SAVING MOTHERS IN AMERICA: A PROPOSAL FOR LEGISLATIVE ACTION

Nikkia Knudsen†

TABLE OF CONTENTS

---

† J.D., 2021, Syracuse University College of Law; B.S., 2013, M.H.A., 2016, The Ohio State University. I would like to thank my Note advisor, Professor Peter Bell, for his support and guidance throughout the writing process. I would also like to thank the members of *Syracuse Law Review* for their hard work and dedication to this Volume. Finally and most importantly, I would like to thank my family and friends for their unwavering love and support throughout law school.

ABSTRACT

Over the past thirty years, the United States has seen a rise in the maternal mortality ratio, positioning the United States as having the worst maternal mortality ratio in the developed world. Unfortunately, maternal mortality increases significantly amongst subpopulations, with black women three to four times more likely to die in childbirth compared to their white peers. Surprisingly, the United States also spends the most, per capita, on health care expenditures, spending about $111 billion in hospital costs for maternal care alone on an annual basis.

Congress responded to the maternal mortality crisis by unanimously passing the Preventing Maternal Deaths Act. The Act was officially signed into law on Friday, December 21, 2018, by the President of the United States. The Preventing Maternal Deaths Act aims to address the abysmal maternal mortality ratio by establishing and supporting the creation of maternal mortality review committees, maternal mortality data collection and review methods, and programming research. In order to foster state participation, Congress authorized $60 million over five years as funding for states to create maternal mortality review committees and standardize data collection around maternal mortality. Unfortunately, the Preventing Maternal Deaths Act only establishes funds for data collection. Although data collection is needed to effectively address the maternal mortality ratio, without interventions to address maternal mortality, data is just that: data. As a result, the Preventing Maternal Deaths Act is generally viewed as a catalyst—not a solution—to addressing maternal mortality, prompting additional legislative reform.

After review of the current state of maternal mortality in addition to country and state practices that have led to a decrease in the maternal mortality ratio, the need to address clinical variations and underlying biases in care become a clear foundation for policy change. Thus, the legislature should amend the Preventing Maternal Deaths Act by requiring states to establish standard clinical practices and implement interventions to address racial disparities.

INTRODUCTION

Kira Johnson, a 39-year-old businesswoman from Los Angeles, and Lauren Bloomstein, a 33-year-old nurse from New Jersey, lived in very different worlds, yet they share a harrowing experience that ties their families together—both passed away during childbirth.[1] Unfortunately, passing away during childbirth is not an isolated incident in the United States, where women are more likely to die from childbirth compared to their peers in other high-income countries.[2] Maternal mortality is even more alarming when one considers that non-Hispanic black women are three to four times more likely to die from childbirth than their white peers.[3] The large discrepancy between black women and white women persists when accounting for socioeconomic status, highlighting that implicit bias and systematic racism contribute to the disparity.[4]

Even Serena Williams, one of the best tennis players in the world, is not immune to life-threatening complications during childbirth.[5] When giving birth to her daughter, Williams described her experience with a less than responsive medical team when she tried to communicate that something was wrong.[6] After persistent requests, Williams was eventually diagnosed with blood clots while in the hospital.[7] Unfortunately for Williams, once home she experienced more complications, eventually going back into the hospital for emergency surgery.[8] Although Williams' experience is horrific, she is lucky to be alive and, sadly, not alone in her experience.[9]

Stories like those of Bloomstein, Johnson, and even Williams breathe life into the statistics around maternal mortality, illustrating the importance of addressing the issue. This note first describes the current state of maternal care in the United States, providing context and clarity to the issues at hand. Next, the first federal policy response to address the

---

1. Nina Martin, *The Last Person You'd Expect to Die in Childbirth*, NPR (May 12, 2017), https://www.npr.org/2017/05/12/527806002/focus-on-infants-during-childbirth-leaves-u-s-moms-in-danger; Elizabeth Chuck, *'An Amazing First Step': Advocates Hail Congress's Maternal Mortality Prevention Bill*, NBC NEWS (Dec. 19, 2018), https://www.nbcnews.com/news/us-news/amazing-first-step-advocates-hail-congress-s-maternal-mortality-prevention-n948951.

2. Elizabeth Kukura, *Giving Birth Under the ACA*, 94 NEB. L. REV. 799, 805 (2016).

3. *Id.* at 806.

4. Chuck, *supra* note 1.

5. Maya Salam, *For Serena Williams, Childbirth was a Harrowing Ordeal. She's Note Alone*, N.Y. TIMES (Jan. 11, 2018), https://www.nytimes.com/2018/01/11/sports/tennis/serena-williams-baby-vogue.html.

6. *Id.*

7. *Id.*

8. *Id.*

9. *Id.*

maternal mortality ratio is analyzed, focusing on shortcomings of the regulation in addressing the problem. To determine potential solutions to maternal mortality, successful practices of specific states and other nations are evaluated. Finally, the article concludes by arguing the Preventing Maternal Deaths Act should be amended, requiring states to implement clinical standards for maternal care and interventions aimed towards addressing racial disparities prevalent in maternal care.

I. THE CURRENT STATE OF MATERNAL CARE IN THE UNITED STATES

As of 2018, United States healthcare spending reached a total of $3.6 trillion dollars or $11,172 dollars per person.[10] Healthcare spending alone accounted for 16.9% of the nation's Gross Domestic Product.[11] This is extremely high given the average healthcare costs in other high-income countries, such as the United Kingdom, Canada, and Australia account for about 9.9% of their Gross Domestic Products.[12] With an increase in cost, one might expect that the United States has better, or at least equal, healthcare outcomes compared to other high-income country peers. However, this is not the case, as healthcare outcomes in the United States lag behind peers in life expectancy, infant mortality rate, and other population health trends. [13] Despite spending about three times more on healthcare, more people die in the United States from preventable diseases than other high-income counterparts.[14] Unfortunately, spending and outcome trends translate to maternal healthcare at an alarming rate.

---

10. *National Health Expenditure Data: Historical*, CTR. FOR MEDICARE & MEDICAID SERV. (Oct. 24, 2020), https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nationalhealthaccountshistorical.html.

