Our Babies Are Dying

From Data to Action: A Review of All 2018 Infant Deaths in Northeast Florida

Northeast Florida Healthy Start Coalition

October 31, 2019 • Sulzbacher Village

Welcome & Introductions

Overview

- Impetus and Purpose of the Review
- Approach
- Summary of Findings
- Moving from Data to Action
- Next Steps

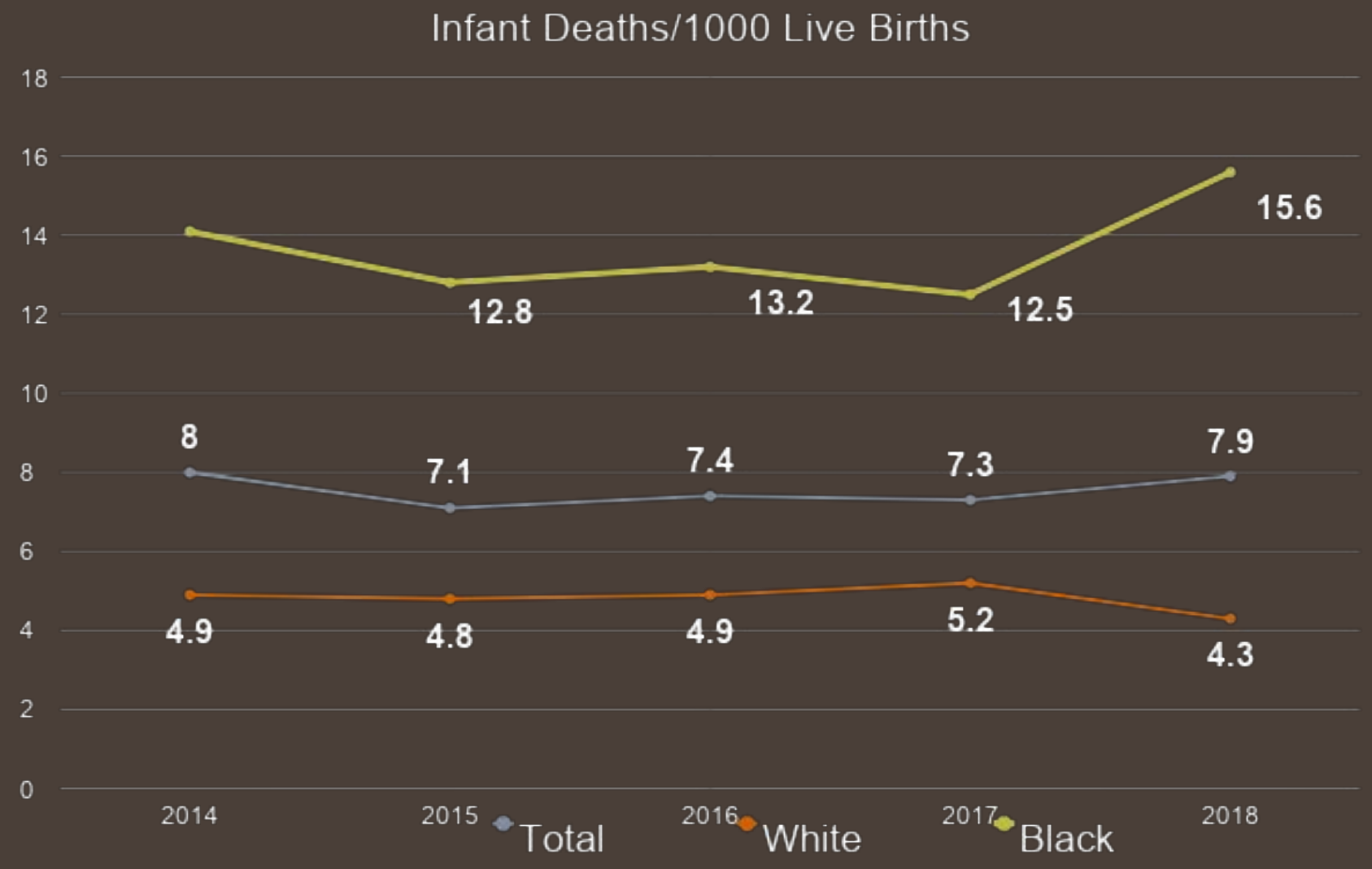
Impetus & Purpose of Review

- NEF exceeds state and national infant mortality rates. Why?
- To identify key medical, system, social and environmental risk factors and policy impacting birth outcomes in NEF and implement action to address them.

Approach

- Analysis of fetal & infant deaths (linked vital stats records)
  - Identify specific "periods of risk"
  - Examine contribution of birthweight
- Pinpoint contributing factors, issues in NEF (case abstractions)
- Identify evidence-based strategies for improving outcomes
- Take action!

