GaPQC

GEORGIA PERINATAL QUALITY COLLABORATIVE

AIM High: Reducing Harm with Safety Bundles

Lauren Nunally RNC-OB, BSN, MPH
GaPQC Core Team Member
Perinatal Quality Coordinator – Georgia OBGyn Society

WHO definition of health:

> “Health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity.”

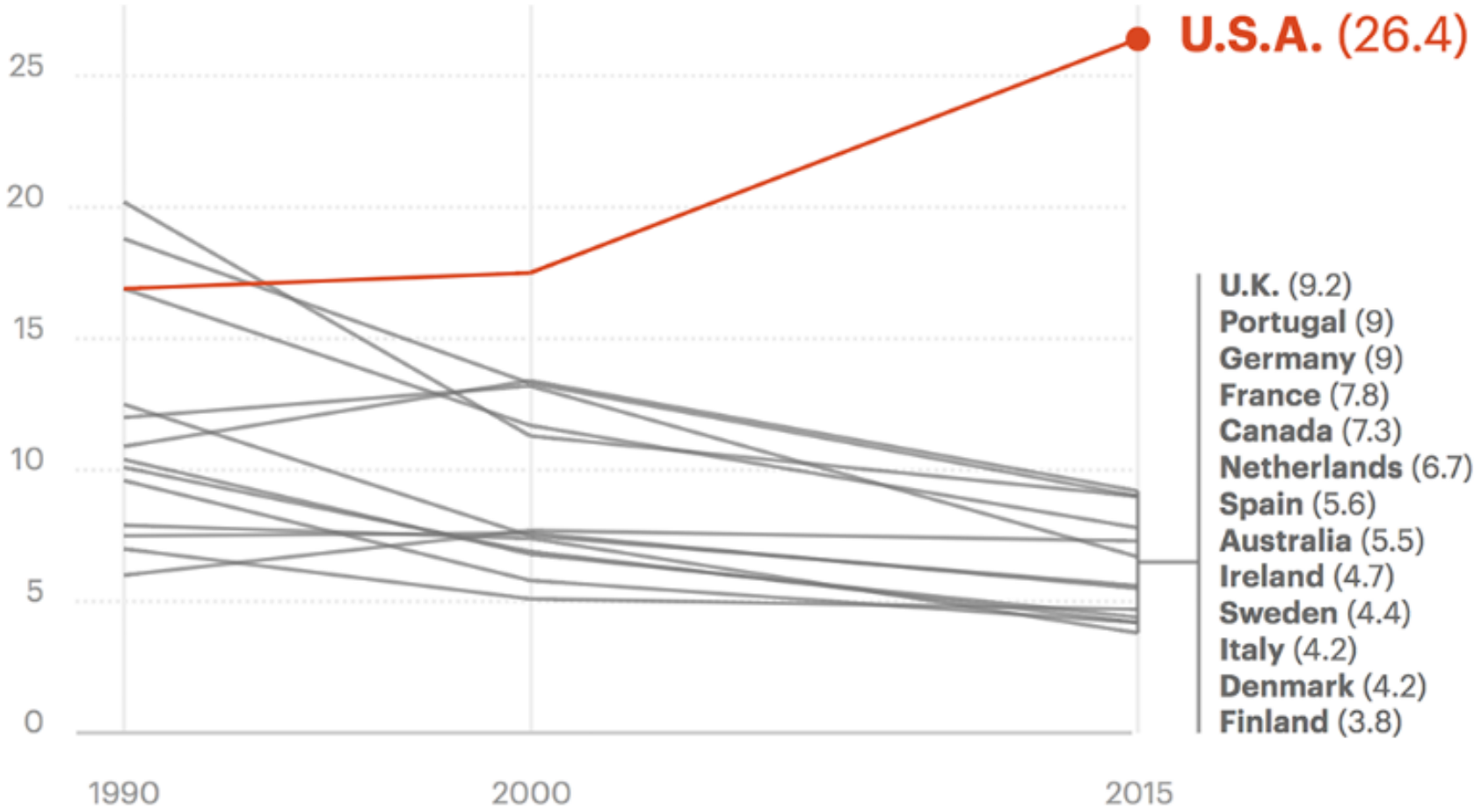
Health Outcomes

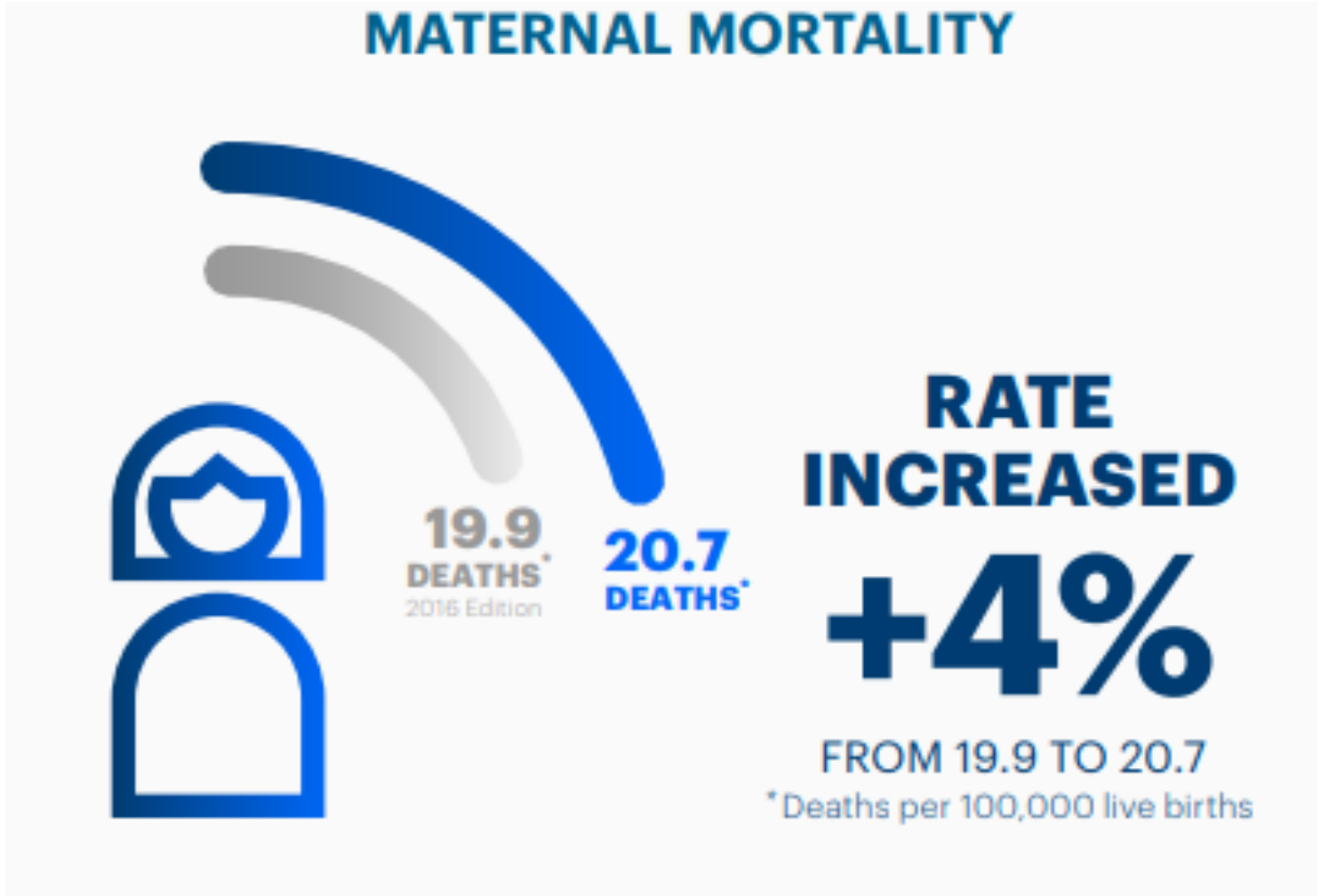
This model reflects that determinants of health directly influence health outcomes.

FACT!

More American women are dying of pregnancy-related complications than any other developed country. Only in the U.S. has the rate of women who die been rising.

