



# Doula Care and Maternal Health: An Evidence Review

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## KEY POINTS

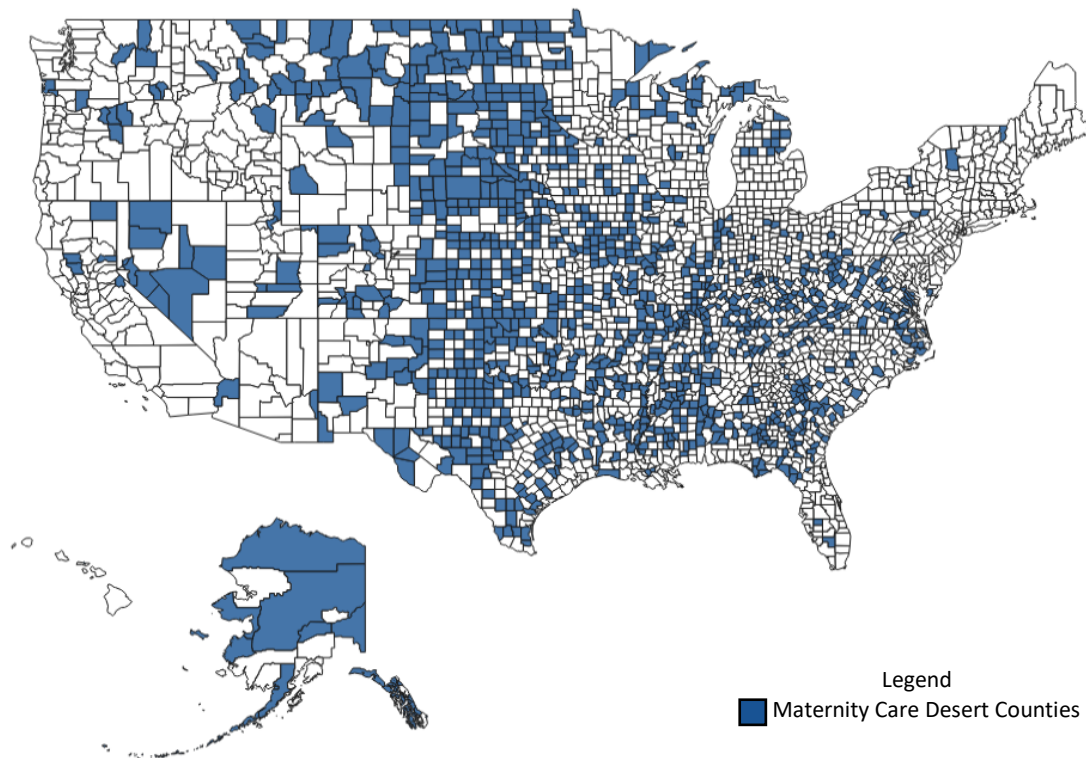
- Doulas provide emotional, physical, and informational support before, during, and after labor and birth.
- Research indicates that doulas positively impact several maternal and infant health outcomes and experiences.
- The doula workforce faces challenges regarding public and provider education and awareness, as well as in obtaining payment from health insurance for the services they provide.
- The federal government is supporting training opportunities to expand the doula workforce and is encouraging coverage of doula services in health care programs.
- Several states provide coverage for doula services in their state Medicaid programs.
- Expansion of doula care nationally, with a focus on Black and American Indian and Alaska Native women who experience worse maternal health outcomes, has the potential to reduce disparities in clinical outcomes and improve care experiences.

## BACKGROUND

For the approximately 3.6 million women\* who give birth in the U.S. each year,<sup>1</sup> birthing experiences vary substantially, particularly by race and ethnicity, and also by other characteristics such as geography. Black and American Indian and Alaska Native (AI/AN) women experience substantially higher rates of severe maternal morbidity and mortality than White women, irrespective of educational attainment.<sup>2</sup> Differences in outcomes can be attributed to a number of factors including inequities in housing, environmental conditions, economic opportunity, and access to health care. These factors are in significant part the result of inequitable policies due to discrimination – both structural and interpersonal.<sup>3,4</sup> Research also indicates women in rural communities have a higher probability of severe maternal morbidity and mortality than women in urban areas.<sup>5</sup> Access to maternity care can be a challenge in many rural areas, as over half of rural counties lack a hospital with obstetric care services.<sup>6,7</sup> In addition, as of 2018, over 2.2 million women of childbearing age lived in one of 1,119 counties (36 percent of U.S. counties) classified as a maternity care desert<sup>8</sup> – which are counties with no maternity care centers or obstetricians. Figure 1 highlights the wide variation in access to maternity care across the U.S., with the majority of maternity care deserts located in the Midwest and South.

\* While this report generally refers to women, the content of this brief is inclusive of every person giving birth, irrespective of gender identity or demographic background.

**Figure 1: Maternity Care Access by County in the U.S., 2020**



**Note:** Information from March of Dimes. Nowhere to Go: Maternity Care Deserts Across the U.S. 2022. Report available at: <https://www.marchofdimes.org/research/maternity-care-deserts-report.aspx>. Data for U.S. counties in 2020 retrieved from [www.marchofdimes.org/peristats](http://www.marchofdimes.org/peristats).

