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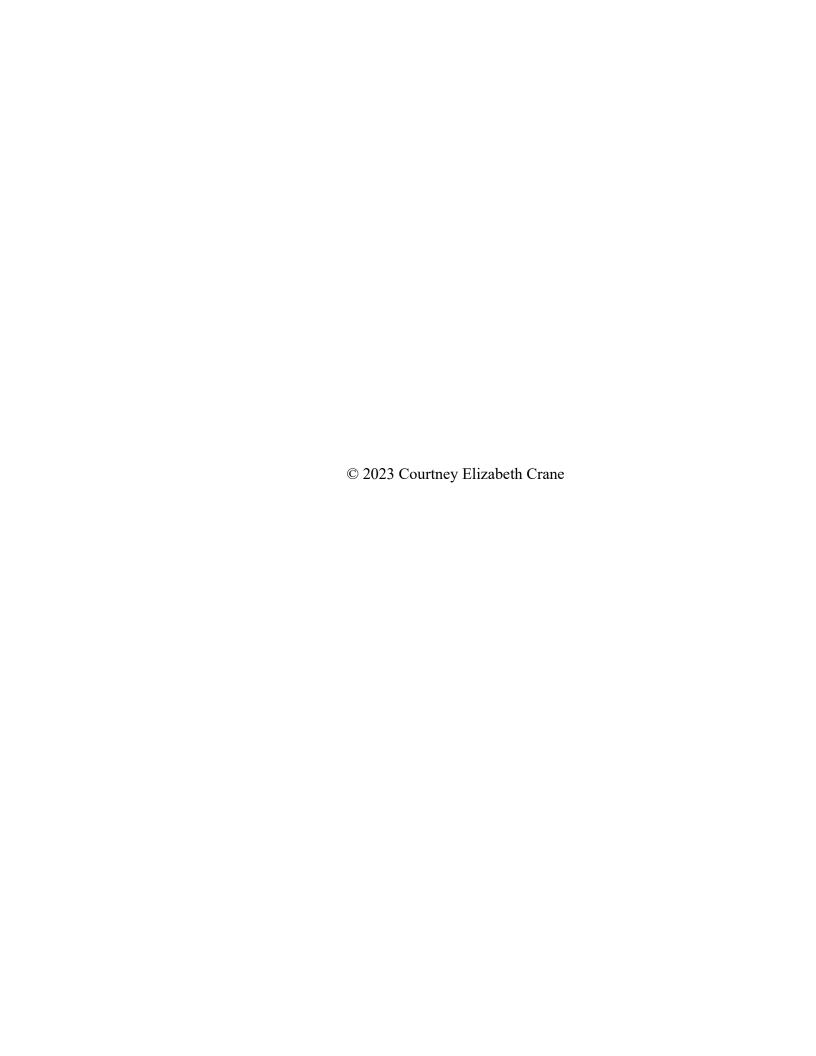
Courtney Elizabeth Crane

A dissertation submitted in partial fulfillment of the requirements for the degree of

Doctor of Philosophy in Health Systems and Policy

Dissertation Committee: Sherril B. Gelmon, Chair Julia Goodman Lynne Messer Julie Reeder

Portland State University 2023



Abstract

Doulas are trained, nonmedical support professionals that provide continuous emotional, informational, physical, and practical support before, during, and after childbirth. Doula care has been shown to reduce the cost of birth-related healthcare, reduce adverse birth outcomes, and increase patient satisfaction and positive birth experience. In 2011 Oregon became the first state to authorize payment expenditures of doula care through Medicaid as a strategy to reduce birth-related health disparities and increase culturally and linguistically appropriate healthcare delivery. The intention of the set of policies and administrative rules was to mandate access to doulas and other types of Traditional Health Workers (THWs) for Medicaid-enrolled families.

Access in healthcare is approximated and measured in many ways, often emphasizing utilization. The Patient Centered Model of Access to Healthcare conceptualizes access as occurring at multiple points across a process of identifying, finding, obtaining, and utilizing healthcare for both patient populations and healthcare systems; the financing of doula care is one of many potential factors that could increase or diminish access to care. Utilizing this conceptualization of access, the research question of this dissertation was: What are the emerging Medicaid policy and system factors that would increase access to doula care in Oregon?

This study utilized a modified Delphi survey to identify the barriers and facilitators to doula care access in Oregon, determine priority barriers and facilitators, and identify possible actions to influence the most influential barriers. First, the Patient Centered Model of Access to Healthcare was modified, and further refined with

qualitative data, to identify seven health system levels and six access points, or dimensions of access, occurring between the steps of identifying healthcare needs, seeking and reaching healthcare, healthcare utilization, and health outcomes. Data were collected through a three-round Delphi survey of healthcare system professionals who work closely with the policy topic to represent the healthcare system and policy perspectives, a set of pre-survey focus groups of participants recruited through Oregon Women, Infants, and Children (WIC) to represent the patient perspective, and a final set of interviews recruited from the initial focus groups to review survey and focus group findings for additional input and consensus.

The findings of this study demonstrate that the most important barriers to access include general and adequate knowledge of doulas across all healthcare system levels, with specific emphasis on patient and healthcare provider knowledge of Medicaid coverage of doula services, patient knowledge and understanding of the role and benefits of doula care, and healthcare provider knowledge of how to refer patients to doulas. The next most influential barriers to doula care access focused on the challenges to create an equitable and sustainable doula workforce to provide culturally and linguistically appropriate care, and the buy-in to THW program development and utilization from Coordinated Care Organizations (CCOs) and the Oregon Health Authority. To effectively increase access to doulas, as is mandated in Oregon legislative and administrative policies, the following recommendations would further support doula care access: direct and detailed communication to patients from their healthcare providers and CCOs about doulas, social needs screening and referral tools that include birth-related support for

healthcare providers, and further technological and administrative support to CCOs to ensure data reporting and referral pathways related to THW tracking and utilization requirements.

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Childbirth and prenatal care have been interwoven tightly into my academic journey and this dissertation. I will always remember going into labor while writing my dissertation proposal, and discovering I was pregnant while completing the data analysis for this dissertation. I have benefited from the trained support of birth workers of many types, including doulas, while in the process of completing my doctoral program and writing my dissertation. It feels full circle to utilize what skills and resources I have to help support the collective of doulas and birth workers who often extend all of their own personal resources to hold the vulnerable, transformative space of birth and who do so at every level. I owe deep gratitude and acknowledgement to the doulas and birth professionals who contributed to this research, directly or indirectly.

I must acknowledge and express my deepest appreciation for my committee. Particular gratitude goes to Julie, who provided more practical and tangible support and feedback than I could have ever dreamed possible, not only for data collection but also for brainstorming the perfect policy-related dissertation topic and helping me start this research journey and set it up for success. And to Sherril, who agreed to chair my dissertation several years, three children, four pregnancies, and many unusual, personal trials and trepidations ago, for whose patient persistence and relentless advocacy are heavily responsible for the very fact I have completed my program. Lynne and Julia (and Kerth), I have genuinely appreciated your varied and nuanced support and feedback on what turned out to be a bigger project and time investment than any of us could have foreseen.

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Chapter 1: Introduction

In 2011, Oregon created a comprehensive health care transformation plan for Medicaid with House Bill 3650, which included Traditional Health Workers (THWs) as a means to deliver culturally and linguistically appropriate care. During the same legislative session, Oregon passed House Bill 3311 (2011), which authorized a special committee to investigate how to incorporate doulas into the state's health transformation plan as a means to improve birth outcomes for populations who disproportionately experience birth related health disparities. The House Bill 3311 Implementation Committee reported that women of color consistently experienced patterns of disparities in birth outcomes and recommended that both Medicaid and private insurance fund doula birth services (Tillman et al., 2012). As a result, in 2014 doulas were identified as Traditional Health Care Workers (THWs) in Oregon and the state established payment mechanisms for doula services through Oregon's Medicaid program (Doula Services, 2017). Oregon was the first state to authorize Medicaid expenditures for the use of doulas during birth (Kozhimannil et al., 2015). The intention of the policy was to reduce poor birth outcomes through increased access to doulas (Tillman et al., 2012).

While doula care is a new part of Oregon's Medicaid program and a recent addition to the health care delivery system, doula care evolved from gaps in the maternity care system. This introduction will define doulas, their role in the health care system, their impact, and the significance of access to doula care. The discussion will then explore what is known about access and the importance of the question of access.

The Research Focus: Doulas

The term "doula" was first used by Dana Rafael in her 1973 book entitled *The Tender Gift: Breastfeeding*. Raphael described a phenomenon seen in cultures around the world and in other mammalian species: females gather to support a female during and after birth, which in turn promotes successful breastfeeding (Raphael, 1973). The term has since shifted from the focus on breastfeeding success to more broadly emphasizing social and emotional support of women and gestational parents surrounding birth. The standing definition of doulas is a trained non-medical professional who provides continuous emotional, physical, and practical support before, during, and shortly after birth (DONA, 2005).

Doulas can be distinguished by the type of service they provide and by their employment or business model. There are two main types of doula services, and doula care is often organized and distinguished by these types. Birth doulas typically provide emotional and informational support for women and gestational parents during the third trimester, continual support during labor and delivery, and postpartum support shortly after birth. Postpartum doulas support families in the days and weeks following birth (DONA, 2005). The role of doula is still evolving; however, the term "doula" is beginning to be used to describe new roles that fill the social and practical needs during transitional phases in life that intersect with health care (Full Spectrum Doula, 2014; Balas et al., 2004; Webb, 2009).

There are four business models of doula care: volunteer, hospital-based, community-based, and independent (Morton & Clift, 2014; Everson et al., 2018).

Independent doulas are the most common type of doula; there are no comprehensive public or private data available on the national doula workforce (Guenther et al., 2022), however current estimates suggest there are about 9,000 credentialed doulas in the US (Maternal Health Learning & Innovation Center, 2021). From previous reports, 79.9% of doulas in the US work in solo practices (Lantz et al., 2005) and 67.7% of Oregon doulas work in solo practices (Everson et al., 2018). They are hired directly by the family and work independently of the hospital, birth center, or obstetrical provider. Doulas typically charge a flat fee for a package of services that includes some prenatal support, continuous emotional and physical support during labor and delivery, and some postpartum support. While there is no set standard of prenatal or postpartum support, Oregon's standard for Medicaid billed services is two prenatal and two postpartum appointments (Everson & Remer, 2015). Most doulas (65%) in Oregon charge between \$500 to 1,200 per birth (Everson et al, 2018). While some insurance plans offer some compensation for doulas (Tillman et al., 2012), the majority of the cost of a doula in the United States is paid out of pocket by the client or family.

Doulas are becoming increasingly popular, both as a service to mothers and gestating parents (Declercq et al., 2013) and as a desirable professional role (Ahlemeyer & Mahon, 2015). In 2018, there were 29 recognized doula certification programs available in the US. The Doula Association of North America is the largest doula association in the world, and in 2015 had 2,300 members internationally (Ahlemeyer & Mahon, 2015); it is estimated that there are 9,000 registered doulas in the US (Maternal Health Learning and Innovation Center, 2021). In 2012, 6% of births nationally were

doula-attended, which is double the 3% of doula-attended births in 2005 (Declercq et al., 2013) and it is likely that in some areas of the US this percentage has increased since (Olivia, 2021). Considering that there were roughly 3.6 million births in the United States in 2021, one can estimate that at least 216,000 births were attended by doulas (Martin et al., 2022).

Support for doula use has grown professionally over the past three decades. In 1996, the Coalition for Improving Maternity Services launched *The Mother-Friendly* Childbirth Initiative and Ten Steps to Mother Friendly Childbirth. The first of the ten steps says that mother-friendly hospitals, birth centers, and home birth services should offer all birthing women and gestational parents unrestricted access to continual emotional and physical support from skilled people, such as doulas (p.3). In 2014, the American College of Obstetricians and Gynecologists (ACOG) and the Society for Maternal-Fetal Medicine developed a joint policy statement, saying "published data indicate that one of the most effective tools to improve labor and delivery outcomes is the continuous presence of support personnel, such as a doula" (ACOG, 2014). The Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) issued a position statement that said "AWHONN recognizes that childbirth education and doula services contribute to the woman's preparation for and support during childbirth and supports consideration of these services as a covered benefit in public and private health insurance plans," (2018, p. 73) The American College of Nurse-Midwives (ACNM) also stated that "ACNM supports the collaborative role doulas play in the care of pregnant and birthing people and recognizes the importance of their skill set as a positive addition to the health care team" (2022, p. 1).

Impact of Doulas

The growing popularity and support for doula use is due to the positive impact of doula care on the Triple Aim outcomes of improved patient experience, decreased cost of health care, and improved population health (Berwick et al., 2008). The most cited and thorough review of clinical trials of doula care to date, the Cochrane Review's *Continuous Support for Women During Labor*, found that doula care increased the chances of spontaneous nonsurgical birth or use of assistive instruments such as vacuum or forceps. Patients were less likely to use pain medications, more likely to have shorter labors and more likely to be satisfied with their birth experience (Hodnett et al., 2013; Bohren et al., 2017). The review recommended that all women and gestational parents have continuous labor support from a trained professional, such as a doula, during birth (Hodnett et al., 2013; Bohren et al., 2017). Medicaid beneficiaries were shown to have a 40.9% lower chance of a Caesarean birth if they utilized a doula during birth (Kozhimannil, Hardeman, Alarid-Escudero, et al., 2016).

Doulas are cost effective when reimbursed at an average of \$986 per birth (Kozhimannil, Hardeman, Alarid-Escudero, et al., 2016). Birth experience is also significantly impacted by doulas. Support from doulas is a stronger predictor of patient satisfaction than support from nurses or doctors (Simon et al., 2016). Women and gestating people vividly remember their birth experience and accompanying feelings decades after their birth event (Simkin, 1991), and birth is a culturally and personally

significant event for mother or gestational parent and their family. Fostering positive birth experiences is important as a life experience.

The number of births financed by Medicaid and the portion of Medicaid services is significant for both cost and potential to impact population health. Roughly half of births in the US are covered by Medicaid; 43% of births in Oregon and 42% of birth nationally were covered by Medicaid in 2020 (KFF, 2021). The average Medicaid payment for birth in 2020 was \$9,021 (Valencia et al., 2022). Increased access to doulas for the Medicaid population, as was intended with HB 3311 and the accompanying administrative rules and policies, could impact a large number of families in Oregon and reduce a significant amount of healthcare spending.

Doulas and Access: The Problem

Access is a crucial concept in health systems research and policy and is defined as the opportunity or ease with which consumers or communities use appropriate services, providers, or institutions, in proportion to their needs; it is a necessary precursor to the utilization of goods or services that will then affect health outcomes (Levesque et al., 2013). Levesque et al. (2013) created a model for patient-centered access to health care that expands upon current conceptualizations of health care. The model conceptualizes access as occurring at the interface of the health care system (or the supply side) and the patients, populations and communities they come from (demand side). The model improves upon previous conceptualizations of access in two ways. First, research in health services often uses utilization as a proxy for access. In Levesque et al.'s model (see Figure 1.1; Levesque et al., 2013, p. 4), the emphasis is not on utilization, which is

the fulfillment of access, but instead is on the factors that contribute to or hinder a patient's opportunity to engage in the process of obtaining and utilizing care. Second, access is often discussed as a function of a health service: health services accessibility. Levesque et al.'s model conceptualizes access and the demand side along the process of obtaining care, making access an issue that includes patient and community characteristics and adds elements such as health literacy, personal and social values, and social support.

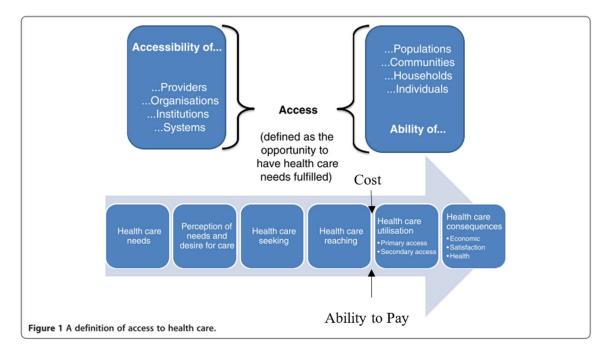


Figure 1.1: Levesque's Definition of Access to Health Care

Levesque et al., 2013

Access to doulas has historical and cultural implications for enhancing the personal power of women and gestating people. The role of the doula in the United States was born out of the complex history of American obstetrical practices; the doula acts as an extension of a mother or gestational parent's personal power during a very significant

transitional phase of life that has become embedded in the health care system (Morton & Clift, 2014). Prior to birth, doulas act as a facilitator to quality health care through influencing health literacy and providing social support (Kozhimannil et al., 2016). Therefore, access to doulas is particularly an expression of a patient's power and autonomy in the health care system and is an extension of the aim to improve access to appropriate care.

When Oregon created a payment mechanism to make doula care a billable service within Medicaid, the point of access addressed was the cost of health care. The cost of health care and the ability to pay are important factors, particularly for the nature of doula care, which is both expensive and traditionally not covered by health insurance. However, payment occurs later in the process of obtaining health care within Levesque's model of access. Research has shown there are many possible barriers to doula care that precede or may influence cost or ability to pay from both the supply side and the demand side. From the demand side, knowledge of the doula role or desire for a doula from women and gestating people (Declercq et al., 2013), may impact access to doulas. From the supply side, having enough qualified doulas per capita (Lantz et al., 2005), obstetrical practitioner understanding and opinions of doulas (Chakladar, 2016; Roth et al., 2016), a doula's willingness to engage with specific populations, and a doula's experience with or origins from communities of color or high-risk populations can also affect access to doulas (Low et al., 2006). The first step to influencing access to doulas is to understand all points of impact that are currently promoting access or hindering access to doulas from a systematic perspective.

Research Question

The research question for this dissertation is: What are the emerging Medicaid policy and system factors that would increase access to doula care in Oregon? The objectives of this research were to:

- Develop a model for access to doula care using Leveque et al.'s (2013)
 model of access to healthcare and use data from a group of mothers, birthing people, and experts to refine the model.
- 2. Determine priority barriers and facilitators to access.
- 3. Recommend possible actions at different levels of the health system that could increase access to doulas.

Purpose of the Study

The purpose of this study was to develop a comprehensive understanding of access to doula care within Oregon's health care system in order to create policy priorities for increasing access to doulas in Oregon. By identifying barriers to access, Oregon can address access issues to doulas for Medicaid-enrolled families. By also identifying the facilitators of access, health systems and policy professionals can illustrate a complete model of access to doula care in one health care system and leverage the effective factors that contribute to access. Oregon was the first state to legislate payment mechanisms for doula care, followed by Minnesota in 2013 (Kozhimannil, Vogelsang, & Hardeman, 2015); by 2022, eight states and Washington DC had covered doula care through legislation of state health initiatives (Chen, 2022). Greater understanding of these

policy innovators can help successful policy adaptation for other states or organizations attempting to integrate doulas into their health care systems.

Furthermore, this research provided an opportunity to apply Levesque's model of patient-centered access to a specific case. Previous research has addressed some of the steps of the process of obtaining health care that may inform issues of access to doulas. What women and gestating people want from the maternity care system (DeVries et al., 2001), why women and gestating people utilize doulas and what they value from their experiences with doulas (Koumouitzes-Douvia & Carr, 2006), and characteristics of people who typically use doulas (Lantz et al., 2005) have been studied on the demand side of access. On the supply side, perspectives from doulas (Lantz et al., 2005; Low et al., 2006) and perspectives from nurses (Papagni & Buckner, 2006) have helped inform some of the access issues. A comprehensive picture of factors influencing access to doula care within a healthcare system is missing from health services research.

Chapter 2: Literature Review

Historical Context of Birth Doulas

While the term doula can refer to nonmedical paraprofessionals that support women and gestating people with many aspects across the spectrum of reproductive health events (Full Spectrum Doulas, 2014), the doulas that are the focus of this dissertation are nonmedical paraprofessionals who are trained to provide social and emotional support to women and gestating people before, during, and just after birth. The current paraprofessional role and use of doulas is a recent phenomenon and was first established in the United States in the 1980s (Gilliand, 2002). However, literature describes the doula role as having deep historic roots and as a critical response to the medicalization of maternity care. The medicalization of maternity care can be attributed to two phenomena: moving birth from the home to the hospital, and the utilization of new technologies during labor and delivery. Both phenomena have created a care structure that no longer ensures continuous social and emotional support during labor and delivery and that the professional role of doula attempts to correct.

A Note About Gendered Language

The author of this study acknowledges that the use of solely gendered language is exclusionary and that much of the health services research has not caught up with other parts of society in utilizing inclusive language. Gender-specific and gender-exclusionary language is used in some of this document when reflecting previous research and historical contexts, and wherever the author's interpretation cannot be

decisively inserted into the content. In birth-related research and healthcare, gender inequity is well documented between men and women to the point where women experience disproportionately poorer outcomes and access to care (Alcalde-Rubio et al., 2020); the transgender and gender nonconforming experience of access to healthcare is also inequitable and transgender people experience more chronic health conditions than cisgender counterparts (Koma et al., 2020). Taking into account both existing realities, gender-additive language has been utilized when possible to be inclusive and account for the disparities of all people who experience gestation, birth, and healthcare related to these life events (Green & Riddington, 2020). Not all people who identify as a woman or mother will or can gestate, give birth, or breastfeed and one does not have to identify as a mother or woman to gestate, birth, or be supported in their access to quality healthcare around these experiences.

Historical Context of Birth

Prior to the 20th century, American women gave birth in their homes with support from female family, friends, and traditional midwives. At the time of birth and for weeks following, referred to as "laying in," women were surrounded by the social and emotional support of other women (McCool & Simeone, 2002). Doctors were used only in rare circumstances. Two social shifts occurred at this time. First, doctors became more organized, medical care became more effective, and the public began to value physicians and medical care (Feldhusen, 2000). Affluent women chose doctors to deliver their babies and the poor and immigrant populations relied on the midwives that came from their native cultures (Brucker, 2000). Second, growing immigrant populations were met

with increased prejudice and distrust from affluent families, as were their midwifery practices (McCool & Simeone, 2002). By the first decade of the 1900s, about half of births were attended by physicians, but birth still occurred at home (Feldhusen, 2000).

Around this time, the philosophy around birth began to change. In 1915, Dr.

Joseph DeLee is credited with introducing the philosophy that birth is pathologic and the process of labor and delivery should be controlled.

DeLee proposed a sequence of medical interventions designed to save women from the "evils" that are "natural to labor." Specialist obstetricians should sedate women at the onset of labor, allow the cervix to dilate, give ether during the second stage of labor, cut an episiotomy, deliver the baby with forceps, extract the placenta, give medications for the uterus to contract and repair the episiotomy. His article was published in the first issue of the *American Journal of Obstetrics and Gynecology*. All of the interventions that DeLee prescribed did become routine." (Feldhusen, 2000, p.17)

Women's view of childbirth also shifted. Women began wanting to give birth in hospitals due to pain control not being available at home births (Feldhusen, 2000). By 1969, only 1% of births occurred outside of hospitals. While the trend of out-of-hospital births has increased in the United States from 1990 to 2012 (MacDorman et al., 2014) and accounted for 1.26% of births in 2020 (Gregory et al., 2021). Moving birth from a home and community setting also removed social support for laboring and postpartum mothers. Until the 1960s, family members of hospital patients were considered visitors and laboring women were not allowed companions during childbirth. Women relied on nursing staff for emotional and social support (Kayne et al., 2001; Kuo et al., 2012).

The development of medical procedures and devices further created emotional and social gaps in maternity care. By the 1950s, most women were not conscious during

birth due to the use of anesthesia (Feldhusen, 2000). In the 1960s, the continual lumbar epidural was introduced and in the 1970s, fetal monitoring systems became commonplace in delivery rooms (McCool & Simeone, 2002). The combination of unconscious women and monitoring systems meant that nurses did not need to stay with women continuously and could oversee multiple patients, calling in the doctor to oversee the active stage of labor (McCool & Simeone, 2002). General anesthesia was phased out by the 1980s because it was found to contribute to developmental problems in children (Feldhusen, 2000). While women no longer receive general anesthesia during labor, maternity care is still organized where nurses are only intermittently present during hospital labors. Research estimates that nurses spend between 6 and 12.5% of their time on emotional and physical support of laboring women (Gagnon & Waghorn, 1996; McNiven et al., 1992; Gale et al., 2001). According to Gagnon & Waghorn (1996), a labor and delivery nurse spends most of her time on indirect care activities away from the patient (42.5% of time attending meetings, notifying physicians, documenting care) or direct care activities not related to the types of supportive care activities performed by doulas (38.9% of time spent on activities such as physical assessments, assisting in performing procedures).

Origins of the Professional Role of Doula

At the time Raphael published *The Tender Gift* and first described the role of doula, other publications with similar and complementary philosophies emerged. Just prior to Raphael's publication, The Boston Women's Health Collective published *Women and Their Bodies* in 1970. This underground publication was a result of the effort to inform women on issues of health and sexuality, including pregnancy and "prepared"

childbirth from a woman's liberation viewpoint," (p. 127) to promote autonomy in health care decisions, and change the way health care was delivered to women. Later editions and eventually a nonprofit organization were named *Our Bodies Ourselves*, to emphasize women taking full ownership of their bodies (Our Bodies Ourselves, n.d.). In 1979, after Raphael's book was published, Barbara Katz-Rothman defined the midwifery model of care and distinguished it from the medical model of care envisioned by DeLee (Midwives Alliance of North America, n.d.). The midwifery model of care declares pregnancy and birth are not illnesses that inherently need to be treated with medical intervention; they are a normal, natural process that holds deep personal meaning to the individual woman (Rooks, 1999). Both autonomy in health decisions and the midwifery model of care are integral components of current doula philosophy (DONA, 2013).

These publications came at a significant time in history. First, the second wave of feminism had taken root by the 1960s, which broadened the idea of "equal rights" from voting rights to a variety of fields, including reproductive rights (Burkett, 2014). Second, the country was undergoing a significant shift in both health care reform through private insurance employer mandates and the federalization of Medicaid ("Health insurance: hearings on new proposals," 1972). Third, the "health rights" movement was beginning in the United States, which demanded that people have the right to informed consent, the right to refuse treatment and the right to see their own medical records (Feldhusen, 2000). The philosophy around hospitalization and medical practice also began to shift; by the 1960s, family-centered care was more common, which recognizes the importance of the family as a unit of medical decision-making and strives to include the family in major

moments, such as childbirth (Kuo et al., 2012). For the first time, fathers were allowed to accompany mothers to the delivery room and began playing an active role in the birth of their children (Kayne et al., 2001).

By the 1980s, both the interests of women to garner more control over their birth experiences and the alarming rise in Caesarean rates resulted in women inviting childbirth instructors and friends to assist in their births and advocate for them during labor and delivery (Gilliand, 2002). The formalization of the doula as a professional role is credited to The Birth Place, a freestanding birth center established in California in 1979. "Birth assistants" provided labor support, early breastfeeding support, and provided meals to families. In 1985, The Birth Place held the first doula training (Morton & Clift, 2014). The early 1990s saw the spread of trainings and workshops designed to train women in the doula role (Piantino, 2012). In 1992, the Doulas of North America (DONA) (2005a), which boasts being the oldest, largest, and most respected doula organization in the world, came into existence and offered training and credentialing of doulas. In 2011, the term "doula" was added to the Oxford English Dictionary, which defines a doula as "a woman who gives assistance and advice to a new or expectant mother, either informally or professionally; esp. a woman (typically without formal obstetric training) employed to provide guidance and continuous support during labour" (Perez, 2012, p. 2).

Organizational Support for the Role of Doula

The late 20th century also saw organizational efforts to impact healthy birth outcomes, and doulas were incorporated into recommendations by many organizations. In

1991, the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) jointly published WHO Baby-Friendly Hospital Initiative and the Ten Steps to Baby-Friendly (Lothian, 2007), now the Ten Steps to Successful Breastfeeding (Baby-Friendly USA, 2012) to improve breastfeeding outcomes across the world. In 1996, the WHO also published Care in Normal Birth: A Practical Guide, which was focused on promoting the use of safe, evidence-based care practice and discouraging the use of common methods worldwide that were clearly harmful or had no evidence for benefit, had insufficient evidence for benefit, or were used inappropriately or ineffectively (WHO, 1996). The guide recommended that a woman be allowed to have people she trusted with her at birth, including a doula (p. 13). In 1997, the Coalition for Improving Maternity Services was formed in the United States, launching the Mother-Friendly Childbirth Initiative (MFCI), a coalition of 26 organizations focused on pregnancy, birth, and breastfeeding, and publishing the Ten Steps of the Mother-Friendly Childbirth Initiative for Mother-Friendly Hospitals, Birth Centers, and Home Birth Services (CMIS, 1996). The MFCI is the first and only consensus document on US maternity care (CMIS, 2015). The MCFI is based on four principles: normalcy of the birth process, empowerment, autonomy, and do no harm.

Other Types of Doula Work

When doulas are discussed in the media and health services literature, typically the references are to birth doulas. This dissertation will focus on the role of the birth doula. However, the role has also differentiated and expanded across the spectrum of pregnancy and reproductive services to fill social and emotional gaps in health care and it

has also expanded to other areas of health care. This section discusses the other types of doulas to provide context for the breadth of roles of doulas in health systems.

Postpartum Doulas. Postpartum doulas provide emotional and practical support following birth. The distinction between birth and postpartum doulas is a more recent division of labor; DONA established a special postpartum doula certification in 2002 that separated the role of doulas who attend birth from doulas who support new mothers in the days and weeks following birth (Campbell-Voytal, et al., 2011). When compared to a birth doula, the rationale behind the use of a postpartum doula fits more directly with Dana Rafael's original description of a doula's role. Birth doulas support a mother to have the birth experience she desires, and postpartum doulas support a mother in "matrescence," Raphael's word for the social and emotional process of becoming a mother (Raphael, 1973). The role of mother to a newborn and managing the very intense, practical demands can be highly challenging for first time mothers. Learning to manage a newborn in a newly expanded family is similarly challenging. Literature is only beginning to address the separate role of postpartum doulas. McComish & Visger (2009) studied postpartum doulas and found 11 domains of postpartum doula care: emotional support, which focused on attending to the mother's emotional needs and was the prominent domain; physical comfort for the mother; assisting the mother in self-care activities; infant care; information; advocacy; referral for further help; partner/father support; supporting mother/father with infant's emotional or developmental care; support of mother/father with sibling care; and household organization. Postpartum doulas can, like birth doulas, charge a flat fee for an agreed upon amount of services, but typically

charge by the hour. Some families have a postpartum doula move in with them and work full-time, but usually postpartum doulas work designated hours or days (Chee, 2013). There is currently no literature examining the impact of postpartum doulas; however, postpartum doulas have been considered as a possible support to prevent postpartum depression (Gjerdingen et al., 2013) and provide breastfeeding support (Cattelona et al., 2015). A recent study, and the only one to attribute postpartum doula care to patient outcomes, found interpreters trained in postpartum doula skills increased patient satisfaction (Maher et al., 2012) and another pilot study described postpartum use as a means to support postpartum depression (Gjerdingen et al., 2013).

Emerging Types of Doulas. The role of doula is beginning to spread across the continuum of reproductive services and expand into another area where medical care and socially significant life transitions overlap: death, dying, and end of life care. The term "full spectrum doula" refers to doulas who identify themselves as providing support for women across the full spectrum of pregnancy experiences: women who gave children up for adoption, specific support for transgendered people around fertility and birth issues, and women or gestating people who have experienced pregnancy loss, infertility, or abortion (Full Spectrum Doula, 2014). The Doula Project in New York started out as the Abortion Doula Project in 2007 and attempted to bring the amount of support doulas provide to during labor to those experiencing abortion (Abortion Gang, 2012). Since then, the Doula Project has become a full-spectrum doula program (Strauss et al., 2015). However, the momentum around abortion-related doula care is still ongoing and some doulas choose to focus their services on abortion or miscarriage (Ronan, 2014).

Currently, there is no certification process for this specific role (Sabatier, n.d.) but some trainings are being offered on support techniques for clients who experience abortion, journals are beginning to address best practices for abortion and miscarriage doulas (Ryan et al., 2015; Chor et al., 2012), and research is beginning to address the impact of abortion doulas.

Chor et al. (2016) interviewed women who used doulas at the time of first-trimester abortions and found that they overwhelmingly reported positive experiences and those who refused a doula regretted the decision. Abortion doulas were studied in a nonblinded trial and were found to have no significant impact on pain, satisfaction with experience, or emotional response, but 94% of participants said they strongly or very strongly felt that the doula benefited their experience and 97% would recommend doula support to someone undergoing a similar procedure (Wilson et al., 2016; Chor et al., 2015). Abortion doulas may meet psychosocial needs (Chor et al., 2016).

Paradoxically, a service that originally formed around childbirth and the start of life has expanded to serve those managing transitions and issues regarding end of life needs. Delirium doulas were created because traditional doulas provide the type of patient management of continual, one-on-one care that was needed for patients with delirium in the ICU (Balas et al., 2004). Doulagivers is an organization that provides training and certification for elder care doulas who focus on nonmedical support for the elderly (Doulagivers, n.d.). Death doulas or elder care doulas are focused on supporting people and their families with the process of death and grieving (Webb, 2009; Elliott, 2014) and accompanying their client while they are in their final hours of life by

providing continual support (Momdoulary, 2016). Some of these services may overlap with other roles, such as hospice, but much like the birth doula, their general aim is to fill any informational, emotional, social or other nonmedical support gaps that exist in current care practices with an individualized approach.

Birth Doulas Today

This section describes birth doulas, including what they do, the outcomes associated with doula use, and how they may influence health outcomes. The goal of doula services is "to support and nurture the laboring women physically and emotionally, to provide information and advocacy and to protect the memory of her birth experience" (DONA International, as cited by Horton and Clift, 2014). Kayne et al. (2001) identified four specific domains of doula care: emotional support, advice and informational support, tangible assistance and physical support, and advocacy. Of the three, Birth experience is the focus of doula care activities. Of the Triple Aim outcomes of improved patient experience, decreased cost of health care, and improved population health that are the backbone of Oregon's healthcare transformation (Berwick et al., 2008; OHA, n.d.), doula care works to affect the cost of health care and the health of patient populations through addressing the individual patient experience.

Emotional Support

Emotional support in the doula context refers to constant physical presence, words of affirmation, calm reassurance, encouragement and praise, eye contact, mental distraction, and role modeling for the father or significant others (Kayne et al., 2001). Emotional support is the most crucial element of doula care. Research has demonstrated

that emotional and social support have positive physical impacts on health on a range of health issues, from diabetes to obesity, and lack of emotional support can have negative effects on physical health; however, a clear causal mechanism is not yet evident (Reblin & Uchino, 2008). Nonetheless, emotional support leads to less feelings of anxiety (Corbett & Callister, 2000; Hofmeyr et al., 1991; Kungwimba et al., 2013); more feelings of security (Campero et al, 1998), and feeling cared for, respected, and more confident (Corbett & Callister, 2000). Nurses also provide emotional support; however, the emotional complexity and depth of support as well as the range of emotional support techniques may be greater when provided by a doula, likely due to an established trust and emotional familiarity prior to birth (Gilliland, 2011).

Co-regulation, a term coined by Steven Porges in his development of the Polyvagal Theory, explains the role of emotional support and its influence on health outcomes. When a person feels safe, the fight-or-flight mechanisms of the sympathetic nervous system caused by fear, such as increased heart rate or blood pressure, are reduced. The calm, regulated presence of a trusted person can help the other person co-regulate, or influence the nervous system of someone who is facing a potential threat, such as the fear of childbirth or pain during childbirth, to become calmer (Porges, 2011). The presence of a doula, then, has the capacity to positively influence the sympathetic nervous system, increase oxytocin, and reduce stress before and during birth (Melancon, 2021). Polyvagal theory's coregulation is likely one of the causal mechanisms for doula care-related outcomes such as shortened labor time as well as positive birth experience.

Tangible Assistance and Physical Comfort

Tangible assistance and physical comfort measures include hands-on activities such as deep or superficial touch (effleurage), massage to legs, feet, and hands, hydrotherapy bath or shower, application of heat/cold, providing fluids and food, positioning and assistance with ambulation, provision of a comfortable environment (lighting, pillows, and room temperature), and support during second-stage pushing efforts (Kayne et al., 2001, p. 697). Physical comfort measures help to promote relaxation during labor and help manage pain. A reduction in physical pain and anxiety are crucial for those who have concerns over the potential negative effects of epidural analgesia (Hodnett et al., 2013).

Advice, Informational, and Advocacy Support

In the doula context, advice and informational support includes discussion of events as they unfold, explaining obstetric interventions, coaching in patterned breathing and relaxation techniques, neuromuscular dissociation or progressive relaxation, imagery, meditation, and attention focusing. Advocacy activities include support of decisions and asking others to respect them, conveying to the woman the centrality of her role in decisions, and encouragement for asking the "right" questions of care providers (Kayne et al., 2001, p.697-698). The combination of advice, informational support, and advocacy, particularly when enough of this support is provided prior to birth with services such as those of a community-based doula, increases a woman's health literacy and addresses gaps in social support, increasing her access to quality care and improved patient-provider interactions (Kozhimannil et al., 2016).

Doulas increase knowledge and literacy. Doulas usually work with mothers and gestational parents at least once in their third trimester and help impart knowledge about their options, such as type of obstetrical provider or pain management options. This increase in health literacy and knowledge improves engagement in decision-making and increases access to better care (Kozhimannil et al., 2016). The Listening to Mothers III survey found that health knowledge and literacy is lacking for new mothers and gestational parents. The survey asked questions about basic information about healthy term infants, labor and delivery; only 18% of respondents gave the correct response for when a baby is considered "full term" (the earliest week in pregnancy when it is safe to deliver a baby should complications not require an earlier delivery), and the vast majority of participants reported 'not sure' or incorrectly identified risks associated with labor induction and Caesarean, regardless of having experienced a Caesarean or not (Declercq et al., 2013, p. 41-42). Thus, mothers' and gestational parents' knowledge of birth may be limited in ways that can possibly lead to negative birth outcomes.

Advocacy and doula-provider tension. Advice and advocacy are some of the more controversial aspects of doula care. Meadow (2015) wrote a critique of the way in which the advocacy aspect of the doula role has been described and offers a theoretical framework to address the ambiguity. There is an indirect view of advocacy where doulas attempt to increase a woman's role in decision-making and emphasize the choices she has while helping make sure her voice is heard. There is a second view of advocacy where doulas take a more active role of communicating on behalf of the patient or attempting to interpret for the patient and interacting with the care team (Meadow, 2015). This second

conceptualization can lead to ethically questionable actions from doulas attempting to direct the activities of both care providers and their clients. Meadow proposes framing the advocacy role within relational autonomy: clients are not autonomous without influence from external forces, but their autonomy exists within a social context that includes their families, social circles, and health care providers. A relational autonomy view places the client as the central actor and the doula's role is to foster the three pillars of relational autonomy: helping clients develop the skills necessary to exercise their autonomy, work to strengthen appropriate trust with the woman's social network, and become mindful of biases that exist in these networks. Doulas can then act on the birth context in a true advocacy role outside of an individual client's network (Meadow, 2015).

Doulas often come into the profession due to a passion for patient-centered, evidence-based care and may witness decisions on behalf of their client or the health care team that contradict these passions. The role of doula was born from the social and emotional gaps in the current US maternity care system and its roots are in a critical view of the current use and rate of certain obstetric practices. Likely due to the newness and the potentially oppositional stance of the doula role, doulas have not been fully embraced by all members of the maternity care team. A serious critique of the doula role arises due to the way in which doulas have acted or ways in which doulas have the potential to act that could interfere with medical care and possibly cause harm. Perspectives from doctors, labor and delivery nurses, and midwives show that some health care professionals are cautious of or dislike the presence of a doula. Some of the criticism of doulas is simply an issue of professional territory. Labor and delivery nurses may feel as

if they are giving away part of their role: "As a labor and delivery nurse for the past 10 years in a high-risk setting at a large university hospital, I can tell you that I indeed don't like to give away my roles [to doulas]; in fact, it is heartbreaking to me and to most of my colleagues to have to do so" (Buck, 2006). One student midwife suggests midwives approach doulas guardedly, as doulas may attempt to overtake the midwife role: "I am not generalizing about all doulas...I am specifically pointing out that midwives need to be aware that we must guard our profession and our specialist role as there is the potential for doulas to come in through the back door to enter our profession" ("Doulas Are Not Midwives," 2007).

Other health care professionals have experienced strained or ineffective or compromised communication with mothers due to the presence of doulas and the lack of an understanding of the doula (Chakladar, 2016). Doulas have also acted in ways that directly interfered with the provision of care, such as locking a doctor out of a room, advising clients to stay home longer before going to the hospital for labor, or advising to wait to call the doctor regarding newborn care concerns (Hwang, 2004).

Relationships between maternity care providers and doulas are not inherently negative, but improper advocacy can serve to strain relationships. Roth et al. (2016) surveyed doulas and labor and delivery nurses in Canada and the United States to determine their views of each other's role (convenience sample of 704 labor and delivery nurses, and 1,074 doulas). The results indicate that doulas are viewed more positively by labor and delivery nurses who have previous experience with doulas, and doulas who view obstetrical procedures more positively also viewed labor and delivery nurses more

positively. Doulas in the southern United States, northeastern United States, and Canada had more negative views of Labor and Delivery nurses than did doulas from the western United States, so regional health care systems may have different experiences of and views of doula use. The results of Roth and colleagues suggest there are a variety of personal, professional, and cultural factors that may impact the working relationship between doulas and other maternity care staff.

Women and Gestating People Who Use Doulas

There are no robust studies to date that focus on why prenatal women or gestating people hire doulas, but research addresses what they find valuable about doulas and how they feel about the care they received from doulas. Women and gestating people who use doulas report that they would use doulas again (Koumouitzes-Douvia & Carr, 2006) and would recommend them to others (Koumouitzes-Douvia & Carr, 2006; Akhavan & Edge, 2012; Dundek, 2006; Schroeder & Bell, 2015). What women and gestating people say they value most about doula support is that doulas support their husbands or partners so they can better support their spouse or partner, tailored/individual approaches to pain reduction, reassurance and encouragement, and the presence of someone experienced in birth. The physical, continual presence of someone to provide physical support is reassuring to laboring mothers and gestational parents (Koumouitzes-Douvia & Carr, 2006). Continuity of care and a sense of control over the course of birth are important to women and gestating people (Lazarus, 1994), and current and developing scales of patient satisfaction with birth care attempt to measure personal control, pain, and birth expectations (Goodman et al., 2004; Stevens et al., 2012; Gärtner et al., 2015); all of

these are areas where doulas can influence prenatal decisions. Women's and gestating people's knowledge of appropriate care at birth as well as their care preferences are a result of complex environments and systems, but they are shaped primarily by the existing health care system. "Opinions of health care are as much a product as a cause of that care" (DeVries et al., 2001, p. 244).

Doulas are primarily White women who serve other white women (Kathawa et al., 2021; Salinas et al., 2022). Lantz et al. (2005) did the most recent survey of doula and client characteristics, and doulas report that 84% of their clientele are White, and the average client age is 30.2 years. Half (54%) of women were giving birth for the first time and 84% were married. Utilizing the Listening to Mothers III Survey, Kozhimannil et al. (2016) found that more White women reported using doulas (n=60 vs. n=~32), Black women as a population were twice as likely to report using a doula (4.6% vs 8.8%) but were also twice as likely to report wanting a doula and not having one (26.1% vs 38.8%) (Kozhimannil et al., 2014). First time mothers (adjusted odds ratio for experienced mothers= .057) and married women (adjusted odds ratio= 1.36) were more likely to use a doula. Doulas were also more likely to be White (Lantz et al., 2005) and the most recent survey of Oregon doulas also shows that roughly 70% of doulas are White as well (Everson et al., 2018).

Choice of a Doula Instead of a Nurse or Other Social Support Person

Birth doulas, in essence, fill a gap in maternity services often seen by the health care system as services that are expected to be provided by labor and delivery nurses or family members. The gap exists between mother's and gestational parent's needs and

expectations during labor and the amount of supportive care they receive from the maternity care team, particularly labor and delivery nurses. When surveyed, respondents expect 53% of a labor and delivery nurse's activities to be direct physical and emotional support (Tumblin & Simkin, 2001) but only 6 - 12% of their work is providing these services (Gagnon & Waghorn, 1996; McNiven et al., 1992; Gale et al., 2001). Birth units may be short-staffed, nurses may lack training in comfort measures and emotional care techniques, and hospital policies may prevent adequate provision of supportive care by nurses (Hodnett, 2002). Given the unpredictable duration and onset of labor and delivery combined with the shift work of nurses in labor and delivery units of a hospital, care from labor and delivery nurses is intermittent and can be provided by a number of people. Instead, doulas provide continual labor support by a single person.

A doula's only responsibility is their client. Birth doulas typically have at least one point of contact before the birth to establish a relationship. The doula is called when labor starts and stays with the laboring client during and shortly after birth, and then there is usually at least one postpartum meeting to help process the birth informationally and emotionally (Simkin & Way, 2008). Similarly, partners and others from a woman's or gestational parent's social network are not always ideal labor support companions. They may have little experience proving labor support and they are also likely to need support while their partner or family member is experiencing labor and birth. Doulas who do not have familial or sustained social connections with their clients but do have training and experience in the maternity care system can remain objective and calm during a time of such strong excitement and anxiety (Mainord, 1997). The social tie to the laboring

mother or gestational parent, perhaps due to a combination of inexperience with labor and an excited emotional state, reduces the effectiveness of continuous labor support on positive health outcomes (Hodnett et al., 2011).

Organization of Doula Services

Doulas have been conceptualized in different ways. Doulas have been described as Complementary and Alternative Medicine (CAM) providers (Steel et al., 2012), lay support (Campbell et al., 2006; Steel, Frawley, et al., 2013; Darwin et al., 2016), and paraprofessionals (Breedlove, 2005; Lantz et al., 2005; McComish & Visger, 2009). The most appropriate way to describe doulas is as paraprofessionals -- people in a formalized role within the health care system who have a lower level of training or credentials than the health care team and work in tandem with professionals, in this case the maternity care team (Lantz et al., 2005).

Defining doulas as paraprofessionals addresses several critical elements in the role of birth doulas in the United States. Doulas obtain a certification or training in care relevant to social and emotional support of their clients during labor, but they are not required to have medical training or credentials and are not responsible for the provision of medical care. Doulas also work within a health care context in which there are multiple other health care providers who have more training, credentials or licenses, and medical and legal responsibility for the health of the patient. Doulas typically also come from the communities or life circumstances similar to their clients and are hired based on hard-to-define emotional or personal qualities (Hans & Korfmacher, 2002), making it particularly

important to recruit and train women and people of color to serve as doulas (Hardeman & Kozhimannil, 2016).

Lay support or lay doulas are an important distinction in doula care but the term has become conflated to generalize doula care. Moffat distinguishes between two types of birth doulas -- the lay doula and the certified doula (2014). Typically, "lay" refers to someone acting within the role of doula without specialized training, but in the case of doulas in the United States it differentiates doulas with a certification from those who do not hold a certification. Certification is not required to work as a doula, and some certifying organizations require that their members serve as a doula for a certain number of births in order to gain the certification. Finally, the label of CAM provider is also misleading because doulas do not offer medical treatment. Some physical support techniques they use to ease pain may be traditionally used by CAM providers, such as massage or pressure points, but they are not licensed in these techniques in the ways that CAM providers, such as acupuncturists or massage therapists, are licensed. This designation can potentially confuse the role. In summary, doulas can be characterized as either certified paraprofessionals or lay doulas.

Certification and Credentialing

Similar to the other care professional roles in health services such as nurses, nurse midwives, and lactation consultants, doulas attempt to attain legitimacy for the role of doula in both the market and the health system through a process of credentialing.

Credentialing is particularly important in a health services context that works towards measuring and improving quality of care, as the credentialing of professionals ensures a

basic standard of care that is agreed upon by those within the profession (Cassel & Holmboe, 2006). There is a substantial lack of information about the different types of existing doula training and certification programs offered in the US and internationally and the way in which these organizations are structured or provide oversight of their credentialed professionals. There are no registries of certifying organizations, but a review of lists and verification of current organizations that serve American doulas resulted in 29 independent doula certifying programs available to US mothers and gestational parents (see Appendix A). Five of them are considered well known or recognized broadly, by frequency of reported type of certification (Ahlemeyer & Mahon, 2015) and presence of the certification mentioned in literature and doula resource information (Doula Services Network, 2016; Perez, n.d.). These are: Doulas of North America (DONA), Childbirth and Postpartum Professional Association (CAPPA), The Organization of Labor Assistants for Birth Options & Resources (toLabor, formerly ALACE), Childbirth International (CBI), and the International Childbirth Education Association (ICEA) (Doula Services Network, 2016). These certifications appear in bold in Appendix A.

Which organizations doulas choose to certify through reveals what designation, training and structure they think will advance their career goals. Doulas of North America (DONA) is the largest organization, with 2,300 doulas internationally. The Childbirth and Postpartum Professional Association (CAPPA), with 230 doulas in the United States, is the next largest. Both are described as having extensive training and recertification requirements and are also the most expensive (Ahlemeyer & Mahon, 2015). People who

wish to act as a doula professionally find certification appealing because doula certification is the typical means of entry into the profession. Certification offers a "structured means of entry into doula practice, access to a trainer and/or mentor, a guided curriculum, opportunities for networking, and discussion, and consumer confidence" (Meltzer, 2004, p. 57).

There are some differences among doula certifying groups. Some organizations such as DONA focus solely on training and certifying doulas. Other doula certification programs, such as the International Childbirth Education Association and Childbirth International, offer childbirth education credentials as well. Other programs have arisen from schools that offer nurse midwife programs and certify locally, such as Birthingways, the Doula Studies Program at the College of the Rockies, Commonsense Childbirth School of Midwifery, and the International Center for Traditional Childbearing. Many of the doula certification programs, such as DONA, CAPPA, ICB, and ICEA, offer a general doula studies program and have an international presence. However, there are some certifying programs, such as the Massage Doula program, HypnoBirth Doula and HypnoBabies Doula that offer a certification based on a very specific set of support techniques and philosophy. Other organizations focus on specific populations: AMANI Birth is an international, Islamically based certification and Mamatoto Village, Sista Midwife Productions and the International Center for Traditional Childbearing are local programs that focus on women and people of color. Some certifying organizations also have a focus on community-based service (Mamamoto, Sista Midwife Productions,

International Center for Traditional Childbearing, Doula Training International, and Ancient Song Doulas; see Appendix A).

Doula Certification Curriculum

While doula certifications vary, there are elements in the curriculum that are relatively standard across each certification, particularly for the organizations recognized as being the most rigorous. The majority of doula certifications require attendance at a workshop (Meltzer, 2004). Workshops last from 2-4 days and cover the philosophy of doula care and basic knowledge. Workshops typically cover topics related to childbirth physiology, standard medical management of childbirth, the midwifery model of birth, and breastfeeding (DONA, 2013). Attending childbirth and breastfeeding support meetings or trainings, reading pivotal books and writing reflective essays, attending a required number of births and obtaining evaluations from parents and birth team members (obstetricians, midwives, and labor nurses) are also frequently required. Some certifications require other elements, such as creating a list of local resources, CPR certification, and reflection pieces from attending births (Morton, 2002).

Now that Oregon, Minnesota, Maryland, Michigan, New Jersey, Nevada, Virginia, and Washington DC have laws that regulate training requirements for doulas who are eligible for Medicaid funding (Chen & Rohde, 2023), this may shape certification requirements or offer existing certifications further legitimacy. Oregon does not provide a list of approved certifications yet but does determine through law which training requirements are required to be registered as a Traditional Health Worker with the state. Minnesota has seven approved doula training programs. Table 2.1 below

presents the training requirements for doulas to be eligible for reimbursement through Medicaid in Oregon and Minnesota.

Table 2.1: Oregon and Minnesota Doula Training and Certification Requirements				
Oregon's Certification Requirements for Doula	Minnesota's Certification			
Training	Requirements for Doula Training			
To be certified in Oregon as a birth doula, an	Doulas who are registered with the			
individual must:	Minnesota Department of Health			
(1) Successfully complete an approved birth	(MDH) and are certified by one of			
doula training program	the following organizations are			
(http://www.oregon.gov/oha/oei/Pages/approved-	eligible to provide and bill for			
thw-training.aspx); or	services under a supervising			
(2) Have successfully completed all birth doula	professional's NPI:			
training requirements as described in OAR 410-	 Association of Labor Assistants 			
180-0375 through one or a combination of non-	and Childbirth Educators (ALACE)			
approved birth doula training programs and meet	 Birthworks 			
the cultural competency course requirements	 Childbirth International 			
through an approved training program for doulas.	 Childbirth and Postpartum 			
Completion of training currently includes:	Professional Association (CAPPA)			
 16 contact hours in labor training 	 Commonsense Childbirth Inc. 			
 4 contact hours in breastfeeding training 	 Doulas of North America 			
• 12 contact hours in childbirth education	(DONA)			
training	 International Center for 			
 6 hours in cultural competency training 	Traditional Childbearing (ICTC)			
 Read 5 books from an authority approved 	 International Childbirth 			
reading list	Education Association (ICEA)			
• Write an essay on the value of labor support				
 Create a resources list 				
 Attend at least three births and three home 				
visits				
 Submit evaluations from work with three 				
families				

Everson & Remer, 2015; Minnesota Department of Human Services, 2016

Doula Practice Models

• Be CPR-certified

• Have a valid food handler's permit.

Morton & Clift (2014) identify three models of practice: independent doulas, volunteer doulas, and community-based models. However, DONA (2005) identifies three models of practice with a different emphasis: hospital staffed doulas, independent doulas,

and volunteer doulas. Evidence suggests there are significant differences between independently hired doulas and hospital staff doulas (Hodnett et al., 2013). Given the prevalence of community-based doula programs and the substantial body of research focusing on community-based doulas, four models of care will be addressed: independently hired doulas, hospital staff doulas, volunteer doulas, and community-based doulas.

Independently hired doulas. The first important distinction in doula care found in reference to doula practice models in the literature is how the doula is hired. Independent doulas are the most common type of doula service. In 2005, Lantz et al. published the only study to gather doula demographics from a national sample in the United States and found that 3.6% of doulas worked for community organizations or hospitals, while the rest were independent (79.9%) or worked in doula groups (19.8%). A study in Canada published in 2010 found a similar pattern: 63.2% of doulas worked independently and 16.7% worked with a doula group (Efterkhary et al., 2010). Oregon doulas are also most likely to be employed, with 68% reporting they are self-employed, 7% working exclusively with an agency, and 5% working for a hospital (Everson et al., 2018). The Cochrane Review on continuous labor support found that doula care that had the best birth outcomes was provided by a doula not employed by the hospital or facility and was not a relative or friend of the mother (Hodnett et al., 2013; Bohren et al., 2017). Even though some doulas do form practice groups or work with community organizations, no research has been identified that has been conducted on doula practice groups or professional organizations. It is important to recognize that, because

independent doulas are the most common providers of doula care, these doulas may not have existing relationships with the labor teams that they encounter at hospitals. Some hospitals have banned the use of doulas or provide a list of doulas who are approved to work at the hospital (Hwang, 2004), restricting the ability of doulas to practice and limiting the options of mothers who wish to employ the doulas.

People of color and low-income people may have significant barriers to careers as doulas because the role of doula is largely an independent business operation. Doulas must rely on their own social support networks to practice as a doula. Doula work is on call and the time requirements are unpredictable, making family commitments and other work difficult to schedule around (Moffat, 2014). Most doulas (73.4%) come from households with incomes over \$40,000 a year but report earning \$5,000 per year on average for doula services (Lantz et al., 2005). In Oregon, over half of doulas (56%) make \$5,000 or less annually from doula work (Everson et al., 2018). Furthermore, the role of doula is also typically not a 'destination career.' Most people who become doulas also have had some other training or credentials related to childbirth or health, such as nursing, midwifery, massage therapy, or birth instructor (Lantz et al., 2005). The job is also demanding. Green (2013) estimates that doulas typically stay in the field for less than two years due to burnout.

Hospital-based doulas. Hospital-based doulas are hired by or volunteer for a hospital directly, and the hospital is responsible for compensation. Some outcomes research on hospital-based doula programs have been published and have shown hospital-hired staff to be highly effective at increasing breastfeeding rates and reducing the use of

epidural injections. Research is unclear on the outcomes of reducing Cesarean births; one study reports a significant decrease (McGrath & Kennel, 2008) but others have reported having minimum (Mottl-Santiago et al., 2008) to no (Gordon et al., 1999) effect on Caesarean rates. Given that the Cochrane Review suggests that doulas are most effective when they are not an employee of the institution but are instead employed directly by the mother or gestational parent (Hodnett et al., 2013; Bohren et al., 2017), more research is needed to better understand the impact of differing doula care models on patient outcomes, particularly the patient experience. Doula care organized by the hospital means that doulas have preexisting, and perhaps hierarchical, relationships with health care providers, which can threaten the advocate role of the doula during labor. More than likely, the diminished effectiveness of hospital-based programs is due to the presence of the doula only at birth and the lack of an established relationship with their client prior to the birth, resulting in a reduced sense of trust.

Volunteer doulas. Volunteer doulas are usually trained professional doulas who provide services through a volunteer program that can be community-based or hospital-based, but the literature also describes family or friends who received additional training in support techniques and act as continual labor support as well (Campbell et al., 2007). Volunteer doula programs offer doulas an opportunity to gain the necessary hours of experience required for doula certification, an opportunity for career growth as a step towards midwifery, a means to gain experience as a doula, and an opportunity to be mentored by experienced doulas (Low et al., 2006; Birthways, 2014; Spiby et al., 2016).

Volunteer doula services also offer a step towards becoming a nurse or nurse-midwife (Munoz & Collins, 2015; Jordan et al., 2008).

The research on volunteer doula effectiveness is limited. Professional volunteer doulas have been shown to affect emotional well-being and relationships with partners (Darwin et al., 2016), as well as the ability to cope with birth and manage pain and anxiety (Hofmeyr et al., 1991). One study, however, looked at the birth interventions and determined that the difference in Caesarean rate and epidural use between the control and volunteer doula groups was not significant (Spiby et al., 2015). There are case studies or individual examples of success from volunteer doula programs (Atkins, 2009; Cattelona et al., 2015; Stein et al., 2004). Volunteer doulas may need additional educational support. One qualitative study looking at the experience of volunteer doulas reports that doulas who are of a higher socioeconomic status than their clients do not feel equipped to handle complex cases; doulas who serve clients with complex health care and social needs want more training on how to manage such cases (Low et al., 2006).

There are also a limited number of research studies on doula-like support from family and friends. Campbell et al. (2007) conducted a clinical trial comparing participants who received no labor support with those who chose a female relative or friend as a doula. Participants and doulas attended a series of two 2-hour classes on birth support. The findings demonstrate that feelings of self-efficacy, patient satisfaction, and breastfeeding rates were similar to those who had hired a doula (Campbell et al., 2007). Campbell et al. (2006) also studied family members who received training in doula techniques and found that labor was shorter and Apgar scores were higher, but

differences in Caesarean rate and epidural use were not statistically significant. The study did not address the effectiveness of reduction in epidural use or birth interventions. These studies align with the findings of The Cochrane Review of continual labor support, which clearly state that the most effective doula model for Caesarean section reduction is an independently hired doula (Hodnett et al., 2013; Bohren et al., 2017).

Community-based doulas. The phenomena described by Rafael (1973), where women within a community come together to support a laboring and breastfeeding woman, is a role in community health research called "natural helper," or lay people who others naturally turn to for emotional and tangible assistance. Natural helpers have the quality of being respected and trusted prior to the need for help (Israel, 1985).

Professionalism of natural helper roles has the potential to shift the accountability and service from the community to the health system (Eng & Smith, 1995). Credentialing the role of doula has been critiqued by doulas and other birth processionals as potentially limiting the scope of practice (Morton, 2002). Doulas employed by hospitals can also shift accountability and association from the client to the hospital (Moffat, 2014). It is unclear how these shifts impact the efficacy of doula care. However, Low et al. (2006) point out that doula care is, at its essence, community health work (p. 25), as it most closely fits the narrative of doula origins.

The HealthConnect One Community-Based Doula model expands the doula role to encompass a community health worker role (Cattelonia et al., 2015). Doulas who address pregnancy, labor, birth, and postpartum care and focus on social support as well as practical support for their clients are community-based doulas (p. 25). Similar to most

other community health workers, the doula utilizes a range of support techniques to provide social support for mother- and gestational parent-child dyad, in addition to the physical and emotional support during birth that is characteristic of birth doulas.

Community-based doulas, who can be paid doulas or volunteer doulas, have been shown to differ from other models because there is significant effort to match mothers and gestational parents with doulas of similar cultural or community background.

