Integration of Continuous Labor Support Within American Obstetric Care:
A Review of Advancements and Persisting Barriers

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Abstract

The purpose of this paper was to review current models for integrating continuous labor support into the standard practice of American obstetric care to identify successes and persisting barriers that delay large-scale implementation. Following a detailed literature review on the impact of doula services, an analysis of current programs and policies outline the advancements in the field taking place at the national level. Such programs offer valuable representations of successful development, implementation, and scale-up of doula care for marginalized populations. Lastly, recommendations are made that identify areas for advancement within the field, while present barriers are discussed to target obstacles documented within doula care that have impeded upon large-scale implementation of service delivery.

The impact of doula care as an evidence-based obstetric intervention has proven a highly effective tool for improving birth outcomes and overall measures of support for low-income women of color within the United States. While there remains a void in policy development, specific legislation enacted within individual states support doula services under the Medicaid care model for pregnancy services. Although such policy shifts advance the practice of doula services, there remain issues with reimbursement that must be addressed to sustain the practice of doula care for all women. Lastly, the work of doulas must be recognized by the broader MCH community of leaders as an evidence-based intervention that, with further research and improved monitoring and evaluation tools can present as an effective method for improving health outcomes within a variety of obstetric care settings.
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SUMMARY

Problem Statement:

Today, the experience of childbirth is at a cross-road. American women are caught within an ever-expanding industrialized world of biomedical medicine. As it currently stands, nearly 32% of all births in the United States are by cesarean. African American women are particularly susceptible to surgical intervention at a staggering rate of 35.9%. As the rise in surgical interventions increase, the American woman is at a growing risk for birth-related complications. The United States has received global attention for having the highest maternal death rate amongst high-income countries, with a mortality ratio of 26.4 per 100,000 live births in 2015. Individuals of color and lower socioeconomic status tend to present the highest risk for adverse health outcomes, including obstetric labor complications, mortality, and poor infant health outcomes.

Black women have a mortality rate 3 times higher than that of white women. Black women also present the highest rates of pre-term birth, low birth weight, post-partum hemorrhage, and peripartum infection.

Doula – Defined:

The etymology of the word doula extends back to modern Greek in reference to slaves, maidservants, and female helpers. Today, a doula is more clearly defined as a trained professional who provides informational, emotional, and physical comfort to a mother before, during, and just after childbirth. Doulas are non-clinical support staff that have been linked to positive birth outcomes. Dependent on training and capabilities, doulas are utilized in the areas of prenatal, birth, postpartum care, abortion services and perinatal loss. Aside from women’s health, doulas have also been utilized within hospice
The term doula will be used interchangeably throughout this paper with the phrase continuous labor support, referring to the presence of non-medical individuals who provide constant support throughout labor and childbirth.

**Relevance to Maternal and Child Health:**

Linked to improved maternal and infant health outcomes, the supportive role of the doula has gained considerable attention over recent years as professionals within both biomedical and holistic models of health care delivery have advocated for continuous labor support. With just under four million live births in 2015, 98.5% occurred within a hospital while 84% were attended by a traditional obstetric medical doctor and 8.1% by midwives. Currently, the rate of United States cesarean deliveries is three times the evidence-based global recommendation of 10%. While the rate of surgical delivery has grown exponentially for all American women, including those increasingly diagnosed with various co-morbidities such as obesity, diabetes, and high blood pressure, the concern here is how birth outcomes lead to a confounding web of disparities for women of color and low socioeconomic status. The physical consequences of cesarean delivery include increased placenta accrete, emergency hysterectomy, blood transfusion, and uterine hemorrhage, all of which increase the risk for maternal mortality. With stagnant cesarean rates and a rise in adverse health outcomes for women of child-bearing age, the United States must prioritize maternity care services as a primary gateway for preventative and therapeutic practice.

Outlined within The United Nations Sustainable Development goal (SDG) three, world leaders call for improvements to various health outcomes to “ensure healthy lives and promote well-being for all at all ages.” Within SDG3, targets are defined that
include reducing the global rate of maternal and premature mortality. Furthermore, Healthy People 2020, a 10-year guide for national objectives laid out by the Office of Disease Prevention and Health Promotion (ODPHP) outlines maternal, child, and infant health as a primary area for improvement, including indicators for morbidity and mortality, reproductive, pregnancy, postpartum, and infant health and benefits, disability and health services. Under the Title V Maternal and Child Health (MCH) Block Grant Program, individual states are required to submit annual applications which outline their specific MCH priorities to receive federal funds. The MCH block grant offers a three-tiered framework for measuring performance with national outcomes measures, national performance measures, and evidence-based strategy measures outlined to hold state MCH programs accountable. Although the MCH block grant is one of the most important pieces of federal legislation for women and children, there remain obvious systems-level flaws as the rate of various national measures including mortality, cesarean births, and breastfeeding have either seen negative growth or remained stagnant over the recent decades.

The linearity between the rise in cesarean births and pregnancy-related mortality presents various health systems stakeholders with several public health issues that demand for a more holistic approach to women-centered care. As medical providers and public health professionals become increasingly aware of the state of emergency within United States obstetric outcomes, state health systems must seek new and innovative interventions to improve national birth outcomes. This paper will seek to explore both the impact of doula care and current program efforts within the United States. Promising strategies and persisting barriers within practice will be addressed in order to identify
pathways towards the implementation of doula care as a standard, practice of preventative and therapeutic intervention for low-income women of color within the United States.

