



## Maternal Mortality Rate in Northern Virginia

Riya Cherukuri

### ABSTRACT

*This study examines maternal mortality in Virginia, with a specific focus on the insights of physicians in Northern Virginia. Through semi-structured interviews, I have explored the experiences, challenges, and recommendations of physicians for enhancing maternal healthcare. Key areas of investigation include the identification of high-risk pregnancies, opportunities for hospital-level improvements, and the influence of socioeconomic and cultural factors on maternal health initiatives.*

*The research highlights significant barriers to care, encompassing limited access to services, complexities in insurance and Medicaid coverage, and a fragmented system of coordinated care throughout pregnancy and postpartum. While Virginia has made strides by expanding Medicaid to cover postpartum care for up to a year and supporting midwife and doula services, crucial gaps persist. These include the absence of mandated mental health screenings during pregnancy and a lack of required paid parental leave.*

*Ultimately, this paper aims to provide policymakers and healthcare administrators with actionable recommendations. These recommendations aim to enhance healthcare access, address underlying socioeconomic disparities, improve healthcare system coordination, and ensure robust postpartum support, ultimately working to reduce maternal mortality rates for all pregnant individuals.*

### 1. Introduction

Maternal mortality remains a critical global health issue despite advancements in technology and policy. Globally, maternal deaths decreased by approximately 40% between 2000 and 2023. However, in 2023 alone, 700 women died every day from preventable causes related to pregnancy and childbirth (World Health Organization [WHO], 2025).

The United States faces a significantly higher maternal mortality rate compared to that of other high-income nations. In 2022, the U.S. recorded 22 maternal deaths per 100,000 live births, a rate two to three times greater than in many developed countries. Nearly 70% of these deaths occur postpartum, and over 80% are preventable (Gunja, Gumas, Masitha, & Zephyrin, 2024). Within the U.S., maternal mortality disproportionately affects vulnerable and marginalized populations, including most racial and ethnic minority groups, individuals with low socioeconomic status, and those with limited access to care. For instance, Black women in the U.S. are significantly more likely to die during pregnancy or from childbirth complications.

In Virginia, the maternal mortality rate was notably high at 32 per 100,000 live births in 2021. Of the 64 pregnancy-associated deaths in Virginia in 2021, approximately one-third occurred 43 to 365 days postpartum, aligning with national trends (March of Dimes, n.d.). Similar to the national



picture, Virginia's maternal mortality rates are heavily influenced by age, race, and geographic disparities such as urban vs rural residence, with causes of death mirroring those seen nationwide. Common causes of maternal mortality include postpartum hemorrhage, pre-eclampsia, infections, and complications.

Northern Virginia, with its diverse communities and healthcare systems, offers a valuable perspective for understanding maternal mortality trends across the state. In 2021, Northern Virginia recorded the lowest number of maternal deaths in the state, with nine deaths accounting for 14% of Virginia's total of 64 maternal deaths for the year (Virginia Maternal Mortality Review Team, 2024).

My central research question is: What role do physicians in Northern Virginia currently play in addressing maternal mortality, and what changes to maternal healthcare practices do they recommend to reduce mortality rates among at-risk pregnant individuals?

This paper will analyze the critical issue of maternal mortality in Virginia, highlighting the perspectives of physicians in Northern Virginia. Semi-structured interviews are used to gather firsthand accounts of their experiences, the challenges they face, and their recommendations for improving maternal healthcare. These interviews are anonymous to preserve the privacy of the participating physicians.

While existing research explores the causes of maternal mortality and potential solutions, many programs lack a comprehensive guide for healthcare organizations looking to implement new strategies initiatives. This study aims to investigate how high-risk pregnancies are identified, areas for improvement within hospitals to reduce maternal mortality rates, and the influence of socioeconomic and cultural factors on the effectiveness of maternal health programs.

By analyzing these interviews in conjunction with relevant research, this paper aims to compile actionable recommendations that enhance maternal healthcare practices and ultimately reduce maternal mortality rates. Significant strides are still needed to achieve the 2030 Sustainable Development Goal of 70 maternal deaths per 100,000 live births set by the World Health Organization (WHO, 2025). We anticipate gaining a deep understanding of physicians' perspectives on this vital issue, which will offer insights into how these healthcare providers collaborate with colleagues, engage with communities, and address broader issues related to healthcare access. The findings will be invaluable for policymakers, healthcare administrators, and future healthcare professionals dedicated to improving outcomes for all pregnant individuals.

## **2. Key Considerations**

Maternal mortality is a long-standing concern in the United States, with records tracing back to the 19th century. Before the advent of modern medicine in the 1930s and 1940s, marked by the introduction of antiseptic practices, antibiotics, and improved obstetric care, maternal deaths were frequent due to infections, hemorrhages, and childbirth complications. However, disparities in maternal health remain due to systemic issues such as socioeconomic status, racial inequities, and geographical differences (Centers for Disease Control and Prevention [CDC], 1999).