Community-based doulas help clients network with institutions, programs, and clinics, and they serve as positive role models (Breedlove, 2005). Many community-based doula programs offer families more contact with the doula before and after birth than hospital-based and independently-hired doulas.

Another defining quality of community-based doulas is that the populations they serve have high social support needs and/or low socioeconomic status (Hunter, 2012, p. 318), may need more help navigating the health care system, may need to be connected to other resources or build their own social support network, and are also more likely to suffer negative birth outcomes. Research on community-based doula programs has addressed the following groups: adolescent and young mothers, who are typically low-income (Edwards et al., 2013; Gentry et al, 2010; Hans et al., 2006; Atkins, 2009; Thullen et al., 2014); Black women (Gentry et al. 2010; Thullen et al., 2014); Latina women (Gentry et al. 2010); immigrants (Akhavan & Edge, 2012); incarcerated women (Stanley et al., 2015; Schroeder & Bell, 2005) and women suffering a catastrophic event, such as losing a spouse during the September 11 attacks in the US (Pascali-Bonaro, 2002 and 2003).

Since their scope of practice extends beyond the process of birth, extended benefits of community-based doula care have also been reported. Community-based doulas have been shown to increase breastfeeding rates and meet healthy-feeding guidelines (Edwards et al., 2013). Further-reaching positive outcomes include mothers staying in school, changing living arrangements, positive feelings about pregnancy and parenting, returning to school, decrease in depressive feelings, and a sense of caring from the doula (Gentry et al., 2010), a sense of satisfaction and trust in the maternity care system (Akhavan & Edge, 2012), and positive parenting strategies and interactions with infants (Hans et al., 2006). Not all effects of community-based doula care are positive; Thullen et al. (2014) studied father participation in a community-based doula program that served young, Black women. While the fathers viewed the doulas as a positive facet, fathers who were reluctant to provide social support to their partners viewed doulas as a replacement for their own social support.

Low et al. (2006) conducted a qualitative study of doulas in a volunteer community-based doula program in Ann Arbor, Michigan. Most of the doulas were educated and had economic advantages; they reported that they were limited in their role as doula by a lack of knowledge of the needs of adolescent mothers, identifying and managing risk behaviors, such as drug abuse and domestic violence, and setting appropriate boundaries with clients. These types of issues speak to the educational needs of doulas who are from different cultures, SES, or backgrounds than their clients. Particularly for high need groups, doulas need institutional support/connections and perhaps a further defined role.

To fit the idea of care continuity of the midwifery model of care, doula work would be carried out using the community health work model and one doula would serve their clients from pregnancy to the postpartum period (Low et al., 2006). The initial projects cited as evidence for the support of doula care by the HB 3311 Committee in Oregon were all community-based doulas (Tillman, et al., 2011). The most common model for care is the fee-for-service, privately employed doula (Low et al., 2006), but the model of care that is looked to by the Oregon Health Authority's House Bill 3311 Implementation Committee for providing evidence of improving health outcomes for underserved populations is based on the community health worker model (Tillman et al., 2012).

Why Doulas Are Needed

As Morton and Clift (2014) have described, "within the context of overall increasing medical interventions, worsening maternal and infant-health outcomes, and higher rates of postpartum mood and anxiety disorders, doulas ... have emerged as ambassadors of evidence-based childbirth" (p. 22). Indeed, the evidence that doulas can impact birth outcomes and cost of maternity care is increasing.

Population Health: Birth Outcomes

American maternity care is the most expensive maternity care in the developed world (International Federation of Health Plans, 2013), yet the outcomes are some of the worst in the developed world. Maternal mortality recently increased in the United States by 26.6%, from 18.8 maternal deaths per 100,000 births in 2000 to 23.8 maternal deaths per 100,000 births in 2014 and in 2020 (MacDorman et al., 2016; Hoyert, 2022). Severe

maternal morbidity increased by 75% from 1998 to 2010 (CDC, 2016c) and has since roughly stayed at that rate (Grobman et al., 2014; Hoyert, 2022). The maternal mortality rate for non-Hispanic Black people (55.3) was 2.9 times greater than that of non-Hispanic White people (19.1) (Hoyert, 2022). The rate of complications during hospitalized labor and delivery in the United States is currently at 31.1% and has not shifted significantly since 1998 (ODPHP, 2016). The ideal Caesarean rate recommended by the World Health Organization (2015) and other international health care leaders is between 10-15%, but in the US it is currently more than double that at 32.1% in 2021 (CDC, 2016a; Hamilton et al., 2022). Since nearly 99% of births in the US occur at hospitals (MacDorman et al., 2014), the cause is not due to lack of care but to modern maternity care practices (Morton & Clift, 2014).

Impact of Doula Care

The most comprehensive review of literature to be done on the impact of continuous labor support was The Cochrane Review (Hodnet et al., 2013; Bohren et al., 2017). The most recent review which included 27 clinical trials where the continual presence of a support person (health professional, trained paraprofessional such as birth coach or doula, or a friend, partner, or stranger without specialized training). Studies included in The Cochrane Review found that continuous labor support was more likely to result in a spontaneous vaginal birth and a shorter labor, and less likelihood to have intrapartum or regional analgesia, report dissatisfaction or negative feelings about childbirth, have a caesarean or instrumental vaginal birth, or have a baby with a low APGAR score (Bohren et al., 2017). The Review found no significant relationship

between continuous labor support and the use of synthetic oxytocin during labor, likelihood of serious perineal trauma, severe labor pain, low postpartum self-esteem, admission to the Neonatal Intensive Care Unit, and prolonged neonatal stay (Hodnett et al., 2013). The authors created a subgroup comparison between seven studies with trained or experienced labor support and six studies where labor support was provided by people from the woman's social network. When labor support was not hired by the hospital and not from a woman's social network, such as a doula, outcomes were most beneficial. The authors suggest that the overall pattern for the subgroups is encouraging but urge the results of the subgroup analysis to be viewed as hypothesis-generating until further clinical trials can be included and the results can be more generalized. Nonetheless, the authors recommend the use of continuous labor support for women, as this intervention has demonstrated important benefit without any adverse risks and recommend that future research focus on longer-term effects on maternal and infant health (Hodnett et al., 2013; Bohren et al., 2017).

Kozhmannil et al. authored five publications between 2013 and 2016 that gave a new and comprehensive look at doula care for the Medicaid population. Kozhmannil and colleagues controlled for clinical and sociodemographic factors; utilizing an intervention population of 1079 (n=279,008 sample), doula use resulted in a 40.9% reduction in Caesarean rate (22.5% for intervention group, 31.5% for control group). Women with doula care also had a 22% lower chance of a preterm birth (4.7% vs 6.3%) (CDC, 2016b). Since the model of doula care utilized in this study included four prenatal doula visits and had a prenatal education component to doula support, this finding may be less

generalized to models of doula care with less prenatal intervention (Kozhimannil, Hardeman, Attanasio, et al., 2013). The same doula program was used in a separate study to evaluate the effect of doula care on breastfeeding, finding that women with doula care experienced near-universal breastfeeding initiation (97.9%), compared with 80.8% of the general Medicaid population. The difference was more pronounced in Black women (92.7% initiation, compared with 70.3% of the African American Medicaid population) (Kozhimannil, Hardeman, Attanasio, et al., 2013).

In another study, Kozhimannil utilized the Listening to Mothers III survey (n=2400), which involved a nationally representative sample of women who recently gave birth and includes women who have private insurance, public insurance, or are uninsured. The aim of this study was to determine if women who use doulas have different outcomes because there is a bias that leads them to seek and utilize doulas, making them more likely to have better outcomes regardless of doula presence. Women who desired a doula but could not obtain one were more likely to report being Black, uninsured or on public insurance, and had higher rates of Caesarean section than women who had doula support (Kozhimannil et al., 2014). From this research it appears that wanting doula assistance does not indicate a bias that would lead to better health outcome, and trained doulas have a positive impact on health outcomes.

Health Consequences of Birth Interventions

For mothers and gestating parents, a reduction in birth interventions reduces negative health consequences later in life. The use of forceps and other instruments can cause a weak pelvic floor, which can cause long-term continence problems (Meyer et al.,

2000). The incidence of Caesarean birth is of significant concern for the health of women and birthing people in terms of short and long-term health outcomes, as well as fertility. The morbidity and mortality rate for Caesarean births is more than triple (3.6 times) the morbidity and mortality rate for nonsurgical births (Deneux-Tharaux et al., 2006). While the causal mechanism is not clear, Caesarean births increase the chance of a future hysterectomy by 350% (1:30,000 vs. 1:1,300) (Knight et al., 2008). Caesarean births have been shown to reduce fertility (11% lower rate of births and 9% subsequent pregnancy rate) and increase the chances of ectopic pregnancies (Grivell & Dodd, 2011; Sakala, 2012) compared to nonsurgical births (Gurol-Urganci et al., 2013).

The causal mechanisms for postpartum depression are multidimensional; the discussion in the literature on preventing postpartum depression revolves around identifying postpartum and antepartum risk factors and screening for postpartum depressive symptoms (O'Hara, 1995). There is some evidence to suggest that doula care may reduce the occurrence of postpartum depression but more robust research needs to be conducted on this health measure (Bohren et al., 2017; Rashid & Mohd, 2017).

Research has demonstrated, however, that negative birth experience (Righetti-Veltema et al., 1998) and unmet birth expectations (Habel et al., 2015) are important risk factors for postpartum depression. Further research has addressed the connections among desired birth outcome, Caesarean, and postpartum depression. Nearly all women (92%) would prefer to give birth vaginally and women who express a strong preference for vaginal delivery are more likely to experience postpartum depression if they have a Caesarean (Houston et al., 2015). The risk factors for postpartum depression that could be

influenced by doula support include having an assisted birth (Caesarean or instrumental birth), dissatisfaction with prenatal care, and having unwanted people present at the birth (Astbury et al., 1994; Ghaedrahmati et al., 2017; Urbanová et al., 2021).

Cost of Care and Financial Impact

Childbirth is the leading cause of hospitalization in the United States. Caesarean section is the most common operating procedure in the United States; six of the fifteen most common hospital procedures are related to childbirth (Sakala & Corry, 2008, p.2). Reducing the number of interventions during labor and delivery has the potential to significantly reduce the cost of maternity care. By reducing Caesareans alone, costs related to birth can be cut in half. In Oregon in 2010, the average cost for a hospital vaginal delivery without complications was \$7,848 while the cost for a hospital Caesarean with no complications was \$15,038 (AHRQ, as cited by Childbirth Connection, 2012). In 2016 and 2017, the cost of commercially insured vaginal deliveries in Oregon was \$16,010 and the cost of Cesarean deliveries was \$26,765 (Johnson et al., 2020).

There have been few studies modeling the cost effectiveness and savings of doula care, and the savings range from \$100 per birth to \$530 per birth, depending on birth risk and reimbursement rate for maternity care (Tillman et al., 2012; Chapple et al., 2013; Kozhimannil, Hardeman, Attanasio, et al., 2013). Kozhimannil and colleagues conducted a cost-effectiveness analysis utilizing Medicaid data and the results indicated average potential savings of \$986 per birth across states (ranging from \$929 to \$1,047). Cost effectiveness analysis was based on doula care and charges for preterm and Caesarean

births; other related procedures or outcomes were not included but may further impact cost effectiveness (Kozhimannil, Hardeman, Alrid-Escudero, et al., 2016).

There is a substantial lack of information on modeling longer-term financial impact of the reduction in negative birth outcomes and reduction in medical interventions largely around complications and both short-term and long-term effects of Caesarean, assisted vaginal deliveries, and the use of anesthesia during labor. Bartick & Reinhold (2010), however, modeled the cost of low breastfeeding rates. The estimated impact of breastfeeding rates below the Healthy People 2020 goal of 90% of families breastfeeding exclusively for 5 months costs the US 13 billion dollars in health care expenditures for breastfeeding related morbidity from common conditions such as ear infections and gastroenteritis to severe conditions such as asthma, sudden infant death syndrome, and necrotizing enterocolitis. Since doulas are so effective at increasing breastfeeding initiation (Kozhimannil, Attanasio, Hardeman et al., 2013) and breastfeeding rates (Nommsen-Rivers et al., 2009), they also have the potential to save millions of dollars for breastfeeding related morbidity.

Experience of Care

For birth doulas, the birth experience is the primary focus of doula care. By influencing birth experience, doulas most likely facilitate other positive health impacts associated with doula care. Experience of care is particularly important with regards to birth because of the prevalence of childbirth and the personal significance of birth as a life event. All people are born from their mothers or gestational parents, and approximately 4 out of every 5 women in the US have given birth in their lifetimes (US

Census Bureau, 2015b). Birth is a social, cultural, and biological phenomenon for mother, gestational parent, child, and family, and the physical, emotional, social, and cultural impact of birth can follow a person throughout their lives. Simkin (1991) found that women interviewed about their births vividly remembered their birth experience 15-20 years after their birth event, and the way in which health care providers talked to them during birth significantly affected their overall experience.

Research has demonstrated that families and mothers or gestational parents who utilize doulas regard their birth experience more positively. Those who utilize doulas more frequently report that they coped well with labor, they had a good birth experience, and their birth experience had a positive impact on how they felt as a woman, their ability to be a good mother, their self-worth, and their body's strength and performance (Gordon et al., 1999). The more nonpharmacologic pain relief measures utilized, the more control over pain was reported (Chaillet et al., 2014). Doulas help women and gestational parents meet their birth expectations (Koumouitzes-Douvia, & Carr, 2006). While support of medical staff does improve the experience of care, experience of doula support is a more powerful predictor of patient satisfaction than support from doctors and midwives (Simon et al., 2016). Research suggests doula use results in improvements in interaction with hospital staff (Campero et al., 1998), enhancing patient-provider communication (Renteria-Poepsel, 2015), and increasing health literacy (Kozhimannil et al., 2016).

One important way in which doulas influences satisfaction with care is by strengthening the client's role in making health care decisions. Engagement with health care decisions is important; 23% of women surveyed in the Listening to Mothers III

survey reported holding back from asking questions because their care provider might view them as difficult, they wanted maternity care that differed from what their provider wanted, or their care provider seemed rushed. Fifteen percent of women reported that their prenatal care provider always or usually used medical words they did not understand. Women reported that the provider sometimes or never encouraged them to talk about their health questions or concerns (21%), spent enough time with them (20%), and answered all of their questions to their satisfaction (16%) (Declercq et al., 2013, p. 8).

There is also substantial evidence that patient-provider communication is strained in US maternity care. One quarter of respondents to the Listening to Mothers surveys who had a Caesarean reported feeling pressured into the procedure, and one third of those who experienced a vaginal birth after Caesarean (VBAC) were pressured to have a Caesarean instead. The pressures to induce labor, use epidurals, and deliver by Caesarean are also considerable and have seen an increasing trend across the Listening to Mothers surveys (Declercq et al., 2013, p.59). The Listening to Mothers III survey found that VBAC was not presented as an option for those who had had previous Caesareans and a considerable proportion of care providers and hospitals were reported as unwilling to offer VBAC. Most mothers who experienced an episiotomy did not have a say in whether it was performed or not, mothers who intended to breastfeed experienced hospital practices that undermined breastfeeding (offering formula, bottles, and pacifiers to mothers intending to exclusively breastfeed), and women reported discrimination relating

to their race/ethnicity, cultural background or language, their health insurance situation, or their views of their right care for themselves or their baby (Declercq et al., 2013).

Policy Context

The implementation of the Affordable Care Act significantly impacted access to maternity care services. Health insurance became more available by making it easier and more affordable to purchase individual insurance or through expanding Medicaid eligibility criteria. The creation of the Affordable Care Act also provided a window of opportunity for states to create and manage their health care systems in new ways. This section describes how the Affordable Care Act increased access to health care for childbearing people, how this change opened a policy window to allow states to innovate ways to meet new health care regulations, and Oregon's response to this policy window that resulted in Medicaid-funded doula services.

Private Insurance

The Affordable Care Act made health care more accessible and transparent to people of childbearing age by making private insurance more accessible, changing eligibility criteria around preexisting conditions, and making health care costs more transparent. Maternity care, childbirth, and newborn care became part of the ten required services for health insurance companies, which must provide a summary of cost and benefits, including childbirth (CMMS, n.d.a). These changes allow for families to financially plan around childbirth (CMMS, n.d.b). Pre-existing conditions, including pregnancy, must be covered by health insurance and subsidies for those with low to

moderate incomes (100-400% poverty level) were established to make private insurance more accessible during pregnancy.

Medicaid

The ACA has increased access by changing eligibility requirements and covered services. Prior to the ACA, pregnant people earning 133% of the federal poverty limit could obtain coverage by Medicaid. The ACA mandates that all individuals earning 133% can get coverage, which can significantly help preconception health. Pregnant enrollees utilizing Medicaid must be offered, at no extra cost, comprehensive smoking cessation programs, all screenings and services recommended by the US Preventive Services Task Force, folic acid supplementation, and breastfeeding counseling before and after birth.

The Affordable Care Act also created new programs. The Maternal, Infant, and Early Childhood Home Visiting program awards grants for services to at-risk communities and the Pregnancy Assistance Fund awards grants to states to assist pregnant and parenting teens and students who are enrolled in higher education programs with child care, housing, baby supplies, food, and other protective services (Sakala, 2010). The Maternal, Infant, and Early Childhood Home Visiting program awarded granted Marion County, Oregon an \$8 million formula grant in 2016 (Health Resources and Services Administration, 2016) and a tribal award to Confederated Tribes of Siletz Indians which serves an 11 county area in Oregon and Yellowhawk Tribal Health Center which serves the Umatilla Indian Reservation in Umatilla County, Oregon (Administration for Children and Families, n.d.). The Pregnancy Assistance Fund funded

the Violence in Pregnancy and Parenting Intervention Project in Salem, Oregon (DHHS Office of Adolescent Health, n.d.).

Access to a variety of providers is secured through the ACA as well. Freestanding birth centers that meet state regulatory requirements and practice within their scope must be covered, despite previous trends of states denying coverage to birth centers. Nurse midwife fee schedules, which used to have them earning 65% of the rate of reimbursement of physicians, now equal the physician rate of reimbursement, potentially increasing the market of maternity care providers to Medicaid enrollees. There are also grants available to expand the community health workforce (Sakala, 2010).

Health System Transformation and the Emergence of ACOs/CCOs

The Affordable Care Act is also credited with being the most aggressive effort in the history of the nation to address problems of the health delivery system as a whole. The ACA changed the system of health care delivery in two main ways. First, it created a new type of health care organization, the Accountable Care Organization (ACO), where a broad range of health care providers and organizations from primary care to specialty care to hospitals and post-acute care facilities agree to collectively take responsibility for the quality and cost of services to patients. Second, the ACOs can participate in the Medicaid Shared Savings Program (MSSP). If ACOs meet certain quality benchmarks and keep health care spending below budget, they receive half of the savings as a result. As of 2013, hospitals have been paid under this "Pay for Value" program, and in 2015, physicians began to be paid under this program (Hamel et al., 2015).

The ACO program has grown significantly, and 11 million people receive care through an ACO (CMMS, 2022). Still, the ACO program is not compulsory. Some states, such as Oregon, decided to take advantage of this policy window and create local, comprehensive health system transformation. Oregon created its own version of the ACO, the Coordinated Care Organization (CCO) (OHA, n.d.). CCOs differ from ACOs in that they focus on using patient-centered primary care homes, global budgets, and a community advisory panel as part of their governance structure (McConnell et al., 2014). Both ACOs and CCOs publish and utilize benchmarks of quality measures or metrics to establish incentive payments. Table 2.2 below lists the quality measures for ACOs and CCOs that utilize maternity care outcomes that could be affected with doula care, in 2015 at the initiation of this dissertation and for 2022, the most recent metrics at the completion of this dissertation. Prenatal care and patient satisfaction were the only metrics maintained, but an additional metric for 2023, which is a metric measuring social needs screening and referral data (Metrics and Scoring Committee, 2022).

Table 2.2: Quality Metrics for ACOs and CCOs that Could be Affected by Doula Care

ACO Quality Measures	Oregon CCO Quality Metrics	Oregon's 2015 Performance	Oregon's 2021 Performance
Core: Frequency of	Postpartum Care Rate	Number of CCOs that	Number of CCOs
Ongoing Prenatal Care	Percentage of women who had a postpartum	improved: 9	that improved: 9
	care visit on or between 21 and 56 days after	Benchmark is 71%	Benchmark is 61.3%
	delivery (2015) and	State performance at	
	between 7 and 84 days	51%	State performance
	after delivery (2021).		at 77.8%
	• ` ` /	2 CCOs met benchmark	
			All CCOs met
			benchmark

ACO Quality Measures	Oregon CCO Quality Metrics	Oregon's 2015 Performance	Oregon's 2021 Performance
Incidence of Episiotomy	Early elective delivery: (Percentage of women delivering a newborn who had an elective delivery between 37 and 39 weeks of gestation).	Number of CCOs that improved: 10 Benchmark is 5%, State was at 1.9% and all CCOs met benchmark	N/A
Core: Elective Delivery (Patients with elective vaginal deliveries or elective Cesareans at >=37 and <39 weeks of gestation completed)	N/A	N/A	N/A
Cesarean Section (Nulliparous women with a term, singleton baby in a vertex position delivered by Cesarean)	N/A	N/A	N/A
Exclusive Breast Milk Feeding and the subset measure (A measure related to newborns that were exclusively fed breastmilk during the entire hospitalization).	Low birth weight Percentage of live births that weighed less than 2,500 grams (5.5 pounds).	Number of CCOs that improved: 7 Benchmark is 6%; 8 CCOs met benchmark	N/A
N/A	Satisfaction with Care: Consumer Assessment of Health care Providers and Systems (CAHPS) Percentage of members (adults and children) who received needed information or help and thought they were treated with courtesy and respect by their health plan's customer service staff.	Number of CCOs achieving benchmark or improvement target: 8 (none met Benchmark) Benchmark 89.6%	No benchmark indicated State average was 89.2%
Experience of Care Consumer Assessment of Health Care Providers and Systems (CAHPS®) Health Plan Survey, Version 5.0 (Medicaid) (CPA) (CMMS, 2015)	N/A	N/A	N/A

ACO Quality Measures	Oregon CCO Quality Metrics	Oregon's 2015 Performance	Oregon's 2021 Performance
	Social Determinants of Health: Social Needs Screening and Referral The goal is to build system capacity to prepare for equitable, trauma informed, and culturally responsive care with the intention of reporting social needs	N/A	Will be measured in 2023
	screening and referral data.		

OHA, 2016; OHA, 2022a; Metrics and Scoring Committee, 2022

Medicaid population statistics. Medicaid policies and service delivery have the potential to change the delivery of maternity services for three reasons. The first is the sheer number of people participating in Medicaid who have the potential to receive or already receive maternity services. Nationally, 16% of all women are enrolled in Medicaid (Gomez et al., 2022); in Oregon, about one in five women (19%) is enrolled in Medicaid (KFF, 2022). Nearly two out of three adult women enrolled in Medicaid are in their reproductive years (ages 19 to 44) (Gomez et al., 2022). Second, maternity services make up a large portion of Medicaid services and can significantly impact quality and outcome metrics for ACOs and CCOs. Approximately half of births in the US (Markus et al., 2013) and 42% of 2020 births in Oregon were covered by Medicaid (KFF, 2021). Impacting health outcomes for the Medicaid population can mean significant savings and quality of life for women, gestating people, and infants. Nearly 9% of births covered by Medicaid (160,000) per year nationally were elective deliveries before 39 weeks of gestation, which can lead to higher rates of negative outcomes and a costlier labor. Pregnancy related hospitalizations and neonatal stays accounted for 50% of all Medicaid

hospitalizations in 2008, and maternity procedures accounted for five of the top 10 hospital procedures billed to Medicaid (KFF, 2016). Third, because half of all births are financed by Medicaid, Medicaid is one of the biggest financers of maternity care and there is an opportunity for 'spillover' (Markus & Rosenbaum, 2010) – i.e. for policies adopted by Medicaid to be the basis of health system restructuring or for private insurance companies to adopt policies on care provision that align with Medicaid provisions.

Since such a large portion of Medicaid services are pregnancy-related, states have significant control over how to enhance services to serve women and gestating people most at-risk for adverse birth outcomes (Markus & Rosenbaum, 2010). Oregon chose to utilize doulas to serve this purpose through administrative rulemaking through the context of community-based care and culturally- and linguistically- appropriate care provision. Doula certification curriculum standards have been defined in Oregon Administrative Rules (see Figure 2.1 Division 180-Traditional Health Workers, OARs 410-180-0315 & 0375) and reimbursement procedures were established in another set (see Figures 2.2 and 2.3 Doula Services, 2017).

Figure 2.1: Birth Doula Certification Curriculum Standards from OAR 410-180-0375

- (1) All birth doulas seeking certification with the state shall complete a minimum of 40 contact hours that include the following:
 - (a) A minimum of 28 in-person contact hours addressing the core curricula topics set forth in section (2) of this rule through an Authority approved training program for birth doulas or through another training program provided by a birth doula certification organization;
 - (b) Six contact hours in cultural competency training; and
 - (c) Six contact hours in one or more of the following topics as they relate to doula care:
 - (A) Inter-professional collaboration;
 - (B) Health Insurance Portability and Accountability Act (HIPAA) compliance; and
 - (C) Trauma-informed care.
- (2) All core curriculum for training birth doulas shall, at a minimum, introduce students to the key principles of the following topics:
 - (a) Anatomy and physiology of labor, birth, maternal postpartum, neonatal transition, and breastfeeding;
 - (b) Labor coping strategies, comfort measures and non-pharmacological techniques for pain management;
 - (c) The reasons for, procedures of, and risks and benefits of common medical interventions, medications, and Cesarean birth;
 - (d) Emotional and psychosocial support of women and their support team;
 - (e) Birth doula scope of practice, standards of practice, and basic ethical principles;
 - (f) The role of the doula with members of the birth team;
 - (g) Communication skills, including active listening, cross-cultural communication, and interprofessional communication;
 - (h) Self-advocacy and empowerment techniques;
 - (i) Breastfeeding support measures;
 - (j) Postpartum support measures for the mother and baby relationship;
 - (k) Perinatal mental health;
 - (1) Family adjustment and dynamics;
 - (m) Evidence-informed educational and informational strategies;
 - (n) Community resource referrals;
 - (o) Professional conduct, including relationship boundaries and maintaining confidentiality; and
 - (p) Self-care.

Figure 2.2: Defining Billable Doula Services from OAR 410-130-0015 in 2017

Doula Services, OAR 410-130-0015, in 2017

- (1) The primary purpose of providing concurrent doula services with the services of a licensed obstetrical practitioner is to optimize birth outcomes, including reduced Caesarian sections, epidural use, reduced assisted vaginal deliveries, and reduce the number of neonatal care unit admissions. These face-to-face services are provided only during the labor and delivery phase of the client's pregnancy. The following are expected to benefit most from doula services:
 - (a) A woman with a racially or ethnically diverse background including, Black/African American, Asian, Pacific Islander, Native American, Latino or multiracial;
 - (b) A homeless woman;
 - (c) A woman who speaks limited to no English;
 - (d) A woman who has limited to no family or partner support; or
 - (e) A woman who is under the age of 21;
- (2) Doula services may be provided only at the request of the licensed obstetrical practitioner. The doula and licensed obstetrical practitioner must work concurrently. The licensed obstetrical practitioner must be a physician or advance practice nurse.
- (3) Doulas must be certified and registered with the Authority pursuant to OAR 410-180- 0325 through 0327. Certification must be effective at the time doula services are provided. Doulas must provide proof of certification to the practitioner.
- (4) Doula services are covered for any woman whose benefit package covers labor and delivery.
- (5) The provision of doula services during labor and delivery must be documented in the client's medical record by the licensed obstetrical practitioner.
- (6) Payment for doula's services
 - (a) The licensed obstetrical practitioner may be eligible for an additional payment, as remuneration for the attending doula providing the doula services;
 - (b) Doulas may not receive direct payment from the Division;
 - (c) To be considered for the additional payment, the professional claim for the delivery services must include the unique Medicaid modifier of U9 appended to the appropriate obstetrical code billed at the time of delivery;
 - (d) This modifier may only be billed once per pregnancy. Multiples (i.e., twins, triplets) are not eligible for additional payment for the doula's services;
 - (e) Only one additional payment shall be made for doula services regardless of the number of doulas providing the services;
 - (f) Only providers with a provider type designation of 34 or 42 may bill the U9 modifier.
- (7) Doula services at the time of delivery are the only services eligible for payment under this rule. Services provided during the prenatal and postnatal period are governed by OAR 410-130-0595 (Maternity Case Management).

Figure 2.3: Defining Billable Doula Services from OAR 410-130-0015 in 2022

Doula Services, OAR 410-130-0015, Effective 2022

- 1) The primary purpose of providing birth doula services as a member of the birthing team is to optimize birth outcomes, including prevention of preterm births, fewer neonatal intensive care admissions, reduced Caesarean sections, reduced epidural use, and improved member experience of birthing care. These services are provided during the prenatal, labor and delivery, and postpartum phases of the member's pregnancy. Pregnant women or pregnant persons experiencing health disparities are expected to benefit most from birth doula services, including the following:
 - (a) A pregnant woman or pregnant person with a racially or ethnically diverse background including, Black/African American, Asian, Native Hawaiian/Pacific Islander, Native American, Latino/Latina/Latine, or multiracial;
 - (b) A pregnant woman or pregnant person experiencing houselessness;
 - (c) A pregnant woman or pregnant person who speaks limited to no English;
 - (d) A pregnant woman or pregnant person who has limited to no family or partner support;
 - (e) A pregnant woman or pregnant person who is under the age of 21.
- (2) Pursuant to § 440.130(c), doula services shall be recommended by a physician or other licensed birth provider acting within the scope of authorized practice under State law.
- (3) Birth doula providers shall meet the following requirements at the time services are provided:
 - (a) Shall be enrolled with the Authority as a Traditional Health Worker (THW) pursuant to OAR 410-180-0300.
 - (b) Shall be certified as a birth doula pursuant to OAR 410-180-0315.
 - (c) Shall be registered with the Authority pursuant to OAR 410-180-0325 through 410-180-0327.
- (4) Birth doula providers shall document services provided for each encounter. The birth doula's record shall include the dates of service, a brief description of education or services provided, assessment of any client or member needs beyond routine care, and any referrals made. The goal of documentation is to verify services were provided and facilitate communication with other members of the birthing team.
- (5) The Authority will pay for birth doula services for any woman or pregnant person whose benefit package covers labor and delivery.
 - (6) Payment for birth doula services:
 - (a) For a member enrolled in Fee for Service (FFS) medical programs:
 - (A) To be considered for payment, birth doula services shall be billed on a professional claim and shall include the unique Medicaid modifier of U9 appended to the appropriate obstetrical codes:
 - (B) Birth doula care shall be billed as a global birth doula package. A global package shall include at a minimum two prenatal face-to-face visits, care during the labor and delivery phase, and two postpartum face-to-face visits;
 - (C) Itemized billing, i.e., billing the day-of-delivery as a standalone and billing separate prenatal and postpartum visits, is allowed in extenuating circumstances. Extenuating circumstances include but are not limited to when the primary birth doula is not able to attend the delivery and a backup birth doula provides services or when a mother is late to care making scheduling two prenatal face-to-face visits impossible:
 - (i) When appropriate due to extenuating circumstances, services rendered by multiple birth doulas for the same pregnancy may be itemized for billing;
 - (ii) Reimbursement of itemized services, regardless of the number of birth doulas serving the member, may not exceed the global package total.

- (D) Billing for birth doula services shall include:
 - (i) Using CPT 59400+U9, 59510+U9, 59610+U9, or 59618+U9 one time for a global birth doula package;
 - (ii) Using CPT 59899+U9 for each encounter up to four encounters and one delivery-only code + U9 for the day-of-delivery in the case of itemized billing. Acceptable day-of-delivery-only codes are: 59409+U9, 59514+U9, 59612+U9, or 59620+U9;
 - (iii) Claim only one global birth doula package per pregnancy. A global birth doula package may not be billed together with any of the itemized birth doula services codes for the same pregnancy.
- (E) Birth doula services may only be billed once per pregnancy. Multiples (i.e., twins, triplets) are not eligible for additional payment;
- (F) Only an enrolled birth doula, provider type designation 13/600, may be the rendering provider for birth doula services.
- (b) For a member enrolled in CCO medical programs, payment shall be according to OARs governing CCO provider payment.

Conclusion

The role of the doula emerged from the shifts in the United States maternity care system during the 1970s, when the way health care was delivered was being challenged by emerging social movements focusing on patients' and women's rights. The social role described by Raphael (1973) of women gathering to provide support to new mothers in a community setting has been formalized into a role within the maternity care system and a possible career option. Professional and credentialing doula organizations in international and local contexts have emerged and contributed to the formalization of the role, and research is demonstrating that using doulas improves birth outcomes (Hodnett et al., 2013). Oregon included doulas and other THW workers in its plan to transform the state Medicaid program with House Bill 3650. Access to doulas is now mandated by law. This dissertation looks to contribute to the research on doulas in the health care system by determining the Medicaid system and policy factors that will increase access to doulas in Oregon.

Chapter 3 addresses the conceptualization of access, definitions of key concepts, the research design, sample selection, and data analysis.

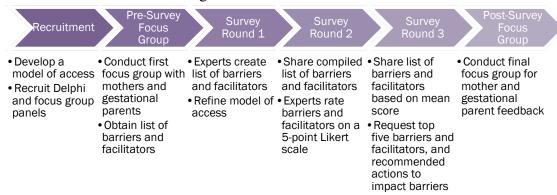
Chapter 3: Design and Methods

The goal of this dissertation was to determine the emerging policy and system factors within Medicaid that will increase access to doula care in Oregon. This study utilized a modified Delphi method to develop a model of access to doula care in Oregon, determine barriers and facilitators to access, identify priority areas for access, and develop possible actions at different levels of the system that could increase access to doulas in Oregon. This chapter includes an overview of the research design, a justification for using a Delphi study and nominal group technique focus groups, a review of the study design and recruitment criteria for participants and characteristics of participants enrolled, and definitions of concepts and variables.

Research Design Overview

Figure 3.1 illustrates the overall data collection process. There were two panels of participants, one to represent the health system and one to represent the patient population of mothers and gestational parents. These panels are based on Levesque's Model of Patient Centered Care, where access occurs at the interface of the health system and the patient (Levesque et al., 2013). This section describes a basic overview of the data collection plan, and each section is explained further in subsequent Chapter 3 sections.

Figure 3.1: Data Collection Plan



In the first phase, recruitment, the conceptual model for Patient Centered Access to Health Care by Levesque et al. (2013) was modified to fit the health care delivery and policy context being studied, creating a new conceptual model specific to access to doula care. The literature reviewed in Chapter 2 was combined with the conceptual models to create an applied model of access to doula care. Concurrently, Delphi and focus group participants were recruited. Second, focus groups were conducted at three Oregon WIC offices, where a list of barriers and facilitators was collected. Next, data collection from experts representing the health system occurred utilizing a three-round modified Delphi survey. Data collection was completed with a final set of interviews from the original set of focus groups to obtain feedback and consensus from the mother and gestational parent perspective. There were five steps to the data collection process, with two data collection methods: the Delphi survey, which occurred in steps 2-4, and the focus groups, which occurred at steps 1 and 5.

The health system panel participated in a three-round Delphi survey using Qualtrics survey software by generating a list of barriers and facilitators to access to doulas in Oregon in Round 1, ranking the list of barriers and facilitators based on their

importance in influencing access to doula care in Oregon in Round 2, choosing their top five barriers and facilitators from the list of barriers and facilitators organized by mean score in Round 3, and generated a list of actions that would increase access to doula care. The panel of mothers and gestational parents participated in a separate focus group process. Focus groups occurred before and after the Delphi survey. In the first group, mothers were asked to offer their opinions on their experience of support during childbirth and list barriers and facilitators to access to doula care. Their list of barriers and facilitators was shared with the health system panel was combined with the list of barriers and facilitators obtained from the expert survey panel collected in Round 1 of data collection. In Round 2 of the Delphi, expert survey panelists were provided with all barriers and facilitators and were asked to rank each on a scale of one to five, based on how influential the factor was to doula care access. In Round 3, survey panelists were provided a set of tables with the barriers and facilitators, organized by the mean score from Likert-type scale responses; panelists were asked to choose their top five barriers and facilitators after reviewing the list and the rankings. After the health system panel chose their top barriers and facilitators, they were provided with an open text field next to each barrier and asked to describe possible actions that would reduce these barriers. Data collection was completed with interviews from participants of the initial focus groups, where the survey results including tables and possible actions were discussed. Mothers and gestational parents commented on the rankings and proposed actions and offered additional input.

Research Question and Objectives

The research question for this dissertation was: What are the emerging Medicaid policy and system factors that would increase access to doula care in Oregon? The objectives of this research were to:

- Develop a model for access to doula care using Leveque et al.'s (2013)
 model of access to healthcare and use data from a group of mothers,
 gestational parents, and experts to refine the model.
- 2. Determine priority barriers and facilitators to access.
- 3. Recommend possible actions at different levels of the health system that could increase access to doulas.

Theoretical Framework

Access to appropriate health care is both a critical goal of policy and research efforts as well as a concept that has been difficult to define and measure. The central issues of this dissertation emerged from the intersection of policy intent for increased access to health care and an opportunity to utilize a framework that could be useful in contextualizing, writing and implementing of policies intended to increase access to health care such as doula care. Furthermore, conceptualizing access and all the elements that can affect access can aid in evaluating the effectiveness of policies written with the intent of increasing access to care.

Noting that health systems conceptualization of access often relies heavily on attributes of health services or health systems and does not consider the complex and varying needs and resources of patient populations, Levesque et al. (2013) published a

model that attempts to conceptualize access in a way that acknowledges both system and patient factors that can contribute to access and emphasize the process of obtaining care. Levesque et al. (2013) argued that two elements of their model help create a stronger basis for operationalization and measurement as a concept: (1) access is conceptualized as occurring across the process of identifying, finding, obtaining, and utilizing care, and (2) factors influencing access are conceptualized as occurring between steps to this. This model frames access issues as not solely health systems issues but as the issues that arise from the interaction of patients and the health system. Such a conceptualization is important when creating and implementing programs related to access and that heavily emphasize equity and inclusion, such as the THW program and the intention of doula care to provide culturally and linguistically appropriate care.

Research Design

The basis of this dissertation is policy analysis, or the "process of multidisciplinary inquiry aiming at the creation, critical assessment, and communication of policy-relevant information" (Dunn, 2012, p. 4). There are four methods to policy analysis: policy evaluation, forecasting, policy prescription (Recommendation on Figure 3.2), and monitoring policies. The focus of this dissertation is the "expected outcomes" box, which is increased access to doula care for Oregon women and gestational parents enrolled in Medicaid. The step before Expected Outcomes is Forecasting and the step after Expected Outcomes is Policy Prescription. This dissertation attempted to fulfill, in part, both expected outcomes and policy prescription steps of policy analysis.

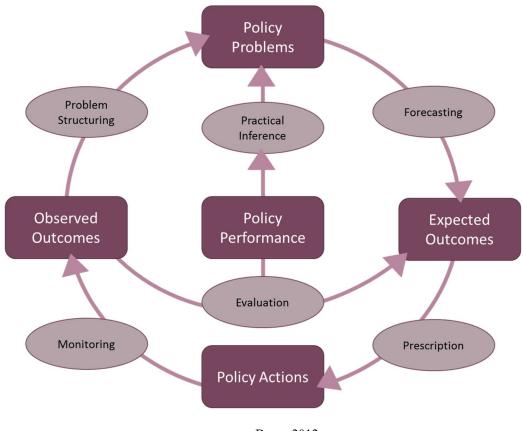


Figure 3.2: Dunn's Policy Analysis

Dunn, 2012

Forecasting is a process that creates factual information about expected policy outcomes on the basis of prior information about a given policy problem. There are three types of forecasting: projection, prediction, and conjecture. Projection is based on the extrapolation of current data to predict future outcomes (Dunn, 2012). Since Oregon was the first state to implement such a policy for doulas and, at the time of data collection, not enough time had passed or data collected to provide information about the policy's performance, this dissertation relied on the other forms of prediction: theoretical and judgmental forecasting. Theoretical forecasting makes predictions about future outcomes based on theoretical propositions. Adapting a conceptual model for access to doula care

to inform data collection allowed this dissertation to be framed with a theoretical conceptualization of access, from which information collected from this dissertation was applied. Judgmental forecasting relies on informed opinions from experts to make predictions. Policy prescription is a method of creating information about preferred policies to assist in recommending policy actions (Dunn, 2012).

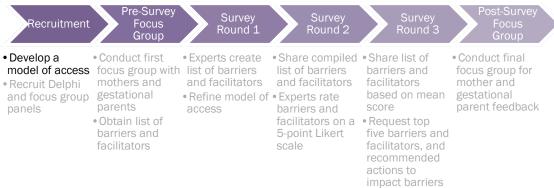
The first objective of this dissertation was to develop a model for access to doula care and refine the model based on information from mothers, gestational parents, and field expert participants. By using the conceptual model of access to doula care to frame study data with the intention to create recommendations that would result in increased access, this dissertation had a theoretical base for theoretical forecasting. By creating an applied model from both the research as well as informed expert and mother opinion, the applied model that resulted from this dissertation can serve as a theoretical forecasting tool for future efforts to increase access to doulas within Oregon or in other health care systems. The second objective allowed experts, mothers, and gestational parents to establish priority areas informed from each other and through their consensus. This step attempted to make normative judgements about possible health system areas that would result in the most impact on access to doulas. The final objective of this dissertation, to determine possible actions at different levels that could increase access to doulas, was a judgmental means to determine the best possible policy actions to achieve increased access to doulas and is an initial stage to policy prescription. This step provided a variety of preferred policy actions that emerged from expert consensus of prioritized health system and policy access factors.

In the following sections, the creation of the initial model are described along with definitions for concepts of the model. Then, the Delphi and focus group protocols are described.

The Conceptual Model

The first step of this dissertation was to create a model for access to doula care (see Figure 3.3 for illustration of the conceptual model in the process of data collection).

Figure 3.3: Steps in the Process: Model Development



This dissertation utilized and adjusted the model of Patient Centered Access to Health Care (Levesque et al., 2013) to create the conceptual model of access to doula care. There are four specific elements of the Levesque et al.'s conceptual model that were retained in the model of access to doula care: the process of obtaining health care, the steps to obtaining health care, the supply side and demand side of access, and the dimensions of access occurring between the steps of obtaining health care.

The Process and Steps of Obtaining and Utilizing Health Care

Two important constructs of the model that were retained were the process of obtaining health care and the steps to this process. The Levesque et al. (2013) model stipulates that there are six steps to the process and that access occurs at the five points in

between the steps. The model utilizes these constructs, but some constructs were combined. Specifically, the first two steps, which are "health care needs" and "perception of those needs and desire to seek care," as well as the third and fourth steps, which are "health care seeking" and "health care reaching," are conceptually indistinguishable within this specific facet of the health care system that the investigator decided to merge them into one step. This simplified the dimensions to three basic points of access centered around the patient, which fall within easily recognizable steps to doula care health outcomes: deciding to use care, obtaining and reaching care, and utilizing care. By identifying six potential points of access, or dimensions of access, instead of ten, the model is simplified and will be easier to use for the intended purpose. Figure 3.4 presents Levesque's original model and Figure 3.5 is the model adapted for this dissertation.

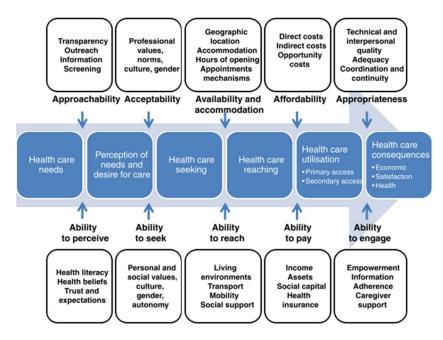
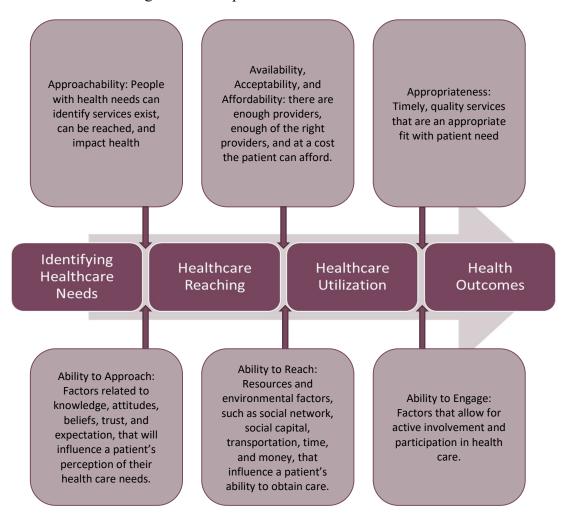


Figure 3.4: Levesque et al. (2013) Model of Patient Centered Care

Figure 3.5: Adapted Model of Access to Doula Care



Dimensions of access. The dimensions of access occur between the steps to obtaining health care (Levesque et al., 2013). For every dimension that affects the patient (Ability to Approach, Ability to Reach, and Ability to Engage), there is a corresponding dimension for the health system (Approachability; Availability, Affordability, Acceptability; and Appropriateness). Since the steps to the process of obtaining health care were condensed, the dimensions of access were also condensed. Table 3.1 lists the operational definitions of all elements of the model.

Table 3.1: Concepts and Definitions

Concept	Operational Definition
Supply Side/Health	Features of the health system, institutions, organizations, providers (Levesque
System	et al., 2013)
Demand Side,	Features of individuals and their families, communities, and populations
Patient Population,	(Levesque et al. 2013)
or Mothers and	(20, 00 que 00 min 20,10)
Gestational Parents	
	f Obtaining Health Care
Health Care Needs	Conditions or states that require and can be served by health care services
Ticatui Care Needs	(adapted from Acheson, 1978)
Health Care Seeking	The act of seeking and obtaining a health care service with the intent to utilize
and Reaching	the service (Levesque et al., 2013)
(Health Service)	The outcome of the interaction between health professionals and patients
Utilization	(Donabedian, 1973)
(Health) Outcomes	The result of a patient's encounter with the health care system, that occur on
(Health) Outcomes	five levels: biological and physiological factors, symptoms, functioning,
	general health perceptions, and overall quality of life (Wilson & Cleary, 1995)
Dimensions of Access	
	People with health needs can identify services exist, can be reached, and
Approachability	
	impact health (adapted from Levesque et al., 2013)
Availability,	There are enough providers, enough of the right providers, and at a cost the
Acceptability, and	patient can afford (adapted from Levesque et al, 2013)
Affordability	
Appropriateness	Timely, quality services that are an appropriate fit with patient need (adapted
	from Levesque et al., 2013)
Dimensions of Access	from Patient Perspective
Ability to Approach	Factors related to knowledge, attitudes, beliefs, trust, and expectation, that will
	influence a patient's perception of their health care needs and desire or
	intention to seek care (adapted from Levesque et al., 2013)
Ability to Reach	Ability to Reach: Resources and environmental factors or influences, such as
·	social network, social capital, transportation, time, and money, that influence a
	patient's ability to obtain care (adapted from Levesque et al., 2013)
Ability to Engage	Factors that allow for active involvement and participation in health care.
, , ,	(adapted from Levesque et al., 2013)
Other Operational Des	
Access	The opportunity to have health care needs fulfilled (adapted from Levesque et
1100035	al., 2013)
The Process of	A set of actions, changes, or functions that patients and health systems engage
Obtaining Health	in while trying to fulfill a health care need or are attempting to promote health
Care	care outcomes. The process for obtaining doula care has four steps (adapted
Cuiv	from Donabedian, 1973).
Dimension of	A feature of the health care system that that influences a patient's movement
Access	from one step to the next step in the process of obtaining health care (adapted
	from Levesque et al., 2013)
Access Element	The individual components of the dimensions of access. This is ascertainable
1 100035 LICITOIII	through the review of literature and understanding of the maternity care system
Access Factor	and has been illustrated in the applied model (Tables 4 and 5 below).
Access raciof	These are specific components of a health care system that will influence
	access. These are what will be provided by expert panel and focus groups

Supply Side and Demand Side. The next element of the Levesque et al. (2013) model is consideration of the levels of the system on both the supply side and the demand side. These system elements also roughly approximate the Socioecological Model of Health (Bronfenbrenner, 1979), which lends them additional validity. "Healthcare" will be used to refer to the supply side and "Mothers and Gestational Parents" will refer to the demand side, interchangeably.

The Preliminary Applied Model

Tables 3.2 and 3.3 present the components of the preliminary applied model. Table 3.2 lists the elements and dimensions of access for the health care system and Table 3.3 lists the Elements and Dimensions of Access for mothers. This model was created by applying the research available on doulas as presented in Chapter 2 to the dimensions of access to doula care in Figure 3.6. As the list of barriers and facilitators was collected from mothers, gestational parents, and health care professionals, their responses were compared to the model, and as necessary the model was adjusted will be seen in Figure 4.1 in Chapter 4. As the system level moves more broadly, from the individual level, which is at the provider and mother or gestational parent level, out to institutions and populations, access elements fit into more than one category. For example, credentialing processes of doulas can affect all three dimensions of access to doulas.

Figure 3.6: Healthcare and Mother/Gestational Parent Model of Access to Doula Care

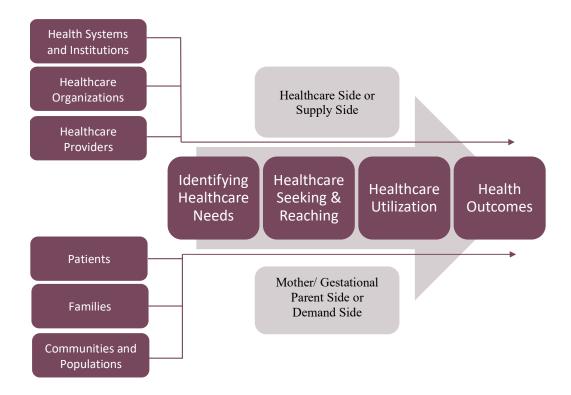


Table 3.2: Healthcare Elements and Dimensions of Access

Health Care Elements	Approachability	Acceptability, Availability, Affordability	Appropriateness
Institutions	•	ws, rules, policies that impace employment, credentialing birthing practices health insurance reimbursement patient rights and responsibility.	
Hospitals and Birth Centers	•	existing relationships between previous experience with do policies around birth compa organizational mission and p	oulas nions
OB Practitioners and Clinical Professionals	 Previous experience with doulas Thoughts/attitudes/belief knowledge about Doulas Professional culture of provider 		 Quality of Provider/ Doula interactions during birth Quality of communication between doulas and providers during birth
Doulas	 Marketing, outreach, networking efforts of doular Quality and availability of information about doular 		 Quality and timeliness of doula care Specific techniques used Quality of interpersonal doulaclient interaction

Table 3.3: Access Elements for Mothers and Gestational Parents

Patient Population Elements	Ability to Perceive	Ability to Reach	Ability to Engage
Mothers and Gestational Parents	 Knowledge, beliefs, attitudes, and expectations of doulas Knowledge, beliefs, attitudes, and expectations about birth Knowledge, beliefs, attitudes, and expectations about health care and health care professionals Health literacy and language 	 Patient's personal value of doula care Autonomy Living environment Ability to pay: income, assets, social assets, health insurance 	 Patient feels as if she has power with her maternity care services as a result of doula care Patient feels that she has power with her relationship to doula Patient was motivated to be successful with care Patient was given support and information that encouraged adherence and success
Families	Mother/Family member dynamic Family's previous experience with doulas	 Family or co-parent value of doula care Co-parent or family knowledge, beliefs, attitudes, and expectations of doulas Co-parent or family knowledge, beliefs, attitudes, and expectations about birth Co-parent or family knowledge, beliefs, attitudes, and expectations about health care and health care professionals Family's ability to pay, including income, assets, social assets, and health insurance 	• Family and co-parent experience power, are empowered to support mother with adherence and success
Population and Community	Demographic influences Age	on family and individual fa	actors such as:

- Gender
- Socioeconomic status
- Race and ethnicity
- Cultural factors that may influence family and individual factors
- The presence of social and cultural organizations
- The influence of social and cultural organizations

Research Method Selection

This dissertation utilized a modified Delphi method. Delphi techniques are used in policymaking fields when opinions either differ or there is a lack of research or scientific evidence on a particular topic (Dunn, 2012). As addressed in the previous chapter, doula integration into the healthcare system is still in its earliest stages and Oregon was the first state to legislate Medicaid financing of doula care. Increasingly, the Delphi process is being utilized in health services and nursing research, either to set priorities for research or professional development, or to gain consensus on current or emerging issues (Keeney et al., 2010; Nasa et al., 2021). This study attempted to do both: first, by inviting input on all the relevant potential factors that influence access to doulas to determine where consensus falls, and then by identifying priority areas among the potential factors identified.

This dissertation also utilized focus groups, specifically the nominal group technique, to complement the Delphi method. Focus groups of mothers and gestational parents were recruited for two reasons. First, a patient-centered approach underlies this work; since the conceptual model attempts to lay out access elements across the process of a mother's or gestational parent's experience obtaining and utilizing care, it is crucial that mothers and gestational parents contribute to the research of a conceptual and applied model of patient-centered access to doula care. Second, a focus group format such as nominal group technique allows for an opportunity for mothers and gestational parents to participate in the research in an accessible way (Porter, 2011).

Nominal group technique is a structured means of data collection from groups of individuals that involves a process of (1) independent idea generation, (2) followed by feedback and collection of individual ideas on a flip chart, (3) followed by discussion. By structuring a focus group in this way, the tendency for process losses such as conversation domination or tangential lines of conversation are diminished (Rothbough, 1981). As in other types of focus groups, groups that use a nominal group technique involve participants meeting face-to-face with other participants and with the focus group moderator, so that perspectives of participants can be clarified, and responses can build upon each other. It is a consensus-building technique that is regarded as similar to the Delphi (Foth et al., 2016). When the phrase "focus group" appears from this point forward in this dissertation, it is in reference to this technique.

The benefits of using a Delphi method with the health system participants include flexibility for participant recruitment and participation. Delphi studies utilizing experts frequently use snowball sampling techniques; experts can be contacted through phone or email and connected with the researcher using methods of communication that are most well-received and introductions can occur through familiar social networks (Keeney et al., 2010). This study took place over the course of six weeks and in three iterations or rounds in the spring of 2018. Health system participants participated in each round through a survey that they could access online were given a two-week timeframe for each response period, allowing for flexibility in participation. This flexible survey administration also means more participants can be recruited than could be expected with an in-person method and a larger variety of system perspectives can be represented.

Selection of Panels and Recruitment of Participants

The next step in this dissertation was participant recruitment. Figure 3.7 illustrates the phase of both Delphi and focus group recruitment.

Survey Round 3 Recruitment Focus Round 1 Group Develop a Conduct first Experts create · Share compiled · Share list of Conduct final model of access focus group with list of barriers list of barriers barriers and focus group for mothers and and facilitators and facilitators facilitators mother and Recruit Delphi based on mean gestational gestational • Refine model of • Experts rate and focus group parents parent feedback barriers and panels access · Obtain list of Request top facilitators on a barriers and 5-point Likert five barriers and facilitators scale facilitators, and recommended actions to impact barriers

Figure 3.7: Steps in the Process: Recruitment

Delphi Panel Recruitment

The types of participants that were recruited were purposively selected based on their participation in, or ability to represent, elements of the health system (Delphi) or patient population (focus groups) (Keeney et al., 2010). Delphi studies utilize experts based on their knowledge and experience within the field. For this study, participant selection was based on relative expertise related to a given element in the system.

For the health systems panel, the recruitment strategy outlined in Tables 3.4, 3.5, and 3.6 included a minimum of two participants and a maximum of four participants from each system level, for a total of 32-62 participants. First, obstetrical providers and doulas were recruited though purposeful sampling (see Appendix B for recruitment email). By utilizing Oregon birth statistics, 18 diverse hospitals or women's clinics that served at least 100 births a year were identified and contacted to recruit obstetrical providers. The researcher also used DoulaMatch.net's database and the Oregon Health

Authority's THW database to find doulas who serve in the counties of those 18 hospitals or clinics. Then, further participants were recruited through snowball and nonprobability sampling of recruits from the first phase of sampling as well as the researcher's professional network (Kumar, 2011), until sufficient representation was achieved.

Table 3.4: Recruitment Plan and Definitions

Maternity Care System Levels	Definition	Types of Experts Needed	Number of Participants
Providers	Health care practitioners or credentialed health care workers who oversee any element of maternity care: the care before, during, and after labor and delivery.	Obstetrical practitioners:	6-12
		• Midwives	• 2-4
		OBGYNs	• 2-4
		• Family Medicine providers who deliver babies	• 2-4
		Other credentialed health care workers who provide or oversee aspects of maternity care	6-12
		Labor and Delivery Nurses	• 2-4
		Lactation Consultants	• 2-4
		Birth Educators	• 2-4
		Doulas	4-8
		• Doulas who are certified to receive payment through Medicaid	• 2-4
		• Doulas choosing not to be certified to receive payment through Medicaid	• 2-4
Organizations	Organizations that directly provider prenatal, labor and delivery, and postnatal care	• Hospitals	6-12
		• Hospitals	• 2-4
		Group OBGYN Practices	• 2-4
		Birth centers	• 2-4
Institutions and Systems	The established organizations that influence behaviors, ethics, norms of health care professionals	Total for Institution and System	6-12
		• Local (national if needed) professional or credentialing organizations for practitioners and hospitals	• 2-4
	The way in which the health care system outside of maternity care is structured or delivered; those that influence these structures	The larger context of the Oregon health care system	• 2-4
	Insurance Companies	Medicaid or other insurance organizations	• 2-4

Table 3.5: Recruitment Strategy for Mother and Gestational Representation

System Level	Definition	Elements in Maternity Care System	
Patients	Individuals utilizing maternity care services financed with Medicaid	Mothers and gestational parents first time and experienced	Focus Group: Recruit 15 per focus group
Communities Population	The groups the patient identifies with; could be based on geography or characteristic. Emphasis on personal identification	Community Representatives	Delphi Survey: 4-8
	The groups of people for which there are system-level identifiers. A person is part of a population based on characteristics they have and is more involuntary than 'community.'	Community Representatives	_

Table 3.6 Recruitment Criteria for Expert Panels

Recruitment Criteria for Expert Panels

Participants in this study will fulfill at least one of the following criteria:

- If they are representing a provider perspective, they must be currently practicing as a provider and at least 25% of their professional role is spent on the provision of care or managing the provision of care.
- Currently employed with or serves an official role with a health care organization, health system organization, professional organization, academic organization, or governmental organization that directly serves or influences maternity care. Active interest or participation in this policy issue is preferred (except for doulas who are independent providers but meet the criteria above).
- Providers who meet the criteria above and who also manage responsibilities that are closer to system-level issues such as insurance, billing, staff or organizational management responsibilities, professional representation such as holding professional association responsibilities, or have been actively interested in and following this policy issue are prioritized.

Twenty-seven participants agreed to participate in the study upon being recruited, 23 participants completed Rounds 1 and 2, and 21 participants completed Round 3. Table 3.7 presents the final totals for each system level outlined in Table 3.6. Of the original 23,

nine participants represented one system level, nine represented two system levels, and five represented three system levels throughout each round.

