Maternal Mortality White Paper

Overview

The United States (U.S.) is a high-income, high health care spending country with one of the highest maternal mortality rates. An average of 3.8 women die from childbirth complications every day (Davidson, 2024). Counties in the United States that have been designated as "maternity care deserts" are associated with significantly higher rates of adverse maternal and pregnancy-related outcomes, including preterm births and maternal death. It is important to understand and ameliorate the causes of significant maternal morbidity and mortality in our state, country, and the world.

Maternity Care Deserts

Regions that are identified as maternity care deserts are areas lacking a hospital or birth center offering obstetric care and a lack of maternity care providers (Stoneburner, 2024). The literature also notes that, even when care may be available, the care quality in Black-serving hospitals, providers' implicit bias, perceived racial discrimination, differential obstetric procedures, chronic conditions, and the causes and timing of maternal deaths are also factors influencing mortality rates (Davidson, 2024).

Maternal Deaths and Morbidity

Maternal death is defined as "the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes'" (WHO, 2009). According to the World Health Organization (2023), the major complications of pregnancy and childbirth that account for around 75% of all maternal deaths world-wide are:

- Severe bleeding which can kill a healthy woman within hours of delivery if unattended
- Infections after childbirth, which are left untreated
- Pre-eclampsia and eclampsia (high blood pressure during pregnancy)
- Complications from delivery
- Unsafe abortion

As seen above, most maternal deaths and complications are preventable. The two key elements to reducing maternal deaths are basic hygiene and the attendance of a health care professional at the birth (Roser 2013). Additionally, severe morbidity during and immediately following pregnancy increases a woman's overall risk of mortality beyond the postpartum period.

Current National Environment

"During the past 3 decades, as the U.S. maternal mortality rate has been increasing, the overall global rate of maternal mortality has declined dramatically. Other high-income countries have maternal mortality rates one third to one half of the U.S. rate" (Davidson, 2024). In addition to the overall mortality rate increasing, the disparity between groups has also increased. In 2022, the maternal mortality rate in the United States was reported (in number of deaths per 100,000 live births) as:

- Black women (49.5 deaths)
- White women (19.0 deaths)
- Hispanic women (16.9 deaths)
- Asian women (13.2 deaths)
- Women younger that 25 (14.4 deaths)
- Women aged 25-39 (21.1 deaths)
- Women aged 40 and older (87.1 deaths) (Hoyert, 2024)

For comparison, in 2015 the maternal mortality rate in the European Union was 8 deaths per 100,000 births (Roser, 2013). These inequities can be related to several social factors in place in the United States, primarily lack of paid parental leave, Medicaid pregnancy coverage limits, variable access to pre- and postpartum care and intimate partner violence (Davidson, 2024; Steele-Baser, 2024; Wallace, 2022).

Current New York State Environment

Over 35% of counties in the United States are maternity care deserts. In New York State (NYS), the counties identified as care deserts are: Hamilton, Herkimer, and Wayne (Stoneburner, 2024). One of the most acute physician shortages in rural NYS is of Ob/Gyn physicians, where there is roughly one Ob/Gyn physician for every 23,000 people. Hamilton, Herkimer, Schuyler, and Yates counties have no Ob/Gyn physicians (DiNapoli, 2025). The disparities identified above for the U.S. are consistent, proportionally, with those in NY. Overall, the New York maternal mortality rate was 22.4 deaths per 100,000 live births during 2018-2022 (March of Dimes, 2024) ranking it 20 of 45 reporting states. The 2018-2020 statewide maternal mortality ratio for black women was 55.8 deaths per 100,000 live births compared to white women at 13.2 deaths making the black to white mortality ration in NYS 4.2 to 1 (NYSDOH, 2023). Racial discrimination was a factor in 50% of these deaths. With current federal budget changes, it is anticipated that small, regional hospitals may close, causing an expansion of the number of maternity care deserts (Luthra, 2025). When compared to women living in urban areas, women living in rural areas have a 9% increased probability for severe maternal mortality and morbidity (Kozhimannil, 2019).

Argument for Implementing Full Practice Authority for Advanced Practice Nurses (Nurse Midwives, Women's Health Nurse Practitioners, Women's Health Clinical Nurse Specialists, Certified Registered Nurse Anesthetists)

Imbalanced geographic distribution of health care providers, in this case maternity care providers, has created these care deserts. The imbalance is most noticeable in rural and low-resourced settings where there are fewer Nurse Practitioners serving more patients (DiNapoli, 2025). Qualified, well-educated nurses can provide care before, during, and after childbirth in these underserved areas improving care outcomes. The integration of midwives has been shown to decrease c-section rates and improve neonatal outcomes (Vedam, 2018). Telehealth and shared mobile units can also help to supplement care in these areas (Atwani, 2025). "Given the increased reliance on Nurse Practitioners for primary care, and the expansion of Nurse Practitioner's scope of practice to allow them to practice medicine without the oversight of a physician, there may be an opportunity to establish educational pipelines to upskill across the nursing spectrum" (DiNapoli, 2025).