11. *Id.*

12. *See* Gary Price & Tim Norbeck, *U.S. Health Outcomes Compared to Other Countries are Misleading*, FORBES (Apr. 9, 2018), https://www.forbes.com/sites/physiciansfoundation/2018/04/09/u-s-health-outcomes-compared-to-other-countries-are-misleading/#167f197f1232 (citing Papanicolas et al., *Healthcare Spending in the United States and Other High-Income Countries*, 319 J. AM. MED. ASS'N 1025, 1026 (2018)); *The U.S. Spends More on Health Care Than Any Other Country*, THE COMMONWEALTH FUND (Jan. 30, 2020), https://www.commonwealthfund.org/publications/issue-briefs/2020/jan/us-health-care-global-perspective-2019#:~:text=In%202018%2C%20the%20U.S.%20spent%2016.9%20percent%20of,approximately%20half%20as%20much%20as%20the%20U.S.%20does (taking the average GDP percentage for the United Kingdom, Canada, and Australia).

13. Price, *supra* note 12; Melissa Etehad & Kyle Kim, *The U.S. Spends More on Healthcare than any Other Country – but not with Better Outcomes*, L.A. TIMES (July 18, 2019), https://www.latimes.com/nation/la-na-healthcare-comparison-20170715-htmlstory.html.

14. Etehad, *supra* note 13.

Currently, the United States spends $111 billion dollars on hospital costs for maternal healthcare each year.[15] In fact, childbirth is the leading cause of hospitalization in the American healthcare system with new mothers and infants comprising 23% of all hospital discharges.[16] Similar to other health outcomes in the United States, the high cost of maternal care does not result in high-quality outcomes.[17] Specifically, the United States has a higher maternal mortality ratio compared to most high-income peers, the maternal mortality has increased over the past thirty years, and the maternal mortality disproportionally impacts women of color.[18]

A. The United States has Worse Maternal Outcomes than Peers

The United States has a higher maternal mortality ratio compared to most high-income peers. [19] For example, the United States maternal mortality ratio currently lags behind fifty-nine other countries including the United Kingdom, Germany, Canada, Denmark, and Finland.[20] The maternal mortality ratio is an estimate of the number of pregnancy-related deaths per 100,000 live births.[21] A pregnancy-related death considers women who have died during pregnancy or within one year of giving birth.[22] The maternal mortality ratio in the United States is estimated to be more than double that of the United Kingdom and shockingly, six times greater than Finland.[23]

The bleak statistics on maternal mortality in the United States are even more disheartening when one contemplates the rate of health complications during childbirth.[24] About 60,000 to 65,000 women will

15. Kukura, *supra* note 2, at 804.

16. *Id.*

17. Nina Martin, *U.S. has the Worst Rate of Maternal Deaths in the Developed World*, NPR (May 12, 2017), https://www.npr.org/2017/05/12/528098789/u-s-has-the-worst-rate-of-maternal-deaths-in-the-developed-world [hereinafter *Worst Rate of Maternal Death*]; PRIYA AGRAWAL, MATERNAL MORTALITY AND MORBIDITY IN THE UNITED STATES OF AMERICA (Bulletin of the World Health Org., 93d ed. 2015).

18. Naomi Strauss, *How the Lone Star State's Refusal to Expand Medicaid is Leaving Pregnant Women More Alone than Ever*, 45 HASTINGS CONST. L.Q. 739, 744 (2018); *Worst Rate of Maternal Death*, *supra* note 17; *Pregnancy Mortality Surveillance System*, CTR. FOR DISEASE CONTROL AND PREVENTION (Oct. 20, 2019), https://www.cdc.gov/reproductivehealth/maternal-mortality/pregnancy-mortality-surveillance-system.htm [hereinafter *Reproductive Health*].

19. Strauss, *supra* note 18, at 744; *Worst Rate of Maternal Death*, *supra* note 17.

20. Kukura, *supra* note 2, at 805; *Worst Rate of Maternal Death*, *supra* note 17.

21. *Reproductive Health*, *supra* note 18.

22. *Id.*

23. *Worst Rate of Maternal Death*, *supra* note 17.

24. Kukura, *supra* note 2, at 808; *Worst Rate of Maternal Death*, *supra* note 17; AGRAWAL, *supra* note 17.

nearly die from childbirth within a given year, even though 83% of women in the United States are considered to have low-risk pregnancies.[25] The culmination of frightening statistics on maternal health demonstrates that mothers in the United States are particularly vulnerable to adverse health outcomes during birth.[26]

B. The Maternal Mortality Ratio has increased over 30 Years

Not only does the United States fall behind peers in maternal mortality outcomes, but the United States is one of eight countries reporting an increase in maternal mortality.[27] Between 1987 and 2016, the estimated maternal mortality ratio more than doubled, increasing from 7.2 deaths per 100,000 live births to 16.9 deaths per 100,000 live births.[28] This is further supported by the most recent data released on January 30, 2020 from the National Center for Health Statistics, estimating the maternal mortality ratio for 2018 at 17.4 deaths per 100,000 live births.[29]

Although this data is alarming, data discrepancies can make it difficult to ascertain whether the risk of dying during childbirth has increased over the past 30 or more years.[30] Some health authorities argue that better data collection methods explain the uptick in the maternal mortality ratio, whereas others argue that the increase is a true rise in maternal deaths rather than a result of improved of data collection.[31] Regardless of explanations for the uptick, improved reporting methods are likely to continue capturing underreported maternal deaths, resulting in an increased maternal mortality ratio.[32]

---

25. Kukura, *supra* note 2, at 851; Martin, *supra* note 1; AGRAWAL, *supra* note 17.

26. *Worst Rate of Maternal Death*, *supra* note 17.