A crucial point in U.S. maternal healthcare history was the enactment of the Sheppard-Towner Maternity and Infancy Protection Act in 1921. This act offered federal funding for maternal and infant health services. Although later repealed, it set the stage for policies such as Medicaid, which expanded access to prenatal and maternal healthcare for low-income individuals. The mid-20th century witnessed a shift towards hospital births and technological advancements that further reduced maternal mortality rates (EBSCO Information Services, n.d.). By the 1980s, however, rates in the U.S. had plateaued and began to increase in the 21st century, driven by widening gaps in healthcare access and the prevalence of chronic health conditions among pregnant individuals (Girardi, Longo, & Bremer, 2023).

In Virginia, historical maternal mortality data mirror these trends with overall improvement over time, yet significant disparities remain. While overall rates decreased in the mid-20th century with advancements in obstetric care, recent data raise concerns about inequalities related to race, income, and geographic location. For example, Black women in Virginia experience significantly higher maternal mortality rates than white women, reflecting national patterns of racial health inequities. Rural areas also face elevated maternal mortality rates due to limited access to specialized maternal healthcare services (Virginia Maternal Mortality Review Team, 2024). Despite rapid progress in medical technology and protocols, equity in maternal health remains incomplete. This may stem from systemic barriers related to insurance, cultural or language differences, racial disparities, citizenship status, access to care, and education. Additionally, like in other specialties, obstetric physicians face challenges in providing optimal care due to time constraints, resource limitations, or a lack of collaboration.

This analysis does not explore racial disparities, the prevalence of chronic conditions across different racial groups, or the link between race and specific chronic conditions. Additionally, it does not investigate unplanned pregnancies or the overall health of the child-bearing population. The analysis only considers socioeconomic factors when they directly affect access to care and does not extensively examine the influence of education or other broader determinants of health.

### **3. Methodology**

The goal of this research paper is to examine the role of physicians in Northern Virginia and identify areas for improvement in maternal healthcare practices to reduce maternal mortality rates. To accomplish this, I conducted two semi-structured interviews with physicians practicing in the region and reviewed recent original research published in English within the last five years to ensure relevance sensitivity. One of the interviewed physicians is an OB/GYN who supports pregnant individuals throughout their journey and sees cases ranging from low-risk to complex pregnancies. Working at a local hospital, she cares for a diverse patient population. She actively helps them navigate challenges related to their socioeconomic circumstances, including issues with access to insurance, transportation, and health literacy. The second physician I interviewed is a neonatologist at a local hospital. I selected her for her extensive experience with critically ill infants in intensive care. Her unique perspective on the postpartum phase is particularly valuable, especially since many of her patients are born from high-risk pregnancies.

The IRB committee at Rock Ridge High School granted ethical approval for this research. Due to the possibility of sensitive topics arising during the interview, interviews have been anonymized to protect the identities of the research participants.

The overarching aim of these interviews has been to understand the viewpoints of gynecologists and physicians in Northern Virginia regarding maternal mortality. To explore this, interviews encompassed questions on their professional experiences and perspectives on maternal mortality rates, current screening protocols for identifying at-risk pregnancies, existing measures for managing high-risk pregnancies, and pre-existing health conditions. I also investigated barriers hindering effective maternal healthcare practices within the region, the extent of collaboration with other healthcare providers and specialists, and opportunities for enhanced training, interventions, and policy-level support. Finally, the interviews explored systemic challenges, including access to care and insurance coverage, as well as the importance of community engagement and education in enhancing maternal health outcomes.

#### 4. Results

Interviews with local doctors indicate that Northern Virginia currently enjoys a relatively low maternal mortality rate compared to other rural parts of the state and the country. This positive trend is primarily attributed to the population's higher educational levels, improved access to healthcare, and increased overall awareness of managing health during and after pregnancy. As one local doctor noted, "I think the maternal mortality rate in Northern Virginia is pretty low compared to a more rural based setting. I am not sure of the exact number though" (Interview 2, April 16, 2025). Another physician added, "There are some top care centers in Virginia and the access is pretty quick. This is much better than other states and cities where they don't have territory care centers. So, I would assume the maternal mortality rate is decent" (Interview 1, April 5, 2025).

Notably, while the physicians were well-versed in the health and socioeconomic challenges confronting high-risk patients, they lacked specific knowledge regarding regional maternal mortality rates and their comparative standing in relation to state, national, or international statistics.

