Written Testimony Submission to USCCR

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High-income women with professional degrees, and low-income women experiencing poverty are all at high risk during childbirth because of one thing they have in common -- the color of their skin. Women of color from all walks of life are dying at alarming rates during and after pregnancy. This tragedy is an emotional and toxic cycle of each woman battling throughout their pregnancy to be heard but having their cries dismissed by their physicians because of implicit and explicit bias. The high mortality rates seen in Black women can be ameliorated if and only if the issue of racial disparities is addressed, with particular attention to how **racism is embedded** in the healthcare system.

According to the Centers for Disease Control and Prevention (CDC), about 700 women die every year as a result of delivery or pregnancy-related complications, a number far too high for the United States. The maternal mortality ratio (MMR) in the United States in 2018 was 17.4 deaths per 100,000 live births (NVSS, 2020). However, when stratified by race, these numbers become even more disturbing. The MMRs for non-Hispanic Black women and white women in 2018 were 37.1 and 14.7, respectively. Furthermore, between 2011 and 2013, non-Hispanic Black women were 3.4 times more likely than non-Hispanic white women to experience a pregnancy-related death. These racial-ethnic disparities persist when deaths are broken down by education and age, with non-Hispanic Black women continuing to have the highest numbers.

Pregnancy-related deaths are unquestionably higher among African American, Hispanic, Asian/Pacific Islander, American Indian/Alaska Native women in the U.S (Tait, et al., 2014, Howell, 2018, Centers for, 2001). However, the alarming maternal mortality trend in the U.S is specifically driven by the higher rates among Non-Hispanic Black women (Novoa, 2018). Black women are three to four times more likely to die from pregnancy-related outcomes, compared to Non-Hispanic White women (Howell, 2018). In fact, Black women with college and/or graduate education still experience maternal morbidity and mortality at higher rates than White women with less than a high school education; education or socioeconomic status is not protective. Moreover, the risk of maternal death among Black women in some U.S regions is similar to rates observed in developing countries like Saudi Arabia(Kassebaum et al., 2014). When compared to women in China, women giving birth in the U.S are more likely to experience pregnancy-related death; this underscores the importance of assessing the quality of care these women receive (Howell, 2018, Kassebaum et al., 2014).

Those at risk for a pregnancy-related death include those with chronic health conditions such as hypertension, diabetes, and chronic heart disease (Pregnancy Mortality, 2020). Cardiovascular conditions are responsible for over one-third of pregnancy-related deaths (Creanga, et al., 2015). Coronary heart disease, the leading cause of death in the United States,

also disproportionately affects people of color, which is shown in the data with cardiovascular conditions being the leading cause of pregnancy-related death for non-Hispanic Black women while the leading cause of death for white women was mental health related conditions (Leigh, et al., 2016). Other leading causes of death are due to infection and hemorrhage. The CDC reports that approximately sixty percent of the pregnancy-related deaths between 2011 and 2015 were preventable, highlighting the importance of targeted interventions and improved data collection methods (Petersen, 2019).

In 2018, as a response to underreporting in pregnancy-related deaths, the United States fully adopted a pregnancy checkbox on death certificates. This checkbox gave researchers the ability to classify pregnancy-related deaths more accurately than previous decades. The CDC states that the reason for the increase in pregnancy-related deaths over the past few decades remains unclear and cannot be fully explained by the implementation of the checkbox or other improvements in computerized data collection methods, which leads us to conclude that the racial disparity seen in maternal mortality is the primary issue in maternal health. And while this checkbox item can help us see the increase in maternal mortality, data collection needs to be further standardized and stratified by race and ethnicity to accurately determine the causes behind maternal death. While we may not yet know the exact and precise causes of death, we can determine without a doubt that social determinants of health are important proximal causes of maternal mortality.

Patient, provider, neighborhood, and institutional factors are notable social determinants of maternal morbidity and mortality (Howell, 2018). The root-causes of racial disparities in maternal death rates can be found by examining the lived experiences of Black women in America, where social factors drive poor health outcomes. Black women are, in general, more likely to receive lower quality care, and thus experience more complications during pregnancy, childbirth, and the postpartum period than white women (Novoa, 2018, *Black Women's Maternal Health*, 2020). Recently, researchers examining inequity and mistreatment during pregnancy and childbirth discovered that 27.2% of women of color with low SES reported mistreatment versus 18.7% of white women with low SES (Howell, 2018, Vedam, 2019). Moreover, provider knowledge of risk factors and warning signs, implicit bias, and cultural competence contribute to poor maternal care (Howell, 2018, Jain, 2017). The existence of provider bias in medical practice is exemplified by another study which assessed disparities in triaging patients. Triage scores are used in the emergency room to determine if a patient needs to be admitted to the hospital or receive complex tests. Results from the analysis indicated that Black, Hispanic, and Native American pediatric patients received lower acuity triage scores than whites, when presenting with subjective complaints such as shortness of breath, fever, and abdominal pain (*Disparities*, 2020). Additionally, others have uncovered differences in the likelihood of providers to prescribe pain medication; a subjective factor, based on racial or socioeconomic factors (Campbell, et al., 2012,Tait, et al., 2014). Correspondingly, there is an existing need to investigate how implicit bias influences diagnosis, treatment decisions and levels of care(Chapman et al., 2013, FitzGerald et al. 2017).

