

# Maternal Mortality and Healthy Start



Hear From Your Peer Webinar

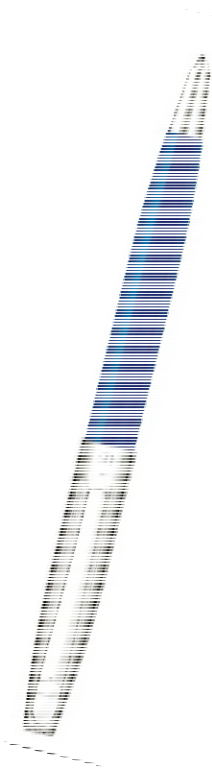
May 9, 2017



Supporting communities to  
give every child a Healthy Start.

Healthy Start EPIC Center

# Webinar Agenda



## **I. Welcome and Overview**

- Division of Healthy Start and Perinatal Services
  - Kimberly Sherman

## **II. Pathways to Maternal Mortality**

- Northern Manhattan Perinatal Partnership
  - Ekua Samuels and Claudia Boykins

## **III. Missed Opportunities and Preventability**

- Michigan Maternal Mortality and Injury Review Committee
  - Gwendolyn Daniels, Mary Roberts and Debra Kimball

## **IV. Q & A with our presenters**

# Working Together to Improve Women's Health

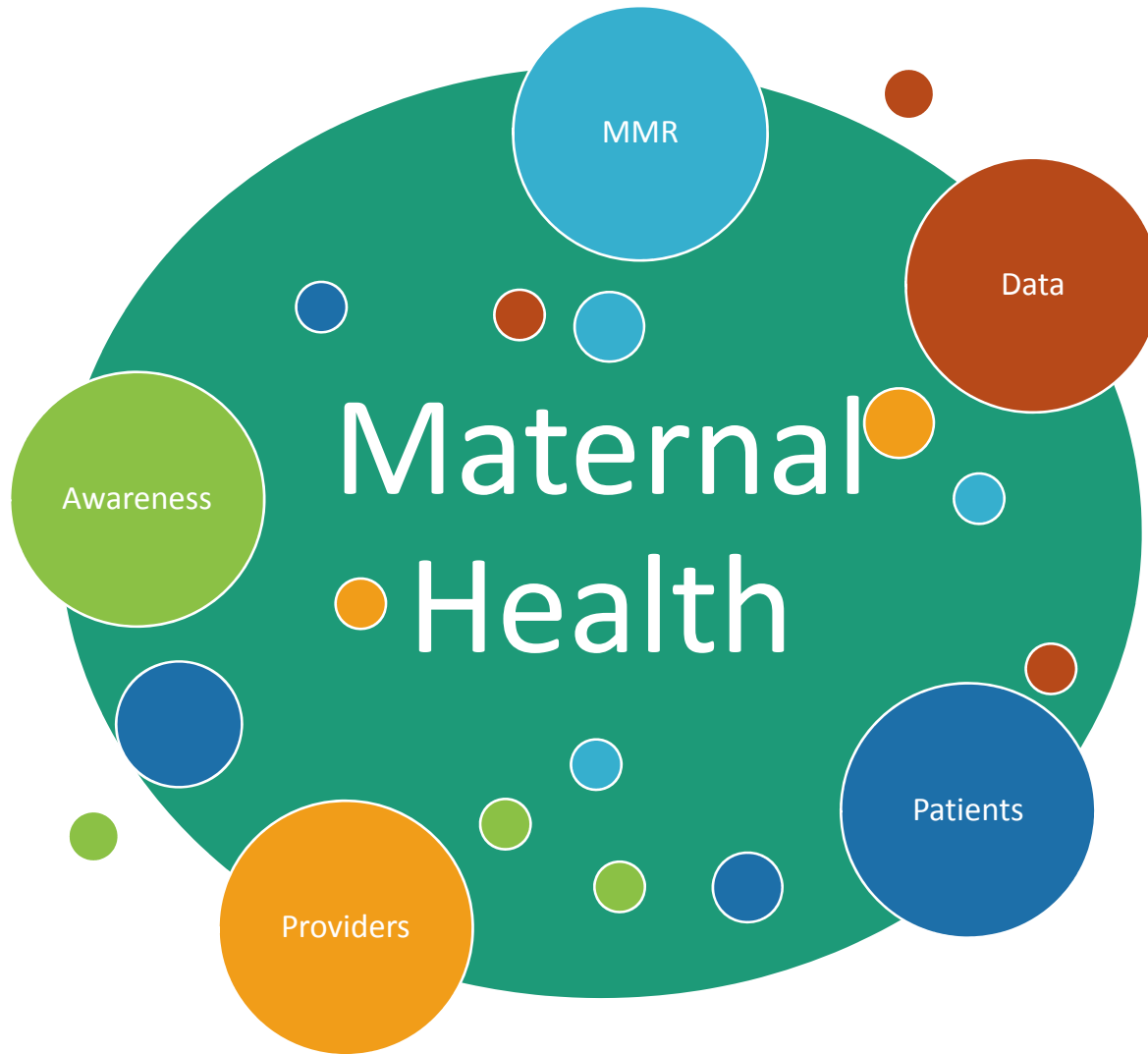
May 9<sup>th</sup>, 2017

**Kimberly C. Sherman, Women's Health Specialist  
Division of Healthy Start & Perinatal Services  
Maternal and Child Health Bureau (MCHB)  
Health Resources and Services Administration  
(HRSA)**



thank  
you





# Poll Questions

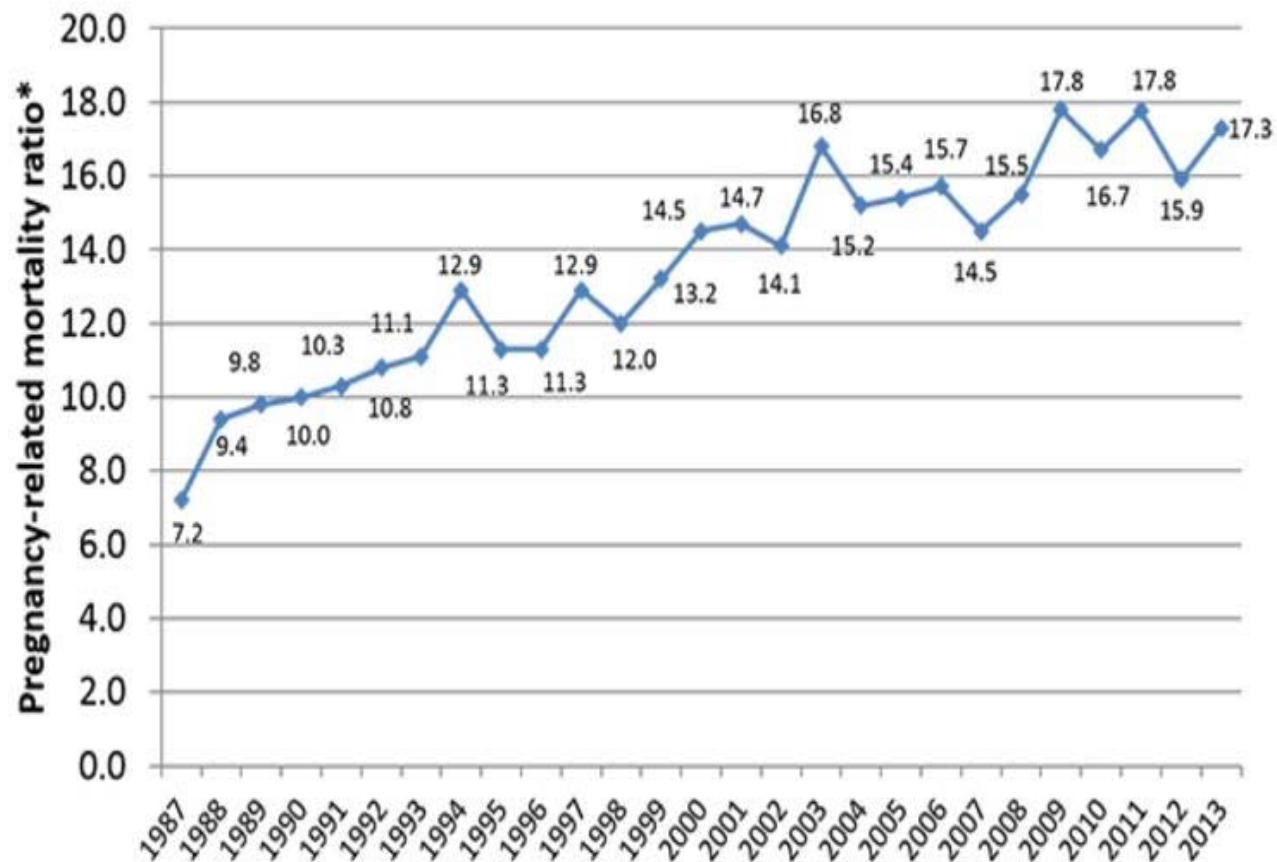
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- **Maternal mortality and severe maternal morbidity are issues in my community.**
  - Yes / No / Don't Know
- **My staff/team members are trained to raise awareness and discuss maternal mortality and severe maternal morbidity with participants.**
  - Yes / No / Don't Know
- **My Healthy Start project is actively addressing maternal mortality and severe maternal morbidity.**
  - Yes / No / Don't Know



