



Department  
of Health

# Maternal Mortality, Unintended Pregnancy, and Preconception Health

2017 NYSPA Perinatal Partnership Conference  
Albany, NY

June 8, 2017

# Presentation Overview



Maternal Mortality

Preconception care

Update NYS' Perinatal  
Regionalization System

# The NYS Partnership for Maternal Health (PMH)

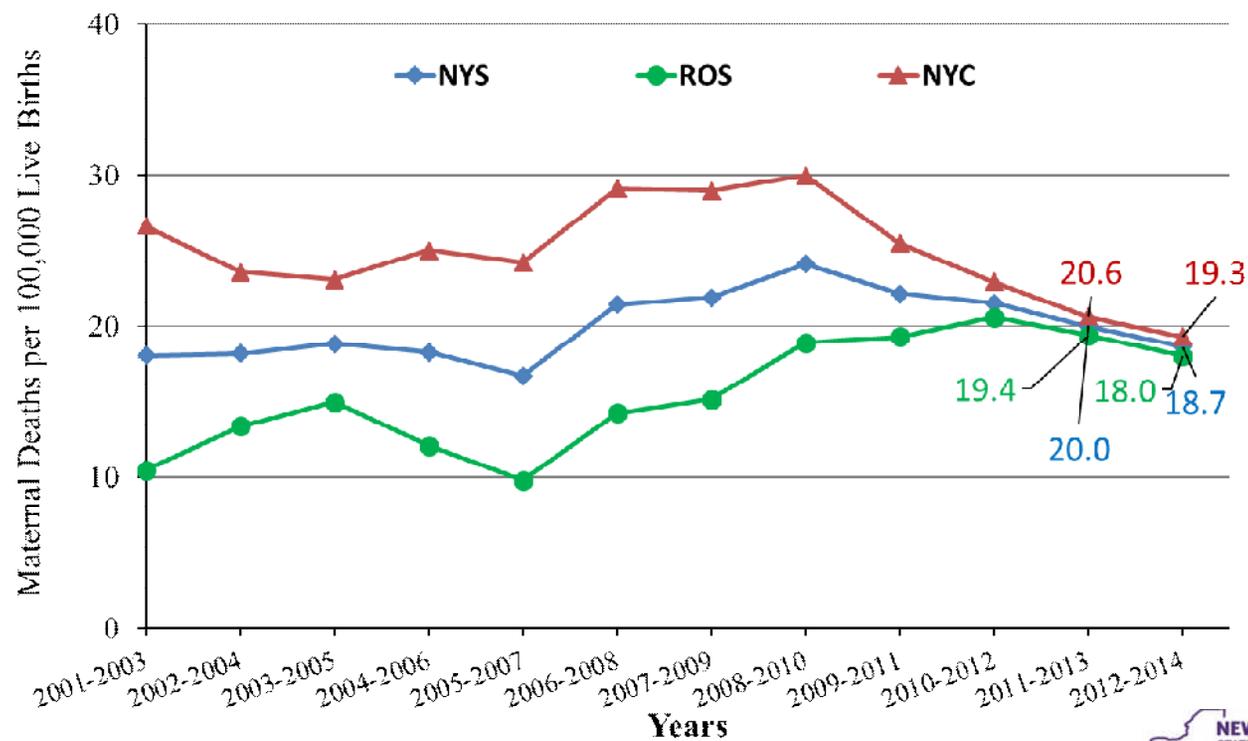
Multi-stakeholders came together to address the increasing rates of maternal mortality:

- New York State Department of Health
- American Congress of Obstetricians and Gynecologists District II,
- New York City Department of Health and Mental Hygiene
- Healthcare Association of NYS
- Greater NY Hospital Association
- New York Academy of Medicine

## Goal:

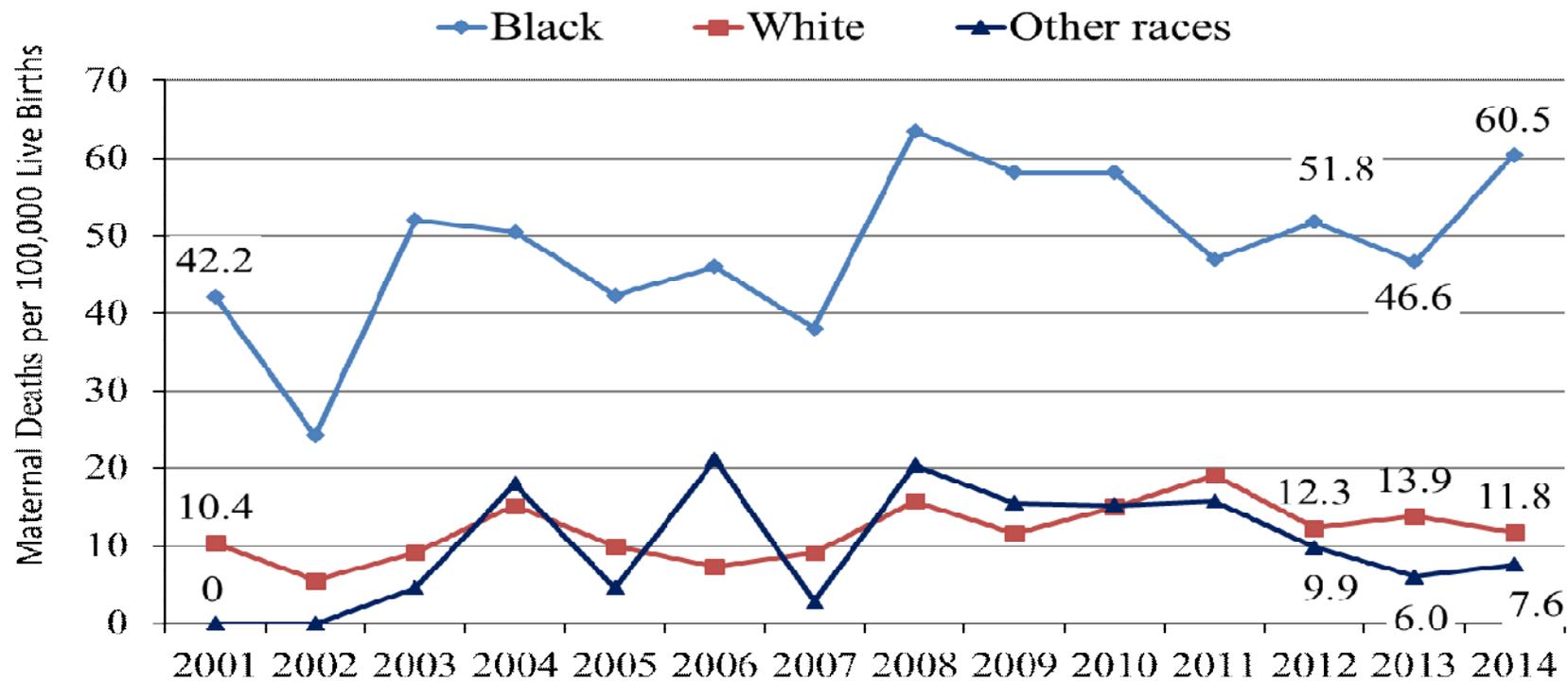
- Promote equity in maternal health outcomes within at-risk populations in NYS to reduce:
  - ethnic and economic disparities
  - preventable maternal mortality and morbidity

