Nebraska Perinatal Quality Improvement Collaborative
NPQIC

DOULA CARE TO IMPROVE OUTCOMES AND REDUCE DISPARITIES IN NEBRASKA

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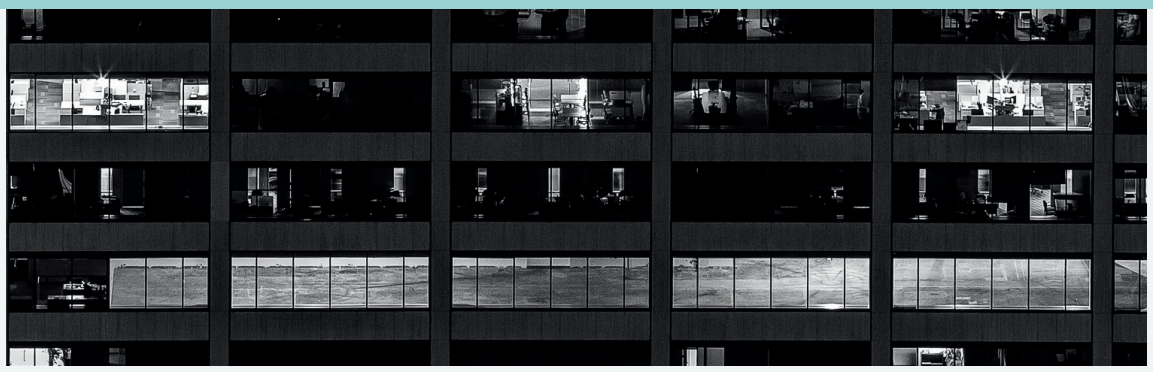
Contributing Authors:
Shannon Haines, MD, FAAP
Sydnie Carraher, DNP, APRN-NP, NNP-BC
Kara Foster, MPH
Lindsey Steele, MPH
Chelsey Kennedy, DNP, APRN-NP, WHNP-BC
Ann Anderson Berry, MD, PhD, FAAP



Contributing Authors: Shannon Haines, MD, FAAP; Sydnie Carraher, DNP, APRN-NP, NNP-BC; Kara Foster, MPH; Lindsey Steele, MPH; Chelsey Kennedy, DNP, APRN-NP, WHNP-BC; Ann Anderson Berry, MD, PhD, FAAP
Prepared in Partnership with: Julie Fedderson, MD; United Healthcare
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Notes: It is crucial to recognize that race and ethnicity are socially defined terms rather than biological constructs. We acknowledge and honor that people who become pregnant and give birth do not always identify as female. Throughout this paper, we interwove the terms “birthing people,” “women,” and “maternal” to attempt to honor the identity of all people who experience pregnancy, childbirth, and their related complications. We trust that people’s lived experiences guide them to their identity. We humbly accept any comments or concerns related to the above approach.

Giving Birth is Dangerous

The United States is one of the most dangerous places among wealthy nations to give birth. Birthing people in the United States are nearly three times more likely to die due to pregnancy complications and childbirth than their peers in other developed countries (Gunja, Munira et al., 2022). Roughly 1,200 women die annually because of pregnancy or delivery complications (Hoyert, DL, 2023), and as many as 60,000 people per year experience life-threatening pregnancy-related morbidities (Declercq & Zephyrin, 2021). Despite considerable advances in obstetric practices and care by highly trained medical professionals, the maternal mortality rate in the United States continues to rise. In 2021, 32.9 women per 100,000 live births died during pregnancy or within 42 days after giving birth from causes due to pregnancy or delivery complications, a significant increase from 23.8 per 100,000 in 2020 (Hoyert, DL, 2022, 2023).

The death of a mother is one of the most tragic events that can befall a family and community. The short and long-term impact of such a tragedy on her surviving children, family, community, and the healthcare professionals who cared for her cannot be overestimated.

Overview of the Problem

In the last 30 years, the pregnancy-related mortality ratio (PRMR) has more than doubled, climbing from 7.2 to 17.6 per 100,000 live births in 2019 (CDC, 2023). Nebraska's PRMR for 2014-2018 was 13.7 per 100,000 live births (Moline et al., 2021). Simultaneously, rates of severe maternal morbidity in the United States increased by 45% between 2006 and 2015 (Fingar et al., 2018). Maternal and infant morbidity and mortality, especially amongst BIPOC people who give birth, are significant health concerns in the U.S. and Nebraska. Throughout the United States, maternal morbidity and mortality disproportionately affect individuals of color, those with socio-economic disadvantage, and people who are living in communities where systemic inequality is prevalent (Collier & Molina, 2019). Black, Indigenous, and People of Color (BIPOC) mothers suffer higher rates of labor interventions, cesarean delivery, and preterm birth (Howell, 2018; Martin et al., 2021) and are twice as likely to experience severe morbidity compared to their White counterparts (Creanga et al., 2014). Even more alarmingly, Black birthing people die at a rate of 3-4 times higher than White birthing people in the United States (Howell, 2018; Hoyert, DL, 2023; U.S. DHHS, 2023). Additional disparities exist between rural and urban populations. According to the National Advisory Committee on Rural Health and Human Services (2020), rural mothers have a 9% greater probability of severe maternal morbidity and mortality when compared to urban mothers.