Table 3.7: Expert Panel Characteristics

Participant Roles	Target	Total Rounds 1 and 2	Total Round 3
Obstetrical practitioners:	6 - 12	8	7
· Midwives	2 - 4	3	3
· OBGYNs	2 - 4	2	2
· Family Medicine Providers	2 - 4	3	2
Other credentialed health care workers who provide or oversee aspects of maternity care	6 - 12	2	2
· Labor and Delivery Nurses	2 - 4	0	0
· Lactation Consultants	2 - 4	0	0
· Birth Educators	2 - 4	2	2
Doulas	4 - 8	10	10
 Doulas who are certified to receive payment through Medicaid 	2 - 4	7	7
Doulas choosing not to be certified to receive payment through Medicaid	2 - 4	3	3
Organizations	8 - 16	8	8
· Hospitals	2 - 4	2	2
· Group OBGYN Practices	2 - 4	1	1
· Birth centers	2 - 4	0	0
· Doula Organizations	2 - 4	5	5
Total for Institution and System	6 - 12	11	10
 Local (national if needed) professional or credentialing organizations for practitioners and hospitals 	2 4	7	6
•	2 - 4	1	<u>6</u> 1
The larger context of the Oregon health care system	2 - 4	-	
Medicaid or other Insurance Organizations	2 - 4	3	3
Patients	2 - 4	0	0
Communities Population The groups the patient identifies with; could be based on geography or characteristic. Emphasis on	4 - 8	3	2
personal identification The groups of people for which there are system-level identifiers. A person is part of a population based on characteristics they have and is more involuntary than 'companyity'.	2 - 4	1	1
involuntary than 'community.'	2 - 4	2	1

Focus Group Recruitment

As gender identity, parenting, and family structures become more diverse, the author of this study acknowledges that language plays a critical role in the analysis and accessibility of research and healthcare information. The academic language around gestating and birthing people has changed from the inception of this dissertation and data collection in 2017. At the time of data collection, the term mother was utilized because it was decided that it more clearly communicated that it was gestating parents enrolled in the Women, Infant, and Children program in Oregon and that it was a term the population would understand as focusing on the gestational parent, which is the primary focus of the study. Therefore, recruitment materials and data collected from Round 1 may be specifically gendered to say mother or women. However, modifications to language appearing in Chapters 3, 4, and 5 attempt more inclusive language, with the addition of the term "gestational parent," and at times "birthing parent." The Academy of Breastfeeding Medicine and American Academy of Pediatrics (AAP) suggests the terms parent or gestational parent as gender inclusive terms (Bartick et al., 2021; AAP, 2021). Also, gender-additive language, which is where nongendered language is included along with gendered language such as woman and mother, is an approach that recognizes the health disparities experienced by women in healthcare settings and health outcomes but also expands discourse beyond biological and gender attributes to people who experience pregnancy and childbirth (Green & Riddington, 2020).

The mother and gestational panel was recruited from three WIC offices in three separate geographic areas. Two WIC offices were located in urban areas, on the I-5

corridor of Oregon, and one WIC office was located in a rural area. Each pre-survey focus group and post-survey focus group was held at the corresponding WIC location, resulting in three pre-survey focus groups and three post-survey focus groups. Rural areas are those identified by the US Census as occurring outside of an urbanized area or urban cluster (US Census Bureau, 2015a). Both first-time and experienced mothers or gestational parents were recruited (see Appendices C and D for WIC recruitment flyer and information sheet). First-time mothers or gestational parents were those who experienced pregnancy for the first time at the time of data collection and had not yet given birth, and experienced mothers or gestational parents had already experienced pregnancy and birth prior to data collection. Experienced mothers and gestational parents had already gone through the process of obtaining and utilizing maternity care; because of this experience in the health care system, they had experiential knowledge that first time mothers and gestational parents do not have. Their previous experience with the maternity care system influenced their knowledge, attitudes, and behaviors in identifying health care needs, seeking and utilizing care, and their experience of care.

Since the intention of this dissertation was to increase access to doulas, there was value in including populations with both mothers and gestational parents who had experience with the health system and therefore understand the gaps retrospectively, as well as those who had experiential knowledge of current pregnancy, current prenatal care, and who could describe the decision-making considerations as they were experiencing them in real time. WIC focus group participants were chosen because the qualifying criteria for WIC are similar to those for Medicaid and most WIC participants are also

receiving Medicaid benefits. Participants were each given one ten-dollar grocery gift card for participating in the first focus group and a twenty-dollar gift card for participating in the second set.

The Delphi Survey

Data collection took place in three main phases: the pre-survey focus group, the Delphi survey, and the post-survey focus group. First, the Delphi survey data collection is explained. Next, the pre-survey focus group and post-survey focus group are explained. Figure 3.8 illustrates where the survey occurred in the data collection process.

Pre-Survey Survey Round 1 Survey Round 2 Recruitment Focus Conduct first Experts create Share compiled • Share list of Conduct final Develop a model of access focus group with list of barriers list of barriers barriers and focus group for and facilitators and facilitators Recruit Delphi mothers and facilitators mother and and focus group gestational based on mean gestational • Refine model of • Experts rate parents score parent feedback panels access barriers and Obtain list of facilitators on a Request top barriers and 5-point Likert five barriers and facilitators scale facilitators, and recommended actions to

impact barriers

Figure 3.8: Steps in the Process: The Delphi Survey

Round 1

The first round of the Delphi survey fulfilled the first objective of the dissertation, which was to develop a model of access to doula care and refine the model. The first round consisted of two questions, asking participants to list the factors that they saw as barriers to doula care in Oregon and a separate list of those factors that act to facilitate doula care in Oregon. The content of the open-ended questions was analyzed and all unique factors was named and placed in tables along with defining quotes from survey participants. Tables from Round 1 survey results and pre-survey focus groups were

shared in Round 2. Language and phrasing used by the respondents were be maintained as close to the original response as possible. Each unique factor was compared to and organized by the preliminary applied model. New thematic system levels and an applied model of doula care are presented in Chapter 4.

In Round 1, the combined factors obtained from pre-survey focus groups and survey panelists were 48 barriers and 40 facilitators. The data analysis plan included the ability for the researcher to include access factors that were found in the applied model for access to doula care into the lists of factors if these did not appear in the survey or pre-survey focus group results and clarified in Round 2. The survey panel did not bring up direct mentions of social factors such as religion, LGBTQ status, languages, immigration status, socioeconomic status and geography, or population characteristics such as age, sex, health status, race and ethnicity, which are fundamental components to access to healthcare (Levesque et al., 2013). These two factors, along with the descriptions of these factors, were included in the final tables that appeared in Round 2, on both the barrier and the facilitator sides, resulting in 50 barriers and 42 facilitators that were presented in Round 2.

Round 2

The second round of the survey began to fulfill the second objective of identifying priority barriers and facilitators. In Round 2, survey panelists were presented with the lists of barriers and facilitators, organized by system level, from both survey participants and focus group participants. The additional factors of social characteristics and population characteristics were also included. Participants were asked to rate each factor

on a scale of one to five, where 1= Not Important (for access to doula care), 2 = Slightly Important, 3= Fairly Important, 4 = Important, and 5=Very important. See Figure 3.9 for an example.

Figure 3.9 Round 2 Survey Question Example

For the Level of Doula, please rank the following barriers for how important they are for access to doula care:					
	Not Important	Slightly Important	Fairly Important	Important	Very Important
Doula Barrier 1	0	0	0	0	0
Doula Barrier 2	0	0	0		0
Doula barrier 3			0		

Mean scores for each factor's Likert-type scale were calculated and shared in the next round. Initial consensus was expressed through the mean scores for each item.

Round 3

In the final round, all barriers and facilitators from Round 2 were presented to survey panelists and organized by mean score. All results were organized from the highest mean to lowest mean. The first component of the survey presented participants with one table that contained the 20 barriers achieving the highest mean value organized by mean values. Separate tables, organized by system level, with the remaining barriers were also presented, also organized by mean values. Survey participants were asked to choose their top five barriers among the barriers presented. Next, survey participants were presented with the same format, except the tables included the 20 facilitators achieving the highest mean values and tables of facilitators organized by system level as well as mean scores. Survey participants were then asked to choose their top five facilitators. Finally, participants were provided with a list of their top five barriers and an open text field next to each barrier and were invited to recommend actions that would influence each barrier they chose. Frequencies for each access factor that appeared in

respondents' top five lists were calculated and access factors were ordered from highest to lowest frequency.

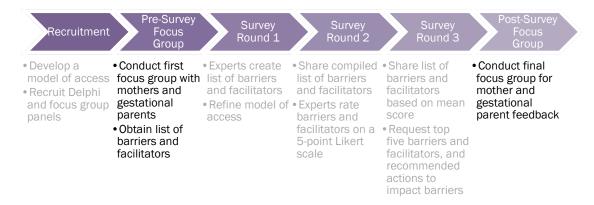
Defining Consensus

Consensus is an important issue in Delphi studies and the level of consensus needed depends on the aims of the study. The first round was idea generation and does not require consensus. Consensus for Round 2 was illustrated with mean score calculations and consensus for Round 3 was illustrated with frequencies of the top barriers and facilitators.

Focus Groups

The focus groups with mothers and gestational parents took place twice: once before the survey and once after the survey. The same set of participants were invited to participate in both the pre-survey focus group and the post-survey focus group. Figure 3.10 illustrates where the focus groups occurred in the process of data collection (see Appendix E for focus group protocols).

Figure 3.10: Steps in the Process: Pre-Survey and Post-Survey Focus Groups



Pre-Survey Focus Groups

Three mothers and gestational parents participated at the rural focus group, while the two urban focus groups consisted of three and eleven participants. Mothers and gestating parents who participated at the initial focus group were then recruited to participate in the follow-up focus group. None of the mothers attending the rural focus group were interested in participating in the follow-up focus group; however, one follow-up focus group was held at one urban WIC location and two follow-up focus groups were held at the other urban location. Mothers were given \$10 grocery cards for their participation in the first focus group and \$20 for participation in the second focus group.

The first focus group utilized the nominal group technique (see Appendix E for protocols). Participants discussed their birth experiences and what birth support looked like for each of them, or if they were pregnant, they explained what plans they had in place for birth support. Participants were then asked if they knew what a doula was, doula care was explained to them, and then they were asked to collaboratively create a list of barriers and facilitators ("what works or doesn't work to get doulas to those who want them or need them"). Focus groups were informed that their information would be used to help create a survey and determine ways to increase access, or make it easier for, mothers who wanted doulas to get them and at the second focus group, the survey results would be discussed, and they would be asked their opinions about the results. Another gift card was also offered. Names and contact information for interested participants were collected by WIC staff.

The barriers and facilitators were combined with Round 1 survey data as presented in Chapter 4. Table 3.8 describes the characteristics of participants and their knowledge or experience of doulas at the first focus group. Of the 17 focus group participants, one had utilized a doula for her birth, one had expressed that she wanted one but could not afford one, one said she knew what doulas were prior to birth but did not want one because she had enough social support, seven had "heard of" a doula but expressed that they did not really know much about them, and seven had never heard of a doula before participating in the first set of focus groups.

Table 3.8: Focus Group Experience with Doulas

Focus Group Participant Experience with Doulas:	
Used a doula	1
Knew what a doula was but was unable to obtain doula services	1
Knew what a doula was but chose not to utilize doula services	1
Had 'heard of' a doula but had incomplete information	7
Had never heard of a doula before the focus group	7

Post-Survey Focus Group

After the three rounds of the Delphi survey were completed, focus group participants who expressed interest in the second focus group were contacted and invited to participate in the second set of focus groups. The intention was to host more focus groups, but due to limited interest these follow-ups occurred as interviews (n=3). One participant from the first focus group showed up for the second round of focus groups,

none of the participants from the urban location were interested in participating in a second round, and in the third focus group, two of the participants were interested in attending but only one could attend the first meeting due to illness. The researcher then reached out to the absent focus group participant and arranged another meeting as a selective sample, because she was the one participant who had used a doula for her birth. One participant had a four-month-old baby, one was pregnant with her first child at the time of data collection, and one participant had one-year-old twins. All three participants were first-time parents. Participant 1 did not know what a doula was before the first focus group, but indicated she would have liked one to support her and her partner during her difficult labor. Participant 2 also did not know what a doula was before the first focus group, said she saw the value in doulas but did not want one for her upcoming birth as she felt she had enough support from her family; her godfather had accompanied her to the focus group and the prenatal education course that had occurred prior to the focus group. Participant 3 utilized a doula for the birth of her twins and found the doula to be valuable to her experience.

Data Analysis

Data analysis occurred after each step in the data collection process. The first round of the Delphi survey and the pre-survey focus groups were qualitative; lists generated through pre-survey focus groups were transcribed and survey answers were exported from Qualtrics to Word. All unique access factors identified were added to the list to create two complete lists of barriers and facilitators. Factors on the final list were organized by system level and dimension of access based on the initial model of access to

doula care; the decision tree for the dimensions of access in Appendix F was created and utilized to help the consistency of sorting each of the factors and the researcher analyzed each factor through the decision tree three times to ensure reliability. The model's system levels were then adjusted based on the thematic findings. The results of Round 1 include the tables of barriers and facilitators presented in Round 1, organized by system level, and the updated model of access to doula care.

In Round 2, data were exported to Excel from Qualtrics and mean scores based upon the respondents' Likert-type ratings were calculated. For both barriers and facilitators, tables containing the 20 factors achieving the highest mean scores were created, then tables organized first by system level then by mean were created for remaining barriers. These tables were shared with participants in Round 3 of data collection. For data analysis purposes, heat maps based on mean scores were created in Excel and are explained in depth in Chapter 4.

In Round 3, survey data were exported from Qualtrics to Excel and frequency tables for factors chosen by respondents as top five barriers and facilitators were created. Open-ended responses to the prompt to provide solutions for the top five barriers were exported to Word and each response was organized into tables and grouped into themes. Separate tables describing the themes to solutions and frequency of suggested solutions were created and included in Chapter 4. Preliminary tables from Round 3 were then shared with post-survey interviews. Similarly, data collection for post-survey interviews included analysis of transcribed interviews using Word. Transcripts were analyzed three

times each, thematic findings were organized by tables for further analysis and then translated to narrative in Chapter 4.

Conclusion

The intention of this dissertation was to determine the emerging policy and system factors within Medicaid that will increase access to doula care in Oregon. Doula integration into the American healthcare system is new, and Oregon was the first state to legislate access through Medicaid reimbursement. Also, access, when conceptualized as Levesque et al.'s (2013), is described as occurring between steps of the process of finding, reaching, and utilizing healthcare services and occurs where patient populations and healthcare systems meet. To account for the newness of doula care in the healthcare system, a modified Delphi survey was designed to inform of the barriers and facilitators in Oregon that contribute to doula care access, to create priority solutions to doula care access, and to include the perspectives of both patient populations and of the healthcare system that interface to create health outcomes. Focus groups of mothers and gestational parents who experience gestation and birth were conducted to help generate lists of barriers and facilitators and to offer final thoughts about recommended actions and priority factors, and a three-round Delphi survey of professionals working closely with the policy topic was created to identify barriers and facilitators, determine the priority factors that influence doula care, and to create recommendations to reduce barriers to doula care access. The results from this dissertation are discussed in Chapter 4.

Chapter 4: Results and Discussion

The purpose of this study was to develop a comprehensive understanding of access to doula care within Oregon's healthcare system in order to create policy priorities for increasing access to doulas. This study's research question asked: What are the emerging Medicaid policy and system factors that would increase access to doula care in Oregon? There were three objectives to this study: (1) develop a model for access to doula care; (2) determine the priority barriers to and facilitators of access to doula care in Oregon; and (3) recommend possible actions to increase access to doula care in Oregon. Objective 1 was met through analysis of factors collected through Round 1 of data collection. Objectives 2 and 3 were met through three rounds of data collection that occurred in five phases, and the results are described in this chapter. Objectives 2 and 3 utilized the Adapted Model of Access to Doula Care (Figure 3.5) to further analyze results.

Creating a Model of Access and Identifying Barriers and Facilitators: Round 1

The first phase of data collection (hereafter referred to as "Round 1") consisted of two separate phases of data collection. The first phase of data collection was three focus groups of mothers or gestational parents, and the second phase of data collection was the first round of the Delphi survey to professionals acquainted with this policy topic (details were presented in Chapter Three). In both phases, participants provided a list of barriers and facilitators that they saw as influencing access to doula care for families enrolled in Oregon's Medicaid program. These access factors were collected, organized based on health system level, and later shared with survey panel participants in Round 2 of the

study. Based on the factors identified by both focus groups and survey panels, some modifications to the original model were made, as seen in Figure 4.1 and described in the following sections. In the following text, the system levels are capitalized when being addressed as a concept from the model of access and treated as a proper noun. For example, doulas being described as a profession will not be capitalized but the Doulas system level as a conceptual construct within this text will be capitalized. For ease of reading, factor names will be in italics.

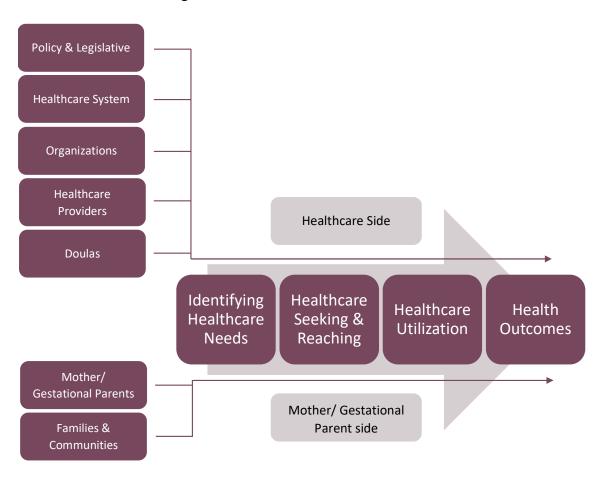


Figure 4.1: Model of Access to Doula Care

Changes to the Supply Side

In the original model, there were four levels of this system: Doulas, OB Providers, Hospitals and Birth Centers, and Institutions. After data collection in Round 1, the system levels changed to better reflect the healthcare system in Oregon. New system levels emerged on both sides, and on the Health System side the new system levels became: Doulas, Healthcare Providers, Organizations, Healthcare System, and Policy & Legislative. These system levels can be seen in Table 4.1. Doulas was the system level that stayed the same, OB Providers was changed to Healthcare Providers because an additional type of healthcare provider, labor and delivery nurses, was also identified as influential to doula care access, and some participants identified obstetrical providers specifically while others mentioned healthcare providers more generally. This system level stayed the same but was broadened to include more than just obstetrical providers.

The initial system level Institutions was too large of a category and needed to be refined. Two distinct themes emerged. First, individual organizations such as hospitals and birth centers were identified as important components of this system level; as well, the identification of other organizations such as doula credentialing organizations and community-based organizations was important. For the purposes of access to doulas in Oregon, Organizations became a distinct system level. Organizations as a system level made individual decisions for their own operations and goals. Second, the broader healthcare system including OHA, CCOs, and their interactions with these organizations (or vice versa) became a theme, as well as broader trends in healthcare delivery or maternal and child health such as research on doula outcomes or childbirth curriculum

content. After distinguishing Organizations from the Healthcare System, Healthcare System had two Traditional Health Worker (THW) policy-related themes as well. The first theme related to how the policy was initially set up, brought into existence, and created, and the second theme related to how the system components managed the policy, how the policy was changed, and how system components interacted with it after the initial implementation. The Healthcare System level was divided further into Healthcare System and Policy & Legislative system levels.

The Policy & Legislative level of the health system addresses how the policy was introduced and initially implemented, highlighting the adoption and initial structure of the policy. Healthcare System includes healthcare system level organizations such as CCOs and OHA, and the interaction among these organizations or the interaction of these organizations with other levels of the healthcare system. This level also includes broader system concepts that would not be organization-specific such as childbirth curriculum content, research on doulas, and outcomes related to doula care. Organizations and Institutions reflect organizational policies, practices, or activities that can be attributed to individual organizations. This includes hospitals and birth centers but also community organizations, doula professional organizations, doula training organizations, and community-based organizations.

Tables 4.1 and 4.2 are the version of the Model of Access to Doula Care that includes the operational definitions for each of the system levels underneath each of the dimensions of access. This table is what was used to sort factors in Round 1 into dimensions of access.

Table 4.1: Supply-Side System Levels for the Model of Access to Doula Care

Supply-Side System Level	Approachability	Acceptability, Availability, Affordability	Appropriateness
Policy & Legislative	Factors related to the following that influence the ability of a mother or gestational parent's ability to identify a service exists, can be reached, and impact health: • Initial legislative and administrative rules about doulas and THWs in HB 3311 • Political actors and advocates that worked on the introduction, passing, and initial structure of this policy	Factors related to the following influences there being enough providers, enough of the right providers, and that care has a cost of time, money, or other resources that the patient can afford: • Initial legislative and administrative rules about doulas and THWs in HB 3311 • Political actors and advocates that worked on the introduction, passing, and initial structure of this policy	Factors related to the following that influence timely, quality services that are an appropriate match to patient need, including coordination and continuity of care: • Initial legislative and administrative rules about doulas and THWs in HB 3311 • Political actors and advocates that worked on the introduction, passing, and initial structure of this policy
Healthcare System	Factors related to the following that influence the ability of a mother or gestational parent's ability to identify a service exists, can be reached, and impact health: • Ongoing maintenance and revision of THW policies and procedures set forth in HB 3311 • Factors that directly relate to the Oregon Health Authority or CCOs • Employment • Credentialing standards • Birthing practices • Health insurance • Reimbursement • Patient rights and responsibilities • Peer reviewed research • Publicly available health information • Trainings and classes available to providers and parents	Factors related to the following influences there being enough providers, enough of the right providers, and that care has a cost of time, money, or other resources that the patient can afford: • Ongoing maintenance and revision of THW policies and procedures set forth in HB 3311 • Factors that directly relate to the Oregon Health Authority or CCOs • Employment • Credentialing standards • Birthing practices • Health insurance • Reimbursement	Factors related to the following that influence timely, quality services that are an appropriate match to patient need, including coordination and continuity of care: • Ongoing maintenance and revision of THW policies and procedures set forth in HB 3311 • Factors that directly relate to the Oregon Health Authority or CCOs • Employment • Credentialing standards • Birthing practices • Health insurance • Reimbursement • Patient rights and responsibilities

- Patient rights and responsibilities
- Peer reviewed research
- Publicly available health information
- Trainings and classes available to providers and parents
- Peer reviewed research
- Publicly available health information
- Trainings and classes available to providers and parents

Organizations

Factors related to the following that influence the ability of a mother or gestational parent's ability to identify a service exists, can be reached, and impact health:

- Existing relationships between doulas or doula organizations
- Existing relationships with communities and mother, gestational parents
- Previous experience with doulas
- Policies around birth companions
- Policies around patient education and referrals
- Policies around staffing and education of staff
- Organization policies around credentials and educational standards
- Organizational mission and philosophy

Factors related to the following influences there being enough providers, enough of the right providers, and that care has a cost of time, money, or other resources that the patient can afford:

- Existing relationships between doulas or doula organizations
- Existing relationships with communities and mother, gestational parents
- Previous experience with doulas
- Policies around birth companions
- Policies around patient education and referrals
- Policies around staffing and education of staff
- Organization policies around credentials and educational standards
- Organizational mission and philosophy

Factors related to the following that influence timely, quality services that are an appropriate match to patient need, including coordination and continuity of care:

- Existing relationships between doulas or doula organizations
- Existing relationships with communities and mother, gestational parents
- Previous experience with doulas
- Policies around birth companions
- Policies around patient education and referrals
- Policies around staffing and education of staff
- Organization policies around credentials and educational standards
- Organizational mission and philosophy

Healthcare Providers

- Previous experience with doulas
- Thoughts/attitudes/beliefs/ knowledge about doulas
- Professional culture of provider
- Provider knowledge of community resources to connect mothers, gestational parents to doulas
- Quality of provider/ doula interactions during birth
- Quality of communication between doulas and

		 Provider knowledge of Medicaid coverage of doulas 	providers during birth
Doulas	 Marketing, outreach, networking efforts of doulas. Quality and availability of information about doulas 	 Number of credentialed doulas Cultural background of doula Cost of doulas 	 Quality and timeliness of doula care Specific techniques used Quality of interpersonal doulaclient interaction

Table 4.2: Demand-Side System Levels for the Model of Access to Doula Care

Demand-Side System Level	Ability to Perceive	Ability to Reach	Ability to Engage
Mothers/Gestati onal Parents	 Knowledge, beliefs, attitudes, and expectations of doulas Knowledge, beliefs, attitudes, and expectations about birth Knowledge, beliefs, attitudes, and expectations about healthcare and healthcare and healthcare professionals Health literacy and language A need for doula care, as self-identified or identified by OAR 410-130-0015 	 Patient's personal value of doula care Autonomy Living environment Ability to pay: income, assets, social assets, health insurance Knowledge of resources that influence ability to pay, including Medicaid coverage of doula care 	Patient feels as if they have power with their maternity care services as a result of doula care Patient feels that they have power with relationship with doula Patient was motivated to be successful with care Patient was given support and information that encouraged adherence and success
Families and Communities	 Family or relationship dynamic Peer's previous experience with doulas Community or collective knowledge of doulas 	 Family, community, or co-parent value of doula care Family's ability to pay, including income, assets, social assets, and health insurance Co-parent or family knowledge, beliefs, attitudes, and expectations of doulas Co-parent, community, or family knowledge, beliefs, attitudes, and expectations about birth Co-parent, community, or family knowledge, beliefs, attitudes, and expectations about birth Co-parent, community, or family knowledge, beliefs, attitudes, and expectations about healthcare and healthcare professionals 	 Family and coparent experience power, are empowered to support mother or gestational parent with adherence and success Family member feels supported by doula

- Demographic influences on family and individual factors such as:
 - Age
 - Gender
 - Socioeconomic status
 - Race/Ethnicity
- Cultural factors that may influence family and individual factors
- The presence of social and cultural organizations
- The influence of social and cultural organizations

Changes to Demand Side

The change to the demand side is that Population and Community are no longer a separate category and were combined with Families to create the system level Families & Communities. Overall, the demand side had a lower number of factors than the supply side, and there were only six barriers and five facilitators that fit into either the Families or Communities side. Furthermore, because of the broad nature of the questions it was not clear if some factors were based on family, culture, or community factors. From analyzing the data, however, it became very clear that mothers and gestational parents consider their own knowledge, attitudes, beliefs, desires, and value of doula care primarily and then considered that of their partners, families, and extended social network when considering their potential choices around doula care. The two most significant distinctions were partners or husbands and peers who use and support doula use, and those themes became independent factors within the system level of Families & Communities.

Round 1: Barriers and Facilitators

The purpose of the Round 1 tables and narratives is to provide each of the factors identified in the study, with defining quotes, to provide context for each of the factors when necessary, and to explain why they were assigned to a particular dimension of access. In Tables 4.3-4.9, each factor identified in Round 1 is in the second column to the left and the defining quotes for each factor are in the column further to the right. Two of the quotes were succinct enough that they were also used as the name of the factor. Some factors have multiple quotes because one quote was insufficient to capture a factor or the

quotes added an additional dimension of analysis. Three columns in the middle indicate which Dimension of Access applies to each factor. As a result of data collection in Round 1, 48 barriers and 40 facilitators were identified. Twenty-two of the barriers and 17 of the facilitators identified were contributed by the focus groups. All focus group participants collaborated to create barrier and facilitator lists during each focus group and each unique factor brought up by survey participants was included in the list of barriers and facilitators. Factors identified frequently are discussed in the narrative. All barriers and facilitators identified in the focus groups were also identified by survey participants; direct quotes from focus group participants appear in italics in the right column. Survey panelists did not mention any social or population specific access factors, so this question was added by the researcher to the Round 2 questions as both a barrier and a facilitator. Example quotes that appear in italics came from focus group participants; quotes lacking italics came from survey participants.

Each factor was also assigned a dimension of access as defined in Table 3.3; for demand-side factors, these dimensions are Ability to Approach, Ability to Reach, and Ability to Engage; for supply-side factors these dimensions are Approachability, Availability, Acceptability & Affordability, and Appropriateness. A decision tree was created using Table 4.2 definitions and the definitions in Table 3.3. This decision tree was used to sort each factor into an access dimension, which is represented by the middle three columns. The decision tree is presented in Appendix F. In the first set of tables (Tables 4.3 to 4.9) in this chapter, each factor is explained in relationship to its dimension of access and, where necessary, its system level or other important defining factors. The

purpose of Round 1 in the data collection process was to provide all of the barriers and facilitators that could influence access to doula care in Oregon, and the purpose of Round 1 narrative was to explain and provide context for each of the factors that appear in the following tables and to explain why each of the factors fits within its assigned dimension of access. Unless specifically stated that an analysis or assessment comes from a participant, all discussion of Round 1 factors are from the researcher.

Mother/Gestational Parent-Level Factors

Eleven barriers and three facilitators related to mothers or gestational parents were identified as presented in Table 4.3. All barriers and facilitators that addressed individual thoughts, feelings, ideas, values, and personal resources that influenced decision making or the ability to reach, obtain, or engage in doula care by the mother or gestational parent were categorized as a Mother or Gestational Parent factor. This system level is occasionally referred to as Parent or Patient. The first six barriers affect a mother or gestational parent's decision-making around the value of doula care for their own pregnancy and birth experience, and address knowledge or perceptions of doulas, doula care, or people who use doulas. Five of the barriers related to knowledge or awareness of doulas or engaging in doula services. All factor names, when discussed in the text, are italicized for ease in reading.

Table 4.3: Mother or Gestational Parent-Level Access Factors to Doula Care

Type	Factor	Ability to Approach	Ability to Reach	Ability to Engage	Example Quotes (quotes in italics came from focus group participants; quotes lacking italics came from survey participants)
	Knowledge of Doulas	X			"Knowing what a doula is, what they can do, what they can't do."
•	Inadequate Understanding of the Role of a Doula	X			"Women may have heard what a doula is, but they do not know their scope of practice and how they can help." "Lack of knowledge about what doulas do and how their services decrease interventions and
					complications."
					"Doulas are too crunchy/hippy."
	Negative or Incorrect Perceptions of the Doula Role				"They're not a traditional part of the labor team."
		X			"Dealing with some of the myths and misconceptions about doulas- only for people who want natural birth, only serving people who can afford to pay out of pocket, being alternative in their own lifestyle, and being anti-medical."
Barriers	Perceptions and Expectations of Women Who Use Doulas	X			"Many women think that once you hire a doula, you are frowned upon if you decide to take pain medication: "If you have a doula, you have to go natural," is often heard."
					"Other people will think I am weird."
	Women Already Have Enough Support	X			"I have a big family and all the support I need."
-	Worthiness of Personalized Care During Birth	X			"Some women may feel they don't deserve that kind of personalized care."
	Awareness of Doula Coverage through Medicaid		X		"Pregnant women on Medicaid and their families do not know that doulas are an option for them, and that Medicaid will pay for them."
	Women Do Not Know How to Get a Doula		X		"I don't know how to even find one. You can't just walk into your doctor's office and be like, 'where can I find a doula?'"

Туре	Factor	Ability to Approach	Ability to Reach	Ability to Engage	Example Quotes (quotes in italics came from focus group participants; quotes lacking italics came from survey participants)
	The Process of				" finding a doula, interviewing doulas, seeking a doula too late in the pregnancy"
	Finding and Hiring a Doula is Difficult		X		"Not knowing which doulas are willing to work for a reduced rate. Nobody wants to call around asking for people to give a service for a reduced rate. That's humiliating."
	Doulas Provide an Additional Burden to Women and Families				"That sounds like another thing to manage."
				X	"I am a private person; I don't want another person in the room."
					"There's pressure to entertain someone [when I am not in control of the situation]"
	Conflicting Ideas about Birth between Mother and Doula	X		X	"A doula may have different ideas about birth from what I want."
rs	Mother's Knowledge of Birth and Needs During Birth	X			"Past birth experience lets women better understand the birth process and their needs during birth."
Facilitators	Autonomy and Agency of Birthing Women	X			"Women can make choices about their birth, including the use of a doula, free from external pressure."
	A Need for Doula Support	X			"Some women don't have the kind of social support they need and could really use a doula."

The following narrative further explains the results presented in Table 4.3.

Knowledge of Doulas, the first barrier listed, is described as a barrier because participants in the focus groups thought that most people simply do not know what a doula is nor that doula care is a potential service available to them. For some focus group participants, the focus group was the first place they heard the word doula or where they learned the

details of what a doula does. Other knowledge-related barriers addressed information, or misinformation, about doulas and their scope of practice. Focus group participants identified a distinction between not knowing what a doula is, not knowing enough about a doula to make an informed choice about doula care and having negative or incorrect perceptions of doulas or the doula role.

The first three barriers, Knowledge of Doulas, Inadequate Understanding of the Role of Doula, and Negative or Incorrect Perceptions of the Role of Doula are all factors that affect a mother or gestational parent's Ability to Approach doula care because they influence the mother or gestational parent's ability to perceive their own needs or perceive their ability to seek doula care. Barriers associated with inadequate or incorrect perceptions were addressed with the factors *Inadequate Understanding of the Role of* Doula and Negative or Incorrect Perceptions of the Role of Doula. Inadequate Understanding of the Role of Doula was identified as a barrier because some participants in the focus group had heard of doulas but did not have enough understanding of what a doula does and how doulas can provide support enough to make an informed choice. Negative or Incorrect Perceptions of the Doula Role was distinct from inadequate information, in part because some of these perceptions may be true. For example, one participant was not interested in doula care because doulas were not already part of the hospital-staffed labor and delivery team. However, participants in two of the focus groups and some of the survey panelists said that doulas can have a reputation for having "alternative lifestyles" and being too "crunchy" or "hippy." Both survey panelists and

focus group participants also identified another barrier that addresses how women or gestational parents would feel about how they are perceived by others.

Perceptions and Expectations of Women Who Use Doulas and Worthiness of Personalized Care During Birth were barriers described by both survey panelists and focus group participants and are related to a mother or gestational parent's perceptions of their own value or needs for care; one expresses conflict within oneself, and the other is a conflict between what a mother or gestational parent wants for themself and what they expect their birth experience to be if they use a doula. Perceptions and Expectations of Women Who Use Doulas was a barrier described by both survey panelists and focus group participants. Some focus group participants thought that others would perceive them as "weird" for using a doula, and one survey participant pointed out that some mothers or gestational parents may expect to experience shame if they hire a doula; the shame would come from having the intention of going without pain medication, but then choosing use pain medication during birth. Similarly, Worthiness of Personalized Care During Birth was mentioned as a potential barrier because women or gestational parents may experience guilt in focusing on their birth experience and may be deterred from seeking doula services as a result. Women Already Have Enough Support is an assessment the mother or gestational parent may make about their needs during birth and the resources they already have to meet these needs; if a mother or gestational parent determines their needs are already met, they will not go to the next step of seeking or attempting to reach care; as a result, this is classified as an Ability to Approach barrier.

Two other barriers around knowledge, Awareness of Doula Coverage through Medicaid and Women Do Not Know How to Get a Doula were also described as barriers in both focus groups and the survey panel. These knowledge barriers are not about a mother's or gestational parent's value or desire for doula care for themselves but reflect knowledge related to obtaining care, and therefore are classified as Ability to Reach Dimensions of Access. Both survey panelists and focus group participants said that most people do not know that this is a service covered by Medicaid; focus group panelists were divided on the influence of this barrier. Some thought that if they knew that doula services were covered by Medicaid, they might be motivated by this information to find out more about the scope and benefit of doulas and to explore doula care as an option. Others thought if they did not already know what a doula was before finding out that it was a covered service, knowing that the service was covered would not be helpful or that other barriers become more important than this one.

The two barriers that were said to potentially have more importance in influencing access are *Women Do Not Know How to Get a Doula* and *The Process of Finding and Hiring a Doula is Difficult*. Many of the focus group participants made the distinction between the information that it would take to decide on the value of a doula and the process of obtaining a doula. Not knowing how to find one and where to ask questions about doulas was an important barrier, represented with *Women Do Not Know How to Get a Doula*. Other participants thought that the additional effort and actions necessary to find adequate doula care, such as finding and calling a doula and interviewing them was a

barrier to doula care. One of the survey panelists pointed out that some mothers or gestational parents may feel shame asking for reduced rate services.

Two of the barriers, Conflicting Ideas About Birth between Mother and Doula and Doulas Provide an Additional Burden on Women and Families, reflect the mother's or gestational parent's assessment of their ability to participate in doula care and are classified as Ability to Engage; they may see value in the kind of care doulas provide but have considerations about a doula's presence or participation in their care. Conflicting Ideas About Birth between Mother and Doula represents some concerns that focus group participants expressed about their birth choices being shared and respected by the doula. Doulas Provide an Additional Burden on Women and Families represents a concern that some focus group participants had about the presence of another person in the room during their birth. Some said that they were private people and simply did not want another person in the room, and some said they felt they would experience pressure to engage with the doula or manage the presence of the doula while giving birth. Doula presence or doula influence during birth would be a burden and therefore are barriers to care.

Participants and survey panelists identified three facilitators to doula care at the level of Mother or Gestational Parent. Two factors addressed needs during birth: *A Mother's Knowledge of Birth and Needs During Birth* and *A Need for Doula Support*.

Both indicate that the mother or gestational parent has assessed their needs and identified that their needs match with the kinds of services doulas provide. One mother who participated in the study used a doula during her birth; she described her experience as a

child in middle school and remembering her mother giving birth to her brother as why she chose to use a doula. She said she was old enough to understand what had happened to her mother to contextualize the risks associated with birth, which illustrates her knowledge of birth and needs during birth, as well as her own increased risk due to having twins, which illustrates a need for doula support. Her understanding of birth, and her own needs in relationship to her birth, facilitated her decision to seek doula support.

A Need for Doula Support can include a mother's self-assessment; however, it is also defined by OAR 410-130-0015 (Doula Services, 2017) as outlined in Figure 2.2 and 2.3 (Chapter 2). Some of the criteria listed are racial or ethnic background, homelessness, age, and language proficiency; access to family or partner support is also listed as a criterion and this can be determined by the mother or gestational parent, or with support from other family, community, or professional sources. Survey panelists and focus group participants also said that most mothers and gestational parents who experience autonomy and agency with decisions around their birth have increased access to doula care, so Autonomy and Agency of Birthing Women is considered a facilitator. All three facilitators address the mother or gestational parent's ability to perceive that doula care would meet their needs for their pregnancy and birth and so are classified as Ability to Approach.

Families & Communities-Level Access Factors

There were six barriers and five facilitators related to the system level Families & Communities (see Table 4.4). The system levels of Family and Community were identified as separate at the onset of data collection but for data analysis have been

grouped together for two reasons. First, the main distinguishing factor between a mother or gestational parent and family or community is that the mother or gestational parent is the pregnant individual utilizing maternity care services financed within Medicaid (Table 3.5); this definition makes very clear the distinction between factors that fall into the mother or gestational parent category or into another category. However, other factors, such as Peers' Support and Use of Doula or Bad Doula Experiences could fall into either Family or Community categories depending on individual context. Secondly, all family and community level factors at the level of analysis presented in this dissertation would likely influence decision-making, resource availability, and engagement in similar ways such that keeping them separate does not aid in further understanding the relationship these factors play in influencing access to doula care. If this study were a case study of access through looking at utilization of doula services, the distinction and how it may influence access might become clearer. The most important distinction that arose from data analysis was that of mother or gestational parent and their support network. Father, spouse, or nongestational parent was also an important distinction that has separate considerations and will be discussed further.

Table 4.4: Family- and Community-Level Access Factors to Doula Care

Type	Name	Ability to Approach	Ability to Reach	Ability to Engage	Example Quotes (quotes in italics came from focus group participants; quotes lacking italics came from survey participants)
	Bad Doula Experiences	X			"Some women have a bad doula experience, and may tell their friends"
					"He wants to be the one providing support."
	Lack of Understanding of		37		"He would say, 'what am I doing here?'"
	Doulas or Support for Doula Use from Partner		X		"He would feel left out."
iers					"Partner does not want a doula (usually they are worried a doula will take their place)"
Barriers	Lack of Support in Choosing to Use a Doula		X		"Lack of medical provider, community partner, family, and/or friend support"
	Lack of Community Awareness of Doulas		X		"Lack of information and education among communities about programs that offer free and low-cost doula services."
	Societal Value of Doulas		X		"A universal value needs to be placed on the doula role."
	Cultural Discrepancy with Doula Role		X		"I'm Latina, if I wanted a doula my husband would say, "What for?" We have a big family, lots of support."
	Oregon's Collective Knowledge of Doulas	X			"Oregon being a state where patients and care providers are generally more familiar with doulas."
					"Knowing other women who have used a doula"
-	Peer Support and Use of Doulas		X		"Communication between parents and parents to be about doula services" "Hearing other women's experiences using
ators					doulas"
Facilitato	Families and Communities Supportive of Doula Care		X		"Friends and families who encourage seeking out doula support." "Knowledge from friends or family about doulas (and what they do)."
	Diverse Communities Embracing the Role of Doulas for their Populations		X		"Outreach to communities to recruit persons interested in serving their own."
	Doulas Support Husbands/Partners			X	"And it was nice for my husband because he wants to help, to know how to help, and so she was able to be like, 'here is what you can do to help her.'"

Six barriers and five facilitators were identified at the level of family and community. One of the barriers was classified as Ability to Approach and the remaining five were classified as Ability to Reach. The barrier that impacted Ability to Approach was Bad Doula Experiences. Survey panelists said that they thought that peers who may have had a bad care experience with a doula would inform their peers and that this would act as information that a mother or gestational parent may use to assess the utility of doula care for their own needs. There are a few factors listed in this data collection that include the outcomes or experiences of other mothers and gestating parents. Quality of care falls into the categories of Ability to Engage (for mother/gestational parent factors that influence participation) or Appropriateness (for doula and care quality factors that influence care quality). However, in this case Ability to Engage or Appropriateness would fall under the peer's access pathway and not the mother or gestational parent's decision-making, healthcare reaching, or healthcare engaging process; this is an example where an entire access pathway concludes and then acts as a factor that influences another person's pathway.

All other barriers were categorized as Ability to Reach because they influenced a mother's or gestational parent's decision or ability to find and engage with doula care, which is outside of their perceived value or need for doula care for themselves and their experience. Partners or husbands were identified by all three focus groups as well as survey panelists as a very specific influence on access to care; *Lack of Understanding of Doulas or Support for Doula Use from Partner* is a barrier that addresses the unique considerations mothers and gestational parents have for their partners when considering

doula use. Participants indicated that while they may have found value in doula care for their birth, their partner's lack of understanding how doulas work or their lack of support for choosing to use a doula would result in not taking actions to seek doula support. *Lack of Support in Choosing to Use a Doula* is a barrier that addresses a general lack of support for the decision to find and use a doula that can come from the mother's or gestational parent's extended social network.

All three focus groups and many survey panelists indicated that social support for the decision to use a doula for their birth is an important factor in a woman or gestational parent's ability to reach doula care and make decisions around the use of doulas. Focus group panelists said that the people they expected to demonstrate lack of support were their partners or spouses and their extended family. The reason that they would expect to experience a lack of support is that partners and extended family would expect to step in and provide the emotional and social support; doulas would be taking over this critical role or would somehow diminish the role of the nongestating parent or the family member. Focus group participants at each focus group as well as some survey panelists said that nongestating partners would feel "left out" or replaced by a doula's presence.

Two of the barriers identified by survey panelists and focus group participants, Societal Value of Doulas and Cultural Discrepancy with Doula Role, potentially influence the experience of support for doula use that women or gestational parents would receive from their partners and extended social network. Some survey panelists and two of the focus group participants indicated that social support during birth is not valued enough in society as a whole and this can act as a barrier for women and gestating

parents to choose and reach doula care. Very specifically, two of the focus groups had participants who mentioned that their own cultural background or their spouses were barriers to the idea of hired social or emotional labor support, so *Cultural Discrepancy* with Doula Role was a more specific barrier for these mothers or gestational parents. Finally, Lack of Community Awareness of Doulas was listed as a barrier as well. Knowledge, awareness, and attitudes are often Ability to Approach; however, this barrier was described as an Ability to Reach barrier because the lack of community awareness was seen as independent from the individual decision and value of doula use to the mother or gestating parent and preventing the mother or gestational parents from knowing of doula programs or how to connect with doulas.

Five facilitators from the community and family level emerged from participant responses. Oregon's Collective Knowledge of Doulas addresses the belief of some survey panelists that, due to medical and social culture in Oregon, Oregon families, especially those who live close to Portland where there are a large number of schools and doula training organizations, are more likely to know what a doula is or have heard the term doula compared to the general US population. There are other facilitators identified in this study on the health system side that allude to Oregon patients being more familiar with doulas. There is a separate facilitator in Table 4.7, Medical Culture: Oregon is a Birth Friendly State, as well as other related facilitators like The Presence of Doula Organizations and Their Efforts to Increase Access to Care (Table 4.6), Available Research on Doula Outcomes, and Childbirth Courses that Incorporate Doulas as Part of the Curriculum (Table 4.7), that indicate a level of familiarity with the midwifery

model of care and doulas within the state. This familiarity would be considered a population characteristic in Oregon, so this would affect both the gestational parent directly as well as their support network. Awareness and knowledge of doulas in this way would influence a mother or gestational parent's assessment of their needs and the ability for doulas to meet their needs as well as their social support network and healthcare providers. Because it does influence the mother or gestational parent directly, it is categorized as Ability to Approach. This knowledge facilitator is in opposition to the individual-level barriers *Knowledge of Doulas*, *Inadequate Understanding of the Role of Doula*, and *Negative or Incorrect Perceptions of the Doula Role*, where many focus group participants said they did not know what a doula was or had incomplete information about how doula care supports prenatal and laboring mothers and gestational parents.

Peer Support and Use of Doulas and Families and Communities Supportive of Doula Care are facilitators that address communities and social networks who encourage doula use or who use doulas and can offer first-hand experience or knowledge of doula care and local doula resources to help connect mothers and gestational parents to doula services. As previously mentioned with Bad Doula Experiences, the peer has their own path to access and utilization, and their previous utilization now influences the access pathway for another mother or gestational parent. Similarly, Families and Communities Who are Supportive of Doula Care are also facilitators to doula access. Families and communities may offer knowledge of doula scope of practice and help assist mothers and gestational parents in deciding on the value of doula care, but they also provide assistance

to connecting with local doulas and other community resources, which is why they are facilitators in Ability to Reach. These facilitators are the opposite of the barriers Lack of Understanding of Doulas, Lack of Understanding of Doulas or Support for Doula Use from Partner, Lack of Support in Choosing to Use a Doula, and Lack of Community Awareness of Doulas, which are also Ability to Reach factors. The Final Ability to Reach facilitator for Families & Communities is Diverse Communities Embracing the Role of Doulas for their Populations. The goal of THWs is to have people from diverse communities supporting people in their communities in a variety of healthcare settings and for a variety of healthcare needs.

Community-level incorporation of doulas is a facilitator. For example, in Portland, Sacred Roots Doula is part of the Black Parent Initiative and part of a community organization serving Black families (The Black Parent Initiative, 2022). The facilitator *Diverse Communities Embracing the Role of Doulas for their Populations* connects mothers and gestational parents with resources and doulas and therefore is an Ability to Reach facilitator. It is a facilitator that is opposite of *Lack of Community Awareness of Doulas* and *Cultural Discrepancy with Doula Role*.

There are other related barriers and facilitators that were identified in other system levels. Lack of a Diverse Doula Workforce and Difficulty in Training Diverse Doulas are identified in Table 4.4. Focus group participants mentioned how important their familial and community support was to their experience of pregnancy and birth, and how important social support was in reaching and obtaining doula support. Finally, the nature of doula care is to support both the parent giving birth as well as their partner, and this

component of doula care, *Doulas Support Husbands/Partners*, was an important facilitator to doula care access for participants. The emphasis in focus groups was on how this support influenced partners and the partner's desire or willingness to obtain and use a doula; this facilitator opposes the barrier *Lack of Understanding of Doulas or Support for Doula Use from Partner*.

Doula-Level Access Factors

The first two system levels focused on the demand side, the mother or gestational parent and their social network, and the dimensions of access focused on their ability to act or engage with the healthcare system. The remaining system levels focus on the supply side of the model, starting with Doulas-Level access factors. Twelve factors were identified for doulas as a health system level, including seven barriers and five facilitators. One barrier related to doulas influences Approachability, four of the barriers affect Availability, Acceptability & Affordability and two barriers affect Appropriateness. All factors are listed in Table 4.5.

Table 4.5: Doula-Level Access Factors to Doula Care

Type	Name	Approachability	Availability, Acceptability & Affordability	Appropriateness	Example Quotes
	Lack of Direct Outreach from Doulas	X			"Lack of direct outreach from doulas to birthing moms receiving Medicaid."
	Out-Of-Pocket Cost of Doulas		X		"Doulas are generally expensive, not affordable for people who are living paycheck to paycheck."
	Difficulty in Training Diverse Doulas		X		"Difficulty in training diverse doulas- especially English as second language."
	Lack of a Diverse Doula Workforce		X		"The doula workforce is not culturally and linguistically diverse."
Barriers	Insufficient Workforce of Qualified Doulas		X		"Myself and the nurses on my team encourage our clients to seek out doulas to be a part of their labor team as desired, it is just hard to find any in our area." "Inadequate doula population that is certified
					by OHA"
	Overcoming Negative Repercussions from Unprofessional Doulas			X	"Overcoming negative repercussions from doulas who have acted non-professionally in client and provider relationships."
	Doula Services May be Taken for Granted			X	" No doula wants to be taken for granted."
	Doula Self- Promotion and Marketing	X			"Doulas who are visible in the community, either on social media or at events, and marketing to the public."
Facilitators	Established Doula Groups in the Community		X		"The presence of established doula groups in the community."
	Flexibility of Doulas for Reimbursement for Private Pay Women on Medicaid		X		"Newer doulas may charge less and be more affordable for women on Medicaid." "Doula[s]willing to bill Medicaid or work on a sliding scale rate."
	Active Leadership in the Doula Community			X	"Individuals within the doula community who act as liaisons to other doulas and professionals in communicating the complex aspects of the getting clients served and doulas reimbursed."

Туре	Name	Approachability	vailability, Acceptability & Affordability	Appropriateness	Example Quotes
	The Quality of Doula Professionalism		Av	X	"Doulas who practice in a professional manner in their relationships with clients and other professionals."

The first barrier, Lack of Direct Outreach from Doulas, is an Ability to Approach barrier because direct outreach reduces the burden of knowledge or awareness related to what services are available in the community and how they meet mother or gestational parent needs. Direct outreach from doulas to mothers and gestational parents would require additional system-level structures such as relationships with obstetrical providers or community organizations, or social media presence on certain platforms to directly connect to families. The next barrier, related to Availability, Acceptability & Affordability, is *Out-of-Pocket Cost of Doulas*. While this dissertation focuses specifically on access to doula services covered primarily by Medicaid, and Medicaid families do not pay for Medicaid services out of pocket, the general cost of doula care is still considered a demand-side barrier for two reasons. First, in both the focus groups and the survey panel there were a few mentions of women and gestational parents who are enrolled in Medicaid but wanting or willing to engage in doula services outside of the Medicaid payment system. It should be noted that 13.1% of Oregon doulas volunteer their doula services, 5.4% of doulas are paid by grant funded programming, and 60.8% of doulas engaged in a sliding scale fee structure for families who cannot afford a doula's

standard fee (Everson et al., 2018), so out-of-pocket cost of doula care is still an access factor. Second, the out-of-pocket cost of doulas is generally set by doulas. In Oregon, 67.7% of doulas consider themselves self-employed, 7% work with a doula agency, 5.4% work through a community-based organization, and 4.6% work as an employee of a hospital (Everson et al., 2018). Doula service fees reflect the cost of living, and most doulas struggle with charging a rate that families can pay; however, most doulas work independently so the cost of doula care has largely been set by doulas individually practicing (Everson et al., 2018). Therefore, the cost of doula care as a barrier is placed at the doula level and influences Availability, Acceptability & Affordability.

The other two barriers for doulas related to Availability, Acceptability & Affordability are *Difficulty in Training Diverse Doulas* and *Lack of a Diverse Doula* workforce. Doulas are considered THWs through Medicaid, and this designation means that representatives from specific communities are intended to serve people from their communities. There are linguistic and other resource barriers such as time, lost wages, and cost of certifications that can act as barriers for community members to enter the doula workforce. Once they are established professionals, doulas of color experience barriers that are compounded by system barriers as illustrated in Table 4.6, such as *Low Reimbursement Rate for Doulas*, *Billing for Doula Services is Complex and Incomplete*, and *Doula Registration Process is Cumbersome*. All of these can further impact the desire or ability for community members to become certified doulas, enroll in the registry and serve their communities in this way, or make a career as a doula sustainable.

First, the lack of doulas generally in some areas of the state, such as rural areas, influences access very broadly. Second, the lack of doulas enrolled in the THW Registry who can serve Medicaid families and bill Medicaid for their services is another barrier related to a qualified doula workforce. A workforce survey conducted by the Oregon Doula Association in partnership with the Office of Equity and Inclusion found that while there are doulas in every county of the state, the largest concentration of doulas is in Multnomah, Clackamas, and Washington Counties, making general doula access more difficult in rural areas of the state (Everson et al., 2018). Since all these factors relate to the number of doulas available to serve families enrolled in Medicaid, they are classified under Availability, Acceptability & Affordability.

The final two barriers that fall under the Doulas system level are Overcoming

Negative Repercussions from Unprofessional Doulas and Doula Services May be Taken
for Granted, both of which address barriers around care quality. Overcoming Negative

Repercussions from Unprofessional Doulas addresses inadequate care quality by doulas
and affects healthcare provider perceptions of doulas and the doula role, as well as the
patient and family perceptions of doulas (Chakladar, 2016). One result of Negative

Repercussions from Unprofessional Doulas is the individual level barrier Bad Doula

Experiences, where these experiences then get shared as information among peers. Doula

Services May be Taken for Granted is considered a doula-level barrier because it
addresses a doula's perception of client engagement and client value. One of the doulas
on the survey panel suggested that client value and commitment to care either arises
from, or is demonstrated by, paying at least some amount of money. If there is agreement

among the doula community that payment is an indication of patient commitment and engagement, then this may be a barrier to doulas enrolling in the THW registry and serving Medicaid enrolled families or, when enrolled, these negative perceptions may influence care quality.

There are five facilitators at the doula level of the system. Just as *Lack of Direct* Outreach from Doulas is a barrier, Doula Self-Promotion and Marketing is a facilitator to doula care access through Approachability. Currently no research on doula marketing exists, other than that doulas who are part of larger organizations such as hospital-based programs have more capacity to market and make direct outreach efforts (Beets, 2014). Still, marketing enhances Approachability by making doula services visible in their communities. Two of the Doulas-Level facilitators address Availability, Acceptability & Affordability: Established Doula Groups in the Community and Flexibility of Doulas for Reimbursement for Private Pay Women on Medicaid. Doula groups are a type of doula practice where individual doulas share their practice with one or more other doulas in order to create more sustainable business practices and work-life balance. The nature of doula work can be unpredictable as a profession and income stream, and the presence of doula groups means that doulas can share their professional responsibilities with another person, reducing the likelihood of burnout and sustaining the presence of that doula group in the community (Everson et al., 2018). Shared business responsibilities also may make it more likely that doulas become enrolled and bill services through Medicaid because the labor involved for applications and billing is shared.

Practice structures that can share the risk of delayed payment and lower fees mean increased availability of doulas by increasing their likelihood to enroll and participate in the THW Registry. Flexibility of Doulas for Reimbursement for Private Pay Women on Medicaid makes doula care more available to families in two ways. First, doulas who are more willing to work on a sliding scale are also potentially more likely to enroll in the THW Registry as well as work outside of Medicaid reimbursement to serve Medicaid-enrolled families. Second, DONA certification requires a recommendation letter from a doula client to complete their certification (DONA, 2016); 54% of doulas in Oregon cite that it is challenging to find families to work with pro bono to complete their certification or recertify (Everson et al., 2018). Doulas completing or renewing their certification increase access through the availability of doulas who are willing to work for a family without payment; this increases access through eliminating the need for payment from both families and Medicaid, increasing Availability, Acceptability & Affordability.

Active Leadership in the Doula Community describes an aspect of care coordination that occurs between organizations and key actors; specifically, this has been a facilitator for efforts related to the policy implementation of Medicaid reimbursement for doula services. This factor primarily influences the coordination of organizations and system level actors, so it is influencing Appropriateness.

Finally, *The Quality of Doula Professionalism* addresses doulas who provide quality care that leads to desired outcomes, influencing Acceptability. Doula quality of care was both listed as a barrier and facilitator in this study, at different levels. *Bad Doula*

Experiences was listed as a parent-level barrier and Overcoming Negative Repercussions of Unprofessional Doulas is this barrier at the doula level.

Healthcare Provider-Level Access Factors

Five barriers and two facilitators were related to healthcare providers (see Table 4.6). Three of the barriers influenced Approachability. The first Approachability barrier, *Acceptance of Doula by Care Providers*, relates to a provider's values and beliefs about doulas. In a study of Canadian obstetrical physicians, family physicians, midwives and doulas in Canada, attitudes toward doulas emerged as an important theme; midwives and family physicians had a supportive attitude toward doulas whereas half of obstetrical physicians had unfavorable attitudes toward doulas (Klein, et al. 2009). Unfavorable attitudes towards doulas may act as a barrier because it possibly makes them less likely to recommend or discuss the benefits of doulas with their patients or providers may dissuade mothers and gestational parents from reaching and using doula services.

Table 4.6: Healthcare Provider-Level Access Factors to Doula Care

Type	Name	Approachability	Availability, Acceptability & Affordability	Appropriateness	Example Quotes
					"Care providers who resent doulas"
	Acceptance of Doulas by Care Providers	X			"Lack of provider confidence in doulas, generally, resulting in lack of patient education and referrals." "Some healthcare providers may discourage
	Lack of Provider Encouragement or Promotion of Doulas	X			"OBs and midwives need to encourage doula care to their clients. Many never mention it."
Barriers	Obstetrical Providers' Lack of Knowledge About How to Refer to a Doula	X			"Lack of education among providers to recommend patients pursue seeking Medicaid- affiliated doulas, or the process to successfully do so."
	Obstetrical Provider's Lack of Knowledge about		X		"Providers and partners don't know that doulas can be reimbursed through Medicaid or how to get one."
	Doula Coverage through Medicaid				"Resource awareness is key [for OB Providers] - we don't currently have much of that."
	L & D Nurses' Understanding and Acceptance of Doula Role.			X	"Nurses need to be ensured that the doula's role in the labor rooms is not taking away (part of) their job."
Facilitators	Healthcare				"Providers and partners aware of the services to begin with."
	Providers Who Are Aware of and Promote Doulas	X			"Medical providers and community partners who encourage their patients to seek out Doula support and have information and literature on hand."
	Healthcare Providers Who Refer Patients to Doulas	X			"Health care providers who refer patients to doulas."

The second approachability barrier, Lack of Provider Encouragement or Promotion of Doulas was mentioned by both focus group participants and survey panelists and may be the result of other barriers such as Acceptance of Doulas by Care Providers or Lack of Knowledge about How to Refer to a Doula. This is a barrier that would be best analyzed in the context of other barriers in Rounds 2 and 3, but in Round 1, conversations about doulas with Obstetrical Providers initiating the conversation was identified as a barrier to Approachability of doula care. Obstetrical Providers' Lack of Knowledge About How to Refer to a Doula is the third Approachability barrier to doula care access at the Healthcare Provider level. Obstetrical Providers' Lack of Knowledge About How to Refer to a Doula and Providers' Lack of Knowledge about Doula Coverage through Medicaid are specific barriers that could explain how a provider would have a positive or accepting attitude about doula care but would either not engage in a conversation about doulas or would engage in a conversation about doula care that would not provide enough information or support to result in increased access to doulas. Referrals in this sense are written orders from care providers to see specialists or obtain certain medical services (CMMS, n.d.c). Referrals are often accompanied by a list of healthcare providers who can fulfill the medical need. If a provider knows doula services are covered through Medicaid, they may be more likely to make a referral. Both barriers address a lack of knowledge about how to connect their patients to doulas and which ones are willing to work with families who are enrolled in Medicaid or cannot afford a typical doula fee. All three of these barriers impact Approachability because it influences a person's ability to perceive services.

There was one barrier related to Availability, Acceptability & Affordability at the Healthcare Provider level. *Providers' Lack of Knowledge about Doula Coverage through Medicaid* is also a knowledge barrier, but it is specific to Medicaid and influences Availability, Acceptability & Affordability because Medicaid coverage is specific to payment and the pool of doulas who accept Medicaid financing. The last Healthcare Provider level barrier, *Labor and Delivery Nurses' Understanding and Acceptance of Doulas* is an access factor that affects Appropriateness because the only point in time that patients and doulas encounter these healthcare providers is during the labor and delivery process, which occurs after the Ability to Reach or Availability, Acceptability & Affordability access dimensions; at this point doula care has been secured and is being administered, and any influence nurses may have on care will be on care quality.

The two facilitators of doula care access that fall under the category Healthcare Providers are Healthcare Providers Who Are Aware of and Promote Doulas and Healthcare Providers Who Refer Patients to Doulas. Healthcare Providers Who Refer Patients to Doulas is the facilitator opposite the barrier Lack of Provider Encouragement or Promotion of Doulas and Healthcare Providers Who Refer Patients to Doulas is the facilitator opposite the barrier Obstetrical Provider's Lack of Knowledge About How to Refer to a Doula. Both facilitators impact access through making doula services more visible as opportunities to influence healthcare needs, therefore influencing access through Approachability. Referrals are orders for care from healthcare providers (CMMS, n.d.c), and may communicate the need for doula care and that doula care is likely a good fit for the mother or gestational parent's specific health needs.