"Full practice authority and equitable reimbursement for all advanced practice nurses increases access to perinatal care, enhances childbearing women's options for pregnancy and birth care, and promotes culturally congruent care with a variety of perinatal providers. Optimizing perinatal nurses and APRNs' roles would also enhance access to and quality of care in perinatal care deserts. Furthermore, by promoting supportive practice environments with unfettered practice laws, culturally congruent care models can flourish and mitigate long-standing disparities in perinatal outcomes" (Bradford, 2025).

Recommendations

Davidson (2024) reports on a National Institute of Health (NIH) consensus panel report that lays out a maternal morbidity and mortality prevention moonshot, which includes resources, commitment, and a focus on equity in the areas of prevention, public health, research, and health care access and quality to reduce maternal death and equitably promote maternal health. Educational pipelines should be created to provide more opportunities to the existing and expanding healthcare workforce to develop their skills, in parallel with efforts to attract and retain more healthcare professionals to underserved areas (DiNapoli, 2025). Full practice authority, improved insurance coverage, and supportive work environments can improve healthcare workforce retention.

Resources

Atwani, R., Robbins, L., Saade, G., Kawakita, T. Association of Maternity Care Deserts with Maternal and Pregnancy-Related Mortality. *Obstetrics & Gynecology* 146(2):p 181-188, August 2025. | DOI: 10.1097/AOG.0000000000005976

Bradford, Heather M. et al. (2025). Growth and diversification of the perinatal nursing workforce: An American Academy of Nursing consensus paper. *Nursing Outlook 73(*3): 102393

Davidson KW, Terry MB, Braveman P, Reis PJ, Timmermans S, Epling JW Jr. Maternal Mortality: A National Institutes of Health Pathways to Prevention Panel Report. Obstet Gynecol. 2024 Mar 1;143(3):e78-e85. doi: 10.1097/AOG.0000000000005488. Epub 2023 Dec 21. PMID: 38128099; PMCID: PMC10863655.

DiNapoli, T.P. (2025, Aug.). *The Doctor is … Out: Shortages of Health Professionals in Rural Areas.* New York State Office of the Comptroller.

Hoyert, D.L. (2024). Maternal Mortality Rates in the United States, 2022. National Center for Health Statistics. https://www.cdc.gov/nchs/data/hestat/maternal-mortality/2022/maternal-mortality-rates-2022.htm

Kozhimannil KB, Interrante JD, Henning-Smith C, Admon LK. Rural-Urban Differences In Severe Maternal Morbidity And Mortality In The US, 2007-15. Health Aff (Millwood). 2019 Dec;38(12):2077-2085. doi: 10.1377/hlthaff.2019.00805. PMID: 31794322.

Luthra, S., Rodriguez, B. (2025, Aug 11). Pregnant people in rural parts of the country are running out of places to give birth. *Daily Journal.* *https://www.djournal.com/mississippi-today/pregnant-people-in-rural-parts-of-the-country-are-running-out-of-places-to-give/article_cc4fdbdc-9b4c-47d3-b7f3-72f8346e7dfe.html*

March of Dimes. (2024). *Mortality and Morbidity Data for New York.* https://www.marchofdimes.org/peristats/data?reg=99&top=6&stop=370&lev=1&slev=4&obj=35&sreg=36

New York State Department of Health (2023). *New York State Report on Pregnancy-Associated Deaths in 2018-2020.* *https://www.health.ny.gov/community/adults/women/maternal_mortality/docs/maternal_mortality_review_2018-2020.pdf*

New York State Department of Health. (2025). *Maternal Mortality.* https://www.health.ny.gov/community/adults/women/maternal_mortality/#:~:text=Public%20Health%20Law%20Section%202509,GOALS

Roser M., Ritchie, H. (2013) - "Maternal Mortality" Published online at OurWorldinData.org. https://ourworldindata.org/maternal-mortality

Steele-Baser M, Brown AL, D'Angelo DV, et al. (2024). Intimate Partner Violence and Pregnancy and Infant Health Outcomes — Pregnancy Risk Assessment Monitoring System, Nine U.S. Jurisdictions, 2016–2022. MMWR Morb Mortal Wkly Rep 2024;73:1093–1098. DOI: http://dx.doi.org/10.15585/mmwr.mm7348a1

Stoneburner A, Lucas R, Fontenot J, Brigance C, Jones E, DeMaria AL. Nowhere to Go: Maternity Care Deserts Across the US. (Report No 4). March of Dimes. 2024. https://www.marchofdimes.org/maternity-care-deserts-report

Vedam S, Stoll K, MacDorman M, Declercq E, Cramer R, Cheyney M, Fisher T, Butt E, Yang YT, Powell Kennedy H. (2018).Mapping integration of midwives across the United States: Impact on access, equity, and outcomes. *PLoS One13*(2):e0192523. doi: 10.1371/journal.pone.0192523. PMID: 29466389; PMCID: PMC5821332.

Wallace, ME, Friar, N., Herwehe, J., Theall, KP. (2020). Violence as a direct cause of and indirect contributor to maternal death. *Journal of Women's Health 29*(8):1032-1038. https://pmc.ncbi.nlm.nih.gov/articles/PMC7462032/

World Health Organization (WHO). (2009). International statistical classification of diseases and related health problems, 10th revision. 2008 ed.

World Health Organization (WHO). (2025, April 7). *Maternal Mortality.* https://www.who.int/news-room/fact-sheets/detail/maternal-mortality