Overview continued..

Severe maternal morbidity and mortality are closely linked to other distressing outcomes, including infant mortality. The U.S. has significantly higher infant mortality rates than other countries. The infant mortality rate in the U.S. for 2022 increased by 3% to 5.6 per 1,000 live births from 2021 to 2022, the first year-to-year increase in 20 years (Ely & Driscoll, 2023); this is twice the rate of Spain and three times the rate in Slovenia and Finland (OECD, 2021). Disparities in infant mortality within the US are significant, with the infant mortality rate being 10.86 live births for infants born to mothers who identify as Black compared to a rate of 4.52 for infants born to mothers who identify as White (Ely & Driscoll, 2023).

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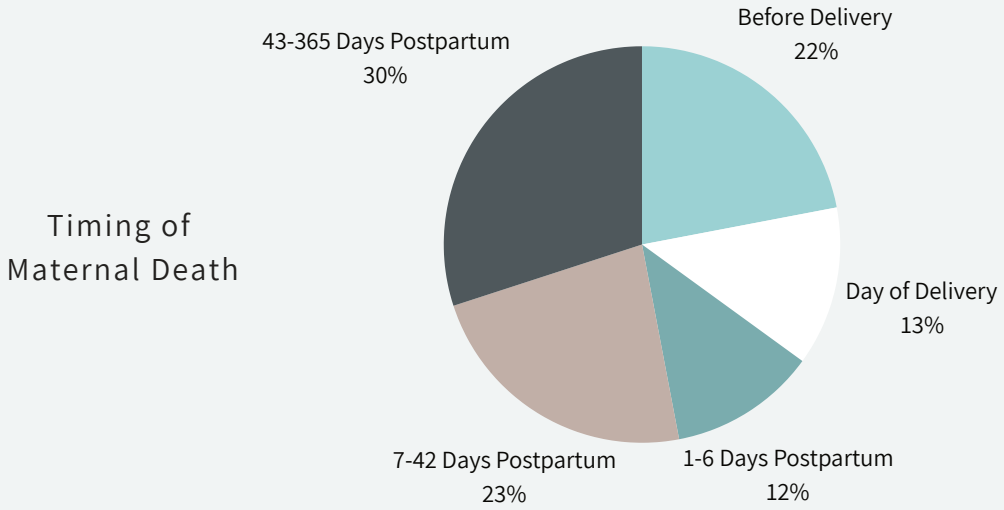
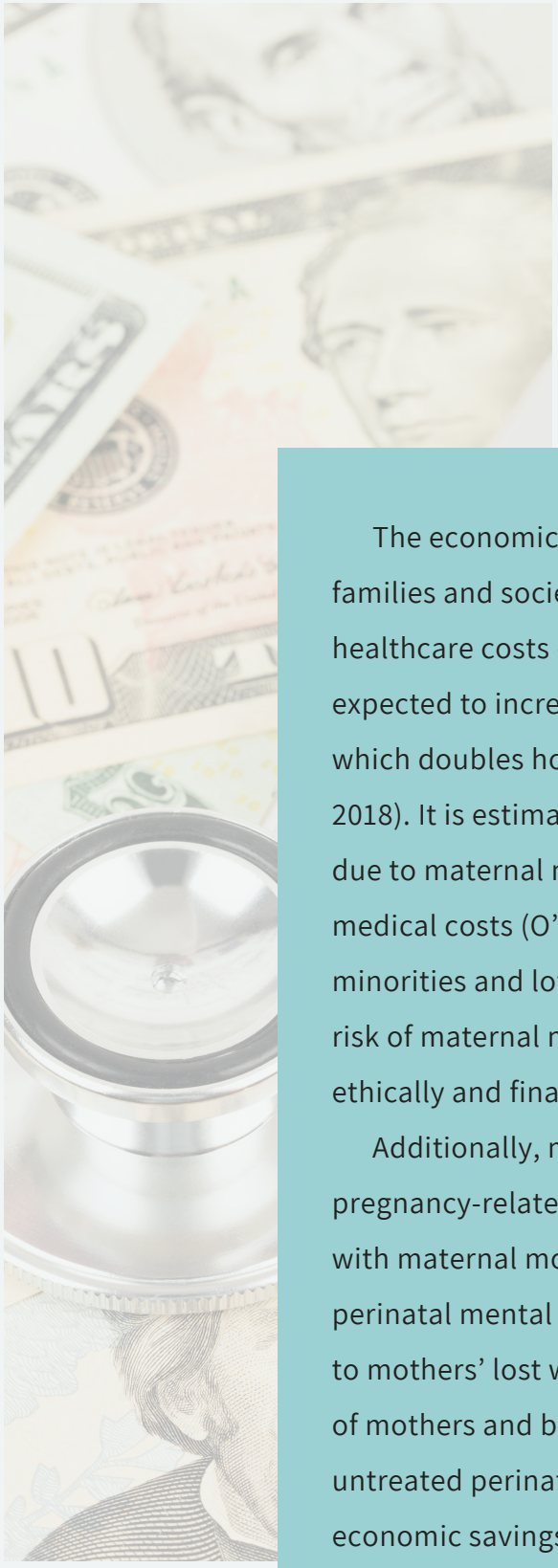
Causes and Timing of Maternal Morbidity and Mortality