Maternal Mortality Is Rising in the U.S. As It Declines Elsewhere





- Rate increased since the 2016 Health of Women and Children Report. (*This is the most recent time that the report was created.)

More Facts

- The lifetime risk of maternal death is greater in the U.S. than in 40 other countries, including almost all other industrialized nations.

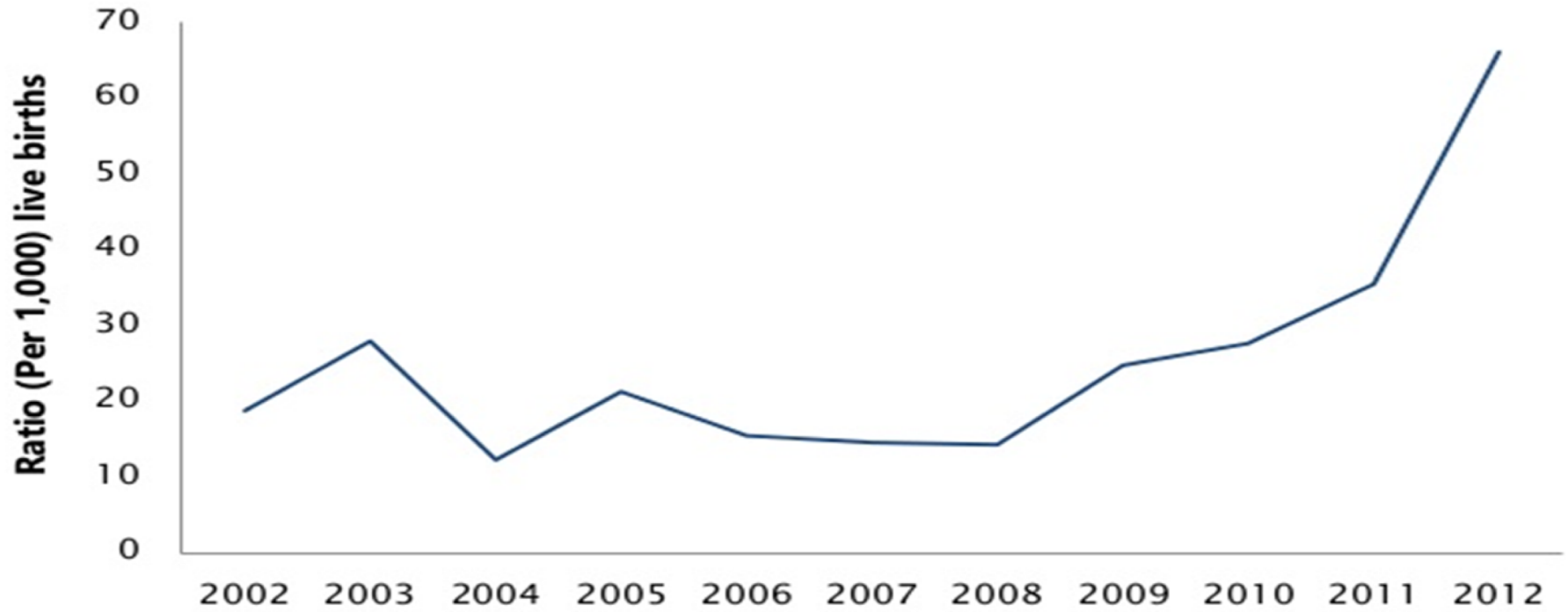
- Black women face a disproportionately high risk of dying from pregnancy-related conditions when compared to white women.