# Trends in Maternal Mortality as Reported in NYS Vital Records\*



\*Causes of death from death records A34, O00-O95, O98-O99.

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## Maternal Mortality in NYS, 2012-2013

Identified 216 women of reproductive age who died within a year of the end of a pregnancy

- 99 deaths linked to a live birth record
- 117 deaths linked to hospital records with an indication of pregnancy

Currently, over 94% of reviews completed

- 153 pregnancy-associated deaths
  - 59 pregnancy-related (49 maternal deaths: within 42 days of end of pregnancy)
  - 14 unknown if related
  - 80 not related
- 45 'false' pregnancies
  - 29 had obstetric causes of death on death record

## Pregnancy-related Maternal Mortality (n=59) 2012-2013 Preliminary Data

88% of pregnancy-related deaths had prenatally identified risk factors

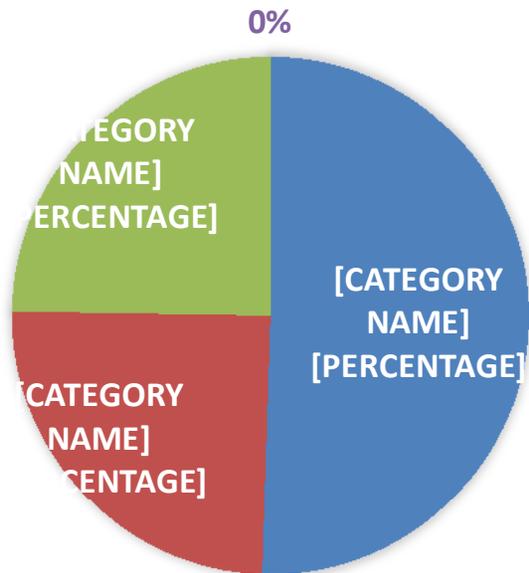
Prenatally identified risk factors*	88%
Hypertension	15% (n=9)
Anemia	12% (n=7)
Asthma	12% (n=7)
Psychiatric disorders	12% (n=7)
Cardiac problems	12% (n=7)
Uterine abnormality or incompetent cervix	10% (n=6)

Pre-pregnancy weight status	
Obesity, BMI $\geq$ 30	34% (n=20)
Overweight, BMI between 25 and 30	12% (n=7)
Smoking prior to pregnancy	12%
Alcohol use prior to pregnancy	12%
Drug use prior to pregnancy	14%

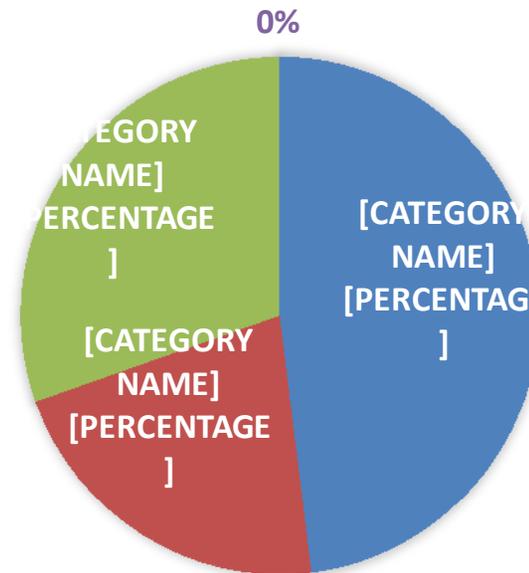
\*Factors identified in less than 6 women not presented.