The doctors interviewed expressed strong satisfaction with the local standard practices for identifying high-risk pregnancies. They particularly praised the thorough intake questionnaire and the robust measures in place to monitor and address any complications during pregnancy visits. An doctor explained, "At OB intake, a whole checklist of questions to identify high risk pregnancies are asked. Throughout the pregnancy every prenatal check up that the patient comes to, we do various measurements, imaging, urine and blood tests to identify patients who are at a high risk" (Interview 2, April 16, 2025). Another doctor confirmed, "So when the expecting moms go to the first gynecologist visit, all basic tests are conducted, including blood pressure, vitals and risk factors are determined. Depending on the risk factors, they are seen more frequently" (Interview 1, April 5, 2025).

Beyond in-clinic or hospital monitoring, high-risk pregnancies often require specialist involvement. This depends on factors like risk assessment, family history, and symptoms. Coordinating care with these specialists can be complex, as it requires the patient's willingness

to attend multiple appointments and diligently follow up on recommended precautions. As one doctor elaborated, "We watch them more closely, we ask them to come to more frequent prenatal care visits, we send them to high risk OB specialists and we see them as well. There are two sets of doctors that are seeing them. We are giving them more instructions, for example we give them a blood measure monitor so they can measure at home, we educate them on what blood pressure is abnormal, what blood sugar is abnormal. We have a protocol system for high risk pregnancies and we follow them" (Interview 2, April 16, 2025). Another physician stated, "The patients are checked more frequently and sent to relevant specialists based on the need and they are enrolled in relevant programs to provide support through pregnancy and delivery" (Interview 1, April 5, 2025).

Reliable transportation is also a persistent issue, making it difficult for some to attend crucial prenatal and postpartum appointments. Beyond transportation, the demands of daily life often mean that prioritizing time for healthcare falls by the wayside, as women juggle work, family responsibilities, and other commitments. Even when time is available, securing appointments can be a frustrating endeavor leading to delays in care. An interviewee summed up some of these barriers: "Some people don't have actual resources, meaning they may not have a car, just to reach the clinic or hospital. In some cases, they may not have insurance, this is especially prevalent amongst immigrants and we have a good chunk of refugees that live in Northern Virginia. Some may have a language barrier and poverty is also a factor in some cases" (Interview 2, April 16, 2025).

The healthcare system itself presents its own set of challenges, particularly in terms of insufficient care coordination. This is especially concerning for women managing chronic conditions because fragmented care can lead to missed diagnoses, inadequate management of existing health issues, and ultimately, higher maternal mortality rates. When specialists aren't communicating effectively, or when there's no central point of contact for a patient's care, crucial details can fall through the cracks. As one doctor noted regarding rural settings, "You are bleeding and don't get to hospital in time, hospital does not have anesthesia, hospital does not have blood bank. These are barriers" (Interview 2, April 16, 2025). Another physician stressed the need for integration, stating, "So I do think there is a need for a bridge between maternal medicine and pediatric medicine because it is so important that they collaborate with each other and communicate more with each other" (Interview 1, April 5, 2025).

Beyond immediate access, broader socioeconomic factors exert a profound influence on maternal health outcomes. Lower incomes and unequal educational and employment opportunities, often rooted in systemic inequities, contribute to a higher prevalence of preventable health conditions among specific populations. These disparities create a vicious cycle where financial instability and limited educational attainment exacerbate existing health vulnerabilities and further impede access to quality care. One doctor lamented the limitations of current policy: "I don't think that there are any policy changes at the level of the state. Encroachment from insurance is predominant, many procedures that are recommended by the doctors are not covered by insurance and patients cannot get them at that point. Some sort of measure on what should be covered by insurance would be helpful. Federal funds do cover every pregnant patient, even without insurance. pregnancy, delivery and 6 weeks of care after



delivery are covered. So, that is fabulous and the most help that we can give" (Interview 2, April 16, 2025).

Moreover, specific policies and practices within the healthcare and broader societal systems can instill fear in women, deterring them from seeking necessary prenatal and postpartum care. This is particularly true for individuals concerned about their immigration status or those who have had interactions with the criminal justice system. The fear of deportation, legal repercussions, or separation from family can override the imperative to seek medical attention, leading to delayed or entirely foregone care (Cermack, Perritt, & Villavicencio, 2023).

A critical, yet often underserved, aspect of maternal health is the postpartum period. A significant portion of pregnancy-associated deaths occur between 43 and 365 days after pregnancy, highlighting a pressing need for intensified focus and support during this time (Gazeley et al., 2024). This emphasizes that maternal care cannot simply end a few weeks after childbirth. One physician shared an example of innovative postpartum care: "I have recently met a physician who does home health care visits rather than patients coming to the clinic. She calls it the fourth trimester because when she visits home, upon her explanation, there is so much need for a physician going to their homes. For improving maternal mortality rate you can visit the family and find out how they really are. And I don't think it's enough when they come to the clinic that half an hour is enough for you to know the family of course, that gives you to check the vitals, the ultrasound, to check for everything else. But I think it will most likely help when a social worker or physician who's good with pregnancy and babies just to visit and see how things are, how the nutrition is if there is any physical domestic abuse and also their drinking and drug usage" (Interview 1, April 5, 2025).