Organization- and Institution-Level Factors

One barrier and ten facilitators were identified for Institutions and Organizations (see Table 4.7). The barrier, Low-Quality Doula Training Organizations, which influences Availability, Acceptability & Affordability, likely refers to the doula organization ProDoula. ProDoula, at the time of the survey, was being publicly discussed for its differing and conflicting ideas about the way doulas provide care and practice their businesses. Doula care is generally conceptualized as meeting basic emotional, social, and physical support needs, but ProDoula contextualizes it as a luxury that should come with a "premium price tag" (Baker, 2017). The differing philosophies have caused conflict among doulas; those that take issue with ProDoula's philosophy say it commodifies doula work (Strauss, 2017). While ProDoula is just one organization that has received media attention due to how they frame doula care as a luxury service, there are a variety of doula credentialing organizations. Some organizations may be judged as not focusing on doula care competencies adequately, so doula training organization has the potential to act as a barrier to doula care. All doulas who want to be a certified THW must meet the criteria outlined in OAR 410-180-0375 (Birth Doula Curriculum Standards, 2022); in 2022, this criterion was expanded and now a doula training organization that provides birth doula trainings in Oregon must submit a birth training curriculum, making the issue of doula care acceptability easier to identify and navigate. Generally, care competency influences Appropriateness because it influences quality of care. However, in this specific situation where the philosophies about the intention of doula care may conflict with culturally and linguistically competent care, this factor is

designated as a barrier to Availability, Acceptability & Affordability because it influences the number of doulas willing or able to be credentialed to serve Medicaid-enrolled families and doulas properly credentialed to meet OHA criteria as THWs.

Table 4.7: Organization and Institution-Level Access Factors to Doula Care

Type	Name	Approachability	Availability, Acceptability & Affordability	Appropriateness	Example Quotes
Barriers	Low-Quality Doula Training Organizations		X		"The proliferation of doula training organizations whose curriculum and philosophy do not foster competency in doula care and may provoke conflict amongst doulas, the health care system, and clients themselves."
Facilitators	Supportive Social and Community- Based Organizations	X			"The Presence of social or community-based organizations who recognize the value of doula care" "Support such as referrals from other community health organizations such as WIC."
	Advertisements for Doulas	X			"Local advertisement that this is a service covered by health insurance." "Flyers/business cards of doulas in the area located at the various OB provider clinics offering services"
	Hospital and Birth Center Promotion of Doula Care	X			"Provider referral to doula services. As a maternity clinic and birth center, we carry business cards from several doulas and regularly refer our mamas to these doulas." "Doula handout. We have recently included a page about doulas in our maternity booklet we give each client as a way to normalize the use of doulas and encourage clients to hire doulas." "Meet the Doula events at health care provider offices, or other known locations where these moms can meet and get to know Doula's who are willing to work with them."
	The Presence of Doula Organizations and Their Efforts to		X		"Doula managed organizations around the state whose mission is to increase access to doula care, serve diverse populations, and promote professional development."

Туре	Name	Approachability	Availability, Acceptability & Affordability	Appropriateness	Example Quotes
	Increase Access to Care				"Efforts of Shafia Monroe and the International Center for Traditional Childbearing to: Train doulas, help doulas become Medicaid providers, advocate for fair reimbursement for doulas" "Doula organizations with student doulas (Birthingway College of Midwifery, Mother Tree Doula Services)"
	Doula Training Organization Diversity		X		"The diversity of training organizations for doulas"
	Presence of Hospital-Based Doula Programs		X		"Hospital based doula programs (PDX Doulas, Gateway Doula Project, Providence staff doulas)." "Clinic based staff doulas." "I would want a doula only when labor sets in."
	Organizations or Practices or Policies that Incorporate Doulas		Х		"Medical providers and community partners who are willing to bring doulas onto their staff." "Requirement to have a doula at the birth. As a maternity clinic and birth center, we require first time parents to hire a doula for additional support at the birth." "We carry business cards from several doulas
	Quality Doula Training and Credentialing Organizations			X	and regularly refer our mamas to these doulas" " "Doula training organizations who [establish] clear standards of practice and codes of ethics and accountability procedures that protect clients, caregivers, and the doula profession from harm by doulas who act unprofessionally, especially outside the scope of practice."
	Persistent Advocacy Efforts to Increase Access to Doulas			X	"The incredible patience displayed on behalf of some doulas, providers, CCO personnel, and organizations who are striving to make it a reality."
	Hospital and Birth Center Support for Doula Care			X	"Hospital/birth center participation in the form of understanding the role, scope, and importance of doula care."

The lack of barriers for organizational-level factors is notable. Hospital or Birth-Center policies specific to doulas are not common in the United States. One study found that about 10% of hospitals have policies and, when a policy is in place, it acts as a barrier, including removal clauses or limiting a doula's scope of practice (Baracker, et al, 2018). The system level facilitator, *Medical Culture: Oregon is a Birth-Friendly State*, describes a culture that is more supportive of doula care so organizational level policies are potentially less likely to be seen in Oregon.

Three of the 10 Organization and Institution-Level access factors influenced Approachability of doula services: Supportive Social and Community-Based Organizations, Advertisements for Doulas, and Hospital and Birth Center Promotion of Doula Care. Supportive Social and Community-Based Organizations refers to local organizations that inform parents of local doulas and the benefits of doula services. For example, during data collection, a focus group occurred at a WIC location that had plans to hire a staff doula and the focus groups occurred after a childbirth education course that included doulas in the curriculum. Advertisements for Doulas refers to the ways in which doulas market their services in the community, influencing Approachability because it influences the ability for doula services to be perceived by families. Doula Self Promotion and Marketing is the doula-level facilitator related to advertisements. Data collected in Round 1 suggested that not only is the doula's active marketing a factor, but also the places in which doula services are advertised, such as local organizations or clinics, were also facilitators to access. Similarly, Hospital and Birth Center Promotion of Doula Care addresses the efforts by these organizations to actively influence a mother or gestational parent's ability to perceive doula services, also influencing Approachability. Promotional efforts can include advertisements and can also include other structural and

organizational practices such as handing out pamphlets at visits or discussing doula care at hospital tours.

Four Organization and Institution-Level access factors were related to Availability, Acceptability, and Affordability. The first two relate to doula-specific organizations. The Presence of Doula Organizations and Their Efforts to Increase Access to Care refers to existing organizations and their work to influence legislation as well as the implementation of the policy. Professional organizations such as the Oregon Doula Association, as well as doula training organizations such as Mother Tree Doula Services, Birthingway College of Midwifery, and The International Center for Traditional Childbearing, were instrumental to the adoption of the policy that enables doulas to be paid through Medicaid. Doula organizations influence Availability, Acceptability & Affordability two ways First, they influenced this dimension through their continual efforts to implement the policy successfully and have qualified doulas enrolled and paid through Medicaid. Second, for doula training organizations, their presence in the community and ability to connect student doulas, who must obtain a recommendation letter from a pro bono doula client, with mothers and gestational parents in the community is a facilitator to doula access. Doula Training Organization Diversity describes the number of organizations that can credential doulas with a variety of platforms or culturally- and linguistically-specific emphasis for care. Diversity can refer to the platforms, such as virtual training, or culturally- and linguistically-specific programs that cater to communities of color, Native American birthing practices, or religious practices. Doula Training Organization Diversity increases access through

increasing the numbers of doulas available to serve Oregon families as well as the acceptability of doulas to meet the diverse cultural and social needs of families. *The Presence of Doula Organizations and Their Efforts to Increase Access to Care* and *Doula Training Organization Diversity* are facilitators that indirectly oppose the one Organizations level barrier, *Low-Quality Doula Training Organizations*. All three factors also address care quality generally but influence this topic area by influencing the number of qualified doulas in the area that could register for the THW Registry.

The next two Organizations factors related to Availability, Acceptability & Affordability address hospitals or birth centers and their incorporation of doulas. *The* Presence of Hospital-Based Doula Programs is a facilitator because doulas are employed by the hospital and the hospital can connect doulas to families, bypassing some other barriers identified in this study, including barriers related to self-promotion and marketing such as The Process of Finding and Hiring a Doula is Difficult and provider acceptance of doulas or knowledge around how to find and refer to doulas, which increases Availability, Acceptability & Affordability of doulas. Hospital-based programs are not seen as providing access by all doulas; there is some evidence that the relationship between the hospital and the doula may strain the relationship between the doula and their client or restrict the doula's scope of practice (Everson et al., 2018). Organizations or Practices or Policies that Incorporate Doulas is similar to Presence of Hospital Based *Doulas* because doula presence is supported and encouraged but doulas are not directly staffed. Some birth centers contract with independent doulas to fill several support roles, and one obstetrical provider said their birth center has a policy where doulas are required

to attend the birth. These policies and relationships make it more likely that a mother or gestational parent would utilize doula care by increasing the mother or gestational parent's view of doula care as appropriate or required for their needs.

Three Organization level access factors were related to Appropriateness. *Quality* Doula Training and Credentialing Organizations is the first Organization level facilitator under Appropriateness. While Doula Training Organization Diversity addresses the ways in which organizations are numerous and different in their focus on cultural competence training or delivery method, the quality of doula organizations addresses the way in which trainings focus on and foster competencies that influence the quality of doula care, influencing care quality and therefore influencing Appropriateness. Persistent Advocacy Efforts to Increase Access to Doulas addresses the coordination of efforts by many organizational actors to continue to implement the policy as intended once the policy was passed; coordination and advocacy that are moving the policy intentions forward such that families are served and doulas are reimbursed through Medicaid are considered Appropriateness. Hospital and Birth Center Support for Doula Care addresses organizations that may not have policies or processes in place that encourage doula use but there is enough professional or organizational culture present or enough knowledge or experience with doulas established where doula care quality can be optimally fulfilled and intended outcomes can be realized. This facilitator is opposite to barriers such as Acceptance of Doula Care by Providers or L&D Nurses' Understanding and Acceptance of Doula Role.

Healthcare System-Level Factors

The Healthcare System-Level had 13 Barriers and 12 Facilitators (see Table 4.8). This system level has the most barriers as well as facilitators compared to the other levels analyzed in this study. Healthcare System-Level factors are likely more numerous due to purposeful sampling and finding survey panelists who are intimately familiar with the policy topic and working with it at the healthcare system level. Of the 13 barriers identified, two influence Approachability: *Lack of Content about Doulas in Childbirth Education* and *Low Reimbursement Rates for Obstetrical Providers/Demands Placed on Obstetrical Providers*.

Table 4.8: Oregon Healthcare System-Level Access Factors to Doula Care

Туре	Name	Approachability	Availability, Acceptability & Affordability	Appropriateness	Example Quotes
	Lack of Content about Doulas in Childbirth Education	X			"Childbirth educators need to mention the pregnant parents' rights and options to have a doula."
Barriers	Low Reimbursement Rates for Obstetrical Providers/ Demands Placed on Obstetrical Providers	X			"The pressure on care providers to serve more clients in less time to keep health care businesses profitable, and the receipt of such low reimbursement for Medicaid clients that there is poor motivation to provide the same level of care as private insurance clients."
	Current Structure of the Healthcare System		X		"The fragmentation of health care and social services, creating barriers to access, lack of knowledge of helpful services, and lack of continuity in care."
	Criteria to Qualify for OHP are Too Restrictive.		X		"Even if OHP covers doulas, you can be working full time and still not qualify for OHP. So even doulas being covered by OHP wouldn't matter."

Туре	Name	Approachability	Availability, Acceptability & Affordability	Appropriateness	Example Quotes
	Lack of Private Insurance Coverage for Doulas		X		"Lack of private insurance funding which, in a regular provider scenario, offsets the low rate of reimbursement from Medicaid, making service to that population feasible."
	Communication to CCOs About Expectations and Processes around Promoting and Paying Doulas		X		"No or poor communication from OHA to the CCO's regarding their obligations, billing processes, referral systems for getting clients served."
	Billing for Doula				"No clear pathway to bill for Doula services"
	Services is Complex and Incomplete		X		"Lack of knowledge about integration of THW doulas and associated billing providers at OHA."
	Doula Registration Process is Cumbersome		X		"Complicated pathway to become a state registered Doula."
	Low Reimbursement Rate for Doulas		X		"Low Medicaid reimbursement and inability to make a living as a doula discourages people from becoming doulas and discourages doulas from being Medicaid providers"
	Lack of Support from CCOs		X		"CCOs that have made no effort to incorporate doulas."
	Lack of Dedicated Administrative Support from OHA			X	"Lack of a person within OHA who can oversee the doula care program, having knowledge of the different components required to carry it out, and having ongoing communication with the various stakeholders."
	Loss of Key Personnel at OHA and the Institutional Memory that Comes With It			X	"High turnover of key state personnel who were involved at the beginning and who held vital information regarding how the state functioned on its end."
	Lack of System- Level Communication			X	"Communication between stakeholders, providers, and doulas is insufficient."
Facilitators	Medical Culture: Oregon is a Birth- Friendly State	X			"Strong and thriving birth community in the area"
Fac		X			"There is enough quality and timely research that demonstrates doula effectiveness."

Туре	Name	Approachability	Availability, Acceptability & Affordability	Appropriateness	Example Quotes
	Available Research on Doula Outcomes				"NIH data showing that doulas help reduce stress/pain of labor and are associated with decreased Caesarean rates."
	Childbirth Courses that Incorporate Doulas as Part of the Curriculum	X			"Childbirth education courses which advocate for doula support or in which doulas are present"
	Efforts to Educate Healthcare Providers on Doula Care	X			"Round table meetings/presentations to hospital staff by doulas to educate on services available."
	The Existence of the Traditional Health Worker Registry Website	X			"There is a search engine on the Oregon Health Authority website that allows you to search for doulas that take OHP."
	The Utility of DoulaMatch to Find Local Doulas	X			"DoulaMatch.com's ability to connect women to active doulas in the community."
	Presence of Information about Doulas on the Internet and Social Media	X			"Websites and social media influence [on informing women] what doulas are." "I first heard of a doula through a video online." "Social media to allow exchange [information about] recommended doulas"
	CCO-Initiated or Insurance-Initiated Doula Programs		X		"I am a doula working in a small CCO in Southern Oregon serving over 100 pregnant members. I'm working hard to facilitate a doula program so that all our members can have access to a doula if they want one. Our CCO is very supportive and sees the value & need."
	Presence of Low- Cost or No-Cost Doula Programs		X		"Some programs that provide low-cost or no- cost doula care to women who qualify."
	Recent Increase in Payment Rate		X		"The recent payment increase to 350 per birth is more reasonable."
	New Billing Pathway Makes It Easier for Doulas to Bill for Services		X		"Doulas can now bill directly to CCOs instead of through providers."
	Impact of Doulas			X	"Doulas improve birth outcomes for women and babies."

Lack of Content about Doulas in Childbirth Education Classes is a barrier to doula care access because childbirth classes are opportunities for mothers and gestational parents, as well as their families, to learn about their own healthcare needs and available resources for meeting their needs; providing no information or not enough information about doulas and how they can support mothers and gestational parents and their families decreases Approachability. Low Reimbursement Rates for Obstetrical Providers/ Demands Placed on Obstetrical Providers was described as a barrier by one of the survey panelists. The panelist said that providers are incapable of frequently talking with patients about doulas and their impact because of the resources available to them for their Medicaid-enrolled families. Medicaid pays providers around 30% of the market rate for healthcare services (Everson et al., 2018), and for obstetrical providers who run small clinics or work independently and accept payment from Medicaid, the tie between reimbursement and time and financial risk to the individual provider is more pronounced than would be seen in a larger, hospital-based system. With these considerations, Medicaid reimbursement influences quality of care in two respects; first, the high number of quality metrics expected of practitioners reimbursed through Medicaid means that they are expected to cover more information in office visits than they often have time for; and second, the low reimbursement rate means that they may be taking on more mothers and gestational parents at one time to make enough money, which means time with patients is more limited and discussions of doula benefits are placed at a lower priority during prenatal visits. This barrier is related to Approachability because it limits the ability for

mothers or gestational parents to gather enough information to understand their specific needs and how doula services may meet their healthcare needs.

Eight barriers for the Healthcare system were identified as influencing Availability, Acceptability & Affordability. The first two are more generally related to the current healthcare system. One panelist said that the broader healthcare system and how it is structured is a barrier to doula services, resulting in the barrier *Current Structure* of the Healthcare System. Because this barrier is outside of the decision-making process for mothers or gestational parents and occurs before or outside of the direct provision of care by doulas, it is considered Availability, Acceptability & Affordability. Second, *Criteria to Qualify for OHP Are Too Restrictive* was seen as a barrier by one of the focus group participants. She thought that even if doula services are covered by Medicaid, qualifying for Medicaid itself is a barrier and may exclude some people from being able to obtain doula care. The criteria mentioned is income-related, so it is an Affordability related barrier.

Lack of Private Insurance Coverage for Doulas is a complex barrier and one that many of the survey panelists identified. Private insurance coverage of doulas could influence access to doula care for Medicaid-enrolled families in two ways. First, doulas would be able to set livable wages earned from doula work. Doulas have described that one of their biggest challenges in establishing a doula career was being able to work as a doula full-time and charge fees that would provide a living wage (Everson et al., 2018). Reimbursement through private insurance would relieve some of the pressure to charge fees families could afford because families would not take on the entire financial burden.

Reduced financial burden means that the general ability to reach doula care for all mothers and gestating parents would be increased, which would create a more sustainable income stream for doulas who would be more capable of assuming the financial risk of Medicaid reimbursement. Doula work that is more likely to achieve a living wage is more likely to attract more culturally and linguistically diverse people to serve in the role and fulfill the intentions of the THW program. Second, there would already be a structure and method in place for doulas to bill insurance companies. Many of the barriers for the Healthcare level that are listed below, such as Billing for Doula Services Is Complex and Incomplete and Doula Registration Process Is Cumbersome would be less of a burden for the healthcare system because these structures and processes would be established in private insurance, as well as reimbursement rates. Doulas would also have more experience with billing insurance companies; the administrative processes that they struggle with for billing OHA and enrolling in the THW registry would still act as a barrier, but they may be a less influential barrier. Increasing the number of doulas in the doula workforce, and the doulas willing and capable of registering into the THW registry, increases Availability, Acceptability & Affordability of access to doula services.

The remaining barriers related to Availability, Acceptability & Affordability are related to issues with implementing the policy as intended and include ways in which individual doulas or organizations interact with OHA in respect to fulfilling the policy intentions. Communication to CCOs About Expectations and Processes around Promoting and Paying Doulas is a barrier relating to the fulfillment of policy intentions related to OARs 410-1411-3740, which instructs CCOs to develop and implement a plan

to integrate THWs, including benchmarks and measurement of utilization and integration, accessible information on THWs and how to obtain them, and the payment strategies for THWs. These plans were to be submitted for approval to OHA (Traditional Health Workers, 2014). Survey participants working with the policy felt that the expectations were not properly communicated to CCOs and therefore CCOs were not actively engaging in their responsibility to promote doula services and create structures for payment. This is a barrier because it influences both Approachability through lack of avenues to find out about doula services but more through Availability, Acceptability & Affordability, and because billing procedures were also not being coordinated and even if doulas were registered as THWs, they would not be capable of serving families because they could not bill for services. There are no barriers explicitly identified at the system level that parallel the Parents level barrier of Knowledge of Doulas or Inadequate Understanding of the Role of a Doula, but this specific barrier may be the result of the unfamiliarity of the healthcare system with the role, scope, and business practices of doulas. THWs, including doulas, were never expected to be Medicaid-funded, as all these services were previously paid through grant-funded programs or private pay and it took CCOs time to learn how to contract with community-based organizations and independent doulas (Everson et al., 2018).

The next three barriers are policy implementation barriers that influence a doula's willingness to engage with the THW program. *Billing for Doula Services is Complex and Incomplete* is a barrier that addresses doula concerns over how doulas, once registered on the THW registry, would be able to bill and be reimbursed for doula services. Doulas

who attempted to bill for services directly to OHA, at the time of data collection, were not clear on who to submit bills to, which form to fill out, and what information to put on the forms. The lack of clarity and support for billing for doula services has been considered a crucial barrier among doulas for enrolling in the THW registry and becoming billable through Medicaid (Everson et al., 2018).

Doula Registration Process is Cumbersome is another process-related barrier that reflects the issues that doulas have had in becoming a registered THW. In the Oregon Doula Workforce Needs Assessment completed in 2018, doulas who reported registering for the THW Registry expressed frustration and lack of support with the process. Doulas also shared this frustration with other doulas, resulting in some doulas waiting to apply to be a THW until other doulas reported that the process was easier to complete Everson et al., 2018). Doulas unable or unwilling to become registered THWs influences Availability, Acceptability & Affordability because it reduces the number of Medicaidreimbursable doulas. As previously mentioned, a critical issue faced by professional doulas in Oregon is the ability to work full-time as doulas while charging fees that create a sustainable income, and Low Reimbursement Rate for Doulas is one related barrier. At the time of data collection, doulas were being reimbursed a total of \$350 dollars: \$150 for birth, and \$50 per prenatal and postnatal appointment. The low reimbursement rate is particularly of interest because doulas in Oregon often cannot earn a living wage from full-time doula work and have to supplement their income with other jobs. Both the cumbersome and confusing enrollment process as well as the low reimbursement act as

barriers to Availability, Acceptability, and Affordability because they prevent eligible and interested doulas from enrolling in the system.

The last barrier influencing Availability, Acceptability & Affordability of
Healthcare System barriers is *Lack of Support from CCOs*. This barrier reflects the
concern that some survey panelists had about the level of buy-in by the CCOs for
incorporating doulas into their healthcare systems, and therefore limited resources and
effort invested in processes that would make it easier for doulas to bill for services.

Survey panelists suggested that if the barrier *Communication to CCOs About*Expectations and Processes around Promoting and Paying Doulas was not present,
CCOs would be motivated to quickly plan and create systems to reduce other Healthcare
System barriers. Since this barrier describes a CCO's investment in creating necessary
structures and plans that would result in doulas serving a CCO's families, it influences
the Availability aspect of the Availability, Acceptability, and Affordability.

All three of the Healthcare System-Level barriers related to Appropriateness addressed ongoing issues in coordinating the necessary communications and actions around long-term policy implementation. Lack of Dedicated Administrative Support from OHA was identified as a barrier because doula care is still very new to the healthcare system; one survey panelist believed the depth of knowledge and need for continual communication was best fulfilled as a dedicated role for one OHA-employed person. Similarly, because so much of the information was spread across multiple OHA employees, Loss of Key Personnel at OHA and the Institutional Memory that Comes With It also made the implementation of the policy difficult; one respondent said that there was

"high turnover" and that contributed to the difficult and delayed implementation of the policy. Finally, and likely as a result of the two other Appropriateness-level barriers, *Lack of System-Level Communication* was identified by two of the survey panelists. While one specific communication of policy expectations from the OHA to CCOs was listed as a barrier to Availability, Acceptability & Affordability, the more general *Lack of System-Level Communication* among the multiple system levels such as doulas, providers, and key OHA roles was also cited as a barrier.

There are seven facilitators to doula care access that influence Approachability at the Healthcare System Level. All of these facilitators influence how a mother or gestational parent can perceive that services are available that they can then utilize for their social and emotional needs during pregnancy and delivery. These factors fall outside of Organizations or Healthcare Providers level factors, and outside of organizations related to doula credentialing or organizing. The first facilitator is *Medical Culture*: Oregon is a Birth-Friendly State. Some of the survey panelists indicated that Oregon providers and practitioners, when compared to providers in other locations, are more likely to be accepting of doulas or have worked with doulas in the past, and that there are a large number of birth and doula training organizations in the state: a "strong and thriving birth community." There is historical evidence that Oregon is a 'birth friendly' state, amenable to the midwifery model of care and therefore more likely to be accepting of doulas. Oregon has a history of professional midwifery activism and involvement in shaping laws around birth and birth practices in Oregon. The Oregon Midwifery Council was established in 1977 and was the first midwifery organization in the country

(Hoffman, 2016). Oregon is also the third most integrated state for midwifery care across all healthcare settings and without third party restrictions (Vedam et al., 2018). Oregon mothers and gestational parents are twice as likely to have a birth attended by a midwife than the US average (Birth Place Lab, 2018). Oregon doctors and obstetrical providers are more likely to work alongside midwives and are more likely to be familiar with the midwifery model of care and continuity of care, which is the philosophy of care from which the doula role originated. It is very likely that, due to the number of doula training organizations and the presence of midwives, Oregon-based obstetrical providers are also more likely to have previous knowledge of, or work experience with, doulas. A birthfriendly culture improves Approachability because more medical professionals, as well as Oregon residents, are likely to know and understand what doulas are and are more likely to know of local doula services.

The next three facilitators influence Approachability by conveying information about doulas. First, *Available Research on Doula Outcomes*, like *Bad Doula Experiences and Peer Support and Use of Doulas*, is a factor influencing access when another person's access pathway has been fulfilled and outcomes have been realized. The information on clinical outcomes is then translated to research, which can be shared with both parents and providers to make informed decisions about their care needs. Some survey panelists said that the research available on doula outcomes is adequate and from reputable sources, and this acts as a facilitator because the data can then inform mothers and gestational parents about how doula care can support their needs during birth.

Second, one of the ways this research can reach mothers and gestating parents is through

childbirth courses that educate on what doulas are and the evidence-based outcomes of having a doula attend a birth. Childbirth Courses that Incorporate Doulas as Part of the Curriculum is a facilitator because childbirth courses are designed to inform mothers and gestational parents and help them identify their own healthcare needs during labor and how to support those needs; understanding how a doula can meet their needs therefore increases Approachability. Third, Efforts to Educate Healthcare Providers on Doula Care is a facilitator that opposes the Healthcare Providers level barriers Acceptance of Doulas by Care Providers, Lack of Provider Encouragement or Promotion of Doulas, Obstetrical Provider' Lack of Knowledge About How to Refer to a Doula, and Obstetrical Provider Lack of Knowledge About How to Refer to a Doula. Educating healthcare providers further increases access by helping reduce these specific Approachability barriers and increases the facilitators Healthcare Providers Who are

The next three Healthcare System-Level facilitators influence Approachability through information available on the internet. The first facilitator, *Existence of the Traditional Health Worker Registry*, is an online database where people can search for registered THWs, including doulas, who are currently enrolled. Searches can be narrowed by county served and type of THW (OHA, 2023b). This system makes doula care more Approachable because it allows families and providers to find doulas in their area who accept Medicaid. Similarly, DoulaMatch is a for-profit registry of doulas nationally; while it does not filter by insurance types, it does provide more personalized information about doulas, where they work, and their approach to doula care, which provides

additional information about the doulas not found on the THW website. Because it helps to provide information to families and assist them in finding and choosing to use a doula, *The Utility of DoulaMatch to Find Local Doulas* also increases Approachability. Finally, *Presence of Information about Doulas on the Internet and Social Media* addresses the availability of general information about doulas, what they are, and how they help families. Most pregnant women and gestational parents have access to the internet and use internet-sourced information for pregnancy and postpartum care (Sayakhot & Carolan-Olah, 2016), and both obstetrical patients and health professionals use social media for health information, exchanging advice, and supporting patient-doctor communication (Antheunis et al., 2013). Survey panelists felt that the available information about doulas acted as a facilitator to doula care.

There are four facilitators at the Healthcare System Level that influence Availability, Acceptability & Affordability of doula care. The first two factors are related to programs that provide doula care and the second two factors are policy changes that have occurred through OHA to make the program run more smoothly. First, CCO-Initiated or Insurance-Initiated Doula Programs acts as a facilitator because the CCO has created a structure or program so that families who need and qualify for doula services can be easily referred to doulas. At the time of data collection, there were three ways CCOs created or utilized doulas within their organization. One survey panelist said they were a doula working for a CCO that was creating a doula program for their members.

One CCO's maternal-child health case manager expanded their role to incorporate doula work and to teach doula support skills to families (Everson et al., 2018). Project Nurture

through HealthShare is a CCO-based program that integrated maternity care and addiction treatment, and as part of their program they offer peer and doula services (HealthShare of Oregon, 2022a; HealthShare of Oregon, n.d.). Second, Presence of Low-Cost or No-Cost Doula Programs are at the Healthcare System level because these programs can often be doula-specific organizations. They are often cause-related such as Doulas Supporting Teens, which was a former doula program serving pregnant and parenting teens in Lane County from 2004-2011 (Atkins, 2009; ODA, n.d.) or community-specific such as the Sacred Roots Doula program which is part of the broader program The Black Parent Initiative (2022). Both of these facilitators increase Availability, Acceptability & Affordability because any effort or barriers to connect doulas to mothers or gestational parents and their families is managed by an organization, making it easier to find and hire a doula. Secondly, financial compensation is also already managed, so billing or funding does not directly come from families, and Affordability is increased. Also, these programs are already familiar with working with alternative funding strategies such as grants and these doulas are used to volunteering their services, so the low reimbursement rate may be less of a barrier to them and they may be able to connect with other financial resources to offset it.

The next two facilitators relate to policy changes that improve financing and billing for doula services. The first is *Increase in Payment Rate*; at the time of data collection the rate had been raised to \$350 per birth from \$75 per birth (OHA, 2017; Everson & Remer, 2015). The charge would cover \$50 per prenatal and postpartum visit and \$150 per birth. In 2022, OHA announced that it intended to increase the

reimbursement rate from \$350 to \$1,500 per birth (OHA, 2022e). The second facilitator related to financing and billing for doula services is New Billing Pathway Makes It Easier for Doulas to Bill for Services. Much like Communication to CCOs About Expectations and Processes around Promoting and Paying Doulas was a barrier resulting from the unfamiliarity of doulas to CCOs, both of these facilitators (increased payment rate and new billing pathway) are correcting for barriers that were the result of unfamiliarity of the healthcare system with doulas and how they work within the system, specifically that OHA and CCOs expected doulas to be hired and staffed through obstetrical clinics, birth centers, or hospitals. Obstetrical clinics and hospitals are increasingly becoming more aware of how doulas work, but at the time of policy implementation they were unfamiliar with doulas and needed more support in incorporating them to the settings. Because doulas do not provide clinical services, clinics are unfamiliar with how to document and chart the kind of support doulas provide and they do not know how to properly supervise, assess, or support doulas in their roles in clinical settings (Everson et al., 2018). The inability to quickly integrate doulas into clinic and hospital settings means that the health system needs to adapt to the sole proprietor practice model of doulas in order to fulfill program objectives; system changes that adapt to this model will facilitate access through incentivizing doulas to enroll and take on Medicaid-eligible families, increasing Availability, Acceptability & Affordability of doulas.

One type of entity that was created out of the need to submit bills is a Doula Hub or Doula Billing Hub. These organizations have been approved by the state to be a doula-specific billing provider and are contracted with one or more CCOs to allow doulas to bill

directly for services. Doula Billing Hubs can also work with CCOs for referrals, to provide coordination and supervision for doulas, and negotiate higher rates of payment (Catlin, n.d.). Since data collection, there have been Doula Billing Hubs established throughout the state (Doula Series Footnotes, 2020). The ability to bill directly for doula services and the additional ability to create an entity such as a Doula Hub are facilitators to doula care access through Availability, Acceptability & Affordability.

The final facilitator, *Impact of Doulas*, influences Appropriateness. The outcomes expected with doula care such as lower Cesarean rates, increased satisfaction, and lower rates of intervention were listed as facilitators. The outcomes themselves are considered a factor of Appropriateness because they are the fulfilled expectation of quality doula care. Some of the factors, such as Bad Doula Experiences, reflect how personal experience is translated into advice, and Available Research on Doula Outcomes addresses the quality and availability of research on said outcomes. Doulas provide social and emotional support during labor and the connections between this kind of support and the clinical outcomes might not be directly understood or perceivable; but if the outcomes are valued enough, they may reduce other barriers earlier in the process of seeking and reaching doula care such as the time it takes to find and interview doulas. It is important to consider the outcomes because of the individual value that these outcomes may have for mothers and gestational parents; their understanding of the outcomes and how these influence health may determine if these outcomes are important. Survey participants seemed to think that the value of these outcomes to mothers and gestational parents was a facilitator to access to doula care.

Policy- and Legislative-Level Factors

There are five barriers and two facilitators influencing access to doulas at the Policy and Legislative-Level (see Table 4.9). None of the barriers identified at this level influenced Appropriateness, but two of the barriers influenced Availability, Acceptability & Affordability. Both barriers influencing this dimension of access can be connected to the lack of familiarity of doula services in the healthcare system and broader system. Use of Inappropriate Information to Set Reimbursement Rate is the first barrier, Initial Reliance on OB Providers to Bill for Doula Services is the second barrier. As previously mentioned, it was assumed by the Oregon Health Authority that doula work functioned much like case management work, so the reimbursement model was based on case management work. The initial reimbursement rate of \$75 per birth was a barrier because doulas were unlikely to enroll as THWs for that price, and this potentially reduced the availability of doulas. Similarly, as previously stated, obstetrical providers and clinics are unfamiliar with how to employ, supervise, and support doula work in their clinics and doulas largely prefer to work alone without relying on a healthcare provider (Everson et al., 2018), so this rule would have reduced the availability of doulas working for the THW program.

Table 4.9: Policy and Legislative-Level Access Factors to Doula Care

Туре	Name	Approachability	Availability, Acceptability & Affordability	Appropriateness	Example Quotes
	Use of Inappropriate Information to Set Reimbursement Rate		X		"Basing the initial reimbursement on one model of care in the state, rather than on the copious amounts of research regarding the impact of doula care on cost savings."
	Initial Reliance on OB Providers to Bill for Doula Services		X		"Assuming that doctor or midwives would be willing to do the billing on behalf of the doulas."
-	Lack of Doula Input on Administrative Rulemaking Process			X	"Once passed, failing to have adequate representation of doulas on the steering committee and rules advisory committees."
Barriers	Inadequate Representation of Stakeholders in Legislative and Administrative Rulemaking Process			X	"Inadequate representation of stakeholders in the process, especially the health care system itself, as decision makers in the early days did not understand how this would impact those very systems who were charged with carrying out the law."
					"[No process for] Ongoing input from all stakeholders in creating the processes and minute details needed in order to get clients served."
	Lack of Implementation Plan			X	"At the beginning, failing to have at least some plans for implementation ready before going to the legislative sponsors who drafted the bill."
Facilitators	Doula Services are Reimbursable Through Legislation and Administrative Policies		X		"Law supporting Medicaid reimbursement for doulas." "Doula services are reimbursable through Medicaid."
	Advocacy Efforts to Legislate Doula Care		X		"Initial advocacy efforts to introduce doula care into legislation."
	Supportive Political Environment and Political Actors for the Use of Doulas			X	"Legislators who sponsored the laws regarding doula care for Medicaid recipients"

Three barriers influenced Appropriateness by influencing the coordination and execution of the program. The first barrier, Lack of Doula Input on Administrative Rulemaking Process, is described as a barrier because there were no doulas on the OHA steering committee and the rules advisory committee. The lack of familiarity with the doula role and how doulas work within the healthcare system would have been substantially reduced if doula input had been integrated into the rulemaking process. Inadequate Representation of Stakeholders in Legislative and Administrative Rulemaking *Process* is a barrier to Appropriateness for similar reasons. Many of the issues seen with creating a structure were not doula specific, and other related healthcare system roles could have provided input. For example, local community and nonprofit organizations related to Traditional Health Work or anyone who works in maternity care, such as obstetrical providers, would hold key information about how doulas or THWs would work in the healthcare system. There were not enough key stakeholders involved in establishing the program who were familiar with doulas; one of the survey participants said that there was not a structure to provide ongoing input from key stakeholders. One survey panelist suggested that advocates who approached legislative sponsors to draft the bill legislating Medicaid coverage for doula care should have had also provided a plan for implementation, and that the Lack of Implementation Plan was a barrier to access to doulas once the plan was finalized.

There were three facilitators for the Policy- and Legislative-Level of the system, the first two influence Availability, Acceptability & Affordability and the third influences Appropriateness. *Doula Services are Reimbursable Through Legislation and*

Administrative Policies is the first facilitator. This facilitator represents the intentions behind the entire policy, which is that financing doula services through Medicaid will increase access to doulas for Medicaid-enrolled families, and that access resulting in utilization will decrease health disparities. Since this factor represents the entire policy intention, it will be notable how influential this facilitator is to the picture of doula care access in Rounds 2 and 3. The intention of the policy was to remove the barrier of paying for doula services, so it influences Affordability. Advocacy Efforts to Legislate Doula Care refers to the combined efforts of doulas, organizations, and key actors to getting the legislation introduced and adopted. The Organizations level facilitator, The Presence of Doula Organizations and Their Efforts to Increase Access to Care, is similar; however, advocacy efforts have a very specific political and legislative influence. Specifically, the specific role of Shafia Monroe as a key actor in advocacy to policymakers has been credited in large part with the successful legislation (Monroe, 2017; Nguyen, 2021). The advocacy efforts influence Availability, Accessibility, and Affordability because the intention of the advocacy efforts was to ensure doulas were reimbursable through Medicaid and increase Affordability of doula care. Finally, Supportive Political Environment and Political Actors for the Use of Doulas refers to the appointed legislators who were receptive to advocacy efforts and acted to implement the policy. Using Kingdon's multiple streams metaphor, the health system transformation of 2012 in Oregon was a policy window where policy entrepreneurs, such as Shafia Monroe, could interact with other streams to help introduce legislation. Representatives Tina Kotek and Lew Frederick were receptive to introducing legislation and cosponsored HB 3311

(Birkland, 2011; Waldroupe, 2012). The political environment supports Appropriateness because these political actors and advocates are working to communicate and coordinate efforts and coordination outside of the delivery of doula care, which falls into the Appropriateness dimension of access.

Round 1 Conclusion

In Round 1, focus group participants and survey panelists with varied personal and professional experiences shared their views on what they thought were influential factors regarding doula care access. As a result, the model of Access to Doula Care was modified to include five supply side system levels and two demand side system levels. The factors collected from focus group participants and survey panelists were organized by these new system levels and assigned a dimension of access. Some factors were seen as both barriers and facilitators, such as Lack of Provider Encouragement or Promotion of Doulas and Healthcare Providers who are Aware of and Promote Doulas, and some themes across system levels emerged, such as lack of knowledge or information to parents, providers, and healthcare system decisionmakers, or how advocacy at the individual and organizational level influenced Policy & Legislative or Healthcare System levels. Some policy decisions, such as the reimbursement rate or the difficulty in engaging with Healthcare System components, can influence individual doula or healthcare practitioner behavior. In Round 2, focus group participants were presented with all the factors organized by system level and participants assigned them values to indicate how influential these factors were to doula care access in Oregon for Medicaid enrolled families. Assessing which factors rank highest, and the relationship between

these factors, will give a better understanding of how to influence access to doula care in Oregon.

Round 2: Rating Each Barrier and Facilitator's Impact on Access

In Round 2, survey participants were presented with each of the barriers and facilitators organized by system level, along with the quotes listed in Tables 4.3 through 4.9. All 23 respondents from Round 1 participated in Round 2. Respondents were asked to rank each factor based on how important the factor was for access to doula care.

Tables 4.10 and 4.11 show the 20 highest ranking barriers and facilitators based on the mean score; tables that include the remaining factors are included in Appendices G and H. In Round 1, there were no specific mentions of population and social factors from survey respondents, so in Round 2, respondents were asked if these items were barriers or facilitators, and to rank their importance in influencing access to doula care, bringing the number of Round 2 barriers to 50 and of Round 2 facilitators to 42.

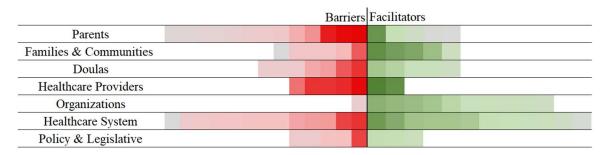
The presentation and discussion of factors begins with the heat maps presented in Figure 4.2. Heat maps display access factors at each system level and use color intensity to indicate the relative strength of a particular factor using the average mean for each factor. Each square on the map represents a factor. Respondents could choose 1 to indicate Not Important, 2 to indicate Slightly Important, 3 to indicate Fairly Important, 4 to indicate Important, 5 to indicate Very Important, and 6 to indicate I Do Not Know. Answers indicating I Do Not Know were removed from the analysis; the column "Number of Responses" reflects the number participants who chose a value from 1 to 5. In this case, the intensity of the color is how close the mean score is to a score of 5 or

Very Important. Figure 4.2 is a heat map of factors organized by system level, Figure 4.3 is a heat map of barriers organized by dimension of access, and Figure 4.4 is a heat map of facilitators organized by dimension of access. Additionally, enlarged heat maps can be found in Appendix I.

Round 2 Barriers and Facilitators by System Level

Figure 4.2 is a heat map that displays both barriers and facilitators to doula care access by system level. The color red indicates barriers, and the color green indicates facilitators. Heat maps in bar graph form were chosen so that there could be a visual representation of barriers alongside facilitators in one visualization, and the relative strength of each factor could be easily determined without looking at numbers or large tables. The color intensity reflects how close the mean is to a score of 5.0 (4.68 was the highest mean score among all factors). A deeper red color or deep green color is closest to 5 while a grey color is closer to 2 (2.85 was the lowest mean score among factors). The heat map gives the reader an idea of the number of factors in each system level and the influence of that overall system level on doula care access, as well as which system levels have more highly ranked factors. The maps give a broad system view in one image with the ability to see a cumulative effect of system levels. Tables 4.10 and 4.11 present the details of the factors including factor names, their means, and their relative importance compared to other factors.

Figure 4.2: Round 2 Heat Map of the Average Score for Barriers and Facilitators, by System Level



When comparing the barriers to facilitators broadly, there seems to be more intensity in the highest-ranking barrier colors, when compared to the highest-ranking facilitators, possibly indicating that more barriers achieved higher mean scores than facilitators. Some of the barriers do have a higher mean score; for example, the three highest barrier means are 4.68, 4.65, and 4.59 while the highest three mean scores for facilitators are 4.57, 4.48, and 4.45. When the topmost barriers are compared to the topmost facilitators, the perception of a more intense barrier color is an accurate assessment. Also, in both the barrier and facilitator factors, some means are repeated across factors, and this influences the intensity of colors. There are more repeating means in the top 20 barrier list than there are on the top 20 facilitator list, and there are a larger number of repeating facilitators with lower mean scores comparatively. The frequently repeating barriers that achieve a mean of less than 4 have a pink shade, so they offer a contrast to the barriers achieving a higher score that appear a more intense red. For the facilitators, there are fewer repeating means and most repeating means occur further away from the highest score. Because of the frequency of repeating high mean scores among barriers, and the greater frequency of repeated means across the barriers, the

barriers appear to have a deeper color than the facilitators and also a stronger contrast among barriers.

When looking at both barriers and facilitators, three system levels draw visual attention for spread of factors: the Healthcare Provider, Parents, and Healthcare System levels. The Healthcare Provider category draws visual attention because it has the fewest number of barriers and facilitators, but, as a category, it has the most highly ranking barriers and facilitators. As illustrated later in Table 4.10, all Healthcare Provider level factors were found in the top 20 list of barriers and facilitators. At a system level, Healthcare Providers play an important role in access to doula care.

The next system level, Parents, has three very influential barriers and one strongly influential facilitator; Parents has a very large number of barriers overall, sharing the same number of barriers with Healthcare Systems. As a system level, Parents appear to have the next most influential barriers and facilitator to access to doula care. The next system level that draws attention when looking at both barriers and facilitators is the Healthcare System level because it has the largest number of both barrier and facilitators. The Healthcare System level was divided into Organizations, Healthcare System, and Policy & Legislative from original conceptualizations of this system level and it retained the most factors. Given the nature of this dissertation is to assess a policy and the purposeful sampling of professionals acquainted with this policy, this was expected. How the system level Healthcare System shifts from Round 2 to 3, in respects to other system levels, is important to consider.

Looking at system levels collectively, there are also some notable observations. As previously stated, the Parents level and the Healthcare System level have a very large number of barriers with a variety of shades of grey, pink, and red, meaning they have varying levels of influence on doula care access. Organizations only has one barrier but has the second largest number of facilitators, with two less than Healthcare System. Families & Communities has four prominently influential facilitators, making it the category with the largest number of highly influential factors on the facilitator side of the map. Collectively, the impact of Families & Communities seems to have a strong facilitating influence on doula care access after Healthcare Providers. The number of Parents barriers, Organizations facilitators, as well as the number of Healthcare System barriers and facilitators, is noteworthy and will be further examined in Round 3.

Figure 4.2 gives an opportunity to see how the system levels generally influence access from a system perspective. The visual trends seen across system levels as well as for barriers and facilitators raise the question of which specific factors are providing the most influence over doula care access (for example, how many factors show highly and moderately influential factors in each level and across levels). The next section, addressing Tables 4.10 and 4.11, will look at the factors by system level.

Round 2 Tables of Factors: Barriers

In Round 2, participants were presented with each of the barriers and facilitators organized by system level, along with the quotes previously listed in Tables 4.3 through 4.9. The first column lists the factor and the next column to the right lists the mean score for the barrier. The rank assigned indicates the numerical value's proximity to the highest

mean, and therefore ranking numerals were not skipped. The 20 individual barriers in Table 4.10 represent the 14 highest ranking mean scores across barriers. Remaining barriers can be found in Appendix G. The barriers and facilitators were divided into 20 because it is a relatively even number, it captured enough of the highest priority barriers without being overwhelming, and it did not interrupt a series of repeating numbers that would have occurred with a lower number. In Tables 4.10 and 4.11, some means were repeated; two barriers achieved a mean score of 4.65, four barriers achieved a mean score of 4.52, and two barriers achieved a mean score of 4.47.

The two middle columns list the rank by mean and the number of responses used to calculate the mean. Some of the barriers that were directly related to the Health System or Policy & Legislation system level achieved fewer responses; for example, *Use of Inappropriate Information to Set Reimbursement Rate* had responses from 15 of the 22 participants. The lowest response rate for any item was 15 responses, but most factors achieved a response rate of 21 responses or higher. The second column from the right lists the system level and the far-right column lists the dimension of access; the influence of the system level was discussed with Figure 4.2 and the dimensions of access will be discussed in further detail with the heat maps in Figures 4.3 and 4.4, and Tables 4.12 and 4.13. When factors are discussed in the text, the name of the factor is in italics and, if not otherwise indicated in the text, the system level, mean, and rank by mean will be indicated in parentheses.

Table 4.10: Top 20 Barriers to Access to Doula Care

Barrier	Mean	Rank by Mean	# of Responses (of 23)	System Level	Access Dimension
Knowledge of Doulas	4.68	1	22	Parents	Ability to Approach
Inadequate Understanding of the Role of a Doula	4.65	2	23	Parents	Ability to Approach
Obstetrical Providers' Lack of Knowledge About How to Refer to a Doula	4.65	2	23	Healthcare Providers	Approachability
Awareness of Doula Coverage through Medicaid	4.59	3	22	Parents	Ability to Reach
L & D Nurses' Understanding and Acceptance of Doula Role	4.55	4	22	Healthcare Providers	Appropriateness
Lack of Knowledge about Doula Coverage through Medicaid	4.52	5	23	Healthcare Providers	Availability, Acceptability, & Affordability
Lack of Provider Encouragement or Promotion of Doulas	4.52	5	23	Healthcare Providers	Approachability
Low Reimbursement Rate for Doulas	4.52	5	21	Healthcare System	Availability, Acceptability, & Affordability
Out-Of-Pocket Cost of Doulas	4.52	5	23	Doulas	Availability, Acceptability, & Affordability
Lack of Support from CCOs	4.47	6	19	Healthcare System	Availability, Acceptability, & Affordability
Use of Inappropriate Information to Set Reimbursement Rate	4.47	6	15	Policy & Legislative	Availability, Acceptability, & Affordability
Difficulty in Training Diverse Doulas	4.40	7	20	Doulas	Availability, Acceptability, & Affordability
Lack of Community Awareness of Doulas	4.39	8	23	Families & Communities	Ability to Reach
Acceptance of Doulas by Care Providers	4.32	9	22	Healthcare Providers	Approachability
The Process of Finding and Hiring a Doula is Difficult	4.22	10	23	Parents	Ability to Reach

Barrier	Mean	Rank by Mean	# of Responses (of 23)	System Level	Access Dimension
Lack of Private Insurance Coverage for Doulas	4.19	11	21	Healthcare System	Availability, Acceptability, & Affordability
Communication to CCOs About Expectations and Processes around Promoting and Paying Doulas	4.18	12	17	Healthcare System	Availability, Acceptability, & Affordability
Lack of Direct Outreach	4.18	12	22	Doulas	Approachability
Billing for Doula Services is Complex and Incomplete	4.16	13	19	Healthcare System	Availability, Acceptability, & Affordability
Lack of a Diverse Doula Workforce	4.14	14	21	Doulas	Availability, Acceptability, & Affordability

Delphi studies aim to reach a consensus among a group on topics for which information is new or not easily available (Linstone & Turoff, 2002); this study was designed to determine priority barriers and facilitators to access to doula care. Consensus in Round 2 was determined through obtaining mean scores for each factor, and in Round 3 by the frequency of factors appearing on a top five list defined by survey panelists. Consensus in this study was also obtained by the identification of mean values for each individual item and in the themes that arose from related factors and their relative scores. The first theme that emerged from the tables was the theme of knowledge-related barriers. The six highest ranking barriers, receiving a mean score between 4.68 and 4.52, were all related to knowledge of doulas or doula coverage through Medicaid. Eight barriers appearing in the top 20 list of barriers in Table 4.10 were directly related to knowledge of doula care. All six of the highest-ranking barriers were under the system level of Parent or Healthcare Provider. Of particular importance were the factors

specifically representing knowledge of doula coverage through Medicaid, which occurred for both Mothers and Gestational Parents (Awareness of Doula Coverage through Medicaid, 4.59) and Healthcare Providers (Obstetrical Provider's Lack of Knowledge about Doula Coverage through Medicaid, 4.52, 3rd). The barrier Lack of Provider Encouragement or Promotion of Doulas (Healthcare Provider, 4.52, 5th) is indirectly related to knowledge because providers are supplying mothers and gestational parents with information to make decisions about utilizing doula services; this barrier had the fifth highest mean score. One more knowledge related barrier, Lack of Community Awareness of Doulas (Families & Communities, 4.39), had the eighth highest mean score and was the only Families & Communities system level factor to be in the top 20 barriers. Knowledge-related barriers, across three health system levels and occurring on both the supply and demand side, were concentrated at the top of the ranked list of barriers; two specific points of knowledge, the knowledge of doula coverage through Medicaid, were also ranked highly as barriers to doula care access.

The next set of barriers most influential to doula care access from Round 2 are related to financial aspects of doula service and reimbursement through Medicaid. The barriers Low Reimbursement Rate for Doulas (Healthcare System, 4.52) and Out of Pocket Cost of Doulas (Doula, 4.52) both had the fifth highest mean and Use of Inappropriate Information to Set Reimbursement Rate (Policy & Legislation, 4.47) had the sixth highest mean, so finance-related barriers were concentrated towards the top of the chart as well, below knowledge-related barriers. Use of Inappropriate Information to Set Reimbursement Rate was the only Policy & Legislative level barrier to appear in the

top 20 barriers and is both secondarily related to knowledge of doula business practices and also influenced initial financing options. These barriers are also the highest-ranking barriers outside of Parent and Healthcare Provider system levels. Other important barriers related to financing of doulas with high means were *Lack of Private Insurance Coverage for Doulas* (Healthcare System, 4.19, 11th) and *Billing for Doulas Services is Complex and Incomplete* (Healthcare System, 4.16, 14th); private health insurance coverage is a more upstream and indirect financing factor, but it would influence workforce sustainability and all other finance-related factors, and the relationship of the reimbursement rate to the barrier related to billing potentially means that an increase in reimbursement would mean more doulas would assume financial risk of delayed payment or cumbersome billing procedures through Medicaid. Cost, financing, and reimbursement of doula care access is the next most influential theme that appears in Round 2, and it occurs across three health system levels on the supply side.

For the remaining barriers in the top 20, there were three additional barriers related to the Doula system level, two barriers related to the Healthcare System level, and one related to the system levels Healthcare Provider and Parent. The Doula level barriers were *Difficulty in Training Diverse Doulas* (4.40), which had the seventh highest mean, *Lack of Direct Outreach* (4.18), which had the 13th highest mean, and *Lack of a Diverse Doula Workforce* (4.14) with the 15th highest mean. Having doulas representative of the communities they serve is an important component to THW; the importance of barriers related to training and recruiting diverse doulas is a notable access barrier. The remaining Healthcare System level barriers in the top 20 were *Lack of Support from CCOs* (4.47)

with the sixth highest mean and Communication to CCOs About Expectations and Processes around Promoting and Paying Doulas (4.18) with the 12th highest mean. These barriers demonstrate the next important theme to doula care access, the investment and engagement from CCOs and the OHA at the time of data collection were insufficient for fulfilling on THW requirements. The Healthcare Provider level barrier Lack of Acceptance of Doulas by Care Providers (4.32) had the ninth highest mean; all Healthcare Provider related barriers from Round 1 were in the top 10 ranked barriers for access to doula care, emphasizing the important role that healthcare providers, in particular obstetrical providers, play in access to doula care. Finally, the last Parent level barrier in the top 20 was The Process of Finding and Hiring a Doula is Difficult (4.22), which had the 10th highest mean. This barrier is the fourth Parent level related barrier in the top 20; while this barrier is not directly related to a lack of knowledge, increasing Approachability with more information to support the process of finding and hiring a doula could reduce this barrier's influence on doula care access and so is related to other previous Parent-level barriers.

Round 2 Tables of Factors: Facilitators

Table 4.11 lists the 20 facilitators achieving the highest mean average across participants. The left column lists the name of the facilitator. The next column to the right lists the mean score for the facilitator and the column to the right of the mean gives a number indicating the rank based upon the mean. The 20 individual facilitators represent the 16 highest ranking mean scores across facilitators. The next column to the right of the rank is the number of responses for each facilitator. Remaining facilitators appear in

Appendix H. The lowest response number for any factor was 15 responses and the lowest response number for the top 20 facilitators was 19. The second column from the right lists the system level and the right column lists the dimension of access; both the system level and dimensions of access will be discussed in further detail with the heat maps in Figures 4.3 and 4.4.

Table 4.11: Top 20 Facilitators to Access to Doula Care

Facilitator	Mean	Rank by Mean	# of Responses	System Level	Access Dimension
Healthcare Providers who Refer Patients to Doulas	4.57	1	23	Healthcare Providers	Approachability
Peers' Doula Use and Peers' Support of Doula Use	4.48	2	23	Families & Communities	Ability to Reach
Healthcare Providers who are Aware of and Promote Doulas	4.48	2	23	Healthcare Providers	Approachability
A Need for Doula Support	4.45	3	22	Parents	Ability to Approach
Impact of Doulas	4.43	4	21	Healthcare System	Appropriateness
Doulas Support Husbands/Partners	4.41	5	22	Families & Communities	Ability to Engage
Diverse Communities Embracing the Role of Doulas for their Populations	4.37	6	19	Families & Communities	Ability to Reach
CCO-Initiated or Insurance- Initiated Doula Programs	4.35	7	20	Healthcare System	Availability, Acceptability, & Affordability
The Presence of Doula Organizations and Their Efforts to Increase Access to Care	4.32	8	19	Organizations	Availability, Acceptability, & Affordability
Supportive Social and Community-Based Organizations	4.29	9	21	Organizations	Approachability
Hospital and Birth Center Support of Doula Care	4.27	10	22	Organizations	Appropriateness
Families and Communities Supportive of Doula Care	4.26	11	23	Families & Communities	Ability to Reach
Available Research on Doula Outcomes	4.24	12	21	Healthcare System	Approachability

Facilitator	Mean	Rank by Mean	# of Responses	System Level	Access Dimension
Active Leadership in the Doula Community	4.23	13	22	Doulas	Appropriateness
Hospital and Birth Center Promotion of Doula Care	4.23	13	22	Organizations	Approachability
The Presence of Low-Cost or No- Cost Doula Programs	4.23	13	22	Healthcare System	Availability, Acceptability, & Affordability
Efforts to Educate Healthcare Providers on Doula Care	4.23	13	22	Healthcare System	Approachability
New Billing Pathway Makes It Easier for Doulas to Bill for Services	4.21	14	19	Healthcare System	Availability, Acceptability, & Affordability
The Quality of Doula Professionalization	4.17	15	23	Doulas	Appropriateness
Persistent Advocacy Efforts to Increase Access to Doula	4.15	16	20	Organizations	Appropriateness

There were only two facilitators for the system level Healthcare Provider, and both factors achieved the highest and second highest mean score for facilitators.

Healthcare Providers who Refer Patients to Doulas achieved a mean score of 4.57 and Healthcare Providers who are Aware of and Promote Doulas achieved a mean score of 4.48. Healthcare Provider barriers related to knowledge also scored very highly as shown in Table 4.10, achieving the second (4.65) and fourth (4.55) highest means across barriers; all Healthcare Provider level barriers also achieved a mean in the top 20. A similar facilitator at the Healthcare System Level, Efforts to Educate Healthcare Provider on Doula Care (4.23, 13th) also emphasized the important influence of knowledgeable obstetrical providers on doula care access. Healthcare Providers, as a system level, have an important role to play in access to doulas.

The next highest-ranking facilitator was from the system level Families & Communities, and all five Families & Communities facilitators achieved a place in the

top 20. The role of peers who utilize doulas and support doula use was seen as highly influential to doula care access (Peers' Doula Use and Peers' Support of Doula Use, 4.48, 2nd), and community use and support for doula care was also seen as a important to facilitating doula care access (Diverse Communities Embracing the Role of Doulas for their Populations, 4.37, 6th; Families and Communities Supportive of Doula Care, 4.26, 11th). Only one Families & Communities level barrier appeared in the top 20 list of barriers and it related to partner support (Lack of Understanding of Doulas or Support for Doula Use from Partner, 3.91, 22nd). Partners and husbands held particular interest for focus group panelists in Round 1; all three groups had discussed the expected resistance to the presence of a doula by their partners. However, Round 2 data indicate that the support husbands and partners receive during labor may be more influential of a facilitator than the potential for their lack of understanding or support to be a barrier (Doulas Support Husbands/Partners, 4.41, 5th). Peer and community support of doula use, and the diverse communities that have embraced the role of doula for their families also were rated as very influential facilitators to doula care access.

Two system levels had fewer facilitators than barriers to appear in the top 20 tables: Mother and Gestational Parents level and Doulas level. The single Parents factor addresses a need for doula support. When analyzing access to care, need is a critical component to consider because doula care need can be assessed by the individual mother or gestational parent, but it is also described by administrative rules as a mother or gestational parent's characteristics such as age, housing status, race, or ethnicity. Understanding and establishing the need for care is one of the first steps of the process

and falls within the dimension of access Ability to Reach. Round 2 results suggest that the survey panelists thought there is enough need for doula support and that this need facilitates access to doula care.

The most influential Doula level facilitators include *The Quality of Doula Professionalism* (4.17, 15th) which influences Appropriateness through both care quality and ongoing coordination of care competency training and assessment. The second most influential Doula level facilitator is *Leadership in the Doula Community* (4.23, 13th) which influenced advocacy and collaboration efforts at the community level but also the Healthcare System and Policy & Legislative levels of the system. As facilitators, the efforts of doula leadership and doula professionalism are considered strongly influential to doula care access. In Figure 4.2, the relative influence of these factors compared to other system levels is less, given the highest rank for the Doulas system level is the 13th highest mean, but it was still overall quite important to doula care access and the most important Doulas level facilitators were related to care quality, professionalism, and continual coordination and advocacy efforts of local leaders.

The Healthcare System level has the most facilitators overall, and it has five facilitators in the top 20 list in Table 4.11; both Organizations and Healthcare System have the largest number of top 20 facilitators, with five facilitators each. Some facilitators were directly or indirectly related to knowledge. Given the nature of knowledge-related barriers and the influence of obstetrical providers on doula care access, *Efforts to Educate Healthcare Provider on Doula Care* (4.23, 13th) was expected to be rated as influential, however, other Healthcare System level barriers were considered as more influential to

doula care access. The Healthcare System facilitator with the highest mean was *Impact of Doulas* (4.43, 4th), and a related facilitator about the amount of research on doula outcomes (*There is Enough Quality and Timely Research that Demonstrates Doula Effectiveness*, 4.23, 12th) are considered important facilitators to doula care access by panelists in Round 2 and utilizing quality research that demonstrates effective; many of the knowledge-related barriers can potentially be supported with quality, outcomes-based doula research.

Other Healthcare System level factors were related to existing or newly created doula organizations. *CCO-Initiated or Insurance-Initiated Doula Programs* (4.35, 7th and *The Presence of Low-Cost or No-Cost Doula Programs* (4.23, 13th) were factors specifically related to the direct provision of doula services to Medicaid-enrolled or Medicaid-eligible families. Low-cost and no-cost programs are also potentially tied to the theme of financing of doulas, which was an important barrier established in Table 4.9. Finally, *New Billing Pathway Makes It Easier for Doulas to Bill for Services* (4.21, 14th) is an important facilitator to acknowledge given barriers in Table 4.9 related to CCO buyin and the complexity of billing for services.