As many as 80% of all pregnancy-related deaths are preventable with lack of access to care, missed or delayed diagnoses, and failure to recognize warning signs being the major contributing factors to preventable deaths (Petersen et al., 2019b; Trost et al., 2022). A review of data from Maternal Mortality Review Committees in 36 US States encompassing the years 2017–2019 found that, overall, maternal mental health conditions were by far the leading cause of pregnancy-related mortality, followed by hemorrhage, cardiac-related concerns, infections, cardiomyopathy, and blood clots (Trost et al., 2022). Black women were more likely to die from eclampsia and cardiomyopathy than White women (MacDorman et al., 2021). Nearly one-fifth (22%) of pregnancy-related deaths occurred before delivery, 13% on the day of delivery, 12% between 1-6 days postpartum, 23% between 7-42 days postpartum, and 30% between 43-365 days postpartum (Trost et al., 2022). The timing of pregnancy-related mortality is also different amongst racial and ethnic groups and can contribute to disparities. For example, the maternal mortality rate from cardiomyopathy is higher in Black mothers than White mothers at baseline, but Black mothers die from cardiomyopathy at six times the rate as White mothers 43 days to 1 year postpartum (MacDorman et al., 2021). The timing of complications that lead to late maternal mortality falls outside the traditional follow-up timing of post-natal ob-gyn visits at 4-6 weeks postpartum, which contributes to a significant risk of missing or delaying diagnoses (ACOG Committee, 2018). Given the preventability of severe maternal morbidity and pregnancy-related mortality, there is an urgency to identify and implement strategies to address preventable causes of maternal deaths, with a specific focus on ending disparities.





At What Cost?

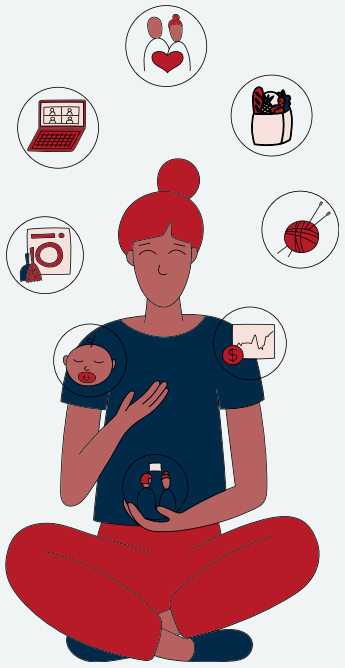
The economic impact of severe maternal morbidity and mortality on families and society is high, accounting for billions of dollars in additional healthcare costs each year in the United States. This financial burden is expected to increase along with rising rates of severe maternal morbidity, which doubles hospital costs compared to unaffected pregnancies (Chen et al., 2018). It is estimated that for every maternal-child pair, there is $8,624 in cost due to maternal morbidity alone, almost 60% of which were considered medical costs (O'Neil et al., 2021). Further, it has been well established that minorities and lower socioeconomic status are associated with an increased risk of maternal morbidity and mortality, which places a heavy burden of care, ethically and financially, on the Medicaid system.

Additionally, maternal mental health conditions, a leading cause of pregnancy-related mortality, contribute significantly to the costs associated with maternal morbidity and mortality. The estimated cost of untreated perinatal mental health conditions in Nebraska is ~$160 million each year due to mothers' lost wages and productivity and addressing poor health outcomes of mothers and babies (Luca et al., 2020). Efforts to lower the prevalence of untreated perinatal mood and anxiety disorders could lead to substantial economic savings for employers, insurers, the government, and society.

