Sentinel Event Alert

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Eliminating racial and ethnic disparities causing mortality and morbidity in pregnant and postpartum patients

Editor's Note: In June 2022, the White House issued a report stating that the United States is facing a maternal health crisis.[1] The Joint Commission has been actively working to help address the myriad and complex causes of maternal mortality and morbidity. This Sentinel Event Alert *delves into eliminating barriers and racial disparities causing mortality and morbidity in pregnant and postpartum patients. In addition, The Joint Commission is issuing a* Quick Safety *that addresses mental health conditions and their role in maternal death.*

Black tennis star Serena Williams faced life-threatening complications five years ago while giving birth to her daughter in an emergency cesarean section.[2] In a recently published book, "Arrival Stories: Women Share Their Experiences of Becoming Mothers," Williams writes, "Giving birth to my baby, it turned out, was a test for how loud and how often I would have to call out before I was finally heard." Her essay describes the complications she faced and how she needed to insist repeatedly while in labor for treatment appropriate for her history of blood clots in her lungs. The dismissal of symptoms and the tendency not to respond to a patient's concerns commonly leads to a sentinel event. In Serena's case, she was fortunate that her complications were eventually treated, and a sentinel event was avoided. Williams now serves as an advocate for maternal health care.

Higher pregnancy-related mortality and morbidity rates for people of color demonstrate how racial and ethnic disparities are quality and patient safety issues. Data show that:

- Non-Hispanic Black people are three times more likely than white people to die of pregnancy-related causes, according to the Centers for Disease Control and Prevention (CDC).[3]
- Native American pregnant patients are twice as likely to die than white pregnant patients.[4]
- For Black and Native American people over the age of 30, mortality for pregnancy-related causes is four to five times higher than it is for white people.[4]
- For Black pregnant patients with at least a college degree, the mortality rate is 5.2 times higher than that of their white counterparts.[4]

The United States has the highest mortality rate for pregnant and postpartum patients among developed countries. According to the CDC's National Center for Health Statistics,[5] that rate increased by 18% in 2020 – from 20.1 deaths per 100,000 live births in 2019 to 23.8 in 2020. In 2020, 861 pregnant or postpartum patients died from pregnancy-related causes in the U.S. compared to 754 in 2019. A prepandemic report from Maternal Mortality Review Committees conducting a thorough review of pregnancy-related deaths in 36 U.S. states determined that 80% of them were preventable.[6]

By race, pregnancy-related mortality rates are 55.3 per 100,000 live births for non-Hispanic Black people, 19.1 for non-Hispanic white people, and 18.2 for Hispanic people.[5] This racial and ethnic disparity in mortality rates may be due to several factors such as structural racism, implicit biases, and their impact on access to care, quality of care, and prevalence of chronic diseases.[7-9] The COVID-19 pandemic exacerbated racial disparities in pregnancy-related outcomes. During 2020, the rate of death for Black and Hispanic pregnant or postpartum patients rose significantly, while the rates for their white counterparts rose only slightly.[5]

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These mortality rates are more stunning when they are compared to other nations' rates. More than 50 nations have lower mortality rates than the U.S. rate of 23.8/100,000. About 40 of these nations have rates of fewer than 10/100,000.[10-11] Among individual American states, pregnancy-related mortality rates are as high as 58/100,000. Only six states – Vermont, New Hampshire, Delaware, California, Nevada and Massachusetts – have rates lower than 10/100,000.[12] The recent overturning of Roe v. Wade is expected to adversely affect reproductive health care and increase mortality in some states, consistent with history.[13]

Conditions and other contributors to pregnancy-related morbidity and mortality

Social determinants of health are the social and economic conditions that affect health status and outcomes. These determinants include housing and food insecurity; lack of access to health care, insurance, or transportation; low income and/or education; and racism, stereotyping, and discrimination. The stress associated with living with these conditions contributes to pregnancy-related mortality and morbidity.

Postpartum hemorrhage is a leading contributor to pregnancy-related morbidity and mortality in the United States.[14] In first-time live births, healthy Black and Hispanic people were 21% and 26% more likely than white people, respectively, to deliver by C-section despite being low risk.[15] C-sections present an elevated risk for surgery-related complications such as infection, blood clots and hemorrhage.[16]

The rising incidence of cardiovascular disease, including hypertension[17] and diabetes,[18] among pregnant patients places them at higher risk of complications during pregnancy or during the postpartum period. Other health factors contributing to pregnancy-related deaths in the U.S. include sepsis and thrombotic or pulmonary embolism.[19] A history of hemorrhage, previous C-section delivery, and multiple birthing experiences (i.e., grand multiparity, or a patient with a history of five or more births at 20 or more weeks of gestation) may add risk, as may a long induction, retained placenta or large fetus.