**A REVIEW OF THE LITERATURE**

**IMPACT OF CARE**

*Health Outcomes:*

Various studies both domestically and abroad over recent decades have presented findings that substantiate the value of doula support related to maternal and infant health outcomes.\(^8,16\) Within a Cochrane Review on continuous support during childbirth involving 26 trials within 17 countries, researchers concluded that such support could potentially act as a protective factor for adverse maternal and infant outcomes.\(^8\) Aside from lower rates of surgical interventions and shortened labors, doula support was associated with improved maternal feelings toward the childbirth experience, higher rates of spontaneous vaginal delivery, and improved five-minute Apgar scores.\(^8\) Continuous support has also been linked to maternal perceptions of their ability to cope well throughout the labor process.\(^16\) Doula presence within birth and immediately postpartum has also been linked to improved rates of breastfeeding initiation and breastfeeding rates at six weeks postpartum.\(^17-20\)

Supported by the American College of Obstetricians and Gynecologists (ACOG) and further endorsed by the American College of Nurse-Midwives (ACNM) and the Association of Women’s Health, Obstetric and Neonatal Nurses, the American obstetric community has substantiated the use of continuous labor support as a viable approach to limiting the use of interventions within low-risk deliveries.\(^21\)
The Health System:

When detailing the impact of continuous labor support, one cannot overlook the potential influence such an intervention as doula services can have on the cost of maternal care as a whole.

In 2009, maternity hospitalizations exceeded $27 billion dollars.\textsuperscript{22} Childbirth-related hospitalization, accounts for the highest portion of payments for hospital-based maternity care.\textsuperscript{22} Today, the United States payment system remains largely dominated by the fee-for-service model. Ultimately, this means that health systems and providers can bill and get paid for each service they provide. For childbirth-related hospitalization in 2010, Medicaid paid on average $29,800 for vaginal births and $50,373 for cesarean births.\textsuperscript{22} Overall, among commercial, employee, and public insurance coverage, cesarean births were nearly 50\% more than the cost of vaginal delivery while hospital stays that included the neo-natal intensive care unit (NICU) had the highest rate of payment.\textsuperscript{22} In 2016, preterm birth, or birth before 37 weeks of gestation, affected 1 out of 10 deliveries.\textsuperscript{23-24} Preterm births cost Americans a minimum of $26.2 billion dollars in 2005.\textsuperscript{25}

Resulting in 1 million deaths worldwide in 2015, the World Health Organization (WHO) estimates that three quarters of all premature infant deaths can be prevented using cost-effective interventions already in practice within various settings.\textsuperscript{24} Continuous labor support is one resource proven effective that can have widespread systems level impact. One study looking at preterm and cesarean birth rates among Medicaid recipients identified an average cost-saving of $986 per delivery with the utilization of doula care as women with continuous labor support had lower rates of preterm and cesarean birth.\textsuperscript{26}
Women included in the study had access to prenatal doula care through Medicaid. Overall, individuals with doula support had 22% lower odds of preterm birth.\textsuperscript{26} Study results identified that black women still had higher odds of preterm birth with a doula present during active labor.\textsuperscript{26} This could be influenced by the higher rates of hypertension among black women overall, which lead to increased odds of preterm birth.\textsuperscript{27-28}

Further research is needed on the cost-effectiveness of continuous labor support and the impact of doula care on the life course which would benefit from calculating the disability-adjusted life years (DALY) of various maternal and infant health outcomes. DALY is used to analyze the overall health and life expectancy of a population living with or suffering from the consequences of a particular health outcome.\textsuperscript{29} Although there are many adverse maternal and infant health outcomes that result from inadequate maternity care, DALYs can further demonstrate how a person’s long-term health is deeply impacted throughout the life course, starting from conception.

The model of cost-efficiency cannot be discussed without the topic of provider liability. In the most recent 2015 survey on professional liability, the American College of Obstetricians and Gynecologists found that 73.6% of 4,294 respondents had a liability claim filed against within their career.\textsuperscript{30} One cannot overlook the impact of liability on provider actions. Research has shown a direct correlation between insurance premium costs and the use of surgical interventions within maternity care.\textsuperscript{31-32} Cesarean rates have been shown to increase based on the rate of malpractice premiums for the specialty of obstetrics and gynecology amongst various states.\textsuperscript{31-32} To successfully reduce the overall rate of cesarean sections nationwide, providers must feel both professionally competent
and supported in choosing the safest, least medically invasive intervention necessary for each labor they oversee.

Supported by ACOG as a safe and viable option in most cases of labor, trail of labor after cesarean delivery (TOLAC) has a success rate of 60-80% for achieving a vaginal birth after cesarean (VBAC). Although the risks of placenta previa and uterine rupture has long instilled fears of medical liability in providers, they present little overall risk in most cases. Placenta previa is when the infant’s placenta either partially or fully covers the mother’s cervix, while uterine rupture refers to the tearing of the uterus along the previous cesarean incision scar. Given current advancements in maternal and fetal monitoring and obstetric interventions, both TOLAC and VBAC have been recommended as feasible alternatives to combat the extreme rate of surgical intervention.