Given the frequency of barriers related to financing and cost of doula care from Table 4.9, Healthcare System level facilitators influencing doula reimbursement have the potential to increase access to doula care. However, other financing and cost related facilitators, such as *Doula Services are Reimbursable through Legislation and Administrative Policies* (4.10, 18th) and *Recent Increase in Payment Rate* (3.95, 21st) did not achieve a mean score that had them ranked in the top 20 facilitators. The intention

behind the legislative and administrative policies around financing doula services through Medicaid was to increase access to doulas for Medicaid enrolled families, so access factors that influence access more than the financing of doula services through Medicaid are worth exploring.

The next most frequently occurring facilitators occurred within the Organizations, with five total facilitators. Two of the facilitators are related to advocacy: The Presence of Doula Organizations and Their Efforts to Increase Access to Doula Care (4.32, 8th), which addresses the organizational efforts to adopt as well as implement the policy with doulas in Oregon so that doulas can be paid and enrolled in the program, and *Persistent* Advocacy Efforts to Increase Access to Doula Care (4.15, 16th) which addressed the continual need for advocacy to change the initial policies once the legislative and administrative rules were created. The remaining facilitators for Organizations involve community-based organizations, hospitals, and birth centers. Supportive Social and Community-Based Organizations (4.29, 9th), Hospital and Birth Center Support of Doula Care (4.27, 10th, and Hospital and Birth Center Promotion of Doula Care (4.23, 13th) are organizations that generally do not employ doulas but work with the mothers and gestating parents. Obstetrical providers have very close proximity to hospitals and birth centers and as a system level factor have a lot of influence on access to doula care. Similarly, community-based organizations, hospitals, and birth centers have close proximity to mothers and gestational parents. Policies, practices, and support from these organizations are positioned to have substantial influence on access to doula care.

Barriers by Dimension of Access in Round 2

Figure 4.3 is a heat map of every barrier by dimension of access and Figure 4.4 is a heat map of all the facilitators by dimension of access. In this research, access is conceptualized as occurring within a process of identifying healthcare needs, seeking healthcare, and utilizing healthcare in which supply side and demand side components come together and interact in ways that can lead to healthcare quality and desired healthcare outcomes. Figures 4.3 and 4.4 help to visualize the collected barriers and facilitators along this process of engagement between the supply side and demand side of access. As in Figure 4.2, the color intensity indicates how close a factor's mean is to a score of 5.0, or Very Important, on the 5-point Likert scale. A deeper shade of red or green indicating a mean closer to 5.0 and a shade closer to grey being closer to 3.0.

Figure 4.3: Round 2 Heat Map of the Average Score for Barriers, by Dimension of Access



The first most notable observation with Figure 4.3 is the number of barriers in each dimension of access. Combined, Ability to Reach (9 barriers) and Availability, Acceptability & Affordability (16 barriers) have the largest number of overall barriers for their respective sides and Availability, Acceptability & Affordability have the largest number of deeply shaded barriers but not necessarily the deepest shaded barriers. Both Ability to Reach and Availability, Acceptability & Affordability were each the combination of two separate concepts in Levesque et al.'s (2013) original model, which may account for some the larger number in Availability, Acceptability & Affordability, but given the number of factors in Appropriateness, which in this study has more barriers

than Approachability, the attribution of size to the combination of conceptualizations likely does not contribute to meaningful differences. When considering the spread of both barriers and facilitators in Figures 4.2 and 4.3, the spread for the demand side barriers is very concentrated into two of the three dimensions of access, the Ability to Approach and the Ability to Reach. For the barriers on the demand side, Ability to Approach has eight barriers, two of which are prominently influential, while the rest achieved relatively low mean scores and are not considered as influential to access. Ability to Reach has nine barriers, one is prominently influential, another is moderately influential, and the remaining seven achieved a lower mean score. Ability to Engage only has two factors, and they achieved some of the most relatively low scores in the study. For the supply side, Approachability had six barriers with one prominently influential to access; Availability, Acceptability & Affordability had 16 barriers with six prominently influential and four moderately influential; and Appropriateness has nine total barriers with one highly influential barrier.

When determining the nature of barrier to doula care access, it appears that two of the most influential barriers are in Ability to Approach, one is in Appropriateness, and six to ten are in Availability, Acceptability & Affordability. Cumulatively, however, Availability, Acceptability & Affordability have a larger number of overall barriers, and have a larger number of important barriers, making it a critical access point for obtaining and utilizing doulas. A closer look at what barriers seem to be most influential on the demand side for Ability to Approach and Ability to Reach, and Supply side for

Availability, Acceptability & Affordability, would provide a new way to look at barriers to access for doula care.

Table 4.12 lists the barriers by dimension of access, which is in the leftmost column. The table starts with all three demand side dimensions of access and then moves to the three supply side dimensions of access. The barrier names are listed in the middle. Factors within each dimension of access are organized by system level and then by the mean achieved. The rank by mean has also been included to aid in analysis of Figure 4.2. Unlike Tables 4.10 and 4.11, which include only the top 20 barriers and facilitators, all barriers and facilitators are included in Tables 4.12 and 4.13.

Table 4.12: Barriers by Dimension of Access in Round 2

Access Dimension	Barrier	Mean	Rank by Mean	System Level
	Knowledge of Doulas	4.68	1	Parents
	Inadequate Understanding of the Role of a Doula	4.65	2	Parents
	Negative or Incorrect Perceptions of the Doula Role	3.65	27	Parents
Ability to Approach	Worthiness of Personalized Care During Birth	3.45	30	Parents
11	Perceptions and Expectations of Women Who Use Doulas	3.26	31	Parents
	Women Already Have Enough Support	3.05	34	Parents
	Bad Doula Experiences	2.85	35	Families & Communities
	Awareness of Doula Coverage through Medicaid	4.59	3	Parents
	Lack of Community Awareness of Doulas	4.39	8	Families & Communities
Ability to Reach	The Process of Finding and Hiring a Doula is Difficult	4.22	10	Parents
	Women Do Not Know How to Get a Doula	4.13	15	Parents
	Lack of Support in Choosing to Use a Doula	4.09	16	Families & Communities
	Cultural Discrepancy with Doula Role	3.91	21	Families & Communities

Access Dimension	Barrier	Mean	Rank by Mean	System Level
	Lack of Understanding of Doulas or Support for Doula Use from Partner	3.91	21	Families & Communities
	Societal Value of Doulas	3.91	21	Families & Communities
	Social Factors, such as religion, LGBTQ Status, languages or immigration status, socioeconomic status, or geography that would influence access to doula care.	3.79	23	Parents
	Population characteristics, such as age, sex, health status, race, and ethnicity	3.74	25	Parents
Ability to Engage	Doulas Provide an Additional Burden on Women	3.24	32	Parents
Ability to Engage	Conflicting Ideas about Birth between Mom and Doula	3.09	33	Parents
	Obstetrical Providers' Lack of Knowledge About How to Refer to a Doula	4.65	2	Healthcare Providers
	Lack of Provider Encouragement or Promotion of Doulas	4.52	5	Healthcare Providers
	Acceptance of Doulas by Care Providers	4.32	9	Healthcare Providers
Approachability	Lack of Direct Outreach	4.18	12	Doulas
	Low Reimbursement Rates for Obstetrical Providers/ Demands Placed on Obstetrical Providers	4.05	19	Healthcare System
	Lack of Content about Doulas in Childbirth Education	3.91	21	Healthcare System
	Out-Of-Pocket Cost of Doulas	4.52	5	Doulas
	Lack of Knowledge about Doula Coverage through Medicaid	4.52	5	Healthcare Providers
	Low Reimbursement Rate for Doulas	4.52	5	Healthcare System
	Lack of support from CCOs	4.47	6	Healthcare System
Availability,	Use of Inappropriate Information to Set Reimbursement Rate	4.47	6	Policy & Legislative
Acceptability, & Affordability	Difficulty in Training Diverse Doulas	4.40	7	Doulas
	Lack of Private Insurance Coverage for Doulas	4.19	11	Healthcare System
	Communication to CCOs About Expectations and Processes around Promoting and Paying Doulas	4.18	12	Healthcare System
	Billing for Doula Services is Complex and Incomplete	4.16	13	Healthcare System
	Lack of a Diverse Doula Workforce	4.14	14	Doulas

Access Dimension	Barrier	Mean	Rank by Mean	System Level
	Current Structure of the Healthcare System	3.81	22	Healthcare System
	Initial Reliance on OB Providers to Bill for Doula Services	3.75	24	Policy & Legislative
	Doula Registration Process is Cumbersome	3.74	25	Healthcare System
	Insufficient Workforce of Qualified Doulas	3.68	26	Doulas
	Low-Quality Doula Training Organizations	3.53	29	Organizations
	Criteria to Qualify for OHP are Too Restrictive	2.85	35	Healthcare System
	L & D Nurses' Understanding and Acceptance of Doula Role	4.55	4	Healthcare Providers
	Inadequate Representation of Stakeholders in Legislative and Administrative Rulemaking Process	4.07	17	Policy & Legislative
	Loss of Key Personnel at OHA and the Institutional Memory That Comes With It	4.06	18	Healthcare System
A	Lack of System-Level Communication	4.06	18	Healthcare System
Appropriateness	Lack of Doula Input on Administrative Rulemaking Process	4.06	18	Policy & Legislative
	Lack of Dedicated Administrative Support from OHA	3.94	20	Healthcare System
	Lack of Implementation Plan	3.75	24	Policy & Legislative
	Doula Services May be Taken for Granted	3.65	27	Doulas
	Overcoming Negative Repercussions from Unprofessional Doulas	3.59	28	Doulas

One of the first notable observations from Figure 4.2 was the spread of barrier impact across the demand side; only the Ability to Approach, which had two deeply shaded barriers, and the Ability to Reach had three notable barriers indicating important influence on access to doula care. The highest and second highest means for barriers in Round 2 occurred in Ability to Approach, and both were related to fundamental knowledge of doulas: *Knowledge of Doulas* (Parents, 4.68, 1st) and *Inadequate Understanding of the Role of Doula* (Parents, 4.65, 2nd). In Ability to Reach, three of the

barriers achieved mean scores in the top 20 list of barriers: *Awareness of Doula Coverage through Medicaid* (Parents, 4.59, 3rd), *Lack of Community Awareness of Doulas* (Families & Communities, 4.39, 8th), and *The Process for Finding and Hiring a Doula is Difficult* (Parents, 4.22, 10th). The Ability to Engage and Ability to Reach barriers that achieved high means, within the top 20 barriers in Table 4.10, were all related to the first theme of knowledge about doulas. Knowledge of doulas is the most prominent theme for doula access from the demand side of the model. Mothers and gestational parents do not know what doulas are or enough about them to make an informed choice and their families and communities also do not know what doulas are or do.

The second observation was the spread of the supply side barriers across all three dimensions of access, with two deeply shaded barriers for Approachability, six for Availability, Acceptability & Affordability, and one for Appropriateness. The two notable barriers to Approachability were *Obstetrical Providers' Lack of Knowledge About How to Refer to a Doula* (Healthcare Providers, 4.65 2nd) and *Lack of Provider Encouragement or Promotion of Doulas* (Healthcare Providers, 4.52, 5th). In the Approachability dimension of access, Healthcare Providers have a pivotal role in influencing access to doulas and the prominent barriers for this dimension of access, similar to that of the Ability to Engage dimension, are knowledge of doulas and lack of information about doulas. Obstetrical providers who may understand and value doula care do not know how to refer their mothers or gestational parents to doulas, therefore parents are not receiving referrals; similarly, obstetrical providers are not talking to their patients about the value and benefit of doulas and therefore parents are not learning about

them. As a result, doulas are not directly connecting with mothers or gestational parents, which would provide information about doula care and how to reach doulas. The one notable barrier for the Appropriateness dimension was *Labor and Delivery Nurses' Understanding and Acceptance of Doula Role* (Healthcare Providers, 4.55, 4th). This is another barrier related to understanding and where knowledge or relationship building would result in a reduction of the barrier.

Availability, Acceptability & Affordability had six notable barriers visible in 4.6, as well as the most barriers of any access dimension. Multiple thematic findings occur in Availability, Acceptability & Affordability that act as barriers to doula care access. As shown in Table 4.12, 10 of the barriers for Availability, Acceptability & Affordability are also on the list of the top 20 barriers in Table 4.10. Of the top 20 barriers for Availability, Acceptability & Affordability, one is related to Healthcare Providers, one is related to the Policy & Legislative system level, three are related to the Doula system level, and six are related to the Healthcare System level.

The Healthcare Provider level barrier is *Lack of Knowledge about Doula*Coverage through Medicaid (4.52, 5th) and the Policy & Legislative barrier is Use of

Inappropriate Information to Set Reimbursement Rate (4.47, 6th), represent a lack of

knowledge of doulas from a healthcare system perspective; healthcare providers are

unaware of the system resources available to their patients and the healthcare system is

unaware of the way in which doulas operate and practice to create appropriate

reimbursement rates that had to be later adjusted. Of the three Doula level barriers, two of
them were directly related to the doula workforce and their ability to provide culturally-

and linguistically- appropriate care: *Difficulty in Training Diverse Doulas* (4.40, 7th) and *Lack of a Diverse Doula Workforce* (4.14, 14th). Finance related barriers also became an important theme and occurred in two system levels: *Out-of-Pocket Cost of Doulas* (4.52, 5th) at the Doula level and *Low Reimbursement rates for Doulas* (4.52, 5th), *Lack of Private Insurance Coverage for Doulas*, (4.19, 11th), *and Billing for Doula Services is Complex and Incomplete* (4.16, 13th) at the Healthcare System level. Finally, CCO and OHA buy-in was another theme found in Availability, Acceptability, and Affordability at the Healthcare System level: *Lack of Support from CCOs* (4.47, 6th) and *Communications to CCOs About Expectations and Processes around Promoting and Paying Doulas* (4.18, 12th). These four thematic findings consist of the barriers in Availability, Acceptability & Affordability.

Decision-making is not entirely linear; however, access is conceptualized in this dissertation as a process of deciding, finding, obtaining, and engaging in healthcare services. Both the Ability to Reach and Availability, Acceptability & Affordability represent the steps in access after a mother or gestational parent decides that doula care is a fit for their healthcare needs and they engage in actions and utilize resources to find and secure doula services. Knowledge of Medicaid coverage of doula services reduces the perceived affordability of doula services and represents another knowledge-related barrier to doula care access. CCO support for doula services through their engagement with the THW program influences the number of doulas available to serve their families. The rate of payment and ease of billing for services influences the number of doulas who are willing to enroll in the THW Program, and outside of Medicaid, the cost of doula

care, and lack of insurance coverage through private insurance, influence the ability for families in general to pay for doula services and therefore the availability of doulas for Medicaid-enrolled families. Overall, the healthcare system and Availability, Acceptability & Affordability have many influential barriers to doula care access.

Facilitators by Dimension of Access in Round 2

Figure 4.4 is a heat map of the facilitators from Round 2 by access of dimension. The heat map in Figure 4.4 has a slightly different shape than the barrier heat map in Figure 4.3. The access dimensions with the most barriers were Ability to Reach and Availability, Acceptability & Affordability, but the access dimensions with the most overall facilitators are Ability to Approach and Approachability. The spread of influential facilitators across all three access dimensions is much more even along the demand side when compared to the supply side in Figure 4.4 or the barriers in the Demand side, when compared to Figure 4.3, and the spread of influential facilitators across the supply side in Figure 4.4 is slightly more concentrated in the Approachability dimension, with a notable barrier in the Appropriateness dimension. As a whole, Ability to Reach has the strongest demand side facilitators and Approachability seems to have the strongest supply side facilitators. As in Figure 4.3 of barriers by dimension of access, more factors appear on the Supply side than the demand side. The number of facilitators tapers down as one moves across the process of finding, obtaining, and using doula care. The number of facilitators in Approachability (13) is the greatest on the supply side, and Ability to Approach (6) on the demand side. Ability to Reach (3) and Availability, Acceptability &

Affordability (12) each have less than the previous dimensions, and Ability to Engage only has one facilitator, Appropriateness has seven.

Figure 4.4: Round 2 Heat Map of the Average Score for Facilitators, by Dimension of Access

	Demand	Supply	
Ability to Approach			Approachability
Ability to Reach			Availability, Acceptability, & Affordability
Ability to Engage			Appropriateness

The following is a discussion using the heat map in Figure 4.4 to look more closely at the influential facilitators listed in Table 4.13. The spread across facilitators for the demand side in Figure 4.4 shows one strong facilitator for each Ability to Approach, Ability to Reach, and Ability to Engage. Ability to Approach has three somewhat influential barriers and two moderately influential barriers, while all three of the Ability to Reach have strong facilitating influence on doula care access.

The most influential Ability to Approach barrier is *A Need for Doula Support* (Parents, 4.45, 3rd). The remaining three facilitators achieved means of 4.11 or lower and did not appear in the top 20 Facilitators. While not all mothers and gestating parents need doulas, survey participants thought that there was enough of a need for doula support that it was a strong facilitator. The important facilitating effect of families and communities to doula care access is demonstrated by the Ability to Reach facilitators. All three of the Ability to Reach facilitators appeared in the top 20 table in Table 4.10; *Peers' Doula Use and Peers' Support of Doula Use* (Families & Communities, 4.48, 2nd) *Diverse Communities Embracing the Role of Doulas for their Populations* (Families & Communities, 4.37, 6th), and *Families & Communities Supportive of Doula Care*

(Families & Communities, 4.26, 11th). Finally, the Ability to Engage facilitator is *Doulas Support Husbands/Partners* (Families & Communities, 4.41, 5th). When diverse communities embrace the doula role, and when families and communities are supportive of doula use and use doulas, these facilitators strongly support access to doula care and do so throughout each dimension of access.

Table 4.13: Facilitators by Dimension of Access

Access Dimension	Facilitator	Mean	Rank by Mean	System Level
	A Need for Doula Support	4.45	3	Parents
A1 *1244	Autonomy and Agency of Birthing Women	4.10	18	Parents
Ability to Approach	Oregon's Collective Knowledge of Doulas	3.83	26	Families & Communities
	Knowledge of Birth and Needs During Birth	3.76	28	Parents
	Peers' Doula Use and Peers' Support of Doula Use	4.48	2	Families & Communities
	Diverse Communities Embracing the Role of Doulas for their Populations	4.37	6	Families & Communities
Ability to Reach	Families and Communities Supportive of Doula Care	4.26	11	Families & Communities
	Social Factors, such as religion, LGBTQ Status, languages or immigration status, socioeconomic status, or geography that would influence access to doula care.	3.17	31	Parents
	Population characteristics, such as age, sex, health status, race, and ethnicity	3.06	32	Parents
Ability to Engage	Doulas Support Husbands/Partners	4.41	5	Families & Communities
	Healthcare Providers who Refer Patients to Doulas	4.57	1	Healthcare Providers
Approachability	Healthcare Providers who are Aware of and Promote Doulas	4.48	2	Healthcare Providers
	Supportive Social and Community- Based Organizations	4.29	9	Organizations
	Available Research on Doula Outcomes	4.24	12	Healthcare System

Access Dimension	Facilitator	Mean	Rank by Mean	System Level
	Efforts to Educate Healthcare Providers on Doula Care	4.23	13	Healthcare System
	Hospital and Birth Center Promotion of Doula Care	4.23	13	Organizations
	Childbirth Courses that Incorporate Doulas as Part of the Curriculum	4.10	18	Healthcare System
	Presence of Information about Doulas on the Internet and Social Media	4.05	19	Healthcare System
	Advertisements for Doulas	3.95	21	Organizations
	Medical Culture: Oregon is a Birth- Friendly State	3.89	24	Healthcare System
	The Existence of the Traditional Health Worker Registry Website	3.78	27	Healthcare System
	Doula Self-Promotion and Marketing	3.74	29	Doulas
	The Utility of DoulaMatch to Find Local Doulas	3.25	30	Healthcare System
	CCO-Initiated or Insurance-Initiated Doula Programs	4.35	7	Healthcare System
	The Presence of Doula Organizations and Their Efforts to Increase Access to Care	4.32	8	Organizations
	The Presence of Low-Cost or No-Cost Doula Programs	4.23	13	Healthcare System
	New Billing Pathway Makes It Easier for Doulas to Bill for Services	4.21	14	Healthcare System
	Initial Advocacy Efforts to Introduce Doula Care into Legislation	4.11	17	Policy & Legislative
Availability, Acceptability, &	Doula Services are Reimbursable Through Legislation and Administrative Policies	4.10	18	Policy & Legislative
Affordability	Flexibility of Doulas for Reimbursement for Private Pay Women on Medicaid	3.96	20	Doulas
	Established Doula Groups	3.95	21	Doulas
	Recent Increase in Payment Rate	3.95	21	Healthcare System
	Organizations or Practices or Policies that Incorporate Doulas	3.91	23	Organizations
	Presence of Hospital-Based Doula Programs	3.86	25	Organizations
	Doula Training Organization Diversity	3.74	29	Organizations

Access Dimension	Facilitator	Mean	Rank by Mean	System Level
	Impact of Doulas	4.43	4	Healthcare System
	Hospital and Birth Center Support of Doula Care	4.27	10	Organizations
	Active Leadership in the Doula Community	4.23	13	Doulas
Appropriateness	The Quality of Doula Professionalization	4.17	15	Doulas
	Persistent Advocacy Efforts to Increase Access to Doula	4.15	16	Organizations
	Quality Doula Training and Credentialing Organizations	3.95	21	Organizations
	Supportive Political Environment and Political Actors for the Use of Doulas	3.94	22	Policy & Legislative

The spread of facilitators across the supply side demonstrated the most facilitators as well as the strongest facilitators in Approachability (13). Availability, Acceptability & Affordability (12) had the second largest number of facilitators, but weaker facilitators when compared to Approachability. There was one strong facilitator in Appropriateness and the fewest facilitators on the demand side (7). Six of the facilitators in the Top 20 table in Table 4.10 were found in Approachability; two were on the Healthcare Providers level, two were on the Organizations system level, and two were on the Healthcare System level. All Approachability facilitators were related to the provision of information about doulas to mothers and gestating parents from different system levels. The facilitators receiving the two highest ranks were the two facilitators from Healthcare Providers: *Healthcare Providers who Refer Patients to Doulas* (Healthcare Providers, 4.57, 1st) and *Healthcare Providers who are Aware of and Promote Doulas* (Healthcare Providers (4.48, 2nd). Provider referrals and promotion are critical access points to doulas in the healthcare system. The next two facilitators, at the Organizations system level,

work directly with mothers and gestational parents during pregnancy and can directly communicate about and promote doula care; outside of providers are the institutions and organizations that physicians work with closely or work for directly, hospitals and birth centers. These are Organizations level facilitators that work directly with mothers and gestational parents during pregnancy and can directly communicate about and promote doula care: Supportive Social and Community-Based Organizations (4.29, 9th) and Hospital and Birth Center Promotion of Doula Care (4.23, 13th). Hospitals also employ and can directly influence healthcare providers as well. Finally, the Healthcare System level facilitators for Approachability include *There is Enough Quality and Timely* Research that Demonstrates Doula Effectiveness (4.24, 12th) with Efforts to Educate Healthcare Providers on Doula Care (4.23, 13th). Survey results suggest that there is enough peer reviewed evidence of doula effectiveness that aids in physician education efforts, and physician education efforts are likely to influence the highest ranking facilitators from Round 2 in this study, further emphasizing the important role of obstetrical providers in the facilitation of doula care access.

The next access dimension that appears to have facilitators with a stronger influence on access is Appropriateness. Five of the facilitators for Appropriateness appeared in the top 20 list of facilitators in Table 4.11. Three of the facilitators in Appropriateness influence the direct provision of care; *Impact of Doulas* (Healthcare System, 4.43, 4th), *Hospital and Birth Center Support of Doula Care* (Organizations, 4.27, 10th) and *The Quality of Doula Professionalism* (Doulas, 4.17, 15th). Participants felt that the outcomes associated with doula use are important facilitators, that these

outcomes are important to mothers, gestational parents, and families and that the level of doula professionalism in Oregon facilitates these healthcare outcomes; hospitals and birth centers that are supportive of doulas helping their patients are important facilitators to obtaining these health outcomes. The other two facilitators that achieved means in the top 20 were related to doula leadership and organizational advocacy efforts: *Active*Leadership in the Doula Community (Doulas, 4.23, 13th) and Persistent Advocacy Efforts to Increase Access to Doula Care (Organizations, 4.15, 16th). Similar to The Quality of Doula Professionalism, these two facilitators demonstrate the survey panelists' view that the coordinated efforts for care quality and professional advancement help to sustain the efforts to increase access to doulas.

Finally, the dimension Availability, Acceptability & Affordability had four facilitators from the top 20 list in Table 4.10; these visually do not appear as important because the highest and second highest means for this dimension of access had the seventh and eighth highest means. One of the facilitators for this access dimension is from the Organizations level and three are from the Healthcare System level (*The Presence of Doula Organizations and Their Efforts to Increase Access to Care*, 4.32, 8th). Doula organizations influence Availability, Acceptability & Affordability through their efforts to increase the number of doulas that provide culturally and linguistically appropriate doula care and to help doulas enroll in the THW registry as well as working to reduce the barriers these doulas face in enrollment. Another facilitator that works to increase the number of doulas enrolling in the THW registry is the fourth barrier to Availability, Acceptability & Affordability: *New Billing Pathway Makes It Easier for*

Doulas to Bill for Services (Healthcare System, 4.21, 14th). The remaining Healthcare System facilitators involve the presence of organizations that connect mothers and gestational parents to no- or low-cost doula services: *CCO-Initiated or Insurance-Initiated Doula Programs* (4.35) with the seventh highest mean and *The Presence of Low-Cost or No-Cost Doula Programs* (4.23, 13th). At the time of data collection, these programs were very new or limited in scope to who they served, but they do have an important role in facilitating access to care.

Round 2 Summary

Overall, the results from Round 2 provide a picture of what supports and constrains access to doula care in Oregon. The data collected in Round 2 were analyzed first by system level and then by dimension of access, across the process of access that leads to finding, obtaining, and utilizing doula care. From an assessment of health care system levels, it became clear that Healthcare Providers are a critical access point for doula care both as barriers and facilitators. Knowledge-related Healthcare Provider barriers about how to make referrals to doulas and their knowledge of Medicaid coverage for doula services were seen as the most influential barriers, and healthcare providers who promote doula use and write doula referrals are the most influential facilitators to doula care access. Families & Communities as a system level were also highly influential to facilitating doula care, all five of the Families & Communities facilitators were in the top 20 list of barriers, Healthcare System had the largest number of barriers and facilitators of all system levels and the Parents system level also had a key number of prominently barriers.

Analyzing the system levels also highlighted several themes related to access to doula care. Knowledge of doula was identified as the most important barrier theme. Knowledge related to doulas including what they do, how their services are organized and reimbursed, and how to find doula care were directly related to eight of the top 20 barriers and indirectly related to three of the top 20 barriers. Knowledge related barriers spanned across system levels, but the knowledge barriers with the most impact were related to obstetrical provider, mothers, and gestational parent knowledge about doulas and doula coverage through Medicaid. Similarly, five of the most influential facilitators to doula care access were related to informing obstetrical providers, mothers, and gestational parents about doulas. Many of the facilitators were also related to knowledge of doulas, the highest rated facilitators for doula care access being provider encouragement and referral of doulas to patients. Efforts to educate healthcare providers on doulas, and organizational efforts to promote and support doula use for their patients, were also seen as important to doula care access.

The next most influential theme influencing doula care access is related to the cost and financing of doula care. After knowledge related barriers, *Low Reimbursement Rate for Doulas* (Healthcare System, 4.52, 5th) was the barrier achieving the next highest mean and five of the top 20 barriers related to financing and billing for doula care. Factors directly related to financing and facilitating doula care were mostly lacking. One facilitator was related to financing through Medicaid, which referenced the new billing pathway that allowed doulas to bill directly instead of through obstetrical providers, and the other finance related facilitators related to CCO-initiated programs, hospital-based

doula programs, or other community programs that were in existence before the THW program that directly serve Medicaid-eligible families. It is notable that the facilitator that identified the policy responsible for doulas' reimbursement through Medicaid through legislative and administrative policies did not rank in the top 20 facilitators, nor did the recent payment increase at the time of data collection. The 2022 payment increase to \$1500 would likely have been chosen as a very influential facilitator to doula care access. In this instance, the financing barriers outweigh the financing facilitators.

Four other important themes emerged when looking at system levels. The Families & Community system level held some strong barriers and facilitators. The first theme is the facilitating nature of peer doula use, family and community knowledge and support of doula use, and the role of culturally and linguistically appropriate doulas. The second theme, seen with barriers identified in Round 2, involve the recruitment and training of a doula workforce that could serve culturally and linguistically diverse families. The barriers at the Families & Community system level were not as influential compared to the facilitators at the same system level; these themes become clearer when analyzing the dimension of access below. The third theme is CCO engagement with doulas and THWs. CCO-initiated doula programs were considered high ranking facilitators while CCO buy-in to incorporating doulas into their offerings and communication about expectations for enrolling and paying doulas were important barriers to doula care access. Finally, doula professional efforts were a fourth theme, both when addressing the quality of care provided to mothers and gestational parents as well

as the organized efforts and doula leadership to advocate for policy and healthcare system changes to increase access to doula care.

After looking at themes from the system levels, themes across the dimensions of access were analyzed. The two heat maps in Figures 4.3 and 4.4 had some similar characteristics between barriers and facilitators and some that were different. The characteristics that were the same were the approximate number of barriers on the supply and demand sides of the model. Six of the top 20 barriers were on the demand side and five of the top 20 facilitators were on the demand side, so most influential factors were found on the supply side. Another similarity was that the Ability to Engage and Appropriateness factors had the least number of factors, albeit fewer on the barrier side and barriers in these access dimensions were less influential than facilitators. The shape of both the supply and demand side, however, looked different. Facilitators had the visual effect of tapering off, reducing in number as one moved from the top to the bottom of the map. Barriers were concentrated in the middle, both in Ability to Reach and Availability, Acceptability & Affordability. The color intensities also reflected a generally stronger facilitating effect for Ability to Approach and Approachability with a weaker Availability, Acceptability & Affordability facilitating effect. Half (10) of the top 20 barriers were in Availability, Acceptability, and Affordability but only four of the top 20 facilitators were in the same dimension.

The themes from the system level were also found in the dimensions of access, but with slightly new context. Knowledge was still a prominent theme, but it occupied primarily demand side barriers and Approachability, with one knowledge-related barrier

in the remaining system levels (Availability, Acceptability & Affordability and Appropriateness). Of the six demand side barriers in Figure 4.3, five were directly related to knowledge of doula care and of Medicaid coverage of doula services. Ability to Approach barriers were related to knowledge of what doulas are and having enough information to decide about the value of doula care. The Ability to Reach barriers were around knowledge of Medicaid coverage of doulas and community awareness of doulas. Similarly, the influential Approachability barriers were related to healthcare providers' lack of or inability to provide information to mothers and gestational parents and doulas' lack of or inability to provide direct outreach to mothers and gestational parents. Two of the Availability, Acceptability & Affordability barriers are also related to knowledge, one was about lack of knowledge of doula coverage through Medicaid and the other was the use of inappropriate information to set the doula reimbursement rate at the onset of the policy. On the other hand, most of the knowledge-related facilitators are concentrated in Approachability. All six of the facilitators in Approachability that appeared in the top 20 list were related to the ways in which mothers and gestational parents get information about doulas, from healthcare provider or direct referrals, to hospitals and communitybased organizations. Another layer of information, which is the availability of doula research and efforts to educate healthcare providers on doula care, was seen as influential and found in Approachability. Knowledge-related barriers seem to spread across multiple access dimensions while the facilitators are concentrated primarily in Approachability.

Another theme that emerged across the demand side, indirectly influencing knowledge of doulas, is the role of family and community support in mothers or

gestational parents choosing to use doulas. Peer use and support for doula use, family and community support for doula care, and diverse communities that embrace the role of doula were influential demand side facilitators in Ability to Reach. The one Ability to Approach facilitator in the top 20 related to a mother or gestational parent's need for doula care and the one Ability to Engage facilitator in the top 20 related to the support husbands and partners receive with doula care provision. Survey panelists and focus group participants agreed that there is a need for doula care from mothers and gestational parents and that this need is important to influencing doula care access. They also agree that peers, families, and communities who use and provide support for doulas, and the nature of support for husbands and partners, facilitate access to doula care.

Another important point of analysis for access dimensions is the accumulation of a variety of Availability, Acceptability & Affordability barriers. Ten of the top 20 barriers were in Availability, Acceptability & Affordability, so half of the top barriers were in this access dimension. For context, Approachability had the largest number of facilitators with six top 20 facilitators. The barriers in this dimension are multilayered as well, but mostly related to a sustainable doula workforce, both recruiting and retaining enough qualified doulas, especially diverse doulas who can provide culturally and linguistically appropriate care. Four of the barriers relate to the cost and financing of doulas, reimbursement, insurance, and the process for billing for services. Two of the barriers related to training and recruiting enough doulas from diverse communities, and two of the barriers related to CCOs' engagement with the THW program, and their responsibilities for, and ability to, promote doulas to their families.

Doula leadership and organizational efforts to promote access to doula care was also an important facilitating theme. The primary Availability, Acceptability & Affordability facilitators that attained a top 20 mean acknowledged the importance of doula organizations in Oregon, existing programs that serve Medicaid-eligible families, and CCO support through CCO-initiated doula programs. The Appropriateness top 20 facilitators also highlighted the professionalism of doulas in Oregon for providing quality doula care and their organizational efforts to advocate for system and policy changes, and the individual leaders in the doula community who took on activism and organizing roles. The impact that doulas have on health outcomes was also seen as important to access.

A final theme was the lack of Ability to Engage and Appropriateness barriers when compared to other access dimensions. None of the ability to Engage barriers appeared in the top 20 or achieved a mean score above 4.0. One of the Appropriateness barriers achieved a top 20 rank, which was related to labor and delivery nurses' knowledge and acceptance of doula care, and knowledge has already been identified as a key barrier across all dimensions. Therefore, the existing and newly created programs that provide doula support to Medicaid-eligible families, the quality of doula professionalism and active leadership of the doula community, and the health outcomes that result from doula care are some of the important facilitating themes to doula care in Oregon.

The dimensions of access begin to illustrate a picture of access to doulas. Survey panelists find that some of the strongest barriers to doula care access are a lack of knowledge or understanding of the doula role for mothers, gestational parents, and

providers and that this lack of knowledge is seen at multiple system levels and across the process of seeking, finding, obtaining, and utilizing doula care. Mothers and gestational parents have a need for doula care, doula care outcomes are important, and doula care is also valuable to their partners. Overall, support for doula care use from families, communities, partners, and healthcare providers through information or emotional support facilitate access to doula care. Approachability, and the ability to get information to mothers and gestational parents from the supply side, is the strongest overall facilitating access dimension but Availability, Acceptability & Affordability is the dimension with the strongest overall barrier influence. In particular, Availability, Acceptability & Affordability barriers are related to the training and recruiting of doulas who can provide culturally and linguistically appropriate care to Medicaid-enrolled families and retaining these doulas through a living wage and easier billing structures. Local doula professional organization and active leadership is facilitating access through the individual provision of quality care as well as efforts to persistently advocate for doula care access, but CCO engagement and buy-in to the program is a major barrier to doula care.

Round 3: Choosing the Top Five Barriers and Facilitators

In Round 3, 21 of the 23 expert panel survey participants from Round 2 participated in Round 3. Participants were presented with tables that had the same information as presented in Tables 4.10 and 4.11; there was a table each for the top 20 barriers and the top 20 facilitators including their mean scores, and separate tables for each of the system levels for remaining barriers or facilitators. Breaking the tables up by

system level allowed for ease of review by survey panelists looking at large numbers of factors in one sitting. Respondents were asked to review each table's information and then choose five of the barriers and five of the facilitators that they thought were most influential to doula care access. Participants were not asked to rank the barriers in order of importance, only to choose their top five from both lists of factors. For the five barriers, respondents were prompted with an open text field to list the solutions to their top five barriers as well. Tables 4.14 and 4.19 list all the barriers collected from participants.

Twenty-one respondents submitted answers for Round 3. Twenty-seven of the barriers in Round 2 moved to Round 3 and 22 facilitators moved from Round 2 to Round 3. The tables are organized by the percentage of respondents who chose a particular factor in their top five factors. The name of the barrier is in the left column, next is the number of responses, the percentage of responses this represents among survey panelists, and the rank that each factor achieved. The system level and access dimension are also included in each table. In the following discussion, when a specific facilitator is being discussed, the percentage of respondents is listed, and the number of responses follows in parentheses.

Round 3 Barriers and Facilitators by System Level

The discussion of factors begins with the heat maps in Figures 4.5, 4.6, and 4.7. The heat maps for Round 3 are similar to the heat maps for Round 2 because they give a broad system view of the barriers and facilitators in one graphic image and the color intensity indicates how close a factor is to the top-ranking facilitator. Since the unit of

analysis in Round 2 was mean scores from a scale from 1 to 5 and the unit of analysis in Round 3 was percentage of respondents who chose a factor, comparison of the two system levels was limited but the graphic charts aid in determining the possible shifts in priorities. Strength or intensity of a factor's color indicates how frequently a factor appeared on a participant's top five list for both barriers and facilitators. The more intense the color, the higher the frequency. Figure 4.5 is a heat map of the factors organized by system level, Figure 4.6 is a heat map of barriers organized by dimension of access, and Figure 4.7 is a heat map of facilitators organized by dimension of access. Additionally, enlarged heat maps can be found in Appendix I.

Consensus in Round 3 was determined through the frequencies. Items occurring more frequently on top five lists obtained a higher degree of consensus. Consensus in this study was also obtained by the themes among related topics; the more frequently a thematic topic occurred, the more consensus existed for that topic. Items occurring on only one or two top five lists may not have had general consensus but they may have fit into an overall theme of influence and have their own analytical considerations. Figure 4.5 shows all barriers and facilitators across each of the system levels, the color intensity for each factor indicating how close to the highest percentage of responses achieved for a factor. The shape of Figure 4.5 looks fairly similar to Figure 4.2 from Round 2, and the spread of both barriers and facilitators also looks similar to Figure 4.2 from Round 2. In Round 2, Figure 4.2, The Healthcare System level had the largest number of barriers (13) and facilitators (12), and the Parents level had an equal number of barriers (8) and

facilitators (5). The next system levels with large numbers of barriers were the Parents level and the Healthcare Provider level, with five barriers each. The Healthcare Provider level is the only system level that retained all its barriers or facilitators from Round 2 to Round 3.

Figure 4.5: Round 3 Heat Map of the Percentage of Respondent-Identified Top Barriers and Facilitators, by System Level

	Barriers	Facilitators
Parents		
Families & Communities		
Doulas		
Healthcare Providers		
Organizations		
Healthcare System		
Policy & Legislative		

The top two barrier values achieved were 62% (n=13) of votes and 52% (n=11) of votes. Both of the highest values for facilitators achieved 81% of votes (n=17) and 67% of votes (n=67%). There was far more agreement on the two highest facilitating factors than there was for the most frequently reported barriers, emphasizing these facilitators as influential to doula care access.

Overall, there are a large number of similarities between Figures 4.1 and 4.4; however, there are a few differences. The difference between Figures 4.1 and 4.4 is the shifting prominence of barriers and facilitators. The number of barriers for the Healthcare Providers level stayed the same but the color intensity, and therefore influence of, Healthcare Providers barriers decreased relative to other factors, however the importance increased for Healthcare Provider level facilitators. Healthcare providers as a system level are still highly influential as both barriers and facilitators, but they are the strongest

facilitating system level found in this study. All other system levels decreased in number of factors and the singular Organizations barrier did not make it to Round 3. The intensity of the influential Doulas system level barriers increased and Parents and Healthcare System level barriers that had highly ranking factors in Round 2 stayed the same but were reduced in number by one each (from 3 to 2 for Parents and from 2 to 1 for Healthcare System). In Round 3, participants emphasized the role of doulas, and doula organization and advocacy efforts, more than they did in Round 3. The highest-ranking doula factor, which is related to financing of doulas, remained prominent. All Policy & Legislative barriers in Round 3 achieved only 5% (n=1) vote, as a system level it has the weakest influence on access to doula care.

Some system level shifts were observed from Rounds 2 to 3, but overall, the shape of the heat map (representing the number of barriers and facilitators for each system level) remained the same. There were 12 prominent barriers across five system levels and nine prominent facilitators across four system levels in Figure 4.1. In Figure 4.4 there are seven prominent barriers across four system levels and two very prominent facilitators, both at the Healthcare Provider level, and five moderately prominent facilitators at three other system levels. Refinement of barriers and facilitators was expected moving from Round 2 to Round 3, and in this case, it emphasized the Healthcare Providers as a facilitating system level and emphasized Parents level barriers as influential to doula care access.

Round 3 Barrier Table

The discussion of Tables 4.14 and 4.15 addresses the barriers and facilitators by system level. As previously discussed, three important barriers were identified at the Parents level in Round 3. In Table 4.14, Parents had five barriers total, and the two identified as most influential to doula care access: Awareness of Doula Coverage through Medicaid appeared most frequently (62%, n=13) and Knowledge of Doulas (52%, n=11) appeared second most frequently. Knowledge remained the most prominent barrier theme in Round 3, but knowledge of doula coverage through Medicaid by mothers or gestational parents was considered more influential than general knowledge of doula care. Other important Parent level barriers appearing in Round 3 include *Inadequate Understanding of the Role of Doula* (33%, n=7), *Women Do Not Know How to Get a* Doula with (14%, n=3) and Negative or Incorrect Perceptions of the Doula Role (10%, n=2). The barrier related to negative or incorrect perceptions had a mean occurring towards the bottom of the ranked list (27th of 35 means) but was a factor that appeared on two of the top five lists in Round 3, emphasizing the importance of appropriate information to mothers and gestating parents. Knowledge related barriers retained their position as the overall most influential barrier to doula care access.

Table 4.14: Top Five Barriers for Round 3

Barrier	Percentage	Rank by %	# of Response s (of 21)	System Level	Access Dimension
Awareness of Doula Coverage through Medicaid	62%	1	13	Parents	Ability to Reach
Out-Of-Pocket Cost of Doulas	52%	2	11	Doulas	Availability, Acceptability, & Affordability

Barrier	Percentage	Rank by %	# of Response s (of 21)	System Level	Access Dimension
Knowledge of Doulas	52%	2	11	Parents	Ability to Approach
Low Reimbursement Rate for Doulas	43%	3	9	Healthcare System	Availability, Acceptability, & Affordability
Lack of Provider Encouragement or Promotion of Doulas	38%	4	8	Healthcare Providers	Approachability
Obstetrical Providers' Lack of Knowledge About How to Refer to a Doula	38%	4	8	Healthcare Providers	Approachability
Inadequate Understanding of the Role of a Doula	33%	5	7	Parents	Ability to Approach
Obstetrical Providers' Lack of Knowledge about Doula Coverage through Medicaid	24%	6	5	Healthcare Providers	Availability, Acceptability, & Affordability
Lack of a Diverse Doula Workforce	19%	7	4	Doulas	Availability, Acceptability, & Affordability
Lack of support from CCOs	19%	7	4	Healthcare System	Availability, Acceptability, & Affordability
Lack of Private Insurance Coverage for Doulas	19%	7	4	Healthcare System	Availability, Acceptability, & Affordability
Lack of Community Awareness of Doulas	14%	8	3	Families & Communitie	Ability to Reach
L & D Nurses' Understanding and Acceptance of Doula Role	14%	8	3	Healthcare Providers	Appropriateness
Billing for Doula Services is Complex and Incomplete	14%	8	3	Healthcare System	Availability, Acceptability, & Affordability
Women Do Not Know How to Get a Doula	14%	8	3	Parents	Ability to Reach
Lack of Support in Choosing to Use a Doula	10%	9	2	Families & Communitie	Ability to Reach

Barrier	Percentage	Rank by %	# of Response s (of 21)	System Level	Access Dimension
Lack of Understanding of Doulas or Support for Doula Use from Partner	10%	9	2	Families & Communitie	Ability to Reach
Acceptance of Doulas by Care Providers	10%	9	2	Healthcare Providers	Approachability
Lack of Content about Doulas in Childbirth Education	10%	9	2	Healthcare System	Approachability
Lack of Dedicated Administrative Support from OHA	10%	9	2	Healthcare System	Appropriateness
Communication to CCOs About Expectations and Processes around Promoting and Paying Doulas	10%	9	2	Healthcare System	Availability, Acceptability, & Affordability
Negative or Incorrect Perceptions of the Doula Role	10%	9	2	Parents	Ability to Approach
Lack of Direct Outreach from Doulas	5%	10	1	Doulas	Approachability
Doula Services May be Taken for Granted	5%	10	1	Doulas	Appropriateness
Difficulty in Training Diverse Doulas	5%	10	1	Doulas	Availability, Acceptability, & Affordability
Loss of Key Personnel at OHA and the Institutional Memory that Comes with It	5%	10	1	Healthcare System	Appropriateness
Lack of Doula Input on Administrative Rulemaking Process	5%	10	1	Policy & Legislative	Appropriateness

The next most frequently chosen barrier occurred at the Doula system level and further represents the second most influential barrier theme of finance-related barriers.

Out-Of-Pocket Cost of Doulas (52%, n=11) had the second highest frequency and slightly increased in importance from Round 2 to Round 3. Two of the remaining five doula barriers addressed another critical thematic set of barriers related to the doula workforce, and also increased in importance, Lack of a Diverse Doula Workforce (19%, n=4) and

Difficulty in Training Diverse Doulas (5%, n=1). Two other barriers at the Doula system level also appeared in Round 3 and each occurred once on a top five list: Lack of Direct Outreach from Doulas and Doula Services May be Taken for Granted. Doula Services May be Taken for Granted (3.65) did not achieve a very high mean in Round 2 (27th of 35) but one person placed it on their top five list of barriers. The financing of doula care, as well as the recruiting, retention, and training of a diverse doula workforce, maintained its importance as a barrier theme to doula care access.

Low Reimbursement Rate for Doulas (43%, n=9) was the next most influential barrier to occur; it is the last prominently shaded barrier that appears in Figure 4.5 and was the first of eight Healthcare System barriers to appear in Table 4.13. Another important thematic finding that emerged from the Healthcare System level was the buy-in from the governmental organizations: Lack of Support from CCOs (19%, n=4, 7th) and Communications to CCOs About Expectations and Processes around Promotion and Paying Doulas (10%, n=2, 9th). Other OHA-specific barriers that demonstrate a commitment of resources to successful THW program execution include Lack of Dedicated Administrative Support from OHA (10%, n=2, 9th) and Loss of Key Personnel at OHA and the Institutional Memory that Comes with It (5%, n=1, 10th). The lack of dedicated administrative support from OHA did not appear in the top 20 list (3.94, 20th) but was a barrier that carried over from Round 2 to Round 3, adding some emphasis to the participants' perception of the importance of additional OHA support of doula care access through dedicated resources. Private Insurance Coverage for Doulas (10%, n=2, 9th) and Billing for Doula Services is Complex and Incomplete (n=3; 7th) are additional

barriers that emphasize the finance-related barrier theme; the one related to billing also secondarily addresses the additional resources needed from the OHA and CCOs to support doula care access. Finally, *Lack of Content about Doulas in Childbirth Education* (10%, n=1) was also noted in Round 3, which represents another system level knowledge barrier to doula care access.

The general themes of Healthcare System barriers from Round 2 were also present in Round 3, with the increasing emphasis on barriers related to financing and paying and an increase in the need for OHA and CCO buy-in, with the expectation of more administrative resources for the initial and continual implementation of the THW program. The increased emphasis of OHA administrative support was a new thematic barrier that arose from Round 3. The second new theme that emerged was also related to the initial implementation of the program but addresses the lack of doula involvement in the creation and initial implementation of the program. The single Policy & Legislative system level barrier that appeared in the Round 3 results, *Lack of Doula Input on Administrative Rulemaking Process* (5%, n=1), did not appear in the Round 2 Top 20 list of barriers. In Round 3, participants emphasized the importance of doula involvement in the initial creation and implementation phase of this policy, and how the lack of involvement acted as a barrier to access to doula care for families enrolled in Medicaid.

The fourth System level to appear on Table 4.14 is Healthcare Providers; Healthcare Providers barriers held the second and fourth highest rank in Round 2 and were the second system level to appear on the top 20 list of barriers but decreased in relative significance in Round 3. Healthcare Providers, however, was also the system

level that retained all barriers and facilitators from Round 2 to Round 3. Both of the first two Healthcare Provider barriers achieved the same number of frequencies in Round 3 (38%, n=8): Lack of Provider Encouragement or Promotion of Doulas and Obstetrical Providers' Lack of Knowledge About How to Refer to a Doula. The remaining Healthcare Provider barriers include the following: Obstetrical Providers' Lack of Knowledge about Doula Coverage through Medicaid (24%, n=5), L&D Nurses' Understanding and Acceptance of Doula Role (14%, n=3), and Acceptance of Doulas by Care Providers (10%, n=2). While all the barriers were retained from Round 2, there was a shift in rank of importance. Healthcare Provider level barriers still retained importance across all system levels when considering the balance of barriers and facilitators, but overall fell below the importance of three other system levels for barriers (Parents, Doulas, and Healthcare System). The remaining barriers maintained their ranks relative to Healthcare Provider barriers; because of the number of votes the higher-ranking barriers achieved in Round 3, the influence of Healthcare Provider barriers overall was important but relatively less. Nonetheless, the main theme with Healthcare Provider level barriers was that important barriers include the lack of conversations about doulas or referrals to doulas from obstetrical providers.

Families & Communities was the next system level to appear on Table 4.14, and three barriers from this system level made it to Round 3: *Lack of Community Awareness Doulas* (14%, n=3, 8th), *Lack of Support in Choosing to Use a Doula* (10%, n=2, 9th), and *Lack of Understanding of Doulas or Support for Doula Use from Partner* (3.91, 21st). *Lack of Understanding of Doulas or Support for Doula Use from Partner* (3.91, 21st) did

not appear in the top 20 list of barriers in Round 2 but it did move from Round 2 to Round 3. The general theme of Families & Communities barriers highlights a theme from Rounds 2 and 3 -- knowledge and understanding of doulas is critical to doula care access, but survey panelists in Round 3 emphasized additional Family & Community barriers, further highlighting the way that a lack of community awareness and social support can reduce access to doula care.

Round 3 Facilitator Table

Facilitators (listed in Table 4.15) also were similar from Round 2 to Round 3, and changes that occurred between Round 2 and Round 3 were similar to the changes that occurred with barriers. The two most prominent facilitators seen in Figure 4.4 both fall within the Healthcare Provider system level, and both appeared on more than half of respondents' top five lists: Healthcare Providers who Refer Patients to Doulas (81%, n=17) was the most frequently chosen facilitator and *Healthcare Providers who are* Aware of and Promote Doulas (67%, n=14) was the second most frequently chosen facilitator. These two barriers achieved the highest and second highest means in Round 2 as well. Doula referrals and promotions are the strongest facilitators of doula care access. Furthermore, these facilitators achieved a higher percentage of top five choices, so there is more consensus among survey participants that these are the most influential factors to doula care access. Similarly, the role of the Families & Communities facilitators carried from Round 2 to Round 3. The facilitator *Peer Support and Use of Doulas* (43%, n=9) was the next facilitator to appear in Table 4.15 after the Healthcare Provider facilitators; in Round 2 it shared the second highest ranking mean (4.48) with *Healthcare Providers*

who are Aware of and Promote Doulas, but in Round 3 the consensus shifted it to a lower priority. Two other Families & Communities facilitators appeared in Round 3: *Diverse Communities Embracing the Role of Doulas for their Populations* (29%, n=6) and *Families & Communities Supportive of Doula Care* (5%, n=1). Peer doula use is seen as a particularly influencing facilitator to doula care access, and families and communities supportive of doula care, in particular the communities intended to be served through the THW program, have also maintained an important role in doula access according to survey panelists.

Table 4.15: Top Five Facilitators for Round 3

Facilitator	Percentage	Rank by	# of Responses (of 21)	System Level	Access Dimension
Healthcare Providers who Refer Patients to Doulas	81%	1	17	Healthcare Providers	Approachability
Healthcare Providers who are Aware of and Promote Doulas	67%	2	14	Healthcare Providers	Approachability
Peer Support and Use of Doulas	43%	3	9	Families & Communities	Ability to Reach
CCO-Initiated or Insurance- Initiated Doula Programs	43%	3	9	Healthcare System	Availability, Acceptability, & Affordability
The Presence of Low-Cost or No-Cost Doula Programs	38%	4	8	Healthcare System	Availability, Acceptability, & Affordability
Hospital and Birth Center Promotion of Doula Care	38%	4	8	Organizations	Approachability
Diverse Communities Embracing the Role of Doulas for their Populations	29%	5	6	Families & Communities	Ability to Reach
New Billing Pathway Makes It Easier for Doulas to Bill for Services	24%	6	5	Healthcare System	Availability, Acceptability, & Affordability
Hospital and Birth Center Support of Doula Care	24%	6	5	Organizations	Appropriateness

Facilitator	Percentage	Rank by %	# of Responses (of 21)	System Level	Access Dimension
The Presence of Doula Organizations and Their Efforts to Increase Access to Care	24%	6	5	Organizations	Availability, Acceptability, & Affordability
Efforts to Educate Healthcare Providers on Doula Care	19%	7	4	Healthcare System	Approachability
Supportive Social and Community-Based Organizations	14%	8	3	Organizations	Approachability
Presence of Information about Doulas on the Internet and Social Media	10%	9	2	Healthcare System	Approachability
A Need for Doula Support	10%	9	2	Parents	Ability to Approach
Doula Self-Promotion and Marketing	5%	10	1	Doulas	Approachability
Active Leadership in the Doula Community	5%	10	1	Doulas	Appropriateness
The Quality of Doula Professionalism	5%	10	1	Doulas	Appropriateness
Flexibility of Doulas for Reimbursement for Private Pay Women on Medicaid	5%	10	1	Doulas	Availability, Acceptability, & Affordability
Families and Communities Supportive of Doula Care	5%	10	1	Families & Communities	Ability to Reach
Available Research on Doula Outcomes	5%	10	1	Healthcare System	Approachability
Supportive Political Environment and Political Actors for the Use of Doulas	5%	10	1	Policy & Legislative	Appropriateness
Doula Services are Reimbursable Through Legislation and Administrative Policies	5%	10	1	Policy & Legislative	Availability, Acceptability, & Affordability

The next system level to appear in Table 4.15 is Healthcare System, which had 6 facilitators appear in Round 3. The first two to appear were related to organizations directly serving Medicaid-eligible families: *CCO-Initiated or Insurance-Initiated Doula Programs* (43%, n=9, 3rd) and *The Presence of Low-Cost or No-Cost Doula Programs*

(38%, n=8, 4th) and both increased in importance compared to other barriers occurring in Round 2. The next most influential Healthcare System level facilitator was New Billing Pathway Makes It Easier for Doulas to Bill for Services (24%, n=5, 6th). This factor also increased in relative importance to other facilitating themes, such as doula professionalism and leadership or organizational efforts to support and promote doulas. Given the frequency of finance-related barriers, the importance of facilitators that support the payment of doula services at the Healthcare System level also emphasizes the role that financing doulas plays in access to care. One facilitator that appeared in Round 3 but was not ranked highly in Round 2 was Flexibility of Doulas for Reimbursement for Private Pay Women on Medicaid (Doulas, 5%, n=1), which represents both the willingness for doulas to work for a lower reimbursement than market value as well as access to doulas outside of finding a THW-enrolled doula. Doulas who are flexible with payment are another community resource contributing to doula access. Finally, all three of the final Healthcare System facilitators include a new theme that did not appear in the Round 2 top 20 facilitators: education or access to information about doulas. The three facilitators related to education and information include Efforts to Educate Healthcare Providers on Doula Care (19%, n=4, 7th), Presence of Information about Doulas on the Internet and Social Media (10%, n=2), and Available Research on Doula Outcomes (5%, n=10). Given that the top barriers among all system levels related to knowledge of doulas, but in particular with Parents and Healthcare Providers, healthcare system factors that work to support informing these critical system levels will substantially increase access to doula care.

The next system level to appear in the list of top five facilitators in Table 4.15 is Organizations, which had a total of four facilitators. The first two Organizations level facilitators related to hospital and birth centers, Hospital and Birth Center Promotion of Doula Care (38%, n=8) and Hospital and Birth Center Support of Doula Care (24%, n=5, 6th). One of the Organizations addresses community-based organizational support, Supportive Social and Community-Based Organizations (14%, n=3, 8th). These Organization factors all represent organizations that work closely with mothers and gestational parents and are in a role that can facilitate doula care access. The other Organization level facilitator was The Presence of Doula Organizations and Their Efforts to Increase Access to Care (24%, n=5, 6th). This facilitator, along with other Round 3 facilitators, including Supportive Political Environment and Political Actors for the Use of Doulas (Policy & Legislative, 5%, n=1) and Active Leadership in the Doula Community (Doulas, 5%, n=1) reflect the Round 2 theme of facilitators that the efforts of collective groups of doulas, doula leadership, and partnership with legislators to get political support for doula coverage through Medicaid. One of the facilitators, Supportive Political Environment and Political Actors for the Use of Doulas (3.94, 22nd), was not in the top 20 facilitators in Round 2. In Round 3, the role of political aspect of this doula policy as being enacted into law and the political support it received emerged as an important facilitating factor to doula care access. In the top five barriers list for Round 3 in Table 4.14, a theme emerged for missing roles or key representatives to more easily implement and sustain implementation; the presence or absence of key representative and groups for this topic has an important impact on access to doula care.

After Organizations, the next system level to appear in Table 4.15 is Parents; in Round 3, only one Parent-level barrier facilitator: A Need for Doula Support (10%, n=2). The importance of the need for doula care and the ability to doulas to influence outcomes carried from Round 2 to Round 3. Another system level, *Policy & Legislative*, had two facilitators: Supportive Political Environment and Political Actors for the Use of Doulas (5%, n=1) and Doula Services are Reimbursable Through Legislative and Administrative Policies (5%, n=1). The Oregon Health Authority House Bill 3311 Implementation Committee established that doula services could provide more equitable birth outcomes for families more at risk for disparities in birth related outcomes (Tillman et al., 2012) and two participants saw that this established need facilitated access to doula care. This need for doula services, then, was also perceived by political actors who took action to legislate Medicaid reimbursement for doula care. Finally, one survey panelist said that the fact that doula services are reimbursable through Medicaid had a facilitating influence for doula care access. The policy intent, as stated by House Bill 3650, is that "members enrolled in Medicaid have access to Traditional Health Workers" (HB 3650, 2011). Legislative intent is a very notable, but not the most influential, facilitator to access to doula care in Oregon.

The remaining system level that appeared in Table 4.15 is Doulas; there were four facilitators for the Doulas level and all four occurred once on a top five list (5%, n=1): Doula Self-Promotion and Marketing, Active Leadership in the Doula Community, The Quality of Doula Professionalism, and Flexibility of Doulas for Reimbursement for Private Pay Women on Medicaid. These Doula level facilitators emphasize that panelists

believe that individual doula actions within the community, from offering sliding scales to self-promotion and marketing to mothers and gestational parents, and broader collective doula actions such as upholding high professional standards and active leadership roles within the community, are important facilitators to access to doula care. However, there is more consensus on other facilitating factors to doula care access in Oregon.

Barriers and Facilitators by Dimension of Access in Round 3

Figure 4.6 is a heat map of all the barriers from Round 3 organized by dimension of access. Again, access is conceptualized in this research as occurring within a process of identifying healthcare needs, seeking healthcare, and utilizing healthcare in which supply side and demand side system levels come together to interact in ways that can promote or hinder access. The heat maps in Figures 4.6 and 4.7 help to visualize the data collected in Round 3 that help promote or discourage access and utilization of doula care in Oregon. Figure 4.5 shows the 27 barriers across the process and Figure 4.7 shows the 22 facilitators across the steps to quality healthcare and desired health outcomes resulting from doula care.

Dimensions of Access: Barriers

The overall shape of Figure 4.5 is the same as Figure 4.2: the category Ability to Reach has the largest number of demand-side barriers (5) and Availability, Acceptability & Affordability has the largest number of supply-side barriers (9). Also, in Figure 4.2 some of the most influential barriers on the demand side were concentrated in Ability to Approach and Approachability, while there was some spread of influential barriers across

all three system levels on the supply side, with the most influential barriers occurring in Approachability and Availability, Acceptability & Affordability. The main shift in the access dimensions heat maps is that Appropriateness seems to have reduced influence, with no prominently colored barriers, and the most influential supply-side barriers are concentrated in Availability, Acceptability & Affordability and Approachability.