The Biden-Harris Administration has prioritized improving maternal health outcomes and the maternity care experience, especially in communities with unmet maternal health care and resource needs. Two of the Administration's efforts include the White House Blueprint for Addressing the Maternal Health Crisis and a request for \$470 million to address maternal health needs in the Fiscal Year 2023 President's Budget.<sup>9</sup> Proposals in the President's 2023 Budget addressing maternal health include requiring twelve months of postpartum coverage in Medicaid; expanding maternal health initiatives in rural communities; implementing implicit bias training for health care providers; creating pregnancy medical home demonstration projects; addressing the highest rates of perinatal health disparities, including by supporting the perinatal health workforce; strengthening data collection and evaluation; and addressing behavioral health disorders.<sup>10</sup> A key strategy to improve the birthing experience for all women is to grow, strengthen, and diversify the perinatal workforce. The perinatal workforce includes clinicians such as obstetricians, nurse midwives, and family physicians, as well as other professionals such as community health workers, health care navigators, and doulas.<sup>†</sup>

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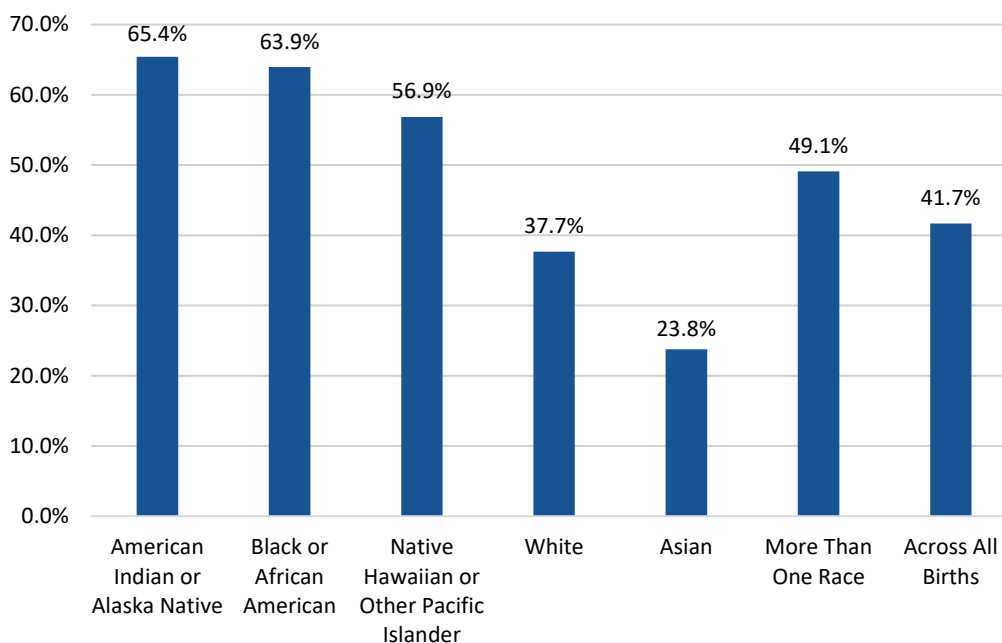
*Medicaid covers over 60 percent of all U.S. births among Black and AI/AN individuals.*

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<sup>†</sup> The White House Blueprint for Addressing the Maternal Health Crisis includes explicit goals to improve the number and diversity of perinatal professionals through programs such as the National Health Service Corps, Primary Care Training and Enhancement—Community Prevention and Maternal Health Program, and Community Health Worker Training Program, as well as by encouraging insurance providers to improve reimbursement policies for maternity care services.

Doulas are nonclinical trained professionals who can provide emotional, physical, and informational support during pregnancy, delivery, and after childbirth. Access to doula services has been historically limited in the U.S., with greater utilization among higher-income individuals, since doula services are often not reimbursed by health coverage programs including most state Medicaid programs. Medicaid covers over 40 percent of all births across the U.S. and is an important source of coverage for populations experiencing poor maternal health outcomes (see Figure 2). For instance, Medicaid covers over 60 percent of all births among Black and AI/AN individuals. Though improving access to doula services would not singlehandedly address the ongoing need to improve access to clinical care services in some communities across the U.S., coverage for doula services is one option to improve the maternity care experience for patients and provide supports that can contribute to improved maternal health outcomes as described later in this report.

**Figure 2: Percent of Births Paid by Medicaid by Mother's Race, 2020**



**Note:** Data are from the CDC's Natality Records 2016-2020, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at <http://wonder.cdc.gov/nativity-expanded-current.html>

In this report, we explore the role of doulas in maternal health care, review the evidence on the effects of doula care on maternal health outcomes, and discuss challenges and policy opportunities for expanding doula care in the U.S., including recent developments in Medicaid and actions being taken as part of the White House Blueprint for Addressing the Maternal Health Crisis.<sup>11</sup>

## THE ROLE OF DOULAS IN MATERNAL HEALTH CARE

As nonclinical perinatal professionals, doulas can provide various types of support for women during pregnancy, childbirth, the postpartum period, and other related reproductive health experiences. Doulas can function as navigators and advocates for expecting parents as they engage with various clinical providers involved in their care, such as licensed midwives and obstetricians, and they can function as consistent points of contact and trusted sources of information in their local communities – which can be particularly valuable for populations that experience increased barriers to accessing clinical services. Many doulas have private practices, but some also practice in hospital- or community-based programs.<sup>12</sup> Whether participating as a member of a broader maternity care team or providing their services on an individual basis, in addition to providing general support and education on pregnancy, doulas may also serve as patient advocates by

communicating patient preferences, needs, and concerns to licensed midwives and obstetricians. They can use their experience and knowledge to explain complicated medical information. For example, doulas can support women during emergency cesarean deliveries by using their experience and knowledge to relay procedural information while also attending to the woman's emotional and other non-medical needs.