Although ACOG represented guidelines on VBAC in 2010, the rate of women with a previous cesarean birth who successfully delivered vaginally in 2016 was just over 12%, while the rate of cesarean has been largely unchanged. The reality is, providers remain fearful of the looming liability and although necessary to ensure safe and reliable healthcare practice and fair treatment, torts present a challenging road block for improving the modality of birth within clinical settings. Further professional acceptance and systems-wide changes to policy and protocols is the only foreseeable challenge to medical liability issues.
ADVANCEMENTS IN THE FIELD

INTERVENTIONS WITHIN THE UNITED STATES

Community-based Programs:

For the majority of women around the world, pregnancy, childbirth, and childrearing hold a deep and historical connection to culture and community. The work of community-based doula programs presents promising frameworks for targeting marginalized communities. HealthConnect One is the national standard for community-based doula programs, offering the first of its kind replication model. Founded in 1986, the organization's initial focus was on breastfeeding but expanded over the recent decades into what is today a support agency for MCH programs offering direct-services within their communities. HealthConnect One’s primary focus is on building up doula programs nationwide through the collection of data, a streamlined approach to easily accessible evidence on doula care, strategic monitoring and evaluation techniques for assessment, and fiscal planning. The program offers a culturally sensitive approach to maternity care that embraces the people, organizations, and resources of a community to build a sustainable model of peer-to-peer support. HealthConnect One has been supported by the Association of Maternal and Child Health Programs as a best practice for targeting Title V measures in MCH work. Program outcomes include higher rates of exclusive breastfeeding among Black and Hispanic mothers, and lower cesarean and epidural rates than that of CDC data.

Built within the foundation of HealthConnect One is a belief in the power of relationships in inciting positive change in the life course of the families they serve. At the core of every struggling neighborhood within this country lives a deep sense of
community that spans blocks and encompasses entire zip codes. Communities of people who have felt left behind for generations that rely on themselves and their neighbors for survival because their trust in the system and all of its civil servants have been broken.

For the HealthConnect One model to thrive in such conditions, it’s not a matter of building relationships for those have been built by the generations before us. What it will demand is a level of trust for the system to be built, for the sake of material and financial resources, as sustainable nonprofit models cannot thrive without the buy-in from various public and private sector entities. HealthConnect One offers an immensely successful standard for community-based doula care driven on a concept of investing in human capital, a simple yet all too often polarizing notion in the United States that offers an evidence-based approach to improving maternal and infant health outcomes. It is perhaps the most inclusive model of doula care that not only services those otherwise left behind but brings much needed diversity and representation to the world of doula work.

Another form of community-based services is the work of county health systems. To address poor maternal and infant health outcomes perpetually witnessed amongst women of color, the New York City Department of Health and Mental Hygiene’s Healthy Start Brooklyn division started the By My Side Birth Support Program.39 Introduced in 2010, the program is offered to residents of specific zip codes who have incomes below 185% of the Federal Poverty Line (FPL), comparable to the requirements to qualify for WIC services.39 Clients are matched with volunteer doulas who along with childbirth support provide home visits that include screening for depression, food security, intimate partner violence, and medical risks, as well as provide referrals to other services she or he may feel the client would benefit from. In an assessment comparing program data to
Healthy Start numbers nationwide, participants had lower rates of low birthweight and preterm birth, while cesarean rates presented a non-significant decrease. Overall, the program received overwhelming support from the communities it reached, with over 95% of women surveyed recommending the program. During the programs first five years, 489 infants were born to women in the program. Given the lack of information available to the public, including the number of volunteer doulas on staff or whether a training curriculum exists, it is difficult to know how the program is meeting such a high capacity. One must also consider that doula programs built into the public sector have more of a readily available access to the various resources low-income families may require when improving their overall social mobility. County level programs do, however, present another viable pathway towards the standardization of doula services as an evidence-based MCH intervention.

The role of doulas within marginalized communities of color has been shown as both a promising model for addressing adverse maternal and infant health outcomes and building positive and lasting relationships of support and empowerment. It is important to recognize the distinct nature of community doulas in comparison to those working within other settings or even private doulas. Peer support is at the heart of community driven initiatives. Within communities so often defined by issues perpetuated by poverty and lack of opportunity, branded dangerous and invaluable to the outside, there is strength to be found within the shared experience. There are, however, significant challenges with implementing a community-based program within a resource limited community. By the very conditions of such communities, doulas often fill a diverse role, not limited to that of birth companion. Within a qualitative evaluation of the Georgia Campaign for Adolescent
Pregnancy Prevention’s (G-CAPP) community-based doula program, doulas were found to take on multiple roles with their adolescent clients. Roles included maternal figure, friend, social worker, healthcare advocate, education advocate, sex educator, counselor and overall life-coach. The diversity of the work lends itself to a highly stressful environment, one that is then confounded by limited resources, an ever-expanding case load, limited funding, and a lack of political buy-in needed for large-scale change.

Although many obstacles remain, the evidence reveals that not only are doulas needed, but deeply wanted and respected in their communities. The community-based model is the most culturally sensitive approach to doula services in the United States, and one that with improved advocacy and public funding could potentially prove the most sustainable.