# Maternal Mortality in New York State

## HEALTH INSURANCE



## EMPLOYMENT DURING PREGNANCY

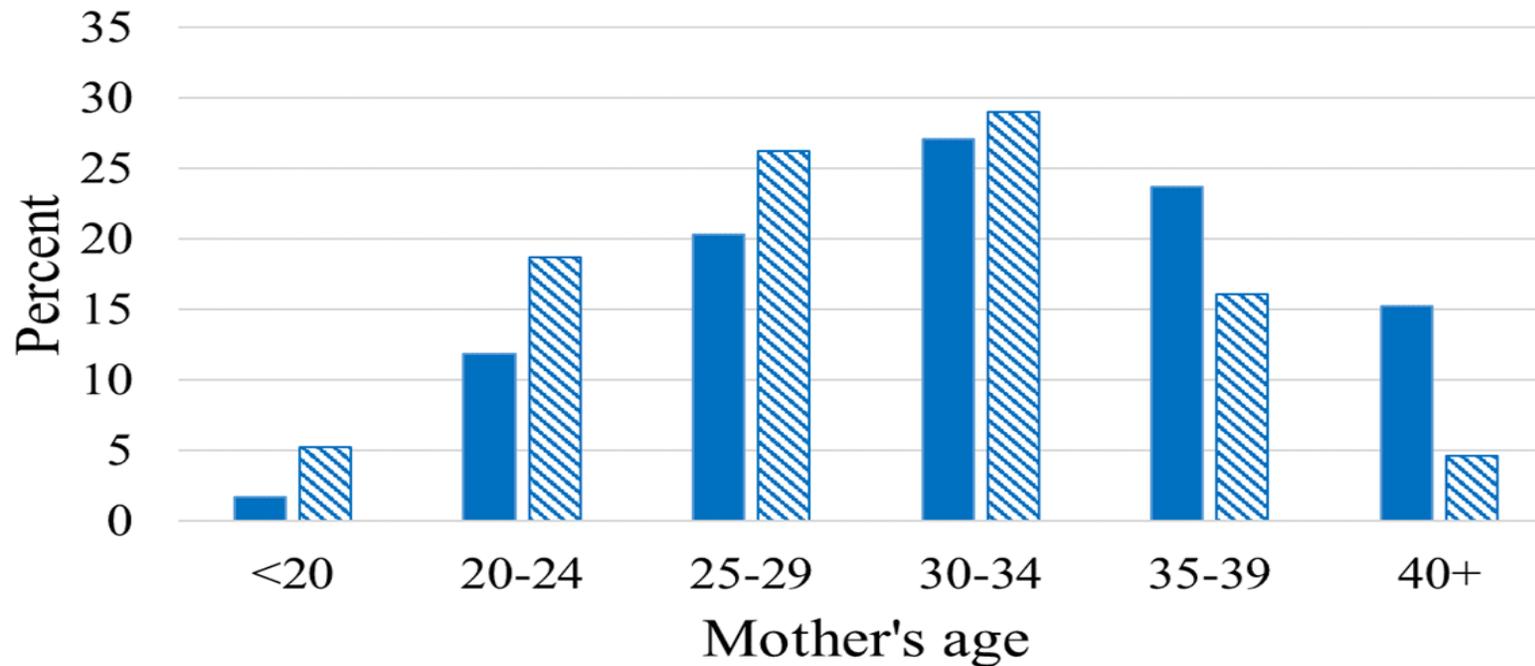


Preliminary Data from 2012-2013 review of pregnancy-related deaths, n=59

## Maternal Mortality Rate by Age

■ MMR 2012-2013 Pregnancy-related, N=59

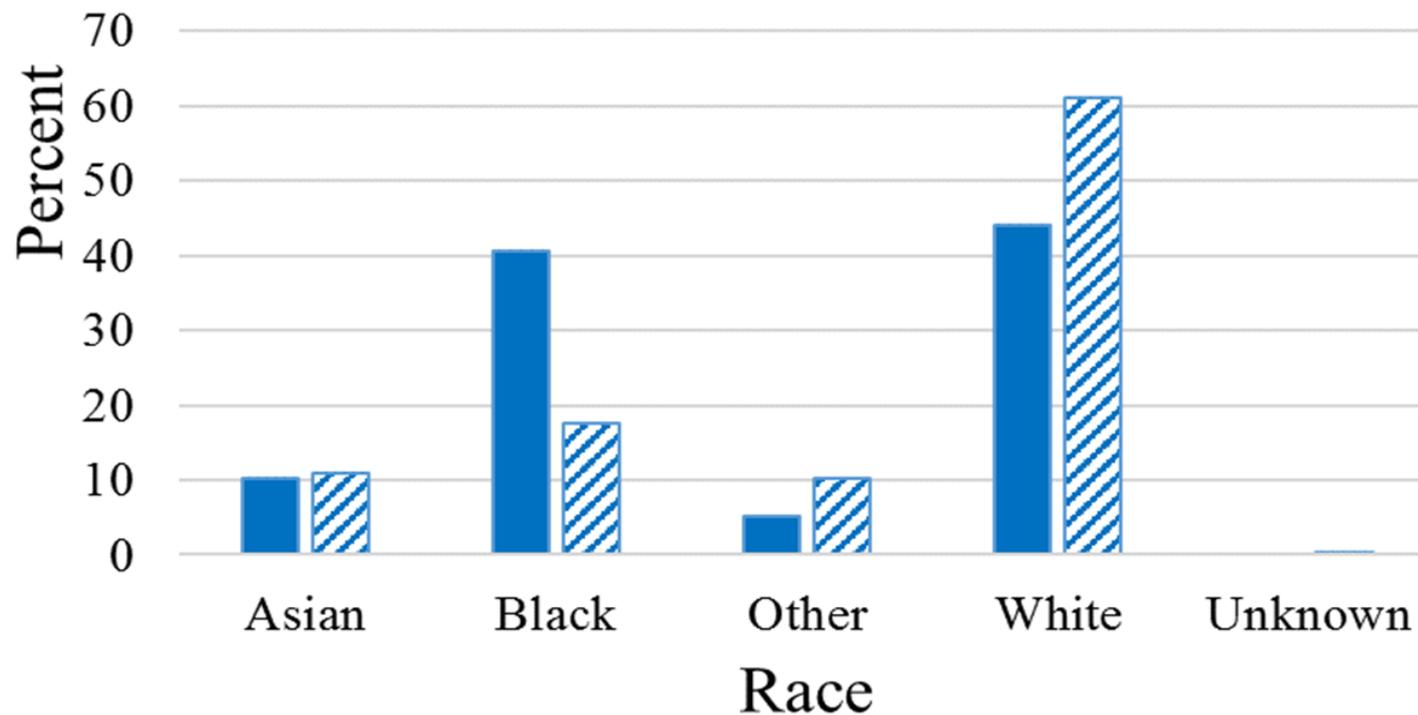
▨ Live Births 2012, N=244,441



## Maternal Mortality by Race

■ MMR 2012-2013, N=59

▨ Live Births 2012, N=244,441



## Process of Maternal Mortality Review in New York State

### Add Committee Review of Cases to Current Method

- NYSDOH and ACOG working collaboratively to develop process

### Complete Assessment of:

- Causes of death
- Factors leading to death
- Preventability
- Opportunities for intervention

### Translate Trends and Issues into Action

- Collaborate to develop Issue Briefs, Grand Rounds
- Quality Improvement project
- Issue maternal mortality report

# Maternal Mortality: Understanding Racial Disparities

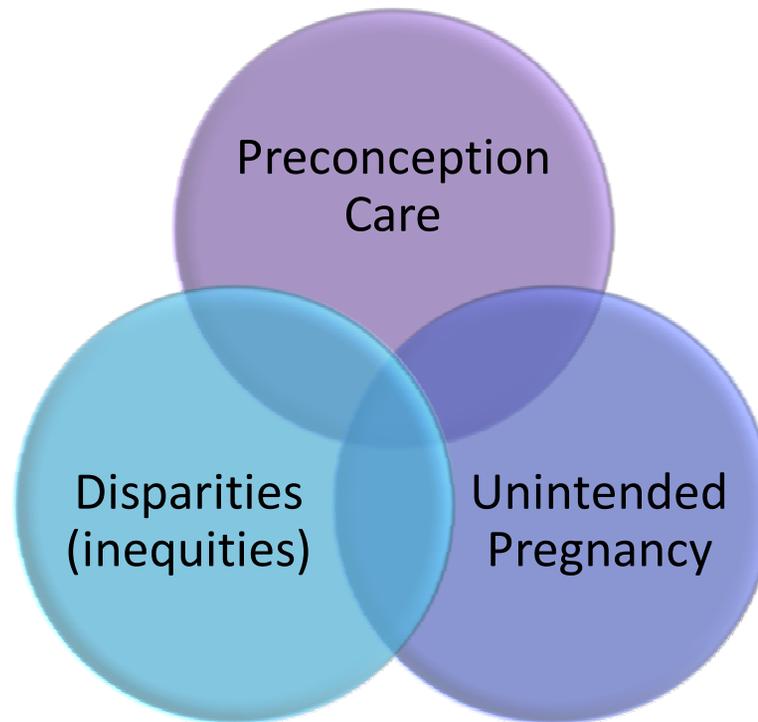
## Potential explanations:

- Higher rates of chronic conditions
- Greater socioeconomic risk factors
- Quality of care
- Higher rate of unintended pregnancy