Some of the supports that a doula may provide include:

- **Education and Emotional Support** – Doulas can provide accessible information to women on topics such as risk factors and warning signs that may need to be addressed and healthy choices to optimize maternal and infant outcomes. They can also provide emotional support during stressful pregnancy and postpartum periods. For example, during childbirth, doulas can serve as patient advocates and work with the medical team to ensure patient preferences are incorporated into the care plan.
- **Affirmation and Advocacy** – Doulas can provide affirmation when women are experiencing uncertain and concerning symptoms that should be addressed and advocate on their behalf when attending clinical visits. Affirmation and advocacy may be particularly beneficial for populations experiencing disparities in maternity care.<sup>13</sup>
- **Navigation** – Doulas can help women navigate the health care and social service sectors. This assistance may be particularly helpful for women who have complex health conditions, are new to engaging with the health care system, or who need assistance with accessing community resources and services to help support their pregnancies and during the postpartum period.

Doulas practicing within their communities, such as community-based doulas,<sup>14</sup> can often provide culturally appropriate support to women at higher risk of poor outcomes throughout pregnancy, delivery, and the postpartum period. Doulas are often trusted members of the community they serve and are well-suited to address issues related to discrimination and other drivers of disparities by bridging language and cultural gaps and serving as health navigators. Further, they often provide additional services tailored to the specific needs of the community including prenatal and postpartum home visits, which reduce travel and logistic issues for clients; breastfeeding education and consultation; and referral and navigation assistance for additional needs such as social services. This may be of particular importance for Black and AI/AN women, who have been historically marginalized in institutions both inside and outside of health care, and thus may face more barriers accessing services and experience far worse maternal health outcomes.<sup>15,16</sup>

## EVIDENCE ON DOULA CARE

Doula support during pregnancy and birth has been shown to be effective in improving the labor and delivery experience.<sup>17</sup> By providing continuous support across the entire pregnancy, doulas can contribute to improved maternal and infant outcomes and experiences by reducing stress, anxiety, and pain, and by promoting self-efficacy and confidence.<sup>18</sup> The Centers for Medicare & Medicaid Services (CMS) Expert Panel on Improving Maternal and Infant Health Outcomes in Medicaid and the Children's Health Insurance Program (CHIP) in 2013 and the Recommendations for Maternal Health and Infant Health Quality Improvement in Medicaid CHIP from 2020 included continuous doula support during labor as a strategy to improve maternal care management.<sup>19,20</sup>

One meta-analysis of 26 randomized controlled trials from 17 countries between 1988 and 2015, involving more than 15,000 women in a wide range of settings, found continuous labor support provided by doulas to reduce rates of cesarean delivery, improve 5-minute Apgar scores,<sup>‡</sup> and improve women's ratings of the

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<sup>‡</sup> Test rating a newborn's appearance, pulse, grimace, activity, and respiration on a scale of 0-2 following birth.

childbirth experience.<sup>21</sup> Among U.S. women, one randomized controlled trial of middle- and upper-income women in labor showed that the continuous presence of a doula during labor compared to not having a doula significantly decreased the likelihood of cesarean delivery and reduced the need for epidural analgesia. All women (244 out of 244) who received doula support positively rated their experience with their doula.<sup>22</sup>

An observational study of low-income women (41 percent of whom were Black) found that doula-assisted mothers were four times less likely to give birth to a baby with low birthweight, two times less likely to experience a birth complication involving themselves or their baby, and significantly more likely to initiate breastfeeding, though these results – unlike the ones cited above – were not randomized and may have been affected by which women utilized doula care.<sup>23</sup>

Among Medicaid beneficiaries, research has shown that women whose labor and delivery were supported by doula care had lower cesarean and preterm birth rates and improved rates of breastfeeding initiation.<sup>24,25</sup> One study found that the high costs associated with cesarean versus vaginal deliveries can make coverage reimbursement for doula services cost-effective for state Medicaid programs.<sup>26</sup> Preventing birth complications for mother or newborn may also be a source of savings.<sup>27</sup>

These studies indicate that doula care can benefit women through pregnancy and during delivery and that infants can benefit as well from high rates of breastfeeding initiation in the postpartum period. A randomized control trial on doula home visit services found women who received doula services were more likely than women enrolled in case management to attend classes ahead of their delivery and practice infant safety measures, including back-sleeping for infants and appropriate car seat use.<sup>28</sup> Future research can assess patient preferences for, access to, and utilization of doula services; the impact of doula services on health outcomes such as maternal and neonatal morbidity and mortality when doula services are covered by insurance; and the effect doula care has on overall maternity care costs.