Yet Another Fact!

Georgia has one of the highest maternal mortality ratios in the nation.

Source: *America's Health Rankings Health of Women and Children Report* released by United Health Foundation

Georgia Maternal Mortality Rate 2002-2012



Source: Georgia Vital Statistics

We Protect Lives.

Georgia's Pregnancy-Related Maternal Mortality Ratio

2001 – 2006	20.2 deaths/100,000 live births
2010	23.2 deaths/100,000 live births
2011	28.7 deaths/100,000 live births
2012	19.2 deaths/100,000 live births

Startling Facts!

- In Georgia, 58 hospitals do not operate labor and delivery units and half of Georgia counties do not have obstetric services
- Rural hospitals on the brink of closure will close labor and delivery units first
- Since 2012, 10 labor and delivery units have closed in Georgia

Alliance for Innovation on Maternal Health (AIM) Initiative

Purpose:

To reduce maternal deaths and severe maternal morbidity by engaging provider organizations, state-based public health systems, consumer groups, and other stakeholders within a national partnership to assist state-based teams in implementing evidence-based maternal safety bundles.

Alliance for Innovation on Maternal Health (AIM) Initiative

Goal

- To eliminate *preventable* Maternal Mortality and Severe Morbidity in EVERY U.S. Birth facility

The Impact of Safety Bundles in Georgia

- The maternal death rate is growing nationally, but GA is more than three times the national rate
- Maternal deaths in Georgia increased from 35 per 100,000 live births in 2013 to 46.2 per 100,000 live births in 2015