Greater emphasis on mental health and trauma screenings during the postpartum period is urgently needed. The physical and emotional changes following childbirth, coupled with existing stressors, can significantly impact a mother's mental well-being. Early detection and intervention for conditions like postpartum depression, anxiety, or post-traumatic stress disorder are essential for preventing tragic outcomes. Alongside screenings, improved care and services specifically tailored to the postpartum period are crucial. As one physician stated, "Postpartum support should include continued access to medical professionals, lactation support, nutritional guidance, and community resources that can help new mothers navigate the challenges of early parenthood and prioritize their own health" (Interview 1, April 5, 2025).

## **5. Analysis and Discussion**

Addressing the complex challenge of maternal mortality in Northern Virginia requires a comprehensive and collaborative strategy. Based on insights from physician interviews and a rigorous review of existing research, key areas for intervention have been identified to lower the maternal mortality rate significantly. These critical factors include improving access to healthcare and enhancing proximity to hospitals, as well as examining socioeconomic factors related to the impact of insurance and Medicaid. Additionally, other enhancements, such as strengthening connected care throughout pregnancy and prioritizing robust support for all postpartum women, have been considered.

### ***Proximity to hospitals***

Access to healthcare facilities, particularly hospitals, and a patient's willingness to make frequent prenatal visits are crucial factors impacting maternal mortality rates. When pregnant individuals have to travel farther for maternity care, they face a higher risk of maternal morbidity and adverse infant outcomes, including stillbirth and NICU admission (March of Dimes, n.d.).

Longer travel distances also create financial strain for families and increase prenatal stress and anxiety. The distance to care is a critical factor throughout pregnancy, during childbirth, and in emergencies. Unfortunately, nationwide closures of birthing hospitals, especially in rural areas, have worsened this problem by increasing travel time and distance to care. This leads to significant disparities in outcomes between rural and urban areas where hospitals are more readily available. We must consider a wider array of social and environmental factors to identify areas lacking essential maternal health services accurately, often referred to as "maternal health deserts" (March of Dimes, 2024).

Since 2012, Virginia has experienced a 25% decline in birthing hospitals, resulting in increased travel distances for many residents. This correlates with higher rates of severe maternal morbidity and preterm births (Isaacs, 2024). This decline has not only strained existing facilities but has also severely limited options for Virginians seeking maternal and infant healthcare.

In Virginia, 31 percent of counties are designated as maternity care deserts, compared to 33 percent of counties nationwide. In Virginia, women travel an average of 11 miles and 18 minutes to their nearest birthing hospital. Women living in counties with the highest travel times (in the top 20 percent) could travel an average of 66 miles and 85 minutes to reach their nearest birthing hospital. Under normal traffic conditions, 1% of women live over 60 minutes from their nearest birthing hospital, compared to 1% in the U.S. 15% of women in Virginia had no birthing hospital within 30 minutes. In rural areas across Virginia, 59% of women live over 30 minutes from a birthing hospital compared to 13% of women living in urban areas. Women living in maternity care deserts traveled 3 times farther than women living in areas with full access to maternity care in Virginia (March of Dimes, n.d.).

The interviews with physicians indicated that distance to hospitals wasn't a primary concern in Northern Virginia, pregnant individuals there faced other significant hurdles. These included a lack of transportation and difficulty scheduling appointments. Unfortunately, due to these obstacles, many pregnant women didn't begin their prenatal care until five or six months into their pregnancy. This delay can be critically problematic, especially for those with high-risk pregnancies, as early intervention is often crucial.

The Virginia Neonatal Perinatal Collaborative (VNPC) is actively working to enhance care coordination through the Centers for Disease Control and Prevention (CDC) LOCATeSM program. This initiative assesses hospital capacity and assigns maternal and infant care levels, pinpointing regions that may lack the resources for high-risk patients. The ultimate goal is to equip Virginia hospitals with the knowledge to improve their capabilities and coordinate with nearby facilities, ensuring that all pregnant and postpartum individuals and infants receive timely and appropriate care, free from geographical or logistical barriers (Isaacs, 2024).

Expanding telehealth options for prenatal and postpartum care in Northern Virginia can significantly reduce common barriers, such as transportation, childcare, and time constraints.

Virtual care proves highly effective for routine follow-up appointments, mental health support, lactation consultations, and medication management. By integrating telehealth more broadly, Northern Virginia can dramatically improve convenience and access, particularly for individuals in underserved areas or those with demanding schedules. This approach aligns with recommendations from Virginia's strategic plan for maternal mortality reduction (Joint Commission on Health Care, 2021).