## **CHALLENGES AND OPPORTUNITIES FOR THE PROVISION OF DOULA CARE**

Despite the benefits doulas can provide, a survey found only 6 percent of U.S. births involved doula services.<sup>29</sup> Low utilization of doula services may be attributable to several factors described in this section, including high out-of-pocket costs, limited numbers of practicing doulas, variation in training requirements, and a lack of awareness of the profession. Doula care in the U.S. is currently largely limited to middle- and high-income women who can afford to pay for such services out-of-pocket, who are disproportionately White, and doulas serving these women tend to be of the same race and socioeconomic class.<sup>30,31</sup>

### ***Cost, Coverage, and Payment***

Both private and public medical insurance generally do not cover doula services and there is a general lack of information available on the size and characteristics of the doula workforce – in part, because they are often not reimbursed through health insurance.<sup>32</sup> Many doulas also operate as solo practitioners and lack the capacity and infrastructure to manage health plan contracting and billing requirements, so many doulas require women to pay for their services out-of-pocket without using insurance.<sup>33</sup> However, in those cases when doula services are covered by Medicaid, the level of payment, the ease of enrolling in insurance arrangements, and the administrative burden of getting paid all may affect access and availability of doula services. Insurance coverage paired with adequate reimbursement of doula services is a key strategy to draw interest to doula care as a financially viable profession; in addition – and generally on a much smaller scale – some doulas are paid through community programs or directly by health care systems and hospitals.

As of October 2022, eight state Medicaid programs (Florida, Maryland, Minnesota, New Jersey, Nevada, Oregon, Rhode Island, and Virginia) and the District of Columbia cover doula services, while an additional four states (California, Illinois, Indiana, and Michigan) are in the process of implementing coverage for doula services.<sup>34</sup> There is also significant variation in reimbursement rates for doulas services at the state level. This year, Rhode Island became the first state to require both Medicaid and private insurance providers in the state to reimburse community-based doula services up to \$1,500 per pregnancy. Rhode Island’s reimbursement rate covers services in the prenatal and postpartum period in addition to labor and delivery. This is higher than many of the other states adopting Medicaid doula reimbursement provisions (see Table 1).<sup>35</sup> Variation in Medicaid coverage for pregnant women during the postpartum period also impacts the potential for doula service reimbursement, with some states terminating Medicaid benefits 60 days postpartum, while a growing number of states are extending postpartum benefits for up to one year postpartum as a result of provisions in the American Rescue Plan.<sup>36,§</sup>

**Table 1. Summary of Medicaid Reimbursement Policies in States Covering Doula Services<sup>37,38</sup>**

State	Prenatal Visit Coverage	Postpartum Visit Coverage	Delivery Coverage	Total Reimbursement
District of Columbia <sup>39</sup>	Covers 12 total visits, \$97 per prenatal visit and up to \$291 (maximum of 6 hours at \$49 per hour) for postpartum visit, additional \$100 incentive for timely postpartum visit		Flat rate of \$686	\$1,565 under a scenario with 5 prenatal, delivery attendance, and 6 postpartum visits that last one hour each with incentive payment
Florida <sup>40</sup>	Number of covered visits varies by plan	Number of covered visits varies by plan	Coverage varies by plan	Varies by Medicaid Managed Care plan, usually \$400 - \$1,110
Maryland <sup>41</sup>	Covers 4 visits, up to \$65 per visit	Covers 4 visits, up to \$79 per visit	Flat rate of \$350	Up to \$930 if all potential visits are reimbursed
Minnesota <sup>42</sup>	Covers 6 total visits, \$47 per visit		Flat rate of \$488	Up to \$770 if all potential visits are reimbursed
New Jersey <sup>43</sup>	Covers 12 total visits, up to \$66 per visit and \$100 for initial visit, additional \$100 incentive for an initial postpartum visit		Flat rate of \$235	Up to \$1,166 across all visits, up to \$1,266 with incentive payment
Nevada <sup>44</sup>	Covers 4 total visits, \$50 per visit		Flat rate of \$150	Up to \$350 across all visits
Oregon <sup>45</sup>	Covers 4 total visits, \$50 per visit		Flat rate of \$150	Up to \$350 across all visits
Rhode Island <sup>46</sup>	Covers 3 visits, \$100 per visit	Covers 3 visits, \$100 per visit	Flat rate of \$900	Up to \$1,500 across all visits
Virginia <sup>47</sup>	Covers 8 total visits, additional \$100 in incentives available		Covered, unspecified amount	Up to \$859 across all visits, up to \$959 with incentive payments

**Note:** The table includes the eight states and the District of Columbia actively reimbursing doula services in Medicaid, as of October 16, 2022. Rounded to nearest dollar.

Often, doula care is discussed in the context of before and after delivery; however, not all pregnancies end with live birth. The “California Momnibus” bill (SB 65), signed into law in October 2021, includes language to cover doula services in cases of miscarriage, stillbirth, and abortion in California. Some doulas, referred to as loss doulas or bereavement doulas, primarily work with families in these cases. Other doulas, known as “full-spectrum” doulas, provide services across various reproductive health experiences including pregnancy and delivery, but also in cases of miscarriage, abortion, and fertility treatments.<sup>48</sup>

<sup>§</sup> 26 states and the District of Columbia have expanded to a year postpartum as of October 27, 2022.



## ***Doula Training***

In conjunction with incentivizing more individuals to enter the doula profession by expanding reimbursement for doula services, a complementary pathway is expansion of training programs, which may be especially important in maternity care deserts. Though various local and national organizations offer doula training and certification programs, doula training and certification is not standardized across the U.S. However, when establishing Medicaid requirements for reimbursing doula services, states specify certain training and skills doulas must possess.<sup>49</sup> Doulas can benefit from training on how maternal health experiences differ by race, ethnicity, and other factors, and combining this training with recruiting doulas in greater numbers from the communities they serve (sometimes referred to as community-based doulas) can contribute to the provision of culturally appropriate and trauma-informed care that can improve outcomes.<sup>50</sup> Other training can include privacy protections for patients including requirements of the Health Insurance Portability and Accountability Act (HIPAA). Additional research could provide insights into best practices that should be incorporated in doula training.