Figure 4.6: Round 3 Heat Map of the Percentage of Respondent-Identified Top Barriers, by Dimension of Access

	Demand	Supply	
Ability to Approach			Approachability
Ability to Reach			Availability, Acceptability, & Affordability
Ability to Engage			Appropriateness

Table 4.16 lists the barriers chosen in Round 2 by dimension of access. The dimension of access occurs in the leftmost column and the name of the barrier is in the middle. On the right, the system level, the number of responses, the percentage of responses, and then the rank of each percentage. The table has been organized by access dimension and then by percentage or rank of each barrier. Only five of the six access dimensions appear on the table because there were no Ability to Engage barriers that were chosen for Round 3.

As with Round 2, the spread of barrier impact on the demand side was limited to Ability to Approach and Ability to Reach, with three total Ability to Approach barriers and five total Ability to Reach barriers. Two of the Ability to Approach barriers appeared very frequently; *Knowledge of Doulas* (Parents, 52%, n=11, 2nd) was most frequently reported and *Inadequate Understanding of the Role of Doula* (Parents, 33%, n=7, 5th). One of the Ability to Reach barriers also appeared the most frequently across all barriers: *Awareness of Doula Coverage through Medicaid* (62%, n=13, 1st). All three of the

prominent barriers on the demand side are knowledge-related barriers: knowledge about Medicaid coverage of doula services was the highest ranked barrier, but also not knowing what doulas are and not having enough information or understanding about doulas to make an informed decision about how a doula may meet a mother or gestational parent's needs. Four of the five remaining demand side barriers also relate to knowledge: Negative or Incorrect Perceptions of the Doula Role (Parents, 10%, n=2) is the last Ability to Approach barrier, and Lack of Community Awareness of Doulas (Families & Communities, 14%, n=3) Women Do Not Know How to Get a Doula (Parents, 24%, n=3), and Lack of Understanding of Doulas or Support for Doula Use from Partner (Families & Communities, 10%, n=2) are Ability to Reach barriers. The remaining barrier on the demand side, Lack of Support in Choosing to Use a Doula (Families & Communities, 10%, n=2), reflects the need for social support in choosing to use doula services. Lack of Understanding of Doulas or Support for Doula Use from Partner (Families & Communities, 10%, n=2) also reflects the need for social support, specifically from a mother or gestational parent's partner, in choosing to seek doula services. Overall, the primary set of demand side barriers is related to general knowledge of doulas, not having enough knowledge of doulas, and not having the correct knowledge about doula services to be able to decide on and to take actions to reach doula care. This lack of knowledge is also found in the family, community, and partner support systems and mothers and gestational parents experience a lack of support as a result.

Table 4.16: Barriers by Dimension of Access in Round 3

Access Dimension	Barrier	Percentage	Rank by %	# of Responses (of 21)	System Level
	Knowledge of Doulas	52%	2	11	Parents
Ability to	Inadequate Understanding of the Role of a Doula	33%	5	7	Parents
Approach	Negative or Incorrect Perceptions of the Doula Role	10%	9	2	Parents
	Awareness of Doula Coverage through Medicaid	62%	1	13	Parents
	Lack of Community Awareness of Doulas	14%	8	3	Families & Communities
Ability to Reach	Women Do Not Know How to Get a Doula	14%	8	3	Parents
Reach	Lack of Support in Choosing to Use a Doula	10%	9	2	Families & Communities
	Lack of Understanding of Doulas or Support for Doula Use from Partner	10%	9	2	Families & Communities
	Lack of Provider Encouragement or Promotion of Doulas	38%	4	8	Healthcare Providers
	Obstetrical Providers' Lack of Knowledge About How to Refer to a Doula	38%	4	8	Healthcare Providers
Approachability	Acceptance of Doulas by Care Providers	10%	9	2	Healthcare Providers
	Lack of Content about Doulas in Childbirth Education	10%	9	2	Healthcare System
	Lack of Direct Outreach from Doulas	5%	10	1	Doulas
	Out-Of-Pocket Cost of Doulas	52%	2	11	Doulas
	Low Reimbursement Rate for Doulas	43%	3	9	Healthcare System
	Obstetrical Providers' Lack of Knowledge about Doula Coverage through Medicaid	24%	6	5	Healthcare Providers
Availability,	Lack of a Diverse Doula Workforce	19%	7	4	Doulas
Acceptability, & Affordability	Lack of support from CCOs	19%	7	4	Healthcare System
	Lack of Private Insurance Coverage for Doulas	19%	7	4	Healthcare System
	Billing for Doula Services is Complex and Incomplete	14%	8	3	Healthcare System
	Communication to CCOs About Expectations and Processes	10%	9	2	Healthcare System

Access Dimension	Barrier	Percentage	Rank by %	# of Responses (of 21)	System Level
	around Promoting and Paying Doulas				
	Difficulty in Training Diverse Doulas	5%	10	1	Doulas
	L & D Nurses' Understanding and Acceptance of Doula Role	14%	8	3	Healthcare Providers
	Lack of Dedicated Administrative Support from OHA	10%	9	2	Healthcare System
Appropriateness	Doula Services May be Taken for Granted	5%	10	1	Doulas
11 1	Loss of Key Personnel at OHA and the Institutional Memory that Comes With It	5%	10	1	Healthcare System
	Lack of Doula Input on Administrative Rulemaking Process	5%	10	1	Policy & Legislative

For the supply side, the four most frequently chosen barriers occur in Approachability and Availability, Acceptability & Affordability. The two most prominent in Approachability barriers are *Lack of Provider Encouragement or Promotion of Doulas* (Healthcare Provider, 38%, n=8) and *Obstetrical Providers' Lack of Knowledge about How to Refer to a Doula* (Healthcare Providers, 38%, n=8). Once again, healthcare provider knowledge of, and capacity to adequately engage with, mothers and gestational parents about doula care can reduce Approachability to doula care, and this carries into Availability, Acceptability & Affordability, as the third most frequently occurring barrier for this category is *Obstetrical Provider's Lack of Knowledge about Doula Coverage through Medicaid* (Healthcare Providers, 24%, n=5). The remaining Approachability barriers include one barrier related to provider engagement and two related to direct education of mothers, gestational parents, and families. *Acceptance of Doulas by Care Providers* (Healthcare Provider, 10%, n=2) *Lack*

of Content about Doulas in Childbirth Education (Healthcare System, 10%, n=2) and Lack of Direct Outreach from Doulas (Doulas, 5%, n=1). Childbirth education and direct doula outreach are both strategies of informing parents directly of the benefits of and availability of doula care; Round 3 Approachability barriers suggest that lack of education across all system levels, and among system levels, are influential barriers to doula care access.

The two most prominent barriers in Availability, Acceptability & Affordability are *Out-of-Pocket Cost of Doulas* (Doulas, 52%, n=11 2nd) and *Low Reimbursement Rate for Doulas* (Healthcare System, 43%, n=9, 3rd), and two other barriers in this dimension relate to financing: *Lack of Private Insurance Coverage for Doulas* (Healthcare System, 19%, n=4, 7th), and *Billing for Doula Services is Complex and Incomplete* (Healthcare System, 14%, n=3, 8th). The importance of finance related barriers has a stronger emphasis in Round 3 than in Round 2 and, while knowledge-related barriers are more frequently occurring and some occur more frequently, it is clear that the next most influential barrier to doula care access is related to financing.

The final four barriers in Availability, Acceptability & Affordability address the doula workforce and OHA or CCO investment in the THW program and have roughly equal weight of importance as categories. The Doula workforce barriers address the need for a more diverse doula workforce and for the difficulty in meeting the training needs of diverse populations: *Lack of a Diverse Doula Workforce* (19%, n=4, 7th) and *Difficulty in Training Diverse Doulas*, (5%, n=1). The Healthcare System organization barriers address the needed support and buy-in from CCOs for successful implementation, which

include the *Lack of Support from CCOs* (Healthcare System, 19%, n=4) and *Communication to CCOs About Expectations and Processes around Promoting and Paying Doulas* (Healthcare System, 10%, n=2). The consistent theme that emerged from Round 2 and carried to Round 3 is that Availability, Acceptability & Affordability is a multilayered access dimension that is of priority influence for access to doula care for Medicaid enrolled families. This access dimension is primarily influenced by payment rate in relationship to the cost of doula services and the ease of the process for billing and payment to doulas. The other layers include informed healthcare providers, the ability to train, recruit, and retain doulas from culturally and linguistically diverse backgrounds, and the Healthcare System level organizations (OHA and CCOs) buy-in and ongoing support to integrate THWs into their programs.

The final access dimension, Appropriateness, had five barriers in Round 3. All five barriers occurred towards the bottom of the list. Two of the barriers addressed the provision of doula care, one addressed the initial setup of the program in the administrative rulemaking process, and two addressed issues around OHA roles within the management of the program rollout. The highest-ranking barrier in Appropriateness, *L&D Nurses' Understanding and Acceptance of Doula Role* (Healthcare Providers, 14%, n=3), is a barrier that influences the quality of doula care because of the way in which labor and delivery nurses may influence or interact with the doula. *Doula Services May Be Taken for Granted* (Doulas, 5%, n=1) addresses the potential for doulas who are undercompensated and are experiencing a potential mismatch in mother or gestational parent commitment or engagement, which results in doulas who feel taken for granted.

The two barriers related to OHA program staffing include *Lack of Dedicated* Administrative Support from OHA (Healthcare System, 10%, n=2) and Loss of Key Personnel at OHA and the Institutional Memory that Comes with It (Healthcare System, 5%, n=1). Not enough staff support and the departure of key OHA employees from their roles during the initial stages of the policy implementation influenced how the policy was implemented and how implementation was carried out over time. Similarly, the barrier Lack of Doula Input on Administrative Rulemaking Process (Policy & Legislative, 5%, n=1) made the initial implementation of the policy difficult because there were some assumptions about doula services that were made that proved to be incorrect and took time to eventually correct. The Appropriateness barriers were not as frequently chosen as other access dimension barriers; however, some panelists still thought that doula care access was influenced by initial and continual OHA staffing and key representatives in administrative rulemaking and policy implementation, and that factors related to Labor and Delivery staff and doulas, and ensuring that a doula's sense of value to their mother or gestational parent is a match for the parent's commitment, are access barriers to doula care in Oregon.

Dimensions of Access: Facilitators

Figure 4.7 is a heat map of the Round 3 facilitators by dimensions of access.

There are similar elements between the Round 2 and Round 3 heat maps.

Approachability had the largest number of facilitators in Round 2, followed by

Availability, Acceptability & Affordability, and Appropriateness had the least. This shape was maintained in Round 3, with eight Approachability facilitators, six Availability

facilitators, and four Appropriateness factors. Approachability is still the strongest appearing supply side dimension and Ability to Reach is the strongest demand side. Approachability facilitators appear to have more higher-ranking facilitators than in Round 2, emphasizing this access dimension more. The main differences, however, fall on the demand side. As in Figure 4.6, there are no Ability to Engage facilitators in Round 3 and the number of facilitators for Ability to Approach reduced to one.

Figure 4.7: Round 3 Heat Map of the Percentage of Respondent-Identified Top Facilitators, by Dimension of Access

Demand Supply

Ability to Approach
Ability to Reach
Ability to Engage
Appropriateness

Ability to Engage

Table 4.17 lists all the facilitators by dimension of access. The demand side facilitators were reduced from eight in Round 2 to four in Round 3. Ability to Approach had one barrier, *A Need for Doula Support* (Parents, 10%, n=2). All three Ability to Reach barriers are at the Families & Communities system level, two are around social support for doula use and one related to diverse communities. *Peer Support and Use of Doulas* (43%, n=9) was the third most frequently chosen facilitator in Round 3 and *Families and Communities Supportive of Doula Care* (5%, n=1) appeared once on a panelist's top five list. *Diverse Communities Embracing the Role of Doulas* for their Populations (29%, n=6) was the fifth most frequently chosen facilitator in Round 3. Panelists felt that doula care is strongly facilitated through family and community doula use and doula support, and this is particularly important for the culturally and linguistically diverse communities served by Oregon's Medicaid program.

Table 4.17: Facilitators by Dimension of Access in Round 3

Access Dimension	Facilitator	Percentage	Rank by	# of Responses	System Level
Ability to Approach	A Need for Doula Support	10%	9	2	Parents
	Peer Support and Use of Doulas	43%	3	9	Families & Communities
Ability to Reach	Diverse Communities Embracing the Role of Doulas for their Populations	29%	5	6	Families & Communities
	Families and Communities Supportive of Doula Care	5%	10	1	Families & Communities
	Healthcare Providers who Refer Patients to Doulas	81%	1	17	Healthcare Providers
	Healthcare Providers who are Aware of and Promote Doulas	67%	2	14	Healthcare Providers
	Hospital and Birth Center Promotion of Doula Care	38%	4	8	Organizations
A 1.11176	Efforts to Educate Healthcare Providers on Doula Care	19%	7	4	Healthcare System
Approachability	Supportive Social and Community-Based Organizations	14%	8	3	Organizations
	Presence of Information about Doulas on the Internet and Social Media	10%	9	2	Healthcare System
	Doula Self-Promotion and Marketing	5%	10	1	Doulas
	Available Research on Doula Outcomes	5%	10	1	Healthcare System
	CCO-Initiated or Insurance- Initiated Doula Programs	43%	3	9	Healthcare System
	The Presence of Low-Cost or No-Cost Doula Programs	38%	4	8	Healthcare System
	New Billing Pathway Makes It Easier for Doulas to Bill for Services	24%	6	5	Healthcare System
Availability, Acceptability, & Affordability	The Presence of Doula Organizations and their Efforts to Increase Access to Care	24%	6	5	Organizations
	Flexibility of Doulas for Reimbursement for Private Pay Women on Medicaid	5%	10	1	Doulas
	Doula Services are Reimbursable Through Legislation and Administrative Policies	5%	10	1	Policy & Legislative

Access Dimension	Facilitator	Percentage	Rank by	# of Responses	System Level
Appropriateness	Hospital and Birth Center Support of Doula Care	24%	6	5	Organizations
	Active Leadership in the Doula Community	5%	10	1	Doulas
	The Quality of Doula Professionalism	5%	10	1	Doulas
	Supportive Political Environment and Political Actors for the Use of Doulas	5%	10	1	Policy & Legislative

The access dimension Approachability had the largest number of facilitators across all dimensions and had the two facilitators with the most frequently chosen top five facilitators. The first two Approachability facilitators are the Healthcare Provider Facilitators: Healthcare Providers who Refer Patients to Doulas (81%, n=17) and Healthcare Providers who are aware of and Promote Doulas (67%, n=14). As a system level, Healthcare Providers, in particular obstetrical providers, were the most influential facilitators to doula care access. Two of the remaining facilitators are at the Organizations system level, Hospital and Birth Center Promotion of Doula Care (38%, n=8, 4th) and Supportive Social and Community-Based Organizations (14%, n=3, 8th), further emphasizing the importance of the organizations that make direct contact and form relationships with mothers and gestating parents. Efforts to Educate Healthcare Providers on Doula Care (Healthcare System, 29%, n=4) was the next frequently occurring facilitator, highlighting the general barrier that is lack of knowledge about doulas and the pivotal role of healthcare providers in doula care access. The remaining three facilitators are related to the availability of information to mothers and gestational parents or the general public: Presence of Information about Doulas on the Internet and

Social Media (Healthcare System, 10%, n=2), Doula Self-Promotion and Marketing (Doulas, 5%, n=1), and Available Research on Doula Outcomes (Healthcare System, 5%, n=1). Mothers and gestational parents who have access to multiple points of information about doulas experience higher levels of Approachability of doula care.

The next access dimension, Availability, Acceptability & Affordability had four influential facilitators. The first two facilitators relate to doula care programs specifically serving Medicaid enrolled or Medicaid eligible families: CCO-Initiated or Insurance-Initiated Doula Programs (Healthcare System, 43%, n=9, 3rd) and The Presence of Low-Cost or No-Cost Doula Programs (Healthcare System, 38%, n=8, 4th). A related facilitator, The Presence of Doula Organizations and Their Efforts to Increase Access to Care (Organizations, 24%, n=5), also occurred frequently on survey panelists' top five lists. The continued presence of these organizations and programs to both serve families directly and to advance professional efforts are important facilitators to doula care access in Oregon. Of the four remaining barriers, three are related to the financing of doula care: New Billing Pathway Makes It Easier for Doulas to Bill for Services (Healthcare System, 24%, n=5), Flexibility of Doulas for Reimbursement for Private Pay Women on Medicaid (Doulas, 5%, n=1), and Doula Services are Reimbursable Through Legislation and Administrative Policies (Policy & Legislative, 5%, n=1). The general themes from Round 2's Availability, Acceptability & Affordability facilitators, established doula programs serving Medicaid enrolled or Medicaid Eligible families, and the financing of doula care, carried into Round 3. These themes are also seen, in contrast, in the barrier dimensions of access, where financing of doulas and doula workforce related barriers were seen as very influential.

The final access dimension, Appropriateness, had four facilitators. Two of the facilitators relate directly to the provision of doula care and two are related to leadership and activism efforts. Hospital and Birth Center Support of Doula Care (Organizations, 24%, n=5) and The Quality of Doula Professionalism (Doulas, 5%, n=1) are both related to how a doula provides support to mothers and gestational parents, specifically during labor. Hospital and birth center support occurred somewhat frequently across survey panelists' top five lists and further emphasized the importance of relationship building, doula organization continual advocacy efforts, and the important relationships between mothers and gestational parents and the organizations that work directly with them and how both hospital and birth center support and doula professionalism result in better care quality. Active Leadership in the Doula Community (Doulas, 5%, n=1) and Supportive Political Environment and Political Actors for the Use of Doulas (Policy & Legislative, 5%, n=1) illustrate the unique combination of factors that allowed for Oregon House Bill 3311 to be passed and for Oregon to be the first state to legislate Medicaid reimbursement for doula services.

Round 3 Survey Summary

Several themes and findings emerged from Round 2 and were clarified in Round 3. Table 4.18 presents the key barriers and facilitators identified. The narrative that follows synthesizes the important findings into five key themes.

Table 4.18: Thematic List of Barriers and Facilitators for Rounds 2 and 3

	Round 2	Round 3
Thematic List	1. Knowledge of doulas: lack of	1. Knowledge of doulas. Strongest
of Barriers	information about (including outreach),	barrier theme, but less influential than in
	encouragement or promotion of, or	Round 2.
	acceptance/ understanding of the doula	2. Finance-related barriers: Cost, low
	role.	reimbursement rate. Increased in
	2. Finance-related barriers: payment of	importance.
	doulas. Low reimbursement, out of pocket	3. Doula diversity.
	costs	4. Lack of OHA support, resources,
	3. Doula workforce: training and hiring	oversight of THW program.
	diverse doulas, adequate doula workforce.	5. Lack of support from CCOs.
	4. CCO engagement and buy-in	6. Lack of social support for choosing to
	5. The process of finding and hiring a	use a doula.
	doula is difficult.	7. Concerns for ensuring patient
	6. OHA communication of expectations	commitment to doula care.
	to CCOs is lacking.	8. Lack of doula involvement in
		administrative rulemaking process.
Thematic List	Healthcare provider encouragement	Healthcare provider encouragement
of Facilitators	and referral.	and referral. Facilitating influence
	2. Peer and community doula use and	strengthened in Round 3.
	support for doula use.	2. Peer and community doula use and
	3. Need for doula support.	support for doula use.
	4. Doula professionalism and active	3. Existing programs and CCO-
	leadership, doula organizations and	created/run doula programs serving
	advocacy.	Medicaid-enrolled or Medicaid-eligible
	5. Available information and education	families.
	about doulas: efforts to educate healthcare	4. New billing pathway for doulas.
	providers, available research on doula	5. Available information and education
	outcomes.	about doulas: education efforts for
	6. Impact of doulas/research on doula	providers, social media, internet, and
	outcomes.	available research on doula outcomes.
	7. Existing programs and CCO-	6. Organizational support and
	created/run doula programs serving	promotion of doulas.
	Medicaid-enrolled or Medicaid-eligible	7. Doula professionalism and active
	families.	leadership; doula organizations and
	8. Organizational support and promotion	advocacy.
	of doulas.	8. Supportive political environment and
	9. New billing pathway for doulas.	actors.
		9. Doula services reimbursable through
		Medicaid.
		10. Need for doula support.

While there were some changes to the priority of certain themes from Round 2 to Round 3, the heat maps of system levels and of the dimensions of access retained similar shapes and the general trend of influential factors carried over, while the influence of

some important barriers and facilitators across access dimensions became more pronounced. The maintenance of these patterns demonstrates reliability to the system's overall contributing barriers and facilitators, system levels, and access dimensions. The less frequently chosen factors allows those who have unique perspectives, such as those who work more closely with the implementation of the policy, to emphasize the nuances they find particularly impactful. Healthcare Providers was the only system level that retained all barriers and facilitators from Round 2 to Round 3, and none of the Ability to Engage factors appeared in Round 3. Knowledge remained one of the most influential barriers and occurred across all access dimensions, and mother and gestational parent knowledge about doula coverage through Medicaid was the highest-ranking set of barriers for Round 3. Overall, the Round 3 knowledge level barriers reduced in quantity and importance but remained the most influential set of barriers to doula care access.

The shift in Round 3 related to knowledge barriers and facilitators was the further emphasis of knowledge and the decreased emphasis on Healthcare Provider or Families & Community level barriers related to acceptance or attitudes about doulas. Healthcare providers, families, and community members are still cautious of the doula role due to their unfamiliarity, but survey participants emphasized that it was the lack of knowledge that was more influential, in particular with healthcare providers. The lack of resources related to promotion, such as lack of direct outreach by doulas or lack of content about doulas in childbirth education, as well as negative or incorrect information about doulas were lower ranking means in Round 2 but made it to Round 3 as important barriers. The strongest facilitators to access to doula care in Round 3 were in Approachability, the

ways in which mothers and gestational parents found out about doula care services from supply-side system levels. In Round 3, the focus was on healthcare provider direct promotion of doulas and referrals, but with additional and shifting themes. The relative strength of healthcare providers' knowledge as a barrier decreased slightly, the influence of healthcare providers' facilitation of doula care access through referrals and promotion of doula care was further emphasized, and the role of available information about doulas, such as educational efforts for healthcare providers, the influence of social media and the internet on information acquisition, and the available research on the health impacts of doula care, were added as having an important influence on doula care access.

Doula level factors became more prominent in Round 3, including the cost of doula care, and the difficulty in recruiting and training a diverse doula workforce to provide culturally and linguistically competent care. The cost of doula care became a more prominent barrier, but doula flexibility for reimbursement from private pay families who are Medicaid-eligible also appeared as a top facilitator. Both of these themes, however, are related to financing of doula care and also reflect the ability to earn a living wage as a professional doula, and the challenges for either the supply side or the demand side to meet that need. A living wage, which reflects both doula factors as well as financing factors, emerged as an important barrier theme. Doula level facilitators, which include the advocacy efforts, doula leadership, and the level of professionalism of Oregon doulas, were a theme present as facilitating access to doula care and also maintained relevance from Round 2 to Round 3.

Overall, doula cost, billing, and financing related barriers and facilitators carried over as influential themes and grew in importance; the most frequently identified finance related barrier, the cost of doulas, received more votes as a barrier than the previously high-ranked, knowledge-related Healthcare Provider barriers for the supply side. The presence of doula programs and CCO-initiated programs that serve Medicaid-eligible families became a more prominent finance related theme and the new billing pathway remained as an important facilitator. Again, the flexibility of payment through sliding scale fees that some doulas offer was a low-ranking facilitator in Round 2 but was chosen as a top facilitator in Round 3. Low reimbursement rate remained a frequently chosen barrier in Round 3, and the increased payment rate did not move from Round 2 to Round 3 as a top facilitator.

Families & Communities factors remained important influences of doula care access, and they were voted more frequently as facilitators than barriers but appeared on both lists. For both demand side system levels, the Parents-related knowledge factors were the most influential barriers but Families & Communities related facilitators were the most influential facilitators. The nature of community support and doula use, with diverse communities, were important demand side factors to doula care access. The lack of support for doula use from partners was included in Round 3 as influential, and the role of peer doula use and support for doula use was more emphasized in Round 3. Given the nature of the THW program to rely on community members, the role of community facilitation of doula care is important to note.

The dimensions of access heat maps illustrated a slightly new theme, where the emphasis on Approachability as a facilitator was increased and the emphasis of Availability, Acceptability & Affordability as a barrier also increased from Round 2 to Round 3. The general shifts in these categories included the addition of Approachability facilitators that achieved lower ranks in Round 2 but appeared in Round 3, including available research on doula outcomes and the presence of information about doulas on the internet and social media. The highest-ranking barriers in Round 3 include the lack of knowledge that doulas are a Medicaid-covered service, the lack of knowledge or understanding of doulas by healthcare providers, mothers, gestational parents, families and communities, but the strongest facilitators are related to the supply side factors that inform parents that doulas care is a service available to them, particularly from healthcare providers. The access dimension with the most impactful group of barriers is Availability, Acceptability & Affordability with a primary focus on the cost and financing of doula care, recruiting and training diverse doulas into the doula workforce, healthcare provider lack of knowledge of Medicaid doula coverage, and support from CCOs for integration of the THW program into their offerings. The ability to recruit doulas to work with Medicaid-eligible populations, through appropriate and timely reimbursement, and programs that promote the recruitment of doulas and appropriate reimbursement, are the primary barriers to doula care access in Oregon.

A new theme emerged as an important facilitator to doula care access; the influence of political actors and a supportive political environment for the passing of House Bill 3311 and the fact that this policy was legislated into law, making doula care

reimbursable through Medicaid, appeared in Round 3. However, these facilitators only appeared once each on the top five barriers. Many of the barriers identified in Round 1 and identified as influential in Round 2 are a direct result of this policy or relate to the implementation of the policy, but many of the highest-ranking barriers exist outside of the policy, specifically the collective knowledge of doulas, incomplete understanding of doula care, and how this knowledge impacts healthcare providers, mothers and gestational parents. The issue of training and recruiting diverse doulas, in particular doulas of color, who can provide culturally and linguistically appropriate doula care is also a longstanding issue that is likely further exacerbated by the new policy. Policy-specific solutions are crucial but working on these issues that arise outside of Medicaid coverage will likely see an increase in access to doula care.

Solutions to Barriers: Round 3 Open Ended Questions

In Round 3, survey participants were asked to provide solutions to each of their selected barriers. Participants identified a total of 108 distinct solutions or strategies. The solutions were analyzed and organized into Table 4.19, into six broad strategies, listed in the left column: Public Information and Education, Direct Education or Information to Patient, Direct Education or Information to Obstetrical Providers, Building

Relationships and Outreach, Organizational Changes, and System Changes. The middle column lists specific strategies or solutions, and the right column lists the frequency in which each strategy was listed. Participants were not limited in the number of solutions they could provide or the frequency with which they suggested strategies, as multiple strategies could be suggested across a variety of related barriers.

Table 4.19: Suggested Strategies to Improve Top Five Barriers

Type of Strategy	Type of Strategy	Frequency
Public Information and Education	General public education campaign	8
	CCO website information about doula coverage	4
	Community forums educating about doulas	2
	Media representation of doulas	1
	Category Total	15
Direct Education or Information to Patient	Face to face (1:1) education	9
	Obstetrical providers promoting or educating about benefits of doulas	6
	CCO notifications/printed information to gestational parent	5
	Hospital staff promoting doulas during tours	3
	Including doulas in birthing class curriculum	3
	Word of mouth	1
	Obstetrical provider referrals	1
	Provider or doula ensure patient commitment and need for doula care is a match for service	1
	Category Total	29
Direct Education or	Education or trainings to providers about doulas	6
Information to Providers	Educate L&D nurses on doula role and outcomes	1
	Category Total	7
Building Relationships and Outreach	OHA or CCO support to create referral pathways from providers to the doula community	5
	Doula outreach to community organizations	2
	Doula outreach to providers	2
	Direct doula outreach to expecting parents	2
	Relationship building between doula organizations and medical organizations	2
	Encourage doulas of color to recruit other doulas in their communities	1
	Category Total	14
Organizational Changes	Brochures at prenatal visits, OB clinics/birth centers	5
	More hospital-based doula programs	4
	OHA hiring personnel: to actively address system barriers around processes and communication, administrative support	3
	Doulas staffed at WIC and community-based programs	2
	Lobbyist to support doula efforts	2
	Hiring doulas to care teams	1
	Category Total	17

System Changes	Increased Medicaid reimbursement rate for doulas	8
	More insurance providers covering doulas	3
	More research dissemination about doula benefits	3
	More research on doula outcomes	2
	OHA policy requiring mandatory participation from CCOs	1
	OHA enforcement of THW policies	1
	Incentives for CCOs to have doulas	1
	OHA educating CCOs on doula benefits	1
	OHA providing CCOs support to build their doula registry workforce	1
	CCOs create programs to recruit and train doulas from the communities they serve	1
	Provide support such as resources and money to community members looking to become doulas	1
	Efforts to streamline billing process through online submission	1
	Clearer direction on the process for submitting claims	1
	A clearer description of information needed to be collected from patients for reimbursement	1
	Category Total	26

Public Information and Education

Since so many top barriers focused on awareness and understanding of doulas and that doulas were a service covered by Medicaid, many of the solutions focused on ways to educate and inform the public. Fifteen different mentions of public education were identified; the most frequent was public education campaigns. Advertisements on bulletin boards, commercials, and public transportation were some examples of a public education campaign that would briefly inform people that doulas were a covered service through Medicaid and could provide a website where more information could be found. Similarly, four survey panelists said that CCOs should provide information on their websites about doula coverage and how to connect with doulas within their program. Two survey panelists suggested community forums designed to educate community

members about doulas. Community forums are public gatherings of the public and health officials to discuss health needs and are reported on by local media (NIEHS, 2022). One participant mentioned media representation of doulas, such as in popular television programs or film.

Direct Education or Information to Patient

The next type of strategy, Direct Education or Information to Patient, had 29 distinct solutions identified across survey panelists. This category achieved the most individual strategy or solution mentions. Nine survey panelists mentioned face-to-face and direct communication to a mother or gestational parent as a strategy to educate them on the benefits of doulas and that the service was covered by Medicaid. Not all mentions addressed who should be doing the education, but there were six mentions of obstetrical providers offering direct education in the next most frequently identified solution. The third most frequently identified solution was information provided to the mother or gestational parent by the CCO. Panelists said that CCOs could send notifications to newly expecting parents about the benefits of doulas or offer printed materials to them in their application packets. Doula promotion during hospital tours for mothers and gestational parents was identified as a strategy by three participants as a way to inform parents about the value of doulas, especially if the hospital had a doula program or worked closely with a doula organization. Education about doulas through birthing class curricula was also mentioned by three participants as a strategy. Three strategies were identified by one panelist each: word of mouth, obstetrical provider referral, and that doulas ensure that the parent commitment and need for doula care is a match for doula services.

Direct Education or Information to OB Providers

The third type of strategy, *Direct Education or Information to OB Providers*, had seven mentions of solutions across two distinct solution types; this category of strategies and solutions had the least frequently identified solutions but was also narrower in scope than other categories. The first solution, education or trainings to obstetrical providers about doulas, was mentioned six times; educating L&D nurses on doula role and outcomes associated with doula use was mentioned once. Educating healthcare providers was not as frequently cited as a solution but given the emphasis that survey panelists and focus group participants gave to obstetrical providers as facilitating access to doula care, and given the facilitator *Efforts to Educate Healthcare Providers on Doula Care* appeared in the Top 20 list of facilitators in Round 2 and in the list of Round 3 facilitators, exploring ways to increase provider education would be a recommended strategy to increase access to doula care.

Building Relationships and Outreach

The fourth type of strategy or solution is *Building Relationships and Outreach*, which had a total of 17 strategies or solutions. The most frequently listed strategy for this type of solution was for either the OHA or individual CCOs to create a program or otherwise facilitate the ability of obstetrical providers to connect with and refer patients to doulas or the doula community. The next three types of solutions achieved two mentions each and were the ways in which survey panelists described different forms of doula outreach: to community organizations, obstetrical providers, and expecting parents. There were two mentions of creating relationships between doula organizations and

medical organizations and there was one mention of doulas of color recruiting doulas from their own community to serve as doulas.

Organizational Changes

The fifth type of strategy, Organizational Changes, had a total of 17 strategies or solutions. Most organizational changes recommended by participants, with the exception of the first strategy, were the hiring of doulas or other staff. Hiring of staff also furthers the building of relationships and the likelihood of face-to-face interactions that can support doula care access. The most frequently suggested organizational change, recommended five times, was to include brochures or pamphlets at prenatal visits or have them available at the front desk of obstetrical clinics or birth centers. Supportive clinics and birth centers that promote doula care were mentioned in both Rounds 2 and 3 as facilitating factors to doula care access. This kind of solution would likely need to be supported through relationship building as well. The next most frequently identified organizational change was the creation of more hospital-based doula programs, which was suggested four times. Hospital-based doula programs would reduce the Ability to Reach and Availability, Acceptability & Affordability dimensions of access, which through both Round 2 and Round 3 were very important to doula care. The third most frequently identified organizational change suggested was that the Oregon Health Authority hire a specific individual to manage the systemic barriers; the specific barriers participants were concerned with were communications among key interested parties and administrative support with enrolling into the registry and billing for services; this recommendation was mentioned three times by participants. The next strategy, which

was mentioned twice, was staffing doulas at community-based programs, such as WIC. Another strategy, which would likely be carried out by the Oregon Doula Association or other larger doula-credentialing organizations, would be to hire a lobbyist to support doula efforts through advocacy and legislation. This strategy was also mentioned twice. The final organizational strategy was hiring doulas to join care teams; this strategy was mentioned once. Hiring a doula to a care team is distinct from creating an entire hospital-based doula program; it would likely involve the addition of a doula to a clinical team or birth center, and they would probably work under the direction of a medical provider.

System Changes

The final types of strategy identified are *System Changes*. This type of strategy had the second highest number of strategies mentioned, but also had the most variety of potential solutions. Because of the purposeful sampling of participants who were closely involved in the implementation of the doula component of the THW policy, the respondents had many suggestions on how the OHA or CCOs could change, as well as new policies or programs they could implement to address systemic barriers to doulas becoming registered with the state and reimbursed for their services. The most frequently cited system level change from survey panelists was to increase the reimbursement rate for doulas through Medicaid. In June of 2022, the OHA issued a public notice stating that they would increase the fee-for-service reimbursement rate for doulas from \$350 to \$1,500 (OHA, 2022e). This significant rate increase could potentially increase the number of doulas who enroll in the THW registry and become available to serve families enrolled in Medicaid.

The next most frequently cited solution was increasing the number of private insurance companies covering doula services, which was mentioned three times. Two strategies that were recommended by panelists address research on doula outcomes, and included three mentions addressing dissemination and two mentions suggesting more research on doula outcomes. Research has been identified as both a barrier and facilitator, and more widely disseminating doula outcome related research could also influence the knowledge of doulas and could be incorporated into educating mothers, gestational parents, and healthcare providers.

Ten separate solutions were identified for the strategy type *System Changes*; each was suggested once. The first two address compliance with the policies that enact the THW program. One suggestion was that the OHA mandate participation in the THW program and one suggested that the OHA should enforce policies around THW participation. OAR 410-141-3470 does require that CCOs develop a plan for implementing and utilizing THWs, but some participants stated enforcement is necessary to see the programs properly utilized and for access to be achieved (Traditional Health Workers, 2014). Similarly, there are three other ways in which participants have suggested the OHA could increase access to doulas through engaging with CCOs: incentivizing CCO use of doulas, educating CCOs on the benefits of doulas, and providing direct support to CCOs to help build their workforce of doulas. Two strategies at the system level involve training and recruiting new doulas: one strategy was a CCO-created program to recruit and train community members and another strategy was a more general provision of resources such as money to community members looking to

become doulas. The final three strategies involve changes to the process of billing for services: one strategy suggested that doulas should be able to bill for services through an online system, another strategy suggested that the OHA provide doulas with a clearer description on how to submit claims, and a final suggestion for clarity on what type of information doulas need to collect from their mothers or gestational parents to submit reimbursement claims.

Round 3 Feedback from Focus Group Participants

At the end of each focus group in Round 1, participants were invited to participate in a second focus group where they were told they could review the results of the three rounds of data collection and provide additional feedback on these results. Participants were invited to participate again so that mother and gestational parent input was not limited simply to the first round of data collection and their added interpretation of data could aid in further understanding of doula care access. Member checks are a means of adding validity to data collection from participants in healthcare research through reviewing their own statements; while they are not reviewing transcripts or their own words in participation, the ability to review information that they contributed to and help shape the way it is communicated helps lend validity to the data collection process (Birt et al., 2016).

All three participants were first-time parents. Participant 1 did not know what a doula was before the first focus group, but indicated she would have liked one to support her and her partner during her difficult labor. Participant 2 said she saw the value in doulas but did not want one for her upcoming birth, she felt she had enough support from

her family; her godfather had accompanied her to the prenatal class that was held the hour prior to the focus group and supported her participation in the member check. Participant 3 utilized a doula for the birth of her twins and found the doula to be valuable to her experience. The researcher gave the participants the prioritized list presented in Tables 4.14 and 4.15 (Round 3) and asked participants if they agreed with the priorities set by the survey panel. All three participants agreed with the highest priority barriers (Knowledge of Doula Coverage Through Medicaid, Knowledge of Doulas, and Out-of-Pocket Cost of Doulas) but had some additional priority recommendations and recommended shifting the priority rankings. Participant 1 said that the knowledge of Medicaid coverage of doulas was the biggest problem, while the other two participants said that knowledge of what doulas are and what they do are the most important barriers. Participant 3 also said that that incorrect information about doulas is a "major barrier" and would rank that highly on the list. She said getting the correct information to parents about doulas and their scope of services is the most important strategy to increase access to doulas. Both Participant 2 and 3 also agreed that knowing that doulas are covered by Medicaid or the out-of-pocket costs of a doula are the next important barrier to address.

Since knowledge of doulas was the main barrier that participants identified as most important, participants were asked about the ways parents could find out about doulas and Medicaid coverage of doulas. All three participants mentioned that the most valuable ways for them to find out about doulas would be from trusted people.

Participants said the trusted people they expected to tell them about doulas were obstetrical providers, WIC counselors, and friends, family or community members.

Participants 1 and 2 said that they would expect to hear about doulas from their obstetrical provider and from WIC counselors or WIC classes and would expect to hear about doulas near the beginning of their pregnancies.

Participant 3 hired a doula at the recommendation of her obstetrical care team during her second trimester. She was receiving care from a birth center but had to transfer care to a hospital because she was expecting twins. "They [birth center] helped me try to create that [continual labor support] atmosphere as much as possible in the hospital. And the number one thing they said was 'get a doula, that's what's really going to make it for you." The birth center gave her a list of doulas who specialize in working with families of twins, and she said this conversation was what convinced her to hire a doula. One participant emphasized the importance of these face-to-face conversations with people seen as knowledgeable, such as her birth center care team or WIC counselors, as the best way to increase knowledge of doulas and doula Medicaid coverage:

So honestly, I think it's going to be people, 'Education from community programs.' If they've already got a toe in WIC, and they have their WIC check-up and they're going, 'did you know doulas are totally covered and they're amazing and let me just talk to you about it for a second, and here's a pamphlet after we've face-to-face chatted for thirty seconds,' that's probably going to go over better. (Participant 3)

Participants were asked what they thought about the solutions to *Knowledge* about *Doulas* that were suggested by the survey panel, such as mailers from health insurance companies or birth classes. Participants 1 and 2 said that this information would be useful, but not as important as information from obstetrical providers, WIC, and family and friends: "Finding out from a birth class is a good idea but doesn't hold as much weight as family and friends" (Participant 1). Participant 3 also suggested that

including information about doulas briefly in hospital tours may be beneficial as well. Participant 2 had attended a WIC prenatal class prior to the focus group, and doulas were discussed as part of the class. Participant 2 said that, given her prior focus group participation, she knew what doulas were and was able to explain it to the class. She explained that some participants knew what a doula was, some had an idea about what they were, and some participants' "eyes got big" because the information was very new to them. When asked if she thought the WIC class gave enough information to help parents decide if they want a doula or how to get one, Participant 2 said "If they wanted more information, they knew where they could get it."

Participant 1 said that when she signed up for Medicaid when she was first pregnant, she signed up for WIC at the same time and suggested this point of contact may be an opportunity to provide print information about doulas and doula services to parents. Participant 1 said that she may miss information mailed directly to her: "I just throw away most of my mail too. I don't look at all of it unless it's important." Participant 2 said that mailed information would be a good starting point: "It [insurance mailers] would give me insight and it'd probably be like, 'you should talk to somebody about it." Participant 3 said information like that would go over well for people like her who prefer to investigate and explore all care options, but that not all people have the time or resources to investigate the information provided in mailers.

Participants 1 and 3 elaborated on why they felt that educating expectant parents on the services of professional doulas would influence access to doulas. The knowledge

of doulas was important because if people knew the benefits of doulas, there would be higher demand for them:

If there were a higher demand for doulas, I feel like more women would take that initiative to try to become doulas. People would fight for them to be reimbursed more than they are, that sort of thing, if more people knew. (Participant 1)

One participant believed the misinformation about doulas contributes to the lack of demand:

You get people who are saying that, "it's just that hippie-dippie, crunchy...it's not actually going to do anything." What was it...Somebody's husband equated it to like, "I'm not going to have [a doula] hold a crystal and chant something." Like, that's not what it is! That's not what it is. But there's that mindset some people have too. (Participant 3)

Participants discussed the sources of their information for prenatal decision-making in more detail. Participants 1 and 2 had additional comments on the role of social media in informing them about prenatal decisions, including doulas. Both parents said that social media was an important way that they gathered information and found support. Participant 1 commented on the value specifically of Facebook groups for educating pregnant mothers and gestating parents. The value of social media, specifically for support groups such as Facebook or due date forums, comes from the ability to ask a variety of questions, the diversity of perspectives and geographical locations, and the nature of expected support:

You know, a Facebook group that reaches thousands of people that everyone's going to support each other... And just as there are moms from other countries... I feel like it's kind of close-minded to just be in one region or one area when there's so much knowledge out there. (Participant 2)

Participant 2 also stressed how helpful Facebook groups were to her education as a pregnant mother. She commented that she did not see any conversation about doulas in

her Facebook pregnancy-related groups: "I look up 'doula' [on the internet], I can find information, but I really haven't noticed anybody talking about doulas in our [Facebook] groups. So, I'm pretty sure they know about it, and some of them probably have them but they just don't talk about it."

Participants commented about the kinds of information they would want about doulas and where they would expect to find it. All three participants said they would want a website with comprehensive information about doulas. All three participants had experience finding obstetrical providers and other clinicians and suggested that there be a similar resource for doulas: "There's websites where you can find a lactation consultant in your area or where you can read about midwives in your area or something. If there was a state-provided website where doulas can network and explain a little bit of who they are... You know, 'yes, I am allowing you to use insurance,' or 'no, I'm not,' sort of thing" (Participant 3). Participants suggested the website include photos of doulas, some biographical information, the types of certifications they hold, if they take insurance and what kind of insurance they take, and the cost of their care.

All three participants, as well as Participant 2's godfather (her social support person who attended all prenatal education classes at WIC) shared comments about the role of the partner: how partners got their information about prenatal care, the partner's perceived value of doulas, and the role or potential role of the doula in supporting the partner. Participant 3 emphasized both the role of the doula in supporting the nongestational parent during birth as well as the role of the obstetrical provider as a

crucial point of influence for prenatal and birth care. One participant emphasized the role of obstetrical providers in the decision-making of nongestational partners:

In my experience, with the people I've talked to that have very strong-minded partners, the common thread ... is anything the doctor said the dad did. That was one of the couples that the doctor made a point of like, "you need to drink more water." It was kind of a flippant, "oh yeah, just make sure you're drinking lots of water." But dad took it as like, "you will drink more water." (Participant 3)

Participants 1 and 2 emphasized the role they saw for doulas for supporting fathers and nongestational parents. Participant 1 knew that some women in her focus group from Round 1 data collection saw fathers as a potential barrier to the use of doulas. She thought that since they were having their first child, an experienced support person could have helped both. Participant 2's godfather shared that he saw doulas as another opportunity for a trusted person to answer questions and address concerns. Participant 2's fiancé could not attend WIC classes or all of the obstetrical appointments, but Participant 2's support person knew that her fiancé still needed support and saw that doulas could fill this role:

... I would think doulas aren't only for the women. I think we'd think it would be for the other half of your support. Or your husband's or boyfriend's or fiancé's or something because the women aren't always going to be the ones with the questions. Sometimes the husband or boyfriend or fiancé, their other half will think questions that the mother...women don't think of. They need to have their option and moments for getting support too. Like, for instance, her other half, he'll ask me, 'I know you have been to the classes,' and I will give [him] the information that I know." (Participant 2's Support Person)

Participant 3 said that most resistance to doulas seems to come from fathers, but that her doula was able to support her husband by helping him know what helpful support looked like: "He's freaking out but wants to help, to know how to help, and so she was able to be like, 'here is what you can do to help her.' So it just made everything less

stressful." Participant 3's labor lasted three days, and the presence of her doula allowed her husband to step away for self-care with reassurance that she still had full support: "After twelve hours in and you're starving, you can go eat and not feel like you're abandoning anybody."

The cost of doula care was raised as an important factor in Round 3 data collection from the survey panelists, so each of the three participants were asked, if they were a doula, what they would need to earn per birth. Participant 1 said at least \$1,000 per birth, Participant 2 said at least minimum wage, and Participant 3 said between \$750 and \$1,200 per birth.

Participant 3 was able to describe her experience using a doula. She said that when her care team had to transition from a birth center to a hospital due to expecting twins, it was her obstetrical provider who recommended that she hire a doula. Her obstetrical provider said a doula would help create the birth experience she wanted: "The number one thing they said was, 'get a doula, that's what's really going to make it for you." She said the doula helped her plan her birth, understand potential scenarios that were often specific to twin births such as what to expect during a Cesarean section, and how to advocate for what she wanted during the birth: "And the doula taught us, 'at any point, ask your doctor to leave and we can talk about it and we can help advocate for yourself and make sure you have the information you need.' "She also felt the doula helped her have appropriate expectations for birth: "She made sure what we wanted had happened within the realm of being reasonable." Participant 3 was particularly concerned about birth because she was in middle school when her brother was born and remembers

her mother's traumatic birth, so was nervous for her own birth. The doula was able to help create a birth plan that addressed her anxieties in a way that would be well received by hospital staff and reminded hospital staff of the plan to engage with her in ways that calmed her: "She was the main one that made sure [I had a] plan that was still respectful to doctors. Like, they've actually listened to it, but it was what I needed. It said on there, 'please don't use scare tactics, please use calming and fact-based statements." Participant 3 was hoping for a natural birth but understood the chances of having a Cesarean section. Her twins were delivered through emergency Cesarean after laboring for two days. She was grateful she had a doula at her birth: "And I'm really ... very thankful that she was there because it would've been a lot more scary with everything we had to go through."

Not only did she see the value at the time, but she said she continued to discover the value of her doula as she reminisced about her birth:

"If she wasn't there, it would not have been positive. I guarantee you it would not have been positive. And I don't think even when talking with other women about, 'oh, how was your birth,' you know? And little things will pop up and I just think, 'I don't think I ... I didn't go through that.' It's because my doula was there. I didn't even realize it until two years later. 'Wow, I didn't even know she did that! That's amazing.'" (Participant 3)

Round 3 Open Ended Questions and Member Check Feedback Summary

There were a few themes that were emphasized by the open-ended questions from the survey and the participants' feedback on Round 3 Results. The theme of knowledge and need for general public education was emphasized by survey respondents in Round 3. Survey respondents shared a wide variety of ways in which they felt more information could be provided to the mass public, such as intentional media representation and public transit advertisements to better research dissemination. Both survey respondents and

member check participants said that information provided directly by the CCO to newly expecting parents, either on the website or through the enrollment paperwork for Medicaid and WIC, would increase access to doulas. Knowing that doula services are covered by Medicaid was a higher priority barrier than the general knowledge of doulas and what doulas do, so this strategy was seen as important.

Both survey panelists and member check participants emphasized the need for one-on-one conversations to convey information about doulas, especially for mothers and gestational parents. Member check participants expected to hear about doulas from their obstetrical providers at prenatal visits and expected to hear about them during their first trimester. Many of the survey panelists mentioned one-on-one conversations as well. The participant who used a doula for the birth of her children said that she was told by her obstetrical provider that a doula would help her have the birth experience she wanted and provided a direct referral to doulas who could help her, further emphasizing the role of provider to patient education and the importance of obstetrical providers in doula care access.

Survey panelists also had other ways in which they emphasized direct communication or relationship building to reduce the knowledge barriers. Two mentions of community forums and seven mentions of direct education to healthcare providers were suggested as solutions. Hospital-based doula programs, community-based organizations such as WIC staffing doulas, and hiring doulas to care teams were organizational changes mentioned that would also help inform both the supply side factors such as obstetrical providers and demand side factors such as the mothers and

gestational parents who are patients at these clinics and hospitals. Outreach efforts, from doulas to parents, providers, and community organizations and doula organizations forming relationships with medical provider organizations were also a recommended strategy, which would increase the face-to-face time doulas spent with these system levels to increase knowledge as well as build relationships.

Financing of doula care was a central theme in Rounds 2 and 3, and many of the suggested solutions revolved around financing. Financially incentivizing CCOs to incorporate doulas, lobbying to support doula efforts, and increasing the reimbursement rate for doulas and health system changes such as improving the billing process for doulas were all finance-related solutions. All three of the member check participants agreed that the current rate of \$350 per birth was too little to recruit people to become doulas and serve as THWs, and their answers varied for what they felt was a fair price; one said at least minimum wage, one said \$1,000 and one said she paid \$1,200 and that her experience was worth more than the money spent.

There were a number of system and organizational changes that survey panelists and member check participants saw as influential to doula care access. Member check participants mentioned expecting to hear about doula care from obstetrical providers during their first trimester prenatal visits, they thought that information sent directly to them by CCOs telling them that doula services were covered by their healthcare plan was important. They suggested receiving this information in the intake packet they fill out when they find out they are expecting, or during WIC counseling sessions or hospital tours. Survey panelists also mentioned the same kinds of organizational changes, such as

direct CCO notifications and hospital staff promoting tours; they also mentioned health system changes such as OHA or CCO creating referral pathways for doulas, additional OHA personnel to support efforts related to supporting CCOs and doulas in administrative support, more insurance providers covering doulas, and the creation and enforcement of policies that support CCOs in integrating doulas into their program offerings for families.

Despite the emphasis in Rounds 2 and 3 on the importance of barriers for training and recruiting diverse doulas to the workforce to provide culturally and linguistically appropriate care, there were two mentions of solutions related to this theme: providing tangible support, such as money, to community members looking to become doulas and for doulas of color to recruit from their communities to work as doulas. This particular problem is likely multi-faceted. By definition, Medicaid-eligible people are lacking financial resources, and it takes financial and other resources to become certified, including offering their services free of charge to at least one family to complete their certification process. The low reimbursement rate from Medicaid would not be enough for doulas to sustain only on Medicaid-enrolled families, so they would need to take private-pay clients as well. Generally, doulas in Oregon currently struggle with charging a rate that allows them to work solely as a doula and often take other jobs in addition to their doula role to survive financially. In order for doula work to be equitable for doulas of color, it would need to be financially sustainable, which may be one of the most critical barriers to doula care access.

Conclusion and Analytic Themes

This research study set out to understand the emerging Medicaid policy and system factors that would increase access to doula care in Oregon through developing a model of access to doula care, determining the priority barriers and facilitators, and recommending possible actions to increase access to doula care in Oregon. The study was conducted in five phases of data collection, divided into three rounds. In the first round, which consisted of focus groups with mothers and gestational parents and a survey to professionals who have expertise in this topic, 48 barriers and 40 facilitators were identified as influential to doula care access. Using these factors, conceptual categories for the model were clarified resulting in a modified model of access to doula care (seen in Figure 4.1 and Table 4.1). In Round 2, the survey panelists read each factor and a descriptive quote and ranked the importance of each factor from a scale of 1-5. In the first part of Round 3, survey panelists were presented with tables of Round 2 results organized by mean and asked to choose their top five barriers and facilitators to doula care access; for each barrier, they were asked to provide a list of solutions to the barrier.

Finding 1: Lack of Knowledge Influenced Health System and Policy Factors that Negatively Impacts Doula Care Access

Knowledge as a general theme, and as represented within specific barriers or facilitators, was one of the most influential factors to doula care access. The most frequently cited solution to increasing access to doula care was related to knowledge and understanding of doulas on the demand side, and many of the factors, including the initial creation and implementation of the program, were caused by a lack of familiarity of the

scope of practice of doulas, the ways they organize and operate, and, for the healthcare system, how to equitably integrate these independent providers into a system that is unfamiliar with, and has demonstrated skepticism of their role (Neel, Goldman, & Nothnagle, 2019; Neel, Goldman, Marte, et al., 2019). Healthcare systems need to learn to document and bill for doula related services, supervise and manage doula staff, contract with doulas, what appropriate payment rates look like, and in some cases how to integrate doulas into care teams effectively. Mothers, gestational parents, nongestating parents, families and communities are also unfamiliar with the role of doulas, how they would support parents in the birth experience and to influence birth outcomes, and how this role does not threaten their own ability to provide support and value during pregnancy, labor, delivery, and postpartum periods.

Keeping in mind that doula care is an extension of the THW program, which is rooted in utilizing and bolstering community-based supports to promote health equity, the way in which survey panelists, mothers, and gestational parents want to be educated about doulas is through trusted sources of information. Obstetrical providers were expected to provide this information, and during first trimester prenatal appointments. The value of community members such as family and friends who have used doulas or endorse doula use was also emphasized as a source of information that "held weight." In particular, the role of the internet and social media forums or parenting and pregnancy groups such as found on Facebook were identified by member check participants as influential sources of information.

Finding 2: Healthcare Providers as Highly Influential to Doula Care Access

Healthcare providers, in particular obstetrical providers, were identified as highly influential to doula care access. The nature of their influence is that of providing information and encouragement to use doula services. Given the nature of knowledge as a thematic barrier to doula care access, and the role that healthcare providers are expected to play in patient education by participants in this research study, it then follows that healthcare provider influence plays a large part in doula care accessibility. The nature of the influence is the same as a barrier and as a facilitator, however, which is primarily providing information. The member check participant who used a doula for her birth was provided with a list of local doulas who were familiar with birth of multiple children, and that information along with the encouragement to use a doula influenced her decision to secure and utilize doula care. Other member check participants said they expected to hear about doulas from their healthcare providers during the first trimester. One member check participant also emphasized that obstetrical providers' recommendations were taken very seriously by nongestational parents and that adherence to obstetrical provider directives was imperative to their view of being supportive to their partners.

Healthcare provider attitudes vary among clinicians based on the kinds of experiences they have had with doulas (Neel, Goldman, & Nothnagle, 2019; Neel, Goldman, Marte, et al., 2019), and many healthcare providers are still cautious and skeptical of the doula care role. Provider attitude was identified as impacting access to doula care outcomes in this study as well, and not only for obstetrical providers but for labor and delivery nurses; families and communities were also said to express reluctance

to the kind of support doulas provide. However, Oregon's familiarity with the model of midwifery care, the perception that Oregon is a "birth friendly state," and the presence of local doula training organizations and doula practice groups in urban areas may influence the knowledge and experience of local providers such that they have more contact and experience with doulas. Nonetheless, it appears that provider knowledge of doulas in general is a barrier, and knowledge that doulas are covered by Medicaid, how to refer patients to doulas, and where to make a referral are all more influential to doula care access than unsupportive healthcare provider attitudes. This is likely why so many of the recommendations for actions to correct barriers included educating healthcare providers from trusted sources such as the OHA or a provider's CCO.

Finding 3: Most Influential Facilitators were in Approachability, and the Most
Influential Health System and Policy Barriers were in Availability, Acceptability &
Affordability

Survey results for Round 3 indicated that the largest number of facilitators and the most frequently chosen facilitators were in the Approachability dimension of access and the most barriers as well as the largest number of influential barriers occurred in the Availability, Acceptability & Affordability dimension. The utility of using the model of access to doula care is the ability to determine where in the process of access more resources and support are needed, and what current health system and policy factors are working to support access. Efforts to educate and provide information to mothers and gestational parents from the healthcare system, specifically healthcare providers, hospitals and birth centers, and any information available on the internet through

websites, peer reviewed research, or social media resources, were identified as influencing this access dimension. Given that knowledge-related barriers are so influential to doula care access, understanding the facilitating factors to doula care access then allows an examination of these efforts more closely to replicate them and make them more widely available.

The most influential access dimension for barriers is Availability, Acceptability & Affordability. The intention of passing a policy to fund doulas through Medicaid fits within this dimension; however, this dimension presents the greatest barriers to doula care access. The three types of barriers in this access dimension relate to the cost and financing of doula care, the ability to train and recruit a diverse doula workforce, and buy-in from CCOs and OHA. All three of these barriers impact the intention of the THW program.

The THW program is fundamentally rooted in equitable health outcomes, and part of this goal is established through providing culturally and linguistically appropriate care for Oregon families by recruiting community members to serve as peers and social supports. However, given the way in which the health system is structured for doulas, the financial risk associated with providing Medicaid-funded services has fallen on individual doulas and issues of equity were not considered for the workforce within the initial structure of the policy; it was assumed to fall on other organizations such as CCOs, hospitals, and clinics. As previously stated, doulas generally have not worked directly for these organizations and these organizations are so unfamiliar with how doulas work and can be integrated into their structures that they are unable to assume financial risk or

responsibility for a fair or living wage. Career doulas in Oregon already struggle with workforce sustainability and earning a living wage through serving private pay clients. Living wage rates were significantly higher than the \$350 per birth that was offered prior to July 2022, which increased to \$1,500 per birth (OHA, 2022e). Oregon has made progress on correcting for doula workforce issues; however, most solutions to access to doula care from the supply side of the model will need to address equitable and sustainable doula workforce development.

Finding 4: Families and Communities have Strong Facilitating Qualities

The second most influential facilitator to doula care, after healthcare provider referral and knowledge of Medicaid coverage, was doula use and support for doula use from peers. Delphi survey participants voted for this facilitator as very influential to doula care access, and member check participants illustrated the ways in which this support held weight for other mothers and gestating parents to make decisions. The idea of community and peer support was not limited to local friends and peers but included other mothers and parents who were part of online parenting forums or Facebook groups dedicated to similar interests or stages of parenting. The value that participants placed on viewpoints from other expecting parents and families from different parts of the world added importance to peer input and shared experiences. The two member-check participants who mentioned the value of these groups said that doulas were not talked about much, which also highlights the theme of both the newness of doulas to the healthcare system and the broad lack of knowledge of doulas.

Another family-related factor that was newly emphasized was the ability for doulas to support nongestating parents and other social support people during pregnancy and birth. Member check participants, as well as Round 3 survey participants, emphasized the support that doulas provide to nongestating parents through emotional support; a more accessible form of support than birth classes or obstetrical providers was highlighted. Participants at each focus group and well as survey panelists felt their families and communities would view doula support as taking away from their ability to support a laboring mother or gestational parent; given the important role that doulas have in supporting the social support network of mothers and gestating parents, this is a particular knowledge gap that would benefit from being addressed, especially with culturally specific messaging for groups most impacted by negative birth outcomes and who would benefit the most from doula support.

Finding 5: Doula Professionalism, Organization, and Activism Is a Facilitating Factor

The roles of doula activism and professionalism were influential. Barriers such as bad experiences with doulas and unprofessional doulas were identified by survey panelists, but doulas who act in ways that promote quality care and beneficial outcomes were rated much more highly. Doula organizational efforts and advocacy, as well as a supportive political environment, were Round 3 top facilitators, emphasizing the importance of the professional, organization, and advocacy efforts of local doulas to help bring about the political and system changes that resulted in doula care becoming Medicaid reimbursable in Oregon.

Doulas do not have the political and financial capital that other licensed medical professionals have developed over time, and the history of their organizing and lobbying is very new (Hart, 2022). This is further emphasized by the finding that knowledge of doulas across system levels and across society is so limited or misinformed. Furthermore, they are entering into a system in which their power dynamics, roles, and ideologies are potentially in conflict with obstetrical providers, who have medical expertise and authority (Adams & Curtin-Bowen, 2021). Doulas in Oregon, Minnesota, and other early-adopters of Medicaid-financed doula care policies have overcome an initial hurdle to entering the healthcare system, but Oregon's healthcare system illustrates a significant number of gaps in the understanding of provider-doula relationships, the doula workforce, and state healthcare system. Access to doula care was influenced by the organization and advocacy of doulas, and its sustainability will continue to be forwarded through the continual efforts of doulas. However, as a matter of fulfilling policy intentions, other resources and partnerships need to be allocated to doula organizations to participate in the policymaking and agenda setting activities necessary for program success.