Infant Mortality 2014-2018

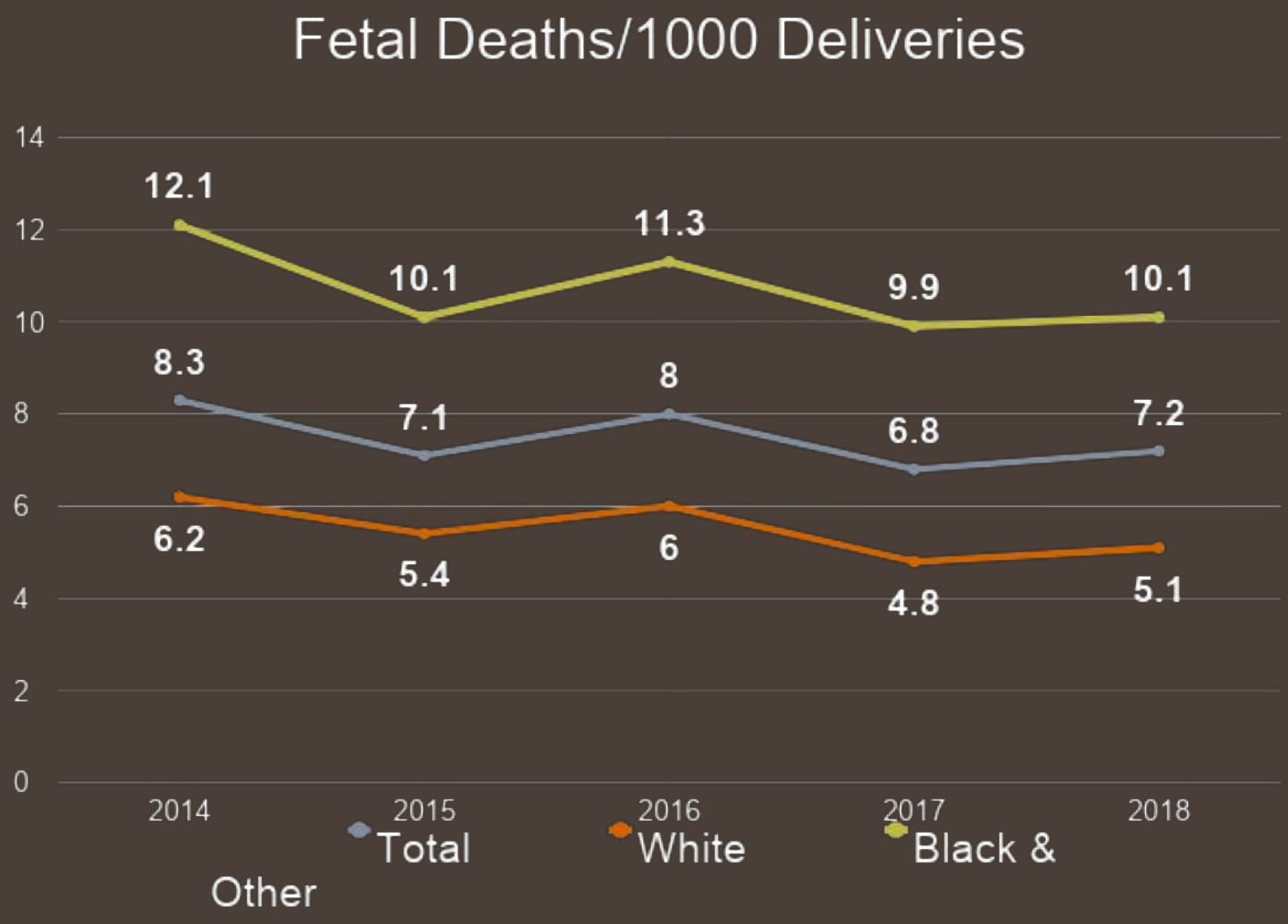


Leading Causes of Infant Death 2018

Cause	Number
Prematurity/Low Birthweight	30
Other Perinatal Conditions	45
Congenital Anomalies	27
Sudden Unexpected Infant Deaths	31
Infections	4
Injuries	4
Other Causes	6
TOTAL	147