### ***Role of insurance***

A recent study sheds light on a critical, yet often overlooked, obstacle to maternal health: the persistent challenge of insurance coverage denial. Conducted through an online survey in early 2022, the research established a clear link between being denied insurance coverage and experiencing significant delays in receiving care. These delays were particularly acute in the early postpartum period, a time when new mothers are most vulnerable. The study also revealed that insurance-related issues exacerbated existing barriers, including transportation difficulties, rural residency, time constraints, and financial limitations. While some challenges, like transportation, lessened over time, financial constraints remained a consistent and major factor in delayed care throughout the maternal journey (Lee et al., 2023).

Financial constraints stemming from insurance denial show a persistent, lasting impact on delayed care throughout pregnancy and the entire postpartum period, reinforcing previous findings that financial barriers remain critical even for those with some form of insurance. Insurance denials stem from various factors, including inadequate coverage, reimbursement issues, prior authorization requirements, and a lack of understanding of insurance policies. Clear communication about policy coverage and increased awareness among healthcare professionals regarding potential insurance-based prejudice are necessary (Lee et al., 2023).

While the Affordable Care Act has improved overall insurance rates, many pregnant and postpartum individuals still struggle to access essential care due to hurdles such as exorbitant deductibles, burdensome out-of-pocket costs, or a limited network of accepting providers (Eliason, 2020).

### ***Role of Medicaid***

The 2018 Medicaid expansion in Virginia has been a vital step forward, providing coverage for prenatal care up to one year postpartum and increasing Medicaid-supported deliveries by approximately 6 (Isaacs, 2024). Our maternal and infant health workforce must be adequately prepared to serve this growing Medicaid population. Data indicate that ratios of Medicaid-enrolled professionals to births are generally more favorable than overall provider-to-delivery ratios, showing private insurance holders report more challenges with provider availability for prenatal care compared to Medicaid patients.

These more favorable ratios for Medicaid births suggest that there are fewer barriers to care for this population. Data from the Pregnancy Risk Assessment Monitoring System (PRAMS) support this: only 20.1% of Medicaid respondents reported difficulty getting an appointment for prenatal care, which is significantly lower than the 47.8% of privately insured respondents. Similarly, 9.7% of Medicaid respondents cited "no money/insurance" as a barrier, compared to





16.1% of privately insured individuals (Isaacs, 2024). However, Medicaid respondents most commonly identified lack of transportation and being too busy as primary obstacles to both prenatal and postpartum care (March of Dimes, n.d.).

### ***Coordinated care***

Poor care coordination is a significant factor in higher mortality rates, especially for women with chronic health conditions. In Virginia, a stark statistic reveals the severity of this issue: over 62% of women who died after the initial six-week postpartum period had at least one chronic condition (Maternal Care Coordination Emergency Department Care Coordination [EDCC], 2022). This highlights the urgent need for better, integrated care for these vulnerable individuals.

The interviews with physicians revealed that when healthcare professionals, including OB-GYNs, midwives, nurses, anesthesiologists, pharmacists, mental health professionals, social workers, and other specialists, communicate and work together effectively, they are better equipped to identify risk factors and early signs of complications. This collaboration leads to timely interventions, preventing situations from escalating into life-threatening emergencies. For complex cases such as severe postpartum hemorrhage, rapid coordination among nursing staff, obstetrics, anesthesia, and the blood bank is critical for patient survival. Strong collaboration fosters improved communication and mutual respect among providers. This is essential for smooth transitions of care across different settings, from prenatal appointments to labor and delivery, and throughout the entire postpartum follow-up period. Centralized patient information systems and robust teamwork are also vital in reducing medical errors, particularly those related to medication, by ensuring all providers have access to up-to-date patient information. Effective communication within the care team enables a more comprehensive understanding of a mother's medical, social, and emotional needs. This comprehensive view enables the development of individualized care plans that address all aspects of her well-being, leading to more effective and patient-centered care.

Funding and expanding programs that employ patient navigators or community health workers can significantly help pregnant and postpartum individuals navigate the often-complex healthcare system. These professionals can assist with scheduling appointments, arranging transportation, understanding insurance benefits, and connecting families with crucial social support services and community resources, acting as vital links between patients and the care they need. Encouraging healthcare systems to adopt integrated care models where mental health services, substance use disorder (SUD) treatment, and social work support are directly embedded within maternal care clinics can streamline access to critical support. This "one-stop shop" approach reduces the burden on patients to seek out separate services, ensuring a more cohesive care experience. Finally, developing clear, standardized referral pathways between different levels of care and specialties ensures seamless transitions and avoids dangerous gaps in treatment. This involves having clear protocols for when and how to refer a patient from a primary care setting to an OB-GYN, or from general maternity care to a high-risk specialist or mental health professional (EDCC, 2022).