**Hospital-based Programs:**

Hospital-based doula programs offer another path towards accessibility of doula services. Doulas are most notably linked to birth centers and servicing only a small, privileged sub-set of the United States population. Hospital programs offer a powerful approach to integrating doula services within a traditional biomedical system of care. Within multicultural, urban settings hospital-based doulas have been linked to improved rates of breastfeeding intent and initiation. Currently, there are a number of doula programs within United States hospitals, however, due to limited research and lack of uniformity there remains no estimate on exactly how many exist. When considering implementing a hospital-based program, or any doula program, the topics of cost and revenue must be strategically planned. For some hospital programs, services are provided
free by trained volunteers. Outside revenue is then pivotal including, allocation of
hospital volunteer funds, grants, and community donors.

San Francisco General Hospital (SFGH) is a county entity under the San
Francisco Department of Public Health with a volunteer doula program that has seen both
growth and stagnation since it was first created in 1993. Service is based solely on
volunteers who are previously trained doulas or receive training by the program. Offering
an impressive repertoire of services, the program has on-call support for labor and
delivery, postpartum, breastfeeding education classes, teenage parenting classes, and also
work with other community entities to fulfill requests for abortion doulas and provide
doula care for incarcerated women. Spearheaded by a Labor and Delivery (L&D) nurse,
volunteers also assist in program administrative tasks like fundraising, coordinating other
volunteers, and organizing the programs many projects. As is apparent by the variety of
services advertised, the SFGH volunteer-based doula program is trying to fulfill a
complexity of needs for a highly diverse and disadvantaged area of the country. Key to
fulfilling such needs, but also for developing a sustainable model of care is building
relationships with other community programs. The program partners with the Birth
Justice Project which focuses on ending reproductive injustice for incarcerated women
and the Homeless Prenatal Program, a family resource center that partners with poor and
homeless families to equip them with the resources necessary to break cycles of
childhood poverty. The reality is, sustainability takes a village and without a
commitment to stakeholder engagement and intersectoral collaboration, programs will
struggle to build replicable models of care.
John Hopkins University also offers a free doula service to families. Birth Companions is a program within the School of Nursing that trains nursing students in doula support.\textsuperscript{46} Trained by a DONA certified instructor, doulas then move on to provide both prenatal and childbirth support for women who request their services.\textsuperscript{46} Another unique aspect to program is that doulas aren’t designated to a specific hospital, rather, they are assigned to the mother, and can travel with her to the facility she chooses. John Hopkins medicine currently operates a total of six academic and community hospitals within the Baltimore, Maryland area.\textsuperscript{46}

Another hospital-based program within an academic setting is that of Birth Partners. A program of volunteer services within the University of North Carolina Medical Center, Birth Partners began in 2001 and has grown to include over 80 volunteer doulas made up of students, professionals, and community members.\textsuperscript{47} There are two modes of entry for volunteers, both of which start with a highly competitive application process.\textsuperscript{47} First, there is service-learning course offered through UNC School of Nursing which accepts students from all disciplines. Lastly, a community-based training course is offered twice a year at a minimal cost and sliding scale fee. Similar to SFGH, Birth Partners doulas are on-call and assist women and families with continuous support during and immediately following labor. Birth Partner’s also offers free prenatal client services depending on volunteer capacity. Unlike SFGH, however, Birth Partners is limited in their scope of capabilities as doulas are not trained to provide long-term postpartum care, abortion support, nor do they lead patient-centered classes at this time.

A second approach taken by health systems is to impose a fee-for-service model. Sharp Mary Birch Hospital for Women and Newborns in San Diego County has a team of
doulas on staff. After signing a contract with the hospital that includes a $900 service fee, mothers and families are afforded to prenatal meetings, birth planning, labor and birth support, and postpartum follow-up. Doulas within the program are also required to carry specific credentials from Doulas of North America (DONA). Given the cost and lack of insurance coverage for such services at the national level, this particular doula experience remains one for the privileged few. Sharp remains a leader in maternal and child health innovations that accepts nearly all insurance plans in the area, including public insurance through Covered California and Medicaid managed plans. The fee-for-service model is one that limits the populations served and inevitably fails at targeting women of color with low socioeconomic means and at highest risk. It does, however, offer a successful and sustained model for integrating doulas into a standard health systems design that could prove advantageous when doula services are covered as a standard benefit for women’s health across state health plans.

Services for Incarcerated Women:

Currently, 219,000 women are incarcerated within the United States. Roughly 10% are pregnant while 80% of women in jails are mothers. Racial disparities present amongst such populations mimic issues faced nationwide. Black women are 3.1 times more likely to be imprisoned then that white females. Incarcerated girls and women face a variety of life burdens including poverty, family instability, and psychological distress coupled with risk factors such as substance abuse, inadequate health care, lack of education, and various co-morbidities that result in cycles of disparity present across generations. The reality is, many of the women behind bars are victims of systemic issues of abuse, exploitation, and discrimination that require high quality, culturally
sensitive, trauma-informed health services. The work of non-profit doula organizations within state correctional services offers a unique pathway for a systems level overhaul of current practices in perinatal health care services for incarcerated women.

Created in 2010, The Minnesota Prison Doula Project offers perhaps the most replicable framework for successful implementation of a doula-based program within a correctional system. Offering birth support, group prenatal and postpartum classes, and counseling services to individuals housed within the state’s one women-only prison, the program has developed a sustainable infrastructure built on stakeholder collaboration. A part of the University of Minnesota’s Center for Urban and Regional Affairs, the program has built a collaborative relationship with the Minnesota Department of Corrections, along with the local public sector and various state donors. Such collaboration has grown to include replicating program efforts within other states, including Alabama.