More than half: Prematurity/LBW & Other Perinatal Conditions

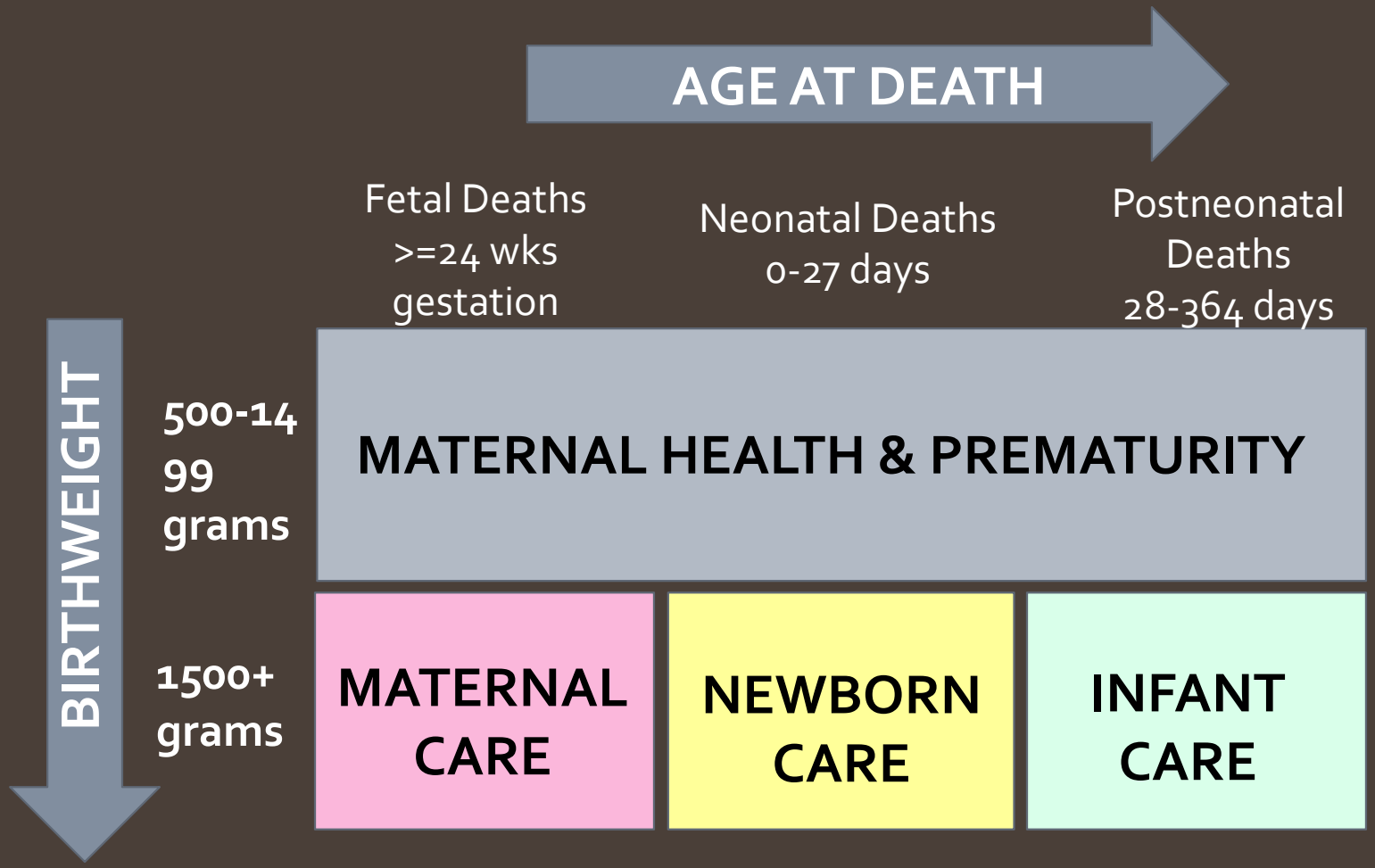
Fetal Deaths 2014-2018



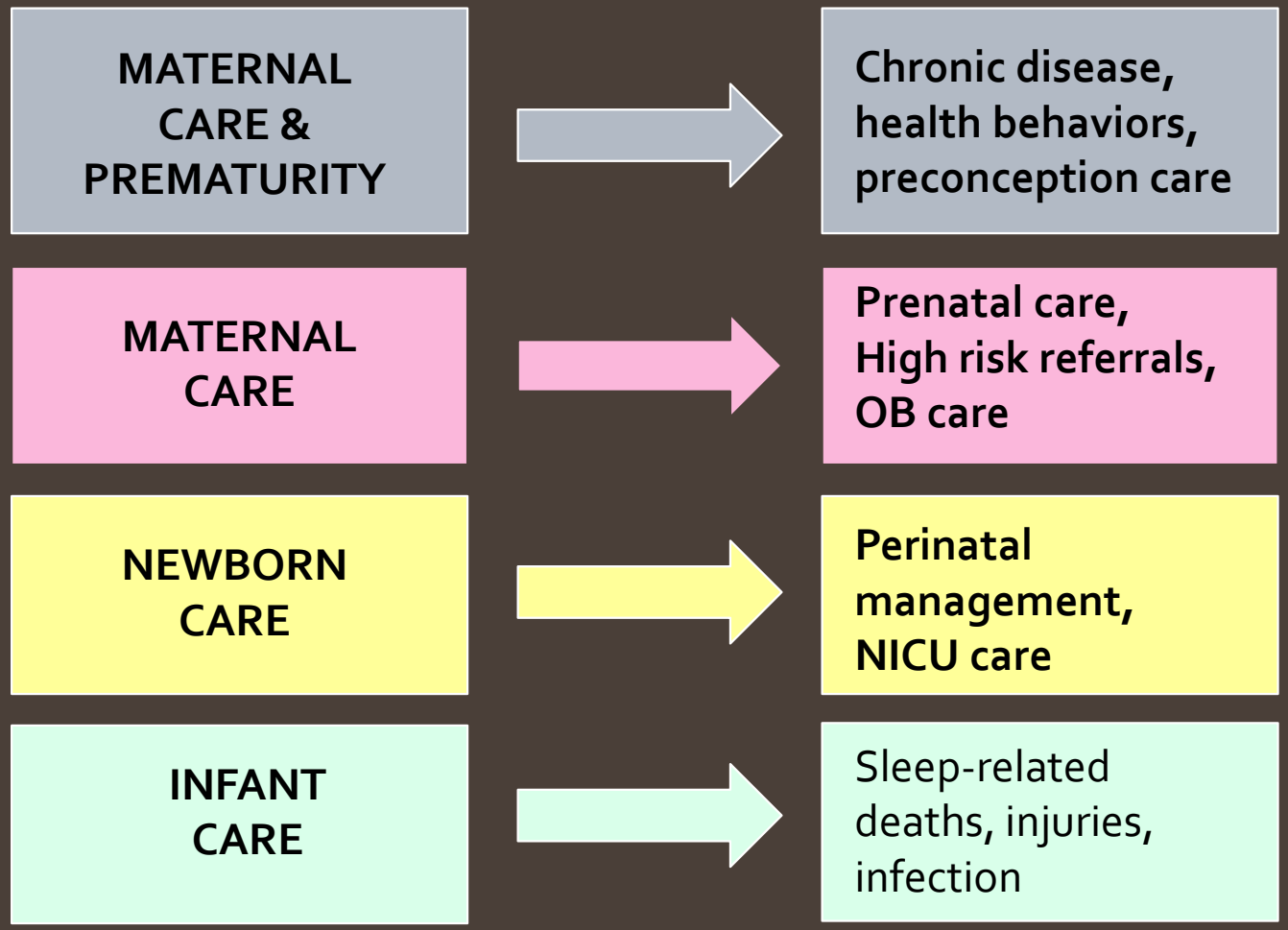
Fetal Deaths 2018

- 70% unknown or unspecified cause
- 30% 24+ weeks gestation & 1500+ grams

Periods of Risk

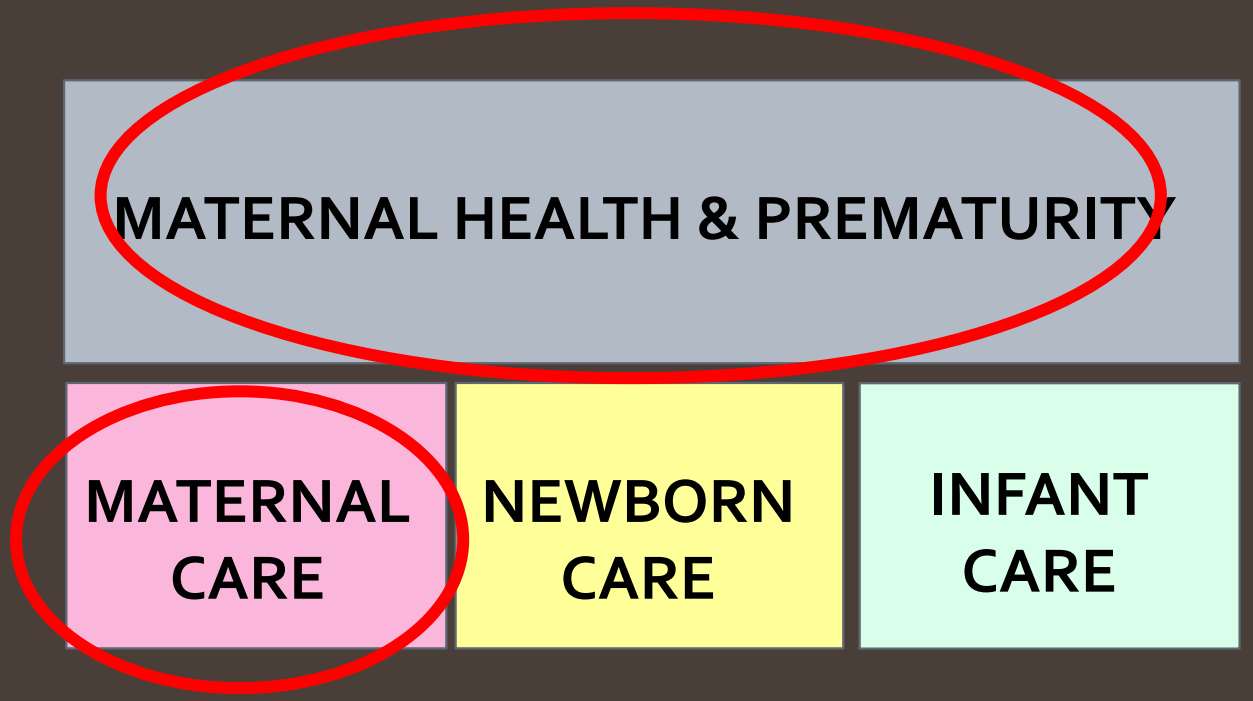


Each period of risk is associated with its own set of risks and prevention factors