At Home

Nebraska's Perinatal Disparities

In Nebraska, historically, access to data that would allow public health agencies and investigators to characterize best the factors specific to our state that increase the rates of Black maternal morbidity and mortality has been unavailable or restricted (Abresch, 2023; Thompson, 2023). However, a first-of-its-kind report released in early 2024 found that the pregnancy-associated mortality ratio was almost 3 times more in Black birthing people than in White birthing people (Division of Public Health, 2023). Also, 20% of pregnancy-associated deaths were in Black women, though they comprised only 7.5% of the birthing population of Nebraska (Division of Public Health, 2023). Black women in Nebraska also suffer significant disparities in risk factors in morbidity. For example, Cesarean sections are a significant cause of maternal morbidity and mortality as they increase birth complications (Louis et al., 2015), can cause significant adverse events and preterm births in subsequent pregnancies (Kilpatrick et al., 2016), and are more likely to occur for non-medically indicated reasons in Black women vs White women despite comparable risk factors (Saluja & Bryant, 2021). Though Nebraska's cesarean section rates are better than the national average, Black birthing people in the state have higher rates of Cesarean and other birth interventions than White birthing people (March of Dimes, 2022b).



20% OF PREGNANCY-ASSOCIATED DEATHS WERE IN BLACK WOMEN, THOUGH THEY COMPRISED ONLY **7.5%** OF THE BIRTHING POPULATION OF NEBRASKA

Maternal health disparities don't just affect mothers. According to population research, there is a strong correlation between severe maternal morbidity and preterm birth (Kilpatrick et al., 2016). In a study performed in California, Black birthing people had double the risk of having both severe maternal morbidity and preterm birth compared to their White peers (Lyndon et al., 2021). Indeed, Nebraska's statistics on disparities in infant morbidity and mortality are distressing.

Infant Morbidity and Mortality

The disparities in infant morbidity and mortality are more significant in Nebraska than in the collective United States. In Nebraska, Black infants are born preterm at 1.5 times the rate of White infants; in Douglas County, this disparity in rates is more pronounced at 1.7 (March of Dimes, 2022a). Though the nation's average preterm birth rate is 10.4, Black infants in Nebraska are born early 15.5% of the time (March of Dimes, 2023). Nebraska's disparities in preterm birth rates are also overall worse than in neighboring states. In Kansas, the preterm birth rates for Black and AI/AN infants compared to White infants were 14.2%, 8.7%, and 9.5% respectively (Centers for Disease Control and Prevention, National Center for Health Statistics., 2023); in Iowa, these rates were 12.9%, 12.8%, and 9.5%, respectively. Nebraska's overall infant mortality rate in 2021 was 5.5 per 1,000 live births (March of Dimes, 2022a). The most recently compiled data from 2019-2021 displays a consistent trend of disparities in infant mortality rates in Nebraska; Black infants died at a rate of 13.1 per 1,000 live births versus White infants dying at a rate of 4.5 per 1,000 live births (March of Dimes, 2023). Babes born to mothers who identified as American Indian/Alaska Native (AI/AN) had an even more staggering infant mortality rate of 18.7 per 1,000 live births (March of Dimes, 2023). Unfortunately, Nebraska ranks 5th in the country for infant mortality rate of babies born to mothers who identify as Black or African American (Centers for Disease Control and Prevention, National Center for Health Statistics., 2023). Clearly, disparities significantly affect the youngest and most vulnerable Nebraskans.

Access to Prenatal Care

Preterm births in Nebraska are significantly associated with chronic and pregnancy-related hypertension and diabetes, late or inadequate prenatal care, multiple gestation pregnancies, and congenital anomalies (Rauner, B et al., 2023). The lack of adequate prenatal care compounds the other associated factors, as it is essential to address chronic health concerns to prevent further complications. However, only 75.7% of pregnant people in Douglas County had appropriate prenatal care compared to the Healthy People 2030 goal of 80%, and 26% of pregnant Black people in Nebraska have inadequate prenatal care (Rauner, B et al., 2023). Nebraskans in rural areas have still greater vulnerability; Nebraska ranks 4th in the percentage of counties considered maternity care deserts, meaning there are no birthing centers or obstetric providers in that county (Fontenot et al., 2023). People have to drive over 30 miles to reach obstetric care in rural Nebraska, precious minutes if there are any emergent health conditions and a barrier to receiving regular prenatal care (Fontenot et al., 2023).

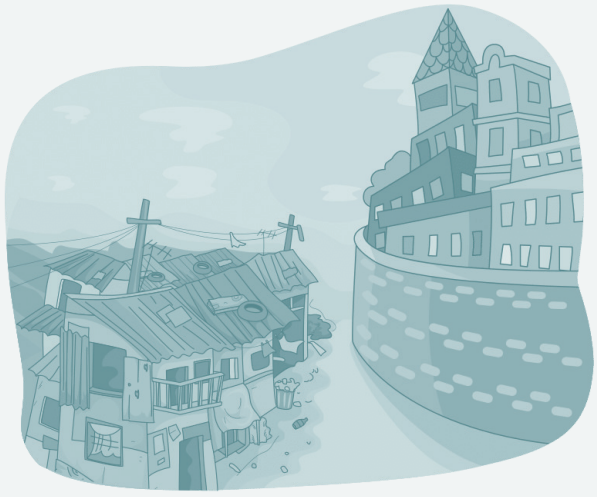
Can We Do Anything?

