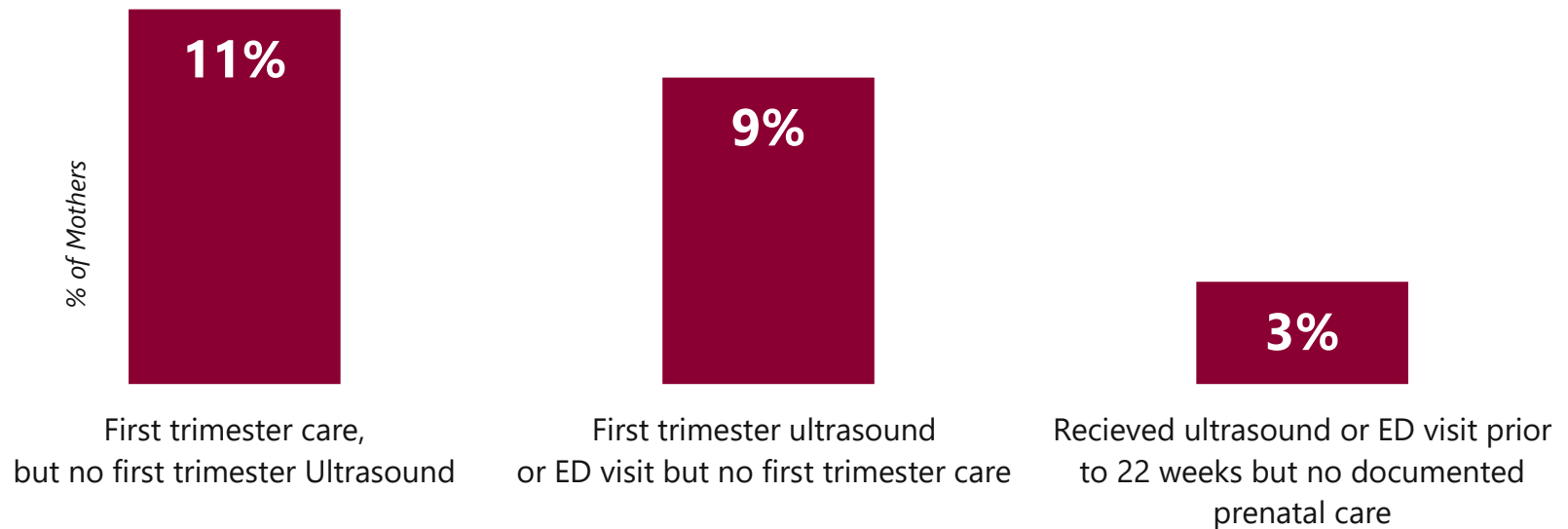


	Black - African American	White
No prior pregnancy	20%	33%
Prior preterm birth	40%	19%
Prior miscarriage/abortion (<20 weeks) only	15%	20%
Prior term birth(s) only	25%	28%

Prenatal Care Events

N=170

Access to Care

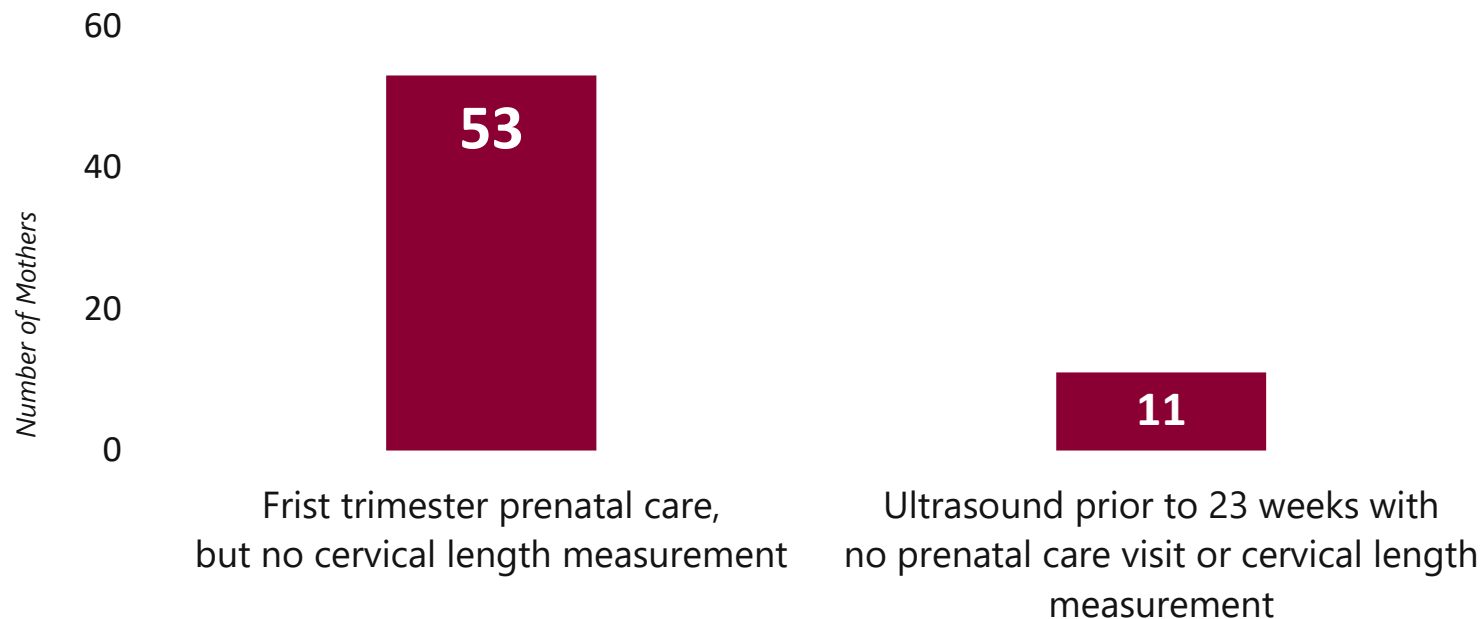


Delayed Prenatal Care, Ultrasound for Cervical Length;
Care Coordination Opportunity after ED Visit