- Impact of racial discrimination

## Bottom Line: We need to address BOTH

- Overall health and well-being of women across the reproductive life course
- Quality of care provided to women (systems improvements)

# Multi-prong Approach to Reduce Maternal Mortality



## Pregnancy Intendedness and Preconception Care

- **Approximately 45% of births in nationally are unintended** (mistimed, unplanned or unwanted at the time of conception)
- Unintended pregnancies minimize the ability to prepare for a healthy pregnancy and have proactive conversations with health care providers
- It is important to start a **universal focus on the importance of preconception care** to begin to reduce maternal mortality and morbidity
- Preconception care is important for all, but crucial for those with chronic conditions
- All health care providers serving women of reproductive age play an important role
- **Every time a women interacts with a health care provider is an opportunity to discuss pregnancy intendedness and preconception health**

# Preconception Care

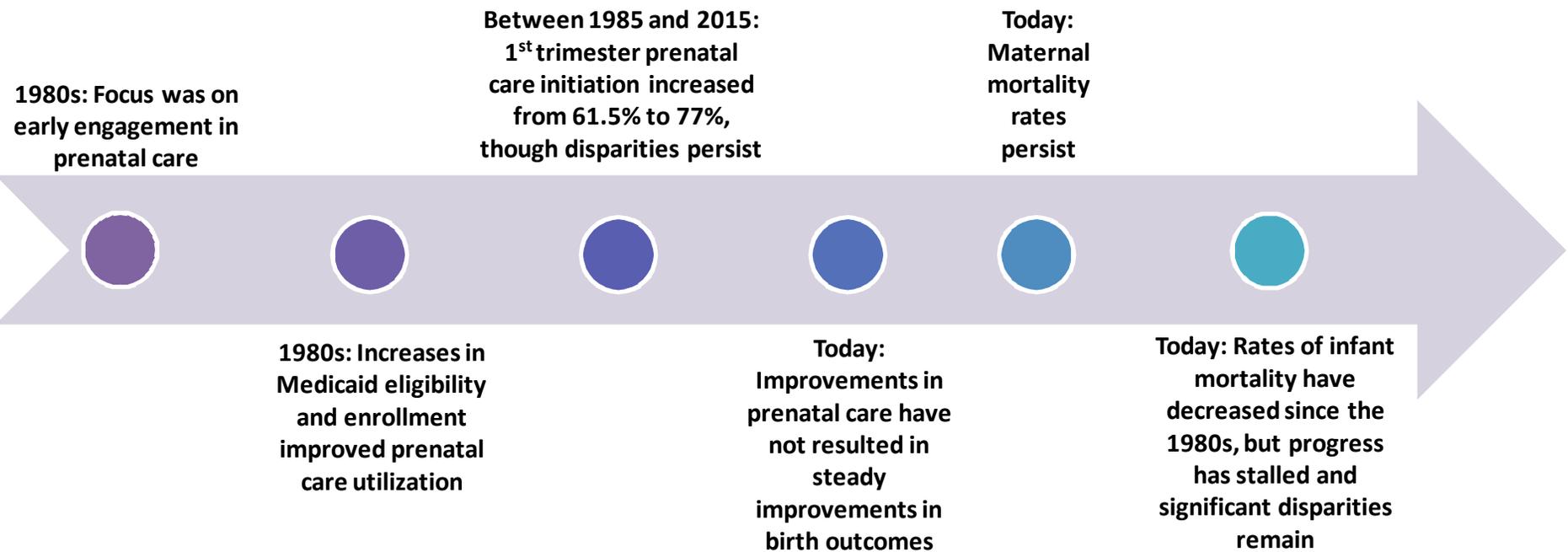
Identifies risks to reduce or minimize potential impact on pregnancy