In Nebraska, 93% of pregnancy-related deaths could have been prevented during the years 2017-2021 (Division of Public Health, 2023). This is higher than the national numbers where it has been found that as many as 80% of all pregnancy-related deaths are preventable (Petersen et al., 2019a; Trost et al., 2022). Tragically, a CDC study found that, though these individuals have similar complications, Black birthing people have a higher case fatality rate than their White counterparts (Petersen et al., 2019a), with preventable deaths being 150% more likely to occur when the person is Black versus when they are White (Louis et al., 2015). Fortunately, there is hope for improvement. Advances in access to care, catching missed or delayed diagnoses, and recognizing early warning signs could prevent deaths (Petersen et al., 2019a). We must identify and implement community-based strategies to prevent further pregnancy-related morbidity and mortality and eliminate the apparent disparity in these tragic outcomes that Black families face.

Maternal and infant morbidity and mortality, especially amongst BIPOC people who give birth, are significant health concerns in the U.S. and Nebraska.

Why the Disparities?

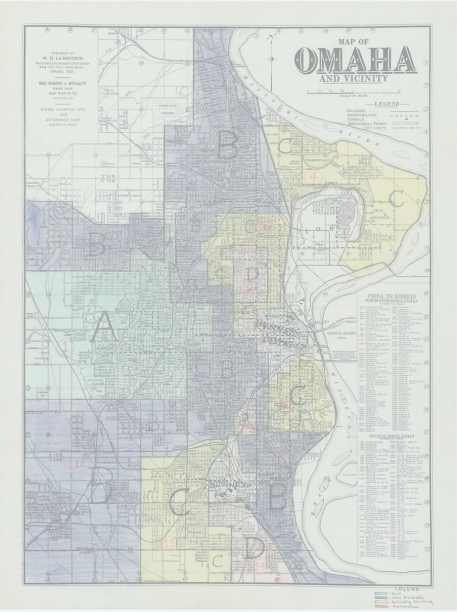
Frameworks that examine the disparities between White and Black maternal morbidity and mortality universally identify inequities in the social and structural determinants of health as root causes of these tragic differences (Crear-Perry et al., 2021; Noursi et al., 2020). Specifically, inadequate access to high-quality healthcare, under-treatment of pre-conception health conditions, exposure to harmful environmental and work conditions, and suffering from institutional racism and implicit bias are some significant contributors to the inequities of health outcomes (Crear-Perry et al., 2021; Louis et al., 2015; Noursi et al., 2020; Saluja & Bryant, 2021). Many of these factors are driven by political determinants of health.



Political Factors

Political factors and government policies such as healthcare availability, Medicaid eligibility criteria, voting guidelines, housing laws, regulation of prescription medication costs, support of public green spaces, justice system management, and funding of supplemental nutrition assistance programs all have a significant impact on baseline health of individuals within a population (Kraft, 2022; Torrey, 2022). It is well-established that "(People) who are uninsured have worse health outcomes" (Louis et al., 2015). Though Nebraska recently extended post-partum Medicaid coverage, it is vital to support pre-conception healthcare as people who have chronic health conditions going into pregnancy are more likely to face pregnancy-related morbidity and mortality (Collier & Molina, 2019). Another healthcare policy that could contribute to poor perinatal health outcomes is insufficient and poorly adaptable postpartum care norms; for now, the standard is one visit at six weeks postpartum, but the American College of Gynecologists suggests that this is inadequate to address many people's needs (ACOG Committee, 2018). Unfortunately, insurance coverage does not cover more visits with OB and often does not cover other needed therapies such as pelvic floor physical therapy (ACOG Committee, 2018). Furthermore, postpartum care is not coordinated; thus, a robust network and referral system could serve patients better.

In the United States, lack of paid family and sick leave also contribute to perinatal health disparities as lack of leave contributes to missed prenatal appointments, inability to take infants to healthcare appointments, and returning to work before adequate post-partum healing, bonding, and establishment of breastfeeding (Khan, 2020; Noursi et al., 2020). Also at play is reduced access to family planning and reproductive health services, leading to shorter between-pregnancy intervals and inadequate pre-conception control of pre-existing medical conditions (Hawkins et al., 2020). However, these factors are not enough to explain the vast disparities in perinatal health. Collier notes, "Although other factors were also identified as significant predictors of (severe maternal morbidity and mortality)… they did not fully explain the observed racial/ethnic disparities in SMM" (2019). This returns the discussion to the role that systematic racism has on maternal morbidity and mortality disparities.



Segregation and Housing

A root cause of maternal health disparities is thought to be a history of segregation leading to inferior housing options and increased exposure to toxins, as well as less access to healthful foods (Jamila Taylor et al., 2019). Based on the dissimilarity index of 51.1, Omaha is moderately to highly segregated, which indicates that disparities exist on multiple levels in the metropolitan area (Omaha Ethnic and Racial Composition, 2021). Omaha has a significant history of redlining, the effects of which are still present today (Redlining, 2023). Housing in areas where the majority of inhabitants are Black are more likely to have lead contamination and other environmental hazards that contribute to poorer health outcomes and health struggles (Akwani, 2020; Environmental Protection Agency, n.d.; Redlining, 2023). Redlining also has a generational ripple effect on the quality of public education due to differences in property tax funding of schools (Centers for Disease Control and Prevention, 2022).