Prenatal Care Events

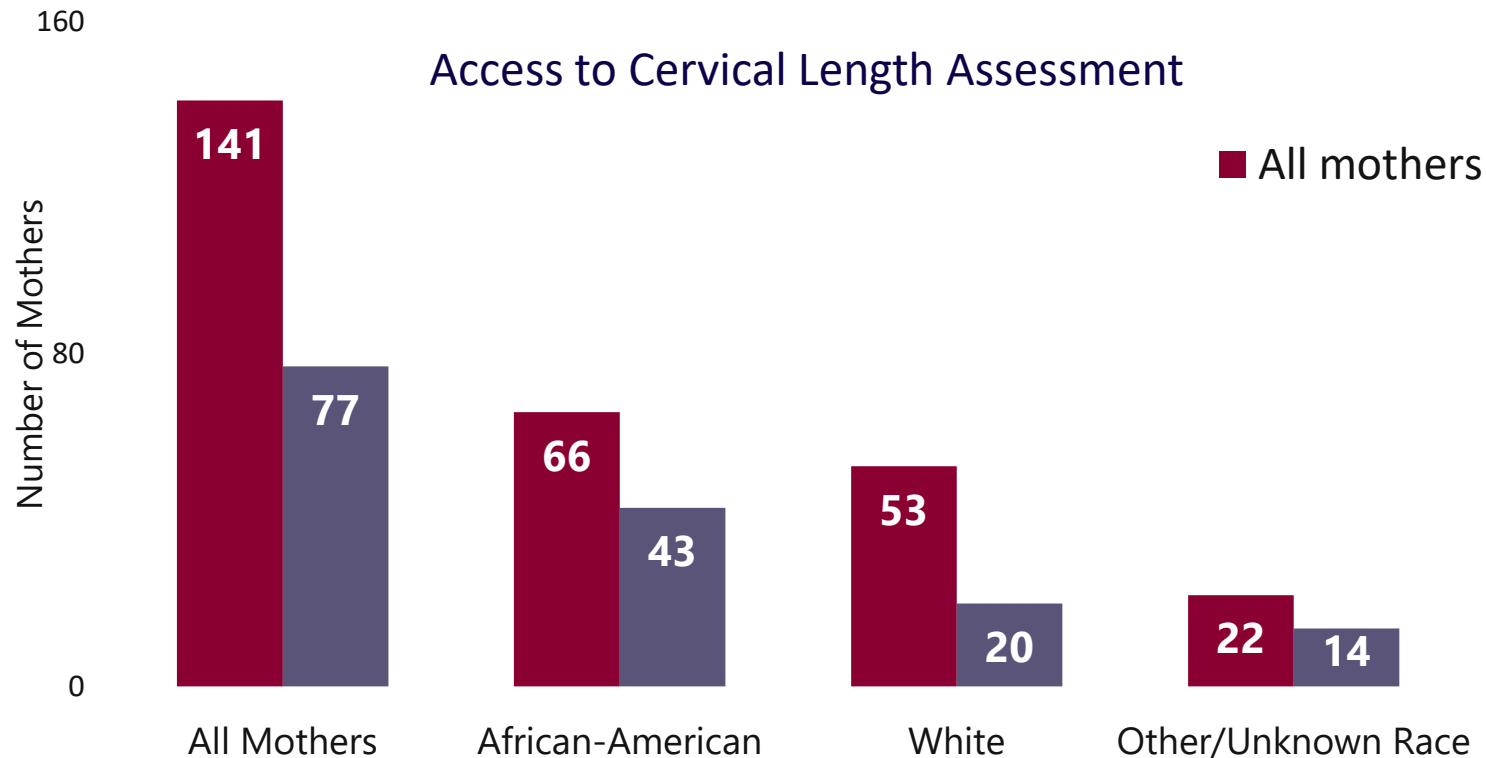
N=170

Access to Cervical Length Assessment



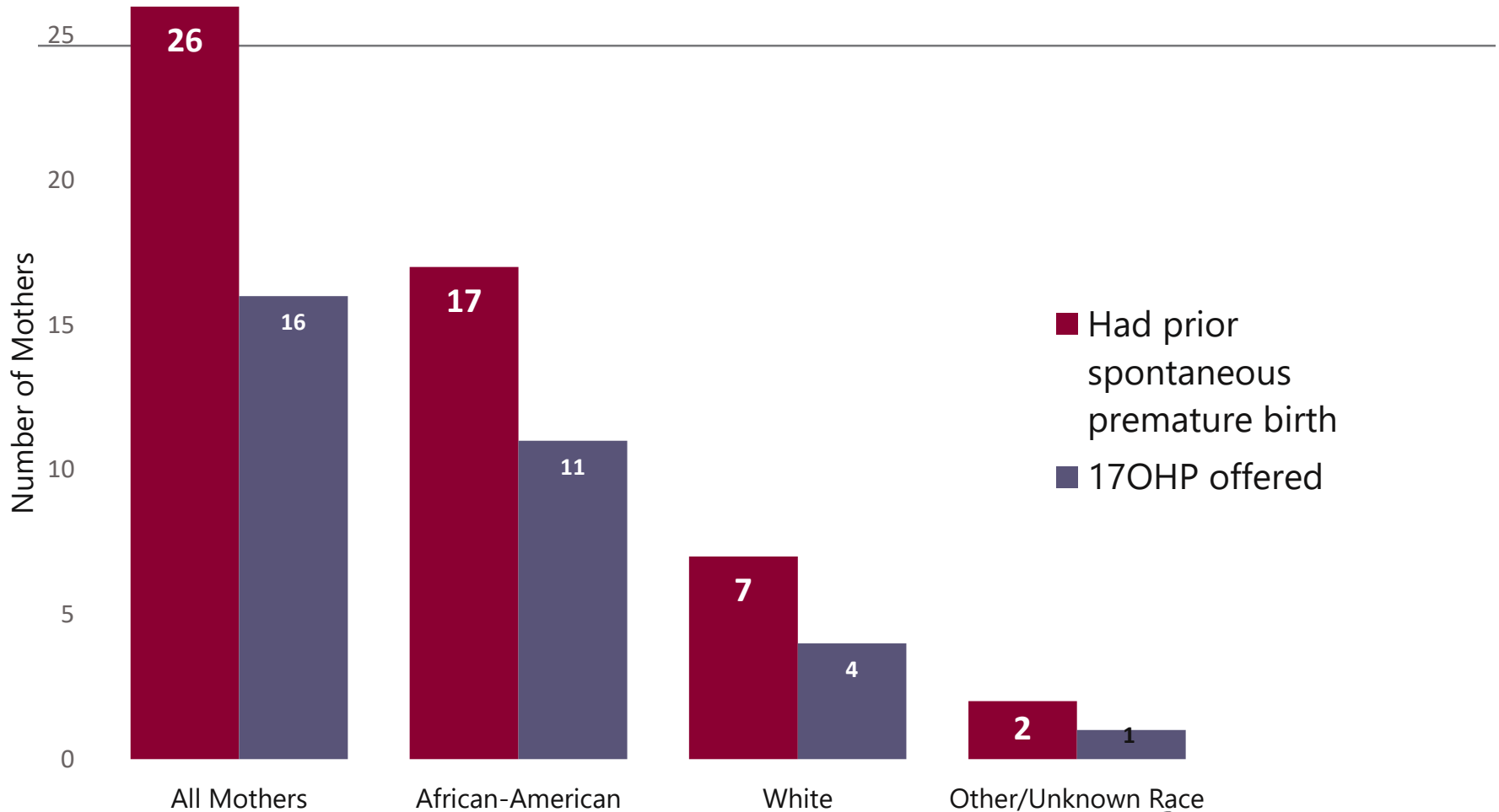
31% had no cervical length measurement and preterm labor was due to short cervix with no preventive intervention

Cervical Length Screening (Prior to 23 Weeks)