In 2015, The Alabama Prison Birth Project was founded from the collaborative efforts made by state advocates, The Minnesota Prison Doula Project and multiple stakeholders including the state department of corrections. Offering a similar programmatic framework to that of Minnesota, the Alabama based program offers two unique strategies for targeting areas of perinatal and infant nutrition for women at Julia Tutwiler Prison. The first is all mothers are provided nutrient dense meals during site visits. While regular access to nutrient dense meals and vitamin supplementation is an important aspect to maintaining a health pregnancy, 41 states in 2010 did not have provisions to ensure appropriate nutrition for incarcerated pregnant women. The organization has also developed the Mother’s Milk Initiative, making it possible for postpartum mothers to express milk within the prison. Aside from the benefits for a
child’s physical and cognitive development, the initiative offers an innovative approach to improving issues of separation and empower incarcerated mothers to maintain feelings of significance in their children’s lives while they are physically separated.

As advocates look to identify pathways for introducing doula services into other state correctional systems, the work and mentoring capacity of The Minnesota Prison Doula Project provides an invaluable resource for future programs. Evident from the collaborative efforts of both state programs mentioned above, the department of corrections must remain an integral partner in building similar programs nationwide. A necessary next step for programs currently in existence is program evaluation. Advanced perinatal health service programs have been shown to improve outcomes amongst incarcerated pregnant women, however, more research is needed to further substantiate the impact of program efforts.59

RECOMMENDATIONS

EXPANDING DOULA CARE

Medicaid Coverage:

Medicaid, funded by a federal and state partnership, represents a 53-year-old federally mandated system targeting low-income individuals under the age of 65 with incomes at or below 133% of the federal poverty line (FPL).60 Medicaid covers over 74 million Americans, including the 6 million children covered under the Children’s Health Insurance Program (CHIP).61 Two out of three women enrolled in Medicaid are women of reproductive age (19-44 years old), largely impacted by the 2013 introduction of the Affordable Care Act (ACA) which expanded Medicaid coverage to non-disabled adults up to 138% of the FPL and parents between 91%-138% of the FPL.62 With nearly 50% of
all births in the United States covered by public insurance, the issue of cost-efficiency is not simply a matter for the health system alone. Among the various race groups categorized by the CDC, individuals of color, excluding Asian women, represent the largest population of births covered by Medicaid. Medicaid paid for over half of all births in 2016 for Hispanics, Native Hawaiian Pacific Islanders (NHOPI), and Blacks with American Indian Alaskan Natives (AIAN) having the highest percentage of births covered through public insurance at a staggering 66.9%. A federal requirement, states must provide pregnant women at or below 133% of the FPL with Medicaid coverage. The lack of federal standardization amongst maternity services, however, allows states to hold a considerable amount of power leading to high variability amongst services and overall quality of care amongst states. In a survey on Medicaid coverage of pregnancy and perinatal benefits conducted by the Kaiser Family Foundation, less than half of the 41 states who responded reported that they provide education services, while a more promising seventy-five percent of states reported covering perinatal and postpartum home visits. Incorporating doula services into the basic prenatal and intrapartum care model for Medicaid recipients presents as a viable strategy for implementation for a variety of reasons. First, we are directly targeting populations of highest need. Women classified as low-income or without coverage gain coverage under Medicaid and would ideally have access to doula care with the introduction of more stringent federal guidelines for Medicaid services amongst states. In 2015, 36% of the women 19-64 years covered under Medicaid were below 200% of the FPL, while 38% had fair or poor health status’, 36% were single parents, and 36% had less than a high school education. Secondly, women of color are more likely to be
Therefore, implementing doula care, specifically that of prenatal and intrapartum doula care, can act as both a preventative and non-medicalized therapeutic intervention for improving present health and social disparities. Lastly, outlined within the ACA, all insurance plans whether public, within or outside of the marketplace system, must offer maternity care and childbirth as an essential health benefit (EHB). Each state is given the responsibility to both develop their own benefit packages including services provided and benchmarks for evaluation. States are, however, expected to include preventative services that comply with what is outlined within the law. Required services for prevention include various health screenings, access to prenatal vitamins, and educational support and counseling in breastfeeding and tobacco cessation.

Although flaws are present within the law, especially as it relates to maternity care, the EHB model offers a strong framework for further policy development at a federal level. Doula services both during the prenatal and intrapartum stage of maternity care can be classified as a preventative service under the EHB of maternity care, as the role offers a level of emotional support that has been proven to positively impact outcomes. To combat the inconsistencies in coverage, further legislation is not only needed but pivotal to improving federal standards for maternity care that includes the impact of innovative solutions to adverse health outcomes. However, given that federal legislation is largely defined by the political climate of the times, advocates must continue to push towards transforming Medicaid coverage within their states.

Currently, two states within the United States cover doula services under their state Medicaid systems including Minnesota and Oregon, while Mississippi and
Kentucky have self-reported funding state covered doula services.\textsuperscript{64, 67-68} In 2012, Oregon passed legislation to adopt doula services into their standard of care for the state Medicaid program.\textsuperscript{68} Although a cost-benefit analysis found a saving when reimbursement was maintained below $159.73 per birth, it did not account for the impact that improved outcomes will have on cost long-term.\textsuperscript{68} Of the 47,000 live births in Oregon, it was found that doula care could result in 51 fewer NICU admissions, 940 cesarean births, 470 instrumental deliveries, and increase the rate of spontaneous vaginal deliveries.\textsuperscript{68} As the case for doulas in Oregon and Minnesota, the rate of reimbursement remains an issue of sustainability as lawmakers fail to provide solutions to payment issues.