Implicit Bias and Other Forms of Systematic Racism

Systemic racism (Jamila Taylor et al., 2019) and weathering – premature aging due to the chronic and compounding stressor of being exposed to racism and discrimination (Patterson et al., 2022) - are complicit in the increased morbidity and mortality rates that Black women and infants face. Systemic racism in the form of poor nutrition, the need for access to higher quality healthcare, poorer control of chronic medical conditions, and less recognition of early warning signs of impending medical concerns contribute to these unacceptable statistics (Howell, 2018; Petersen et al., 2019b). Black families also have excessive exposure to economic injustices and have not had the opportunity to build generational wealth (Centers for Disease Control and Prevention, 2022). These adults are frequently restrained to jobs that have inadequate pay and no paid leave, which leads to less preventative healthcare and an inability to care for chronic health conditions adequately (Baciu et al., 2017).

Medical Racism

Racism ingrained in the medical establishment also plays a role in poor outcomes, and it is well-established that medical racism has a long history in OBGYN practice (Prasad, 2022). Implicit bias, the unconscious attitudes humans hold toward groups of people, is more common in high-stress, overcrowded environments like the labor and delivery wards (Saluja & Bryant, 2021). Implicit bias has historically led to providers responding to patients' pain less frequently and with less than adequate medications to address the pain levels of Black patients. (Saluja & Bryant, 2021). This can and does lead to decisions that do not align with the standard of care or best practices, such as the higher cesarean delivery rate that Black pregnant people face (Saluja & Bryant, 2021). In a study examining the mistreatment and discrimination of people during their pregnancy with their first child, 30% of Black, Hispanic, and multiracial mothers reported mistreatment by their medical team, and 40% reported discrimination (Mohamoud et al., 2023). This mistreatment and discrimination decrease the trust between patients and their healthcare teams, which leads to poorer health outcomes and a lower likelihood of appropriate access to healthcare (Chipidza et al., 2015; Saluja & Bryant, 2021). Implicit bias can also affect the provider’s index of suspicion. For example, Cardiomyopathy is the leading cause of maternal mortality for Black women but is not as common in White women (Noursi et al., 2020). A low index of suspicion, a possible consequence of implicit bias, could be one of the reasons that cardiomyopathy is such a significant cause of mortality in Black women.

Medical Racism continued...

Implicit bias and failure to recognize racism as a risk factor for worse health outcomes also played a significant role in the calculation utilized to counsel patients on whether to attempt a vaginal birth after cesarean section (VBAC) or have a repeat cesarean section (Rubashkin, 2022). The people who created this calculator included race as a risk factor, implying that the greater cesarean section rates that Black women had were due to an inherent difference rather than systemic racism (Rubashkin, 2022). The use of race as a risk factor likely led to innumerable unnecessary cesarean sections being performed, which in turn would lead to excessive morbidity in the Black birthing community (Campbell, 2021). Considering the above, it is no surprise that experts agree that implicit bias and lack of culturally appropriate care are the primary causes of the disparities in rates of maternal morbidity and mortality between Black and White birthing people.

During focus groups held in Nebraska, community members' and public health officials' perceptions of the cause of maternal and infant health disparities were consistent with the above literature review. These stakeholders in Nebraska called for solutions to the maternal and infant disparities that focus on the root causes of systematic racism, weathering, and implicit bias. This call to action with a focus on holistic care to combat maternal morbidity is in line with solutions suggested by an expert review article, and addressing factors related to implicit bias and systematic racism is considered crucial to combatting the disparities that Black birthing people face (Collier & Molina, 2019; Temple & Varshney, 2023).

How Can We Stop the Unnecessary Deaths?

The higher rates of maternal and infant morbidity and mortality in Black families are not due to inherent genetic causes or personal failings; rather, it is the result of an interplay of many complex factors that put Black people at higher risk for poor health outcomes. Thus, combatting Black maternal and infant health disparities must be approached from a holistic, culturally humble lens. Creating a system by which doulas can be credentialed and reimbursed by Medicaid so care can be provided to BIPOC people will be the primary focus of this report. Still, the implementation of multiple interventions will be essential to address maternal and infant morbidity and mortality disparities in Nebraska. Some suggested interventions are listed below.