Summary of Findings

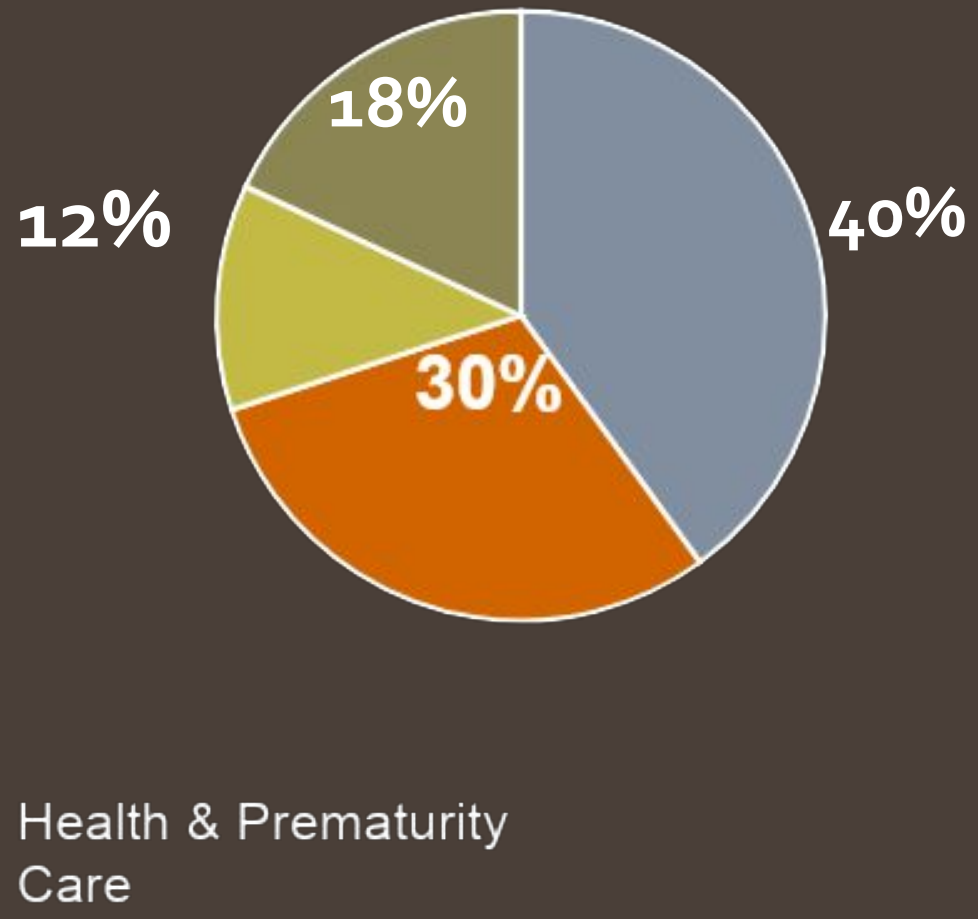
Largest proportion of fetal-infant deaths
&
Most significant disparities



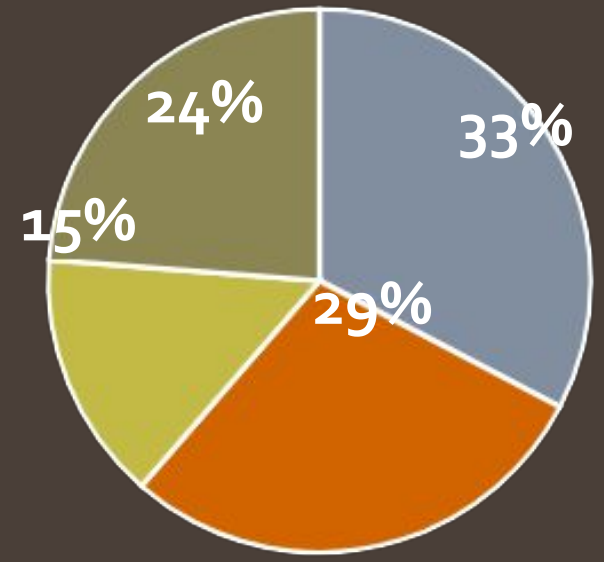
2016-2018 linked birth, death & fetal death files

PPOR Results 2016-2018

All Races

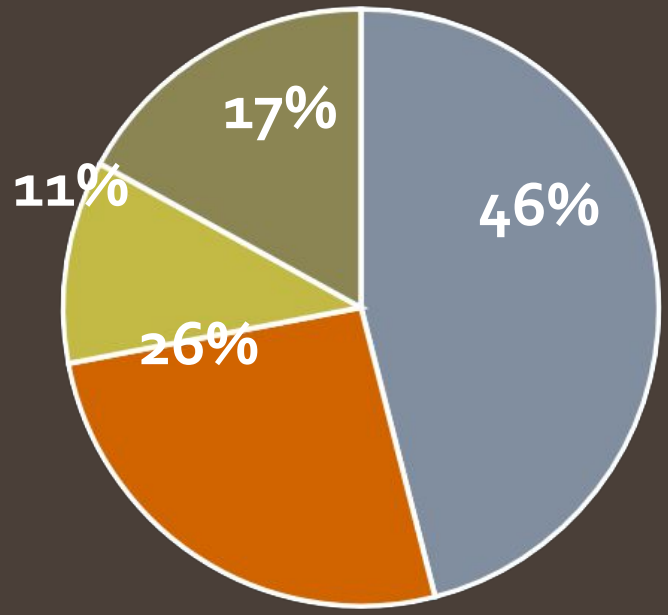


PPOR Results by Race 2016-2018



White

- Maternal Health & Prematurity
- Maternal Care
- Newborn Care
- Infant Care



Black

MH/Prematurity: Contribution of Birthweight

Difference in Outcomes (Groups with Best vs. Poor Outcomes)

=

Birth weight advantage? (Birth weight distribution)

+

Survival advantage? (Birthweight specific mortality)

Root causes →

Behavioral, social, health, economic disparities

Perinatal or medical care

Findings

Too many babies born too soon and too small (90% of "excess deaths")

- Social determinants of health

10% due to medical/health care

- Access, service delivery, quality improvement opportunities

What we learned. . .

Two periods of risk account for largest proportion of poor birth outcomes in NEF:

- Maternal health & prematurity
- Maternal care

These periods of risk reflect the greatest disparities in birth outcomes.

Infant care also contributes to poor outcomes among white babies (sleep-related deaths, accidents, abuse/neglect)

Difference in mortality between groups with best and worst outcomes – too many babies are born in NEF too soon and too small