27. Kukura, *supra* note 2, at 805; *Worst Rate of Maternal Death*, *supra* note 17.

28. *Id.*

29. Elizabeth Chuck, *The U.S. Finally has Better Maternal Mortality Data. Black Mothers Still Fare the Worst*, NBC NEWS (Jan. 30, 2020), https://www.nbcnews.com/health/womens-health/u-s-finally-has-better-maternal-mortality-data-black-mothers-n1125896 [hereinafter *Better Mortality Data*]; Donna L. Hoyert et al., *Maternal Mortality in the United States: Changes in Coding, Publication, and Data Release, 2018*, 69 NAT'L. VITAL STAT. REPORT 1, 4 (2018), available at https://www.cdc.gov/nchs/data/nvsr/nvsr69/nvsr69-02-508.pdf [hereinafter *Maternal Mortality*]; Tara O'Neill Hayes & Carly McNeil, *Maternal Mortality in the United States*, INSIGHT (Sept. 9, 2021), https://www.americanactionforum.org/insight/maternal-mortality-in-the-united-states/.

30. *Reproductive Health*, *supra* note 18.

31. *Id.*; Alexandra Sifferlin, *Why U.S. Women Still Die During Childbirth*, TIME (Sept. 27, 2016), https://time.com/4508369/why-u-s-women-still-die-during-childbirth/; MacDorman et al., *Recent Increases in the U.S. Maternal Mortality Rate: Disentangling Trends from Measurement Issues*, 128 OBSTETRIC GYNECOLOGY 447, 447 (2016).

32. *See* Ina May Gaskin, *Maternal Death in the United States: A Problem Solved or a Problem Ignored?*, 17 J. PERINATAL ED. 10, 10–11 (2008) (stating that maternal deaths are likely underreported in the United States, and, as a result, improved reporting will likely show an increase in the maternal mortality rate).

C. Poor Maternal Outcomes Disproportionally Impact Women of Color

Despite data discrepancies one thing is clear, the maternal mortality ratio changes significantly when examining sub-populations within the United States. For example, black women are three to four times more likely to die as a result of childbirth compared to their white peers.[33] The increased likelihood of death for black women remains after accounting for factors such as education and socioeconomic status.[34] The Centers for Disease Control and Prevention (CDC) estimates that the maternal mortality ratio for non-Hispanic black women is 42.4 deaths per 100,000 live births, whereas the maternal mortality ratio for non-Hispanic white women is 13.0 deaths per 100,000 live births.[35] The most recent data from the National Center for Health Statistics for 2018 continues to echo these sharp differences, with the maternal mortality ratio for non-Hispanic black women sitting at 37.3 deaths per 100,000 live births and non-Hispanic white women sitting at 14.9 deaths per 100,000 live births.[36] Shockingly, it has been projected that about 50% to 60% of maternal deaths in the United States are preventable. [37]

Regardless of why the United States falls behind peers or why statistics illustrate an uptick in the maternal mortality ratio, large discrepancies in maternal outcomes between certain subpopulations solidifies maternal mortality as an issue worthy of attention.[38]

II. PREVENTING MATERNAL DEATHS ACT—GOOD PLACE TO START, LONG WAY TO GO

In response to the frightening maternal mortality statistics, Congress unanimously passed the Preventing Maternal Deaths Act in 2018.[39] The Preventing Maternal Deaths Act amends § 247b-12 of Title 42 of the United States Code.[40] The amended regulation, titled "Safe Motherhood," aims to address the maternal mortality ratio by providing states with federal support on the creation of maternal mortality review committees, data collection and reporting of maternal deaths, surveillance systems and

33. Tara Wilson, *Medicaid Approaches to Addressing Maternal Mortality in the District of Columbia*, 20 GEO. J. GENDER & L. 215, 219 (2018).

34. *Id.*

35. *Reproductive Health*, *supra* note 18.

36. *Better Mortality Data*, *supra* note 29; *Maternal Mortality*, *supra* note 29.

37. AGRAWAL, *supra* note 17; Martin, *supra* note 1.

38. *Reproductive Health*, *supra* note 18.

39. Preventing Maternal Deaths Act of 2018, H.R. 1318, 115th Cong. (2018) (enacted); Nina Martin, *U.S. Senate Committee Proposed $50 Million to Prevent Mothers Dying in Childbirth*, PROPUBLICA (June 28, 2018), https://www.propublica.org/article/us-senate-committee-maternal-mortality-prevention-proposal.

40. 42 U.S.C. § 247 b-12 (2021).

research to better understand the issue, and prevention programming to decrease differences in maternal death amongst subpopulations.[41]

To accomplish the purpose of the law, the federal government has opted to allocate $12 million a year, over five years, to the CDC.[42] The CDC is tasked with supporting state actions to facilitate the creation of Maternal Mortality Review Committees (MMRCs), standardized data collection methods, and a maternal mortality database. [43] The standardization of data collection methods is imperative because it allows a comparison of maternal outcomes across different states. [44] Comparison across different jurisdictions helps states and health professionals better understand the causes of maternal mortality, especially given that comparative data has been lacking until now. [45]

As a result, the Preventing Maternal Deaths Act is a good place to start in addressing maternal health outcomes, as standardized data collection and review is critical to understanding the issue, creating best practices, and laying the foundation for more comprehensive policy change.[46] Nevertheless, the United States has a long way to go.[47]

A. The Preventing Maternal Deaths Act Lacks Support for Interventions Beyond MMRC and Data Collection

The Preventing Maternal Deaths Act has been hailed as a great first step in addressing maternal mortality in the United States.[48] Even so, the statute demonstrates stark shortcomings in moving beyond data collection to intervention implementation. First, the statute indicates that the ". . . Secretary, acting through the Director of the Centers for Disease

41. § 247 b-12(a)(1).

42. Martin, *supra* note 39.

43. *The Preventing Maternal Death Act Shows that Our Collective Voices Matter*, BLACK WOMEN'S HEALTH IMPERATIVE (Dec. 17, 2018), https://bwhi.org/2018/12/17/the-preventing-maternal-health-act-shows-that-our-collective-voices-matter/ [hereinafter *Black Women's Health Imperative*]; DEP'T OF HEALTH AND HUMAN SERV., FY 2020 BUDGET IN BRIEF 49 (2020) [hereinafter *FY 2020 Budget*].