* Ref: DPH (2017). Reducing Maternal Mortality In Georgia 2013 Case Review

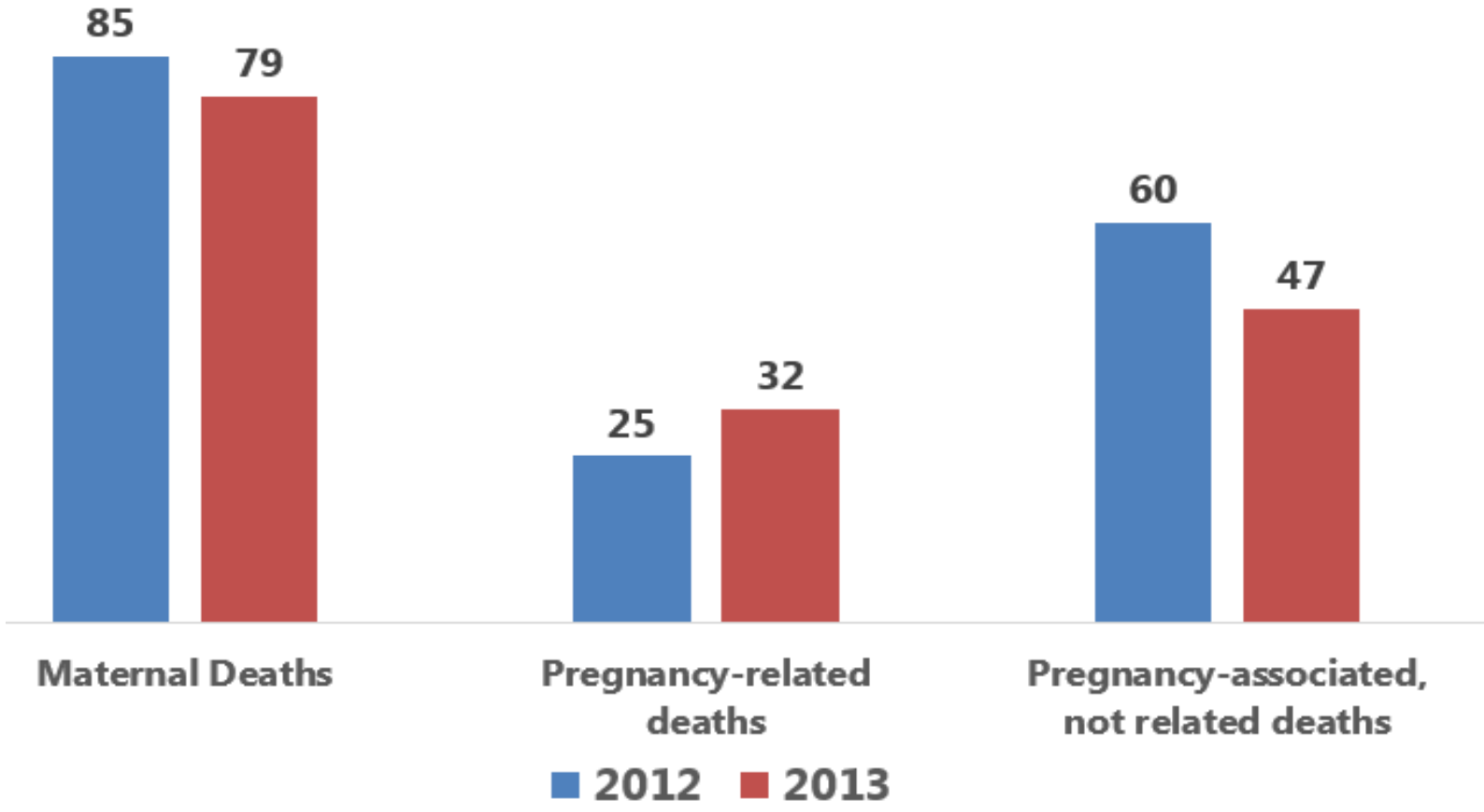
Maternal Mortality

- Defined as all deaths occurring to women while pregnant or within one year of giving birth.
- All maternal deaths are reviewed to determine whether they are pregnancy associated or pregnancy related.
- Pregnancy associated deaths are those occurring within the specified time frame but are not related to the current or recent pregnancy (car accident).
- Pregnancy related deaths are from any cause related to or aggravated by pregnancy or its management.

Source: World Health Organization, 2018

Maternal Mortality Review Process

Georgia MMRC Findings



Georgia MMRC Findings

Demographic Factors	2012	2013
Percent black race	68%	66%
Percent < 30 years old	64%	50%
Percent with high school education or less	76%	84%
Percent covered by Medicaid	N/A	50% (25% unknown)
Percent of deaths that occurred during pregnancy or within 42 days of delivery	80%	69%

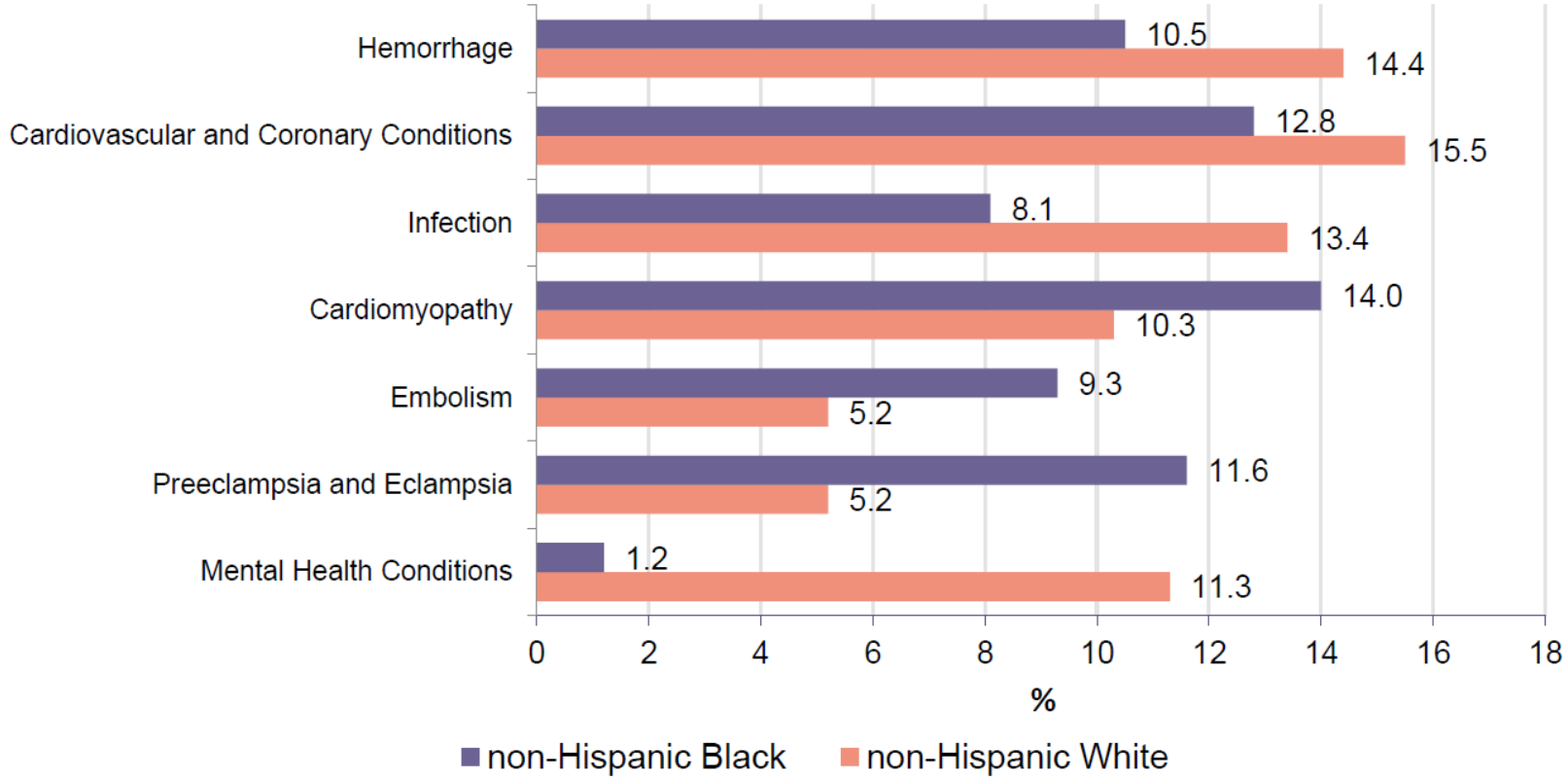
Georgia MMRC Findings

Leading Causes of Pregnancy Related Deaths

2012	2013
Hemorrhage 28%	Cardiomyopathy 25%
Hypertension 16%	Hemorrhage 16%
Cardiomyopathy 16%	Embolism 16%
Embolism 16%	Cardiovascular and Coronary Conditions 6%

Maternal Deaths: A Closer Look

Figure 5. Leading Underlying Causes of Pregnancy-Related Deaths, by Race-Ethnicity



Source: Report from Nine Maternal Mortality Review Committees, 2018

Racial Disparities

Between 2001-2011 the Georgia pregnancy-related maternal mortality ratio was 4 x higher in Black, non-Hispanic women than in White, non-Hispanic women

- 39.1 deaths/100,000 live births for Black, non-Hispanic women
- 9.6 deaths/100,000 live births for White, non-Hispanic women

* Ref: DPH (2017). Reducing Maternal Mortality In Georgia 2013 Case Review

Is This Really A Concern?