## ***Patient and Provider Awareness of Doulas***

Doulas face challenges due to a lack of awareness of their role by patients and clinical providers. Awareness of doula services among women may also vary by race. One study found Black women were less likely to be aware of doula care services, with 37 percent of Black women indicating they felt knowledgeable about doula care, compared to 87 percent of White women.<sup>51</sup> Friction between doulas and clinical providers, and in some cases, lack of provider respect for doulas can curb the potential for improved patient experiences and clinical outcomes.<sup>52,53</sup> Education, awareness, and additional research may help women gain a better understanding of the benefits of doula care, aid them in determining whether a doula is appropriate for them, and help facilitate greater acceptance among clinicians.<sup>54</sup>

## **POLICY EFFORTS TO STRENGTHEN AND EXPAND DOULA CARE**

The White House Blueprint for Addressing the Maternal Health Crisis highlighted efforts by HHS and other parts of the federal government to expand access to doula care in federal programs. These efforts and others include:

- **CMS:** CMS released guidance and is providing technical assistance on new and existing coverage options for states, including the ways in which doula services can be reimbursed under Medicaid.<sup>55,56,57</sup> CMS also released guidance based on findings from the Strong Start for Mothers and Newborns Initiative on best practices for integrating doula care in out-of-hospital birth models.<sup>58</sup>
- **Health Resources and Services Administration (HRSA):** In 2022, HRSA provided over \$5.9 million in funding to support doula care programs and expand the doula care workforce via training and certification opportunities provided by Healthy Start grantees. There are 44 doula projects funded across 25 states and territories.<sup>59,60</sup> Additionally, in 2019, HRSA implemented the first cohort of the Rural Maternal Obstetrics Management Strategies (RMOMS) program to increase access to maternal and obstetrics care in rural communities. HRSA has since provided funding for two additional RMOMS cohorts, including one that began on September 1, 2022. RMOMS awardees use funding to provide a variety of services including doula care with the aim of improving maternal health outcomes.<sup>61</sup>
- **Office of Minority Health (OMH):** OMH is planning an initiative of up to \$10 million to evaluate the effectiveness of innovative or enhanced payment models for community-based maternal support services – including doulas and community health workers – in 2023. Recipients will identify and implement payment models in areas with high rates of adverse maternal health outcomes that are

intended to reduce maternal and infant health disparities for racial and ethnic minority populations. Recipients will be expected to develop public, private and community partnerships to support project implementation, including data collection and evaluation.

- **Department of Defense (DOD):** DOD is evaluating the TRICARE Childbirth and Breastfeeding Support Demonstration, which launched in January 2022 and provides doula and lactation services to TRICARE beneficiaries. The results of the demonstration will be used to inform future TRICARE maternity care benefits.
- **Office of Personnel Management (OPM):** OPM's Annual Call Letter encouraged Federal Employees Health Benefits (FEHB) Program carriers to include coverage and reimbursement for doula services.<sup>62</sup> FEHB carriers provide insurance coverage to federal employees, the largest employer-sponsored group health insurance program totaling nine million people.<sup>63</sup>
- **Department of Justice (DOJ):** DOJ's Bureau of Prisons has committed to identifying pathways to offer doulas to pregnant inmates and provide training and certification opportunities for female inmates.

These efforts can be further supported by state-level programs. In addition to the Medicaid policies discussed earlier, 15 states have developed criteria for certification and registry programs.<sup>64</sup> Legislation passed in Connecticut establishes a Doula Advisory Committee to advise on requirements for doula certification and standards for recognizing doula training programs which meet certification requirements.<sup>65</sup> States also may opt to implement pilot payment programs for doulas. The Iowa Department of Public Health is currently operating a 3- to 4-year doula pilot program through the state's Title V service delivery system with the goal of assessing the business case for doula care reimbursement.<sup>66</sup>

The aforementioned efforts offer potential avenues to expand and finance the doula care workforce to improve access to their services. Research on the implementation of these objectives could help guide future decision-making regarding policies to support doula services. The National Institute of Nursing Research recently released a funding opportunity, Advancing Integrated Models (AIM) of Care to Improve Maternal Health Outcomes among Women Who Experience Persistent Disparities, which could fund research exploring some of these topics.<sup>67</sup>

## CONCLUSION

Doula support during pregnancy, birth, and during the postpartum period has been shown to be an effective best practice that can enhance the birthing experience, reduce complications, and improve outcomes for women and infants. However, the use of doula services in the U.S. has been relatively limited to date, which is likely related to low public awareness of doula care and limited insurance coverage of doula services.<sup>68</sup> Populations that experience worse maternal health outcomes, including Black and AI/AN women, may particularly benefit from doula services but have historically been less likely to use doulas or be aware of their services. Research can provide additional evidence on the relationship between doula services and health outcomes and spending, in addition to best practices in doula care that should be incorporated into doula training programs.

The federal government is supporting training opportunities to expand the doula workforce and encouraging coverage of doula services in a number of health programs. Several states have either developed pilot programs to reimburse doula care or are paying for doula care through their state Medicaid programs. Expansion of similar efforts in other areas of the country, with a particular focus on populations experiencing



worse maternal health outcomes, has the potential to improve clinical outcomes and care experiences for many women. If implemented with a focus on equitable access to doula services and coupled with other initiatives to improve maternal health, doula care can help address longstanding racial disparities in maternal health outcomes.