The Virginia Maternal Mortality Review Team (MMRT) has recently emphasized coordination of care as a key area for improving maternal and infant healthcare. This focus ensures that Virginians receive the appropriate level of care tailored to their needs, particularly for high-risk

patients who may require specialized facilities. Knowing where to transfer patients appropriately is paramount to ensuring safe and effective maternal care (Shelton et al., 2025).

The Virginia Neonatal Perinatal Collaborative (VNPC) is spearheading this effort through the CDC's Levels of Care Assessment Tool (LOCATeSM) program. The first wave in 2022 involved 16 facilities, followed by 18 in the second wave in 2023. The VNPC is now working towards 100% statewide participation. Initial data revealed that many hospitals self-assessed at a higher capability level than determined by the CDC, underscoring the importance of facilities accurately understanding their resources (Isaacs, 2024). This data can catalyze collaboration among health agencies and policymakers, helping to establish clear guidelines for care coordination. It can also pinpoint regions that currently lack adequate resources or specialized staff for high-risk patients. A thorough understanding of Virginia's birthing hospital capabilities will be vital for future assessments of maternal and infant healthcare access.

### ***Post Partum Care***

The postpartum period is a critical time, as many maternal deaths happen in the months after childbirth (Dol et al., 2022). Both mothers and their infants encounter numerous challenges during this phase. Mothers often deal with their own health issues and tend to prioritize their infant's needs over their own. Postpartum depression is also a common concern.

The interviews with physicians indicated that the challenges they encountered include insufficient time off from work and the struggle to balance childcare with other responsibilities. It's also vital for new mothers to be able to schedule and attend follow-up appointments and have access to reliable transportation to healthcare facilities. They frequently encounter barriers to care, such as putting their infant's needs first, a lack of dependable transport (even with Medicaid coverage for non-emergency medical transport), and limited appointment availability outside of standard weekday hours.

A report from the Urban Institute, supported by the Robert Wood Johnson Foundation, explored how Medicaid/CHIP postpartum coverage extensions are being implemented in New Jersey, New Mexico, Ohio, South Carolina, and Virginia. This study found that even with these extensions providing 12 months of continuous coverage after pregnancy, limited communication and outreach often prevent full utilization (Allen et al., 2024).

The healthcare system also intrinsically poses significant obstacles during the postpartum period. A major problem is the lack of clear, multilingual communication from state Medicaid agencies to new mothers, providers, and other stakeholders about extended coverage and available services (Allen, Haley, Verdeflor, Dudley, & Health Policy Center, 2024).

The term "postpartum" can also cause confusion, worsened by conflicting messages from other Medicaid policy changes like "unwinding," which involves reevaluating eligibility and removing individuals who no longer qualify. Additionally, the traditional single postpartum visit is often seen as inadequate for meeting the full needs of new mothers. There is a clear need for more frequent check-ups, better preparation for the "fourth trimester" during prenatal care, and more comprehensive content within these postpartum visits (Adams, Miller, Agbenyo, Ehla, & Clinton, 2023).

## ***Virginia's Progress and Gaps in Addressing Maternal Mortality***

Virginia has implemented many recommended policies to tackle its maternal mortality crisis. The state has adopted both Medicaid expansion and extension, which greatly improve access to preventive care throughout pregnancy and up to one year postpartum. Additionally, Virginia has met key midwife policies, including those related to independent practice, pay parity, prescription authority, and licensure requirements. The state's Medicaid agency is also now reimbursing for doula care, further supporting maternal health.

However, some critical policy gaps still exist. Virginia's Medicaid program does not include mental health screening during pregnancy, an essential part of comprehensive care. Additionally, the state does not require employers to offer paid parental leave. While Virginia has a CDC-funded maternal mortality review committee that also examines fetal and infant deaths, these unresolved policy issues offer opportunities for further improvement in maternal health outcomes (March of Dimes, n.d.).

## **5. Conclusion**

Virginia's maternal mortality rate, along with the barriers to care its residents face, largely mirrors national trends. To effectively reduce this rate, key healthcare-related factors must be addressed.

This study analyzes the contributing factors to maternal mortality in Virginia, specifically through the lens of physicians in Northern Virginia. Utilizing semi-structured interviews, I explored their direct experiences, the challenges they face, and their recommendations for improving maternal healthcare. Our investigation centered on identifying high-risk pregnancies, pinpointing areas for hospital-level enhancements, and understanding the impact of socioeconomic and cultural factors on maternal health initiatives.