- According to the 2016 U.S Census, the "White" population makes up 77% of the U.S population

However.....

- Racial and ethnic minorities are expected to comprise more than one-half of the US population by 2050
- Women of color were overrepresented among deliveries involving severe maternal morbidity, as compared with white women

Drivers of Health Disparities

Occurs at 3 levels:

- Patient
- Provider
- System

Recommendations

- Make reducing racial and ethnic disparities a priority
- Recognize and acknowledging racial bias and stereotypes
- Harvard Race Implicit Association (IAT) Test https://implicit.harvard.edu/implicit/user/agg/blindspot/indexrk.htm

Recommendations

- Raising awareness of the prevalence and effects of racial and ethnic disparities
- Recognition of provider bias
- A “zero tolerance” policy for racial bias and disparate care
- Culturally sensitive education

Recommendations

- Collaboration with local public health authorities to address disparities
- Advocate for local, state, and national policies to improve women's health care and reduce disparities.

Source: http://www.astho.org/Policy-and-Position-Statements/Position-Statement-on-Maternal-Mortality-and-Morbidity/

Medical Providers

- Equitable health care requires a multidisciplinary approach.
- Standardization of obstetric care is proven to lower maternal mortality rates.
- Avoiding delays,
- Consistent approach to managing complications and emergencies
- Appropriate care and reduce severe morbidities

Source: Association between hospital-level obstetric quality indicators and maternal and neonatal morbidity. JAMA. 2014 Oct 15; 312(15):1531-41.

Medical Providers (cont'd)

- An understanding of culturally derived mistrust of the health care system
- Be aware of the existence of and contributors to health disparities and be willing to work toward their elimination.

Nursing Staff

Code of Ethics - Principles

- Nonmaleficence
  - Do no harm

- Beneficence
  - preventing harm
  - removing harm
  - promoting good

Ref: ANA *The Code of Ethics for Nurses with Interpretive Statements*

Nursing Staff (cont'd)

- Self awareness of personal bias, unconscious or implicit bias
- Education on diversity, healthcare disparities, and cultural competence
- Work toward a goal of respectful and consistent care

Source: Many Nurses Lack Knowledge Of Health Risks To Mothers After Childbirth

Perinatal Quality Collaboratives

- Perinatal Quality Collaboratives (PQCs), are state or multi-state networks of teams working to improve the quality of care for mothers and babies through evidence based quality improvement initiatives

- The CDC's Division of Reproductive Health is currently providing support for state-based PQCs in Colorado, Delaware, Florida, Georgia, Illinois, Louisiana, Massachusetts, Minnesota, Mississippi, New Jersey, New York, Oregon, and Wisconsin.

GaPQC: Background

- Launched in November 2012 by a group of neonatologists, obstetricians, midwives, public health professionals and other stakeholders.
- The purpose of the GaPQC is to identify and implement quality improvement (QI) strategies to improve maternal and neonatal care and outcomes in Georgia.
- Past initiatives include screening for Critical Congenital Heart Disease (CCHD) and increasing post-partum long acting reversible contraception (LARC) insertions.