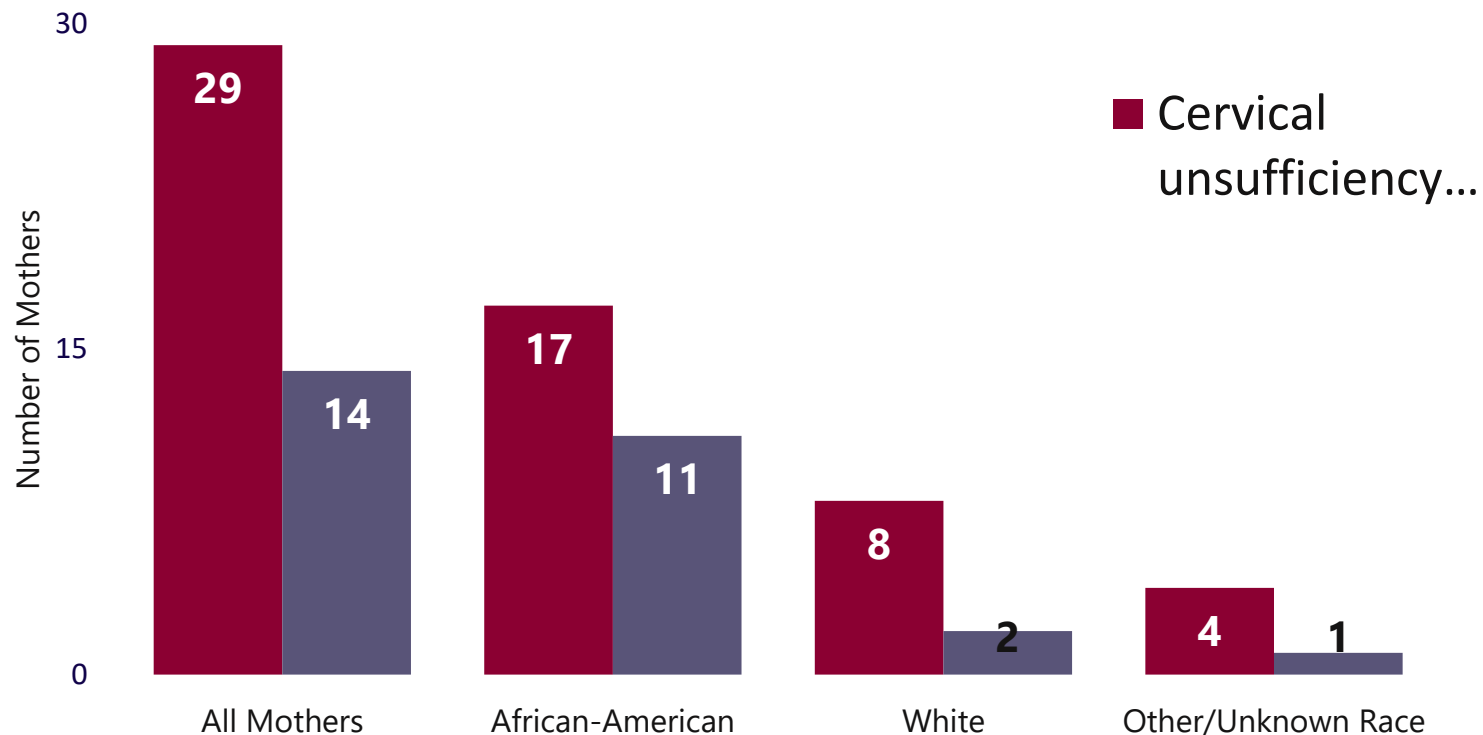
Prior Preterm Birth

17OH-Progesterone for Prior Spontaneous Premature Births



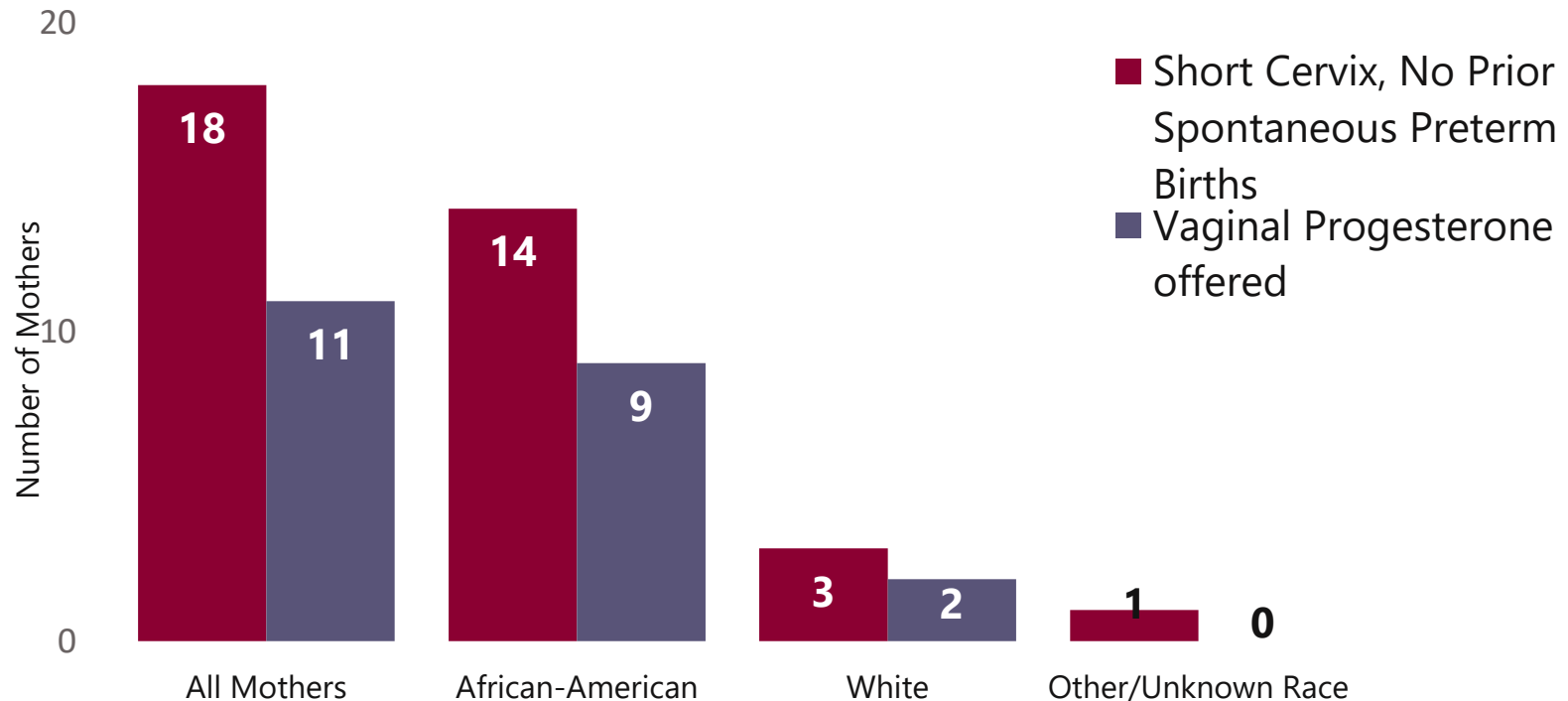
Cervical Insufficiency

(Diagnosed Prior to 23 Weeks)