Conclusion

Oregon was the first state to incorporate doula care as a Medicaid-funded effort to reduce health disparities among mothers and gestating parents and increase quality of care. Oregon, and other states, have encountered a number of barriers to fulfilling policy intentions of increased access to doulas. This study aimed to identify the barriers and facilitators to doula care access, prioritize both barriers and facilitators, and identify

actionable solutions to the top-identified barriers to doula care access. Barriers and facilitators were identified both by focus group participants who were mothers or gestating parents utilizing WIC in three regions of Oregon and a panel of healthcare, doula, and related professionals well acquainted with the policy topic and policy details; both groups assessed the importance of all identified factors.

Utilizing and modifying the model of access to doula care resulted in understanding that the greatest barriers to doula care involve a lack of knowledge about doulas across all supply and demand side system levels and that this lack of knowledge influenced the initial implementation and continued execution of the THW program. Mothers and gestational parents who experience healthcare provider recommendations and referrals seem to have the greatest facilitated access to doula care in Oregon. The next most influential barrier to doula care access was related to the financing of doulas including the cost of doula care, the low reimbursement rate, and the barriers to billing CCOs or the OHA for doula services. The third most influential thematic barrier was the training and recruitment of doulas from diverse communities; both the finance-related barriers and the doula workforce barriers combine to highlight the need for programs that utilize doulas as THWs to highlight equitable doula workforce development as a critical component to access to doula care.

Communities and families, and in particular nongestational partners, are excellent facilitators of doula care access when educated about the benefits of doula care to mothers, gestational parents, and nongestational parents or support people. Communities are also excellent sources of a new and emerging doula workforce but will need supports

to obtain the necessary training and certifications. The continued efforts of doula advocates and organizations and the professional standards have resulted in quality care and increased access to doulas, but healthcare systems that intend to utilize doula services cannot solely rely on these organizations to make changes in a system built from medical professionals who have a longer history of and more financial resources for organizing, lobbying, and advocacy. In the next chapter, research, policy, and healthcare system recommendations are offered to address these barriers to doula care access.

Chapter 5: Recommendations and Conclusions

Introduction/Overview

The purpose of this study was to develop a comprehensive understanding of access to doula care within Oregon's healthcare system in order to create policy priorities for increasing access to doulas in Oregon for Medicaid-enrolled families. The research question for this study was: What are the emerging Medicaid policy and system factors that would increase access to doula care in Oregon? There were three objectives in this study:

- (1) Develop a model for access to doula care using Leveque et al.'s model of access to healthcare and use data from a group of mothers, gestational parents, and experts to refine the model,
- (2) Determine priority barriers and facilitators to access, and
- (3) Recommend possible actions at different levels of the healthcare system that could increase access to doulas.

This chapter begins with a summary of the findings for Objectives 1 and 2, and then addresses policy, healthcare, and research recommendations (Objective 3) as well as assumptions and limitations of the study.

Summary of Findings: Objective 1 and Conceptualizing Access to Doula Care

Healthcare policy and legislation frequently use language that declares access as an important component of policy intent. Most recently in Oregon's legislative history, voters passed a ballot measure that states that it is the responsibility of the "state to ensure that every resident of Oregon has access to cost-effective, clinically appropriate and

affordable care as a fundamental right" (Ballotpedia, 2022). Conceptualizing access to care is critical to policy analysis and determining measures of policy success. This dissertation research was conducted using Levesque et al.'s (2013) conceptualization of access (Figure 5.1), which occurs across a process of steps to obtaining care. Access issues occur not only as a facet of the health system but also as an interaction between the patient and factors such as their social supports or resources.

Availability, Approachability: People Acceptability, and Appropriateness: Timely, Affordability: there are with health needs can quality services that are identify services exist, enough providers, an appropriate fit with can be reached, and enough of the right patient need impact health providers, and at a cost the patient can afford. Identifying Healthcare Healthcare Health Healthcare Reaching Utilization Outcomes Needs Ability to Reach: Ability to Approach: Resources and Factors related to environmental factors, Ability to Engage: knowledge, attitudes, such as social network, Factors that allow for beliefs, trust, and social capital, active involvement and expectation, that will transportation, time, participation in health influence a patient's and money, that care. perception of their influence a patient's health care needs. ability to obtain care.

Figure 5.1: Adapted Model of Access to Doula Care

This conceptualization of access, which includes six dimensions of access across a process of obtaining and utilizing health care, allows for understanding specific areas where access is supported and where access is impeded and needs additional resources. The results of this study showed that there are strong facilitating factors to doula care access, primarily in the Approachability dimension of access through provider promotion and referrals to doula care, and some important Ability to Reach factors which include social support and communities, family and friends who use doula support and are supportive of mothers and gestational parents who consider using doulas. The barriers that were most influential to doula care access fell primarily within the Availability, Acceptability & Affordability access dimension, as well a few prominent barriers in the Approachability, Ability to Approach, and Ability to Reach dimensions of access. When policies to increase access to care are primarily tied to funding, they influence one aspect of access to healthcare. However, increasing access to doula care necessarily means addressing all barriers, especially critical barriers that influence multiple steps of access and the multiple levels of access.

Summary of Findings: Objective 2 and Priority Barriers to Doula Care Access

There were several themes for influencing doula care access that emerged from this study. The primary theme that influenced all five of the dimensions of access in Round 3 was related to knowledge, understanding, and misconceptions of doula care on both the supply side and the demand side of access. On the demand side, it became clear that not enough mothers, gestational parents, and families had sufficient knowledge about the doula role to make informed decisions; many of the participants did not know what a

doula was upon entering the study. On the supply side, healthcare provider knowledge and acceptance of the doula role was a high priority barrier that had specific implications for patient access to doulas through information and education. Healthcare system knowledge was a priority barrier at the highest system levels because it influenced the initial implementation and structure of the doula program and the Traditional Health Worker (THW) program as a whole; the critical decisionmakers and administrators in the healthcare system did not know enough about how doula business and care models operate, what qualifies as a living wage, and that successful, quick reimbursement is critical to access. For healthcare providers who value doula care for their clients, knowledge of Medicaid coverage and how to make referrals to doulas were significant barriers. Correcting the knowledge gap for all system levels, in particular among healthcare providers, is a top priority barrier to influencing doula care access, especially in the Approachability and Ability to Approach access dimensions.

The next priority barrier that was most influential to access to doula care for Oregon Medicaid-eligible families was the set of barriers related to the ability of doulas to earn a living wage: the general cost of doula services, the low reimbursement rate at the time of data collection, and the difficulties that doulas experienced in attempting to enroll and bill for services, all of which created barriers for existing doulas to engage with the THW program and become reimbursable through Medicaid. These general barriers that influenced the available doula workforce were further compounded by another important barrier theme: barriers for doulas of color to enter the doula workforce and earn a living wage serving their communities while receiving the fees offered by the

state Medicaid program. Since doulas were seen to act as advocates for equitable healthcare delivery and equitable healthcare outcomes for diverse communities served by Medicaid, the development of a sustainable doula workforce and the ability to earn a living wage through doula services are both necessary to carry out the policy as intended and to sustainably increase access to doula care for Medicaid-enrolled families.

Finally, the last major barrier theme to doula care access was the perceived buy-in from the OHA and CCOs for successful program implementation. The knowledge gap of the doula business model and scope of practice led to assumptions by the OHA and administrative policymakers, when rolling out the initial plan, that integration into a clinical setting and supervision by obstetrical providers would come easily and allow for financial risk-sharing, and administrative processes such as enrollment in the program and billing would be assumed by doula groups, community-based organizations, clinics, or hospitals. The doula role is still so new to the healthcare system that, while integration is still a salient goal, the CCOs and OHA needed to proactively engage with and offer resources for successful doula integration, and study participants felt that this was lacking, creating a barrier to doula care access.

Objective 3: Policy, Healthcare System, and Research Recommendations to Increase Access to Doulas

The third objective of this dissertation was to recommend possible actions at different levels of the healthcare system that could increase access to doulas. There were many thematic barriers that were considered the key areas for influencing access to doula care. Recommendations were developed to address each barrier theme to increase access.

Recommendation 1: Increase Knowledge of Doulas for General and Patient Populations

The most influential barriers identified in this study relate to knowledge of doulas; there is a perception among participants that people do not know the benefits of doula care and the role that doulas play in pregnancy, labor and delivery, and within the healthcare system. Survey panelists made population-level suggestions for communication strategies including public education campaigns, accurate media representation of doulas, and public transit ads that would demonstrate the need for a better societal understanding of the doula role. While the general population's knowledge and understanding of doulas is critical to increasing doula care access, the primary emphasis for increasing access to doulas in Oregon for Medicaid-enrolled families was directed to healthcare providers, mothers and gestational parents.

Patient-Centered Research to Support Patient Decisions about Doulas.

Finding ways to get the appropriate information to mothers and gestational parents is equally as important as understanding what information is important to convey. There have been studies on the experiences of women and gestational parents' perception of their doula support and the value of the support to their birthing experiences (Koumouitzes-Douvia & Carr, 2006; Breedlove, 2005; Steel, Diezel, et al. 2013; Bohren et al., 2016). There is also evidence that, once past the birth experience, 27% of mothers and gestational parents who knew what doulas were but had not utilized a doula during their birth wished they had utilized a doula during their delivery (Declercq et al. 2013). While not all mothers and gestating parents want or need to use doulas, communicating

the need, value, and potential impact to these populations is necessary for increased access to doula care. The present study is the first of its kind that included the mother's and gestational parent's perspective of doula care from participants who have not used a doula, who have chosen not to use a doula, or who were not familiar with the doula role.

Existing research needs more detailed accounts of the decision-making process around doula use, why some mothers and gestational parents use them and why some may experience facilitated access to doulas but choose not to use them. Equally important are cultural considerations; this became clear at the Families & Communities system level because participants who chose not to use a doula or expected there to be resistance to doula use from their spouses or extended family cited their cultural backgrounds as reasons for the barrier. There are studies on the potential cultural conflict of White or culturally dominant doulas working with culturally and linguistically diverse populations including Mothers or Gestational People of Color, immigrants, and LGBTQ families (Basiale, 2012; Kang, 2014; Salinas et al., 2022), and doula care has been suggested to provide women and gestational parents access to cultural aspects about birth (Hardeman & Kozhimannil, 2016). However, the present study suggests that there are also cultural barriers to utilizing and seeking doula support. Further research needs to be done to understand what the cultural perceptions of birth, the role of family, the role of the health care team, and the role of doulas could be in health care decision-making for these populations in Oregon. This research could focus on understanding the expected needs during the last trimester of pregnancy and during birth, how women and gestating parents expect these needs to be met, how they differ from lived or potential birth experiences

that diverge from their knowledge, and how birthing parents envision that a doula could have filled this role despite the social and information supports they had at the time of labor and delivery.

The next step in understanding access to doula care in a way that influences knowledge and understanding would be to explore multiple case studies using the model of access to healthcare or the model of access to doula care for mothers and gestating parents who have used doulas and those who have not. For those who have not used doulas, finding mothers and gestating parents who wished they had used a doula during childbirth and exploring why they did not obtain a doula would help refine messaging to address potential knowledge gaps or misunderstandings, and enhance understanding about those who are satisfied with their birth experiences and did not use doulas.

Collectively, these research activities would better refine screenings and need-based criteria for recommending doulas to expecting parents.

Support Effective Means of Communication. Despite the lack of information on what messages to convey about doulas to fill the knowledge gap, the way in which information is provided and by whom was made clear, and future efforts should find ways to support this messaging. Mothers and gestational parents expect to hear about doulas within their first trimester and want to hear about them from their obstetrical providers; messaging that is conveyed one-on-one with individual parents is important and highly valued. Supporting healthcare providers in facilitating access to doula care is covered in the next recommendation, but there are other system levels that can further support doula access through informing parents.

CCO-provided information made available directly to parents through welcome packets sent by mail, and in enrollment materials obtained through application assistance sites or MothersCare visits, and additional website information on the CCO's website specifically directed at expecting parents, were strategies strongly encouraged by participants. The current strategy of many CCOs is to inform parents of their CCO's THW liaison through member handbooks or on their websites under the general THW program information section which explains doula services (Columbia Pacific CCO, n.d.; Trillium, 2022; HealthShare of Oregon, 2022b), and/or by including a brief description of what a doula is in their handbooks (OEA, 2022; OHA, 2023a). This information reduces some of the burden of knowing that doula services are covered by their health plan, which influences an important barrier identified in this study; however, the knowledge gap is substantial enough that CCOs should provide more information about the doula scope of practice and outcomes associated with doula care. CCOs could provide more general information within intake packets and in materials related to their THW programs. The Office of Equity and Inclusion at the Oregon Health Authority oversees and publishes the information related to THW program integration and utilization and would be a logical administrative site to oversee the implementation of educational information about doulas.

Recommendation 2: Support Obstetrical Providers as Doula Access Facilitators

Researchers and policymakers in Oregon understand the nature of doula and obstetrical practitioner relationships as important to quality care and the experience of care for families; existing research discusses the perceptions of the doula role by

healthcare providers (Stevens et al., 2011; Neel, Goldman, & Nothnagle, 2019; Neel, Goldman, Marte, et al., 2019; Lucas & Wright, 2019). During the creation of the THW policies, there were assumed relationships about doulas and obstetrical providers, and the ways in which doulas work with the birth team that were adjusted subsequently in order to have effective doula utilization. It was expected that doulas would work directly under the supervision of an obstetrical provider and that the provider could be responsible for billing, and that doula work was closer in nature to the role of social workers rather than direct supports such as certified nursing assistants. While Medicaid funding has created more opportunities for obstetrical providers and doulas to collaborate and coordinate services, the system had to adjust its payment mechanism to account for doulas working independently from healthcare providers and healthcare organizations, and to adjust expectations for billing for the direct provision of care for the length of labor and delivery (Everson et al., 2018). The findings of this study further contextualize the important facilitating role of obstetrical providers in increasing access to doula care for Oregon families; it is recommended that future efforts to increase access to doulas include supporting healthcare providers in facilitating access to doulas.

The OHA Office of Equity and Inclusion first published its healthcare deliverables for the THW program in 2021; one of the reported items is referrals to THWs, including doulas (OEA, 2022). Furthermore, the 2023 CCO incentives include measures for building system capacity to provide trauma-informed, culturally responsive screening and referrals and to start reporting and sharing social needs screening and referral data (Metrics Scoring Committee, 2022). However, because doulas do not require

a referral, doula referrals are not always tracked and some CCOs experience difficulties tracking encounters with doulas (AllCare, 2021; Columbia Pacific, 2021). Given the importance of healthcare provider referrals to facilitating access to doula care, assisting CCOs and their obstetrical providers to track referrals would be a crucial measure of access to doulas for Medicaid-enrolled families (ACOG, 2014). Furthermore, assisting physicians in supporting patients and providing referrals without increasing workload burden should be explored.

One identified barrier to doula care was the time constraints experienced by obstetrical providers to offer quality care to their patients, so recommendations regarding the additional burden of mandated processes or quality metrics need to be carefully considered before being made or instituted. Furthermore, the OARs outline specific populations, such as those with "limited to no family or partner support," "under the age of 21," or patients "with a racially or ethnically diverse background" who would benefit most from doula services (Doula Services, 2017). Nonetheless, the development of screening and referral tools that can easily be implemented would greatly increase access to doula care for Medicaid-enrolled families in Oregon. The American Academy of Pediatrics and the American College of Obstetricians and Gynecologists recommend screening for social support that includes safety and personal resources (AAP & ACOG, 2017), so expanding those screenings could support obstetrical practitioners in making appropriate referrals to a wide variety of support services. Initially, healthcare practitioners who do not have additional screening tools can include resources such as the Olso-3 Social Support Scale, PTSD screening tool, or other related screenings that can

help assess the potential need for additional social support (Wenz-Gross, 2016). Future research endeavors could help to further create screenings for the kind of support doulas provide during childbirth as well as postpartum.

The larger gap to close for providers, as with mothers and gestational parents, may be creating an adequate understanding of the role of doulas, providing enough practical experience working with doulas, and providing knowledge and resources to make referrals and connect patients with doulas. While there has been research on the attitudes and perceptions of healthcare providers on doulas (Stevens et al., 2011; Neel, Goldman, & Nothnagle, 2019; Neel, Goldman, Marte, et al., 2019; Lucas & Wright, 2019), it is not understood what information providers have about doula care outcomes. Shifting research from additional evidence to informational and comprehension-focused studies may be key to shifting access through healthcare providers.

One finding of the present study was that some participants believed that there was enough evidence-based support for doula-related outcomes such as shorter birth times, improved patient experience, and reduced use of medical interventions, while others said that there was not enough research on the topic. What evidence-based information healthcare providers have about doulas, their trust in the current research and perceived research gaps, and how this relates to their experiences (or lack of experience) need to be explored further. Most studies engaging with healthcare providers were survey-based (Stevens et al., 2011; Neel, Goldman, & Nothnagle, 2019; Neel, Goldman, Marte, et al., 2019; Lucas & Wright, 2019); given the considerable gap in general knowledge of doulas and the specific role of healthcare providers in influencing access to

doulas, future research with methodologies such as interviews and case studies of clinics, hospitals, or healthcare systems should be conducted to identify strengths-based approaches. Finally, healthcare providers need easy-to-access resources that can help them connect patients with doulas in order to make referrals. Given that claims data on referrals to doulas by care providers are emerging, and some CCOs are successfully tracking and referring patients to doulas, strengths-based research that assesses the existing relationships between doulas and providers, the tools and information available to referring providers, and how to replicate these practices would greatly increase access to doulas in other healthcare systems.

Recommendation 3: Support Equitable Doula Workforce Development

One major theme of this study is the healthcare and administrative sectors' lack of familiarity with doulas. Additionally, while not directly mentioned by participants, previous research suggests that it is also critical to increase the rural doula workforce, as most doulas are concentrated in the more urban areas of Oregon (Everson et al., 2018). The most recent healthcare workforce development efforts in Oregon are focused on developing a diverse behavioral health workforce, supporting health-related social needs such as housing and nutrition (OHA, 2022d; Behavioral Health Services, n.d.), and recent legislative efforts in Oregon's Legislature focused on increasing the public health workforce and modernization (HB 2773; SB 5525). While 2023 workforce allocations may not be able to focus on statewide doula workforce initiatives, future legislative advocacy efforts for THW spending and more localized efforts could advance workforce development efforts.

The primary barrier to address at the Doula system level is the diversification of the workforce and equitable wages. The Oregon doula workforce that works with private pay clients struggles to maintain work-life balance and charge rates that make doula work a sustainable career (Everson et al., 2018), so the ability to offset lower Medicaid reimbursement with private pay clients is not feasible for most doulas in Oregon. At the core of this issue are three factors: the first is the socioeconomic nature of Medicaid and that certain populations such as the Black and Latinx populations are over-represented as Medicaid-enrolled; the second is the barriers to entry into the doula workforce through costly and time-consuming certifications (Kozhimannil & Hardeman, 2016) and a sustainable career as a doula while earning a living wage (Everson et al., 2018); and the third is the needed structural support from OHA and CCOs to ensure that doulas enrolled in the THW program have enough administrative support to file claims for reimbursement and receive their payments in a timely manner.

Since the intention of the policy was to provide culturally competent care by a diverse doula workforce, it necessarily requires that a living wage be included in future legislation that will support attempts to recruit community members to serve low-income populations. One of the key findings of this study was that an increased Medicaid rate for doulas was an important system change that was necessary for increased access to doula care. Oregon has already announced an increase in fees from \$300 to \$1,500 per birth (OHA, 2022e), which is more equitable and more likely to result in a living wage for doulas serving predominantly Medicaid-enrolled families. This will likely increase access to doula care but there are still other barriers to a diverse doula workforce. Sustainability

of doula work with Medicaid-enrolled families also means these payments must be made in a timely manner; OHA and CCOs must work to create structures to support the administrative aspects of billing, either through taking on this responsibility directly through existing clinics or organizations acting as a doula billing provider or offering grants, administrative, and other support to local doula organizations to become and sustain Doula Billing Hubs for billing (Everson et al., 2018; Catlin, n.d.). Doula Billing Hubs, which are state approved, doula-specific organizations that can bill directly for services (Caitlin, n.d.), have emerged across the state but require additional staff to submit claims and will require ongoing financial support to offer billing services to an increasing number of doulas.

Incentivizing entry into the doula workforce for low-income populations will also require financial support for certification as well as wages lost due to training hours, attending pro bono births to become certified or maintain certification, and transportation to and from visits. State or CCO funding for grants to existing organizations such as the Community Doula Alliance or, for more rural areas, scholarships for individuals to help certify, train, and mentor doulas will be required to diversify the doula workforce and to provide culturally and linguistically appropriate care. The expanded focus on community-led health equity interventions through the 1115 Medicaid Waiver and new Community Investment Collaboratives are a potential source of funds for community-based organizations to propose and implement workforce support initiatives, currently or in future endeavors (OHA, 2022d; OHA, 2022b). Additionally, the ability for an independent healthcare provider to work with Medicaid-enrolled families requires them

to be able to stratify their patients with private insurance patients; the lack of private health coverage for doula care makes diversifying the doula workforce and creating a sustainable doula career even more difficult (Kozhimannil & Hardeman, 2016). Federal or state legislation that mandates doula coverage would help to increase the viability of doula work and secure a livable wage for doulas.

Finally, legislation or administrative rule amendments to implement or assess a postpartum doula program in Oregon, rather than a program solely focused on birth doulas, would also increase access to doula care. Adding postpartum doula care could be an administrative rule change that adds to the existing doula offerings of birth doulas or a separate piece of legislation. Postpartum doula care could also fall under In Lieu of Services; breastfeeding support provided by THWs or postpartum doulas is already an approved service covered by Health-Related Services (HRS) funds currently available to CCOs (OHA, 2022c). Oregon has a unique opportunity to provide and demonstrate the use of doula services in this way.

Offering and tracking claims related to postpartum doula work and doula visits would fill a significant gap in knowledge of the impact of postpartum doula care.

Postpartum doula care is limited to after birth, and there is a potential for postpartum doula care to influence breastfeeding success, connection with and adherence to other medical and social services for families of newborns (Campbell-Voytal et al., 2011, Cattelona et al., 2015), and reducing the effects of postpartum depression (Gjerdingen et al., 2013). Little is known about postpartum doula care, its use in combination with or separate from birth doula work, if postpartum doula care aligns more closely with other

THW activities, or what key outcomes at what appropriate timeframes would be included in postpartum doula research. From a workforce sustainability lens, postpartum doula care is different from birth doula work because it is delivered on a more predictable schedule, includes a set number of hours, and is paid at an hourly rate. Postpartum doula care adds more work and predictability to a doula's schedule, reducing burnout (Everson et al., 2018).

Finally, advocacy is a foundational part of doula work within the healthcare system on behalf of culturally and racially diverse gestating and birthing individuals (Basile, 2012; Salinas et al., 2021; Rysdam, 2019; Mallick et al., 2022). Doula credentialing, through training organizations and supplemental trainings required by states to meet cultural competency requirements (see Figure 2.1), addresses the medical and, to some extent, societal contexts that their culturally- and linguistically-diverse clients encounter. Expanded trainings to doulas and THWs to include political advocacy, lobbying and coalition building to support professional advancement would also support workforce development and sustainability.

Recommendation 4: Support Doula Integration into the Clinical Setting

There was only one Organization level barrier listed in the study (which was related to low quality doula organizations), so most organizational changes that were suggested address increasing the facilitating factors or fall within the Healthcare System category and occur within OHA and CCOs. There were three organizational changes recommended by survey participants: more hospital-based doula programs, doulas staffed at WIC and within community-based programs that serve mothers and gestational parents

and hiring doulas to join clinical office care teams. Similar to expanding doula offerings through postpartum doula services, expanding the role of doulas in clinical and community-based settings for efforts such as breastfeeding education or peer support as covered In Lieu of Services would address these changes.

The number of hospital-based doula programs has increased since the implementation of the THW program, with two large hospital systems in Oregon hiring doulas in urban areas. The current research on hospital-based doula programs is growing. There is some research on hospital-based doula programs related to outcomes such as reduced epidural use, reduced Cesarean sections, positive birth experience, and improved breastfeeding (Gordon et al., 1999; Mottl-Santiago et al. 2008; Kozhimannil, Hardeman, Attanasio, et al., 2013), how well integration was received by clinicians or community members (Neel, Goldman, & Nothnagle, 2019; Neel, Goldman, Marte, et al., 2019), and the doula scope of practice within hospital settings (Beets, 2014). However, further research on the successful integration of doula care into a hospital setting and processes or challenges in properly supporting doulas to communicate, collaborate, and fully integrate into a hospital setting at various levels of integration (hospital administration; staffing, scheduling, and management or oversight of doula work; workflow integration and management; successful role definition) will be needed to help health systems integrate and adapt to birth teams that include doulas (Mottl-Santiago, 2020).

Given the framing of doula work as an extension of Traditional Health Work, future research needs to attend to the framing as a focus on community-based, culturally and linguistically appropriate health care. There may be some challenges in integrating doulas directly into healthcare systems, and finding ways to preserve social and cultural supports will become more important as doula integration as an extension of culturally and linguistically appropriate care expands to other regions and health systems.

Researching and expanding hospital-based doula programs can then offer more insight into incorporating doulas into other pregnancy and birth-related programs for parents and infants, such as WIC and obstetrical clinic settings.

One of the major barriers to successful integration of doulas is the healthcare system's lack of familiarity with doula scope of practice. A long-term solution that has been successful in clinic or community-based organizational settings is the flexible incorporation of certified doulas into existing offerings and making the doula role more flexible. For example, one CCO employed a maternal and child health case manager who was also a certified doula, allowing them to offer additional prenatal support and to coach non-gestational parents on providing labor and delivery support (Everson et al., 2018). Given the payment structure where each prenatal and postpartum appointment can be billed separately, there is a more flexible and slower integration process of doulas into these settings to potentially offer prenatal doula appointments as a means to assess birth and social support needs and make recommendations for birth that do not necessarily result in labor and delivery support.

Recommendation 5: Increase Administrative Support from OHA to CCOs and Doula Organizations

The overarching barrier that would support access to doulas for Medicaid-eligible families is to make the ability to bill and receive payments more accessible to THW

doulas. The two recommendations that arose from this research are to create a platform for online bill submission and to create grant-funded programs to establish Doula Billing Hubs throughout the state. The main theme of the healthcare system's lack of familiarity with the doula business model and scope of practice has created a need for innovation on how to incorporate all types of THWs into the healthcare system and healthcare settings. Finding ways to ensure quick payment and review of billing submissions for this specific set of healthcare workers is critical to fully equitable programming. An ideal scenario would be when the IT capacities can support electronic billing and payment for doulas and other THWs directly to OHA or to individual CCOs. However, limitations in technological support for such a program may vary across the state or healthcare systems.

Doula Billing Hubs already have some support from the Oregon Doula

Association and the THW Commission through guidelines and assistance with how to
properly submit bills, and what information is required of doulas (Catlin, n.d); some
billing hubs have already been created to help doulas bill (Doula Series Footnotes, 2020).

Further financial support to help create Doula Billing Hubs in every CCO in Oregon will
increase access to doula care. Funding would need to include startup funding to initiate
the process as well as continued funding to reduce the financial risk of individual doulas
serving primarily Medicaid-enrolled families. In this way, Doula Billing Hubs could
support equitable workforce development. Furthermore, to better understand how to
support these unique services, interviewing and collaborating with existing Doula Billing
Hubs to describe best practices, identify successes and challenges in becoming
established and integrating into CCOs, and serve registered doulas, would help influence

future efforts within Oregon and other state or federal organizations attempting to integrate THWs and doulas into their healthcare systems.

Recommendation 6: Expand Access through Future Legislation and Healthcare System Change

One key finding of this research is that Availability, Accessibility, and Affordability barriers related to doula workforce development are critical to increasing access to doulas for Medicaid-eligible families. Doula coverage for insurance companies would be highly beneficial as an evidence-based cost saving and outcome improvement strategy as well, given the outcomes related to doula care such as reduced Cesarean rate, reduced maternal deaths, and reduced postpartum depression, all of which also reduce the cost of care (Greiner et al, 2018). However, from a workforce development context, future legislation at the state or federal level that ensures doula care is a service covered by private insurance would increase access to doulas by ensuring that doula work can be sustainable and that doulas can earn a living wage without having to depend only on Medicaid-paying clients or private pay clients.

While there are studies that continue to produce evidence of the impact of doulas (Bohren et al., 2017, Falconi et al. 2022) and the cost savings associated with doulas (Greiner et al., 2018, Kozhimannil, Hardeman, Attanasio, et al., 2013; Kozhimannil, Hardeman, Alarid-Escudero, et al., 2016), the capacity to complete such research from Medicaid claims and across states is becoming more possible, creating a case for expanded insurance coverage of doulas. At this time (2023), eight states and Washington, DC have policies in place that actively provide coverage for doula care; Oregon and

Minnesota were the first states in 2011 and 2013, respectively. Florida and New Jersey both implemented their Medicaid doula coverage in 2019. Maryland (2021), Nevada (2021), Rhode Island (2022), Virginia (2020) and Washington, DC (2021) approved doula care as a covered service through varied legislative or state health initiatives. Within the next few years, the states that are beginning to implement doula care as a covered service will be able to generate multi-state research on the cost effectiveness of doulas to contribute to the evidence around doula coverage (Chen, 2022).

More research on the implementation of doula care through state Medicaid programs, such as is seen Kozhimannil, Hardeman, and Attanasio et al.'s (2013) report on doula care outcomes and cost for a cohort in Minnesota or Falconi et al.'s (2022) analysis of doula care outcomes from three states, will be available to analyze as these states begin implementing their programs and collecting claims data. Findings from such studies can support the further development and implementation of Medicaid-covered and private-insurance coverage of doulas, further identify cost benefit analysis, and examine more closely the outcomes related to doula care in short- and long-term scenarios.

Further research will also help new and current legislative efforts at the federal level. The most recently proposed legislation, HR 2521 DOULAS for Veterans Affairs Act of 2022, which passed the U.S. House of Representatives in December 2022, would require the Secretary of Veterans Affairs to conduct a study on the feasibility and advisability of providing doula services to veterans (DOULAS for Veterans Affairs Act, 2022). In April of 2022, HR 7475 Mamas First Act, which would mandate Medicaid

coverage of midwives and doulas, was also introduced into the House of Representatives (Mamas First Act, 2022). Bills related to doula care at the federal level have only been introduced, and none have yet to be passed, but passage of federal level legislation would increase access to doulas.

Summary of Objective 3 Recommendations

Table 5.1 presents a consolidation of recommendations organized by system level. The middle column addresses health policy recommendations and organizational or system changes to increase access to doulas. The right column describes future research and assessments that would further contribute to increasing access to doulas and expanding culturally and linguistically appropriate healthcare.

Table 5.1: Summary of Recommendations for Policy, Practice, and Research

Level	Policy and Practice Recommendations	Research Recommendation
Policy Recommendations: Federal Level	 Enact HR 7475, Mamas First Act, which would amend the Social Security Act to make doula services covered through Medicaid at the federal level. Add equitable workforce sustainability and billing/payment feasibility requirements. Propose legislation that would require doula coverage through private insurance at the federal level. Ensure that a perspective of healthcare equity also include workforce training and development equity and living wages. 	Enact HR 2521, DOULAS for Veterans Affairs Act of 2022, which requires the VA to conduct a study of feasibility and advisability of providing doula services to covered veterans. More multistate research on doula outcomes and cost effectiveness of doula care.
Policy Recommendations: State Doula Workforce	 Oregon: Propose legislation that would require doula coverage through private insurance in Oregon. Propose legislation or administrative rule changes adding postpartum doula care to Traditional Health Work offerings Advocate for legislation that focuses 	Oregon: Produce a report assessing the benefit and impact for the adoption of postpartum doula care into THW offerings in Oregon Region and community-specific
Recommendations	on living wages and equitable workforce development in Oregon and nationally.	workforce assessments in key regions in the US (community-based workforce needs assessment)

	 Explore startup and maintenance funding for Doula Billing Hubs. Advocate for postpartum doula care into THW offerings in Oregon. Include political advocacy trainings in doula credentialing curriculum. 	The development and execution of workforce capacity and needs assessments in other states Gather and collect information from current Doula Billing Hubs to create documentation and reports related to successes, challenges, and recommendations on establishing and sustaining these billing hubs
Healthcare Practice Recommendations	Explore additional screening tools for social support needs that could coexist with current screening practices. Develop referral resources for doctors and obstetrical practitioners at the CCO-level	 Further research on understanding knowledge gaps for mothers and gestational parents who would benefit from doula services. Culturally specific research on meeting the social support needs of specific communities in Oregon and how to best utilize this role. Case study research utilizing the model of access to doula care to identify the factors that lead to successful doula use and related outcomes. Qualitative research on provider knowledge and frame of reference, rather than attitudes about, doulas. Research engaging providers who refer patients to doulas to better understand the facilitating factors. Research on the impact of postpartum doula care and its cost effectiveness for related outcomes. Research the barriers and needs unique to rural patient populations and doula workforce development
Organizational Recommendations	 Expand hospital-based doula programs. Explore the use of doulas in other clinic or community based organizational settings. OHA assistance to CCOs for tracking doula referrals and encounters for CCOs struggling to provide this information. Enhance communications from CCOs directly to patients about doula services, accounting for knowledge gaps. Printed information in intake packets, welcome letters, and expanded website information. 	Hospital-based doula program research with a focus on serving the culturally and linguistically appropriate health care intention of the THW program

Policy Recommendations: Federal Level. Policy initiatives to support the passing of HR7475 Mamas First Act and HR 2521 DOULAS for Veterans Affairs Act of 2022 would increase access to doula care, adding equitable workforce sustainability, equitable workforce training and development, livable wages, and mechanisms to ensure swift payment practices for independent doulas. These elements need to be added to any future legislation. Federal legislation to require private insurance of doula coverage at the federal level should also be considered.

Policy Recommendations: State Level. Oregon should consider enacting legislation that would mandate private insurance coverage of doula services. Legislation or administrative rule changes that would add postpartum doula care to THW offerings would also increase access to doula care by creating a more sustainable doula workforce while providing for emotional and physical support to postpartum families.

Organizational Recommendations. There are three primary areas for organizational expansion of doula care access. First, doula access can be increased by expanding hospital-based doula programs to more hospitals in Oregon and exploring the flexible use of doulas in other community or clinic settings. Second, the OHA should explore ways to support CCO community partners and clinics in reporting THW referrals and encounters for CCOs and organizations that struggle with this metric. Finally, enhanced communications directly to patients from CCOs about doula services would offer more comprehensive information about what doulas provide. This information should be included in welcome packets, welcome letters, and expanded website information.

Healthcare Practice Recommendations. The primary healthcare practice recommendations focus on supporting obstetrical providers in guiding patients and making appropriate referrals to doulas. Exploring additional social support screening tools that could occur concurrently with other prenatal screenings and the development of resources for obstetrical providers to enhance their ability to make referrals would increase access to doulas.

Doula Workforce Recommendations. Enhancing the doula workforce is a key theme for increasing access to culturally and linguistically appropriate doula care. Advocating for legislation that focuses on living wages and financial supports for culturally and linguistically diverse doulas to become certified and trained as doulas, adding postpartum doula care to THW offerings, exploring startup and maintenance funding for Oregon Doula Billing Hubs, and including political advocacy in credentialing THWs are all recommended for increasing and sustaining access to doulas.

Implications for Future Research

There are many existing opportunities to further study and assess ways to improve access to doulas and improved birth outcomes, expanding on existing reports or assessments mandated through legislation as well as health systems and healthcare practice research that can better understand and influence healthcare practices and administration. First, there are reports and assessments that have been created or bills introduced that would help further understand how to increase doula access; enacting or expanding upon these would provide more information to influence policy and health system change. In Oregon, House Bill 3311 mandated that the Oregon Health Authority

explore options for using doulas to improve birth outcomes, and subsequently analyzed data and created a report with recommendations to use doulas as a means of addressing birth-related health disparities (Tillman et al., 2012). Oregon House Bill 3311 required the Oregon Health Policy Board to conduct a healthcare needs assessment of the state, and a doula workforce needs assessment was conducted through the Office of Equity and Inclusion (Everson et al., 2018).

States such as Oregon, Minnesota and Florida have a unique opportunity to expand doula services and, using data from birth doula use with postpartum doula visits, make a case for postpartum doula coverage or expanded doula packages that include more postpartum visits. There is an increased focus on postpartum care currently in Oregon and a further need for culturally- and linguistically- appropriate care around pregnancy and postpartum support. Pregnancy-related Medicaid benefits will continue for 12 months postpartum instead of 60 days postpartum and the Citizenship Waived Medical (CWM) Plus, administered through the Healthier Oregon program, extends pregnancy-related benefits to Oregonians regardless of immigration status (OHP, 2022; Ersland, 2022; HB 3352). While postpartum doula care outlines 11 domains and potential benefits related to infant feeding, bonding and attachment, the mental health of the maternal or gestational parent and adherence to programs have both been identified as potential benefits (McCormish & Visger, 2009; Campbell-Voytal et al., 2011; Cattelonia et al., 2015). Specific metrics related to postpartum doula care and expanded birth doula care into the postpartum period of exclusive doula care will need to be identified. Given the nature of workforce stability for additional postpartum or exclusive postpartum visits,

and the potential health impacts of postpartum care, exploring postpartum doula care as a billable health service is important to consider in future research and healthcare transformation.

There are other state and federal level assessments and studies that could be considered research efforts and would increase access to doulas in Oregon and in other healthcare systems. Currently, the DOULAS for Veterans Affairs Act of 2022 is a bill that mandates a study of feasibility and advisability of providing doula services to covered veterans; enacting this policy and utilizing VA claims data to project the potential impact of doulas could help support other federal or state legislative efforts to include doulas in Medicaid and private pay coverage. Similarly, regional- and community-specific needs assessments, led by existing coalitions such as the Regional Health Equity Coalitions in Oregon, on doulas and other THWs to determine the gaps and how to fill those gaps will be able to inform how to best use the most recent CCO spending initiative and the most recent Medicaid 1115 Waiver. Given the goals of Healthy Together Oregon to increase the use of THWs (2020), geographic and community specificity in assessments are needed to move forward.

Other research opportunities are arising as more states integrate doulas into Medicaid offerings, which provides an opportunity to expand multistate research on doula outcomes and effectiveness of doula care. The growth of hospital-based doula programs offers another unique opportunity for multi-state or multi-organizational research efforts to assess the impact of costs and outcomes. However, given that doula care integration into Medicaid plans in Oregon and many other states is based on a

premise of health equity, adding measures and findings with reportable metrics for equitable health care outcomes as well as equitable practices and integration of these community-based, culturally-specific roles into healthcare and hospital settings is crucial for future research. Qualitative and program assessments of hospital-based doula programs to identify strengths and challenges in serving these purposes, and potential reportable measures of these efforts, would enhance the ability to fulfill the intentions of the THW role and achieve the equity related goals.

Healthcare research focusing on understanding knowledge gaps for both patient populations (mothers and gestational parents) and healthcare providers is needed. Not all mothers or gestational parents need, want, or would be likely to benefit from birth doula services; given evidence that suggests that there are mothers and gestational parents who did not use a doula but would have wanted one for their births, further research to understand what informational or other potential demand-side gaps exist would identify barriers to doula care. Similarly, research that focuses on providers who refer doulas and have strong working relationships with them, as well providers who may or may not make doula referrals, would remove the focus on provider attitude and instead focus on knowledge, frame of reference, working relationships, and provider-identified research or practice gaps surrounding the need or overlap of social support around birth.

Further research and assessments on the doula workforce should also be conducted to assess and support a sustainable doula workforce. The development of a workforce capacity needs assessment would be a beneficial tool for any future endeavors to implement doula integration into other healthcare systems. This study identified the

barriers and facilitators to doula care access in Oregon; given the barriers and where they are concentrated, developing an assessment, and then using it to determine capacity and barriers prior to the initial rollout of a new policy will help reduce the barriers to successful implementation and strains on efforts to create an equitable program. In Oregon, Doula Billing Hubs provide a unique research and assessment opportunity that could further relate to THW programs as well as the ability to build capacity for these specific entities in Oregon. An in-depth analysis of the successes, challenges, and recommended changes to establish and successfully operate these groups would be valuable, and could be potentially conducted by a group such as the Oregon Health Workforce Institute, and extension of the Office of Equity and Inclusion's Traditional Health Worker workforce assessments, or a grant offered to the Oregon Doula Association or other doula advocacy coalition that has the capacity to do such research and then influence policymaking. As healthcare transforms to incorporate more social and equity-based solutions, entities such as billing hubs are fundamental to bridge some of the administrative gaps, and special attention should be paid to how they are organized and operate.

Finally, the model of access to healthcare, and specifically the model of access to doula care, and the conceptualization of access with this model offer unique opportunities to further understand the nuances of access and the interactions of different system elements in contributing to how people experience access. In similar fields such as doula integration into the healthcare system or THW integration into clinical settings, and where little is known about the processes or mechanisms involved, case studies assessing

individual experiences and using the model to contextualize findings to create new barriers, facilitators, or appropriate conceptualizations, would be informative and would demand less time and resources of participants and researchers than a Delphi study.

Limitations and Assumptions

Inherent to this research are some assumptions regarding the study design and conceptualization of access. The primary assumption in this dissertation is that doula care access can be conceptualized in the same way as primary healthcare, and therefore Levesque et al.'s (2013) conceptualization of access is appropriate and useful for understanding and influencing access to care. Another important assumption is that the participants are sufficiently representative of the healthcare system in Oregon and of the populations served that appropriate recommendations and generalizations can be made, or that the gaps in representation do not significantly sway or invalidate findings reported. Within those assumptions, there are also some limitations to validity.

The limitations of this study include threats to validity related to the timing of data collection, resources available for data analysis and sampling. Delphi surveys typically are very time-intensive processes, and necessarily occur over a long period of time from the perspective of the researcher as well as make time demands on the participants. This study utilized an adapted method, creating three sets of methodology-related limitations. First, focus group participation started the data collection process and member check interviews with some focus group participants concluded the process by reviewing survey results several weeks later. One threat to validity was the memory of focus group participants who returned for the member checks; this was controlled by

attempting faster Delphi survey rounds, which had their own challenges. Second, Delphi surveys are very time consuming for participants. Engaging and retaining participants in Delphi surveys involves a balance between allowing enough time to analyze data and allowing enough time for participants to respond to avoid the threat of participant dropout due to delays in sending out each round of surveys (Hsu & Ohio, 2007).

This study also had the added limitation of a broad scope of information and factors given the lack of information about doula workforce development or Medicaid doula policies at the time of data collection. The number and nuanced nature of factors could have influenced participation and retention as well in Rounds 2 and 3. Third, having a short time between rounds of data analysis added another limitation, which had specific implications between Rounds 1 and 2 given the qualitative nature of analysis for that round. Data analysis could have been impacted by the quick turnaround time for the next survey round. To help mitigate these limitations, participants were given two weeks to complete each round and data analysis occurred as answers were submitted in an attempt to allow enough time for survey participants, avoid recollection issues for focus group participants, and maintain participant retention. Nonetheless, the demands on participants and the time lapse between data collection periods for each group may have affected results. The survey participation fatigue was controlled for by organizing factors by system level for Round 2 and offering the mean score for each item and organizing responses by mean score in Round 3.

The scope of this project meant that there was a very large amount of data collected to fulfill the intention of creating a broad picture of what could influence access

to doula care for Medicaid-enrolled families in Oregon. This project was a dissertation, so budget constraints meant that there was only one researcher to analyze data, and primary data analysis of Round 1 responses occurred over a short period of time. The inclusion of other researchers may have resulted in differing emerging themes. These were controlled for through three separate iterations of raw data analysis per analysis period by the researcher to ascertain individual reliability, the creation of a flow chart for access dimension designations and bringing survey results to focus group participants as a form of member checking of the final round and interpretation of the round.

Nonetheless, the lack of resources may have influenced the interpretation of factors, their constructs, and the results of this study.

Timeliness of this study also influenced results, as did the sampling of participants. The initial study was approved in 2016, data collection occurred in 2018 but analysis of data was not completed until 2022, resulting in four years between initial data collection due to the impact of COVID-19 and personal circumstances of the researcher. During this time, the field of "Maternal and Child Health" has undergone significant efforts to be more inclusive in language and approach in describing people and families who experience pregnancy and birth (Bartick et al., 2021; MacKinnon et al, 2021; Darwin & Greenfield, 2022). Language in this research originally was heavily gendered, including recruitment materials, in an attempt to meet fifth grade reading level guidelines. Language is only one facet of gender as well as possible racial or other biases that may have influenced the research design, data collection, and interpretation of these findings. Public health and health systems research has an increasing commitment to health equity

outcomes and recognizes the need for inclusive language (Moseson, et al. 2020), and the use of more inclusive language and a reexamination of potential biases given the information newly available since data collection has been included during data analysis and interpretation.

Similarly, this research was created based on a program intended to serve culturally and linguistically diverse populations, and while there were efforts to include people who work with or are from these communities in Oregon for survey participation, cultural, racial, and ethnic diversity was not intentionally included in recruitment strategies for focus group participants at WIC, in large part due to the resources available for the study. A study that could account for racial and ethnic diversity for mothers and gestational parents may have found differing results than the ones presented in this study.

Conclusion

Studies have demonstrated that doula care improves birth outcomes for mothers and gestating or birthing parents and the use of doula care is a valuable strategy to decrease health disparities (Tillman, et al., 2012). In 2012, doulas became part of the THW program in Oregon as a means to increase access to culturally and linguistically appropriate care and doula services became reimbursable through Medicaid. This dissertation research used a modified model of access to healthcare from Levesque et al. (2013) and a modified Delphi survey methodology to better understand what influences access to doula care in Oregon and how to reduce barriers to access to doula care for Medicaid-enrolled families.

This study found that a mother's or gestational parent's ability to pay for services was only one of many barriers to doula care access; there were several themes at differing stages of healthcare access. The most influential barriers to doula care were the lack of knowledge, awareness, and misconceptions about the doula role, scope of practice, and business model that leave mothers, gestational parents, families and communities on the demand side without enough information to make decisions about their health care needs and how doulas may support those needs. For the supply side, this lack of knowledge acted as a barrier for healthcare providers who do not have enough information and resources to properly assess for doula need or promote and refer patients who may benefit from doula services and healthcare systems to adequately create billing and payment structures that support sustainable doula work.

The next most influential set of barriers addressed equitable, sustainable doula work. The primary doula workforce barrier was the cost of doula care compared to the low reimbursement rate, which should be reduced as a barrier with the recently announced increase in payment from \$300 to \$1,500 per birth. However, there were significant barriers for doulas of color to enter the doula workforce and establish a sustainable career earning a living wage from doula work.

Finally, successful THW program implementation requires significant buy-in from the state and CCOs; both OHA and CCO engagement with the doula THW program, as well as financial and resource allocation to coordination of the program, were considered barriers to doula care access.

As this research demonstrates, creating a billing pathway and allocating Medicaid dollars to doula care is only one way to influence access to doulas. To further increase access to doulas in Oregon, healthcare systems must take into account the considerable gap in knowledge of the doula role in both patient and provider populations and access to care, which means dedicating substantial resources to educating patient populations and tailoring education and support of healthcare providers working with these populations. Equitable access to doula care in a healthcare system necessarily needs representation of doulas throughout all stages of policy analysis and policy implementation, especially from communities of color, to ensure that doulas are equitably integrated into the healthcare system in a way that retains the nature of their culturally- and linguisticallyspecific patient support. For policymakers attempting to legislate doula care access, and as more states begin to develop doula programs and incorporate doula care into their offerings for Medicaid-enrolled families, access will need to be recontextualized to include education, sufficient administrative support, and equitable doula workforce development to provide for the healthcare benefits and lowered cost that doula care can facilitate.

References

- Abortion Gang. (2012). *So what is an abortion doula?* Abortion Gang. Retrieved October 6, 2016, from http://abortiongang.org/2012/01/04/so-what-is-an-abortion-doula/
- Acheson, R. M. (1978). The definition and identification of need for health care. *Journal of Epidemiology and Community Health*, 32(1), 10–15. https://doi.org/10.1136/jech.32.1.10
- Adams, C., & Curtin-Bowen, M. (2021). Countervailing powers in the labor room: the doula–doctor relationship in the United States. *Social Science & Medicine*, 285, 114296–114296. https://doi.org/10.1016/j.socscimed.2021.114296
- Administration for Children and Families, Early Childhood Development. (n.d.). *Tribal home visiting grantees*. Retrieved March 3, 2017 from https://www.acf.hhs.gov/ecd/home-visiting/tribal-home-visiting/grantees
- Akhavan, S., & Edge, D. (2012). Foreign-born women's experiences of community-based doulas in Sweden--a qualitative study. *Health Care for Women International*, 33(9), 833–48. https://doi.org/10.1080/07399332.2011.646107
- Ahlemeyer, J., & Mahon, S. (2015). Doulas for childbearing women. *The American Journal of Maternal/Child Nursing*, 40(2). https://doi.org/10.1097/NMC.000000000000111
- Alcalde-Rubio, L., Hernández-Aguado, I., Parker, L.A. *et al.* (2020). Gender disparities in clinical practice: Are there any solutions? Scoping review of interventions to overcome or reduce gender bias in clinical practice. *International Journal for Equity in Health*, 19 (166), 1-8. https://doi.org/10.1186/s12939-020-01283-4
- AllCare CCO. (2021, November 10). *AllCare 2021 integration and utilization data*. https://www.oregon.gov/oha/OEI/2021deliverables/AllCare-2021-Integration-Utilization-Plan-Update.pdf
- American Academy of Pediatrics (AAP). (2021). *Gendered terms in childbirth*. https://downloads.aap.org/AAP/PDF/Gendered%20terms%20in%20childbirth.pdf
- American College of Obstetricians and Gynecologists (ACOG). (2014). Safe prevention of the primary cesarean delivery. Obstetric Care Consensus, Retrieved April 21,

- 2016, from http://www.acog.org/Resources-And-Publications/Obstetric-Care-Consensus-Series/Safe-Prevention-of-the-Primary-Cesarean-Delivery
- Antheunis, M. L., Tates, K., & Nieboer, T. E. (2013). Patients' and health professionals' use of social media in health care: motives, barriers and expectations. *Patient Education and Counseling*, 92(3), 426–431. https://doi.org/10.1016/j.pec.2013.06.020
- Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN). (2018). Continuous labor support for every woman: a WHONN position statement. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 47, 73–74. https://doi.org/10.1097/AOG.0000000000001905
- Astbury, J., Brown, S., Lumley, J., & Small, R. (1994). Birth events, birth experiences and social differences in postnatal depression. *Australian Journal of Public Health*, 18(2), 176–184.
- Atkins, J. (2009). Doulas supporting teens. *Midwifery Today with International Midwife*, (92), 42, 66, 67. https://www.midwiferytoday.com/mt-articles/doulas-supporting-teens/
- Baby-Friendly USA. (2012, January). *The ten steps to successful breastfeeding*. Retrieved March 7, 2017, from http://www.babyfriendlyusa.org/about-us/baby-friendly-hospital-initiative/the-ten-steps
- Baker, K. J. M. (2017, January 4). *This controversial company wants to disrupt the birth world*. BuzzFeed News. https://www.buzzfeednews.com/article/katiejmbaker/doula-drama
- Balas, M. C., Gale, M., & Kagan, S. H. (2004). Delirium doulas: an innovative approach to enhance care for critically ill older adults. *Critical Care Nurse*, 24(4), 36-46.
- Ballotpedia. (2022). *Oregon Measure 111, Right to healthcare amendment*. Retrieved January 13, 2023 from https://ballotpedia.org/Oregon_Measure_111, Right to Healthcare Amendment (2022)
- Baracker, L., Burrowes, S., Hernandez, A. L., & Lingas, E. O. (2018, November 20). Examining hospital doula policies. [Poster presentation] American Public Health Association.
 - https://apha.confex.com/apha/2019/mediafile/Handout/Paper428443/2019_Poster_40x56_Lisa%20Baracker%2CDO%2C%20MPH_final.pdf

- Bartick, M., & Reinhold, a. (2010). The burden of suboptimal breastfeeding in the United States: a pediatric cost analysis. *Pediatrics*, *125*(5), e1048–e1056. https://doi.org/10.1542/peds.2009-1616
- Bartick, M., Stehel, E. K., Calhoun, S. L., Feldman-Winter, L., Zimmerman, D., Noble, L., Rosen-Carole, C., & Kair, L. R. (2021). Academy of breastfeeding medicine position statement and guideline: infant feeding and lactation-related language and gender. *Breastfeeding Medicine*, *16*(8), 587–590. https://doi.org/10.1089/bfm.2021.29188.abm
- Basile, M. R. (2012). Reproductive justice and childbirth reform: Doulas as agents of social change. [Doctoral Dissertation, University of Iowa] ProQuest Dissertations and Theses, 242.

 <a href="http://search.proquest.com/docview/1030282371?accountid=14553\nhttp://openurl.library.uiuc.edu/sfxlcl3?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&genre=dissertations+&+theses&sid=ProQ:ProQuest+Dissertations+&+Theses+Full+Text&atitle
- Beets, V. D. (2014). *The emergence of U.S. hospital-based doula programs*. [Doctoral dissertation, University of South Carolina]. https://pretermbirthca.ucsf.edu/sites/g/files/tkssra2851/f/wysiwyg/Beets%20-%202014%20-%20The%20emergence%20of%20U.S.%20hospital%20based%20doula%20programs%20thesis.pdf
- Behavioral Health Services. (n.d.). *The behavioral health workforce initiative*. Oregon Health Authority. Retrieved March 18, 2023 from https://www.oregon.gov/oha/HSD/AMH/Pages/Workforce-Initiative.aspx
- Berwick, D., Nolan, T., & Whittington, J. (2008). The Triple Aim: care, health and cost. Health Affairs, 27(3), 759-69. https://doi.org/10.1377/hlthaff.27.3.75
- Birkland, T. A. (2011). An introduction to the policy process: theories, concepts, and models of public policy making. (3rd ed.). Routledge.
- Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member checking: a tool to enhance trustworthiness or merely a nod to validation? *Qualitative Health Research*, 26(13), 1802–1811. https://doi.org/10.1177/1049732316654870
- Birth Doula Curriculum Standards (2022) OAR 410-180-0375 https://secure.sos.state.or.us/oard/viewSingleRule.action?ruleVrsnRsn=288137
- The Birth Place Lab. (2018). *Midwifery Integration State Scoring (MISS) System report* card: Oregon. https://www.birthplacelab.org/wp-content/uploads/2018/02/Oregon.pdf

- Birthways. (2014). *Joining the Volunteer Doula Program*. Retrieved October 22, 2014 from https://birthwaysinc.com/site/birthways-services-ebook
- The Black Parent Initiative (2022). Sacred Roots Doula. https://www.thebpi.org/sacred-roots-doula
- Bohren, M. A., Hofmeyr, G. J., Sakala, C., Fukuzawa, R. K., & Cuthbert, A. (2017). Continuous support for women during childbirth. *Cochrane Database of Systematic Reviews*, 2017(8). https://doi.org/10.1002/14651858.CD003766.pub6
- Bohren, M. A., Munthe-Kaas, H., Berger, B. O., Allanson, E. E., & Tunçalp, Ö. (2016). Perceptions and experiences of labour companionship: a qualitative evidence synthesis. *The Cochrane Database of Systematic Reviews*, *3*(3), CD012449. https://doi.org/10.1002/14651858.CD012449.pub2
- Boston Women's Health Collective. (1970). *Women and their bodies*. Retrieved from http://www.ourbodiesourselves.org/cms/assets/uploads/2014/04/Women-and-Their-Bodies-1970.pdf
- Breedlove, G. (2005). Perceptions of social support from pregnant and parenting teens using community-based doulas. *The Journal of Perinatal Education*, 14(3), 15–22. http://doi.org/10.1624/105812405X44691
- Bronfenbrenner, U. (1979). *The ecology of human development*. Harvard University Press.
- Buck, L. (2006). On labor support and doulas. *The Association of Women's Health, Obstetric and Neonatal Nurses*, 10(4), 279–281. https://doi.org/10.1111/j.1552-6356.2006.00057.x
- Catlin, D. (n.d.). *Guidelines for THW doulas serving OHP members*. Retrieved January 13, 2023 from https://www.oregon.gov/oha/OEI/THW%20Documents/Guidelines%20for%20THW%20Doulas%20Serving%20OHP%20Members.pdf
- Campero, L., Garcia, C., Diaz, C., Ortiz, O., Reynoso, S. A., & Langer, A. N. A. (1998). "Alone, I wouldn't have known what to do": a qualitative study on social support during labor and delivery in Mexico. *Social Science & Medicine*, 47(3), 395–403. https://doi.org/10.1016/s0277-9536(98)00077-x
- Campbell, D. A., Lake, M. F., Falk, M., & Backstrand, J. R. (2006). A randomized control trial of continuous support in labor by a Lay Doula. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, 35(4), 456–464. http://doi.org/10.1111/j.1552-6909.2006.00067.x

- Campbell, D., Scott, K. D., Klaus, M. H., & Falk, M. (2007). Female relatives or friends trained as labor doulas: outcomes at 6 to 8 weeks postpartum. *Birth*, *34*(3), 220–7. https://doi.org/10.1111/j.1523-536X.2007.00174.x
- Campbell-Voytal, K., McComish, J., Visger, J. M., Rowland, C. A., & Kelleher, J. (2011). Postpartum doulas: Motivations and perceptions of practice. *Midwifery*, 27(6), e214–e221. http://doi.org/10.1016/j.pestbp.2011.02.012.Investigations
- Cassel, C. K., & Holmboe, E. S. (2006). A central role for board certification. *Journal of the American Medical Association*, 295(8), 939–940. http://doi.org/10.1001/jama.295.8.939
- Cattelona, G., Friesen, C. A., & Hormuth, L. J. (2015). The impact of a volunteer postpartum doula program on breastfeeding success: a case study. *Journal of Human Lactation*, 31(4), 607–610. http://doi.org/10.1177/0890334415583302
- Centers for Disease Control and Prevention (CDC). (2016a). *Births: method of delivery*. FastStats. Retrieved November 6, 2016, from http://www.cdc.gov/nchs/fastats/delivery.htm
- Centers for Disease Control and Prevention. (2016b). *Preterm birth*. Retrieved February 28, 2017, from https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pretermbirth.htm
- Centers for Disease Control and Prevention. (2016c). Severe maternal morbidity in the United States. Retrieved November 6, 2016, from http://www.cdc.gov/reproductivehealth/maternalinfanthealth/severematernalmorbidity.html
- Chaillet, N., Belaid, L., Crochetière, C., Roy, L., Gagné, G.-P., Moutquin, J. M., Rossignol, M., Dugas, M., Wassef, M., & Bonapace, J. (2014).