GaPQC
GEORGIA PERINATAL QUALITY COLLABORATIVE

Georgia OBGyn
GEORGIA OBSTETRICAL AND GYNECOLOGICAL SOCIETY

RPC

GHA
Georgia Hospital Association

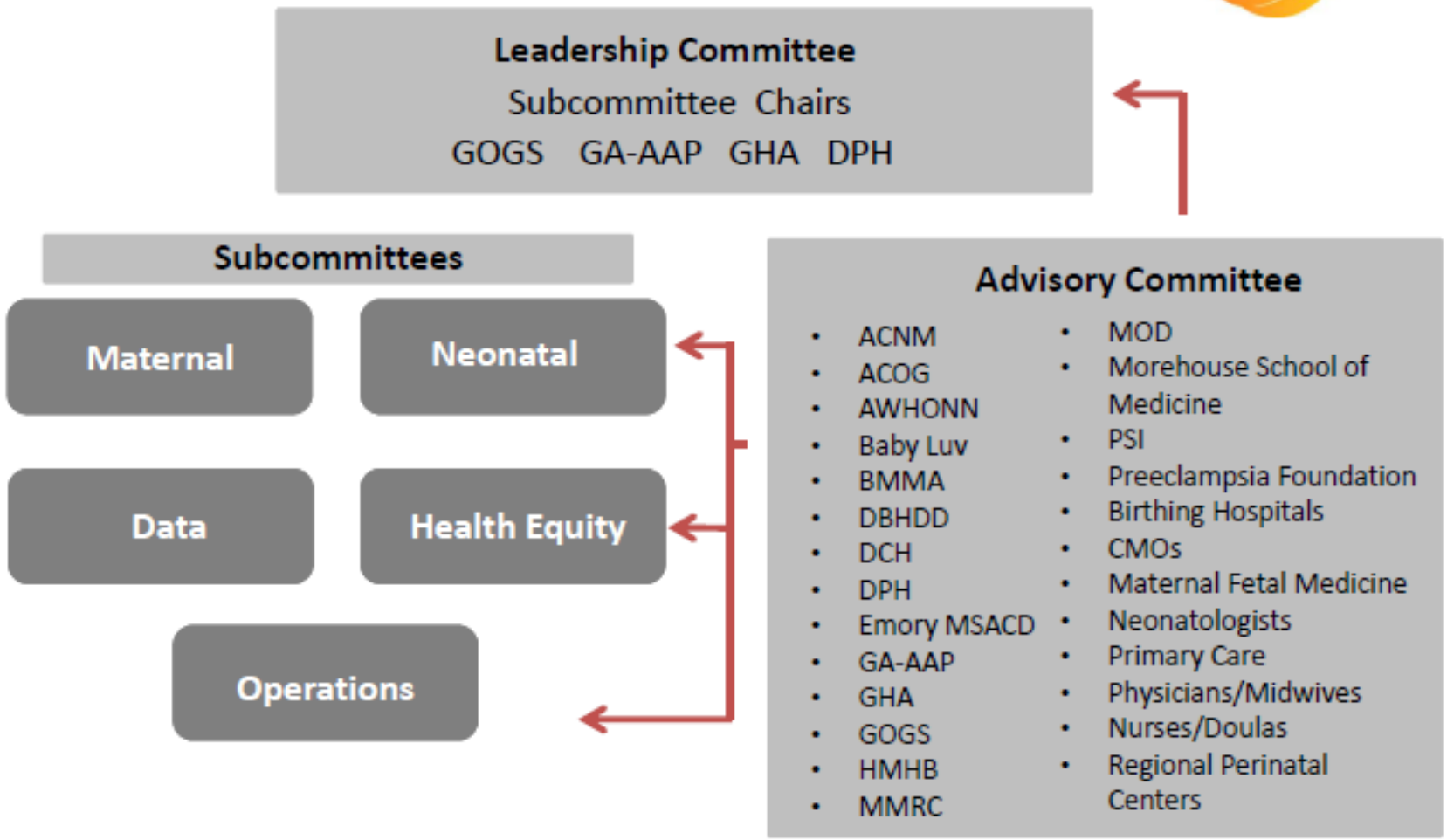
DPH
Georgia Department of Public Health

GEORGIA DEPARTMENT OF COMMUNITY HEALTH

ACOG
THE AMERICAN CONGRESS OF OBSTETRICIANS AND GYNECOLOGISTS

ALLIANCE FOR INNOVATION ON MATERNAL HEALTH AIM

GaPQC Structure



Alliance for Innovation on Maternal Health (AIM)

- AIM is a national data-driven maternal safety and quality improvement initiative based on proven implementation approaches to improving maternal safety and outcomes in the U.S.
- National partnership of organizations with the mission to reduce severe maternal morbidity by 100,000 events and maternal mortality by 1000 deaths by 2018.
- Data submitted from four states that implemented the hemorrhage and hypertension bundles in 2015 showed a decrease ranging from 8.3 to 22 percent in maternal morbidity.

American College of Obstetricians and Gynecologists, 2014

Maternal Safety Bundles

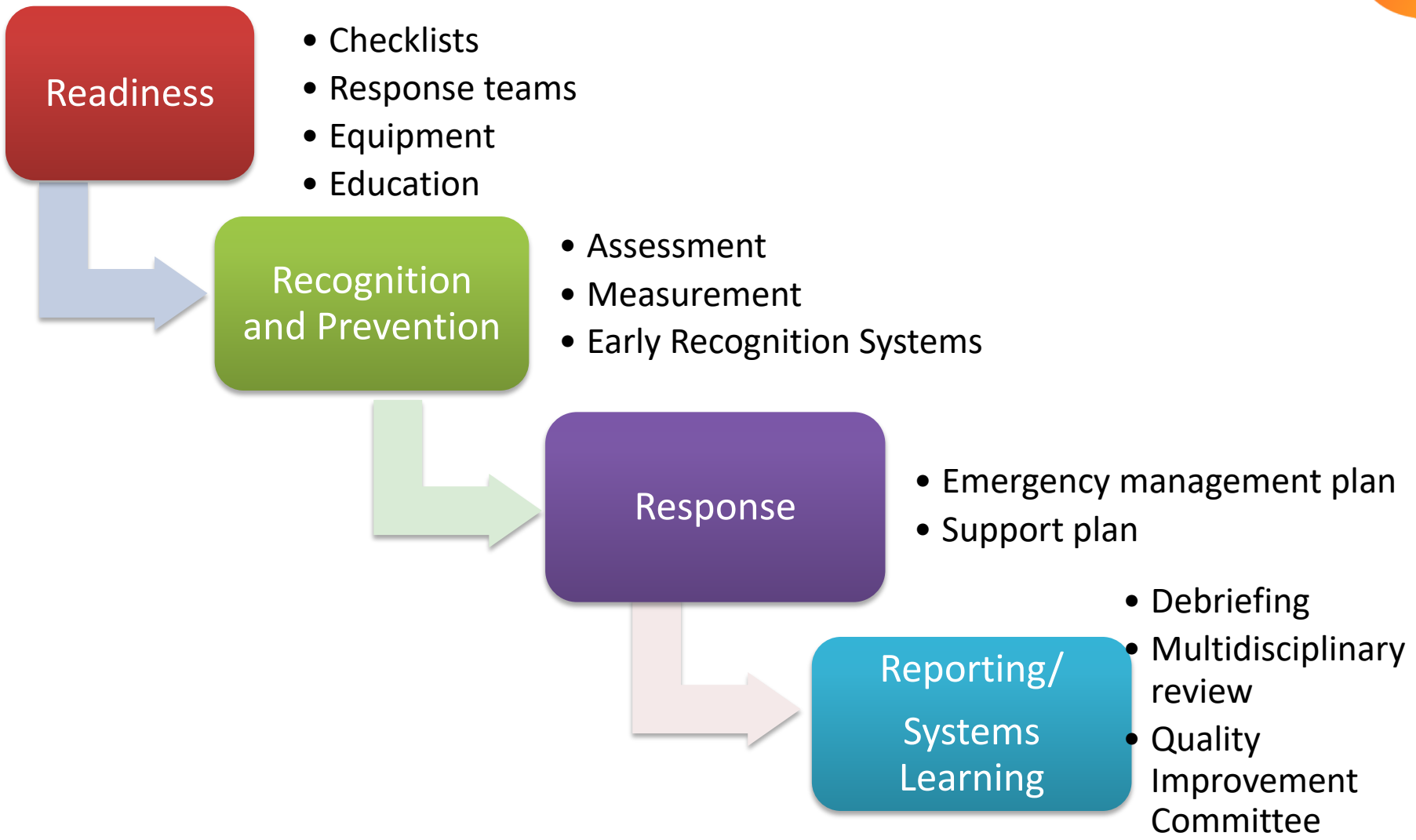
Why Safety Bundles?