Medicaid represents perhaps the most effective outlet for implementing doula services into the standard of obstetric care. It is, however, important to recognize that there remain large segments of the female population in the United States who lack the most basic coverage for effective well woman, prenatal, and postpartum care due to issues of access. Policy makers must also recognize the gap that remains between maternity and women’s health insurance coverage. By law, all states are required to cover pregnant women with incomes up to 133\% of the FPL; however, this coverage abruptly ends after 60 days postpartum.\textsuperscript{62} Although the ACA has allowed for more affordable insurance plan options and easier re-enrollment methods, there remains a lack of continuity of care. The loss of coverage for such women results in the lack of access to vital health services, including treatment and monitoring of various co-morbidities, mental health and postpartum depression treatment, substance abuse treatment, and family planning that can all negatively impact intergenerational mobility.
When expanding Medicaid coverage overall, we know there is a direct effect on health service utilization, a decrease in catastrophic cost and an overall increase in access to preventative services. Without continuing the conversation around expanding Medicaid coverage amongst states, health service professionals will continue to fail in seeing effective interventions utilized on a national level, including doula care. In building a stronger and more connected infrastructure for maternal health, stakeholders from various sectors can channel their collective efforts made within local and state levels to further collect evidence that substantiates doula care as a sustainable intention tool to improve maternal health.

**Minority Representation Among Doulas:**

When it comes to addressing diversity within doula services, programs and certification organizations must be held accountable in recruiting individuals from a variety of cultural backgrounds. The reality is, most doulas remain white, well-educated women. Given that many of the women and families who face adverse social and health outcomes are individuals of color, the practice of doula care cannot be advanced without recognizing the critical need for minority representation. Although diversity means more than simply race, the concept of ethnic representation presents a promising strategy for targeting communities at highest risk for poor birth outcomes which can potentially impact current health services efforts and assist in reducing wide-spread intergenerational disparities.

For many women of color, entering the profession of doula care was inspired by their desires to support others who resembled them, whether that be by race, ethnicity or a shared culture. It is important to note that major racial and socioeconomic disparities
still persist within society, including the various levels of obstetric care. The impact of the perceptions of racism on the psychosocial stress of pregnant mothers has been shown to impact current birth outcome disparities present amongst women of color. \(^{72}\) Making doulas of color a priority within the profession, especially within communities where the traumas of historical racism and discrimination has perpetuated situations of adversity, allows for opportunities of empowerment and a redefining of a cultural narrative.

The love for cultural connectedness doulas of color express for motivating them to work in the field must be cultivated within the profession. Training curriculums and outreach materials must be presented in a culturally sensitive manner that keeps in mind the many lifestyles people may come from. Information should also be able to be easily tailored to target specific groups of individuals and be culturally specific to the women and families receiving doula care. Within their work, doulas not only work with mothers but interact with the entire family. Depending on the various cultures in the room, one must also consider the historical rituals and traditional practices to birth that may seem foreign to others. An ability to have a shared understanding of such practices allows for doulas to be advocates for a culturally adaptive medical environment, where all nurses and providers are aware of the significance of various practices while the mother and family feel supported and respected lending to a more satisfying birth experience. Programs should also remain cognizant of the populations they work with and actively seek out doulas and volunteers who are representative of such groups.

*MCH Advocacy:*

Minority representation within doula work cannot be fully realized without channeling advocacy efforts towards inclusivity and intersectionality. In doing so, the
shift in the landscape of doulas will grow to dispel well known myths that doulas are a privilege, but rather a much-needed necessity for a majority of the population all too often underrepresented. By definition, doulas are advocates for reproductive and maternal health. Their work is guided by a belief in the empowering nature of the physiologic birth, and work empathetically to honor the wishes, beliefs, and culture of the women served.

As the larger community of health professionals become increasingly aware of the benefit to continuous labor support, a priority must be made to target disadvantaged communities of color. Within a national survey of mothers, only 6% of women had a doula present at birth. Among racial groups, black women were more likely to report lack of support. For those aware of doula services, 49% of black women shared they would have liked a doula present. Although the Listening to Mothers surveys presents a stark reality of the underutilization of doula care throughout the country, it also provides advocates with the answer to a very simple question, are doulas wanted? The answer has continued to be an astounding - yes.

Advocacy, on the other hand, demands more from doulas than to simply share how amazing the service they provide is. Advocates must frame the work of doula care as an essential maternal health benefit to heighten the conversation within individual states around Medicaid coverage. Proposals for insurance coverage must address the issue of reimbursement head-on by outlining financing in comparison with cost saving that would result from improved outcomes and decreases in biomedical interventions. Organizations must build more efficient models of internal monitoring and evaluation for continued growth and program replication. Advocacy must also include the voices of the women
and communities who benefit from the work of doulas. Women and families are at the heart of doula work and for marginalized communities that relationship could mean the difference between breaking the cycle of despair. Strategic programmatic work, scale-up, and replication, alongside continued research could be the evidence needed to transform doula advocacy in the United States into a national talking point with political and public buy-in.