SUGGESTED INTERVENTIONS TO ADDRESS DISPARITIES IN MATERNAL AND INFANT MORBIDITY AND MORTALITY IN NEBRASKA

- **Establish doula care as a Medicaid-reimbursable option for birthing people in Nebraska.**
- Implement bias training for providers.
- Construct and deliver a respectful care survey to all mothers upon discharge from the hospital.
- Prioritize the processing of Medicaid applications for pregnant people (<14 days) to combat the disparities in inadequate prenatal care.
- Establish equitable care practices for the state of Nebraska.
- Begin a campaign to address misconceptions and increase awareness of Medicaid eligibility related to pregnancy to increase the number of people receiving adequate prenatal care.
- Adopt a state-wide reporting system that hospitals are responsible for reporting to multiple times per year to better evaluate and respond to factors contributing to infant and maternal morbidity and mortality. This would also assist in evaluating the cost-effectiveness of the measures being implemented.
- Implement a standardized Pregnancy Risk Assessment and a process of treating identified risk factors in Nebraska.

Doulas: Roles and Benefits

Doulas are non-clinical specialists trained to support people who are pregnant or have recently given birth. Doulas can help the pregnant or postpartum person communicate their wishes with their care team, understand medical procedures, cope with pregnancy and labor's emotional and physical stressors, and share concerns during challenging times. There are multiple doula specialties including but not limited to antepartum, labor and delivery, postpartum, full spectrum, and trauma-informed doulas. Services these various specialties can provide include helping people through tragic events such as pregnancy loss, supporting breastfeeding, strategizing parenting techniques, helping clients identify health concerns, and encouraging clients to receive follow-up care. Doulas could be an important link to assist with continuity of care, especially in rural health settings where access to health records across systems is difficult.

Incorporating doula care into perinatal care could address many of the causes of Black maternal and infant morbidity and mortality and have a sizable impact on maternal and infant perinatal outcomes (Adams & Thomas, 2017). Culturally congruent doulas target the specific problems of implicit bias and curb the harmful effects of perceived racism on Black birthing people (Temple & Varshney, 2023). In rural areas, culturally congruent doulas can mitigate some of the effects in not only maternal care deserts but also areas that have no Black healthcare providers.

Though psychologically important, it is not just culturally congruent care that is improved with doulas. A systematic review by Hartmann et al. found that utilizing doulas reduced cesarean section rates, a significant cause of morbidity and mortality, by 5-22% (2012). Importantly, doulas have a significant impact on preterm birth, with one study reporting a 22% reduced odds of preterm births when Black women were attended by a doula (Kozhimannil et al., 2016).In a review of several interventions in New York City hospitals to decrease maternal mortality, only the involvement of doulas yielded improved health outcomes and decreased preterm births (Ricklan et al., 2021). Though some argue that the non-clinical support doulas provide can be provided by friends or family, a reduction in cesarean section rates is affected significantly more by doulas than other support people (Hartmann et al., 2012; Ramey-Collier et al., 2023). Thus, implementing a pathway for doulas to be credentialed by DHHS and reimbursed by Medicaid is a salient solution to the disparities in maternal-infant health outcomes in Nebraska.

Involvement of doulas in the care of patients on Medicaid has been shown to save about $1,000 per infant-birther pair (Kozhimannil et al., 2016). This figure does not account for other monetary benefits to doula care. For example, doula care has been associated with significantly higher breastfeeding success rates, leading to a lower risk of chronic health conditions in both the mother and the neonate (Robles-Fradet & Greenwald, 2022). **Importantly, though this program is tailored to be part of the solution to eliminating the inequities faced by Black birthing people, doula services cannot dismantle centuries of racism. Doulas services should also be accessible to any pregnant person as they improve outcomes for all.**

NPQIC concludes that the optimal first step to establish reimburseable culturally congruent doula care in Nebraska is to convene a workgroup to map out process development and implementation. The workgroup should be initially convened by a neutral party (such as NPQIC or the ALIGN group) but then should be driven by doulas. This doula-led workgroup should also include community organizations that serve Nebraska birthing people, managed care organizations, and healthcare providers, as necessary. Great care should be taken to address power dynamics and shared decision-making so that doulas are honored as experts, solution-bearers, and leaders in this effort. This group would create and prioritize a specific list of action items, generate work groups to implement and evaluate these interventions, and give recommendations to DHHS/CMS.

Implementation of Medicaid-Reimbursed Doula Care for Nebraska Families

SUGGESTED GOALS FOR THE DOULA-LED WORKGROUP TO ESTABLISH EQUITABLE ACCESS TO CULTURALLY CONGRUENT DOULA SUPPORT IN NEBRASKA