# U.S. Maternal Mortality Ratio

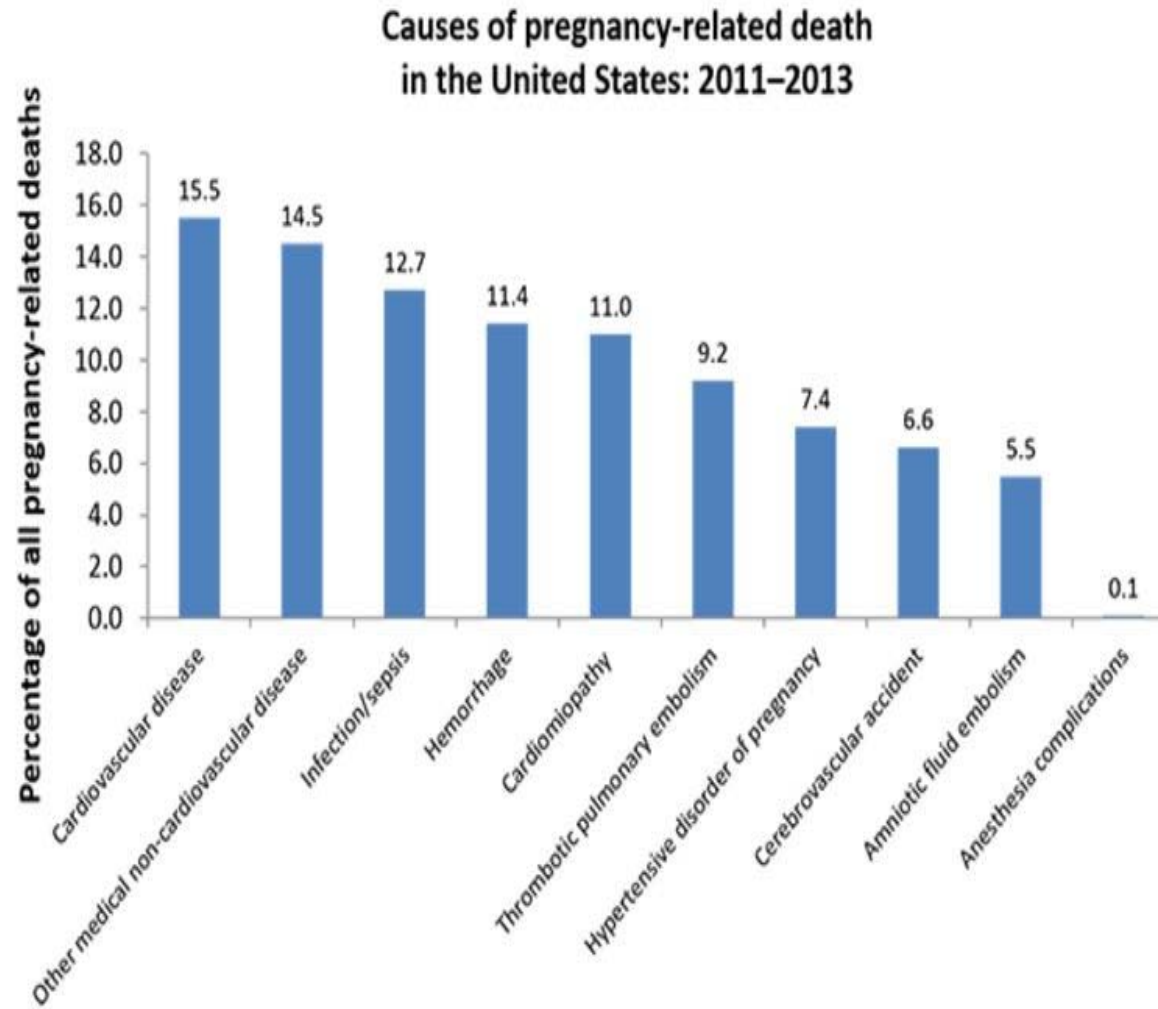
Trends in pregnancy-related mortality  
in the United States: 1987–2013



\*Note: Number of pregnancy-related deaths per 100,000 live births per year.



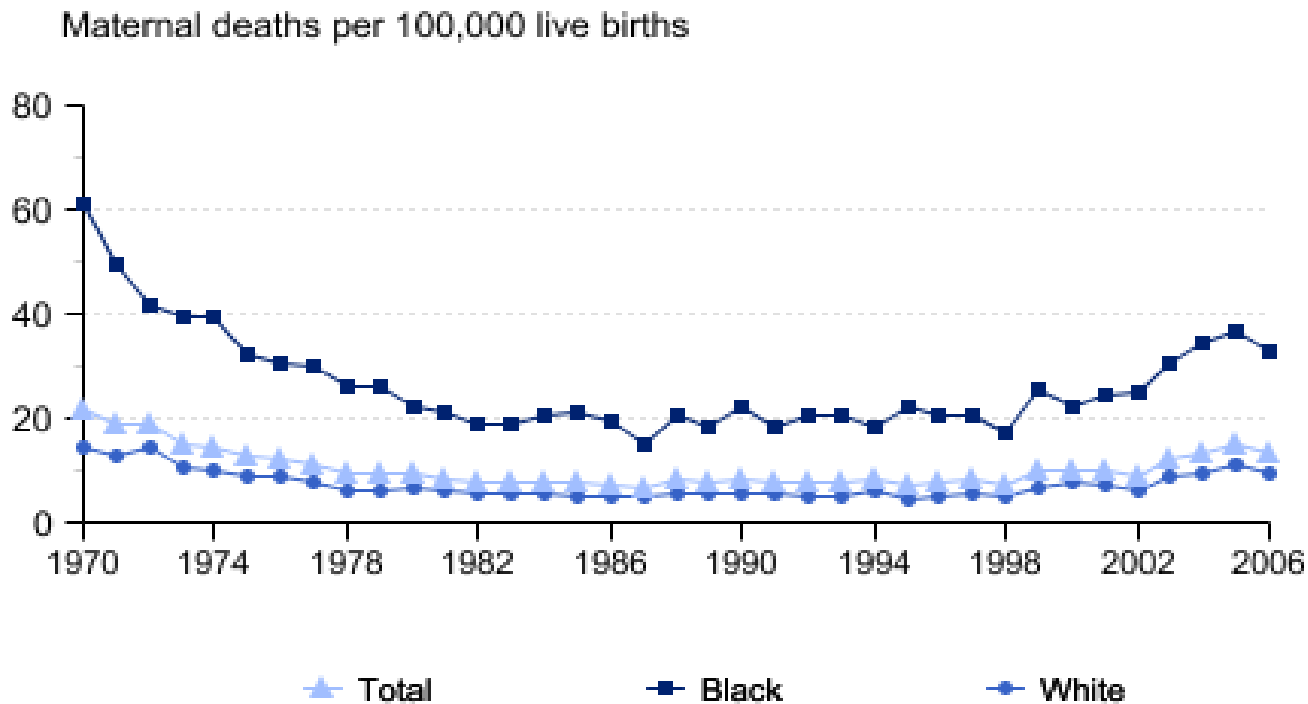
# Leading Causes of Maternal Deaths in U.S.





# U.S. Maternal Mortality Ratio

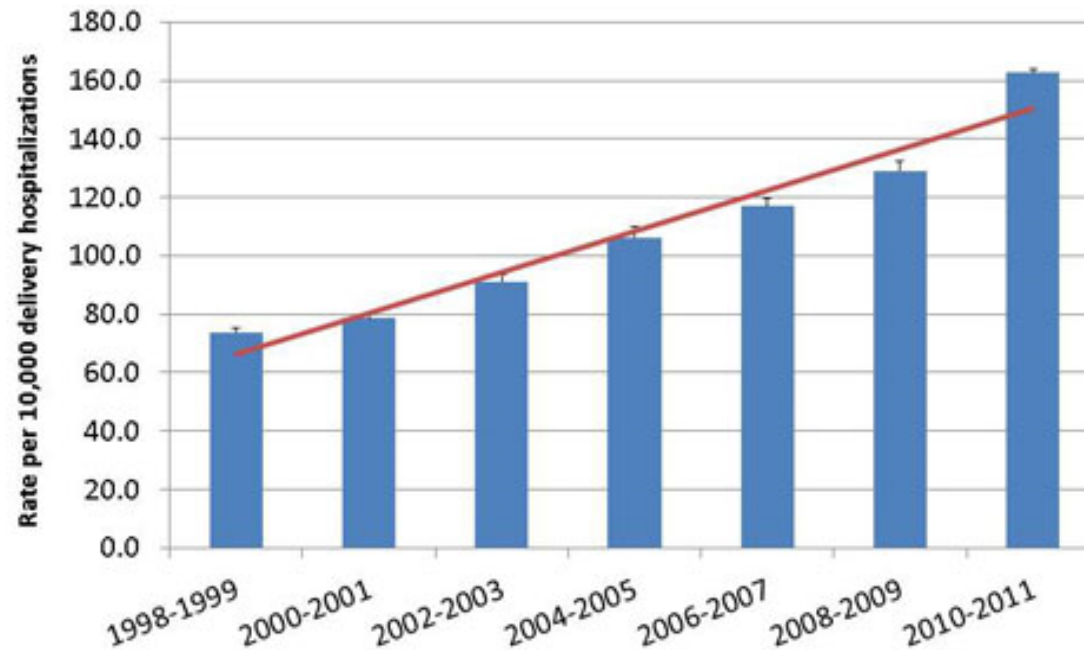
## Racial Gap



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# U.S. Severe Maternal Morbidity

Severe Maternal Morbidity During Delivery Hospitalizations: United States, 1998-2011



CDC defines severe morbidity as a potentially life-threatening maternal condition or complication during a delivery hospitalization



# MCHB's National Maternal Health Strategy

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## Our Goal:

To promote coordination and collaboration within HRSA, across HHS agencies, and with professional and private organizations to improve women's and maternal health.