Access to obstetric care remains a barrier, as well. The Commonwealth Fund[20] compared obstetric care in the U.S. to 10 other developed countries and identified other contributors to pregnancy-related mortality including a shortage of obstetrics providers and a lack of postpartum care. Up to 33% of all maternal deaths take place postpartum, which includes 12% of what are known as late maternal deaths – those that take place after six weeks and up to one year after giving birth.[20] ***Note:*** For details on timing and definitions, see Tikkanen, et al., Exhibit 2: Timing of U.S. Maternal and Pregnancy-Related Deaths 2011-2015.[20]

Delivering care: D.C. Safe Babies Safe Moms

In Washington, D.C., MedStar Health's D.C. Safe Babies Safe Moms Program is countering pregnancy-related shortcomings, having served more than 18,000 patients through a multi-generational, integrated care delivery program. "Having a model where different professionals – midwives, obstetricians, family medicine physicians, pediatricians, behavioral health professionals, and social workers – are all wrapped around the care delivery of our families has been beneficial," said Angela Thomas, DrPH, vice president, Healthcare Delivery Research, MedStar Health Research Institute.

With a goal to reduce maternal and infant mortality in Washington, D.C., by 25% in the next five years, D.C. Safe Babies Safe Moms strives to put the family at the center of care before, during and after pregnancy until the child reaches age 3.

In addition to providing the full scope of midwifery and obstetrics care, D.C. Safe Babies Safe Moms provides patients with behavioral health services they can access alongside their pre- and post-natal appointments, social support services to address issues like food insecurity and job training, and legal counseling through one of the country's only perinatal medical-legal aid partnerships. The program also includes critical partnerships with federally qualified health centers and community-based organizations to reach the district's most under-resourced neighborhoods.

Actions suggested by The Joint Commission

Through a multidisciplinary team, provide prenatal, perinatal, and postpartum care in an environment supporting diversity, equity and inclusion.

1. Encourage access to prenatal care. Improving access to prenatal care is particularly important in rural areas as well as communities affected by provider shortages and health disparities.

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Research shows that, while the quality of perinatal care has broadly improved, these efforts have not reduced health disparities for people of color and those in rural communities.[21]

2. During prenatal care, screen patients for hypertension, risk of hemorrhage, and other medical and socioeconomic risk factors. The Joint Commission's Health-Related Social Needs Screening Question Bank can assist organizations in selecting questions to assess health-related social needs of their patients. Questions are organized by five social needs domains derived from the screening tools included in our standards and resource compendium. Also included are a description of the skills necessary for engaging in sensitive screening conversations, sample scripts, suggested approaches and screening methods, and an interactive tool that analyzes text to determine grade reading level.[22]

Identify conditions in a patient's medical history that present a higher-than-average risk of hemorrhage if not identified or treated expeditiously. Offer evidence-based preventive and disease management services to patients indicating risk factors.[23] Encourage patients to communicate any concerns throughout their pregnancy and to inform health care providers of their pregnancy history when they seek care to ensure correct diagnosis and comprehensive care.[24]

3. Provide support and options that meet the needs and expectations of patients, including those who wish to deliver in a home or birthing center environment, while managing their risk of pregnancy complications. The pregnant patient and the clinician should share decision-making. Discuss delivery options and support patients in receiving their preferences. To reduce the high incidence of low-risk C-sections, provide education and training for the interdisciplinary team to develop knowledge and skills on approaches that maximize the likelihood of a vaginal birth, including assessment of labor, methods to promote labor progress, labor support, pain management (both pharmacologic and nonpharmacologic), and shared decision making.

4. Prepare for the possibility of hemorrhage and other complications. As noted earlier, postpartum hemorrhage is a leading contributor to pregnancy-related morbidity and mortality in the U.S.[14] Postpartum hemorrhage must be treated in a timely way because every second of delay leads to blood loss and increases the risk of death. The primary cause of delayed treatment is keeping supplies and medications for treating postpartum hemorrhage too far away from patients.[25-27] These actions are recommended:

- Assess risk of hemorrhage and other complications upon admission and at all other appropriate times during the delivery process.[25-27]
- Maximize response efficiency by reducing the time spent and distance traveled to access supplies and medications necessary for postpartum hemorrhage treatment.[25-27] One hospital stocked a cart with all necessary supplies and a refrigerated medications kit. The cart was placed in a central, easily accessible location. The hospital thereby reduced its response time from 11 minutes, 5 seconds to 2 minutes, 14 seconds.[25] Test and perfect your system to ensure quick response, especially access to blood.
- Educate the patient and family about the signs and symptoms of postpartum hemorrhage in the hospital and at home after discharge.[25-27] Data submitted by four states identified a lack of patient knowledge about hemorrhage warning signs or chronic health conditions as a leading contributor to pregnancy-related death.[28]

Note: Relevant to the above bullets – The Joint Commission's Hospital Accreditation manual includes a Provision of Care, Treatment and Services (PC) Standard, PC.06.01.01, Element of Performance (EP) 5 that requires an organization to conduct annual drills to determine system issues as part of its ongoing quality improvement efforts. The drills must include representation from each discipline identified in the hospital's hemorrhage response procedure and should be followed by a team debrief.