What are Safety Bundles?

- Hospital-based quality improvement
- Tools to improve outcomes of hemorrhage or severe hypertension
- Set of hospital-based protocols, policies, practice changes, drills, and system of data tracking
- Represent national consensus

Source: Council on Patient Safety in Women's Health Care

AIM Bundle Components



American College of Obstetricians and Gynecologists, 2015.

GaPQC – AIM Safety Bundles Participation

- Initial goal to enroll 10 hospitals per year to the AIM bundles
- Staff will be provided with technical assistance, quality improvement tools, and educational resources.
- Outcome data will be analyzed and shared with partnering hospitals to measure the impact of bundle implementation.
- Facilities are not charged a fee to participate!

Hospital Participation Update

As of September 1, 2018

- 48 participating hospitals
  - 42 AIM hospitals
  - 12 VON hospitals
- % of GA births covered – 64% (84K births)
- Total # of birthing hospitals in GA – 75

Current Initiatives - Neonatal

- 2017- Joined VON as a statewide collaborative with 8 participating hospitals
  - 2018 - Continued work with 12 participating hospitals
  - 2019 - Sustain mode
- NAS Needs Assessment Survey deployed May 2018

Current Initiatives - Maternal

CY – 2018

- AIM OB HMG Cohort #1
- AIM OB HMG Cohort #2

MOVING FROM HERE… TO THERE

- Start small - with the most important first
  - crash cart
  - hemorrhage cart
  - protocols
  - staff education
- Risk Assessments
- MEWS
- QBL, CBL practices
- Massive transfusion protocols
- EHR Integration

But we've done this before…

- Implementing initiatives is common place in hospital, but do you know the effectiveness?

- The data collection and analysis process utilized in the AIM bundles facilitates an understanding of the effectiveness of initiatives and provides factual data

Implementing the Bundles

- Should not be managed as a task list
- Requires planning, strategies and buy-in by stakeholders
  - RN's, MD's, other disciplines (anesthesia, pharmacy, blood bank, materials management
- A change of culture

CHALLENGES

- Staff buy in
- Change processes
- Understanding what, why, how and who
- QI/Data collection
- Resources to implement
  - Human
  - Time
  - Knowledge/expertise

Support Systems

- Many facilities are already implementing several of these standards
- Standardization of processes
- Sharing/shamelessly stealing best practice
- Staff involvement
- Patient education

GaPQC Ongoing Support

- Hospital staff are provided with technical assistance, quality improvement tools, and educational resources.
  - Monthly learning webinars
  - Monthly technical calls to champions in individual hospitals
- Outcome data is analyzed and shared with partnering hospitals to measure the impact of bundle implementation.
- AIM National Team Support
- AIM Partner States