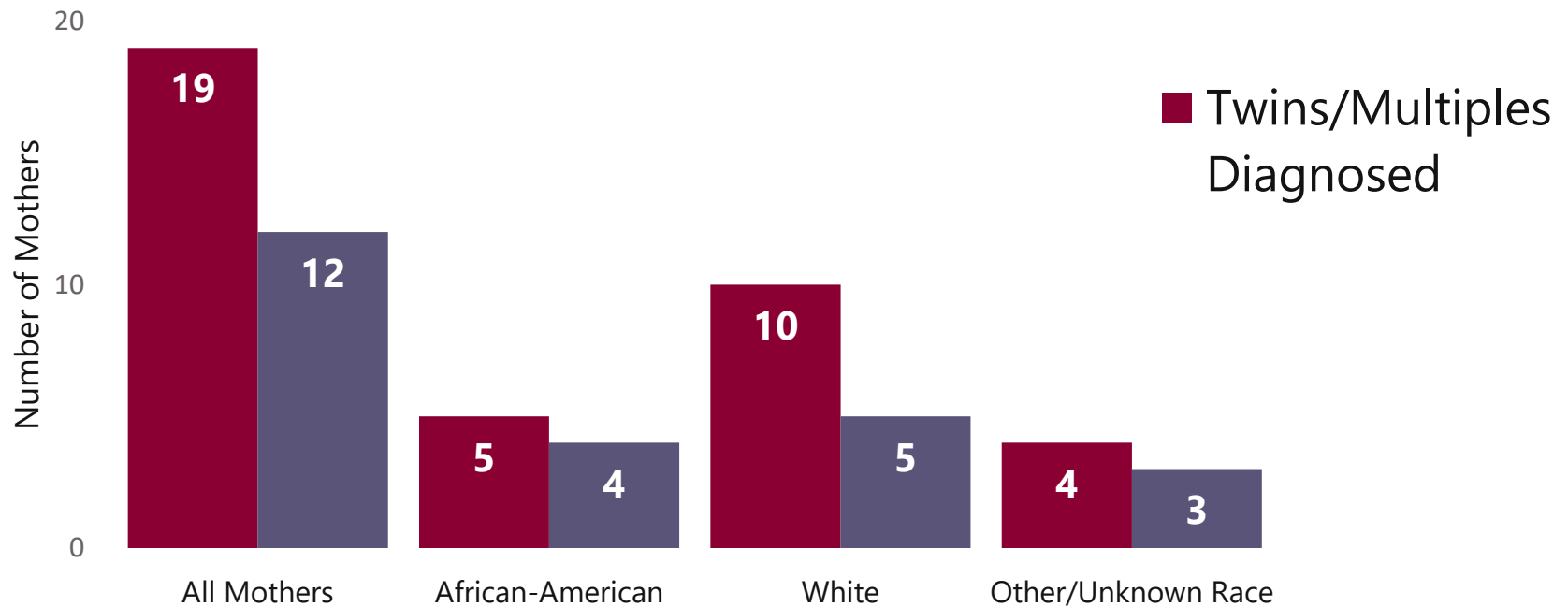


Short Cervix

Vaginal Progesterone for Cervix (< 20 mm)