**IMPROVING CURRENT BARRIERS TO CONTINUOUS LABOR SUPPORT**

*Insurance Reimbursement for Services:*

The integration of doula services within the United States health system cannot be discussed without recognizing the issue of reimbursement. Insurance reimbursement is when insurers provide health-related entities with financial compensation for the services provided. For doulas of color and others working within communities of limited resources, the likelihood of maintaining a living from a profession in doula care is limited. The fee-for-service model of community-based programs often depend largely on volunteer staff inevitably because the work that doulas provide are not recognized by health insurance companies and political leaders as the viable and effective MCH intervention research has proven it to be.

In championing Medicaid as an effective pathway towards standardizing doula care, state advocates must recognize the role credentialing and payments play within practice management and sustainability. Reimbursement is highly dependent on the process of credentialing as doulas will require unique identifiers for billing, such as the state of Oregon. The National Provider Identifier (NPI) is the national standard for health care providers and is required by HIPAA covered entities during transactions.74 Within
Minnesota, doulas are allowed to bill under a supervisor’s NPI, which could include a physician, nurse practitioner, or certified nurse-midwife but travel time and mileage is not covered under state law.67 Within state systems, doulas then have to enroll as state Medicaid providers in order to bill for services provided under Medicaid and Medicaid managed care plans.75 Ultimately, the process of provider enrollment and certification verification must be streamlined. Within situations other than that of delivery and birth, it is inconceivable to think that doulas practicing in Minnesota must remain under the supervision of a clinician for the duration of care provided.76 Not only inconvenient for medical providers and doulas, the quality of care provided to the patients is then compromised as a means to maintain protocol for billable hours.

Both states offer promising models for integrating doula services into their individual Medicaid programs, but ultimately the rate of reimbursement fails to accurately portray the value of doula care. Oregon’s Medicaid plan for example offers a flat rate for a “standard doula benefit” package that include two prenatal visits, two postpartum visits, and birth services for a total of $350.75 Considering the low reimbursement rates, mixed with the out-of-pocket expenses due to training, certification, work-related supplies, and traveling expenses the Medicaid doula fails to make a livable salary even when covered by insurance. Advocates for insurance reimbursement must also legislate for rates of reimbursement comparable to the diverse nature of the work and must consider all aspects of this unique role. Until doula reimbursements reach a livable range, state plans will find it challenging to incentivize all women to enter the field of work.
Standardization of Training and Accreditation:

There is currently no formal standard for doula certification within the United States. Both a strength and a weakness of doula services, the lack of licensure amongst doulas is largely due to the high cost of training. DONA International is the leading certification organization for doulas, however, accreditation, including workshop costs, membership and other materials ranges between $700 and $1100.77 If DONA were to remain a standard for doula certification following the implementation of doula services within standard obstetric practice, to many, the cost of training and services would be prohibitive.

Doula certification must be discussed amongst professionals and within states who will model current practices for integrating doula care into Medicaid legislation. Developing a state-wide system for licensure, rather than a country or even universal option, is a feasible choice that would limit variability of care and access when working with state run programs. Including a clause of reciprocity in which doulas can gain licensure within other states based on various standards and good practice may also incentivize a larger number of doulas to contract with Medicaid. Although a standardized curriculum is needed, exploring innovative pathways for training, such as online programs would be one cost-effective option for states to utilize. Doula Trainings International (DTI) provides web-based training, however, the cost can range anywhere from $1197-$1597, not including the annual membership charge of $157.78 The program’s training also only covers the periods of birth and postpartum, lacking curriculum for prenatal care which would be an important service for Medicaid beneficiaries and various other high-risk populations.78 The variability amongst
certification programs, non-profit doula organizations, and state systems implementing
doula care into the Medicaid care plan has proven to be a challenge. A pathway for
collaboration may include a partnership between state and private credentialing
organizations at a fixed rate. States can also subsidize training cost. The option would
improve intersectoral collaboration and aim at improving both the number of doulas
available and the cultural diversity of the workforce.

In implementing doula services into the Medicaid maternity care model for the
state of Minnesota, health science professionals identified limitations in doula training.\textsuperscript{76} Inadequate understandings of culturally sensitive material including systemic racism and
poverty, as well as topics like trauma, intimate partner violence and infant loss can
provide a challenging environment for effective models of care to be sustained.\textsuperscript{76} DTI’s
current curriculum provides advanced training in areas of loss, trauma, and cultural
sensitivity; however, training cost remains a major detriment for large-scale utilization.\textsuperscript{78}
In order to challenge the current Medicaid model of care and reach populations of highest
need, doula trainings must maintain a level of standardization across all pathways to
accreditation which includes culturally sensitive and trauma-informed approaches to care.

\textit{Institutional Practices and Policy Reform:}

The under-utilization of doula support is due to a variety of barriers present
amongst the various pathways to service delivery that impede on a community and an
individual’s ability to access such services. Although barriers are greatly impacted by
cultural, geographic and financial aspects to care, such facets are ultimately a product of
institutional practices, standards, and policies that have continued to dictate the basic
functioning of the United States health system.
In identifying the various influences on low-risk interventions and increased maternal and infant risk, professionals must also recognize the structural level implications of poor systems management and service utilization. One must consider the implications high patient volumes and increased accessibility to surgical interventions may have the provider choices. Weekend delivery rates are a simple yet clear example of the problem we face. Within a comparative analysis published by the Medicare and Medicaid Research Review in 2014, a cohort whom received the standard hospital care (n=42,987) were significantly less likely to have a weekend delivery (23.9%) in comparison to birth center mothers (n=872; 28.6%). With a statistically higher cesarean rate of 29.3% compared to 19.8% and a significant probability of cesarean after cesarean given the low rate of VBAC, the push for a more holistic model of care is not only beneficial for maternal and infant health outcomes but can also improve overall per capita cost.