44. Chuck, *supra* note 1.

45. Katy Backes Kozhimannil, Elaine Hernandez, Dara D. Mendez, & Theresa Chapple-McGruder, *Beyond the Preventing Maternal Deaths Act: Implementation and Further Policy Change*, HEALTH AFFAIRS BLOG (Feb. 4, 2019), https://www.healthaffairs.org/do/10.1377/hblog20190130.914004/full/; *Black Women's Health Imperative*, *supra* note 43; Katelyn Burns, *CDC Grant to 'Lay the Groundwork' for Further Action on Maternal Mortality*, REWIRE.NEWS (Mar. 8, 2019), https://rewire.news/article/2019/03/08/cdc-grant-lay-groundwork-further-action-maternal-mortality/.

46. Burns, *supra* note 45; Kozhimannil, *supra* note 45; 42 U.S.C § 247(b)(b-m)(2021).

47. Chuck, *supra* note 1.

48. *Id.*

Control and Prevention, may carry out . . .” activities specified within the statute.[49] The use of “may” in the language of the statute supports the notion that the Secretary is not required to carry out any of the actions outlined within the statute, which includes support for data collection and the creation of MMRCs.[50]

Further, of the four main sections within the statute, three focus only on data collection and research.[51] Although § 247b-12(c) outlines authorization for prevention programming, the requirements for such programming are non-existent.[52] This differs starkly from § 247 b-12(d), which outlines requirements that must be met by states should they participate in the creation of a MMRC.[53] The requirements generally focus on processes for data collection, review, and reporting of maternal deaths throughout the state, thereby further supporting general surveillance and prevention research outlined within the statute.[54] Conversely, the section on prevention programs fails to specify requirements for state compliance.[55] Not only does § 247b-12(c) list no programming requirements, but amongst the entirety of the statute, the section on prevention programs seems insignificant, only occupying five lines in a statute spanning four pages in length.[56]

Although the statute has a strong focus on the creation of MMRCs, data collection and surveillance in comparison to prevention programming, the statute’s failure to require action signifies a need for additional legislation.[57]

B. Allocation of Funds only to MMRC and Data Collection

The lack of support for prevention programming with the Preventing Maternal Deaths Act is further illustrated by a review of the Department of Health and Human Services’ annual budget for the year 2020.[58] The 2020 budget outlines the allocation of $12 million dollars to the CDC.[59] The CDC is required to use the funding to help states establish MMRCs and strengthen data collection and reporting methods.[60] The budget brief

49. § 247 b-12(a)(2).
50. *Id.*
51. § 247 b-12(a)–(f).
52. § 247 b-12(c).
53. § 247 b-12(d).
54. *Id.*
55. § 247 b-12(c).
56. § 247 b-12(a)–(f).
57. *Id.*
58. *See generally FY 2020 Budget*, *supra* note 43, at 49.
59. *Id.*
60. *Id.*

specifies that the data will be used to establish evidence-based practices for reducing the maternal mortality ratio.[61] Yet the budget fails to specify that funding can be used to facilitate the implementation of these practices.[62]

The absence of clarity around how the $12 million a year can be spent fosters questions as to whether states could receive funding on prevention programming or only for activities outlined within the budget.[63] Considering most health care professionals view the legislation as a starting point with a focus on data collection and the creation of MMRCs, it seems unlikely that funding for programming is compressively supported by the legislation.[64]

C. Increased Introduction of Bills and Policies Supports a Need for Additional Change

Finally, the continuation of policy proposals to address maternal mortality further supports the notion that the Preventing Maternal Deaths Act is a catalyst for additional policy recommendations rather than a comprehensive solution.[65] For instance, six bills, each addressing a facet of factors that contribute to the maternal mortality ratio, were introduced to the legislature in 2019.[66] Of these six policies, three address best practices or the standardization of obstetric medical care, three ensure insurance coverage and access to medical services, and two propose implicit bias training for medical providers.[67]

Not surprising, some of the 2020 presidential candidates outlined their policy initiatives to address maternal health in the United States.[68] Various candidates spoke out about the need to address maternal health deficiencies, with some Democratic candidates suggesting comprehensive policy change.[69] In particular, the policies outlined in

61. *Id.*

62. *Id.*

63. *FY 2020 Budget*, *supra* note 43, at 49.

64. Kozhimannil, *supra* note 45; Chuck, *supra* note 1.

65. Burns, *supra* note 45; Alexa Richardson, *Policy Roundup: Improving Maternal Health Outcomes for Black Women*, HARV. L. BILL OF HEALTH (Nov. 14, 2019), https://blog.petrieflom.law.harvard.edu/2019/11/14/policy-roundup-improving-maternal-health-outcomes-for-black-women/; *Federal Legislation to Improve Maternal Health*, NAT'L P'SHIP FOR WOMEN AND FAMILIES (June 3, 2019), https://www.nationalpartnership.org/our-work/health/federal-legislation-to-improve-maternal-health.html.

66. NAT'L P'SHIP FOR WOMEN AND FAMILIES, *supra* note 65.

67. *Id.*

68. Alex Friedman Peahl, Katy Backes Kozhimannil, & Lindsay K. Admon, *Addressing the US Maternal Health Crisis: Policies of 2020 Presidential Candidates*, HEALTH AFFAIRS BLOG (June 26, 2019), https://www.healthaffairs.org/do/10.1377/hblog20190625.583781/full/.

