

Addressing SDOH, Barriers and Clinical Successes in Maternal Cardiovascular Care

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BACKGROUND

Childbirth is the leading reason for hospitalization in the U.S. Over one-third of maternal deaths could be avoided if women had access to quality, safe care throughout pregnancy and the postpartum period.

Although low-income women are at the highest risk of poor health outcomes, Black women across the income spectrum have the highest mortality overall, despite college education and neighborhood status.

Maternal morbidity has increased 50% over the past decade and the U.S. ranks 64th in the world for maternal mortality; one of the very worst of the high-income countries.

Definitions

Pregnancy-associated death: The death of a woman while pregnant or within one year of pregnancy regardless of cause

Pregnancy-related death: The death of a woman while pregnant or within one year of pregnancy from any cause related to or aggravated by the pregnancy or management, excluding accidental or incidental causes

Maternal mortality: The death of a woman from complications of pregnancy or childbirth that occur during pregnancy or within six weeks after the pregnancy ends



- CDC released data in September of 2022 that declares 80% of pregnancyrelated deaths are preventable (*2017-2019 Maternal Mortality Review Committee from 36 states).
- Maternal mortality has been on the rise since 1990.
- The majority of deaths are due to cardiovascular complications.
- Nearly one half of maternal deaths occur in the postpartum period, primarily from hypertensive disorders and post-delivery hemorrhage.
- 32.9 maternal deaths per 100,000 births (all-comers).
- 69.9 maternal deaths per 100,000 in non-HSB.
- 28 maternal deaths per 100,000 in Hispanic people.



Half of pregnancy-related deaths occur after the day of birth



A major obstacle to postpartum care has been lack of Medicaid coverage; however, nearly all states have now expanded Medicaid coverage for 12 months postpartum.



Postpartum Coverage Tracker Map

Source: KFF Analysis of approved and pending 1115 waivers, state plan amendments, and state legislation, as of May 10, 2024.



National Initiatives to Improve Maternal Mortality

- The <u>Black Maternal Health Momnibus Act of 2021</u> (H.R.959), introduced by **Rep. Lauren Underwood (D-IL)**, addresses
 issues affecting maternal mortality including social determinates of health and diversifying the perinatal workforce. The
 bill created new grant programs for the training of maternal care providers in rural areas and establishes rural obstetric
 networks focused on improving maternal health outcomes. Read more about the Act <u>here</u>.
- The California Maternal Quality Care Collaborative (CMQCC) demonstrated maternal mortality decline by 55% between 2006 2013, while the national maternal mortality rate continued to rise.
- In 2018, the American Heart Association (AHA) and American College of Obstetricians and Gynecologists (ACOG) jointly published a presidential advisory on recommendations to reduce disparities via early identification of traditional risk factors for future cardiovascular disease and the use of interdisciplinary maternal heart teams.
- The Heart Outcomes in Pregnancy: Expectations (HOPE) registry aims to address key clinical questions surrounding preconception counseling, antenatal care, delivery planning, and long-term postpartum monitoring and screening.

HIGHLIGHTS

- 1. Key drivers of heightened cardiovascular risk include poverty, decreased access to health care, food insecurity, transportation challenges, low health literacy, psychosocial stressors, systemic racism and mistrust of traditional health care systems.
- 2. Black women are three to four times more likely to die in childbirth than White women.
- 3. White women belonging to higher income stratas have more favorable mortality and cardiovascular outcomes compared with White women in the lower income stratas.
- 4. Higher income Black women had higher cardiovascular complication rates compared with low-income White women.
- 5. Higher income Black women do not have a statistically significantly lower mortality compared with low-income Black women and have higher odds of acute coronary syndrome and acute kidney injury.
- 6. Black, Hispanic and Asian/Pacific Islander women with preeclampsia have higher inpatient mortality rates compared with White women across all income groups.
- 7. 80% of pregnancy-related deaths are preventable with coordinated cardio-obstetric care.
- 8. Many communities of color have deep rooted distrust of the "medical establishment." Engaging trusted community leaders, places of worship and trusted social networks is tantamount to reducing cardiovascular morbidity and mortality in women.



CLINICAL PEARLS



Take a detailed obstetric history of all women, including specific adverse outcomes that increase CV risk, such as hypertensive disease of pregnancy, gestational diabetes, intrauterine growth restriction and preterm delivery.

Acknowledge patient-specific barriers and ways to reduce those barriers, such as:

- o Translator services for English-limited patients
- o Reimbursed travel, childcare, reduced co-pays
- o Telemedicine options like virtual visits



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Consider using a multidisciplinary approach to pregnancy care through:

- o Improved access to peripartum subspecialty care
- o Assured postpartum follow-up (obstetrical and primary care provider) for high-risk patients
- o Addition of social workers, case managers, community health workers and patient navigators to the care team to help address social factors contributing to maternal health

Use telemedicine, digital engagement and remote health care interventions to facilitate care in the fourth trimester.

o Postpartum remote blood pressure (BP) monitoring has been shown to be effective at improving short-term follow-up.

o Postpartum remote monitoring has demonstrated high adherence, patient satisfaction and a reduction in hospital readmission.

- o Text-based remote monitoring improves compliance with recommended postpartum follow-up.
- o Text-based remote monitoring eliminates racial disparities in postpartum hypertension care.
- o Remote self BP monitoring is associated with lower BP at nine months postpartum.



Follow Up Method

<u>Source</u>





System Level Changes:

- o Promote system-wide implicit bias training
- o Educate staff on effective communication practices and methods for diverse populations
- o Standardize education about the management of conditions in pregnancy and postpartum for trainees and the entire cardiovascular care team
- o Standardize the coordination of care, recognition of and response to emergencies
- o Monitor quality metrics on disparities in peripartum and postpartum care

o Implement quality initiatives to improve care, such as patient <u>safety bundles</u> for postpartum hypertension and <u>postpartum cardiac</u> care

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