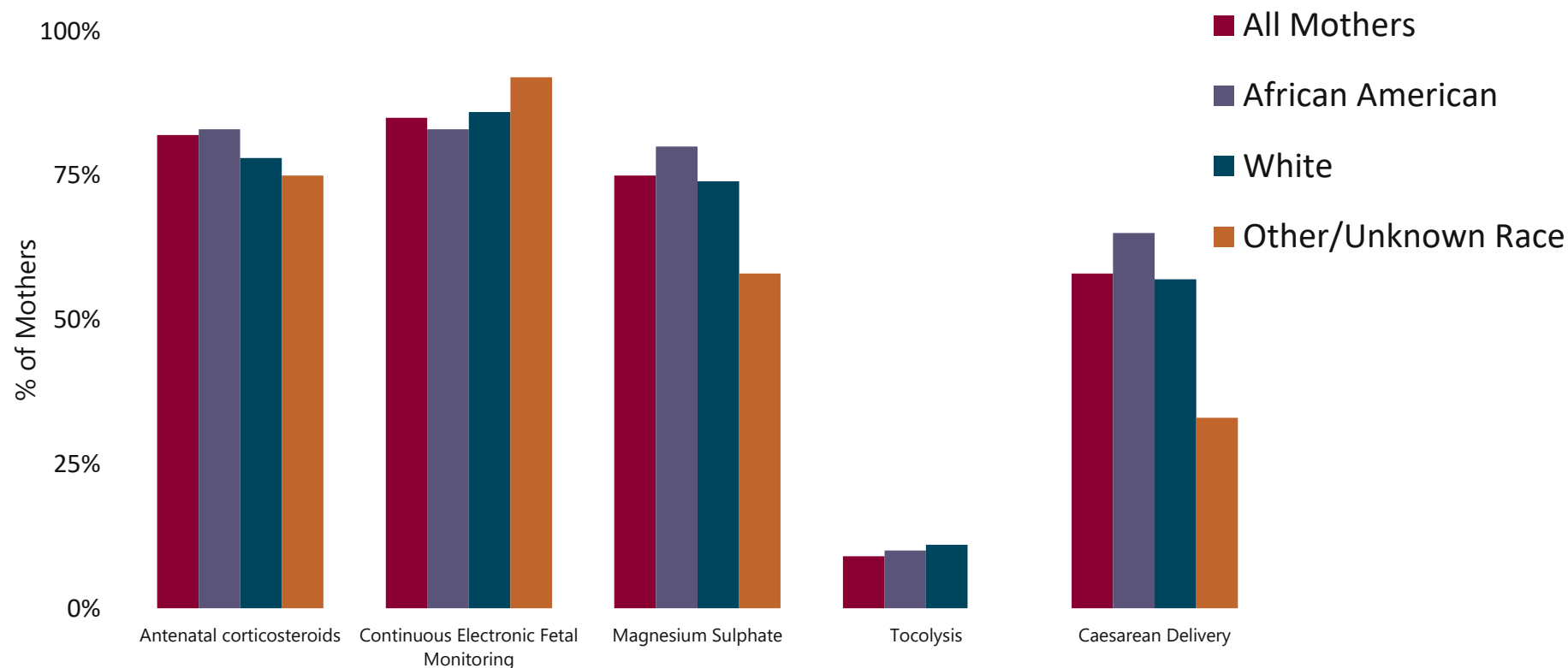
Multiple Gestations



Hospital Care

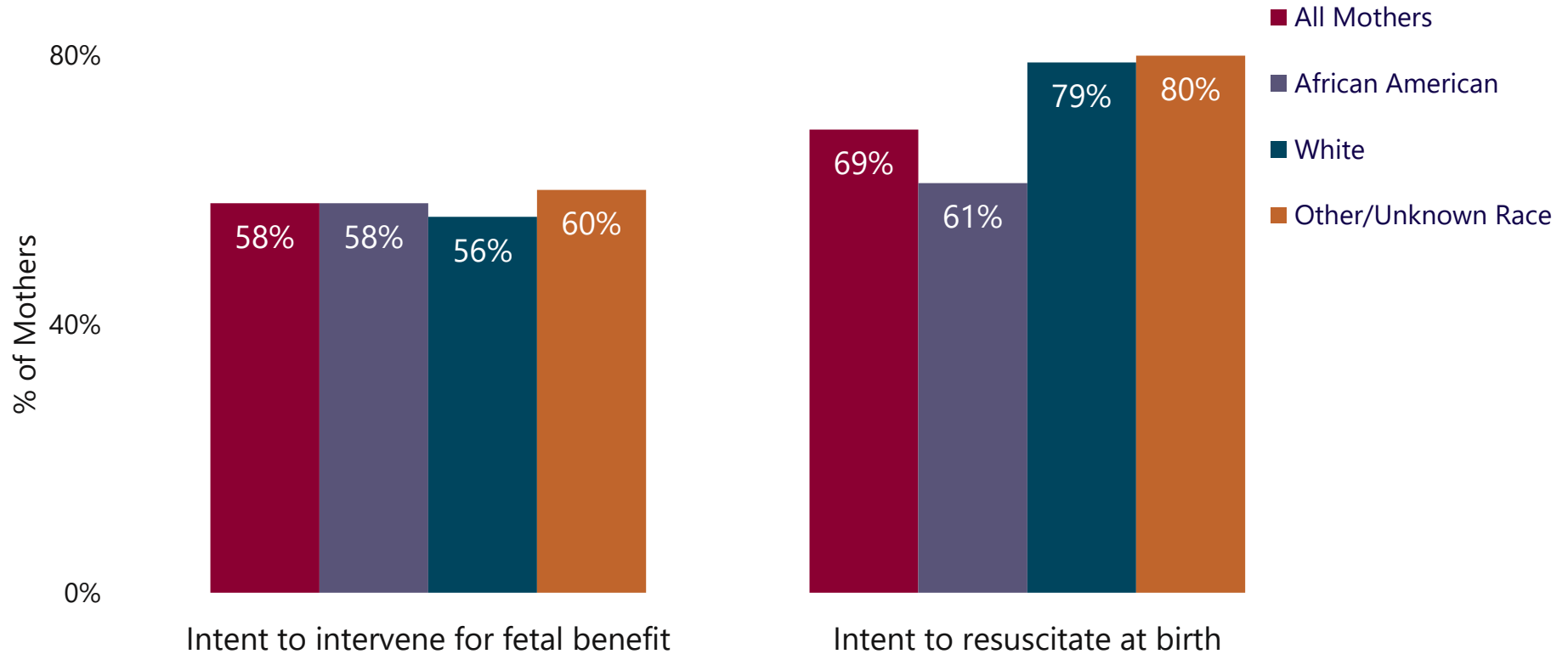
Intrapartum Interventions for Fetal Benefit

(Mothers with Documented Intent to Intervene, Delivery >1 hour After Admission)