69. *Id.*

presidential candidates' platforms are those that were introduced into the legislature.[70] The proposals cover everything from implicit bias training to establishing a standard of clinical care for hospitals.[71] Senator Elizabeth Warren's proposal differs slightly from her peers in the recommendation of bundled payments to improve the quality of maternal care.[72] A bundled care payment would pay practitioners a lump sum to provide obstetric care during pregnancy and birth.[73] The goal is that paying for the service as a whole, rather than as individual services, will incentivize healthcare providers to work together to improve quality outcomes.[74]

A review of the Preventing Maternal Deaths Act and the Department of Health and Human Services' annual budget for the year 2020 demonstrates that more support may be needed for prevention methods or programming that address maternal mortality.[75] Further, the legislature itself recognized the need for the expansion of the Preventing Maternal Deaths Act, as evidenced by the proposal of six bills all aiming to address varying scopes of the maternal mortality problem.[76]

III. WHAT CURRENTLY WORKS TO ADDRESS MATERNAL MORTALITY

It is not disputed that better data on maternal mortality is needed to create solutions that truly address maternal mortality in the United States.[77] However, debate remains as to whether more can be done at a federal level to reduce the maternal mortality ratio.[78] As the legislature continues to consider various policy proposals, it would be helpful to look to other countries and states that have been addressing maternal mortality, with success, for quite some time.[79] A key thread in both country and state success in addressing the maternal mortality ratio is the implementation of clinical standards for obstetric care.[80]

---

70. *Id.*

71. *Id.*

72. *Id.*

73. Peahl, *supra* note 68; *see Bundled Payments for Care Improvement (BPCI) Initiative: General Information*, CTR. FOR MEDICARE & MEDICAID SERV., https://innovation.cms.gov/initiatives/bundled-payments (last visited Feb. 2, 2020).

74. *Id.*

75. § 247 b-12(a)(2); *FY 2020 Budget*, *supra* note 43, at 49.

76. NAT'L P'SHIP FOR WOMEN AND FAMILIES, *supra* note 65.

77. Martin, *supra* note 1.

78. Daniel Young, *Legislative Proposals Addressing Maternal Mortality*, NAT'L HEALTH L. PROGRAM (Aug. 26, 2019), https://healthlaw.org/legislative-proposals-addressing-maternal-mortality/.

79. Martin, *supra* note 1.

80. *Id.*

A. United Kingdom

The United Kingdom has been working on reducing and addressing maternal mortality issues for the past 70 years, with every maternal death viewed as a national tragedy.[81] In 1940, the United Kingdom started a national commitment to reduce the maternal mortality ratio after recognizing that it was high.[82] The steps taken over the past 70 years appear to be working, as the maternal mortality ratio has declined to 8.9 deaths per 100,000 live births, a stark difference from the United States where the maternal mortality ratio is significantly higher.[83] The decline of maternal deaths is largely attributed to the national standardization of obstetric care and the review process of every maternal death at the national level.[84]

The standardization of clinical care and review processes was completed through the legislative process, where the United Kingdom created the Confidential Enquiry into Maternal Deaths committee.[85] The committee, now run by Mothers and Babies: Reducing Risk through Audits and Confidential Enquiries in the United Kingdom (MBRRACE-UK) has currently been implemented for over 60 years, ever-evolving to address maternal needs.[86] MBRRACE-UK is an organization that has been commissioned and appointed by the United Kingdom's Healthcare Quality Improvement Partnership (HQIP) on behalf of the National Health Services and other governmental entities to monitor and address maternal mortality.[87]

The committee currently investigates every maternal death and provides information on clinical best practices.[88] For instance, after a maternal death, MBRRACE-UK conducts a standard investigation to determine the cause of death.[89] It is important to note that hospitals are not allowed to opt-out of the auditing or reporting process or not comply

81. Kate Womersley, *Why Giving Birth is Safer in Britain than in the U.S.*, PROPUBLICA (Aug. 31, 2017), https://www.propublica.org/article/why-giving-birth-is-safer-in-britain-than-in-the-u-s.

82. *Id.*

83. Womersley, *supra* note 81; *Reproductive Health*, *supra* note 18.

84. Martin, *supra* note 1.

85. *Maternal and Perinatal Death Reviews in the UK*, WORLD HEALTH ORG., https://www.who.int/maternal_child_adolescent/epidemiology/maternal-death-surveillance/case-studies/united-kingdom/en/ (last visited on Feb. 2, 2020).

86. World Health Org., *supra* note 85; Womersley, *supra* note 81.

87. *MBRRACE-UK: Mothers and Babies: Reducing Risk through Audits and Confidential Enquiries across the UK*, NUFFIELD DEP'T OF POPULATION HEALTH, https://www.npeu.ox.ac.uk/mbrrace-uk (last visited Mar. 14, 2021).

88. *Id.*; Womersley, *supra* note 81.

89. Womersley, *supra* note 81.

with best practices.[90] Further, the information collected during the auditing and investigation process occurring throughout the year is later synthesized into a full report on every maternal death that occurred in the nation.[91] The report also outlines recommended clinical practice changes to prevent maternal deaths in the future.[92] The recommended clinical standards, including the report on maternal deaths, are available to both practitioners and the public through online databases.[93]

The creation of a standardized approach to addressing maternal care at a national level, in conjunction with open reporting and collaboration, has been attributed to the decrease in the maternal mortality ratio for the United Kingdom.[94]

B. United States

Surprisingly, one does not need to look across the pond to find solutions to address maternal mortality, as various states have been addressing it successfully right at home.[95] For instance, California has the lowest maternal mortality rate in the United States with Massachusetts falling close behind.[96]

1. California

In 2006, the State of California partnered with Stanford University School of Medicine to establish a response to the State's high maternal mortality and morbidity rates.[97] The collaboration initially looked to the process established in the United Kingdom for guidance.[98] California's work has now culminated in the creation of California Maternal Quality Care Collaborative, an organization focused on establishing best practices to improve health outcomes for moms.[99] Through this work, California decreased the maternal mortality rate by 55% between 2006

90. *Id.*
91. *Id.*
92. *Id.*
93. *Id.*
94. Womersley, *supra* note 81.
95. Martin, *supra* note 1.
96. *The States with the Highest (and Lowest) Maternal Mortality, Mapped*, ADVISORY BD. (Nov. 9, 2018), https://www.advisory.com/daily-briefing/2018/11/09/maternal-mortality [hereinafter *Advisory Bd.*].
97. *Who We Are*, CAL. MATERNAL QUALITY CARE COLLABORATIVE, https://www.cmqcc.org/who-we-are (last visited Feb. 2, 2020) [hereinafter *Cal. Maternal Quality Care Collaborative*].
98. Martin, *supra* note 1.
99. *Id.*

and 2013. [100] The group attributes their success to the development of statewide data that can be used for benchmarking as well as the creation of standardized clinical care practices for childbirth emergencies. [101]