Maximizes maternal health

Intervenes to achieve optimal outcomes

Promotes health and provides an opportunity for health education

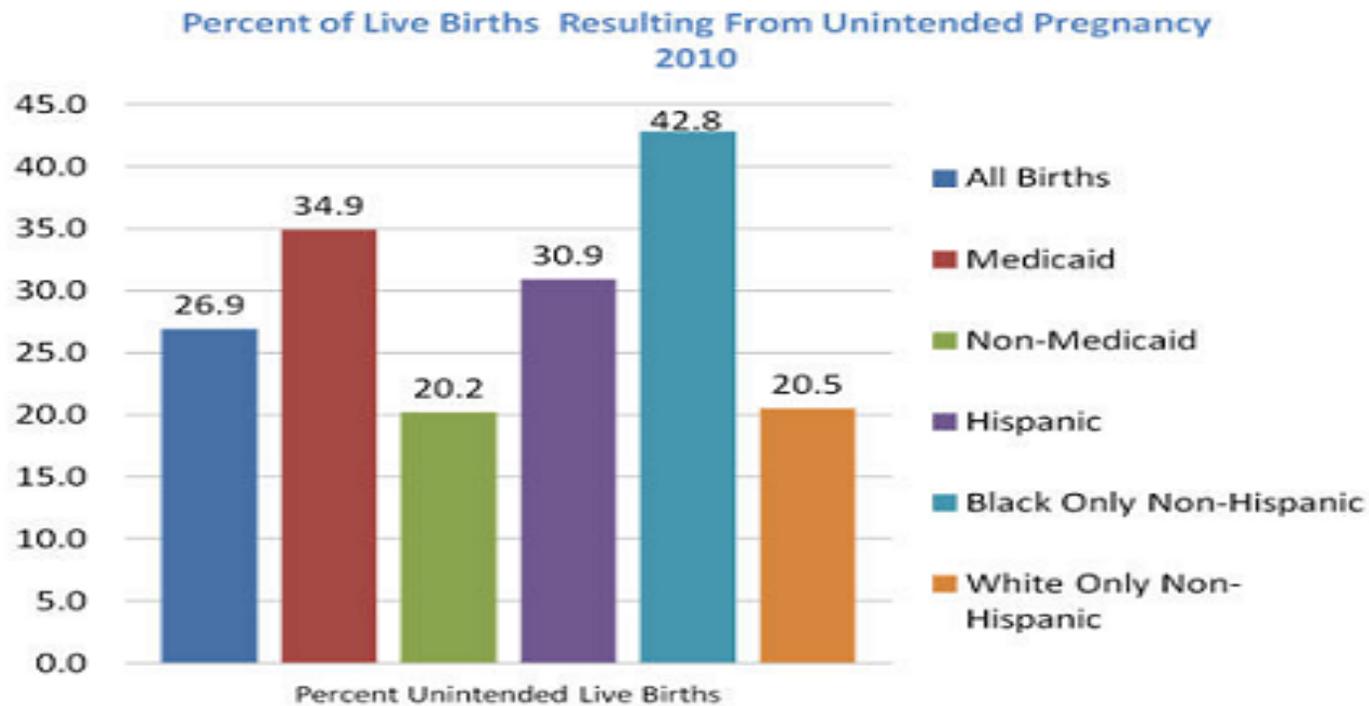
# The Need for Preconception Care



## Unintended Pregnancy, 2010 National data

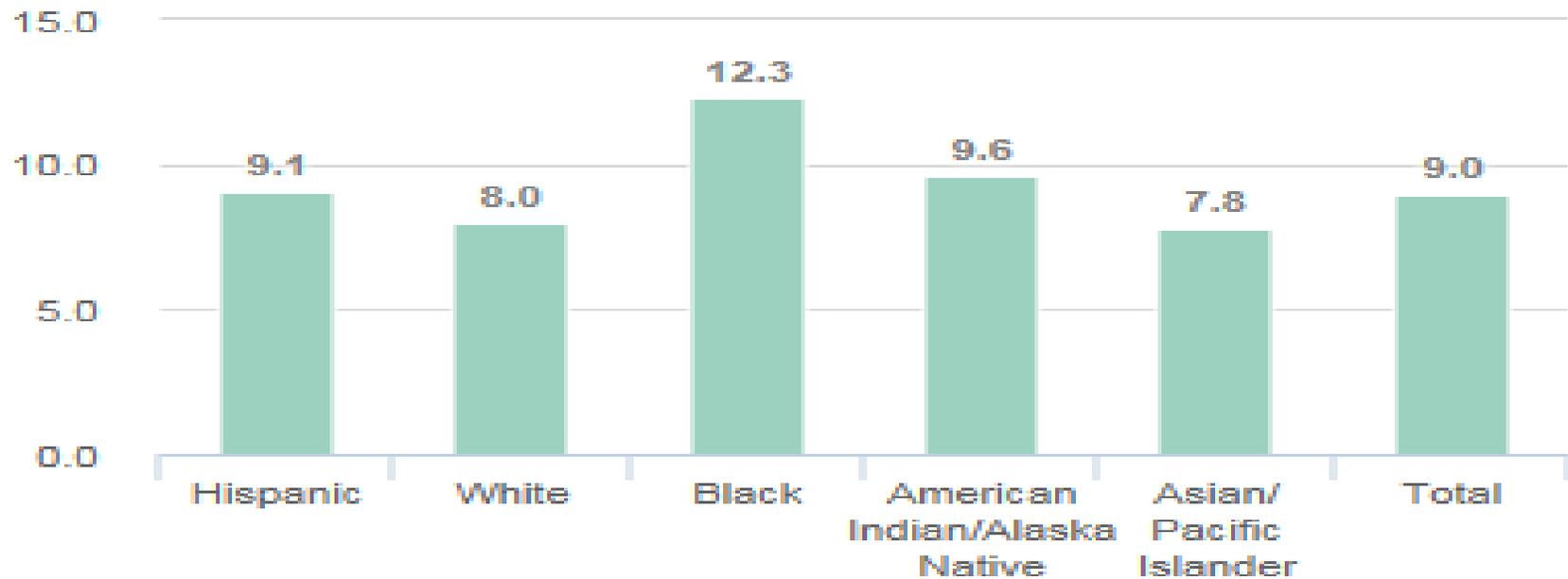
- **55% of pregnancies in NY were unintended.** National average 45%
- National average of Adolescent unintended pregnancies was 82% (28% for 35-39 years old and 48% for 40 years old and over)
- Unintended pregnancies higher: <high school education, income <100% of FPL, Black non-Hispanic, and never married/not cohabiting
- 5% of unintended pregnancies are attributed to 2/3 of women who use contraceptives consistently
- **95% of unintended pregnancies are attributable to 1/3 of women who do not use contraceptives or who use them inconsistently**

# Live Births Resulting from Unintended Pregnancy



# Health Inequities Related to Preterm Delivery

Percent of live births



