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PA-AWHONN SECTION CONFERENCE 2022

Pennsylvania-Department of Health Maternal Mortality Review Committee: Where we are, where we are going, and what we are doing-2022!

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Disclosures

Conflict of Interest

Julia A. Greenawalt-Invited member of the Pennsylvania-Department of Health, Maternal Mortality Review Committee since 2019, and a member of AWHONN since 1986. The data and information is correct, however the comments are coming from Julia Greenawalt a private citizen of the Commonwealth and do not reflect the official position of the Pennsylvania Department of Health or of the PA-DOH, Maternal Mortality Review Committee (PA-DOH, MMRC).

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Objectives

1. To discuss the origins and operations of the Pennsylvania DOH-MMRC (PA Department of Health-Maternal Mortality Review Committee).

2. How the MMRIA (Maternal Mortality Review Decision Form/v21, is used to inform decision-makers about maternal mortality.

3. To discuss the various elements of the MMRIA and address sources from the abstractors.

4. To discuss current challenges found in the present system and offer insight to potential solutions.

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Abstract

Improving maternal health outcomes is a top priority for decision-makers across the state. There are a number of challenges and factors contributing to this high rate. The PA- Department of Health established the Maternal Mortality Review Committee after federal legislation spearheaded such an initiative across our nation. Under the direction of the Centers for Disease Control and Prevention, a grant funded initiative was started. How do decision-makers become informed on what decisions, actions, and necessary interventions that are warranted become operationalized? This presentation will address how the PA-DOH, MMRC is guided in their thought process by the MMRIA form. An in-depth look will be shared with the audience on how the members of PA-DOH, MMRC use the MMRIA form to guide their thought process and offer insight to our state, local and organizational members in hopes of reversing the diving trend in maternal mortality for the state of Pennsylvania.

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What is a Maternal Mortality Review Committee?

Maternal Mortality Review Committees (MMRCs) are:
-multidisciplinary committees
-that convene at the state or local level
-to comprehensively review deaths of individuals during or within a year of pregnancy

- MMRCs have access to clinical and non-clinical information (e.g., vital records, medical records, social service records) to better understand the circumstances surrounding each death and to develop recommendations for action to prevent similar deaths.

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Mission

The Pennsylvania Maternal Mortality Review Committee's mission is to systematically review all maternal deaths, identify root causes of these deaths, and develop strategies to reduce preventable morbidity, mortality and racial disparities related to pregnancy in Pennsylvania.

Vision

The Pennsylvania Maternal Mortality Review Committee's vision is to eliminate preventable maternal deaths and racial disparities and reduce maternal morbidities in Pennsylvania.

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Background

According to the 2020 Census population estimates, Pennsylvania is currently the fifth most populous state in the country.3 In 2018, Pennsylvania's population was approximately 12.8 million people.4 Individuals who were assigned female at birth and are of reproductive age (10- 60), as defined by the CDC guidance on identifying cases of maternal deaths, made up more than 32% of the state's population.4 In 2018, there were 135,677 reported live births, 28,240 reported abortions, and 1,165 reported fetal deaths in Pennsylvania.5 Of these pregnancies, 111 resulted in a maternal death.

Pennsylvania is racially and ethnically diverse, with non-Hispanic white individuals accounting for approximately 64% of live births, non-Hispanic Black individuals accounting for 13% of live births, Hispanic individuals accounting for 12% of live births, and non-Hispanic individuals of other races accounting for 8% of live births.6 The remaining 3% of live births identified race but did not specify an ethnicity.

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How did the PA MMRC come about?

-Established by the Maternal Mortality Review Act or Act 24 of 2018.
-There is a Philadelphia-MMRC, established in 2010, which operates independently from the statewide PA-DOH, MMRC. Although they do use basically the same structure and serve somewhat the same purpose. Philadelphia accounts for roughly 20% of PA's annual maternal deaths.

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Act 24, 2018

-The Secretary of Health and Physician General (current: Dr. Denise Johnson) appoints members to the PA-DOH, MMRC, and then the staff assign members to a multidisciplinary team to review cases and make recommendations.

-Through an application process the initial team was selected by the Secretary of Health, guided by 3 criteria:

1. members be from various geographic areas of the state
2. members are working/representing communities most impacted by maternal deaths
3. that it be an interprofessional team.