In order to standardize clinical care practices, the California Maternal Mortality Review Committee created tool kits to address frequent complications that occur during birth.[102] The tool kits aim to establish standard best practices in identifying and treating medical complications.[103] The committee began by addressing two well-known complications that occur during childbirth such as hemorrhage and preeclampsia.[104]

The hemorrhage toolkits consist of four component bundles, each addressing a different area of hemorrhage care. For example, the first bundle is the readiness bundle which consists of training guides for staff on protocols for hemorrhage response.[105] Specifically, the bundle focuses on best practices for staff training and materials required for carts, kits, and trays for treating a hemorrhage.[106] The second bundle consists of education materials covering standardized clinical signs that signify a mother might be hemorrhaging.[107] The third bundle, or the response bundle, provides guidance on a standard clinical response when a hemorrhage occurs.[108] Finally, the fourth bundle contains recommendations on reporting measures and additional review, such as a hospital system review of all critical hemorrhages.[109]

The preeclampsia toolkits also aim to standardize clinical care.[110] Preeclampsia is a complication that occurs during pregnancy and is characterized by high blood pressure and damage to other organs, such as the liver or kidney.[111] To address complications occurring from late

100. Renee Montagne, *To Keep Women from Dying in Childbirth, Look to California*, NPR (July 29, 2018), https://www.npr.org/2018/07/29/632702896/to-keep-women-from-dying-in-childbirth-look-to-california.

101. *Id.*

102. *Id.*

103. *Id.*

104. *Id.*

105. AUDREY LYNDON ET AL., EXECUTIVE SUMMARY CMQCC OBSTETRIC HEMORRHAGE TOOLKIT (2d ed. 2015), available at https://www.cmqcc.org/resource/ob-hem-executive-summary.

106. *Id.*

107. *Id.*

108. *Id.*

109. *Id.*

110. EXECUTIVE SUMMARY CMQCC PREECLAMPSIA TOOLKIT (2013), available at https://www.cmqcc.org/resources-tool-kits/toolkits/preeclampsia-toolkit [hereinafter *Preeclampsia Toolkit*].

111. *Preeclampsia Overview*, MAYO CLINIC, https://www.mayoclinic.org/diseases-conditions/preeclampsia/symptoms-causes/syc-20355745 (last visited Mar. 14, 2021).

identification of the condition, the toolkit focuses on covering best practices for clinical standards, policy and procedures, and educational information.[112] Thus, both toolkits establish a standardized response and treatment protocol for preventable causes of maternal death.[113]

The establishment of standardized clinical practice resulting from the implementation of the toolkits is one intervention attributed to the drastic decline of maternal mortality in the state of California.[114] For instance, a study conducted on the impact of the hemorrhage toolkits found that hospitals that participated in the implementation of the toolkit decreased maternal death from hemorrhage by 21%.[115] In contrast, hospitals not participating in toolkit implementation only decreased maternal death resulting from hemorrhages by 1% within the same study period.[116]

Not only has the committee created toolkits, but the committee also provides information on best practices for supporting vaginal birth.[117] The goal of supporting vaginal birth is to reduce the cesarean section rate in California.[118] Cesarean sections increase a woman's risk of life-threatening complications, increasing a mother's chance of death by 60%.[119] Surprisingly, cesarean sections outnumber vaginal deliveries in the United States.[120] For example, cesarean procedures are the most common surgical procedure in the United States, with about 32.7% of infants being born by cesarean.[121] As a result, establishing best practices to reduce the cesarean rate likely contributes to a reduction in maternal mortality.

California's proven success in addressing preventable complications that occur during birth, resulting in a substantial decrease of the State's maternal mortality rate, position California as a potential example for policy change.[122]

---

112. *Preeclampsia Toolkit*, *supra* note 110.
113. *See id.*
114. Montagne, *supra* note 100.
115. *Id.*
116. *Id.*
117. *Toolkit to Support Vaginal Birth and Reduce Primary Cesareans*, CAL. MATERNAL QUALITY CARE COLLABORATIVE, https://www.cmqcc.org/VBirthToolkit (last visited Oct. 25, 2020).
118. *Id.*
119. Michaeleen Doucleff, *Rate of C-Sections is Rising at an 'Alarming' Rate*, NPR (Oct. 12, 2018), https://www.npr.org/sections/goatsandsoda/2018/10/12/656198429/rate-of-c-sections-is-rising-at-an-alarming-rate.
120. *Id.*
121. Kukura, *supra* note 2, at 808.
122. *See* Martin, *supra* note 1.

2. Massachusetts

The State of Massachusetts has the second-lowest maternal mortality rate in the United States based on a study conducted by *USA Today*.[123] Massachusetts has had a maternal death review panel, or a maternal mortality review committee, implemented for over twenty years.[124] In 2014, the panel released a report on maternal deaths in the state.[125] After a review of maternal deaths from 2000 to 2007, the panel recommended various clinical interventions.[126] One of these clinical interventions included the recommendation that hospitals establish clinical guidelines and protocols for maternal hemorrhage, similar to that of California.[127] The report also focused on various societal and systemic issues that impacted the maternal mortality rate.[128]

Additionally, the maternal death review panel has succeeded in identifying concerning trends and providing recommendations on interventions.[129] For example, Massachusetts experienced a 33% increase in maternal deaths from 2012 to 2014, prompting an investigation.[130] Upon review, the panel determined that more than half of the pregnancy-associated deaths also had a documented mental health condition.[131] Of the women with a documented mental health condition, about 91.4% had a documented mental health condition prior to delivery.[132] As a result of the study, the panel recommended screening for depression and anxiety in both obstetric and primary care settings as well as referring women on to appropriate treatment providers.[133] Thus, Massachusetts has reduced the maternal mortality rate by focusing on maternal death review in conjunction with measured interventions.