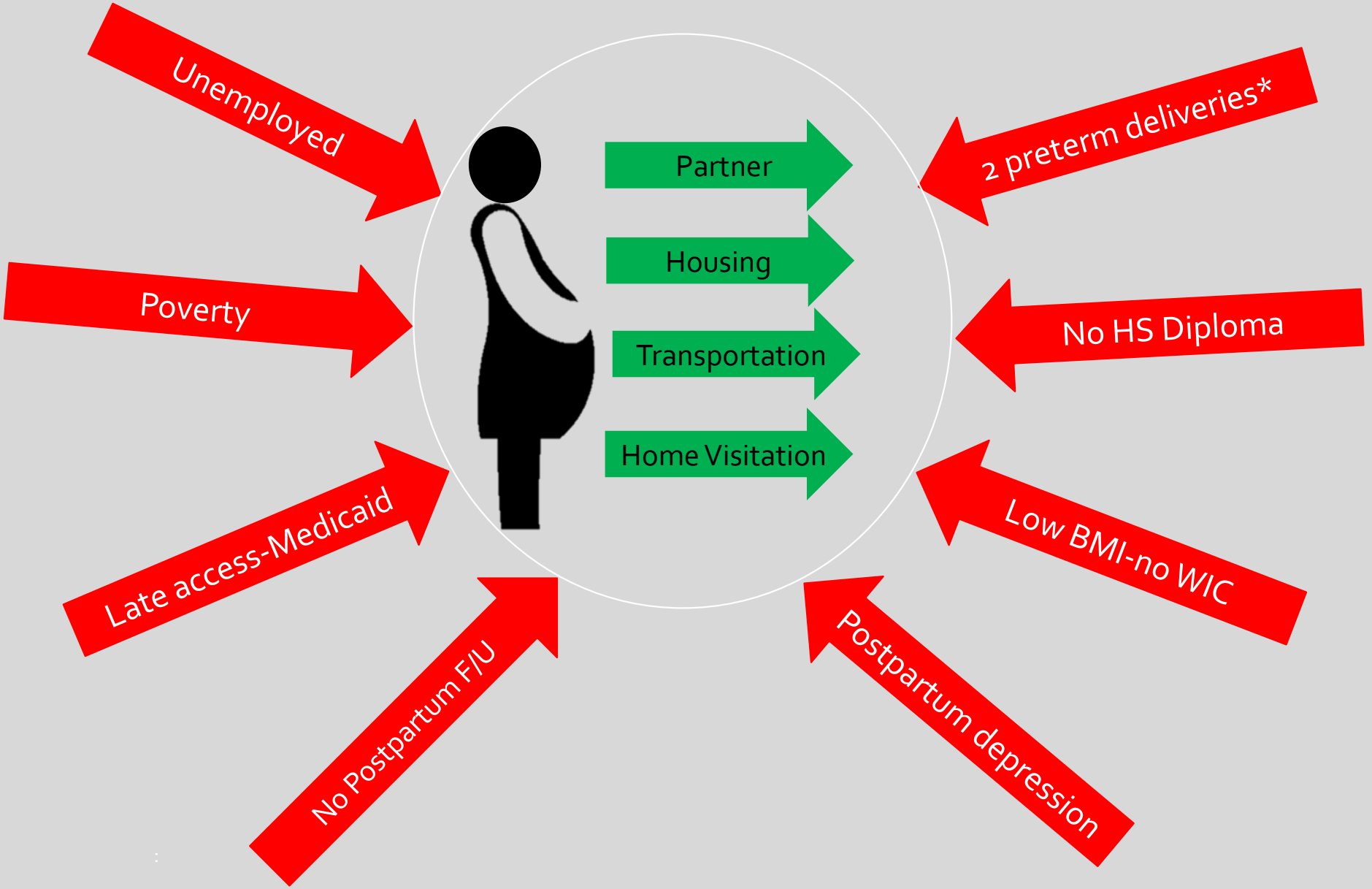
Next Step: NEF Case Reviews

- Prenatal, hospital, other medical records abstracted using NFIMR tool for 147 infant deaths (2018)
- 12 Maternal interviews completed
- Healthy Start prenatal screens (2018)
- Findings:
  - Summary information on key issues, with particular focus on Maternal Health & Maternal Care
- Challenges & limitations of review
  - Missing data, inconsistent documentation
  - No fetal cases

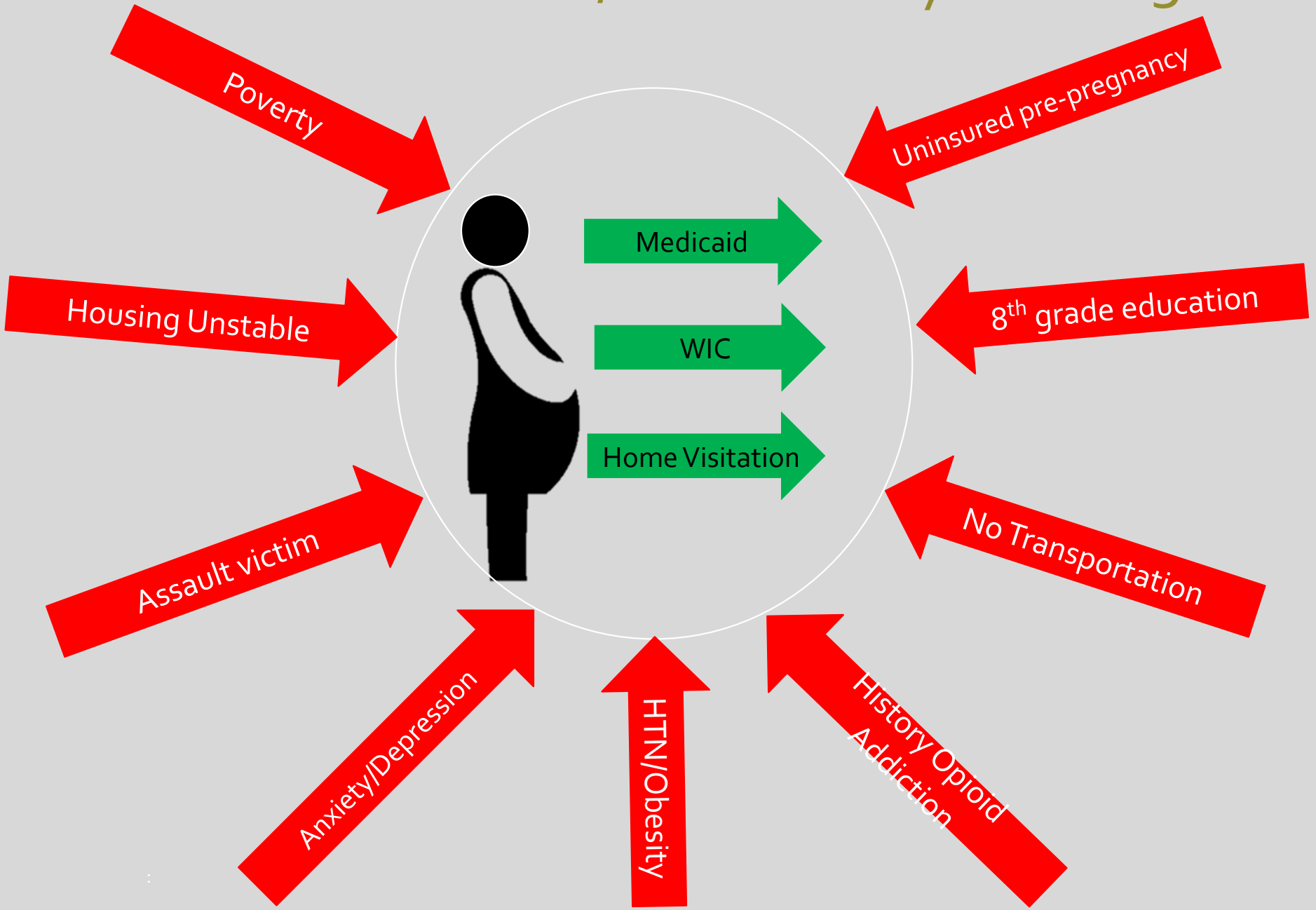
NEF Scan: Healthy Start Prenatal Screen 2018 At Risk Moms (6 or more)

Risk	%White (n= 988)	%Black (n=2895)
Not Married	41.4	75.2
Education <HS	10.7	15.4
Alcohol Use	12.0	4.9
Tobacco Use	5.7	4.4
Prior Stillbirth	3.1	5.6
Prior PTB	8.9	11.9
Prior LBW birth	4.7	10.0
Needs Ongoing Medical Care	16.2	17.9
2nd Trimester PNC Entry	20.0	32.6
First pregnancy	36.6	30.6
Unwanted pregnancy	7.8	17.8
Birth interval < 18 mos	18.0	21.3
BMI too low	8.3	6.7
BMI too high	12.5	21.6
Depression	12.6	18.6