## REFERENCES

1. Hamilton BE, Martin JA, Osterman MJK. Births: Provisional data for 2020. Vital Statistics Rapid Release; no 12. Hyattsville, MD: National Center for Health Statistics. May 2021.
2. Petersen EE, Davis NL, Goodman D, Cox S, Mayes N, Johnston E, Syverson C, Seed K, Shapiro-Mendoza CK, Callaghan WM, Barfield W. Vital Signs: Pregnancy-Related Deaths, United States, 2011-2015, and Strategies for Prevention, 13 States, 2013-2017. *MMWR Morb Mortal Wkly Rep.* 2019 May 10;68(18):423-429.
3. Hoffman KM, Trawalter S, Axt JR, Oliver MN. Racial bias in pain assessment and treatment recommendations, and false beliefs about biological differences between blacks and whites. *Proc Natl Acad Sci U S A.* 2016 Apr 19;113(16):4296-301.
4. Braveman PA, Arkin E, Proctor D, Kauh T, Holm N. Systemic And Structural Racism: Definitions, Examples, Health Damages, And Approaches To Dismantling: Study examines definitions, examples, health damages, and dismantling systemic and structural racism. *Health Affairs.* 2022 Feb 1;41(2):171-8.
5. Kozhimannil KB, Interrante JD, Henning-Smith C, Admon LK. Rural-Urban Differences In Severe Maternal Morbidity And Mortality In The US, 2007–15. *Health Affairs* 2019 38:12, 2077-2085
6. Hung P, Kozhimannil KB, Casey MM, Moscovice IS. Why Are Obstetric Units in Rural Hospitals Closing Their Doors? *Health Serv Res.* 2016 Aug;51(4):1546-60. Erratum in: *Health Serv Res.* 2018 Jun;53(3):2005.
7. Hung P, Henning-Smith CE, Casey MM, Kozhimannil KB. Access to obstetric services in rural counties still declining, with 9 percent losing services, 2004–14. *Health Affairs.* 2017 Sep 1;36(9):1663-71.
8. Brigance, C., Lucas R., Jones, E., Davis, A., Oinuma, M., Mishkin, K. and Henderson, Z. Nowhere to Go: Maternity Care Deserts Across the U.S. (Report No. 3). March of Dimes. 2022. Available from <https://www.marchofdimes.org/research/maternity-care-deserts-report.aspx>
9. The White House Blueprint for Addressing the Maternal Health Crisis. June 2022. Available from: <https://www.whitehouse.gov/wp-content/uploads/2022/06/Maternal-Health-Blueprint.pdf>
10. FACT SHEET: President Biden’s and Vice President Harris’s Maternal Health Blueprint Delivers for Women, Mothers, and Families. June 2022. Available from: <https://www.whitehouse.gov/briefing-room/statements-releases/2022/06/24/fact-sheet-president-bidens-maternal-health-blueprint-delivers-for-women-mothers-and-families/>
11. The White House Blueprint for Addressing the Maternal Health Crisis. June 2022. Available from: <https://www.whitehouse.gov/wp-content/uploads/2022/06/Maternal-Health-Blueprint.pdf>
12. Ballen LE, Fulcher AJ. Nurses and Doulas: Complementary Roles to Provide Optimal Maternity care. *J Obstet Gynecol Neonatal Nurs.* 2006 Mar-Apr;35(2):304-11.
13. Vedam S, Stoll K, Taiwo TK, Rubashkin N, Cheyney M, Strauss N, McLemore M, Cadena M, Nethery E, Rushton E, Schummers L, Declercq E; GVtM-US Steering Council. The Giving Voice to Mothers study: inequity and mistreatment during pregnancy and childbirth in the United States. *Reprod Health.* 2019 Jun 11;16(1):77
14. Healthy Start Epic Center. National Institute for Children's Health Quality. Available from: <https://healthystartepic.org/resources/evidence-based-practices/community-based-doula-programs/>
15. Ellmann N. Community-Based Doulas and Midwives. The Center for American Progress. 2021. Available from: <https://www.americanprogress.org/article/community-based-doulas-midwives/>
16. Racial and Ethnic Disparities Continue in Pregnancy-Related Deaths. Centers for Disease Control and Prevention. 2019. Available from: <https://www.cdc.gov/media/releases/2019/p0905-racial-ethnic-disparities-pregnancy-deaths.html>
17. Berghella V, Baxter JK, Chauhan SP. Evidence-based labor and delivery management. *Am J Obstet Gynecol.* 2008 Nov;199(5):445-54.