Data Analysis

Baseline Survey

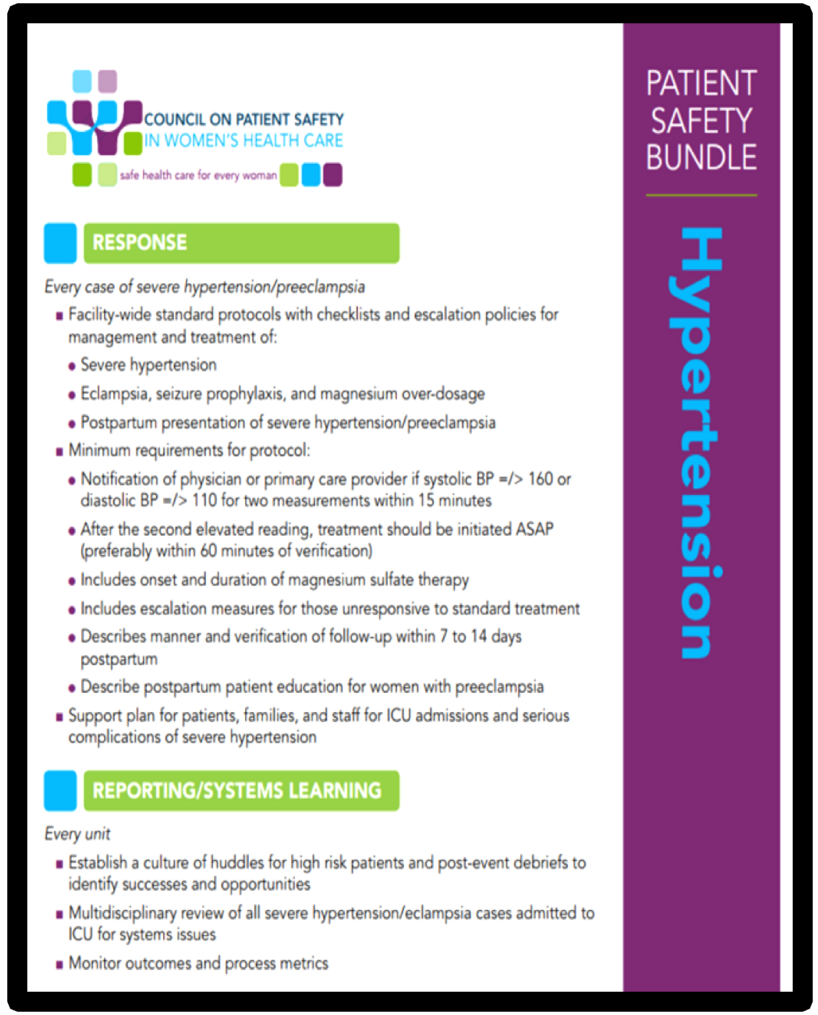
Process Measures

- Unit Drills
- Provider Education
- Nurse Education
- Risk Assessment
- Quantified Blood Loss

Structure Measures

- Patient, Family and Staff Support
- Debriefs
- Multi-disciplinary Case Review
- Hemorrhage Cart
- Unit Policy and Procedure
- EHR Integration

Future Initiatives



CY - 2019

- AIM OB HMG Cohort #3
- AIM HTN in Pregnancy Cohort #1

References

American College of Obstetrician and Gynecologists (2015). Obstetric Hemorrhage Patient Safety Bundle. Council on Patient Safety in Women's Health Care. Retrieved from http://safehealthcareforeverywoman.org/patient-safety-bundles/obstetric-hemorrhage/

AHRQ Types of Quality Measures
https://www.ahrq.gov/professionals/quality-patient-safety/talkingquality/create/types.html

ASTHO - Maternal Mortality and Morbidity - Position Statement
http://www.astho.org/Policy-and-Position-Statements/Position-Statement-on-Maternal-Mortality-and-Morbidity/

Building U.S. Capacity to Review and Prevent Maternal Deaths. (2018). Report from nine maternal mortality review committees. http://reviewtoaction.org/Report_from_Nine_MMRCs.

California Maternal Care Quality Collaborative (2015). Improving Health Care Response to Obstetric Hemorrhage Version 2.0 A California Quality Improvement Toolkit.

Crossing the Quality Chasm: The IOM Health Care Quality Initiative
http://www.nationalacademies.org/hmd/Global/News%20Announcements/Crossing-the-Quality-Chasm-The-IOM-Health-Care-Quality-Initiative.aspx

Deadly Delivery: The Maternal Health Care Crisis in the USA, One Year Update, Spring 2011. New York, NY: Amnesty International; 2011. Available at: http://www.amnestyusa.org/sites/default/files/deadlydeliveryoneyear.pdf.

Every Mother Counts. Putting Maternal Health on the Map. https://www.everymothercounts.org/pages/giving-birth-in-america

Georgia Department of Public Health (2015). Reducing Maternal Mortality in Georgia 2012 Case Review.

Georgia Department of Public Health (2018). Reducing Maternal Mortality in Georgia 2013 Case Review Update.

Health of Women and Children's Report 2018 https://www.americashealthrankings.org/learn/reports/2018-health-of-women-and-children-report

References

JAMA (2014) Association between hospital-level obstetric quality indicators and maternal and neonatal morbidity; 312(15):1531-41. https://www.ncbi.nlm.nih.gov/pubmed/25321908

The Lancet Notes. Global, regional, and national levels of maternal mortality, 1990–2015: a systematic analysis for the Global Burden of Disease Study 2015, https://www.ncbi.nlm.nih.gov/pubmed/27733286

National Public Radio (2017). Black mothers keep dying after giving birth. Shalon Irving's story explains why. https://www.npr.org/2017/12/07/568948782/black-mothers-keep-dying-after-giving-birth-shalon-irvings-story-explains-why

National Public Radio (2017). Focus on infants during childbirth leaves U.S. moms in danger. https://www.npr.org/2017/05/12/527806002/focus-on-infants-during-childbirth-leaves-u-s-moms-in-danger

Nina Martin (2017)Nothing Protects Black Women From Dying in Pregnancy and Childbirth https://www.propublica.org/article/nothing-protects-black-women-from-dying-in-pregnancy-and-childbirth

Nurses' Knowledge and Teaching of Possible Postpartum Complications https://journals.lww.com/mcnjournal/Citation/2017/11000/Nurses__Knowledge_and_Teaching_of_Possible.6.aspx

SMFM Special Report: Putting the "M" back in MFM: Addressing education about disparities in maternal outcomes and care American Journal of Obstetrics and Gynecology, 218, (2), 2018,

United States Census Bureau https://www.census.gov/quickfacts/fact/table/US/PST045217

World Health Organization 2018 http://www.who.int/news-room/fact-sheets/detail/maternal-mortality