## Our Priorities:

- Improving women's health before, during, and after pregnancy
- Improving systems of maternity care, including clinical and public health systems
- Improving the quality and safety of maternity care
- Improving public awareness and education
- Improving research and surveillance




# Select MCHB Initiatives

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## Community Level

- **National Healthy Start Program** 
- Maternal, Infant & Early Childhood Home Visiting Program

## State/National Level

-  • **Alliance in Innovation in Maternal health (AIM)**
- **Women's Preventive Services Guidelines**
- Infant Mortality Collaborative Innovation & Improvement Network (IM CoIIN)





## AIM Overview

Award Recipient	ACOG Council on Patient Safety in Women's Health
Project Period	2014 – 2018
Goal	Coalition Maternal Health Safety Bundles State Partnerships

# AIM

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Purpose: To improve the quality and safety of maternity care practices across 8 states with high rates of maternal mortality and severe maternal morbidity.

## AIM Objectives

- Develop a partnership of national stakeholders
- Complete the Maternal Health Safety Bundles

Facilitate Widespread Adoption of the Bundles



# AIM Strategies

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1. Promote consistent message through partner organizations
2. Engage birth facilities through hospital and birth center associations and risk management organizations
3. Engage state public health and perinatal associations
4. Provide tools and technical assistance for self-evaluation and quality improvement planning
5. Provide step by step implementation training
6. Provide real time data to promote quality improvement initiatives.





# What's in a safety bundle?

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## Readiness

Is your team ready for an emergency?

## Recognition

How does your team recognize patients at risk?

## Response

What is your teams response to an emergency?

## Reporting

How does your team improve and learn?



# Maternal Health Safety Bundles

## Currently Available

- Obstetric Hemorrhage
- Severe Hypertension in Pregnancy
- Maternal VTE Prevention
- Patient, Family, and Staff Support After a Severe Event
- Safe Reduction in Primary Cesarean Births
- Reducing Disparities in Maternity Care

## In Progress

- Postpartum Visit/Interconception Care
- New --- October 2016  
Obstetric Care of Opioid Dependent Women



# Bundle Implementation

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## AIM State Teams

- Focus on states with high MM/SMM
- Teams involve public health, hospitals, providers, payers
- Enrollment process

## Hospital Systems

- Organizations engaged with birth hospitals for quality improvement
- Have capacity to collect and transmit hospital data



# Current Activities

## AIM States

- Oklahoma
- Maryland
- Illinois
- Florida
- Michigan
- Mississippi
- Louisiana
- New Jersey
- North Carolina
- Utah
- California

## Project Expansion

- Northern Mariana Islands
- Premier, Inc.
- National Perinatal Information Center
- Trinity Health Care
- AIM Malawi

**AIM Implementation: 643 Birthing Facilities**



# To Learn More...

Login | AIM Data Center Login | Contact Us

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**COUNCIL ON PATIENT SAFETY  
IN WOMEN'S HEALTH CARE**

safe health care for every woman

About Us | Patient Safety Bundles and Tools | Safety Action Series | National Improvement Challenge | **AIM Program**

AIM Enrollment  
AIM Data  
AIM Resources & FAQs  
AIM Support  
Contact AIM

AIM

<http://www.safehealthcareforeverywoman.org/aim.php>



# Women's Preventive Services Initiative

# Women's Preventive Services Initiative

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To improve adult women's health across the lifespan by engaging a coalition of health professional organizations to recommend updates to the HRSA-supported Women's Preventive Services Guidelines.

<https://www.hrsa.gov/womensguidelines/>

*Authority: Title V, § 501(a)(2) of Social Security Act (42 U.S.C. 701(a)(2)), as amended.*



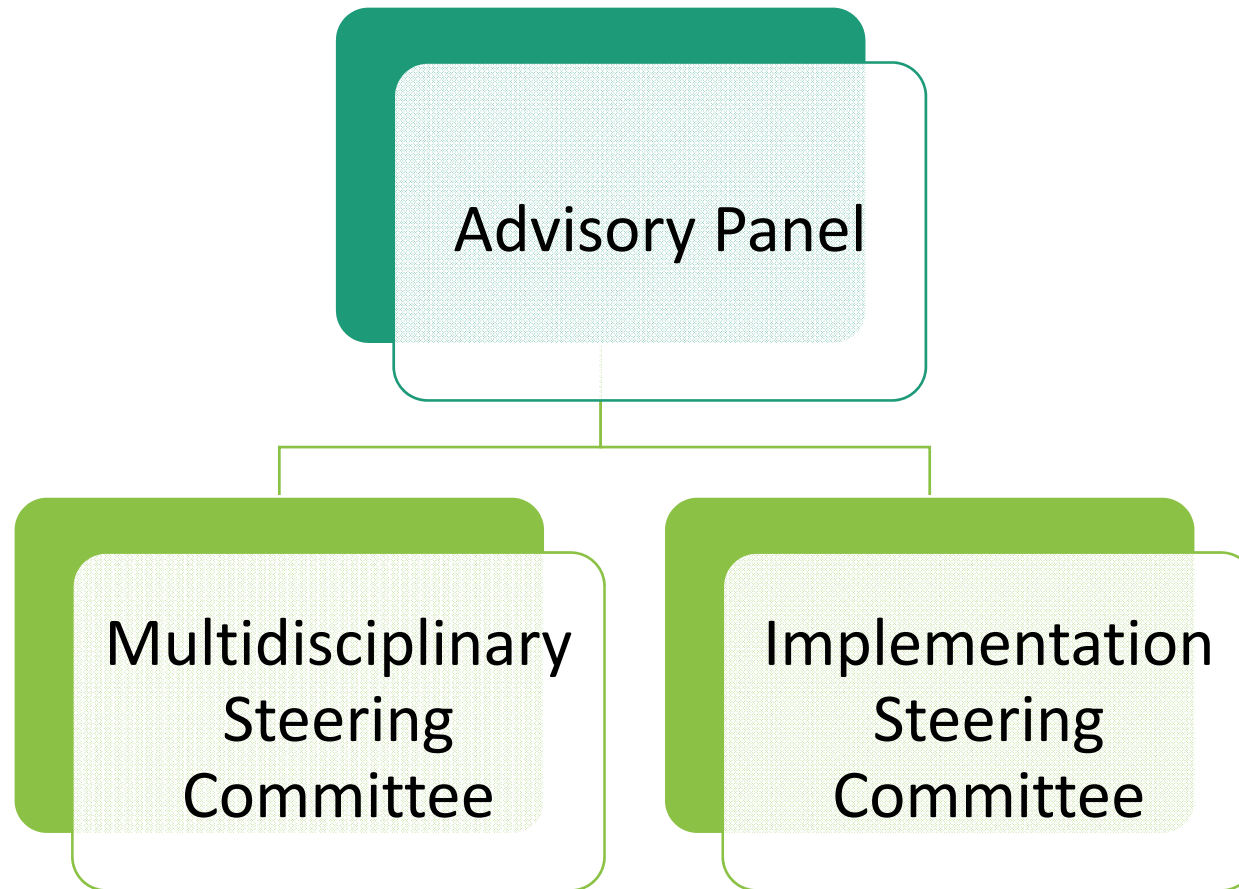
## WPSI Overview

Award Recipient	American College of Obstetricians & Gynecologists (ACOG)
Project Period	March 2016 – February 2021
Year 1 Deliverable	Updated Recommendations December 2016





# WPSI Project Framework



# Project Aims

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**Aim 1:** Establish a process for developing and regularly recommending updates to the guidelines for women's preventive services;

**Aim 2:** Obtain participation by health professional organizations on developing recommended guidelines for women's preventive services;



# Project Aims

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**Aim 3:** Review and synthesize existing guidelines and new scientific evidence for women's preventive services;

**Aim 4:** Develop recommended guidelines for women's preventive services;

**Aim 5:** Disseminate HRSA-supported guidelines for use in clinical practice.



# Updated Preventive Service Guidelines

- Screening for Gestational Diabetes
- HPV Testing
- STI Counseling
- HIV Counseling and Testing
- Breastfeeding Support, Supplies, and Counseling

- Screening and Counseling for Interpersonal and Domestic Violence
- Well Woman Visits
- Contraceptive Methods and Counseling
- Breast Cancer Screening for Average Risk Women





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<http://www.womenspreventivehealth.org/>



# Contact Information

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**Women's Health Team**

**Division of Healthy Start & Perinatal Services**

**Maternal and Child Health Bureau (MCHB)**

**Health Resources and Services Administration  
(HRSA)**

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**Phone: 301.443.0543**

**Web: [mchb.hrsa.gov](http://mchb.hrsa.gov)**

**Twitter: [twitter.com/HRSAgov](https://twitter.com/HRSAgov)**

**Facebook: [facebook.com/HHS.HRSA](https://facebook.com/HHS.HRSA)**



# Questions?



# ROLE OF CHRONIC ILLNESS IN MATERNAL MORTALITY AND SEVERE MATERNAL MORBIDITY OUTCOMES



Ekua A-Samuels & Claudia Boykins

Maternal Intentions

Northern Manhattan Perinatal Partnership, Inc.