Preterm Delivery by Race/Ethnicity: New York, 2012-2014 Average

# Why Women's Health Before Pregnancy Matters

Better Health  
Before  
Pregnancy  
Means Better  
Birth Outcomes

Many  
Pregnancies are  
Unplanned

Early Prenatal  
Care is Too Late

## An Important Question: “Would you like to become pregnant this year?”

### Emphasize need for preconception care

- Emphasize the need for preconception care of women with chronic conditions with all health care providers

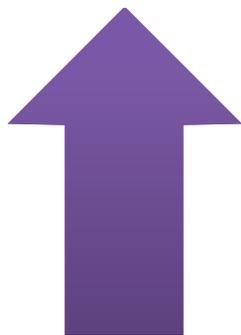
### Identify conditions, risks, and behaviors

- Identify and modify certain medical conditions, personal behaviors, psychosocial risks, and environmental exposures before conception through clinical interventions

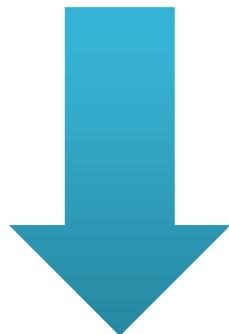
### Every Woman, Every Time.

- Discuss reproductive life plan
- Prescribe contraception, if appropriate
- Address risk factors and chronic conditions that could compromise maternal health