5. Implement performance standards and improvement initiatives in every unit.

- Have regular unit and tiered huddles and post-event debriefs to monitor outcomes and identify successes and opportunities for process improvement.[25-27] While examining adverse events, apply an equity lens during case review. Also, incorporate discussion of equity into the peer review and educational processes, including grand rounds and morbidity and mortality reviews.[29] ***Note:*** See

the American College of Obstetrics and Gynecology (ACOG) Health Equity Morbidity and Mortality Conferences in Obstetrics and Gynecology for best practice guidance for incorporating an equity component into morbidity and mortality conferences.[29]

- Enhance pregnancy and postpartum health surveillance by improving data collection transparency, timeliness, standardization, and stratification by risk factors.[23] In addition to tracking morbidity, mortality, and other clinical measures of performance, monitor racial, ethnic, socioeconomic, language, gender, gender identity, and sexual orientation disparities in performance measurements.[30] Compare your hospital performance to other hospitals serving similar demographic groups and implement strategies to reduce disparities.
- Optimize patient care through interdisciplinary teams, including but not limited to physicians, nurses, obstetric providers, dieticians, and social workers. Research indicates that interdisciplinary care teams improve health outcomes by streamlining care, promoting adherence to follow-up care, and helping patients manage behavioral and social risks.[30]
- Emphasize the importance of noting a patient's pregnancy and delivery history any time the patient receives care. Team members who do not work in obstetrics should participate in educational activities on the importance of considering the patient's pregnancy history.[24]

6. Address unconscious biases of health care providers toward people of color through universal training. Enable your organization to provide culturally competent, patient-centered care by recognizing and correcting provider bias and educating staff about health care disparities and health equity issues surrounding pregnancy-related healthcare. To give all patients an equal opportunity to have a healthy birth, promote inclusiveness, interdependence, acknowledgment, and respect for racial and ethnic differences. Empower the development of diverse formal and informal leadership. Focus on meaningful integration and engagement of diverse staff. Develop a plan that increases accountability and demonstrates transparency.[31]

Standards

An R3 Report describes in detail 13 standards and EPs relating to maternity care that apply to Joint Commission-accredited hospitals and became effective in July 2021. In June 2022, The Joint Commission published an R3 Report on new and revised requirements to reduce health care disparities. Effective in January 2023, the new standards focus on fundamental processes that will help organizations start the journey to addressing healthcare disparities, since healthcare is still learning how best to do this effectively and efficiently. The standards also provide flexibility in their scope and focus to accommodate organizations at different stages on the path forward.

What else is The Joint Commission doing to address maternal mortality and morbidity?
The Joint Commission is helping organizations combat pregnancy-related mortality and morbidity through its Maternal Levels of Care Verification Program, developed in collaboration with ACOG. The program was developed using ACOG's Levels of Maternal Care Obstetric Care Consensus (OCC) document, which includes comprehensive uniform definitions, a standardized description of perinatal facility capabilities and personnel, and a framework for integrated systems that address pregnant or postpartum patients' health needs. This optional program aims to reduce pregnancy-related morbidity and mortality by encouraging systems that help standardize risk-appropriate care from the most basic care to the most complex. The goal is that by verifying that a hospital treats only patients for whom it has the appropriate expertise, equipment, and resources, this program facilitates safe, successful births and more positive pregnancy-related outcomes.

In addition, as of Jan. 1, 2023, The Joint Commission offers Advanced Certification in Perinatal Care (ACPC) in collaboration with ACOG. ACPC focuses on areas that are high risk for pregnancy-related morbidity and mortality, such as mental health disorders, including substance use, addressing health-related social needs, and identifying healthcare disparities.

Resources

- Association of periOperative Registered Nurses: Diversity, Equity and Inclusion in the Perioperative Community
- CDC's Hear Her Campaign
- D.C. Safe Babies Safe Moms Program
- Institute for Healthcare Improvement's web page on Black Maternal Health: Reducing

Inequities Through Community Collaboration.
- Patient Safety Bundles at saferbirth.org
- "Aftershock," an award-winning documentary, tells the story of two Black pregnant patients who died due to pregnancy-related causes and how their surviving family members are working to improve perinatal care.

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Patient Safety Advisory Group

The Patient Safety Advisory Group informs The Joint Commission on patient safety issues and, with other sources, advises on topics and content for *Sentinel Event Alert*.

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