Healthy Start Webinar - May 9, 2017



# PRESENTATION OBJECTIVES



1. Acknowledge the proportion of Maternal Deaths and Near Misses related to Chronic Illnesses in women of childbearing age
2. Highlight the disparities within these indicators
3. Understand the nature of the complications that exist
4. Walk through the chain of pathways and circumstances that increase risk of women experiencing these complications
5. Explore the social determinants that perpetuate the chronic conditions
6. Discuss Promising interventions towards making birth safer for women
7. Folding these practices into current programmatic components

# DISTINGUISHING MATERNAL MORTALITY DATA



**Pregnancy-associated death** is the death of a woman from any cause while pregnant or within one calendar year of the end of pregnancy. Pregnancy-associated deaths are further categorized based on whether they are causally related to the pregnancy.

**Pregnancy-related death** is defined as the death of a woman while pregnant or within one year of the end of pregnancy from any cause related to or aggravated by the pregnancy or its management. In these cases, the pregnancy and death are causally related. Pregnancy-related deaths are a subset of pregnancy-associated deaths.

**Maternal Mortality** for our purposes are the death of a woman that is causally related to her being pregnant

**Severe Maternal Morbidity** is defined as life-threatening complications during delivery. For every Maternal Death, there are 100 cases of severe morbidity. SMM is a precursor to the deaths that occur. Also called Near Misses.

# COMPLICATIONS THAT CAUSE PREGNANCY- RELATED DEATHS IN NYC 2006-2010



- Hemorrhage - 27.3%
- Embolism - 18.7 %
- Pregnancy-induced hypertension 13.7 %
- Cardiovascular condition 12.9 %
- Infection 7.2 %
- Cancer 3.6 %
- Injury 2.2 %
- Anesthesia complication 2.2%
- Other 11.5 %
- Nationally, the leading causes of pregnancy-related death from 2006 to 2010 were embolism (14.9%), cardiovascular conditions (14.6%), infection (13.6%), cardiomyopathy (11.8%) and hemorrhage (11.4%).

# THE LEADING DIAGNOSIS & PROCEDURES INDICATED IN SMM CASES IN NYC



- Leading Diagnosis was Complications of Surgery or medical procedures
  - Followed by Disseminated Intravascular Coagulation, Adult Respiratory Distress Syndrome, Acute Renal Failure, and Eclampsia
- The Leading procedures indicated were:
  - Blood Transfusions - 65%
  - Hysterectomy
  - Ventilation
  - Operations of the Heart and Pericardium
- Leading causes of Hemorrhage:
  - C-section
  - Obesity
  - Pre-Eclampsia (or Gestational Diabetes)
  - Blood Disorders

# THE LINK BETWEEN PREGNANCY RELATED DEATH AND CHRONIC ILLNESS



- Pregnancy related mortality is associated with obesity, underlying chronic illnesses, such as hypertension and diabetes, and poverty (NYCDOHMH-BMIRH, 2015).
- These conditions are known to be driven by social determinants that disproportionately affect minority groups.
- Maternal overweight and obesity are linked with adverse pregnancy outcome. Maternal complications include hypertension, diabetes, respiratory complications (asthma and sleep apnea), thromboembolic disease, more frequent cesarean deliveries with increased wound infection, endometritis, and anesthetic complications (Yogev & Catalano, 2009) (Lu, 2001).
- Poor management of chronic conditions increase the need for c-sections and other procedures in pregnancy and childbirth and as a result the increased risk of morbidity and mortality.

# PATHWAYS OF SOCIAL DETERMINANTS TO CHRONIC DISEASE



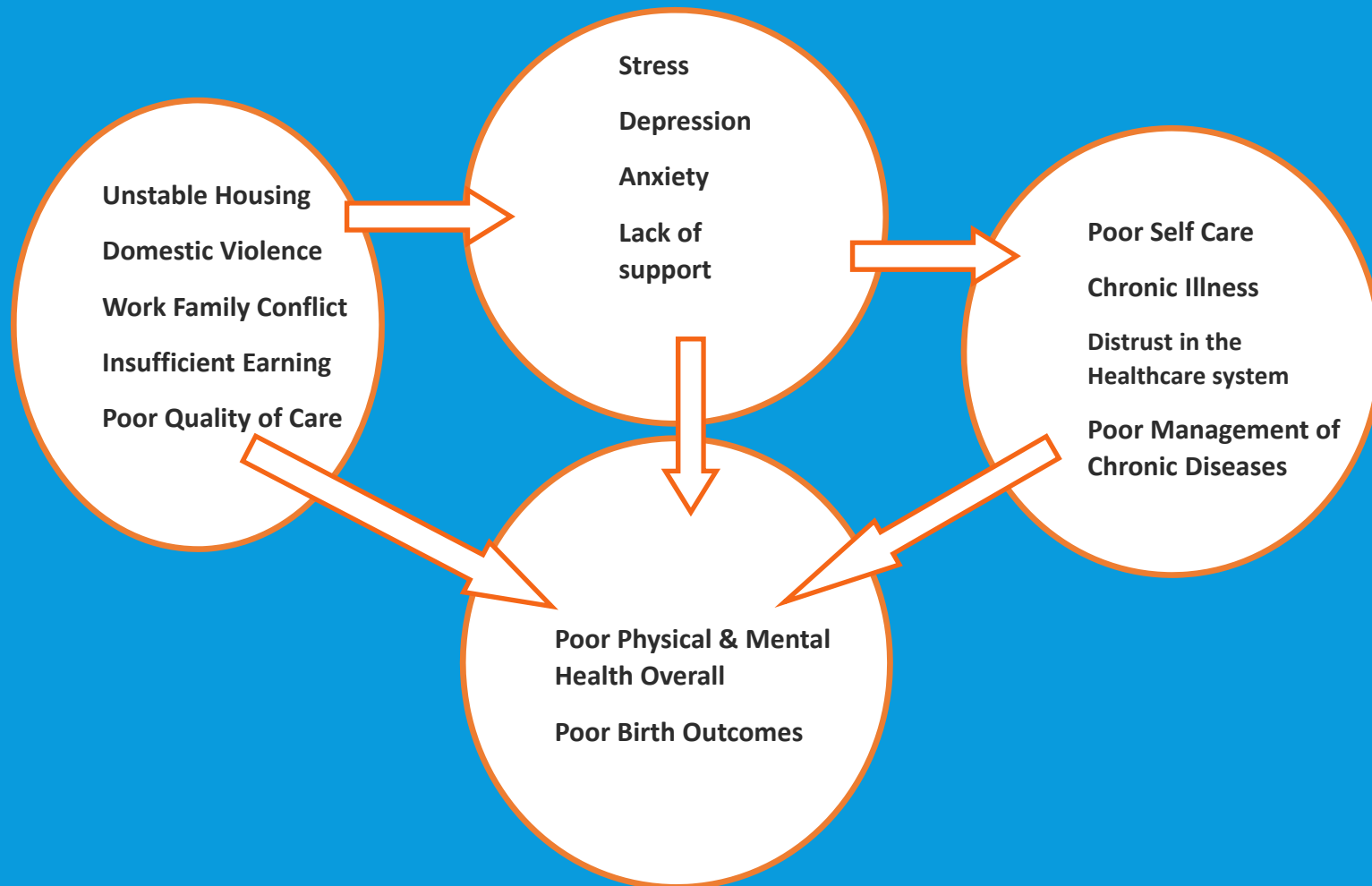
- To be healthy and prevent, manage, or effectively treat chronic conditions, women must have basic needs of survival met. They need safe and livable housing, access to nutritious food, the need to feel safe, from the elements as well as individuals they live with and around.
- A great proportion of the homeless shelter residents in New York are women of childbearing age, pregnant women or women with kids 5 or younger (Kerker, 2011).
- Domestic violence is a major culprit of homelessness among adult women and children. So much so that 22% to 57% of homeless women report that DV is the immediate cause of their homelessness and seeking shelter in the system (USDHHS Family and Youth Services Bureau, 2016).
- Studies from high-income countries identify depression as both a cause and consequence of diabetes and a growing body of research emphasizes bi-directionality between depression and diabetes (Mendenhall, 2012).