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PA-DOH, MMRC Complement

-Includes both clinical and non-clinical individuals, who represent diverse interests that pertain to prevention of maternal deaths, including maternal-fetal medicine, obstetrics and gynecology, midwifery, addiction medicine, emergency medicine, community health, psychiatry, social work and violence prevention. There are currently 28 active members, including:

Co-Chairs: Aasta D. Mehta, MD, MPP, FACOG, Medical Officer of Women's Health, Philadelphia DOH.

Stacy Beck, MD, OB/GYN, Assistant Professor, Maternal Fetal Medicine, U of Pitt, UPMC Magee-Women's Hospital

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Process for Moving MMRC Data to Action to Reduce Maternal Mortality

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Meetings

-First, had planning and strategy meetings.
  -determined the PA-DOH MMRC would review cases from 2018 forward.
  -had 2 in person meetings, then covid so pivoted to virtual meetings.
  -currently, meet monthly and review 5-6 cases per meeting.

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Identification of Maternal Deaths

-Program staff identify maternal deaths within the commonwealth. Identified through various mechanisms; vital records from the PA-DOH, Bureau of Health Statistics and Registries (BHSR). Cases were identified through logic provided by the CDC.

-2018-89 cases were originally identified, but 4 were found to be not true cases reducing the actual number to 85 (excluding Philadelphia county).

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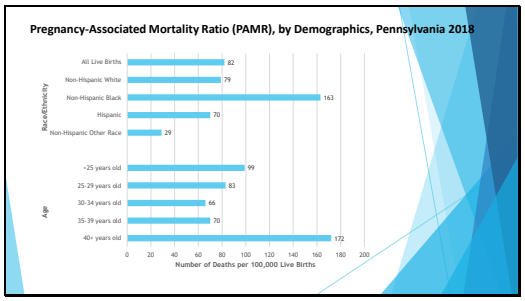

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Record Request Process

-Use vital records
-Typical sources include: Vital Records for birth/death cert, Pennsylvania Health Care Cost Containment Council (PHC4), PA Prescription Drug Monitoring Program data (PDMP), or even requesting data from the Unified Judicial System of Pennsylvania Web Portal for court cases, summaries or dockets.

-Just because staff requested, not all were supplied.

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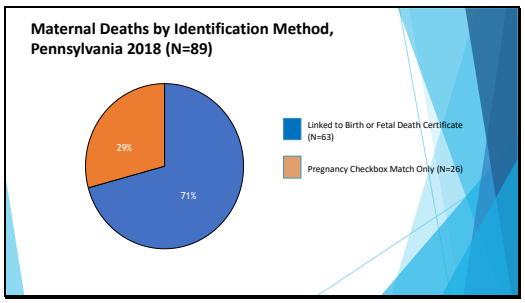

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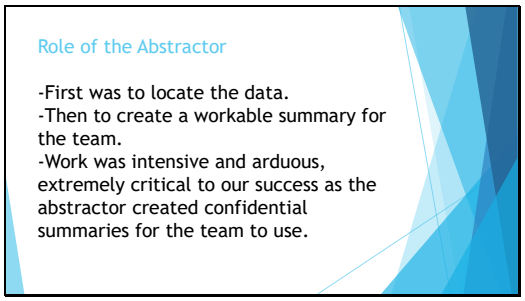

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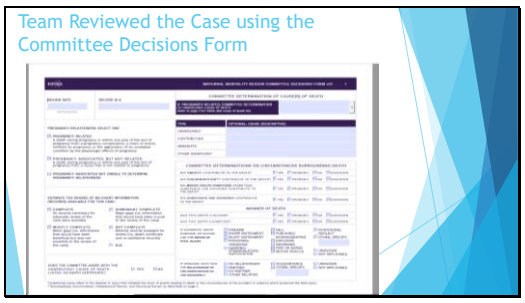

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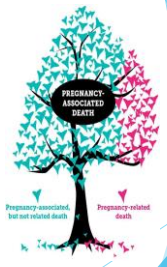
PREGNANCY-RELATEDNESS: SELECT ONE

PREGNANCY-RELATED
A death during pregnancy or within one year of the end of pregnancy from a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiologic effects of pregnancy

PREGNANCY-ASSOCIATED, BUT NOT-RELATED
A death during pregnancy or within one year of the end of pregnancy from a cause that is not related to pregnancy