The adoption of a maternity-centered approach to a patient centered medical home (PCMH) is one innovative model of practice transformation that has required a multi-tier stakeholder collaboration from health systems and state Medicaid services. The state of North Carolina’s Pregnancy Medical Home (PMH) model of care for Medicaid beneficiaries is the first state-wide system of its kind. The model uses the Triple Aim framework from the Institute of Healthcare Improvement (IHI), which aims to optimize health systems performance through improving quality and health while reducing per capita cost. Although PMH care is not solely offered to Medicaid patients, the state evaluation efforts have focused on public insurance enrollees given the disparities in birth outcomes present amongst the population. The model requires PMH providers to agree to
chart audits, no elective deliveries before 39 weeks, decrease the rate of initial cesarean rates, and complete high-risk screenings.\textsuperscript{80}

Since the programs start in 2011, the majority of Medicaid beneficiaries are receiving care from a PMH, while the rate of cesarean deliveries and unintended pregnancies have decreased.\textsuperscript{82} Missing from the PMH model of care is that of doula services, which research has shown meets all three aims of the IHI framework. Although the PMH model has proven an effective approach to health systems improvement, the adoption of doula services as an evidence-based approach to improving reproductive health outcomes can elevate the current model of care to new heights and provide an effective route towards Medicaid coverage of doula services.

Previously discussed, the Title V MCH Block Grant Program is another area advocates for doula services can likely influence. Indicators for specific national and state MCH performance measures are created by each state program. Doula services offer an innovative evidence-based intervention for a variety of state and national measures that can be implemented at the country or state level. Local health systems can utilize grant funds to create doula programs. Health Connect One offers a framework for national health systems to utilize to replicate programs currently in existence, while still catering programmatic work to the specific needs of the maternal populations they serve. Although Title V funding is a consistent revenue stream, departments must choose to allocate funds to doula programs. Programs are also dependent on other sources of funding. Inevitably, funding revenue and allocation within the public sector is largely influenced by internal capacities which can vary depending on the political climate of the times. Prioritizing maternal and reproductive health within all areas of health care,
including academia, practice, and policy development will be essential in moving forward evidence-based interventions including that of doula services.

Lastly, adopting a life course theory approach to healthcare policy development can prove a useful framework for understanding present health outcomes. The life course perspective is a conceptualization of an individual’s health trajectory by identifying the various social determinants at play that act as both protective and risk factors. Infants who suffer from preterm birth, low birth weight, and other complications due to maternal health issues are at greater risk for sustained health, behavioral, and social-emotional adversities within their formative years that perpetuate issues into adulthood. Policymakers, doulas, and the larger health systems community must also recognize the intergenerational influences systemic racism and discrimination have on the individual social determinants of health, including education, community, and access to healthcare. Such visualizations that illustrate the larger community level inequalities present between populations can assist in targeting those at highest risk and therefore influencing positive changes in the health status of future generations.
CLOSING

Conclusion:

Continuous support during the laboring process has been identified as a significant protective factor for a number of adverse maternal and infant health outcomes. Within the United States, doulas are largely absent from childbirth. Access to doula services continues to be largely limited to populations of higher economic means, while minority representation within the profession remains a major issue. To address the concerns over access, doula programs across the country are targeting populations of highest need through innovative approaches to service utilization. The impact of community-based, hospital-based, and correctional-based doula programs have led to profound shifts in the modality of doula care. Such programs target issues of access and equity while offering valuable models of sustainability that are built on intersectoral collaboration and leadership.

Essential to large-scale replication of doula care, programs must focus their programmatic efforts on monitoring and evaluating the implementation of their services. Further research is needed that focuses on populations of highest need, including women with high rates of chronic disease, trauma and abuse, extreme poverty, homelessness, and incarceration, while active recruitment across all cultural boundaries is pivotal to the impact doula care can have on the mothers and families served. Although there has been considerable attention focused on the utilization of doula services, the use of doulas as an evidence-based reproductive health intervention has failed to gain the momentum needed to standardize the service throughout the United States. There remains a lack of policy level acknowledgement necessary to expand the use of continuous labor support.
personnel. Crucial to standardizing care and expanding access for low income women of color, advocates must prioritize integrating doula care into the national MCH framework and the Medicaid care model for maternity services. Furthermore, Medicaid coverage must offer a competitive reimbursement rate for services offered to maintain effective and sustained state-wide doula services.

At the most basic level, doulas provide a level of continuous support often times missing from the traditional biomedical birth experience. The diversity of the role, although purely non-clinical, is widely dependent on the populations served and available resources of particular programs. Ultimately, the addition of continuous labor support into the traditional North American model of obstetric care has been linked to improved health outcomes and proven an effective approach in fostering a more holistic, compassionate, and empowering birth environment for all women.
References


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