# SOCIAL DETERMINANTS WE SEE IN OUR PROGRAM POPULATION



- Unstable Housing
- Domestic Violence
- Illegal Immigration Status
- Depression, Anxiety, and more severe mental health diagnosis
- Distrust of the healthcare system and clinical providers when it comes to their care
- Ambivalence about seeking care for acute and long-term chronic conditions
- Lack of support

# THE PROBLEM CONTEXTUALIZED



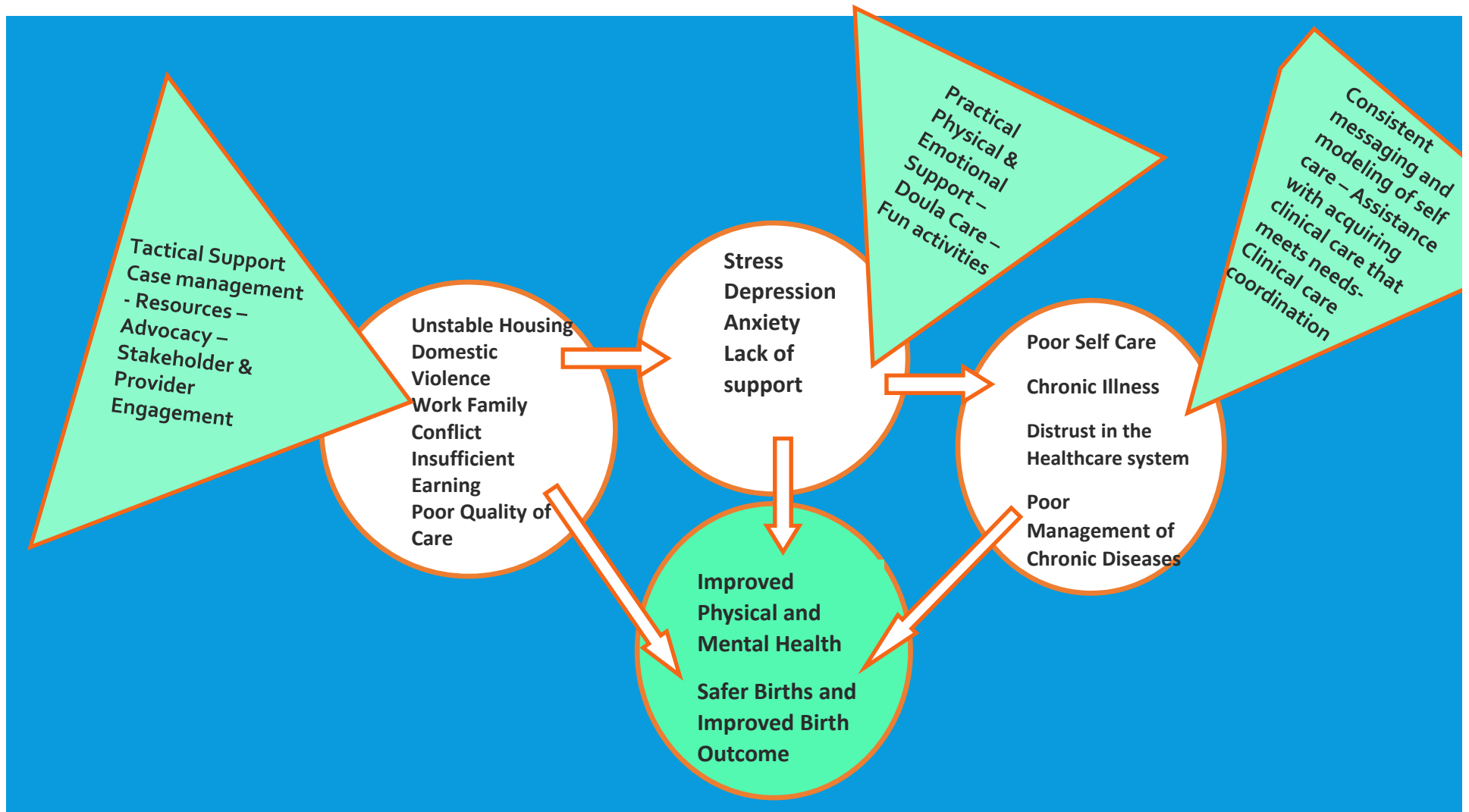


# PROMISING PRACTICES WE HAVE SEEN WORK



- Consistent messaging around Self Care being a Major Priority for women
- Clinical Care Coordination – assist women in taking steps towards clinical care
- Escorts – address quality of care issues
- Diverse efforts to secure housing stability – based on each individual woman’s needs and circumstances
- Education for staff on identifying and supporting women experiencing Intimate Partner Violence – CHW skills helps women feel safe and keeps them engaged.
- Doula Care – Tactical and practical support
- Mental Health Counseling and referrals
- Fun activities for mom and babies that promote wellness and encourage community
- Health Education

# MOVING THE NEEDLE



# WHAT WE SHOULD BE TEACHING WOMEN AND



- Signs and symptoms of Pre-Eclampsia and other serious issues
- Childbirth Education
- Stress Management
- Mobilizing their Support Systems
- Managing Providers and Medications
- Removing stigma from seeking mental health services
- That we will show-up for her and back her up, but she has to show up for herself
- If she isn't well, her family is at greater risk

# CHALLENGES



- Social determinants are a result of structural determinants
- Systems change is needed
- Social norms can be prohibitive
- Culture of ambivalence towards pregnant and parenting women
- Superwoman mentality
- Policies within our organizations or with governing bodies that are harmful to women
- Unbridged care between clinical providers and non-clinical support systems

# STRENGTHS OF EXISTING PROGRAM MODELS



- Home Visiting
  - Intimate – Rapport and trust can be built
  - View into unique environments our women live in to better assess risks and assets
- Stakeholder Engagement
  - Providers informing each other's practice
  - Mobilizing shared resources
  - Women themselves informing and participating in providing preventive services
- Balancing consistency with innovation
  - Constant assessment of what works and what doesn't
  - Enough time invested into intervention details to see results
  - Making changes and improvements as the landscape changes

# PUTTING THE “M” BACK IN MCH



- Maternal Mortality Rate (MMR) is one of the most compelling indicators of community, national and global health and wellbeing.
- Infant Mortality Rate (IMR) and its supporting indicators of Low Birth Weight (LBW), Very Low Birth Weight (VLBW), and Preterm birth, measure the onset of life of our most vulnerable, and thus predicts the relevant population's trajectory for health and wellness. However, the health of the conceivers, the incubators, and primary caretakers of are most vulnerable must be given significant attention, if not more.
- Traditionally, most cultures have celebrated, protected, served, and revered women and childbearing.
- The increased focus on maternal health among the range of MCH providers is promising

# REFERENCES



- Kerker, B. D. (2011, March ). A population-based assessment of the health of homeless families in New York City, 2001-2003. *American Journal of Public Health, 101*(3), 546-553.
- Lu, G. C. (2001, October). The effect of the increasing prevalence of maternal obesity on perinatal morbidity. *American Journal of Obstetrics and Gynecology, , 185*(4), 845-849.
- Mendenhall, E. S. (2012, December). Stress and diabetes in socioeconomic context: A qualitative study of urban Indians. *Social Science and Medicine, 75*(12), 2522-2529.
- NYCDOH-BMIRH. (2016). *New York City, 2008-2012 Severe Maternal Morbidity*. New York City Department of Health and Mental Hygiene Bureau of Maternal, Infant and Reproductive Health.
- NYCDOHMH-BMIRH. (2015). *Pregnancy-Associated Mortality New York City 2006-2010*. New York City Department of Health and Mental Hygiene Bureau of Maternal, Infant and Reproductive Health.
- Yogev, Y. C. (2009, June). Pregnancy and Obesity. *Obstetrics and Gynecology Clinics of North America, 36*(2), 285-300.

# Questions?





# Michigan Snapshot

## MATERNAL MORTALITY SURVEILLANCE

### Methods and Practices

### Collaboration in Public Health Surveillance

**Mary Roberts, MD, DFAPA, CHCQM**  
Chair, MMMS Injury Committee

**Gwendolyn Daniels, DNP, MSN, RN**  
Vice President, Institute For Population Health



# Key Partners & Committee Membership

- **MDHHS Bureau of Epidemiology and Population Health**
- **MDHHS Division for Vital Records and Health Statistics**
- **MDHHS Bureau of Family Health Services**
- **Michigan Section American College of Obstetricians & Gynecologists (ACOG)**
- **Michigan State Medical Society**
- **Michigan Osteopathic Association**
- **Michigan Birthing Hospitals**
- **Michigan Health and Hospital Association**
- **Michigan Association of Medical Examiners**
- **Michigan Affiliate American College of Certified Nurse Midwives (ACNM)**
- **Michigan Law Enforcement Agencies, Fire Departments**
- **Emergency Medical Service Providers**
- **Medical, Nursing, Allied Health and Public Health Colleges and Universities**
- **Members of the Medical and Injury Maternal Mortality Advisory Committees**



**The State of Michigan  
Medical Committee has  
uninterrupted review of  
maternal deaths since 1950**

[www.michigan.gov/mchepi](http://www.michigan.gov/mchepi)

# Maternal Mortality Review in Michigan

**2002 ...Transition to review of *all* maternal deaths *within* 365 days of pregnancy including deaths due to Injury**

**2002 Accidental & Injury causes of maternal death reviews began *in addition* to medical causes. Interdisciplinary Committee formed, abstract forms developed and State Maternal Child Health Epidemiologist position established.**