The research identifies significant barriers to care, such as limited access to services, the complexities of insurance and Medicaid coverage, and a fragmented system of coordinated care during pregnancy and postpartum. Although Virginia has advanced by expanding Medicaid to cover postpartum care for up to a year and supporting midwife and doula services, important gaps still exist. These include the lack of mandated mental health screenings during pregnancy and the absence of required paid parental leave.

The reduced number of birthing hospitals, especially in rural Virginia, creates "maternity care deserts." This forces women to travel significantly farther for care, increasing risks and delaying crucial prenatal interventions. Even in Northern Virginia, transportation and time constraints delay prenatal care for many. Despite improved overall insurance rates resulting from the Affordable Care Act, insurance coverage denials remain a significant barrier, causing substantial delays in care, particularly postpartum. High deductibles, out-of-pocket costs, and limited provider networks exacerbate financial strain, a consistent factor in delayed care. While Virginia's 2018 Medicaid expansion provides coverage up to one year postpartum and has increased Medicaid-supported deliveries by 6%, issues persist. Despite generally better provider-to-birth ratios for Medicaid patients compared to privately insured individuals, lack of



transportation and being too busy are common barriers for Medicaid recipients in accessing prenatal and postpartum care. Over 62% of women who died postpartum in Virginia had at least one chronic condition. Fragmented care leads to missed or delayed diagnoses and inadequate management. Effective collaboration among healthcare professionals (OB-GYNs, midwives, mental health specialists, social workers) is crucial for timely interventions, reducing medical errors, and developing holistic, patient-centered care plans. The postpartum period is critically underserved. Traditional single postpartum visits are insufficient, and there's a vital need for more frequent check-ups, comprehensive content, and better preparation for the "fourth trimester." Communication from state Medicaid agencies about extended coverage is often limited and confusing.

This research offers actionable recommendations for policymakers and healthcare administrators to enhance access, mitigate socioeconomic disparities, and enhance care coordination. These initiatives aim to improve healthcare access, address underlying socioeconomic disparities, enhance healthcare system coordination, and ensure robust postpartum support, all of which work towards reducing maternal mortality rates for all pregnant individuals.

While Virginia has advanced with Medicaid expansion and support for midwives and doulas, critical policy gaps remain, including the absence of mandated mental health screenings during pregnancy and required paid parental leave. Expanding telehealth options is highlighted as a promising strategy to reduce transportation and time barriers. Ultimately, a comprehensive, collaborative approach is essential to reduce maternal mortality rates for all pregnant individuals in Virginia.

## References

Interview 1, Personal interview. Conducted by Riya Cherukuri. April 5th 2024.

Interview 2, Personal interview. Conducted by Riya Cherukuri. April 16th 2024.

Adams, Y. J., Miller, M. L., Agbenyo, J. S., Ehla, E. E., & Clinton, G. A. (2023, July 7). Postpartum care needs assessment: Women's understanding of postpartum care, practices, barriers, and educational needs. *BMC Pregnancy and Childbirth*.  
<https://pmc.ncbi.nlm.nih.gov/articles/PMC10327352/>

Allen, E. H., Haley, J. M., Verdeflor, A., Dudley, K., & Health Policy Center. (2024). *Improving maternal health and well-being: Postpartum coverage extensions*. Urban Institute.  
[https://www.urban.org/sites/default/files/2024-12/Improving\\_Maternal\\_Health\\_and\\_Well-Being\\_through\\_MedicaidCHIP\\_Postpartum\\_Coverage\\_Extensions\\_New\\_RWJF.pdf](https://www.urban.org/sites/default/files/2024-12/Improving_Maternal_Health_and_Well-Being_through_MedicaidCHIP_Postpartum_Coverage_Extensions_New_RWJF.pdf)

Centers for Disease Control and Prevention. (1999, October 1). Achievements in public health, 1900–1999: Healthier mothers and babies. *Morbidity and Mortality Weekly Report*.  
<https://www.cdc.gov/mmwr/preview/mmwrhtml/mm4838a2.htm>

Cermack, E., Perritt, J., & Villavicencio, J. (2023, February). *Health care for immigrants*. American College of Obstetricians and Gynecologists.  
<https://www.acog.org/clinical/clinical-guidance/committee-statement/articles/2023/01/health-care-for-immigrants>

Distribution of gestational age categories: Virginia, 2023. (n.d.). *March of Dimes | PeriStats*.  
<https://www.marchofdimes.org/peristats/state-summaries/virginia?lev=1&obj=3@=99&slev=4&sreg=51&stop=55&top=3>

Dol, J., Hughes, B., Bonet, M., Dorey, R., Dorling, J., Grant, A., Langlois, E. V., Monaghan, J., Ollivier, R., Parker, R., Roos, N., Scott, H., Shin, H. D., & Curran, J. (2022, September 1). Timing of maternal mortality and severe morbidity during the postpartum period: A systematic review. *JB I Evidence Synthesis*.  
<https://pmc.ncbi.nlm.nih.gov/articles/PMC9594153/>