It is also worth noting that health behaviors before, during, and after pregnancy are influenced by social and environmental factors (Maternal, 2020). Access to health insurance, green space, health facilities and personnel, are notable factors that affect health behaviors of pregnant women (Howell, 2018, Novoa, 2018, Laraia et al., 2007). **Racism, not race,** contributes significantly to structural barriers in accessing health services and threatens the well-being of women of color (Novoa, 2018). Hence, it has been hypothesized that systemic racism; an intermediary factor, embedded in policies and norms forms the foundation of the racial disparities in maternal health (Novoa, 2018).

Due to historical residential segregation and redlining practices, Black women are exposed to neighborhoods with high rates of poverty, pollution, violence, and limited access to reproductive health services (Jain, 2017). This further exacerbates racial disparities in maternal morbidity and mortality and indicates that institutional determinants of maternal health operate through intermediary factors which generate, produce, and maintain adverse health outcomes for women of color (Hamal, 2020). Furthermore, research shows that even after controlling for health status and low socioeconomic status, Black women remain at increased risk for adverse pregnancy outcomes (Novoa, 2018).

Correspondingly, the weathering hypothesis posits that recurrent exposure to stressors accumulates and increases an individual's susceptibility to disease (Geronimus et al. 2006). It states that Black women experience gender and racial discrimination over their life span which leads to chronic stress and elucidates the racial inequities in maternal health. Evidence for the weathering hypothesis lies in the finding that teenage Black mothers have better maternal outcomes than Black women in their twenties, despite the association of teenage pregnancy with poor birth outcomes(Geronimus, 2011). This lends to the notion that chronic stress adversely affects Black women's health. Likewise, Black women who migrated to the U.S as adults have better birth outcomes than native-born Black women; they do not experience the undue stress that results from exposure to racial discrimination during the sensitive developmental period (Novoa, 2018).

The compounding factors of racial disparities leads to the loss of economic opportunities and continuous cycles of poverty in families and communities where mothers are dying giving birth(Miller & Belizán, 2015). As a result, having an advocate in the delivery room, such as a doula can help Black mothers overcome racial disparities as well as a fragmented healthcare system that continuously devalues pregnant Black women (Abbyad & Robertson, 2020). Doulas help provide continuous support to a mother before, after, and during a pregnancy by ensuring the mother's needs are met. Furthermore, research shows that mothers with doula support have positive birth outcomes and experience less anxiety and discomfort (Kozhimannil et al. 2016). Thus, the presence of doulas can help improve Black maternal health by providing mentally, emotionally, physically, and spiritually support to mothers.

Expanding Medicaid for pregnant women one year postpartum would allow mothers access to critical care they currently do not have post-labor. In some US states, a new mother loses Medicaid coverage after 60 days postpartum causing lower income women to no longer have the

resources and physician contacts they need (*House Energy, 2020).* The year after birth is critical for both mother and child, as it has been shown that more than 70% of complications occur during this period, some of which transpire to be fatal. Of the fatalities, 60% were preventable (*Ocomm*, 2019). The Maximizing Outcomes for Moms through Medicaid Improvement and Enhancement of Services (MOMMIES) Act (S. 1343) intends to increase coverage after a year postpartum and should be considered in order to expand coverage for new mothers (*Ocomm*, 2019, Booker, 2019). Implementing the MOMMIES Act would allow mothers immediate access to their practitioners and give them free of mind from the limitations and fear of having no healthcare. Another solution towards the prevention and hopeful elimination of maternal and infant mortality is the federal government could urge the Centers for Medicare and Medicaid Services' Center for Medicare and Medicaid Innovation to develop additional alternative payment models which would improve the quality of clinical care for pregnant women and new mothers (*AAMC Responds*, 2020). Increasing access to coverage through Medicaid would give mothers from rural areas and minority women more resources to prevent maternal mortality, especially since 50% of all births are from mothers who are enrolled in Medicaid nationally (*Ocomm*, 2019).