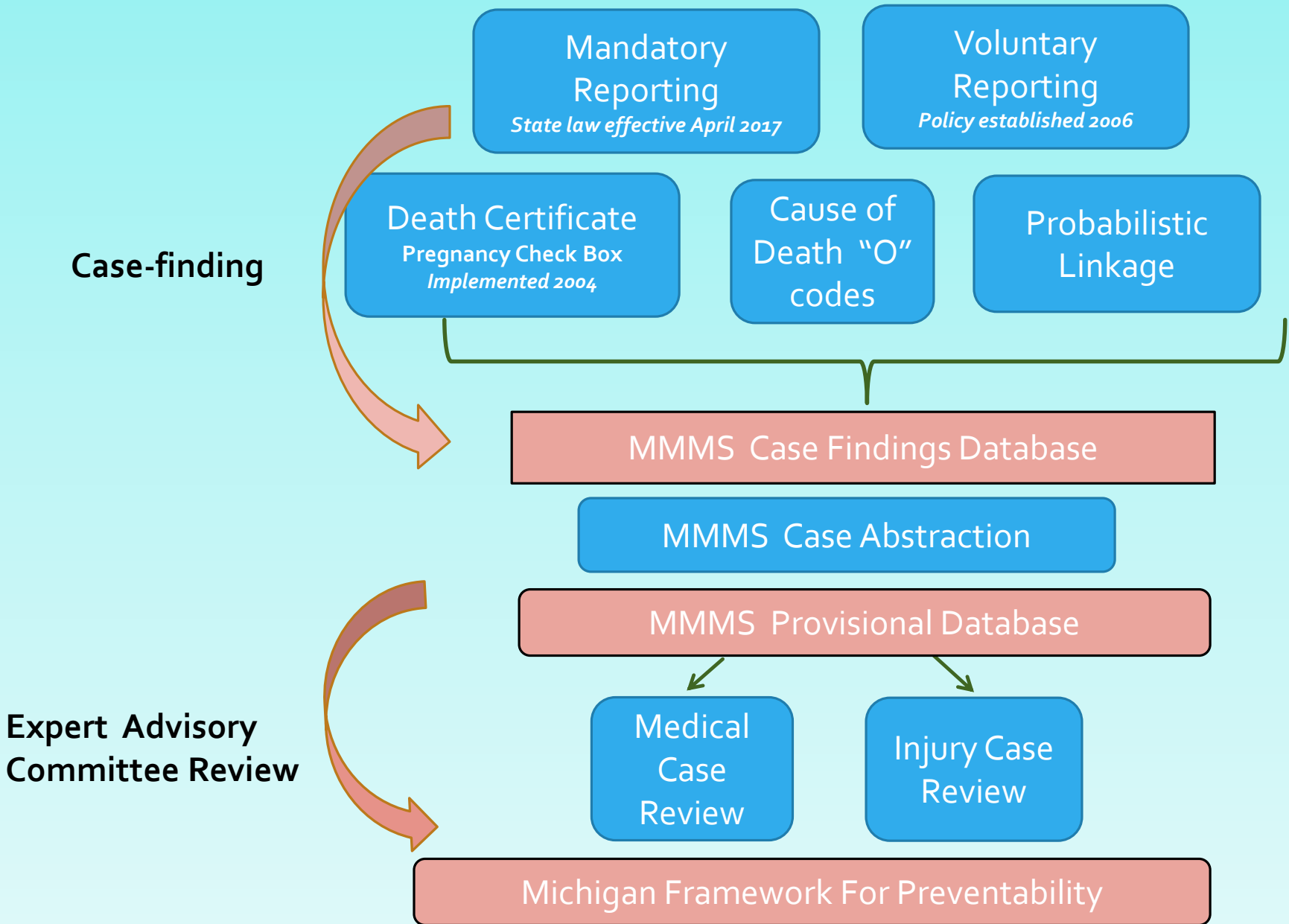
**2003 Division of Family & Community Health assigned staff to prepare case information and coordinate committee activity.**

**2004 Injury Committee established.**

**2005 Interdisciplinary Committee refines recommendations to move toward public health actions.**

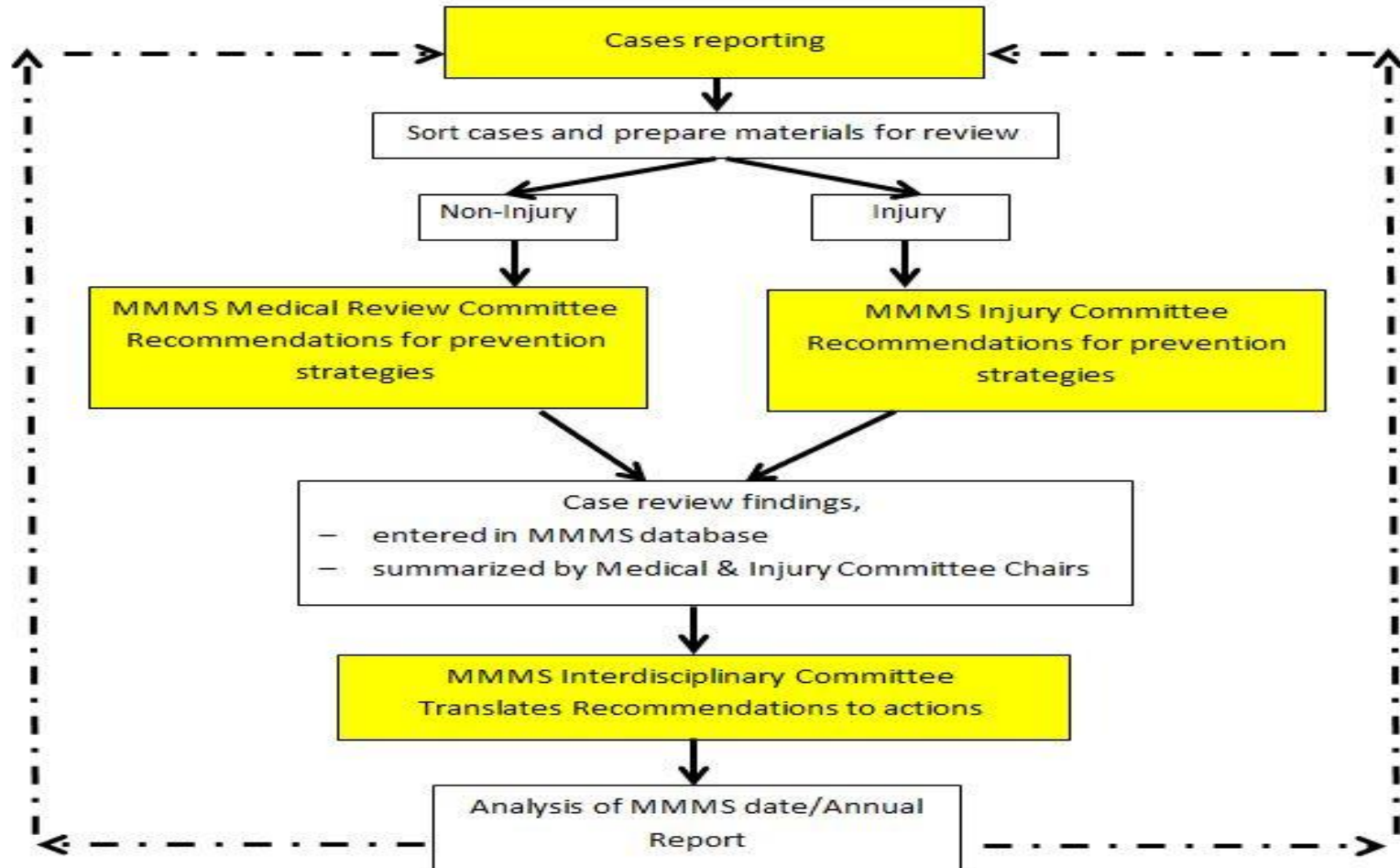
**2010 Development of searchable state MMMS database is underway along with revisions to identify specific *Levels of Public Health Preventability* recommendations.**

# MMMS Case Identification and Review



# Michigan Maternal Mortality Surveillance (MMMS) Structure & Design

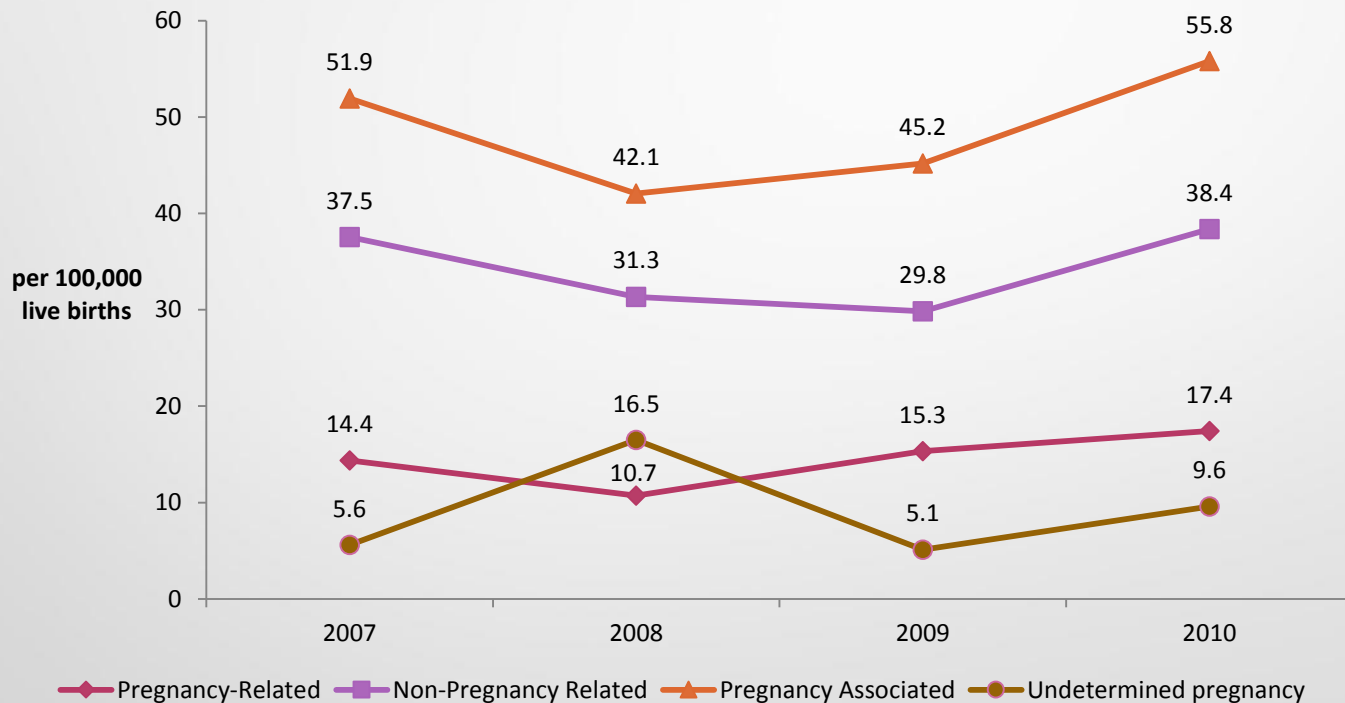
The following diagram is the graphical representation of the MMMS process