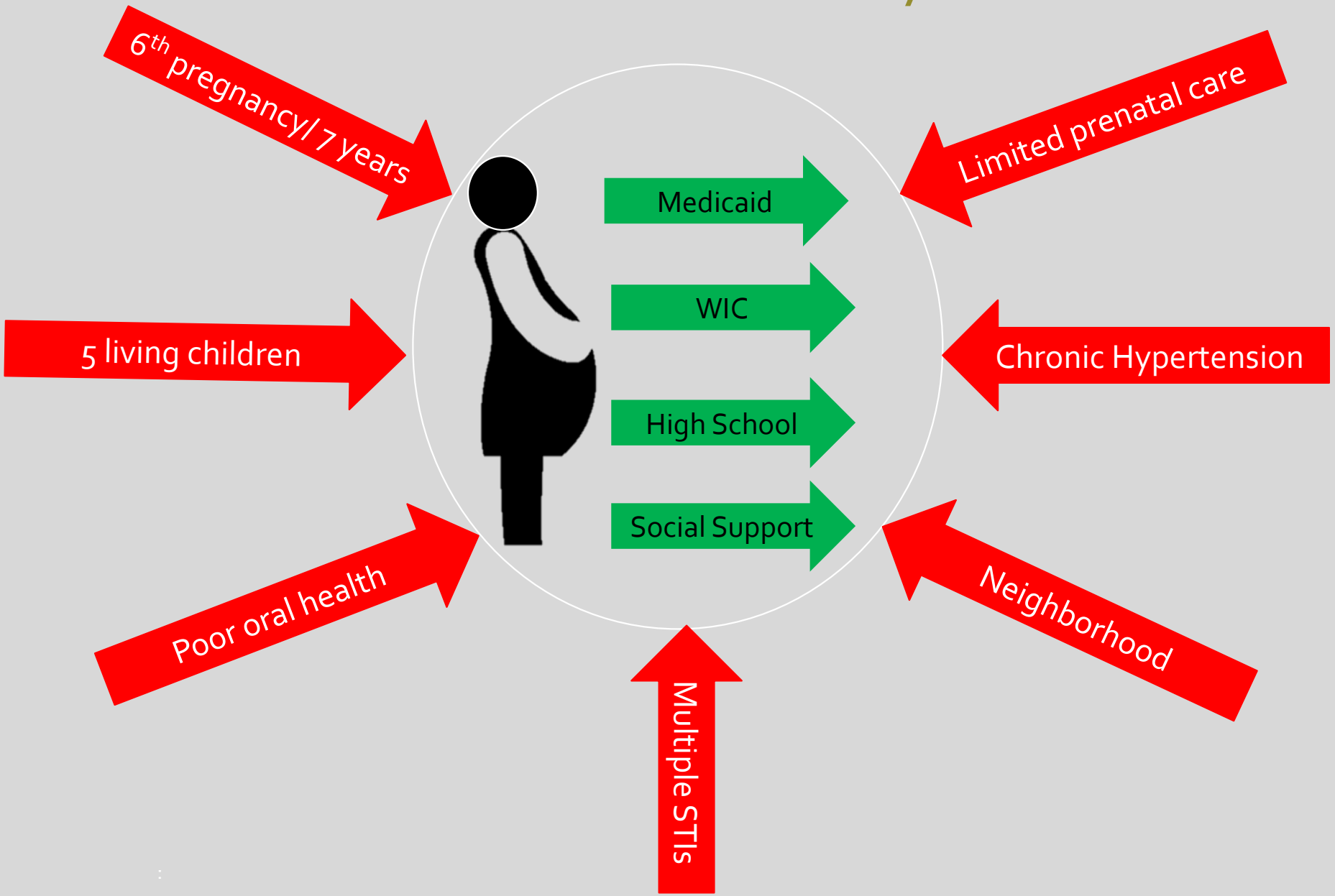
Maternal Health/Prematurity Case #2



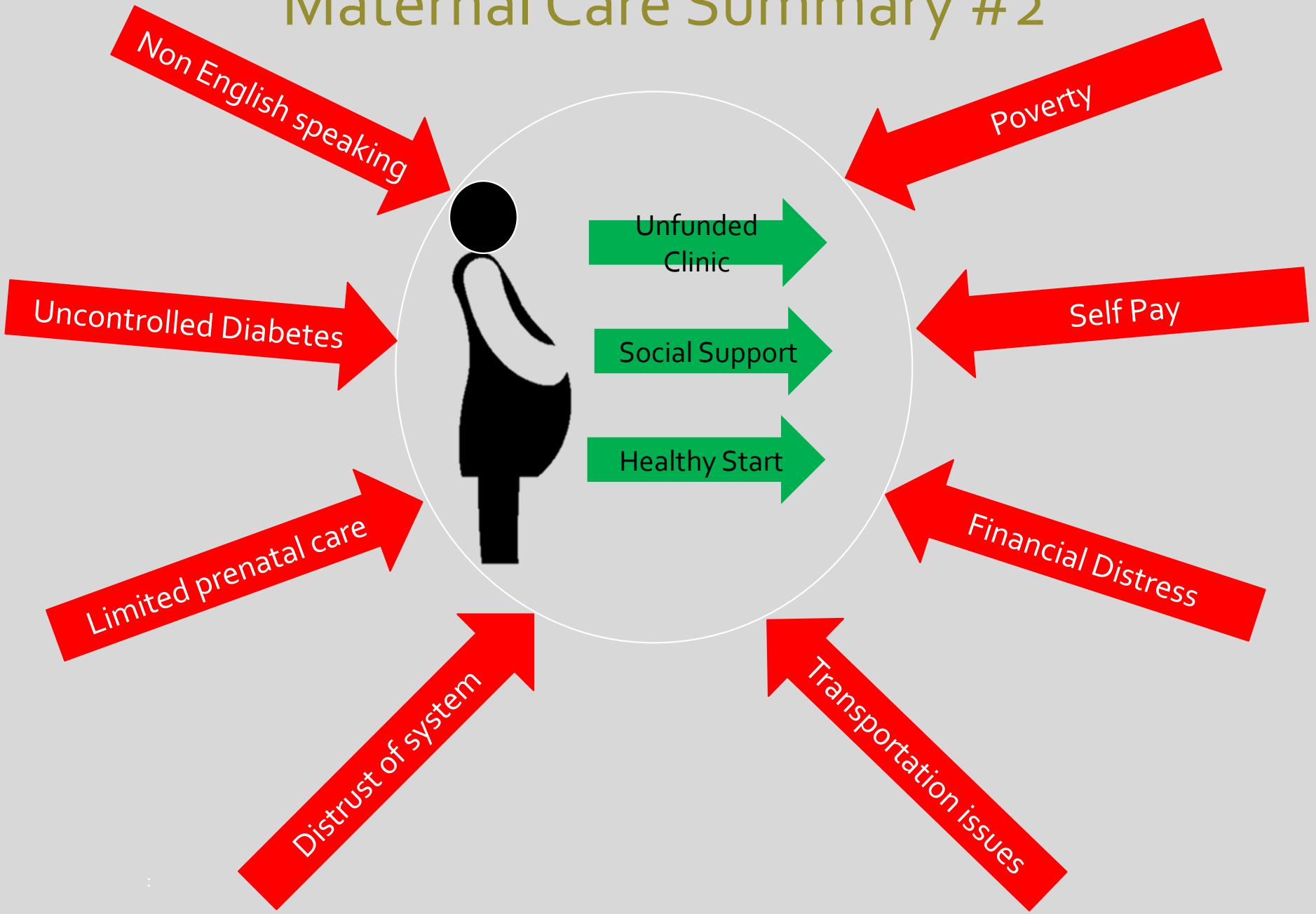
Maternal Health/Prematurity Case #3



Maternal Care Summary #1



Maternal Care Summary #2



Key issues: pre-pregnancy

Social determinants of health

- 61% unmarried (single, divorced, separated)
- 12% < 18 years old at first pregnancy
- 77% high school or less education
- 55% low income
- 41% employed
- Dads had similar profiles (although lots of missing info)
- Lack of insurance prior to pregnancy
- Disproportionate impact on black moms

Prior poor outcome

- 27% previous pre-term of LBW birth
- More likely among black moms

Key issues: pre-pregnancy

Lack of family planning

- 40% had < 18 months between pregnancies
- About 30% not using birth control
- 50% of these moms report pregnancy as unintended or mistimed

Substance use (prescription & illegal)

- 43% self-report
- 20% used tobacco during pregnancy (white moms at higher rates)
- 10% documented MAT

Poor pre-pregnancy health

- 59% overweight or obese
- Chronic hypertension, diabetes
- One-third with STIs

Key issues: Prenatal

Prenatal care

- 82% received some prenatal care
- One third entered care late or not at all
- 50% covered by Medicaid
- 45% received < 5 visits prior to delivery
- Access or compliance issues were documented in nearly half of the cases
  - Transportation
  - Medicaid, other insurance problems

Pregnancy complications

- Most common: gestational hypertension, diabetes, pre-eclampsia
- Multiple births in 11 cases

Key issues: Prenatal

Stressors during pregnancy

- One-third of cases with documented stressors
- Financial problems, IPV, depression

Use of services, support

- Most cases (72%) documented receipt of social services
- About half received referral to case management
- Lack of follow-up by mom
- Lack of engagement, follow-up by provider
- 40% of cases had documented home visit, BUT
- Low intensity, short duration of services across programs

Key issues: Delivery