Addressing care shortages in rural communities can be supplemented through various alternative, virtual programs including the expansion of telehealth models, improved broadband access, and dedicating resources towards a centralized pipeline of physician communication which would allow for rural and lower income mothers to have a variety of access to health care and communication with their caregivers and specialists(*AAMC Submits Comments to CMS,* 2020). Non-specialized care programs exist in some communities, such as Project ECHO (Extension for Community Healthcare Outcomes) which allows mothers and parents the opportunity to connect with specialists and facilitates dialogue between OB/GYNs and primary care providers in order to help familiarize uninformed pregnant patients (*Ocomm*, 2019).

Constitutional and legal obligations exist that may help prevent pregnancy-related/associated deaths for all women in the U.S., and eliminate racial disparities in maternal health outcomes and pregnancy-related/associated deaths of women in the U.S. The most promising is with Section 1557 in the Patient Protection and Affordable Care Act. Section 1557 is the nondiscrimination provision of the Affordable Care Act (ACA) which prohibits discrimination on the basis of race, color, national origin, sex, age, or disability in certain health programs or activities including denying or segregating recipients of federal financial assistance based on their race, color, or national origin (Congress, 2020) It is important to note though that these rights are being attacked by the Trump administration, current administration has finalized Statutory Cite: 42 USC § 18116 which amends the liberal interpretation of section 1557 initiated by the Obama Administration that enhanced civil rights protections (Congress, 2020).With this finalization, the diminished protections for vulnerable populations is especially heightened due to insurance limitations and reductions on enforcement alternatives for people who suffer discrimination. In addition to the Affordable Care Act, Title VII of the Civil Rights Act of 1964 protects people of every race, color, or national origin from discrimination in programs and

activities that receive federal financial assistance from HHS. In 1978, pregnancy discrimination was amended to this legislature prohibiting "sex discrimination on the basis of pregnancy" (US EEOC) (Congress, 2020). The House of Representatives in September 2020 passed the Pregnant Workers Fairness Act (PWFA – H.R. 2694), an additional bill to Title VII's Protections on the basis on pregnancy discrimination which outlines unlawful employment practices on the basis of accommodating, working, and hiring pregnant women having consequential procedures and practices if violated or fail to make reasonable accommodations to known limitations of such employees unless the accommodation would impose an undue hardship on an entity's business operation(Congress, 2020).

These laws protect all women in the U.S. from negative pregnancy-related/associated health outcomes and pregnancy-related/associated deaths, specifically with racial disparities in maternal health outcomes and pregnancy-related/associated deaths. Black women and other women of color are disproportionately impacted by racial disparities and inequities in maternal health outcomes. With racial discrimination and pregnancy discrimination prohibited under both Title VII and Section 1557 of the ACA, these laws protect all women from negative pregnancy-related/associated health outcomes advancing health equity and reducing disparities in health care (Congress, 2020). Though these civil rights laws exist, they are insufficient in the lens of addressing and potentially eradicating racial disparities affecting women of color. Title VI of the Civil Rights Act of 1964 does not currently have a uniform enforcement of consequences in state and local governments when there are violations. Additionally, action is only taken based on individual complaints which puts the focus on women of color to affirmatively seek a judicial remedy disadvantaging these populations who are already disproportionately impacted by racial disparities in the first place(Congress, 2020).

The most crucial step in having primary care providers and physicians participating in dialogue with patients is that there needs to be a sustainable employment of physicians in the first place, especially increasing specialties in maternal child health as well as obstetrics and gynecology. In the next 12 years, the U.S. is projected to experience a physician shortage of between 46,900 and 121,900 physicians. These shortages of medical staff and access already exist in some regions of the country, and this gap will increase tenfold by 2032. A possible solution could be to increase the number of applicable teaching hospitals that highlight cultural competence training which would in turn be able to train more physicians expanding healthcare access for vulnerable populations through the increase of Medicare-supported graduate medical education (GME) positions (*Ocomm*, 2019). Passing the bipartisan Resident Physician Shortage Reduction Act of 2019 (S. 348) would responsibly and gradually ease the cap on Medicare's support for physician training by adding 3,000 new residency positions a year for five years. This legislation would produce approximately 3,750 new physicians annually when fully implemented (*Ocomm*, 2019). Passing the Resident Physician Shortage Reduction Act of 2019 (S. 348) would increase the number of physicians able to treat pregnant and postpartum women allowing for prevention in maternal mortality pre, during, and post-pregnancy (*AAMC Responds*, 2020, Menendez, 2019).