# Preconception Care and Maternal Mortality: Quality Pre- and Interconception Care

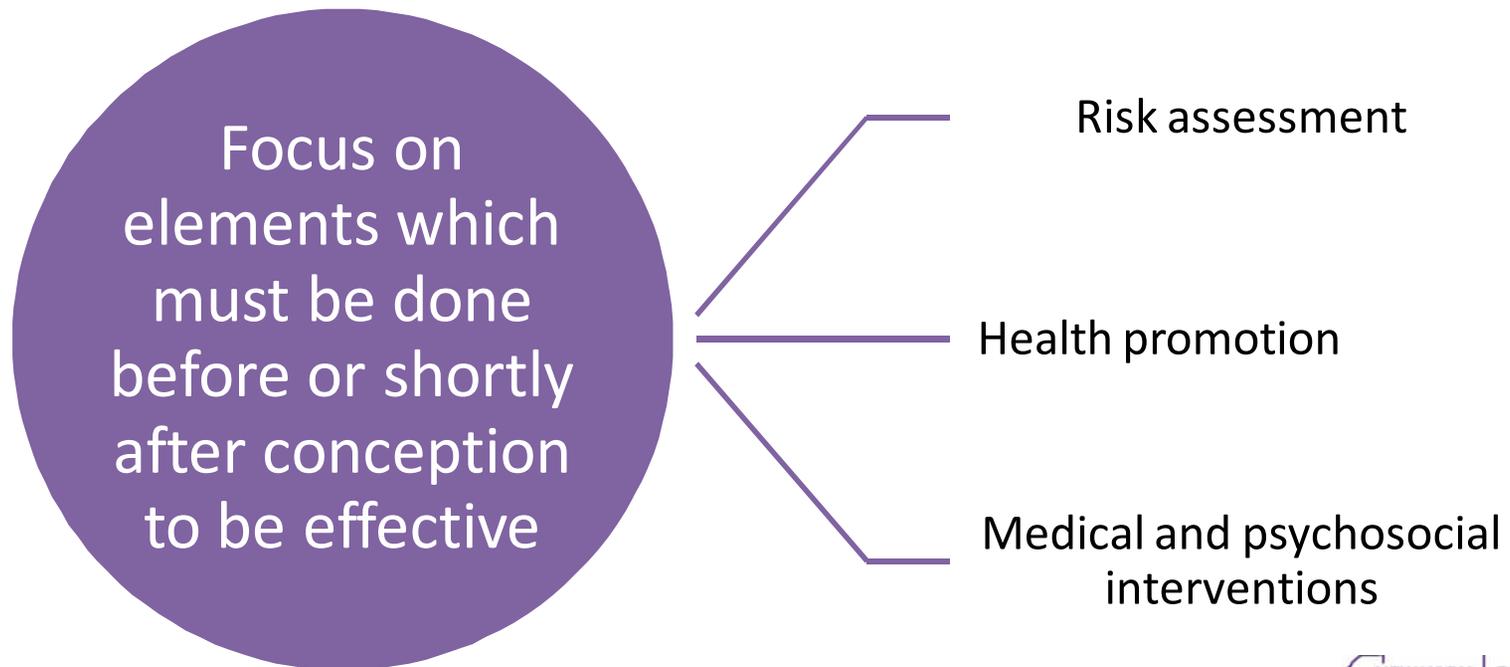


Increase healthy birth outcomes and early identification and treatment of health conditions among infants



Reduce risk of maternal and infant mortality and pregnancy-related complications

## Elements of Preconception Care



## Conditions Addressed by Preconception Care

- Those that need time to correct prior to conception
- Interventions not usually undertaken in pregnancy
- Interventions considered only because a pregnancy is planned
- Conditions that might change the choice or timing to conceive
- Conditions that would require early post-conception prenatal care

## *Before* Pregnancy is the Optimal Time to Address:

Family  
Planning

Chronic  
Diseases

Healthy  
Weight

Smoking  
Cessation

Treating  
Substance  
Use/Abuse

Immunizations

# Examples of Components of Preconception Care

## Family Planning

- Reproductive Life Planning
- Birth Spacing
- Contraception

## Social History

- Domestic abuse and violence
- Substance use
- Assessment of socioeconomic, educational, and cultural context
- Environmental and occupational exposures
- Social Support

## Nutritional History

- Adequate mineral/vitamin intake (Folic acid, Calcium)
- Healthy weight

## Behavioral Health

- Depression

## Medical History

- Chronic diseases (Diabetes, Asthma, Hypertension, CVD, Autoimmune, Kidney, Thyroid)
- Genetic history (maternal and paternal)
- Medical, surgical, pulmonary and neurologic history

## Infectious Disease History

- Immunity and immunization status
- Risk factors for STDs

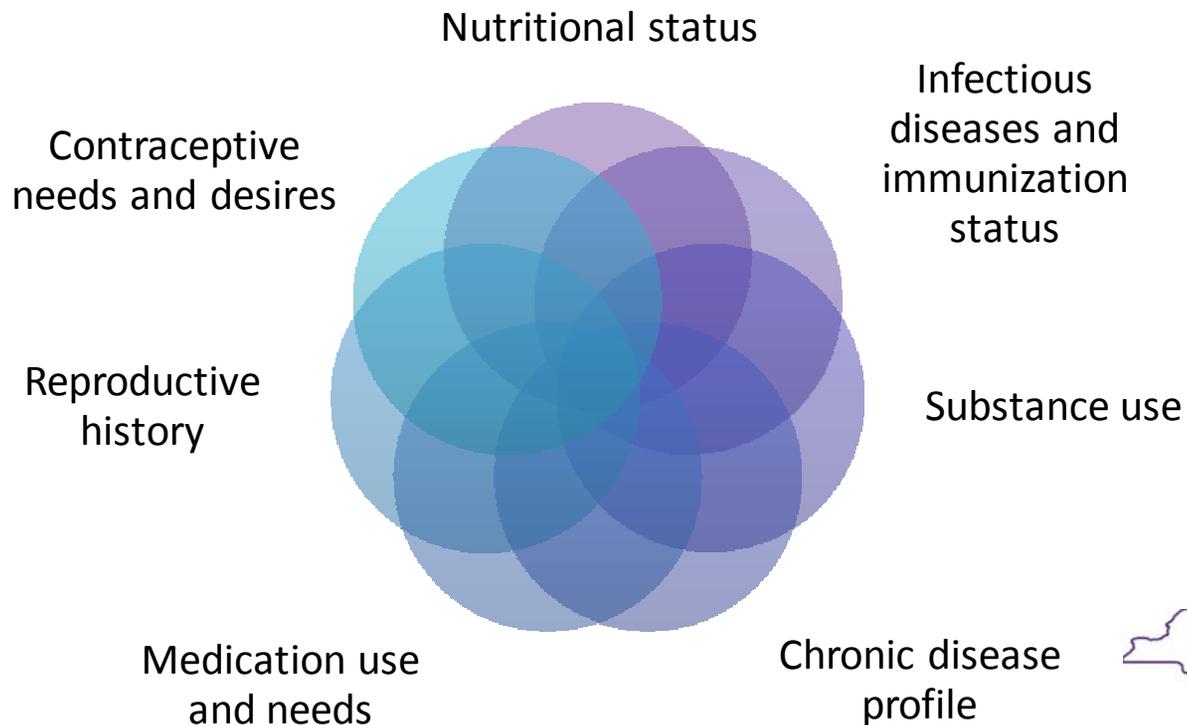
## Medications

- Prescription and Over-the-counter

## Reproductive History

- Obstetric history (Preterm births, fetal loss)
- Gynecologic history (Uterine abnormalities)