18. Gruber KJ, Cupito SH, Dobson CF. Impact of doulas on healthy birth outcomes. *J Perinat Educ*. 2013 Winter;22(1):49-58.
19. Centers for Medicare and Medicaid Services. Improving maternal and infant health outcomes: Crosswalk between current and planned CMCS activities and expert panel identified strategies. 2013. Retrieved from <https://www.medicare.gov/Medicare-CHIP-Program-Information/By-Topics/Quality-of-Care/Downloads/Crosswalk-of-Activities.pdf>
20. Bigby J, Anthony J, Hsu R, Fiorentini C, Rosenbach M. Recommendations for Maternal Health and Infant Health Quality Improvement in Medicaid and the Children's Health Insurance Program. December 2020. Available from: <https://www.medicare.gov/medicaid/quality-of-care/downloads/mih-expert-workgroup-recommendations.pdf>
21. Bohren MA, Hofmeyr GJ, Sakala C, Fukuzawa RK, Cuthbert A. Continuous support for women during childbirth. *Cochrane Database of Systematic Reviews* 2017, Issue 7.
22. McGrath SK, Kennell JH. A randomized controlled trial of continuous labor support for middle-class couples: effect on cesarean delivery rates. *Birth*. 2008 Jun;35(2):92-7.
23. Gruber KJ, Cupito SH, Dobson CF. Impact of doulas on healthy birth outcomes. *J Perinat Educ*. 2013 Winter;22(1):49-58.
24. Kozhimannil KB, Hardeman RR, Attanasio LB, Blauer-Peterson C, O'Brien M. Doula care, birth outcomes, and costs among Medicaid beneficiaries. *Am J Public Health*. 2013 Apr;103(4):e113-21.
25. Kozhimannil KB, Attanasio LB, Hardeman RR, O'Brien M. Doula care supports near-universal breastfeeding initiation among diverse, low-income women. *J Midwifery Womens Health*. 2013 Jul-Aug;58(4):378-82.
26. Kozhimannil KB, Hardeman RR, Alarid-Escudero F, Vogelsang CA, Blauer-Peterson C, Howell EA. Modeling the Cost-Effectiveness of Doula Care Associated with Reductions in Preterm Birth and Cesarean Delivery. *Birth*. 2016 Mar;43(1):20-7.
27. Gruber KJ, Cupito SH, Dobson CF. Impact of doulas on healthy birth outcomes. *J Perinat Educ*. 2013 Winter;22(1):49-58.
28. Hans SL, Edwards RC, Zhang Y. Randomized Controlled Trial of Doula-Home-Visiting Services: Impact on Maternal and Infant Health. *Matern Child Health J*. 2018 Oct;22(Suppl 1):105-113. Erratum in: *Matern Child Health J*. 2018 Aug 20.
29. Declercq ER, Sakala C, Corry MP, Applebaum S, Herrlich A. *Listening to Mothers SM III: Pregnancy and Birth*. New York: Childbirth Connection, 2013.
30. Sperlich M, Gabriel C, St Vil NM. Preference, knowledge and utilization of midwives, childbirth education classes and doulas among U.S. black and white women: implications for pregnancy and childbirth outcomes. *Soc Work Health Care*. 2019 Nov-Dec;58(10):988-1001.
31. Lantz PM, Low LK, Varkey S, Watson RL. Doulas as childbirth paraprofessionals: results from a national survey. *Womens Health Issues*. 2005 May-Jun;15(3):109-16.
32. Doula Care Saves Lives, Improves Equity, And Empowers Mothers. State Medicaid Programs Should Pay For It, *Health Affairs Blog*, May 26, 2021.
33. Roth Port DR, Srinivasan H. How Much Do Doulas Cost? *Parents*. 2022. Available from: <https://www.parents.com/pregnancy/giving-birth/doula/how-much-do-doulas-cost/>
34. National Health Law Program. Doula Medicaid Project. Available from: <https://healthlaw.org/doulamedicaidproject/>
35. Nguyen A. Behind the growing movement to include doulas under Medicaid. *The Washington Post*. 2021 . Available from: <https://www.washingtonpost.com/graphics/2021/the-lily/covering-doulas-medicare/>
36. Centers for Medicare & Medicaid Services. HHS Approves 12-month Extension of Postpartum Medicaid and CHIP Coverage in North Carolina. September 22, 2022. Available from:

- <https://www.cms.gov/newsroom/press-releases/hhs-approves-12-month-extension-postpartum-medicaid-and-chip-coverage-north-carolina>
37. Guarnizo T. Doula Services in Medicaid: State Progress in 2022. The Center for Children & Families, Health Policy Institute at Georgetown University. June 2022. Available from: <https://ccf.georgetown.edu/2022/06/02/doula-services-in-medicaid-state-progress-in-2022/>
  38. National Health Law Program. Doula Medicaid Project. Available from: <https://healthlaw.org/doulamedicaidproject/>
  39. DC Department of Health Care Finance. Fee Schedule. Available from: <https://www.dc-medicaid.com/dcwebportal/nonsecure/feeScheduleDownload>
  40. Ollove M. More States Adding Medicaid Benefit for Doula Services. The Pew Charitable Trusts. June 2022. Available from: <https://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2022/06/06/more-states-adding-medicaid-benefit-for-doula-services>
  41. Maryland State Plan Amendment #22-0004. Available from: <https://www.medicaid.gov/medicaid/spa/downloads/MD-22-0004.pdf>
  42. Minnesota State Plan Amendment #19-0012. Available from: <https://www.medicaid.gov/medicaid/spa/downloads/MN-19-0012.pdf>
  43. New Jersey State Plan Amendment #20-0011. Available from: <https://www.medicaid.gov/Medicaid/spa/downloads/NJ-20-0011.pdf>
  44. Nevada Department of Health and Human Services Division of Health Care Financing and Policy. Fee Schedules. Available from: <https://dhcfp.nv.gov/Resources/Rates/FeeSchedules/>
  45. Oregon State Plan Amendment #17-0006. Available from: <https://www.medicaid.gov/sites/default/files/State-resource-center/Medicaid-State-Plan-Amendments/Downloads/OR/OR-17-0006.pdf>
  46. Rhode Island State Plan Amendment #21-0013. Available from: <https://www.medicaid.gov/medicaid/spa/downloads/RI-21-0013.pdf>
  47. Wood T, Lewis N. Doula Services Enrollment, Billing, and Training. DC Department of Health Care Finance. Presented on August 8, 2022. Available from: <https://dhcf.dc.gov/sites/default/files/u23/Slides%20Maternal%20Health%20Advisory%20Group%20Enrollment%20and%20Billing%20Meeting%20080822.pdf>
  48. Our Communities Hold the Solutions: The Importance of Full-Spectrum Doulas to Reproductive Health and Justice. National Partnership for Women & Families. October 2022. Available from: <https://www.nationalpartnership.org/our-work/resources/health-care/maternity/our-communities-hold-the-solutions.pdf>
  49. Rhode Island State Plan Amendment #21-0013. Available from: <https://www.medicaid.gov/medicaid/spa/downloads/RI-21-0013.pdf>
  50. Chen A. Routes to Success for Medicaid Coverage of Doula Care. National Health Law Program. 2018. Available from: <https://healthlaw.org/wp-content/uploads/2018/12/NHeLP-PTBi-Doula-Care-Report.pdf>
  51. Sperlich M, Gabriel C, St Vil NM. Preference, knowledge and utilization of midwives, childbirth education classes and doulas among U.S. black and white women: implications for pregnancy and childbirth outcomes. *Soc Work Health Care*. 2019 Nov-Dec;58(10):988-1001.
  52. Lucas L, Wright E. Attitudes of Physicians, Midwives, and Nurses About Doulas: A Scoping Review. *MCN Am J Matern Child Nurs*. 2019 Jan/Feb;44(1):33-39.
  53. Neel, K, Goldman, R, Marte, D, Bello, G, and Nothnagle, MB. Hospital-based maternity care practitioners' perceptions of doulas. *Birth*. 2019; 46: 355– 361.
  54. Chen A. Routes to Success for Medicaid Coverage of Doula Care. National Health Law Program. 2018. Available from: <https://healthlaw.org/wp-content/uploads/2018/12/NHeLP-PTBi-Doula-Care-Report.pdf>

55. Gordon S, Sugar S, Chen L, Peters C, De Lew, N, and Sommers, BD. Medicaid After Pregnancy: State-Level Implications of Extending Postpartum Coverage. (Issue Brief No. HP-2021-28). Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. December 2021. Available from: <https://aspe.hhs.gov/reports/potential-state-level-effectsextending-postpartum-coverage>
56. Improving Maternal Health and Extending Postpartum Coverage in Medicaid and the Children's Health Insurance Program (CHIP) SHO 21-007. Centers for Medicare & Medicaid Services. 2021. Available from: <https://www.medicare.gov/federal-policy-guidance/downloads/sho21007.pdf>
57. Coverage of Maternal, Infant, and Early Childhood Home Visiting Services. Center for Medicaid & CHIP Services and the Health Resources and Services Administration. 2016. Available from: <https://www.medicare.gov/federal-policy-guidance/downloads/cib-03-02-16.pdf>
58. Strong Start for Mothers and Newborns initiative (Strong Start). Center for Medicare and Medicaid Innovation and Center for Medicaid & CHIP Services. 2018. Available from: <https://www.medicare.gov/federal-policy-guidance/downloads/cib110918.pdf>
59. FY 2021 Healthy Start Initiative Awards. Maternal and Child Health Bureau. Available from: <https://mchb.hrsa.gov/programs-impact/programs/healthy-start/fy-2021-healthy-start-initiative-awards>
60. Healthy Start Community Based Doula Fiscal Year 2022 Awards. Maternal and Child Health Bureau. Available from: <https://mchb.hrsa.gov/programs-impact/healthy-start/doula-fy-2022-awards>
61. Rural Maternity and Obstetrics Management Strategies (RMOMS) Program. Federal Office of Rural Health Policy, Health Resources and Services Administration. Available from: <https://www.hrsa.gov/rural-health/grants/rural-community/rmoms>
62. Federal Employees Health Benefits Program Call Letter. Office of Personnel Management. Available from: <https://www.opm.gov/healthcare-insurance/healthcare/carriers/2022/2022-03.pdf>
63. Information for Federal Civilian Employees on the Federal Employees Health Benefits Program. Office of Personnel Management. Available from: <https://www.opm.gov/retirement-services/publications-forms/pamphlets/ri75-13.pdf>
64. Doula Medicaid Project. National Health Law Program. Available from: <https://healthlaw.org/doulamedicaidproject/>
65. Public Act No. 22-58. Connecticut General Assembly. October 2022. Available from: <https://www.cga.ct.gov/2022/ACT/PA/PDF/2022PA-00058-R00HB-05500-PA.PDF>
66. Iowa Title V Community-Based Doula Project for African American Families. Iowa Department of Public Health. 2021. Available from: <https://idph.iowa.gov/Portals/1/userfiles/38/Maternal%20Health/Comprehensive%20handout.pdf>
67. Advancing Integrated Models (AIM) of Care to Improve Maternal Health Outcomes among Women Who Experience Persistent Disparities (R01 Clinical Trial Required). NIH. 2022. Available from: <https://grants.nih.gov/grants/guide/rfa-files/RFA-NR-22-002.html>
68. Declercq ER, Sakala C, Corry MP, Applebaum S, Herrlich A. Listening to Mothers SM III: Pregnancy and Birth. New York: Childbirth Connection, 2013.

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