EBSCO Information Services. (n.d.). Sheppard-Towner Act. In *Research starters*.  
<https://www.ebsco.com/research-starters/law/sheppard-towner-act>

Eliason, E. L. (2020). Adoption of Medicaid expansion is associated with lower maternal mortality. *Women's Health Issues*, 30(3), 147–152.  
<https://doi.org/10.1016/j.whi.2020.01.005>

Ellis, L. P., Parlier-Ahmad, A. B., Scheikl, M., & Martin, C. E. (2023). An integrated care model for pregnant and postpartum individuals receiving medication for opioid use disorder.



*Journal of Addiction Medicine*, 17(2), 131–139.

<https://doi.org/10.1097/ADM.0000000000001052>

Gazeley, U., Reniers, G., Romero-Prieto, J. E., Calvert, C., Jasseh, M., Herbst, K., Khagayi, S., Obor, D., Kwaro, D., Dube, A., Dheresa, M., Kabudula, C. W., Kahn, K., Urassa, M., Nyaguara, A., Temmerman, M., Magee, L. A., von Dadelszen, P., & Filippi, V. (2024). Pregnancy-related mortality up to 1 year postpartum in sub-Saharan Africa: An analysis of verbal autopsy data from six countries. *BJOG: An International Journal of Obstetrics and Gynaecology*, 131(2), 163–174. <https://doi.org/10.1111/1471-0528.17606>

Girardi, G., Longo, M., & Bremer, A. A. (2023). Social determinants of health in pregnant individuals from underrepresented, understudied, and underreported populations in the United States. *International Journal for Equity in Health*, 22(1), 1–12. <https://doi.org/10.1186/s12939-023-01963-x>

Gunja, M., Gumas, E., Masitha, R., & Zephyrin, L. (2024, June 4). *Insights into the U.S. maternal mortality crisis: An international comparison*. Commonwealth Fund. <https://www.commonwealthfund.org/publications/issue-briefs/2024/jun/insights-us-maternal-mortality-crisis-international-comparison>

Isaacs, E. (2024). *Access to maternal healthcare in Virginia*. Virginia Navigator Policy Center. <https://govnpc.org/wp-content/uploads/2024/10/Maternal-Access-to-Care-2024.pdf>

Joint Commission on Health Care. (2021, April). *Virginia's maternal health strategic plan*. <https://jchc.virginia.gov/2.%20Virginia's%20Maternal%20Health%20Strategic%20Plan-1.pdf>

Lee, J., Howard, K. J., Leong, C., Grigsby, T. J., & Howard, J. T. (2023). Beyond being insured: Insurance coverage denial as a major barrier to accessing care during pregnancy and postpartum. *Clinical Nursing Research*, 32(8), 1092–1103. <https://doi.org/10.1177/10547738231177332>

March of Dimes. (2024). *Maternity care deserts: 2022 report*. <https://www.marchofdimes.org/peristats/reports/united-states/maternity-care-deserts>

Maternal Care Coordination Emergency Department Care Coordination (EDCC) program enhancements. (2022). [Report]. Virginia Health Information. <https://www.vhi.org/Media/flyers/2022%20EDCC%20Maternal%20Care%202022-06-30.pdf>

Shelton, K., Gormley, W., Walker-Harris, V., Rouse, M. J., Durica, A. R., Greene, A., Ollendorf, A., Uzzle, B., Bones, C., Davis, C., Romero, C., Lester, D. W., Schminkey, D., Kendall, E., Saade, G., Knight, G., Yglesias, J., Burnette, K., ... Lanni, S. M. (2025). *2024 Virginia Maternal Mortality Review Team annual report*. Virginia Department of Health. <https://www.hhr.virginia.gov/media/governorviriniagov/secretary-of-health-and-human-resources/pdf/maternal-health/2024-Virginia-Maternal-Mortality-Review-Team-Annual-Report.pdf>



---

Virginia Maternal Mortality Review Team. (2024). *RD151: Virginia Maternal Mortality Review Team annual report – 2023*. Division of Legislative Automated Systems.  
<https://rga.lis.virginia.gov/Published/2024/RD151>

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

World Health Organization. (n.d.). *SDG target 3.1: Maternal mortality*. Retrieved August 18, 2025, from  
<https://www.who.int/data/gho/data/themes/topics/sdg-target-3-1-maternal-mortality>

World Population Review. (n.d.). *Maternal mortality rate by state 2025*. Retrieved August 18, 2025, from  
<https://worldpopulationreview.com/state-rankings/maternal-mortality-rate-by-state>