# Areas of Overlap in Routine Care and Preconception Considerations



# When Should Preconception Care be Offered?

- As part of routine health maintenance care
- At a defined preconception visit
- For women with chronic illness
- At one visit vs. several visits
- Any time a woman interacts with a health care provider

# Perinatal Regionalization

comprehensive, coordinated geographically structured system of care organized around a series of Regional Perinatal Centers (RPCs), each supporting a group of affiliate hospital by providing:

Clinical Expertise

Education

Quality Improvement

# Benefits of Perinatal Regionalization

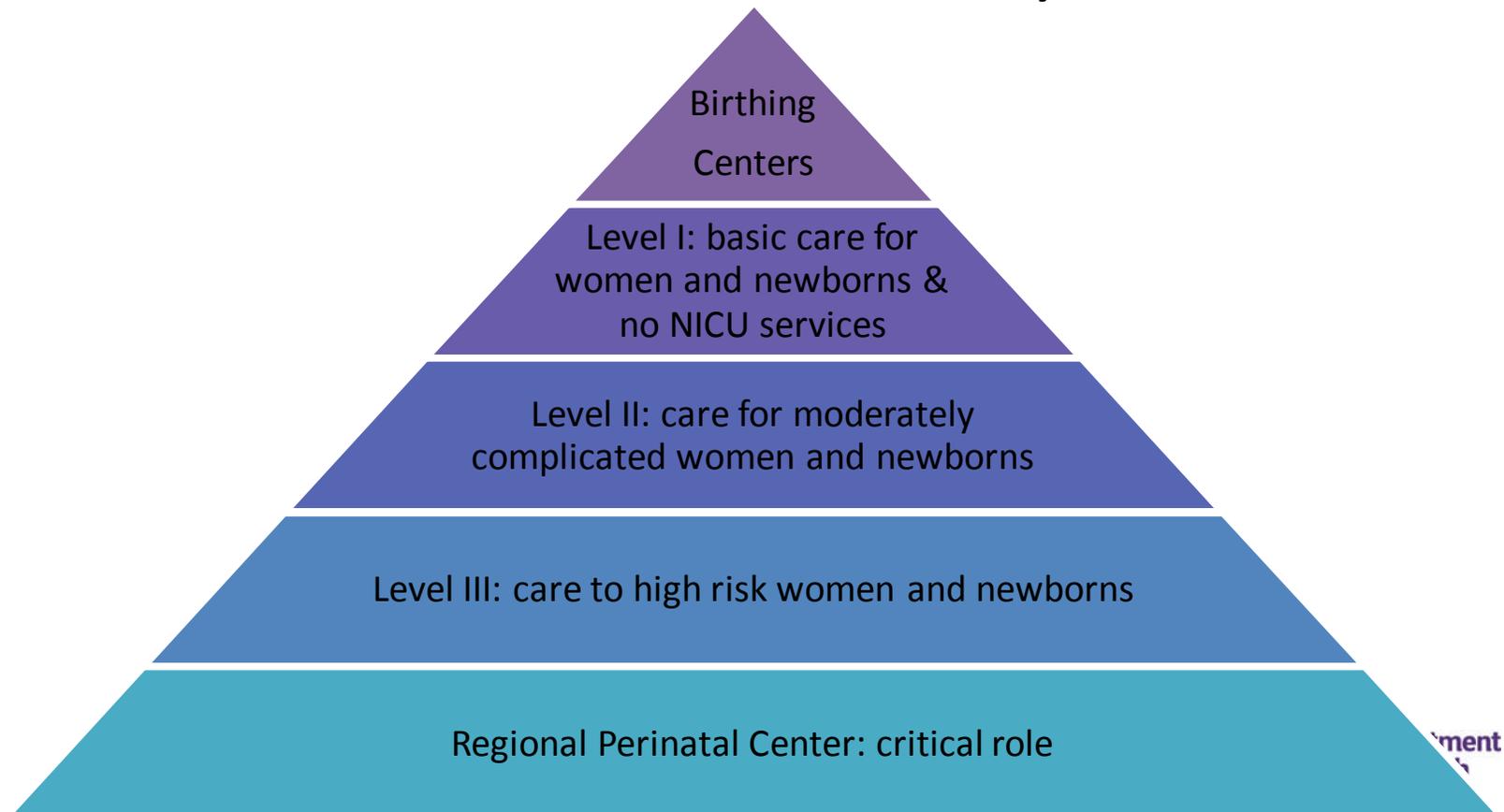
To ensure women and their babies will have ready access to the services they need through:

Ensuring access to an expert health care team

Maximizing resources of the various facilities across the state – centralizes technology

Ongoing quality improvement to better ensure quality services across all levels of perinatal care

# Levels of Care in Perinatal System



## Role of the Regional Perinatal Center

Care for a concentration of high-risk patients

Reduce duplication of services within their region

Maintain expertise to *consistently* provide the best quality care to the highest risk patients

Ensure quality of care provided throughout affiliative region through:

- 24-hour consultation
- transport coordination
- outreach and education
- onsite quality of care visits

# Re-designation Process

Review and update perinatal hospital standards with increased emphasis on maternal health

Convene expert workgroup to assist with review and to finalize standards

Produce recommendations for revisions: 10 NYCRR Section 405.21 Perinatal Services and Part 721 Perinatal Regionalization

# Re-designation Process

Webinar for hospitals on revised criteria and process

Electronic survey of all birthing hospitals related to new standards

Clinical review of surveys for compliance

Multidisciplinary teams will conduct onsite reviews of:

- All RPCs and Level III perinatal hospitals
- All hospitals requesting higher level designation
- 20% of Level II and I perinatal hospitals
- Birthing Centers- Hospital and Licensed Midwife administered

Final Report to DOH with recommendations and approval

June 8, 2017

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# Questions & Discussion