PREGNANCY-ASSOCIATED BUT UNABLE TO DETERMINE PREGNANCY-RELATEDNESS



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Completeness of Records by Pregnancy-Relatedness Determination for the 2018 Maternal Deaths Reviewed by PA MMRC (N=44)

	Complete	Mostly Complete	Somewhat Complete
Pregnancy-Related (N=25)	11 (44%)	7 (28%)	7 (28%)
Pregnancy-Associated, but Not Related (N=12)	5 (42%)	3 (25%)	4 (33%)
Pregnancy-Associated, but Unable to Determine Pregnancy-Relatedness (N=7)	1 (14%)	0 (0%)	6 (86%)
Overall (N=44)	17 (39%)	10 (23%)	17 (39%)

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Cases Reviewed and Findings

Of the 85 total cases for 2018, the PA-DOH MMRC reviewed 44 cases.

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Findings

Top Causes of Death for All Maternal Deaths (Excluding Philadelphia County) in 2018 (N=85)		
Cause of Death	**Number of Deaths**	**Overall Percentage**
Accidental Poisoning	43	51%
Other Direct Obstetric Deaths	9	11%
Transportation Accidents	8	9%
Assault	7	8%
Other Pregnancy Related	4	5%
Intentional Self-Harm	4	5%

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3 Key Trends were identified:

1. Accidental poisonings were the leading cause of maternal deaths in 2018 and accounted for over 50% of all maternal deaths This category includes drug-related overdose deaths. In 2013, only 19% of pregnancy-associated deaths were due to accidental poisonings. That over half of all deaths in 2018 fell into this category reflects, in part, the continuing devastating impact of Pennsylvania's opioid epidemic on both individuals and families.

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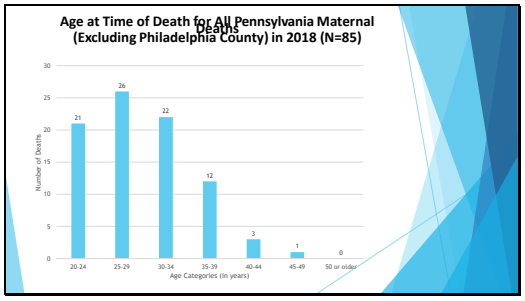

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Key Trends Cont.

2. Individuals aged 25-29 had the most maternal deaths, with slightly fewer deaths in the 20-24 and 30–34-year-old categories.

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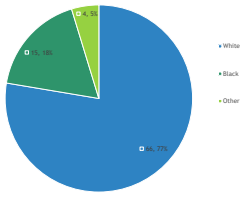
Race for All Maternal Deaths (Excluding Philadelphia County) in 2018 (N=85)



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Key Trends Cont.

3. Seventy-seven percent of maternal deaths were of individuals listed as white on their death certificate While it is not identified in the individual 2018 data year, racial disparities in adverse maternal health outcomes persist in Pennsylvania as evidenced by the fact that non-Hispanic Blacks had a Pregnancy Associate Mortality Risk (PAMR) two times greater than the PAMR for non-Hispanic whites. Racial disparities in maternal mortality stem from the detrimental effects of institutional and interpersonal racism, implicit bias among providers and social determinants of health.

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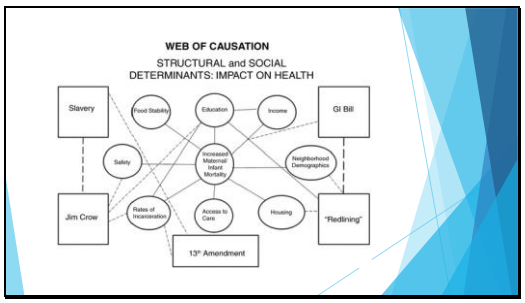

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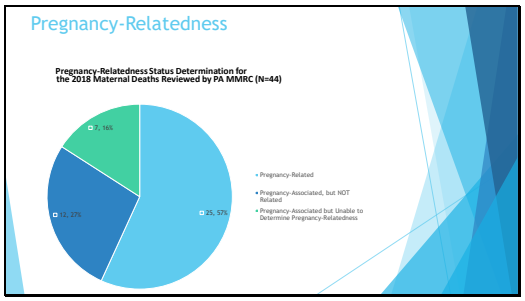