Medical complications

- One-third documented pre-term labor
- One in five cases experienced PROM, PPROM
- Chorioamnionitis, placental abruption
- Cord problems
- UTI, HELLP syndrome

Key issues: Baby, Postpartum

Prematurity & very low birthweight

- 36% of babies lived < 1 day
- 59% of babies born VLBW lived < 1 day
- 52% of babies lived < 1 week
- Disproportionate impact on Black babies

Nursery & NICU

- 40% with documented morbidity during nursery stay
- RDS, neonatal sepsis, jaundice, other most common
- 40% with NICU stay > 1 day

Substance use

- 11% documented with substance exposure

Preventable post-discharge deaths

- Sleep-related, accidents

Postpartum visit

- Only 23 of 147 cases included some documentation of a postpartum visit by mom

What we learned. . .

Pre-pregnancy health of mother is a key factor contributing to poor outcomes

Lack of insurance coverage (before & after pregnancy)

Chronic health conditions, especially among black moms

Lack of family planning

Non-use

Birth intervals <18 months

Postpartum visit?

Social determinants of health

Poverty, lack of education, transportation, violence = STRESS

Screening, documentation by providers?

Culturally sensitive/trauma informed care?

Lack of awareness among policymakers, at-risk families

Siloed, fragmented care

Disconnect between clinical/medical/hospital and community support services

Lack of follow-through, engagement, retention in home visiting, other care coordination

Action!!

- Increase Provider Screening Rates
- Develop Medical Home Model
- Medical and Social Needs Model
- Centering Pregnancy Group Care Models -Chronic Disease and Stress Model
- Universal Home Visitation
- Improve Quality of Care

Screen and treat women at risk for preterm births

- In Florida, state law requires every prenatal care provider to offer a Healthy Start Risk Screen to all pregnant women to assess risk for preterm birth. The Universal Screen is voluntary and women can choose not to be referred for services.