- **Establish a definition of doula services**
  - We recommend a definition that honors the multiple specialties of doulas. For example: A doula is a professional trained to provide physical, emotional, and informational support to expectant individuals and families. This support can be given during pregnancy, delivery, and/or the postpartum period. Doulas are not clinicians but work as consultants to assist birthing people in communicating with healthcare providers and understanding and advocating for their healthcare choices. By assisting with understanding health choices and reinforcing provider instructions, doulas ensure families have the ability to make truly informed decisions. (Adapted from a previous definition given to a Nebraska MCO, with the assistance of Joyce Dykema).
- **Lay out a framework for identifying doulas to be eligible for Medicaid reimbursement, based on competencies addressed in their training.**
  - Doulas are the experts in the core competencies and various pathways that exist for doula training. We recommend the doula-led workgroup considers how to ensure equitable and ample training opportunities for doulas from disproportionately affected communities. Cost should not be a barrier for a person from a minoritized community to obtain training and to become eligible for Medicaid reimbursement.
- **Establish a Quality Assurance plan for Doula services**
  - Much like systems of accountability that exist in clinical professions, we recommend that the doula-led workgroup establish a quality assurance plan to address any client complaints that arise. This could include the creation of a board of doulas who would review grievances and determine if a doula should maintain Medicaid reimbursement eligibility. It could also involve doulas writing a code of ethics to guide which grievances are appropriate to be heard by the board. Again, doulas are the experts in their field; thus, they should be the ones to address concerns that arise among their peers.

SUGGESTED GOALS FOR THE DOULA-LED WORKGROUP TO ESTABLISH EQUITABLE ACCESS TO CULTURALLY CONGRUENT DOULA SUPPORT IN NEBRASKA CONT...

- **Create process improvement targets for the reimbursement process**
  - Like any new process, we anticipate there may be opportunities to improve the experience for doulas and other involved parties. We recommend that the doula-led workgroup employ quality improvement measures to periodically assess how smoothly and effectively the process is going. This could include the workgroup meeting quarterly to address agreed-upon measures of implementation. This recommendation is not meant to evaluate the quality of support doulas are providing, but rather how well the reimbursement process is serving doulas (rates of reimbursement, efficiency of payments, accessibility, etc).
- **Identify a network of resources to build and implement doula training programs or highlight those that fit within the established core competencies**
  - The doula profession is evolving all the time. In the current maternal health crisis experienced by birthing people in America- especially those who identify as BIPOC- we have seen a surge in the quantity and types of training available. We recommend that the doula-led workgroup develop and maintain a repository of resources in terms of training available that have been vetted to include agreed-upon core competencies. This can include local or national/global opportunities and should be updated periodically in the dynamic context of the doula profession.
- **Guide best practice for integrating doulas into clinical settings**
  - The workgroup would also partner with NPQIC to guide the creation of education and training for clinical providers and other staff around structural determinants of health and the role and benefits of doulas with the goal of creating doula-friendly birthing environments (Jain & Moroz, 2017).

In addition to the discussed barriers to establishing accessible doula care to combat health disparities, there are always challenges with implementing and evaluating new health programs. The following is a list of anticipated challenges.

ANTICIPATED CHALLENGES TO ESTABLISHING CULTURALLY CONGRUENT DOULA CARE IN NEBRASKA

1. Medicaid coverage of doula services is not currently available, and overcoming this barrier will require collaboration between DHHS, doula groups, and the workgroup to create a pathway to reimbursement for doula services and the creation of legislation needed to establish funding.
2. Implementing behavioral and thought changes can be difficult for many people. Clinicians and staff have limited time for education and implementing systems changes, and some care team members may resist bias training.
3. Though this intervention is based on research on community-recommended solutions to the Black maternal health crisis, there is understandably limited trust among groups that have been marginalized when healthcare systems implement new interventions.
4. Beginning new solutions to long-term problems poses a more considerable initial cost than maintenance does; establishing required core competencies, creating educational material, and allocating funds for doulas to be reimbursed by Medicaid will require funding and necessitate buy-in from multiple levels of organizations and government. It will be crucial to utilize numerous forms of media to educate and maintain communication with legislators, employers, families, community organizations, and hospitals.

These anticipated challenges highlight the need to involve community organizations and doulas at every step of this process. It should be emphasized that the responsibility to resolve the disparities faced by Black patients and patients identifying with other minoritized groups should not be placed on doulas; rather, their expertise is highly valued to mitigate some of the downstream effects of systemic racism.

Black infants and mothers die at 2-3 times the rate of their White counterparts in the United States; if they survive, they still face higher odds of severe health conditions. This is unacceptable. Systematic racism and implicit bias play a significant role in these disparities and must be addressed to attack these inequalities. Implementing doula care to improve birth and perinatal outcomes will be a highly beneficial, cost-effective intervention to end the excessive morbidity and mortality that Black birthing people in Nebraska suffer. However, doulas were not responsible for these disparities, and should not be tasked with fixing the maternal health crisis in Nebraska or the United States. Expediting access to Medicaid to encourage early and adequate prenatal care, individualizing postnatal care, educating providers on culturally humble care, combatting institutionalized racism, and implementing better peripartum leave policies will be essential factors to ameliorate poor health outcomes for all birthing people in the state of Nebraska and end the significant disparities that Black women face. The above must be done with input from doulas and affected communities to implement meaningful, pragmatic changes and ultimately improve outcomes.

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