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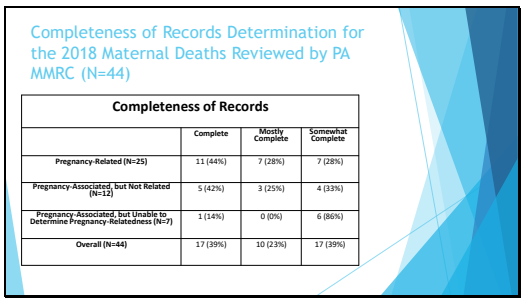

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Contributing Factors

Committee Determinations on Contributing Factors for the 2018 Maternal Deaths Reviewed by PA MMRC (N=44)

	Yes	Probably	No	Unknown	Blank
Did obesity contribute to the death?	3 (7%)	2 (5%)	34 (77%)	5 (11%)	0 (0%)
Did discrimination contribute to the death?	1 (2%)	8 (18%)	18 (41%)	11 (25%)	6 (14%)
Did mental health conditions other than substance use disorder contribute to the death?	17 (39%)	4 (9%)	17 (39%)	6 (14%)	0 (0%)
Did substance use disorder contribute to the death?	15 (34%)	3 (7%)	22 (50%)	4 (9%)	0 (0%)

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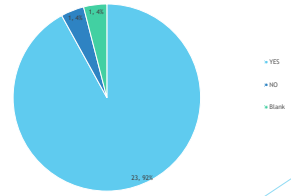
Preventability

Preventability Determination for the 2018 Pregnancy-Related Maternal Deaths Reviewed by PA



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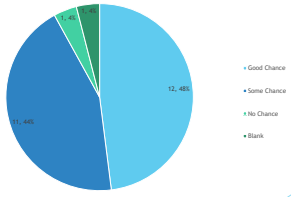
Chance to Alter Outcome

Chance to Alter Outcome Determination for the 2018 Pregnancy-Related Maternal Deaths Reviewed by PA MMRC (N=25)



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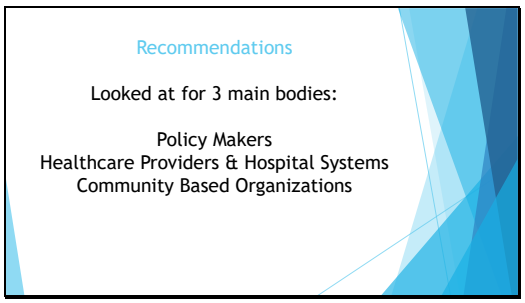

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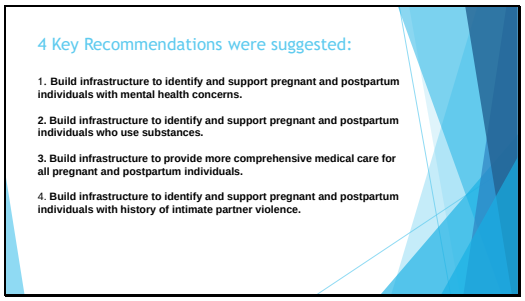

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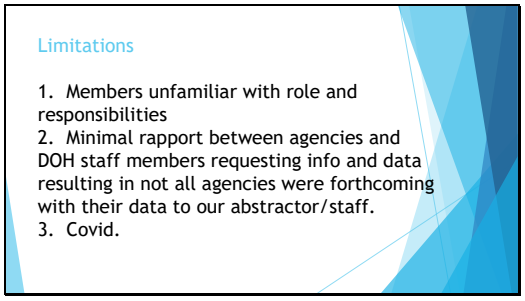

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Future Directions

1. Working towards sustainability.
2. Establishing working relationships between agencies and strengthening relationships.
3. Improve processes.
4. Continuous program development.

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It is the PA-DOH MMRC's goal to ensure that this committee's work will be impactful in reducing maternal death and improving the health of pregnant and postpartum individuals.

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Acknowledgments

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2. Co-Chairs of the 2018 PA MMRC: Dr. Stacy Beck and Dr. Amanda Flicker.
3. Co-Chairs of the 2022 PA-DOH, MMRC: Dr. Aasta Mehta and Dr. Stacy Beck.
3. Senator Joe Pittman for his support of this committee work.

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Thank you.

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