Additionally, the examination and implementation of evidence-based quality improvement toolkits developed by the California Maternal Quality Care Collaborative could lead to improvements in maternal health nationally (*AAMC Submits Comments to CMS,* 2020). Patient safety bundles created by the Council on Patient Safety in Women's Health Care would help physicians and practitioners be better equipped in maternal mortality risk factors and disparities which would include lessons and guidance on surrounding obstetric hemorrhages, maternal mental health, and severe hypertension during pregnancy (*Ocomm,* 2019). Such solutions being employed to current health models would benefit the lives of millions belonging to vulnerable populations.

A **possible solution** to the prevalent maternal mortality in the US could be investing in practical and community based interventions that would build evidence for opportunities to address patient and societal level risk factors surrounding maternal mortality. Funding opportunities to build evidence-based programs for practical and community-led efforts would address patient-level social factors related to maternal mortality. Additionally, increasing funding for health policy research which identifies maternal mortality disparities through social and structural mechanisms would lead to policy-level interventions (*AAMC Submits Comments on NIH,* 2020).

The federal government is able to prevent pregnancy-related deaths with legislation to improve the lives of mothers and their children. One way to do so is supporting the passing of the Social Determinants Accelerator Act of 2019 (S. 2986) which hopes to specifically address social determinants of health for maternal mortality. This way, more information is known about the mothers who have lost their lives and the preventability of their deaths (*AAMC Responds,* 2020, Young, 2019). Looking closer at racial and discriminatory social determinants of health would also increase access and treatments for new mothers, especially new mothers of color. Providing culturally appropriate care with the representation of diverse health care workers would reduce maternal mortality being that the most vulnerable patients are minorities from rural areas (Taylor, 2020). Increasing funding for the Health Resources and Services Administration (HRSA)'s Title VII health professions programs would allow for more healthcare worker diversity by permitting students from underrepresented backgrounds to connect to health professionals and careers through recruitment, education, training, and mentorship opportunities. (*Ocomm*, 2019, Kuster, 2019). Through these new programs, conversations between healthcare providers would instill and expose others to new backgrounds and perspectives that would heighten their own cultural biases and awareness benefiting future patients and their health outcomes (*Ocomm*, 2019).

Advances in community health programs and improvements could be applicable through the Clinical and Translational Science Awards to effectively translate research advances. Partnering with community-based stakeholders to co-develop programs and policies that address systemic issues like racism, discrimination, sexism, and classism which all have adverse effects on maternal health outcomes, will require grants and funding, but it is the first step of many to eradicate discrimination and implicit bias complications which still maternal mortality in the US especially (*AAMC Submits Comments to CMS,* 2020).

It is inconceivable that the United States spends 17.8% of the GDP on healthcare, which is nearly double the average amount of other high-income countries (Health, 2020). The US ranked lower than most developed countries in maternal health falling behind consistently(Health, 2020). We must allocate more funds into maternal health in order to reduce maternal mortality and morbidity in the United States. This is a pressing issue that requires immediate attention to mitigate the racial disparities that are prevalent in the healthcare system and contributing to poor maternal health outcomes. **To decrease the alarming rates of maternal mortality we must commit to taking each of these steps**: 1) Invest in Doula care to improve health outcomes, 2) Implement a standardized data-collection system on maternal and infant deaths in all states to enhance readiness, 3) Enforce cultural competence training into health practice at all levels in order to ensure that providers are better able to provide culturally appropriate care and accommodate for the unique needs of their patients, 4) Increase access to maternal health resources through the expansion of Medicaid one year postpartum and number of specialties in obstetrics and gynecology, and 5) Increase the use of and expand access to digital tools such as virtual programing to increase efficiency and access to maternal health

Adhering to each step will help us accurately identify and address the causes of disparities in maternal mortality rates, which will in turn help to improve pregnancy-related outcomes because of the enhanced readiness of providers. These steps will provide peripartum racial/ethnic disparity education including focusing on these disparities' root causes in order to eliminate racial biases promoting anti-racist healthcare institutions (Engel, Howell, 2018). Moreover, to foster better doctor-patient relationships based on trust and mutual participation, it is imperative to increase representation of Black and Hispanic populations in medicine (*Figure 18*, 2018). Overall these recommendations help reduce comorbidities through improved community health care.

In conclusion, in light of the structural barriers seen regarding accessing care, discrimination, and micro-aggressions, African American women are often caught in a seemingly inescapable atmosphere of interpersonal and systemic racism. These environments can produce physiological stress in pregnant women of color which have detrimental effects on the health of the mother and child. While there are many complex drivers of maternal mortality, a focus on dismantling structural racism offers a concrete/promising approach towards advancing health equity and improving maternal outcomes for women of color.

I thank you for the opportunity to provide a testimony, and look forward to a timely hearing on this pressing public health issue.

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