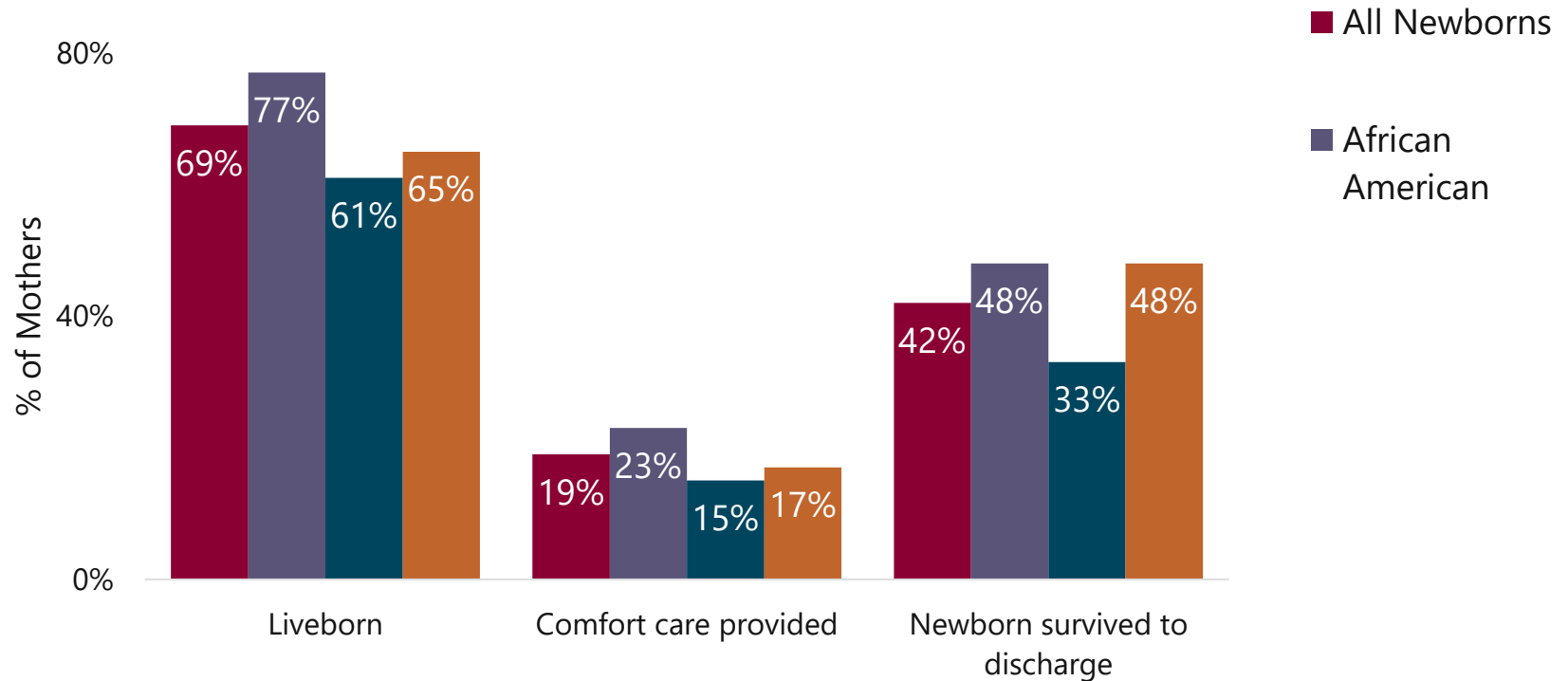
NICU Staff Involvement and Care

Intent to Intervene For Fetal Benefit and Intent to Resuscitate



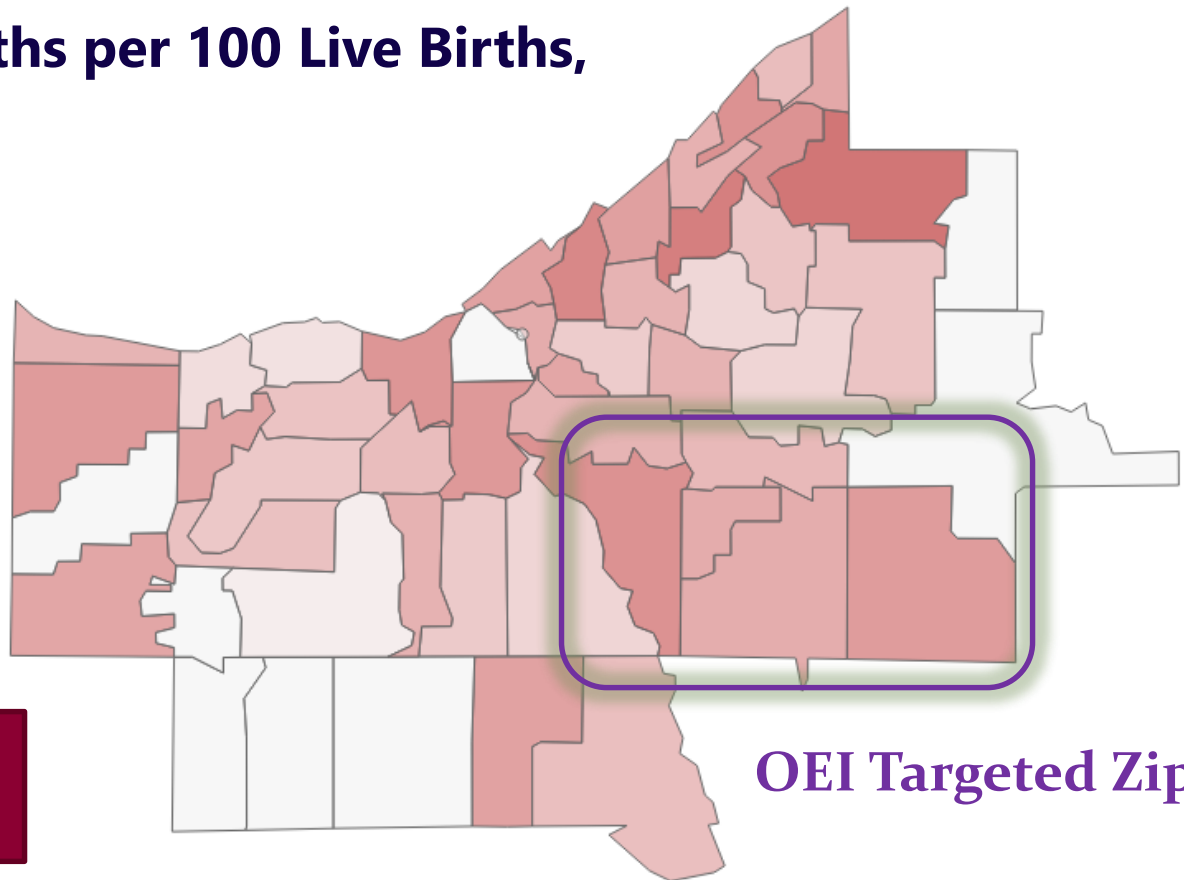
NICU Staff Involvement and Care

Newborn Outcomes



Extreme Premature Births per 100 Live Births, Cuyahoga County 2018

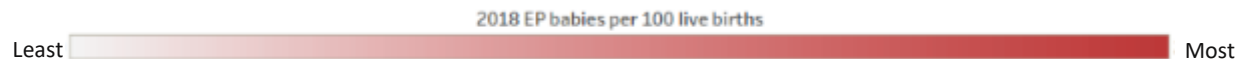
Area	# EP Babies	Births (2018)	Ratio
Cuyahoga	149	13843	1.07
Cleveland	109	8956	1.22
OEI Targets	21	1417	1.48