123. *Advisory Bd.*, *supra* note 96.
124. *Id.*
125. *Id.*
126. *Maternal Mortality and Morbidity Review in Massachusetts*, MASS. DEP'T OF PUB. HEALTH, at 21 (July 2014), https://www.mass.gov/files/documents/2016/07/ng/pregnancy-mortality-report-2000-2007.pdf [hereinafter *Maternal Mortality and Morbidity Review in Massachusetts*].
127. *Id.* at 22.
128. *Advisory Bd.*, *supra* note 96; *see Maternal Mortality and Morbidity Review in Massachusetts*, *supra* note 126, at 6.
129. *See Maternal Mental Health & Pregnancy Associated Deaths*, MASS. DEP'T OF PUB. HEALTH, at 2 (Sept. 2017), https://www.mass.gov/doc/maternal-mental-health-pregnancy-associated-deaths-0/download.
130. *Id.*
131. *Id.*
132. *Id.*
133. *Id.*

Similar to California, Massachusetts' success in reducing the maternal mortality rate position the state as an appropriate reference for innovative policy change.[134]

IV. RECOMMENDED POLICY CHANGE

The high maternal mortality ratio, in addition to the stark disparities in maternal mortality amongst race, signifies the need for comprehensive policy intervention in the United States.[135] As a result, the nation must look farther than the Preventing Maternal Deaths Act, using the Act as a catalyst for the development of policy interventions that reduce maternal mortality and save moms.[136] Specifically, in order to reduce the maternal mortality rate at a national level, the government must consider enacting legislation that establishes standard clinical practices for maternal care across the United States.[137] As racial disparities are a major concern in maternal mortality, the legislature must require states to establish, implement, and measure interventions that address factors contributing to maternal mortality amongst black women.

A. Policy Recommendation on Standard Clinical Practice

Section 247b-12(c) of the Preventing Maternal Deaths Act should be amended to require states receiving funds from the CDC to implement standardized clinical practice for hemorrhage, preeclampsia, and cesarean sections. Specifically, the statute should outline requirements for clinical practices using successful interventions from the United Kingdom, California, and Massachusetts as a guide. For example, the statute could require states to develop clinical processes that comply with standard identification factors for hemorrhage and preeclampsia, standard protocols to recognize and treat hemorrhage and preeclampsia, standard training on best practices protocols, and standard reporting measures on hemorrhages and preeclampsia events. Further, the legislation could require states receiving funding to establish standards on the appropriate use of cesarean section procedures. For instance, the legislation could specify that each state is required to implement training on best practices to reduce the state's cesarean rate to account for 10% to 15% of all pregnancies, as recommended by the World Health Organization.[138]

---

134. *See Advisory Bd.*, *supra* note 96.

135. *See Reproductive Health*, *supra* note 18.

136. *See* Martin, *supra* note 1.

137. *Advisory Bd.*, *supra* note 96; *Maternal Mortality and Morbidity Review in Massachusetts*, *supra* note 126; *Cal. Maternal Quality Care Collaborative*, *supra* note 97.

138. *Id.*

The legislation must also require states to annually report and provide evidence of training, implementation of clinical standards, and review of pertinent medical events to the CDC. The standardization of clinical practices is a viable solution because inconsistent clinical standards are one explanation for poor maternal outcomes, other countries and states have successfully implemented standardized practices to effectively reduce maternal mortality, funding to establish standard clinical practices is already available, and standard practices may reduce racial disparities.[139]

1. Inconsistent Clinical Standards Impact Maternal Mortality

As inconsistent obstetric medical practice in the United States is an explanation for poor maternal outcomes, the standardization of clinical practices is one viable solution.[140] Currently, there are no standard clinical practice protocols for healthcare providers in the United States.[141] The lack of standard protocol extends to maternal care, resulting in various approaches to address medical complications or emergencies throughout pregnancy or during childbirth.[142] Medical training for physicians also varies across the United States, contributing to clinical inconsistencies across the nation.[143]

Further, inconsistent standards on the appropriate use of cesarean procedures may contribute to the maternal mortality rate.[144] Although cesarean procedures can be life-saving, they are still major surgical procedures resulting in increased medical complications for mothers.[145] Data also suggests that cesarean procedures may be overused, especially in the United States.[146]

Thus, inconsistent medical practices prevalent in obstetric care play a role in maternal mortality in the United States. As a result, addressing these inconsistencies by creating standard clinical protocols could save lives.

---

139. AGRAWAL, *supra* note 17; *Advisory Bd.*, *supra* note 96; *Maternal Mortality and Morbidity Review in Massachusetts*, *supra* note 126; *Cal. Maternal Quality Care Collaborative*, *supra* note 97; *FY 2020 Budget*, *supra* note 43, at 49.

140. AGRAWAL, *supra* note 17.

141. *Id.*

142. *Id.*

143. Martin, *supra* note 1.

144. Sifferlin, *supra* note 31.

145. *Id.*

146. Jessica Brown, *The Fight for Birth: The Economic Competition that Determines Birth Options in the United States*, 52 U.S.F. L. REV. 1, 9 (2018); Doucleff, *supra* note 119.

2. Standardized Clinical Protocols have been Successful

As previously reviewed, varying countries and states have established standard clinical practices to address well known complications that occur during childbirth, resulting in reductions in maternal mortality.[147] These complications include hemorrhage and preeclampsia.[148] The prevalence of these issues across varying demographics such as California to Massachusetts, and even to the United Kingdom, demonstrate that these issues are universal.[149] This is further supported by CDC data on maternal mortality, which indicates that there is still a prevalence of hemorrhage and preeclampsia when examining maternal deaths.[150]

The need for clinical standards is further supported by the fact that it takes about 17 years for clinical standards to take hold, indicating that providers may need some incentive to adopt clinical best practices.[151] The regulation may provide the needed incentive. Additionally, the tool kits on hemorrhage and preeclampsia have proven to be effective in reducing maternal mortality.[152] As a result, there is ample support for the establishment of a national clinical standard of care, as the issues are universal, incentives are needed to establish clinical standards, and the recommended solution has been successful.[153]

3. Funding Is Already Allocated for Best Clinical Practices

The federal government has already allocated funding for prevention programs focused on maternal mortality.[154] The allocation of these funds to states that establish clinical standards overcomes funding barriers that may prevent the adoption of appropriate interventions.