# Michigan Maternal Health Indicators, MI Vital Records 2010

- Mortality per 100,000 live births
  - Pregnancy-Related: 17.4
  - Pregnancy-Associated: 55.8
- Causes of Death:
  - Pregnancy-Related: 31%
  - \* Non Pregnancy-Related: 69%

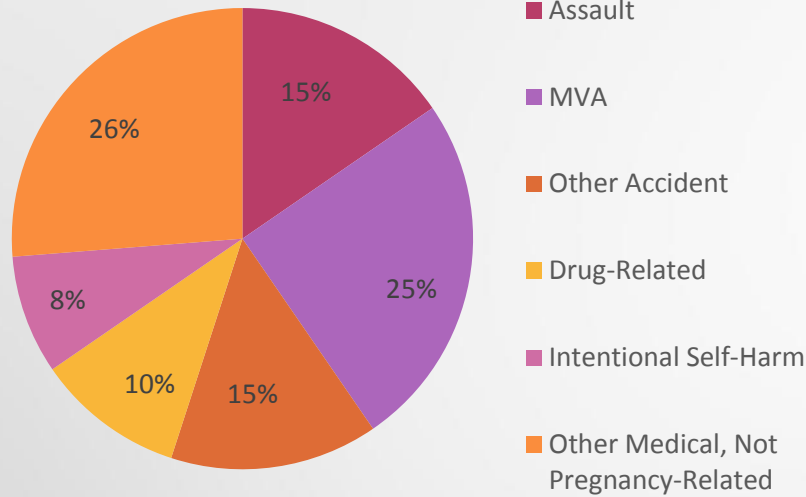
# Michigan Pregnancy-Associated Mortality Trends, MI Vital Records 2007-2010



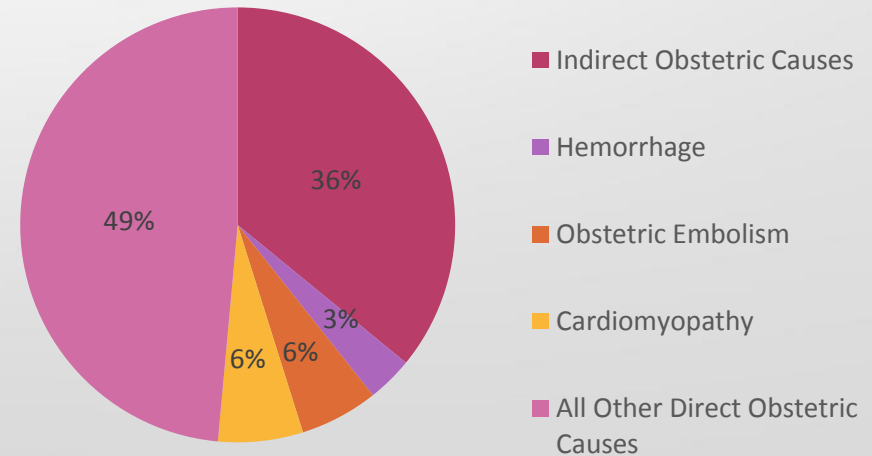


# Cause of Death, MI Vital Records 2005-2010

## Not Pregnancy-Related



## Pregnancy-Related



# Committee Determinations

- **Injury Committee**
  - Delays at different levels
  - Levels of Preventability
  - Recommendations
- **Medical Committee**
  - Cause of Death
  - Pregnancy Related or Associated
  - Preventability Recommendations

# MMMS Committee Deliberations

- Each Case is reviewed and *de-identified* written narrative is typed by the reviewer
- *de-identified* Case Reviews are presented at Injury Committee Meetings
- Free form discussion, questions, issues and preventability determinations are made

# Challenges and Opportunities

- Capture the essence of the deliberations
- Identify trends & make appropriate recommendations given the “case study” nature
- Ascribing preventability and their implications at national, state, local and clinical levels
- Use the results of the review deliberations to inform state level database and statistics

# Procedure For Each Injury Case Review

## Phases of Delay Questions

### *Four Key Questions for Each Injury Case Review*

**Was a problem relating to the cause of death identified prior to the terminal event?**

**Were there delays in the decision to seek care or assistance?**

**Were there delays in receiving or reaching care and assistance once a decision to obtain help was made?**

**Was quality care provided once (if) it was accessed?**

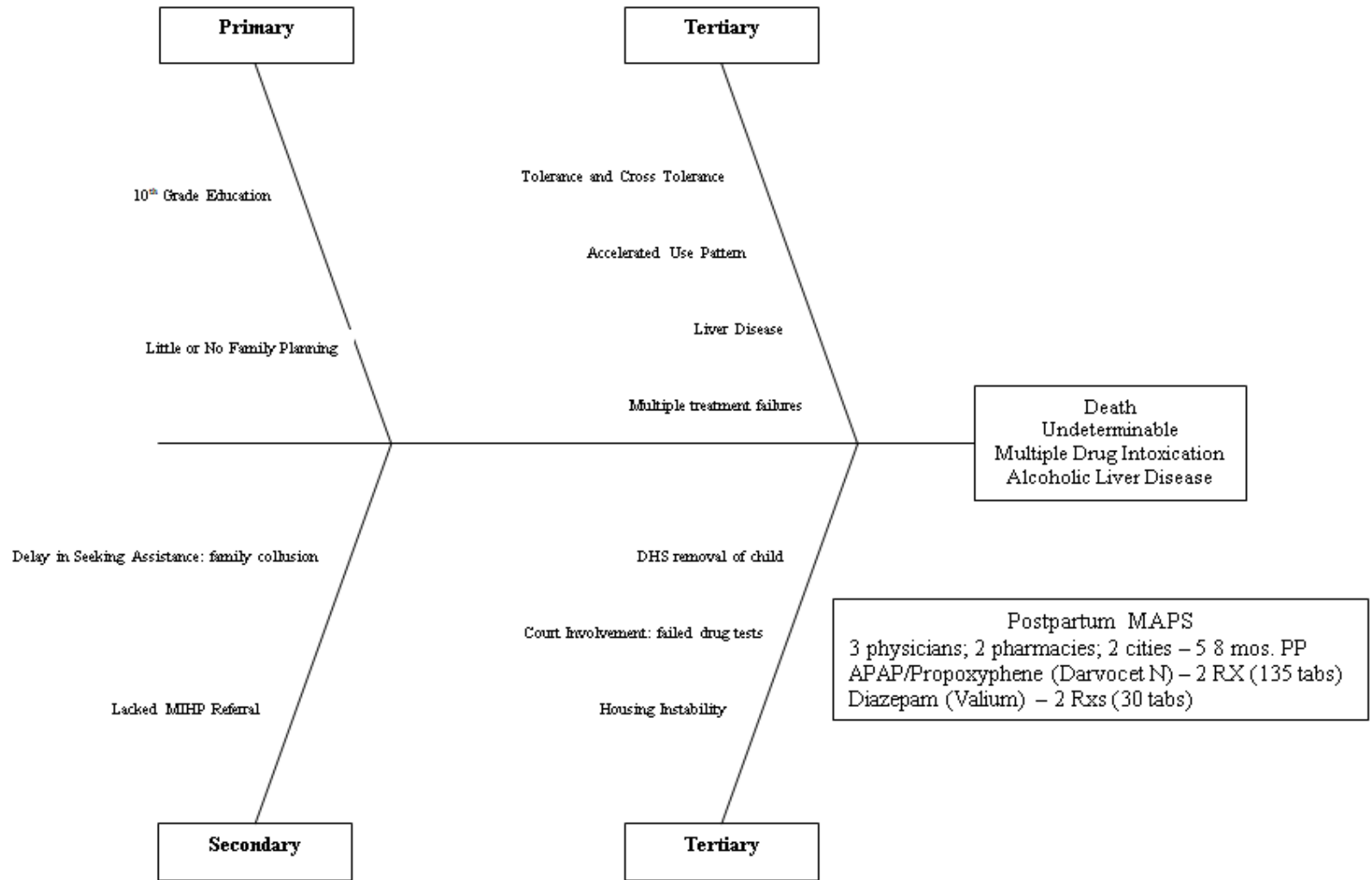


# Levels of Preventability

## Primary, Secondary and Tertiary Prevention

- *Primary prevention* avoids the development of a disease and/or injury. Most population-based health promotion activities are primary preventive measures.
- *Secondary prevention* activities are aimed at early disease or condition detection, thereby increasing opportunities for interventions to prevent progression of the disease, condition, or problem and emergence of symptoms.
- *Tertiary prevention* reduces the negative impact of an already established disease, condition, or problem by restoring function and reducing disease-related complications.