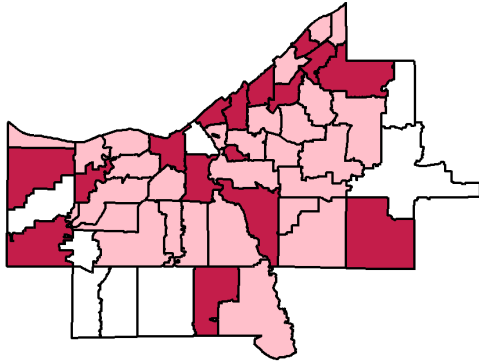
Extreme PTB occurred in 43 out of 52 zip codes; It's everyone's problem

OEI Targeted Zips

OEI=Ohio Equity Institute



2018 Extreme Premature Births Ratio



Data Reported to FYC/BHP	High Ratio [1.50, 2.73)	Low Ratio [0.01, 1.50)	None (0)
# of zip codes	16	27	9
# of Moms	64	71	0
# of Babies	71	78	0
From 2018 Birth Certificate Data			
Mean Births	235	321	158
% Medicaid	52.3	48.0	29.8
% Inadequate Pre-Natal Care	18.0	17.5	9.4

Extreme Premature Babies

divided by Birth Certificate Births in 2018
for Moms who were residents of zip codes in Cuyahoga County

Social/Economic Determinants	High Ratio [1.50, 2.73)	Low Ratio [0.01, 1.50)	None (0)
# of zip codes	16	27	9
% Non-Hispanic White	53.4	57.6	75.4
% African-Amer. or Black	35.8	35.1	14.1
% Hispanic ethnicity	5.5	3.5	3.4
Area Deprivation Index	106.8	102.1	86.6
Median Income	47,500	50,300	65,200
HS Graduation Rate	84.1	87.5	87.0
% Single-Parent HHs	39.7	39.3	23.1
% Broadband	69.9	73.7	77.1
% Smart Phone	64.5	66.4	69.7
Death Rate	12.8	11.7	9.4
Maltreatment Rate	20.9	13.1	8.9

AT #4: Prioritized/ Recommended Areas of Improvement

Based on chart review data collection, AT #4 prioritized 3 quality improvement interventions:

1. Early access to prenatal care for pregnant women presenting to an ED for evaluation
2. Early establishment of gestational age, pregnancy viability, and determination of pregnancy risk
3. Consistent cervical length screening in all pregnancies receiving prenatal care before 20 weeks

2020 Follow-up Actions and Insights

Dr. Brian Mercer

Rita Horwitz

Kimberly Dudley, Community Health Worker
The MetroHealth System
and
Alvonta Jenkins, Program Coordinator
Better Health Partnership

**Leveraging the Better Health Pathways HUB
to assist high-risk pregnant moms**



First Year Cleveland's Mobilization Strategy to Reduce Infant Deaths and Racial Disparities



**First Year
Cleveland**

By the end of 2020, our community will reduce Cuyahoga County's IMR from 10.5 in 2015 to 6.0 IMR

Register for Next Webinar- last of 5 part series

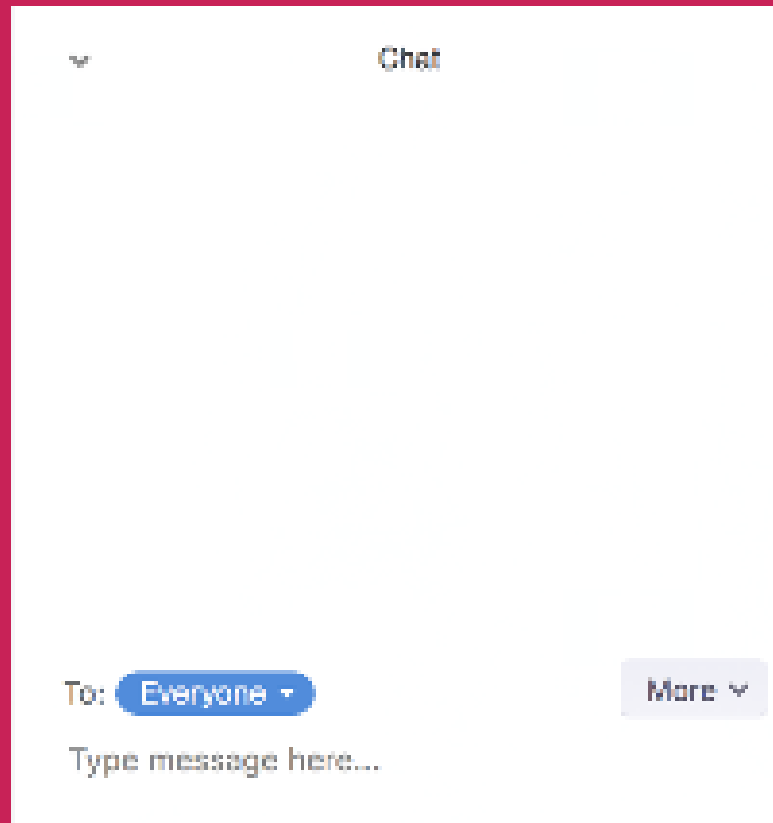
- **September 23: 12:00 noon – 1:00 p.m.**

Prioritized Findings from First Year Cleveland's **Action Team #1**
Patient Experiences; Racial Disparities

Need more information?

Please send your requests to Carol Kaschube ckaschube@metrohealth.org

Questions?
Please submit through chat function





Thank You!



www.betterhealthpartnership.org