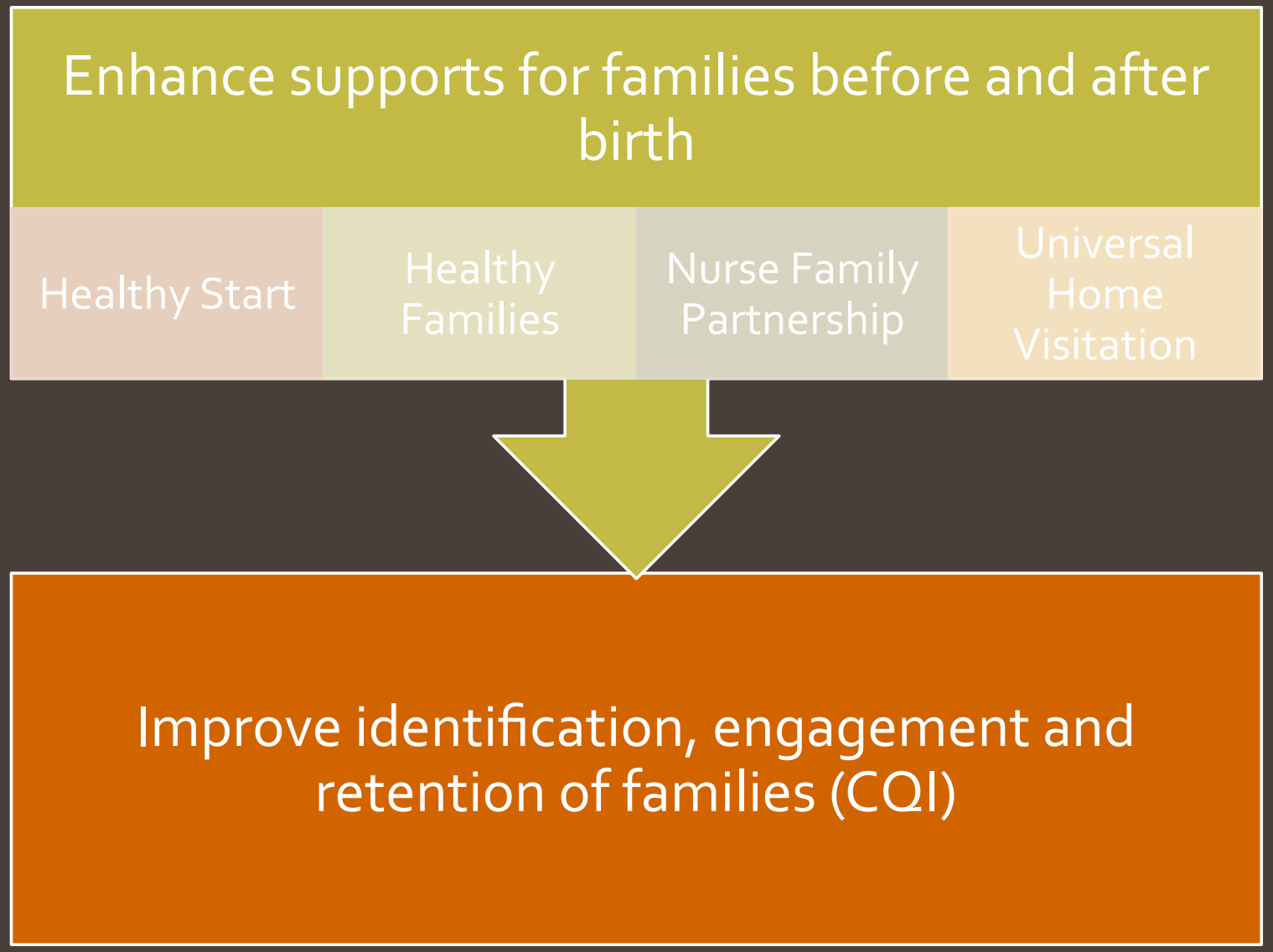
  State Screening Rate 70.1%

  NEFL Rate 53.8%.

- Strengthen screening for SDOH. Create NEF SDOH Consortium of stakeholders to address.

- In addition to screening women for risk factors, also screen for cervical shortening.

Home Visitation



Medical One Stop - Social Determinants of Health Investment

Invest in medical provider hospitals/hubs/clinics/offices that offer one-stop comprehensive services in addition to medical care.

Families looking for additional support face a fragmented system, begin with where services are located.

Research: one-stop approach can promote healthy behaviors and reduce negative outcomes associated with maternal and infant mortality.

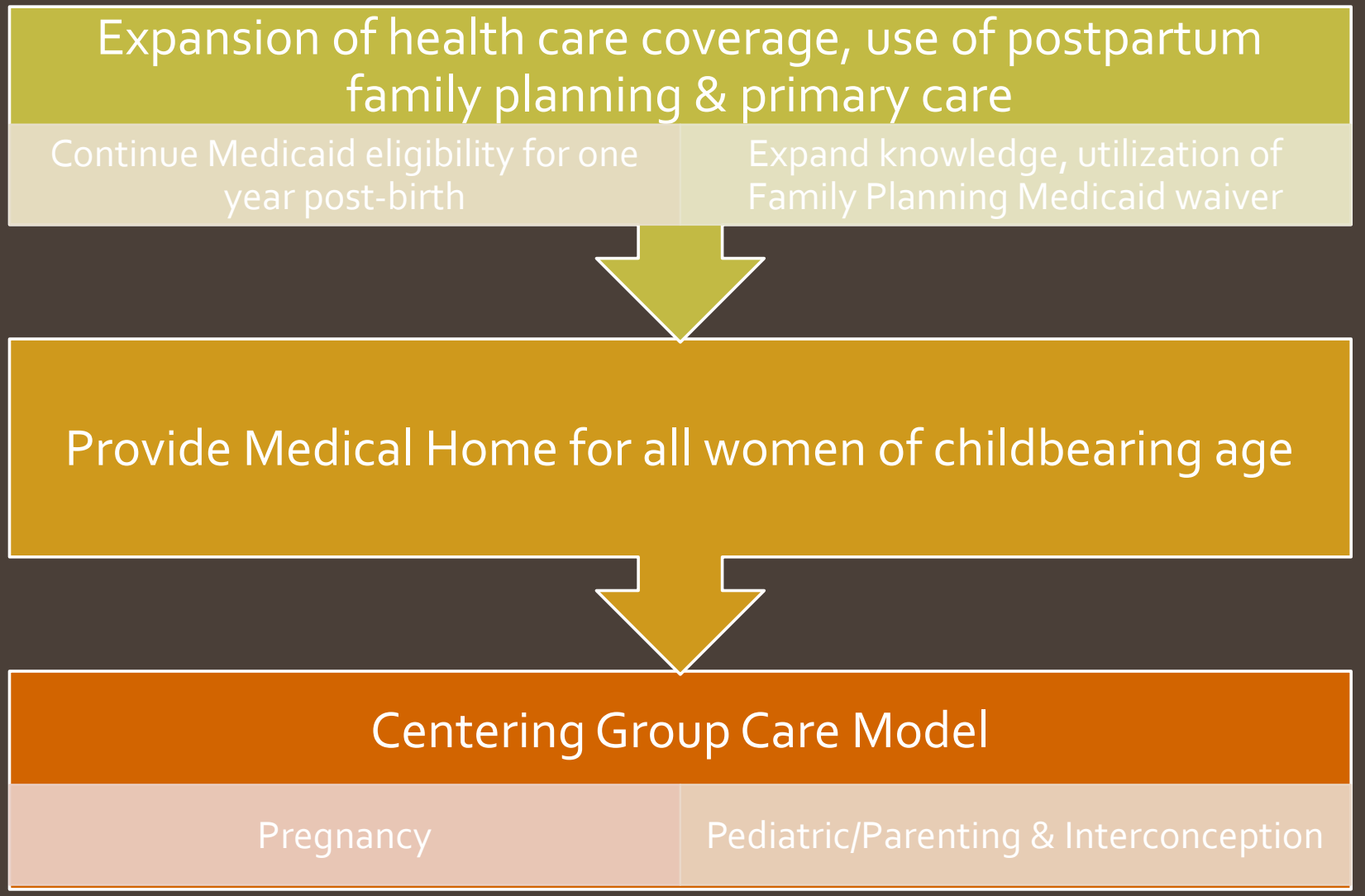
Medical Home Model

Medical home and Episode based Payments

Successful models:

- Strong Start for Healthy Mothers & Babies Medical Home Model in Tampa Bay area (successful three-year demonstration project).
- Wisconsin's Obstetric Medical Home Program (part of state Medicaid program)

Access to Medical Care Before, During & After Pregnancy



Improve Quality of Care

- The Cultural Humility Model: An effective approach to addressing bias and racism key aspect of the cultural humility model.
- Results can be used as part of broader efforts to align payment with quality, such as rewarding providers that successfully reduce racial disparities in maternal and infant mortality.
- Take advantage of opportunities to participate in Florida Perinatal Quality Collaborative.
- Incorporate CQI in ongoing medical, community service delivery.
- Community voice

Engagement of community is key

- Families, community residents & leaders, faith-based orgs
- MCH providers, stakeholders
  - Doctors, hospitals, midwives, other MCH providers
  - Hospitals
  - Family planning, public health social service providers
  - Healthy Start, home visiting programs
  - Public & private payers (insurers, MCOs)
- Policymakers
- Business
- Others

How do we make this happen?

Thank you & last word