Generally, the establishment of a clinical standard will have little impact on a problem without funding to implement programming or clinical training.[155] Luckily, in 2020, the federal government allocated $23 million in support grants to the State Maternal Health Innovation Program and $3 million to the Alliance for Innovation in Maternal Health

147. Womersley, *supra* note 81; *Advisory Bd.*, *supra* note 96; *Maternal Mortality and Morbidity Review in Massachusetts*, *supra* note 126; *Cal. Maternal Quality Care Collaborative*, *supra* note 97.

148. *Id.*

149. *Id.*

150. *Reproductive Health*, *supra* note 18.

151. Martin, *supra* note 1.

152. *Advisory Bd.*, *supra* note 96; *Cal. Maternal Quality Care Collaborative*, *supra* note 97.

153. *Advisory Bd.*, *supra* note 96; *Maternal Mortality and Morbidity Review in Massachusetts*, *supra* note 126; *Cal. Maternal Quality Care Collaborative*, *supra* note 97.

154. *FY 2020 Budget*, *supra* note 43, at 49.

155. *Id.*

Initiative.[156] Both organizations work to establish evidence-based practices on maternal care, with the Alliance for Innovation in Maternal Health Initiative specifically providing funding to hospitals working to implement safety bundles.[157] However, a downfall of these programs is that funding is only allocated to hospitals that willingly participate.[158] As a result, amending the legislation to require states to implement clinical standards and report on the success helps incentivize states, and in turn, hospitals to participate in reducing maternal mortality.[159]

As a result, the legislation will provide an incentive for states to participate while the funding further reduces barriers to participation.[160]

4. Standard Clinical Practices May Address Aspects of Implicit Bias

Implicit bias within the clinical care environment is one explanation provided for the stark racial disparities evident in maternal mortality.[161] As a result, the implementation of clinical care standards could address some aspects of implicit bias present during the care delivery process.[162]

Racial disparities are a main factor in the increasing maternal mortality rate.[163] Specifically, both the chronic stress of racism and unconscious bias impact the health outcomes of black women in America, helping to explain why black women are three times more likely to die from childbirth than their white peers.[164] The experience of consistent, chronic racism impacts the health of a black woman through pregnancy and after childbirth.[165] Further, unconscious bias also impacts the provision of healthcare services, affecting the quality of medical care

156. *Id.* at 34.
157. *Id.*
158. VICTORIA L. ELLIOT, CONG. RSCH. SERV., R46256, HEALTH RES. AND SERV. ADMIN. (HRSA): MATERNAL HEALTH PROGRAMS 34 (2020).
159. ALLIANCE FOR INNOVATION ON MATERNAL HEALTH, https://safehealthcareforeverywoman.org/aim/ (last visited Feb. 2, 2020).
160. *Id.*
161. Salam, *supra* note 5.
162. *Id.*
163. Patti Neighmond, *Why Racial Gaps in Maternal Mortality Persist*, NPR (May 10, 2019), https://www.npr.org/sections/health-shots/2019/05/10/722143121/why-racial-gaps-in-maternal-mortality-persist.
164. *Id.*
165. *Id.*

that black women receive during pregnancy and childbirth.[166] Social status, income, or education do not improve a black woman's birth outcomes, further supporting the conclusion that racial disparities impact birth outcomes for all black women in America.[167]

The standardization of clinical practice may positively impact racial disparities. Specifically, requiring states to comply with best clinical practices for obstetric care, forces providers to treat all patients exactly the same.[168] As a result, when a patient presents with symptoms of hemorrhage or preeclampsia, the established protocols will guide the practitioner's actions.[169] The utilization of established protocols potentially addresses implicit biases that may result in varying clinical protocols in the treatment of black women versus white women.

It is important to note that the standardization of clinical care is only recognized as one solution to an intricate, and multifaceted issue facing black women today.[170] As varying reasons are provided to explain maternal mortality and the harrowing differences in outcomes of black women compared to their white peers, this solution is not a one size fits all.[171] However, the recommended policy may address some aspects of systemic racism and implicit bias that impact maternal mortality. Thus, the implementation of standard clinical care protocols may still be a good place to start.[172]

B. Policy Recommendation to Address Health Disparities

Section 247b-12(c) of the Preventing Maternal Deaths Act should also be amended to require states receiving funding to establish and implement interventions to reduce racial disparities evident in maternal outcomes. The statute should require each state receiving funds to establish a plan to address health disparities. This plan should include specific interventions, measures to gauge the success of interventions, and steps that will be taken should interventions fail to address health disparities. For example, states could require implicit bias training for all clinical care staff, beginning with obstetric providers. The statute should also require states to provide an annual report to the CDC, outlining the progress of established interventions and success measures.

As previously mentioned, systemic racism and implicit bias are factors resulting in stark differences in the maternal mortality ratio

166. *Id.*
167. *Id.*
168. Montagne, *supra* note 100.
169. *Id.*
170. Neighmond, *supra* note 163.
171. *Id.*
172. Montagne, *supra* note 100.

between black women and white women. As a result, the gravity of the issue can only be addressed by the complete cooperation and support of women, communities, and the nation as a whole.[173] Thus, establishing legislation that requires action to address these issues forces states to find solutions, improving birthing outcomes for black women in America.

CONCLUSION

In conclusion, addressing the maternal mortality rate is a complex, multifaceted issue where a one size fits all approach will not work. Nonetheless, the poor maternal health outcomes in the United States compared to international peers, the increase in maternal mortality ratio over the past 30 years, and the shocking disparities in maternal outcomes based on race, position maternal mortality as an issue that requires immediate attention. Although the enactment of the Preventing Maternal Deaths Act was a starting point for addressing maternal mortality, the legislation does not provide the incentives required to invoke state action. Thus, supporting additional policy change is required to address maternal mortality.

Using the success of other countries and states as a guide for policy expansion, ample support exists for the standardization of clinical care through the federal legislative process. Additionally, stark racial disparities impacting black women further support the argument that federal legislation is needed to incentivize states to take action to address maternal mortality. While the Preventing Maternal Deaths Act started the movement towards addressing maternal mortality in America, it is now time to finish.

173. Martin, *supra* note 1.