I



# Intervention Decision Matrix

Systematic Approach to MMMS Injury Committee  
Findings and Recommendations

## Education

Health Promotion

Behavior Change

Social Influence

## Enforcement

Policy

Law

Regulation

## Engineering

Environment

Technology

# Injury Committee Ranking Proposed Preventability Interventions

Reference: Fowler, CJ & Dannenberg AL, 2010. Guiding Intervention Selection.

Online access:

[https://www.dellchildrens.net/services\\_and\\_programs/safety\\_and\\_injury\\_prevention/texas\\_injury\\_and\\_violence\\_prevention\\_conference/conference\\_presentations/Dr\\_Carolyn\\_Cumpsty\\_Fowler\\_2.pdf](https://www.dellchildrens.net/services_and_programs/safety_and_injury_prevention/texas_injury_and_violence_prevention_conference/conference_presentations/Dr_Carolyn_Cumpsty_Fowler_2.pdf)



# 2014 Interdisciplinary Injury

State Health Plans, to implement policy to provide incentives, and require Providers with DEA to obtain MAPS reports once each trimester during pregnancy, emergency room visits, and at each postpartum office visit	Educational (option 1)	Increase Enforcement (option 2)	Economic incentives (option 3)
Effectiveness	Low	Medium	High
Feasibility	Low	High	High
Cost-Feasibility*	Low	High	High
Sustainability	Low	High	Medium
Ethical Acceptability	High	High	High
Political Will	Medium	Medium	Low
Social Will	Medium	Medium	High
Potential for unintended benefits (maximize benefits)	Low	Low	Medium
Potential to "Do No Harm" (Avoid unintended risks)	Low	Medium	Medium

**FINAL PRIORITY = Move Forward**

# Levels of Preventability Recommendations

## Primary Level *Injury-Related* Preventability Recommendations

- **Medication Safety: Increase public awareness of Tylenol (acetaminophen) excess dose danger**
  - *Warning Signs where the public buys OTC meds*
  - *Warning Labels on all Rx that contain acetaminophen*

# Secondary Level *Injury-Related* Preventability Recommendations

- **Uniform Screening Tools are needed for use across *all* health care settings: Office, Clinics, ER, Labor & Delivery**
  - **Substance use**
  - **Domestic violence**
  - **Depression**
- **Communication and coordination of care '*Hand-Off*' is critical to continuity & quality of care during pregnancy and postpartum**
- **Provider education at professional conferences and regional meetings with 'sanitized' summary examples of MMMS case reviews provide powerful messages to OB specialists, Primary Care, Psychiatric, Mental Health, Child Protective Services, Domestic Violence Shelters**

# Tertiary Level *Injury-Related* Preventability Recommendations

- Close gaps between crisis & access to care; referral to psychiatrist can be life-saving!
- There are implications for policy at local and hospital level system of care when petition & certification meet code.

# 2004 - 2016 MMMS Injury Committee Collaborative Accomplishments

- **Alignment with Public Health Title V State Priorities**
- **MMMS Injury Suicide Research Project with Grand Valley State University Epidemiology Intern**
- **Office of Highway Safety & Planning - Seatbelt Use Pregnancy Brochure**
- **MMMS Injury Committee Presentations *By Invitation***
  - ❖ **Michigan Section of ACOG: Maternal Infant Health Home Visiting Program & Medicaid Outpatient Mental Health Policy**
  - ❖ **Michigan Association of Local & County Public Health Premier Conference: Maternal Mortality (MMMS) Injury Breakout Session**
  - ❖ **CDC-AMCHP National Maternal Mortality Initiative**
  - ❖ **CDC-AMCHP *Every Mother Initiative* Grantee Technical Assistance**
- **CDC Pregnancy Mortality Surveillance System (PMSS) Validation Study and Pregnancy Check Box Study**
- **MMMS Injury Committee Educational Trainings**
  - ❖ **Michigan Automated Prescription System (MAPS) – State Controlled Substance Monitoring Program Educational Training**
  - ❖ **Michigan Framework for Preventability**
  - ❖ **Life Course Theory & Social Determinants of Health**

# Recommendations from Michigan Interdisciplinary Committee - *examples*

- Develop a standing data subcommittee as a joint endeavor between MDHHS & MMMS to review reports, publications, & emerging issues from review process of both committees.
- Implement *Education Guidelines For MMMS Case Summaries* to use as teaching synopses by both Medical and Injury Committee members for 'grand rounds' or professional conference presentations.

# Recommendations from Michigan Interdisciplinary Committee - *examples*

- Consider adopting a method to define domestic violence cases to classify the number of statewide maternal deaths related to domestic violence. Past cases not originally classified as domestic violence could potentially be redefined.
- Publish policy and/or system recommendations regarding '*lessons learned*' from hemorrhage related maternal mortality cases in Michigan.

# Recommendations from Michigan Interdisciplinary Committee - *examples*

- Warning Label 'Black Box' on OTC Pregnancy Tests:

*If you take a pregnancy test and the result is positive, talk to your doctor*

- Ectopic pregnancy recommendations:

**Access to prenatal care** at first sign of pregnancy

**Education of early pregnancy complications** for all medical care providers

**Screening tests** including serial beta HCG and vaginal ultrasounds available to women of reproductive age



# Lessons Learned and Recommendations

- **Refine preventability and recommendations so they capture the depth of the deliberations**
- **Aggregate Michigan data to identify trends**
- **Work with a consortium of other Review Committees to aggregate “refined” data and case findings and use for policy and clinical recommendations (ACOG opinions and guidelines and clinical protocols, i.e. hemorrhage)**

# Challenges in Maternal Mortality Reviews



- Identifying trends & making appropriate recommendations given the “case study” nature of the maternal mortality review process.
- Ascribing broader scale preventability and their implications at state, local & system of care levels for translation into public health action.
- Relying on volunteer and in-kind support of the expert committee membership.
- Allocating resources to a comprehensive data collection, data analysis, and review process.
- Using results of MMMS review deliberations to inform state level database and statistics.

# CURRENT MMMS INITIATIVES

- Michigan Alliance for Innovation on Maternal Health (MI-AIM) Implementation of Quality Improvement Safety Bundles
- CDC Pregnancy Check Box Study – Multi-State Maternal Mortality Review Study
- Michigan Maternal Mortality Framework for Preventability
- MMMS Research study to determine risk factors, recurring themes, common errors, and systems issues that contribute to obstetric hemorrhage-related maternal mortality in Michigan
- MMMS Research study to identify the contribution of maternal obesity to pregnancy-related mortality; the Michigan experience

# The right care at the right time at the right place.

*“To a significant extent, this is a problem of policies, priorities, and management, not of resources.*

*Improving access to emergency obstetric care does not necessarily require building new hospitals or training new cadres of workers.*

*Much can be achieved by improving the functioning and utilization of existing facilities and personnel.”*



Bailey, Patricia. E., and Paxton, Anne. 2002, "Using UN Process Indicators to Assess Needs in Emergency Obstetric Services." *International Journal of Obstetrics and Gynecology* 76: 299–305.



# The Future.... New Collaborations

Engagement with National, State, Regional & Local  
Initiatives to Improve Health Outcomes for  
Women, Infants and their Families

Questions ??



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# Takeaways

- Approximately 700 women die from pregnancy related causes each year! Maternal death can happen to any woman at any time. It is important to discuss prevention with every client at every pregnancy.
- Make sure to work with clients to manage chronic diseases before, during, and after pregnancy.
- Healthy Start has a role to play in preventing these deaths. You can help sound the alarm on the maternal mortality, severe maternal morbidity by raising awareness in your community, working with your state Maternal Mortality Review board, talking with clients about their challenges and getting risk appropriate care. Currently, 27 states have Maternal Mortality Review Boards. If your state does not currently have an Maternal Mortality Review you can advocate for one.
- Access the Maternal Health Safety Bundle, *Reduction of Peripartum Racial/Ethnic Disparities* at <http://safehealthcareforeverywoman.org/patient-safety-bundles/reduction-of-peripartum-racial-ethnic-disparities/>
- You can adapt these resources for use at your Healthy Start site.





# Wrap Up and Reminders

## Upcoming Events:

**May 11:** What's Working in the Healthy Start Community to Support Breastfeeding

**May 16:** Capturing Lessons Learned from the Field: Healthy Start Town Hall Webinar

**May 17 and 18:** HSMED Phase 2 Training

**May 25:** Introduction to FASD Screening and Diagnosis

**Coming soon:** Healthy Living Series

**EPIC Center website:** <http://www.healthystartepic.org>

- Includes all recorded webinars, transcripts, slide presentations, evidence based practice inventory