 Nonpharmacologic approaches for pain management during labor compared with usual care: a meta-analysis. *Birth*, *41*(2), 122–37.

 http://doi.org/10.1111/birt.12103
- Chapple, W., Gilliland, A., Li, D., Shier, E., & Wright, E. (2013). An economic model of the benefits of professional doula labor support in Wisconsin births. *Wisconsin Medical Journal*, (April), 58–65. https://wmjonline.org/wp-content/uploads/2013/112/2/58.pdf
- Chakladar, A. (2016). Encounter with a doula: is the NHS failing mothers? *British Medical Journal*, 339(7733), 1316. doi: https://doi.org/10.1136/bmj.b5112

- Chee, A. (2013). A postpartum doula for every mother. *Midwifery Today with International Midwife*, (105). http://doi.org/10.1017/CBO9781107415324.004
- Chen, A. (2022, November 18). Current state of doula Medicaid implementation efforts in November 2022. National Health Law Program. Retrieved January 13, 2023 from https://healthlaw.org/current-state-of-doula-medicaid-implementation-efforts-in-november-2022/#:~:text=As%20of%20November%202022%2C%20there,Medicaid%20coverage%20for%20doula%20care.
- Chen, A. & Rohde, K. (2023, March 16). Doula Medicaid training and certification requirements: Summary of current state approaches and recommendations for improvement. National Health Law Program. Retrieved March 17, 2023 from <a href="https://healthlaw.org/doula-medicaid-training-and-certification-requirements-summary-of-current-state-approaches-and-recommendations-for-improvement/#:~:text=Maryland%2C%20Michigan%2C%20Minnesota%2C%20 New,qualify%20for%20payment%20from%20Medicaid
- Childbirth Connection. (2012). Average facility labor and birth charge by site and method of birth, Oregon, 2008-2010. Retrieved from http://transform.childbirthconnection.org/resources/datacenter/
- Chor, J., Goyal, V., Roston, A., Keith, L., & Patel, A. (2012). Doulas as facilitators: the expanded role of doulas into abortion care. *The Journal of Family Planning and Reproductive Health Care / Faculty of Family Planning & Reproductive Health Care, Royal College of Obstetricians & Gynaecologists*, 38(2), 123–4. http://doi.org/10.1136/jfprhc-2011-100278
- Chor, J., Hill, B., Martins, S., Mistretta, S., Patel, A., & Gilliam, M. (2015). Doula support during first trimester surgical abortion: a randomized controlled trial. *American Journal of Obstetrics and Gynecology*, 212(1), 1–6. http://doi.org/10.1097/MPG.0b013e3181a15ae8.Screening
- Chor, J., Lyman, P., Tusken, M., Patel, A., & Gilliam, M. (2016). Women's experiences with doula support during first-trimester surgical abortion: a qualitative study. *Contraception*, 93, 244–248. http://doi.org/10.1016/j.contraception.2015.10.006
- Coalition for Improving Maternity Services. (CMIS). (1996). *The mother-friendly childbirth initiative*. http://www.birthnetwork.org/Resources/Documents/MFCI_english.pdf
- Coalition for Improving Maternity Services. (CMIS). (2015). Coalition for improving maternity services: home. Retrieved October 18, 2016, from http://motherfriendly.org/

- Columbia Pacific CCO. (n.d.). *Pregnancy and family support*. Retrieved January 23, 2023, from https://www.colpachealth.org/for-members/more-services/pregnancy-and-family-support
- Columbia Pacific CCO. (2021). *Columbia Pacific 2021 integration and utilization data*. https://www.oregon.gov/oha/OEI/2021deliverables/Columbia-Pacific-2021-Integration-Utilization-Data.pdf
- Corbett, C.A., & Callister, L.C., (2000). Nursing support during labor. *Clinical Nursing Research* 9, 70–83. https://doi.org/10.1177/105477380000900106
- Darwin, Z., Green, J., McLeish, J., Willmot, H., & Spiby, H. (2016). Evaluation of trained volunteer doula services for disadvantaged women in five areas in England: women's experiences. *Health & Social Care in the Community*, 1-12. http://doi.org/10.1111/hsc.12331
- Declercq, E. R., Sakala, C., Corry, M. P., Applebaum, S., & Herrlich, A. (2013).

 Listening to mothers III: pregnancy and birth. Childbirth Connection.

 http://transform.childbirthconnection.org/wp-content/uploads/2013/06/LTM-III_Pregnancy-and-Birth.pdf
- Doula Services. (2017). OAR 410-130-0015. https://secure.sos.state.or.us/oard/viewSingleRule.action?ruleVrsnRsn=244195
- Deneux-Tharaux, C., Carmona, E., Bouvier-Colle, M.-H., & Bréart, G. (2006).

 Postpartum maternal mortality and Cesarean delivery. *Obstetrics & Gynecology*, 108(3, Part 1), 541–548. https://doi.org/10.1097/01.AOG.0000233154.62729.24
- DeVries, R., Benoit, C., VanTeijlingen, E. R., & Wrede, S. (2001). *Birth by design: pregnancy, maternity care, and midwifery in North America and Europe*. Routledge.
- Department of Health and Human Services, Office of Adolescent Health. (n.d.). *Pregnancy assistance fund grants (2010-2013)*. Retrieved March 3, 2013 from https://www.hhs.gov/ash/oah/grants/closed-paf-grants.html# Toc377539694
- Donabedian, A. (1973). Aspects of medical care administration: specifying requirements for health care. Harvard University Press.
- Doula Series Footnotes. (2020, December 29). *Doula hubs*. Retrieved January 13, 2023 from https://doulaseriesfootnotes.com/doula-hubs.html
- The Doula Services Network. (2016) *Doula Certification*. Retrieved November 3, 2016, from http://doula-services.com/doula-certification-2/

- Doulagivers. (n.d.) *Doulagivers: new specialized area of non-medical health care for elderly*. Retrieved from http://www.doulagivers.com/
- Doulas Are Not Midwives. (2007). The Practising Midwife, 10(11), 11.
- DOULAS for Veterans Affairs Act of 2022, H.R. 2521, 117th Cong. (2022) https://www.congress.gov/bill/117th-congress/house-bill/2521/text
- Doulas of North America International. (2005). *DONA International: What is a doula?* Retrieved August 24, 2016, from http://www.dona.org/mothers/
- Doulas of North America. (DONA). (2013). *Birth Doula Steps to DONA International Certification* (Issue 16, pp. 1–3).
- Doulas of North America. (DONA). (2016). *Birth doula certification: a doula's guide*. https://www.dona.org/wp-content/uploads/2016/08/Certification-Overview-Birth-1.pdf
- Dundek, L. H. (2006). Establishment of a Somali doula program at a large metropolitan hospital. *The Journal of Perinatal & Neonatal Nursing*, 20(2), 128–137. https://doi.org/10.1097/00005237-200604000-00006
- Dunn, W. N. (2012). Public Policy Analysis (5th ed.). Pearson.
- Edwards, R. C., Thullen, M. J., Korfmacher, J., Lantos, J. D., Henson, L. G., & Hans, S. L. (2013). Breastfeeding and complementary food: randomized trial of community doula home visiting. *Pediatrics*, *132 Suppl*, S160-6. http://doi.org/10.1542/peds.2013-1021P
- Efterkhary, S., Klein, M. C., & Xu, S. Y. (2010). The life of a Canadian doula. *Journal of Obstetrics and Gynaecology Canada*, 32(7), 642–649. http://www.sussexcountylibrary.org/about/overview/libraries#Sussex
- Elliott, H. (2014, August). Death doulas complement nursing care at the end of life. *Nursing Times*, 1–2. https://www.nursingtimes.net/archive/hermione-elliott-death-doulas-complement-nursing-care-at-the-end-of-life-20-08-2014/
- Eng, E., & Smith, J. (1995). Natural helping functions of lay health advisers in breast-cancer education. *Breast Cancer Research and Treatment*, *35*(1), 23–29. https://doi.org/10.1007/BF00694741
- Ersland, S. (2022, July 5). *OHA launches program to provide full health care coverage to residents previously ineligible due to immigration status.* State of Reform.

- https://stateofreform.com/featured/2022/07/healthier-oregon-provides-health-coverage-regardless-of-immigration-status/
- Everson, C., Crane, C., & Nolan, R. (2018). Advancing health equity for childbearing families in Oregon: Results of a statewide doula workforce needs assessment.

 Oregon Doula Association.

 https://www.oregon.gov/oha/OEI/Documents/Doula%20Workforce%20Needs%2

 OAssesment%20Full%20Report%202018.pdf
- Everson, C. L.& Remer, J. (2015). *Reimbursement for doula care: an overview*.

 https://static1.squarespace.com/static/55e60182e4b09fb565b2eb88/t/57995688cd

 https://static/55e60182e4b09fb6698
- Falconi, A. M., Bromfield, S. G., Tang, T., Malloy, D., Blanco, D., Disciglio, R. S., & Chi, R. W. (2022). Doula care across the maternity care continuum and impact on maternal health: Evaluation of doula programs across three states using propensity score matching. *EClinical Medicine*, 50, 101531. https://doi.org/10.1016/j.eclinm.2022.101531
- Feldhusen, A. E. (2000). *The history of midwifery and childbirth in America: a time line*. Midwifery Today. https://www.midwiferytoday.com/web-article/history-midwifery-childbirth-america-time-line/
- Foth, T., Efstathiou, N., Vanderspank-Wright, B., Ufholz, L.-A., Dütthorn, N., Zimansky, M., & Humphrey-Murto, S. (2016). The use of Delphi and nominal group technique in nursing education: a review. *International Journal of Nursing Studies*, 60, 112–120. https://doi.org/10.1016/j.ijnurstu.2016.04.015
- Full Spectrum Doulas. (2014). *Welcome to Full Spectrum Doulas*. http://www.fullspectrumdoulas.org/
- Gagnon, J., & Waghorn, K. (1996). Supportive care by maternity nurses: a work sampling study in an intrapartum unit. *Birth*, *23*(1), 1–6. http://doi.org/10.1111/j.1523-536X.1996.tb00453.x
- Gale, J., Fothergill-Bourbonnais, F., & Chamberlain, M. (2001). Measuring nursing support during childbirth. *The American Journal of Maternal Child Nursing*, 26(5), 264–271. https://doi.org/10.1097/00005721-200109000-00010
- Gärtner, F. R., de Miranda, E., Rijnders, M. E., Freeman, L. M., Middeldorp, J. M., Bloemenkamp, K. W. M., Stiggelbout, A. M., & van den Akker-van Marle, M. E. (2015). Good reliability and validity for a new utility instrument measuring the

- birth experience, the Labor and Delivery Index. *Journal of Clinical Epidemiology*, 68(10), 1184–1194. http://doi.org/10.1016/j.jclinepi.2015.05.020
- Gentry, Q. M., Nolte, K. M., Gonzalez, A., Pearson, M., & Ivey, S. (2010). "Going beyond the call of doula": a grounded theory analysis of the diverse roles community-based doulas play in the lives of pregnant and parenting adolescent mothers. *The Journal of Perinatal Education*, 19(4), 24–40. http://doi.org/10.1624/105812410X530910
- Gilliland A. L. (2002). Beyond holding hands: the modern role of the professional doula. *Journal of Obstetric, Gynecologic, and Neonatal Nursing: JOGNN*, 31(6), 762–769.
- Gilliland A. L. (2011). After praise and encouragement: emotional support strategies used by birth doulas in the USA and Canada. *Midwifery*, 27(4), 525–531. https://doi.org/10.1016/j.midw.2010.04.006
- Gjerdingen, D. K., McGovern, P., Pratt, R., Johnson, L., & Crow, S. (2013). Postpartum doula and peer telephone support for postpartum depression: a pilot randomized controlled trial. *Journal of Primary Care & Community Health*, *4*(1), 36–43. http://doi.org/10.1177/2150131912451598
- Gomez, I., Ranji, U., Salganicoff, A., & Frederiksen, B. (2022, February 17). *Medicaid coverage for women*. Kff.org. https://www.kff.org/womens-health-policy/issue-brief/medicaid-coverage-for-women/
- Goodman, P., Mackey, M. C., & Tavakoli, A. S. (2004). Factors related to childbirth satisfaction. *Journal of Advanced Nursing*, 46(2), 212–219. http://doi.org/10.1111/j.1365-2648.2003.02981.x
- Gordon, N. P., Walton, D., McAdam, E., Derman, J., Gallitero, G., & Garrett, L. (1999). Effects of providing hospital-based doulas in health maintenance organization hospitals. *Obstretics & Gynecology*, 7844(98), 422–426.
- Ghaedrahmati, M., Kazemi, A., Kheirabadi, G., Ebrahimi, A., & Bahrami, M. (2017). Postpartum depression risk factors: a narrative review. *Journal of education and health promotion*, 6, 60. https://doi.org/10.4103/jehp.jehp_9_16
- Green, M. (2013). The downside of doula-ing. Midwifery Today, 42–43.
- Green, H., & Riddington, A. (2020). *Gender inclusive language in perinatal services: Mission statement and rationale*. Brighton & Sussex University Hospitals.

 https://www.bsuh.nhs.uk/maternity/wp-content/uploads/sites/7/2021/01/Gender-inclusive-language-in-perinatal-services.pdf

- Gregory, E. C. W., Osterman, M. J. K., & Valenzuela, C. P. (2021). Changes in home births by race and hispanic origin and state of residence of mother: United States, 2018-2019 and 2019-2020. *National Vital Statistics Reports*, 70(5), 1–10. https://www.cdc.gov/nchs/products/index.htm.
- Greiner, K. S., Hersh, A. R., Hersh, S. R., Remer, J. M., Gallagher, A. C., Caughey, A. B., & Tilden, E. L. (2019). The cost-effectiveness of professional doula care for a woman's first two births: a decision analysis model. *Journal of Midwifery and Women's Health*, 64(4), 410–420. https://doi.org/10.1111/jmwh.12972
- Grivell, R. M., & Dodd, J. M. (2011). Short- and long-term outcomes after Cesarean section. *Expert Review of Obstetrics and Gynecology*, 6(2), 205–215. https://doi.org/10.1586/eog.11.5
- Grobman, W. A., Bailit, J. L., Rice, M. M., Wapner, R. J., Reddy, U. M., Varner, M. W., Thorp, J. M., Jr, Leveno, K. J., Caritis, S. N., Iams, J. D., Tita, A. T., Saade, G., Sorokin, Y., Rouse, D. J., Blackwell, S. C., Tolosa, J. E., Van Dorsten, J. P., & Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) Maternal-Fetal Medicine Units (MFMU) Network. (2014). Frequency of and factors associated with severe maternal morbidity. *Obstetrics and gynecology*, *123*(4), 804–810. https://doi.org/10.1097/AOG.00000000000000173
- Guenther, G., Kett, P., Skillman, S. M., & Frogner, B. (2022). *The birth doula workforce in the U.S. rapid response brief*. https://familymedicine.uw.edu/chws/wp-content/uploads/sites/5/2022/08/Doula-Workforce-RR-2022.08.22.pdf
- Gurol-Urganci, I., Bou-Antoun, S., Lim, C., Cromwell, D., Mahmood, T., Templeton, A., & Van der Meulen, J. (2013). Impact of Caesarean section on subsequent fertility: a systematic review and meta-analysis. *Human Reproduction*, 28(7), 1943-1952. https://doi.org/10.1093/humrep/det130
- Habel, C., Feeley, N., Hayton, B., Bell, L., & Zelkowitz, P. (2015). Causes of women's postpartum depression symptoms: men's and women's perceptions. *Midwifery*, *31*, 728–734. https://doi.org/10.1016/j.midw.2015.03.007
- Hamel, M. B., Blumenthal, D., Abrams, M., & Nuzum, R. (2015). The Affordable Care Act at 5 years. *New England Journal of Medicine*, *372*(25), 2451–2458. http://doi.org/10.1056/NEJMhpr1503614
- Hamilton, B. E, Martin, J. A., & Osterman, M. J. K. (2022, May 24). Births: provisional data for 2021, *Vital Statistics Rapid Release*, 20, 1-11. https://dx.doi.org/10.15620/cdc:116027

- Hans, S., & Korfmacher, J. (2002). The professional development of paraprofessionals. *Zero to Three, November*, 4–8.
- Hans, S. L., Thullen, M., Henson, L. G., Lee, H., Edwards, R. C., & Bernstein, V. J. (2006). Promoting positive mother-infant relationships: a randomized trial of community doula support for young mothers. *Infant Mental Health Journal*, 27(1), 5–25. http://doi.org/10.1002/imhj.
- Hardeman, R. R., & Kozhimannil, K. B. (2016). Motivations for entering the doula profession: Perspectives from women of color. *Journal of Midwifery & Women's Health*, 61(6), 773–780. http://doi.org/10.1111/jmwh.12497
- Hart, S. (2022). It takes a village: Pathways for achieving access to doula services for Medicaid enrollees. *Georgetown Journal on Poverty Law & Policy*, 30(1), 97-114. https://doi.org/10.1007/s40615-019-00577-w
- Health Resources and Service Administration, Maternal and Child Health Bureau. (2016, September 14). *MIECHV grant formula program*. Retrieved March 3, 2017, from https://mchb.hrsa.gov/sites/default/files/mchb/MaternalChildHealthInitiatives/HomeVisiting/MIECHV Formula Grant Program %28X10%29.pdf
- Healthier Together Oregon. (2020). 2020-2024 State health improvement plan. Retrieved January 28, 2023 from https://healthiertogetheroregon.org/wp-content/uploads/2020/08/Healthier-Together-Oregon fullplan-1.pdf
- HealthShare of Oregon. (n.d.). *Project Nurture: learn more*. https://www.healthshareoregon.org/storage/app/media/documents/Health%20Equity/Project%20Nurture%20-%20Learn%20More%20Flyer.pdf
- HealthShare of Oregon (2022a). *Get Help*. Retrieved January 14, 2023, from https://www.healthshareoregon.org/members/get-help
- HealthShare of Oregon. (2022b). *Project Nurture*. https://www.healthshareoregon.org/health-equity/project-nurture
- Hodnett, E. D. (2002). Pain and women's satisfaction with the experience of childbirth: a systematic review. *American Journal of Obstetrics and Gynecology*, 186, S160–S172.
- Hodnett, E., Gates, S., Hofmeyr, G., & Sakala, C. (2013). Continuous support for women during childbirth. The Cochrane Library.

 https://www.nationalpartnership.org/our-work/resources/health-care/maternity/cochrane-review-continuous-support-for-women-during-childbirth.pdf

- Hoffman, B. (2016). Birth activism, law, and the organization of independent midwifery in Oregon. *Oregon Historical Quarterly*, 117(2), 198–231. https://doi.org/10.5403/oregonhistq.117.2.0198
- Hofmeyr, G. J., Nikodem, V. C., Wolman, W. L., Chalmers, B. E., & Kramer, T. (1991). Companionship to modify the clinical birth environment: Effects on progress and perceptions of labour, and breastfeeding. *British Journal of Obstetrics and Gynaecology*, 98(8), 756–764. http://doi.org/10.1097/00006254-199203000-00009
- HB 2773, 82nd Legislative Assembly. (Oregon, 2023). https://olis.oregonlegislature.gov/liz/2023R1/Downloads/MeasureDocument/HB2773/Introduced
- HB 3311, 76th Legislative Assembly. (Oregon 2011). <u>https://olis.oregonlegislature.gov/liz/2011R1/Downloads/MeasureDocument/HB3</u> 311
- HB 3352, 81st Legislative Assembly. (Oregon, 2021). https://olis.oregonlegislature.gov/liz/2021R1/Downloads/MeasureDocument/HB3352/Enrolled
- HB 3650, 76th Legislative Assembly. (Oregon, 3650). https://olis.oregonlegislature.gov/liz/2011R1/Downloads/MeasureDocument/HB3 650
- Houston, K. A., Kaimal, A. J., Nakagawa, S., Gregorich, S. E., Yee, L. M., & Kuppermann, M. (2015). Mode of delivery and postpartum depression: the role of patient preferences. *American Journal of Obstetrics and Gynecology*, 212(2), 229.e1-229.e7. https://doi.org/10.1016/j.ajog.2014.09.002
- Hoyert, D. L. (2022, February). *Maternal mortality rates in the United States, 2020*. Division of Vital Statistics Health E-Stats. https://dx.doi.org/10.15620/cdc:113967.
- Hsu, C., & Ohio, T. (2007). The Delphi technique: making sense of consensus. *Practical Assessment, Research, and Evaluation*, 12(10). https://doi.org/10.7275/pdz9-th90
- Hunter, C. (2012). Intimate space within institutionalized birth: women's experiences birthing with doulas. *Anthropology & Medicine*, 8470(March 2014), 1–12. http://doi.org/10.1080/13648470.2012.692358

- Hwang, S. (2004). *As "doulas" enter delivery rooms, conflicts arise*. Wall Street Journal. Retrieved November 2, 2016, from http://www.wsj.com/articles/SB107446888698004731
- International Federation of Health Plans. (2013). 2013 Comparative price report variation in medical and hospital prices by country. http://www.ifhp.com/1404121/
- Israel, B. A. (1985). Social networks and social support: implications for natural helper and community level interventions. *Health Education Quarterly*, *12*(1), 65–80. https://doi.org/10.1177/109019818501200106
- Johnson, W., Milewski, A, Martin, K, & Clayton, E. (2020, May 13). *Understanding variation in spending on childbirth among the commercially insured*. Health Care Cost Institute. https://healthcostinstitute.org/in-the-news/understanding-variation-in-spending-on-childbirth-among-the-commercially-insured
- Jordan, E. T., Van Zandt, S. E., & Wright, E. (2008). Doula care: nursing students gain additional skills to define their professional practice. *Journal of Professional Nursing*, 24(2), 118–121. http://doi.org/10.1016/j.profnurs.2007.06.018
- Kaiser Family Foundation. (KFF). (2016). *Women's health insurance coverage*. http://files.kff.org/attachment/fact-sheet-womens-health-insurance-coverage
- Kaiser Family Foundation. (KFF). (2021, December 17). Births financed by Medicaid.

 Retrieved March 10, 2023, from https://www.kff.org/medicaid/state-indicator/births-financed-by-medicaid/?currentTimeframe=0&sortModel=%7B%22colId%22%3A%22Location%22%2C%22sort%22%3A%22asc%22%7D
- Kaiser Family Foundation. (KFF). (2022, October). *Medicaid in Oregon*. https://files.kff.org/attachment/fact-sheet-medicaid-state-OR
- Kang, H.-K. (2014). Influence of culture and community perceptions on birth and perinatal care of immigrant women: doulas' perspective. *Journal of Perinatal Education*, 23(1), 25–32. https://doi.org/10.1891/1058-1243.23.1.25
- Kathawa, C. A., Arora, K. S., Zielinski, R., & Low, L. K. (2022). Perspectives of doulas of color on their role in alleviating racial disparities in birth outcomes: a qualitative study. *Journal of Midwifery & Women's Health*, 67(1), 31-38. https://doi.org/10.1111/jmwh.13305
- Kayne, M. A., Greulich, M. B., & Albers, L. L. (2001). Doulas: an alternative yet complementary addition to care during childbirth. *Clinical Obstetrics and*

- *Gynecology*, 44(4), 692–703. https://doi.org/10.1097/00003081-200112000-00009
- Keeney, S., McKenna, H., & Hasson, F. (2010). *The Delphi technique in nursing and health research*. Wiley. https://doi.org/10.1002/9781444392029
- Klein, M. C., Kaczorowski, J., Hall, W. A., Fraser, W., Liston, R. M., Eftekhary, S., Brant, R., Mâsse, L. C., Rosinski, J., Mehrabadi, A., Baradaran, N., Tomkinson, J., Dore, S., McNiven, P. C., Saxell, L., Lindstrom, K., Grant, J., & Chamberlaine, A. (2009). The attitudes of Canadian maternity care practitioners towards labour and birth: many differences but important similarities. *Journal of Obstetrics and Gynaecology Canada*, 31(9), 827–840. https://doi.org/10.1016/S1701-2163(16)34301-8
- Knight, M., Kurinczuk, J., Spark, P., & Brocklehurst, P. (2008). Cesarean delivery and peripartum hysterectomy. *Obstetrics and Gynecology*, 111(1), 97-105. https://doi.org/10.1097/01.AOG.0000296658.83240.6d
- Koma, W., Rae, M., Ramaswamy, A., Neuman, T., Kates, J., & Dawson, L. (2020, October 21). *Demographics, insurance coverage, and access to care among transgender adults.* Kaiser Family Foundation. https://www.kff.org/health-reform/issue-brief/demographics-insurance-coverage-and-access-to-care-among-transgender-adults/
- Koumouitzes-Douvia, J., & Carr, C. A. (2006). Women's perceptions of their doula support. *The Journal of Perinatal Education*, 15(4), 34–40. https://doi.org/10.1624/105812406X151402
- Kozhimannil, K. B., Attanasio, L. B., Hardeman, R. R., & O'Brien, M. (2013). Doula care supports near-universal breastfeeding initiation among diverse, low-income women. *Journal of Midwifery & Women's Health*, 58(4), 378–82. https://doi.org/10.1111/jmwh.12065
- Kozhimannil, K. B., Attanasio, L. B., Jou, J., Joarnt, L. K., Johnson, P. J., & Gjerdingen, D. K. (2014). Potential benefits of increased access to doula support during childbirth. *The American Journal of Managed Care*, 20(8), e340–e352. https://www.ajmc.com/view/potential-benefits-of-increased-access-to-doula-support-during-childbirth
- Kozhimannil, K. B. & Hardeman, R. R. (2016). Coverage for doula services: How state Medicaid programs can address concerns about maternity care costs and quality. *Birth*, *43*(2), 97–99. https://doi.org/10.1111/birt.12213

- Kozhimannil, K. B., Hardeman, R. R., Alarid-Escudero, F., Vogelsang, C. A., Blauer-Peterson, C., & Howell, E. A. (2016). Modeling the cost-effectiveness of doula care associated with reductions in preterm birth and cesarean delivery. *Birth*, 43(1), 20–27. https://doi.org/10.1111/birt.12218
- Kozhimannil, K. B., Hardeman, R. R., Attanasio, L. B., Blauer-Peterson, C., & O'Brien, M. (2013). Doula care, birth outcomes, and costs among Medicaid beneficiaries. *American Journal of Public Health*, 103(4), e113–21. https://doi.org/10.2105/AJPH.2012.301201
- Kozhimannil, K. B., Vogelsang, C. A., & Hardeman, R. R. (2015). Medicaid coverage of doula services in Minnesota: preliminary findings from the first year. https://static1.squarespace.com/static/577d7562ff7c5018d6ea200a/t/5840c791cd0 f683f8477920a/1480640403710/FullReport.pdf
- Kozhimannil, K. B., Vogelsang, C. A., Hardeman, R. R., & Prasad, S. (2016). Disrupting the pathways of social determinants of health: doula support during pregnancy and childbirth. *The Journal of the American Board of Family Medicine*, 29(3), 308–317. https://doi.org/10.3122/jabfm.2016.03.150300
- Kumar, R. (2011). Research methodology: A step-by-step guide for beginners (3rd ed.). Sage.
- Kungwimba, E., Malata, A., Maluwa, A., & Chirwa, E. (2013). Experiences of women with the support they received from their birth companions during labour and delivery in Malawi. *Health*, *5*(1), 45–52. https://doi.org/10.4236/health.2013.51007
- Kuo, D. Z., Houtrow, A. J., Arango, P., Kuhlthau, K. A., Simmons, J. M., & Neff, J. M. (2012). Family-centered care: current applications and future directions in pediatric health care. *Maternal and Child Health Journal*, 16(2), 297–305. https://doi.org/10.1007/s10995-011-0751-7
- Lantz, P. M., Low, L. K., Varkey, S., & Watson, R. L. (2005). Doulas as childbirth paraprofessionals: results from a national survey. *Women's Health Issues: Official Publication of the Jacobs Institute of Women's Health*, *15*(3), 109–16. https://doi.org/10.1016/j.whi.2005.01.002
- Lazarus, E. S. (1994). What do women want?: Issues of choice, control, and class in pregnancy and childbirth. *Medical Anthropology Quarterly*, 8(1), 25–46.
- Levesque, J.-F., Harris, M. F., & Russell, G. (2013). Patient-centered access to health care: conceptualizing access at the interface of health systems and populations.

- *International Journal for Equity in Health*, *12*(1), 18. https://doi.org/10.1186/1475-9276-12-18
- Linstone H. A. & Turoff M. (2002). *The Delphi method: Techniques and applications*. Addison-Wesley Pub. Co. Advanced Book Program. https://doi.org/10.2307/3150755
- Lothian, J. A. (2007). Introduction: the coalition for improving maternity services. *Perinatal Education* 16(1), 1S-4S. https://doi.org/10.1624/105812407x173119
- Low, L. K., Moffat, A., & Brennan, P. (2006). Doulas as community health workers: lessons learned from a volunteer program. *The Journal of Perinatal Education*, 15(3), 25–33. https://doi.org/10.1624/105812406X118995
- Lucas, L., & Wright, E. (2019). Attitudes of physicians, midwives, and nurses about doulas. *MCN The American Journal of Maternal/Child Nursing*, *44*(1), 33–39. https://doi.org/10.1097/NMC.0000000000000488
- MacDorman, M. F., Declercq, E., Cabral, H., & Morton, C. (2016). Recent increases in the U.S. maternal mortality rate: disentangling trends from measurement issues. *Obstetrics and Gynecology*, *128*(3), 447–55. http://doi.org/10.1097/AOG.000000000000001556
- MacDorman, M. F., Matthews, T. J., & Declercq, E. (2014). Trends in out-of-hospital births in the United States, 1990-2012. *NCHS data brief*, (144), 1–8.
- MacKinnon, K. R., Lefkowitz, A., Lorello, G. R., Schrewe, B., Soklaridis, S., & Kuper, A. (2021). Recognizing and renaming in obstetrics: how do we take better care with language? In *Obstetric Medicine*, *14*(4), 201–203. https://doi.org/10.1177/1753495X211060191
- Mallick, L. M., Thoma, M. E., & Shenassa, E. D. (2022). The role of doulas in respectful care for communities of color and Medicaid recipients. *Birth*, 49(4), 823–832. https://doi.org/10.1111/birt.12655
- Maher, S., Crawford-Carr, A., & Neidigh, K. (2012). The role of the interpreter/doula in the maternity setting. *Nursing for Women's Health*, *16*(6), 472–481. http://doi.org/10.1111/j.1751-486X.2012.01775.x
- Mainord, M. (1997). Doulas: aids or opportunists? *Tennessee Nurse*, 60(3), 21.
- Mamas First Act, H.R. 7475, 117th Cong. (2022) https://www.congress.gov/bill/117th-congress/house-bill/7475/text?r=1&s=1

- Markus, A. R., Andres, E., West, K. D., Garro, N., & Pellegrini, C. (2013). Medicaid covered births, 2008 through 2010, in the context of the implementation of health reform. *Women's Health Issues*, 23(5), e273–e280. https://doi.org/10.1016/j.whi.2013.06.006
- Markus, A. R., & Rosenbaum, S. (2010). The role of Medicaid in promoting access to high-quality, high-value maternity care. *Women's Health Issues*, 20(1), S67–S78. https://doi.org/10.1016/j.whi.2009.11.012
- Martin, J. A., Hamilton, B. E., Osterman, M. J., Curtin, S. C., & Matthews, T. J. (2015). Births: final data for 2013. *National Vital Statistics Reports*, *64*(1), 1–65. https://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64 01.pdf
- Martin, J. A., Hamilton, B. E., & Osterman, J. K. (2022, August). Births in the United States, 2021. *NCHA Data Brief*, 442, 8. https://www.cdc.gov/nchs/data/databriefs/db442.pdf
- Maternal Health Learning & Innovation Center (2021, August). *Doula care in the United States*. https://maternalhealthlearning.org/wp-content/uploads/2021/08/MHLIC-Report Doula-Care-in-the-United-States.pdf
- McConnell, J., Chang, A. M., Cohen, D. J., Wallace, N., Chernew, M. E., Kautz, G., McCarty, D., McFarland, B., Wright, B., & Smith, J. (2014). Oregon's Medicaid transformation: an innovative approach to holding a health system accountable for spending growth. *Healthcare*, 2(3), 163–167. https://doi.org/10.1016/j.hjdsi.2013.11.002
- McCool, W. F., & Simeone, S. A. (2002). Birth in the United States: an overview of trends past and present. *The Nursing clinics of North America*, *37*(4), 735–746. https://doi.org/10.1016/s0029-6465(02)00020-8
- McComish, J. F., & Visger, J. M. (2009). Domains of postpartum doula care and maternal responsiveness and competence. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, 38(2), 148–156. https://doi.org/10.1111/j.1552-6909.2009.01002.x
- McGrath, S. K., & Kennell, J. H. (2008). A randomized controlled trial of continuous labor support for middle-class couples: effect on Cesarean delivery rates. *Birth*, 35(2), 92–97. https://doi.org/10.1111/j.1523-536X.2008.00221.x
- McNiven, P., Hodnett, E., & O'Brien-Pallas, L. L. (1992). Supporting women in labor: a work sampling study of the activities of labor and delivery nurses. *Birth*, 19(1), 3-9. https://doi.org/10.1111/j.1523-536x.1992.tb00363.x

- Meadow, S. L. (2015). Defining the doula's role: fostering relational autonomy. *Health Expectations*, 18(6), 3057–3068. https://doi.org/10.1111/hex.12290
- Melancon, S. (2021). Safety, co-regulation, and Polyvagal Theory: the autonomic nervous system as the missing link in childbirth outcomes and experiences. In *Birthing Techno-Sapiens* (pp. 208-221). Routledge.
- Meltzer, B. (2004). *Paid Labor: Labor Support Doulas and the Institutional Control of Birth*. [Doctoral dissertation, University of Pennsylvania]. Penn Libraries Scholarly Commons. https://repository.upenn.edu/dissertations/AAI3125873
- Metrics Scoring Committee. (2022, June 24). 2023 CCO incentive measures and benchmarks. Oregon Health Authority.

 https://www.oregon.gov/oha/HPA/ANALYTICS/CCOMetrics/2023-CCO-incentive-measures_7.15.2022.pdf
- Meyer, S., Hohlfeld, P., Achtari, C., Russolo, A., & De Grandi, P. (2000). Birth trauma: short and long term effects of forceps delivery compared with spontaneous delivery on various pelvic floor parameters. *BJOG: an international journal of obstetrics and gynaecology*, 107(11), 1360–1365. https://doi.org/10.1111/j.1471-0528.2000.tb11648.x
- Midwives Alliance of North America. (n.d.). *Midwifery model: Midwives Alliance of North America*. Retrieved November 6, 2016, from http://mana.org/about-midwives/midwifery-model
- Minnesota Department of Human Services. (2016). *Doula services*. Retrieved December 22, 2016, from http://www.dhs.state.mn.us/main/idcplg?IdcService=GET_DYNAMIC_CONVERSION&RevisionSelectionMethod=LatestReleased&dDocName=dhs16_190890
- Moffat, A. (2014). *The labor of labor support: how doulas negotiate care work*. [Doctoral dissertation, University of California, Merced]. Available from UC Merced Electronic Theses and Dissertations. https://escholarship.org/uc/item/03c1s1kq
- Momdoulary. (2016). FAQ *Momdoulary death & mourning doula training program*. Retrieved October 10, 2016 from https://mourningdoula.com/faq/
- Monroe, S. (2017, May 10). *Shafia M. Monroe's biography*. Shafia Monroe Consulting. https://shafiamonroe.com/about-shafia-monroe/shafia-monroe/
- Morton, C. H. (2002). *Doula care: The (re)-emergence of women-supported childbirth in the United States.* (Order No. 3059588). [Doctoral dissertation, University of

- California]. Available from ProQuest Dissertations & Theses Global. https://stats.lib.pdx.edu/proxy.php?url=https://www.proquest.com/dissertations-theses/doula-care-re-emergence-woman-supported/docview/304802186/se-2
- Morton, C. H., & Clift, E. G. (2014). *Birth ambassadors: Doulas and the re-emergence of woman-supported birth in America*. Praeclarus Press.
- Moseson, H., Zazanis, N., Goldberg, E., Fix, L., Durden, M., Stoeffler, A., Hastings, J., Cudlitz, L., Lesser-Lee, B., Letcher, L., Reyes, A., & Obedin-Maliver, J. (2020). The imperative for transgender and gender nonbinary inclusion: beyond women's health. *Obstetrics and Gynecology*, *135*(5), 1059. https://doi.org/10.1097/AOG.00000000000003816
- Mottl-Santiago, J., Walker, C., Ewan, J., Vragovic, O., Winder, S., & Stubblefield, P. (2008). A hospital-based doula program and childbirth outcomes in an urban, multicultural setting. *Maternal and Child Health Journal*, *12*(3), 372–7. https://doi:10.1007/s10995-007-0245-9
- Mottl-Santiago, J., Herr, K., Rodrigues, D., Walker, C., & Feinberg, E. (2020). The Birth Sisters Program: a model of hospital-based doula support to promote health equity. *Journal of Health Care for the Poor and Underserved*, *31*, 43–50. https://doi.org/10.1353/hpu.2020.0007
- Munoz, E. G., & Collins, M. (2015). Establishing a volunteer doula program within a nurse-midwifery education program: a winning situation for both clients and students. *Journal of Midwifery and Women's Health*, 60(3), 274–277. http://doi.org/10.1111/jmwh.12312
- Nasa, P., Jain, R., & Juneja, D. (2021). Delphi methodology in healthcare research: how to decide its appropriateness. *World Journal of Methodology*, *11*(4), 116–129. https://doi.org/10.5662/wjm.v11.i4.116
- National Institute of Environmental Health Sciences (NIEHS). (2022, August 22). *About community forums*. National Institute of Environmental Health Sciences. https://www.niehs.nih.gov/about/community/communityforums/index.cfm
- Neel, K., Goldman, R., Marte, D., Bello, G., & Nothnagle, M. B. (2019). Hospital-based maternity care practitioners' perceptions of doulas. *Birth*, 46(2), 355–361. https://doi.org/10.1111/BIRT.12420
- Neel, K., Goldman, R., & Nothnagle, M. (2019). Integrating doulas into hospital births: provider perceptions of doulas and doula care. *Obstetrics & Gynecology*, *133*, 37S. https://doi.org/10.1097/01.AOG.0000559443.76117.4a

- Nommsen-Rivers, L. A, Mastergeorge, A. M., Hansen, R. L., Cullum, A. S., & Dewey, K. G. (2009). Doula care, early breastfeeding outcomes, and breastfeeding status at 6 weeks postpartum among low-income primiparae. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, 38(2), 157–73. https://doi.org/10.1111/j.1552-6909.2009.01005.x
- Office of Disease Prevention and Health Promotion. (ODPHP). (2016). *Maternal infant and child health 6: reduce maternal illness and complication due to pregnancy*. Retrieved November 6, 2016, from https://www.healthypeople.gov/2020/data-search/Search-the-Data#objid=4898
- Office of Equity and Inclusion (OEI). (2022). CCO *Traditional health worker deliverables*. Retrieved January 14, 2023, from https://traditionalhealthworkerregistry.oregon.gov/Search
- O'Hara, M. (1995). Postpartum depression: Causes and consequences. Springer-Verlag.
- Olivia, S. (2021, February 9). Statistics about birth in the United States. *DC Metro Maternity*. https://dcmetromaternity.com/statistics-about-birth-in-the-united-states/
- Oregon Doula Association (ODA). (n.d.). *ODA board*. Oregon Doula Association. Retrieved January 16, 2023 from http://www.oregondoulas.org/oda-board
- Oregon Health Authority (OHA). (n.d.) *Oregon health policy board coordinated care organizations*. Retrieved January 24, 2017, from http://www.oregon.gov/oha/OHPB/pages/health-reform/ccos.aspx
- Oregon Health Authority (OHA). (2016). *Oregon's health system transformation CCO metrics 2015 final report*. Retrieved January 24, 2017 from https://www.oregon.gov/oha/Metrics/Documents/2015 performance report.pdf
- Oregon Health Authority (OHA). (2017, June 15). Oregon Medicaid reimbursement for doula services.

 https://www.oregon.gov/oha/HSD/OHP/Tools/Oregon%20Medicaid%20reimbursement%20for%20doula%20services.pdf
- Oregon Health Authority. (2017, June 15). *Billing for Doula Services*. Oregon.gov. https://www.oregon.gov/oha/HSD/OHP/Tools/Billing%20for%20doula%20services.pdf
- Oregon Health Authority. (OHA). (2022a, December). 2021 CCO performance metrics dashboard. Retrieved February 23, 2023 from https://visual-

- data.dhsoha.state.or.us/t/OHA/views/CCOPerformanceMetrics/performance?%3A embed=y&%3AisGuestRedirectFromVizportal=y
- Oregon Health Authority. (2022b). *Community investment collaboratives*. Retrieved January 28, 2023 from https://www.oregon.gov/oha/HPA/dsi-tc/Documents/OHA%20CIC%20Overview%20082922.pdf
- Oregon Health Authority. (2022c). *Comparing CCO spending initiatives*. Retrieved January 28, 2023 from https://www.oregon.gov/oha/HPA/dsi-tc/Documents/HRS-SHARE-ILOS-Comparison.pdf
- Oregon Health Authority (OHA). (2022d). *Oregon's 2022-2027 1115 Medicaid waiver*. https://www.oregon.gov/oha/HSD/Medicaid-Policy/Documents/2022-2027-Waiver-Policy-Summary.pdf
- Oregon Health Authority (OHA). (2022e). *Public notice: Notice of intent-OHA will amend the Medicaid state plan to increase fee-for-service reimbursement for doula services.* https://www.oregon.gov/oha/HSD/OHP/Announcements/Doula-Rates0622.pdf
- Oregon Health Authority (OHA). (2023a) *Member handbook CCO model*. https://www.oregon.gov/oha/HSD/OHP/CCO/Member%20Handbook%20CCO%20Model%20Handbook Final%202023.docx
- Oregon Health Authority (OHA). (2023b). *Traditional health worker registry: Find a traditional health worker*. https://traditionalhealthworkerregistry.oregon.gov/Search
- Oregon Health Plan. (OHP). (2022, August 29). *CWM Plus: full Oregon Health Plan (OHP) benefits during pregnancy*. https://www.oregon.gov/oha/HSD/OHP/Tools/CWM-Plus-Benefits.pdf
- Our Bodies Ourselves. (n.d.). *History Our bodies ourselves*. Retrieved February 26, 2017, from http://www.ourbodiesourselves.org/history/
- Papagni, K., & Buckner, E. (2006). Doula support and attitudes of intrapartum nurses: A qualitative study from the patient's perspective. *The Journal of Perinatal Education*, 15(1), 11–8. https://doi.org/10.1624/105812406X92949
- Pascali-Bonaro, D. (2002). Pregnant and widowed on September 11: The birth community reaches out. *Birth*, 29(1), 62–64. https://doi.org/10.1046/j.1523-536X.2002.00159.x

- Pascali-Bonaro, D. (2003). Childbirth education and doula care during times of stress, trauma and grieving. *Journal of Perinatal Education*, 12(4), 1–7. https://doi.org/10.1624/105812403X107017
- Perez, M. Z. (n.d.). *Doula trainings radical doula*. https://radicaldoula.com/becoming-a-doula/doula-trainings/
- Perez, M. Z. (2012, August 19). *Doula comeback tied to gaps in modern birth*. Women's E-News. http://womensenews.org/story/reproductive-health/120818/doula-comeback-tied-gaps-in-modern-birth-care#.VFJz0_ldVqg
- Piantino, E. (2012). Doulas in Europe. *Midwifery Today with International Midwife*, (104), 61, 68.
- Porges, S. W. (2011). The polyvagal theory: neurophysiological foundations of emotions, attachment, communication, and self-regulation. W.W. Norton & Co.
- Porter, J. (2013). Be careful how you ask! Using focus groups and nominal group technique to explore the barriers to learning. *International Journal of Research & Method in Education*, 36(1), 33–51. https://doi.org/10.1080/1743727X.2012.675554
- Raphael, D. (1973). The tender gift: Breastfeeding. Prentice-Hall.
- Rashid, A., & Mohd, R. (2017). Poor social support as a risk factor for antenatal depressive symptoms among women attending public antennal clinics in Penang, Malaysia. *Reproductive Health*, *14*(1), 144. https://doi.org/10.1186/s12978-017-0404-4
- Reblin, M., & Uchino, B. N. (2008). Social and emotional support and its implication for health. *Current Opinion in Psychiatry*, 21(2), 201–205. http://doi.org/10.1097/YCO.0b013e3282f3ad89.Social
- Renteria-Poepsel, G. (2015). *The role of doulas in enhancing patient-provider communication*. (Order No. 1599128). [Doctoral Dissertation, Southern Illinois University]. Available from ProQuest Dissertations & Theses Global; Publicly Available Content Database. (1728327221).

 https://stats.lib.pdx.edu/proxy.php?url=https://www.proquest.com/dissertations-theses/role-doulas-enhancing-patient-provider/docview/1728327221/se-2

- <u>main.pdf?_tid=f179d88e-ffa4-11e6-823e-</u> 00000aab0f26&acdnat=1488499637 67361c0745ba7ae6c0ff95ff738dd959
- Ronan, A. (2014, September). *My year as an abortion doula: the cut*. New York Magazine. http://nymag.com/thecut/2014/09/my-year-as-an-abortion-doula.html
- Rooks, J. (1999). The midwifery model of care. *Journal of Nurse-Midwifery*, 44(4), 370–374. https://doi.org/10.1016/S0091-2182(99)00060-9
- Roth, L. M., Henley, M. M., Seacrist, M. J., & Morton, C. H. (2016). North American nurses' and doulas' views of each other. *Journal of Obstetric, Gynecologic, and Neonatal Nursing*, 45(6), 790–800. https://doi.org/10.1016/J.JOGN.2016.06.011
- Rothbaugh, J. (1981). Improving the quality of group judgement: Social Judgement Analysis and the nominal group technique. *Organizational Behavior and Human Performance*, 28(2), 272–288. https://doi.org/10.1016/0030-5073(81)90025-8
- Ryan, A., Bernhard, H., & Fahlberg, B. (2015). Best practices for perinatal palliative care. *Nursing*, 45(10), 14–15. http://doi.org/10.1097/01.NURSE.0000471422.49754.9b
- Rysdam, S. (2019). Doula advocacy: strategies for consent in labor and delivery. In *Women's Health Advocacy* (pp. 90-101). Routledge.
- Sabatier, J. (n.d.). Some doulas offer support during abortions or miscarriages. Radio OPB. Retrieved October 24, 2016, from http://www.opb.org/radio/programs/thinkoutloud/segment/some-doulas-offer-support-during-abortions-or-miscarriages/
- Sakala, C. (2010). U.S. health care reform legislation offers major new gains to childbearing women and newborns. *Birth*, *37*(4), 337–340. https://doi.org/10.1111/j.1523-536X.2010.00430.x
- Sakala, C. (2012). *Childbirth: what you need to know about Casarean section*. National Healthy Mothers Healthy Babies Coalition. http://www.hmhb.org/virtual-library/interviews-with-experts/cesarean-section-c-section/
- Sakala, C., & Corry, M. P. (2008). *Evidence-based maternity care: What it is and what it can achieve*. Milbank Memorial Fund.

 http://www.nationalpartnership.org/research-library/maternal-health/evidence-based-maternity-care.pdf

- Salinas, J. L., Salinas, M., & Kahn, M. (2022). Doulas, racism, and whiteness: how birth support workers process advocacy towards women of color. *Societies*, 12(1), 1-19. https://doi.org/10.3390/soc12010019
- Sayakhot, P., & Carolan-Olah, M. (2016). Internet use by pregnant women seeking pregnancy-related information: a systematic review. *BMC Pregnancy and Childbirth*, 16, 65. https://doi.org/10.1186/s12884-016-0856-5
- Schroeder, C., & Bell, J. (2005). Doula birth support for incarcerated pregnant women. *Public Health Nursing*, 22(1), 53–58. https://doi.org/10.1111/j.0737-1209.2005.22108.x
- S.B. 5525, 82nd Legislative Assembly. (Oregon, 2023). https://olis.oregonlegislature.gov/liz/2023R1/Downloads/MeasureDocument/SB5 525/Introduced
- Simkin, P. (1991). Just another day in a woman's life? Women's long-term perceptions of their first birth experience. Part I. *Birth*, *18*(4), 203–210. http://doi.org/10.1111/j.1523-536X.1991.tb00103.x
- Simkin, P., & Way, K. (2008). *The birth doula's contribution to modern maternity care*. DONA International Board of Directors.
- Simon, R. M., Johnson, K. M., & Liddell, J. (2016). Amount, source, and quality of support as predictors of women's birth evaluations. *Birth*, *43*(3), 226–232. https://doi.org/10.1111/birt.12227
- Spiby, H., Mcleish, J., Green, J., & Darwin, Z. (2016). "The greatest feeling you get, knowing you have made a big difference": Survey findings on the motivation and experiences of trained volunteer doulas in England. *BMC Pregnancy and Childbirth*, 16(289), 1-11. http://doi.org/10.1186/s12884-016-1086-6
- Stanley, D., Sata, N., Oparah, J. C., Mclemore, M. R., & Mclemore, M. R. (2015). Evaluation of the East Bay Community Birth Support Project, a community-based program to decrease recidivism in previously incarcerated women. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, 44(6), 743–750. http://doi.org/10.1111/1552-6909.12760
- Steel, A., Adams, J., Sibbritt, D., Broom, A., Gallois, C., & Frawley, J. (2012). Utilisation of complementary and alternative medicine (CAM) practitioners within maternity care provision: Results from a nationally representative cohort study of 1,835 pregnant women. *BMC Pregnancy and Childbirth*, *12*(146), 1-8. http://doi.org/10.1186/1471-2393-12-146

- Steel, A., Diezel, H., Johnstone, K., Sibbritt, D., Adams, J., & Adair, R. (2013). The value of care provided by student doulas: an examination of the perceptions of women in their care. *The Journal of Perinatal Education*, 22(1), 39–48. http://doi.org/10.1891/1058-1243.22.1.39
- Steel, A., Frawley, J., Sibbritt, D., & Adams, J. (2013). A preliminary profile of Australian women accessing doula care: findings from the Australian Longitudinal Study on Women's Health. *The Australian & New Zealand Journal of Obstetrics & Gynaecology*, 53(6), 589-92. https://doi.org/10.1111/ajo.12123
- Stein, M. T., Kennell, J. H., & Fulcher, A. J. (2004). Benefits of a doula present at the birth of a child. *Pediatrics*, 114(5), 1488–1491. http://doi.org/10.1542/peds.2004-1721R
- Stevens, J., Dahlen, H., Peters, K., & Jackson, D. (2011). Midwives' and doulas' perspectives of the role of the doula in Australia: a qualitative study. *Midwifery*, 27(4), 509–516. http://doi.org/10.1016/j.midw.2010.04.002
- Stevens, N. R., Wallston, K. A., & Hamilton, N. A. (2012). Perceived control and maternal satisfaction with childbirth: a measure development study. *Journal of Psychosomatic Obstetrics & Gynecology*, 33(1), 15–24. http://doi.org/10.3109/0167482X.2011.652996
- Strauss, N., Giessler, K., & McAllister, E. (2015). How dould care can advance the goals of the Affordable Care Act: a snapshot from New York city. *Journal of Perinatal Education*, 24(1), 8-15. https://doi.org/10.1891/1058-1243.24.1.8
- Strauss, E. (2017, January 9). *This is what happens when #boss feminism and the doula industry collide*. Slate Magazine. https://slate.com/human-interest/2017/01/this-is-what-happens-when-boss-feminism-and-the-doula-industry-collide.html
- Thullen, M. J., McMillin, S. E., Korfmacher, J., Humphries, M. L., Bellamy, J., Henson, L. G., & Hans, S. L. (2014). Father participation in a community-doula home-visiting intervention with young, African American mothers. *Infant Mental Health Journal*, 35(5), 422–434. https://doi.org/10.1002/imhj
- Tillman, T., Gilmer, R., & Foster, A. (2012). *Utilizing doulas to improve birth outcomes for underserved women in Oregon*. Oregon Health Authority, Office of Equity and Inclusion. https://digital.osl.state.or.us/islandora/object/osl:28454
- Traditional Health Workers, OAR 410-141-3740 (2014). https://oregon.public.law/rules/oar 410-141-3740

- Trillium Community Health Plan (2022). Expanding our doula network. Retrieved January 14, 2023, from https://www.trilliumohp.com/newsroom/expanding-our-doula-network.html
- Tumblin, A., & Simkin, P. (2001). Pregnant women's perceptions of their nurse's role during labor and delivery. *Birth*, 28(1), 52–56. http://doi.org/10.1046/j.1523-536x.2001.00052.x
- US Census Bureau. (2015a). 2010 census urban and rural classification and urban area criteria. Retrieved March 19, 2017, from https://www.census.gov/geo/reference/ua/urban-rural-2010.html
- US Census Bureau. (2015b). *Historical table 2. Distribution of women age 40 to 50 by number of children ever born and marital status: Selected years, 1970 to 2014*. Retrieved from http://www.census.gov/hhes/fertility/files/cps/historical/H2.xlsx
- US Centers for Medicare & Medicaid Services. (CMMS). (n.d.a). *Find out what marketplace health insurance plans cover*. HealthCare.gov. Retrieved November 6, 2016, from https://www.healthcare.gov/coverage/what-marketplace-plans-cover/
- US Centers for Medicare & Medicaid Services. (CMMS). (n.d.b). *Health coverage options for pregnant or soon to be pregnant women*. HealthCare.gov. Retrieved November 6, 2016, from https://www.healthcare.gov/what-if-im-pregnant-or-plan-to-get-pregnant/
- US Centers for Medicare & Medicaid Services. (CMMS). (n.d.c). *Referral glossary*. HealthCare.gov. https://www.healthcare.gov/glossary/referral/
- US Centers for Medicare & Medicaid Services. (CMMS). (2015). OB-GYN measures. Retrieved January 7, 2017, from https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/QualityMeasures/Downloads/OB-GYN-Measures.pdf
- US Centers for Medicare & Medicaid Services. (CMMS). (2022, January 26). *Medicare shared savings program continues to grow and deliver high-quality, person-centered care through accountable care organizations*. CMS.gov. https://www.cms.gov/newsroom/press-releases/medicare-shared-savings-program-continues-grow-and-deliver-high-quality-person-centered-care-through
- Urbanová, E., Škodová, Z., & Bašková, M. (2021). The association between birth satisfaction and the risk of postpartum depression. *International Journal of Environmental Research and Public Health*, *18*(19), 10458. https://doi.org/10.3390/ijerph181910458

- Valencia, Z., Sen, Aditi, Kurowski, D., Martin, K., & Bozzi, D. (2022, June 9). Average payments for childbirth among the commercially insured and fee-for-service Medicaid. Health Care Cost Institute. https://healthcostinstitute.org/hcci-research/average-payments-for-childbirth-among-the-commercially-insured-and-fee-for-service-medicaid
- Vedam, S., Stoll, K., MacDorman, M., Declercq, E., Cramer, R., Cheyney, M., Fisher, T., Butt, E., Yang, Y. T., & Kennedy, H. P. (2018). Mapping integration of midwives across the United States: Impact on access, equity, and outcomes. *PLoS ONE* 13(2), 20. https://doi.org/10.1371/journal.pone.0192523
- Waldroupe, A. (2012, February 28). *Workgroup recommends Oregon Health Plan use doulas*. The Lund Report. https://www.thelundreport.org/content/workgroup-recommends-oregon-health-plan-use-doulas
- Webb, S. (2009). What is a death doula? The intentional caregiver. http://www.intentionalcaregiver.com/what-is-a-death-doula/
- Wenz-Gross M, Weinreb L, & Upshur C. (2016) Screening for post-traumatic stress disorder in prenatal care: prevalence and characteristics in a low-income population. *Maternal and Child Health Journal*, 20(10), 1995–2002. https://doi.org/10.1007/s10995-016-2073-2
- Wilson, I. B, & Cleary, P.D. (1995). Linking clinical variables with health-related quality of life: a conceptual model of patient outcomes. *JAMA*, 273(1), 59-65.
- Wilson, S. F., Gurney, E. P., Sammel, M. D., & Schreiber, C. A. (2016). Doulas for surgical management of miscarriage and abortion: a randomized controlled trial. *American Journal of Obstetrics and Gynecology*, (216)1, 1–7. http://doi.org/10.1016/j.ajog.2016.08.039
- World Health Organization. (WHO) (1996). Care in normal birth: a practical guide. *Journal of Chemical Information and Modeling*, 53(9), 1689–1699. http://doi.org/10.1017/CBO9781107415324.004
- World Health Organization (WHO). (2015). WHO statement on Caesarean section rates.

 Department of Reproductive Health and Research.

 https://apps.who.int/iris/rest/bitstreams/714841/retrieve

Appendix A: Doula Certification Organizations

Certification Group	Culturally specific?	Website/source
AMANI Birth	Islamically based; global	http://www.amanibirth.com/about-us
Birthing from Within		http://www.birthingfromwit hin.com/pages/doula- certification
Childbirth and Postpartum Professional Association (CAPPA)		http://www.cappa.net/
Ancient Song Doula	Focus on women of color and low-income women	http://www.ancientsongdoul aservices.com/about
Birth Arts International		http://www.birtharts.com/ce rtified-doula.htm
Birthingway College of Midwifery		http://birthingway.edu/labor -doula-program/
Birthworks International		https://www.birthworks.org/ become-a-doula/
Charis Childbirth	Christian focus	http://www.charischildbirth. org/?page_id=133
Childbirth International (CBI)		http://childbirthinternational .com/story/
College of the Rockies Birth Doula Studies Program		http://www.cotr.bc.ca/doula/
Commonsense Childbirth School of Midwifery		http://www.commonsensech ildbirth.org/doula-training- and-certification/#doula
Cornerstone Doula Trainings		http://cornerstonedoulatraini ngs.com/labor-doula- training/
Doulas of North America (DONA)		http://www.dona.org/
Doula Training International	Scholarships for doulas of color and those focusing on trans health; have a 'social justice board.' Community focused.	https://www.doulatrainingsi nternational.com/get-to- know-us/faqs/
HypnoBabies		https://www.hypnobabies.co m/become-a-hypno-doula/

HypnoBirthing International		https://us.hypnobirthing.com/professional-doula-training/
International Center for Traditional Childbearing	Women of color	http://www.blackmidwives.
International Childbirth Education Association		http://icea.org/certification/u pcoming-workshops/doula- workshops/
Institute of Somatic Therapy: Massage Doula Program		https://www.massagecredits.com/pages/course_details.php?id=59&cPage=1&SB=22&CAT=12
Madriella		http://madriella.org/birth-doula-certification/
Mamatoto Village	Women of color; community-based program in DC	http://www.mamatotovillage .org/training
MaternityWise	Distance program/online 'workshops.'	http://www.maternitywise.c om/becomedoulatraining.ht ml
The Matrona Foundation		http://thematrona.com/holist ic-doula-program/
Mothering the Mother	Focus on certifying low income women	http://www.mtmtraining.org/faq.html
Sista Midwife Productions, LLC	Community based, multicultural approach	http://www.sistamidwife.co m/#/training- information/4580985198
Tiny Love Doula Certification		http://www.tinylovedoula.co m/
toLabor: The Organization of Labor Assistants and Birth Options (Formerly ALACE)		http://tolabor.memberlodge. org/page-1218119?
Pacific Association of Labor Support (PALS)		http://www.palsdoulas.org/b ecome-a-doula/certification- requirements/

Appendix B: Recruitment E-mail for Delphi Study

Message Header: Invitation to Participate in a Delphi Study on Access to Doulas in Oregon

Message From: Courtney Crane. MPH

Dear :

My name is Courtney Crane, and I am a PhD student in the Health Systems and Policy doctoral program at the OHSU & PSU School of Public Health. My dissertation research addresses the Medicaid health system and policy factors that impact access to doulas in Oregon. The findings from this project will be used to test and validate a model of access to doula care, which can be used to inform integrating doulas into other health systems. My dissertation chair is Dr. Sherril Gelmon, Professor in the OHSU & PSU School of Public Health. Dr. Julie Reeder from WIC is also a member of my dissertation committee and is providing supervision for this phase of the research.

You are invited to participate in this study because you have been identified as a medical or professional expert in maternity care or doula care in Oregon. Your participation will involve engaging in an online survey using the Delphi technique. The Delphi survey technique was chosen for two reasons. First, it allows for the sharing of expert opinion anonymously in order to develop consensus and set priorities. Second, it offers flexibility as participants can respond according to their own schedules. The survey will consist of three iterations; each should take you no more than 20 minutes to complete. You will have a one week time frame for each iteration. In the second and third iterations, you will be able to see the aggregated responses of other maternity system and doula experts in Oregon, and can factor these responses into your own answers as you choose.

The survey will occur in three iterations:

- #1: Idea generation. Participants will be asked to generate two separate lists of their ideas (stated briefly): the first list will include things seen as barriers to access to doula care in Oregon for women receiving Medicaid, and the second list will include things seen as facilitators of doula care in Oregon for women receiving Medicaid.
- #2: Priority Setting. Each participant will receive the aggregated lists generated in #1. You will then be asked to rate each topic on a 5-point scale in terms of how important a barrier or facilitator it is to influencing access.
- #3: Brainstorming on Priorities. The mean scores for each access barrier and facilitator (from #2) will be shared with participants. You will be asked to choose your top 5 barriers and top 5 facilitators from these lists. You will be invited to list possible actions to address the barriers.

Each iteration will be conducted through an online survey. You will be emailed a link to the survey and will be asked to complete the survey within one week. The next iteration will be emailed to you about one week later, and you will again have a week to complete it. I expect that you will receive surveys the weeks of **February 4**, **February 11**, and **February 18**. Again, it should take you no more than 20 minutes to complete each survey.

I hope that you will participate. Your identity will be kept confidential, and will be known only to me as the researcher and my research supervisors (Drs. Gelmon and Reeder). All identifying information will be removed from the responses so that they are anonymous, and results will only be reported in the aggregate. No information that could identify participants will be reported in my dissertation or any publications arising. Your involvement in the study is voluntary, and you may choose not to participate. You can refuse to answer any of the questions at any time. There are no known risks in this study, but some individuals may experience discomfort when answering questions. All data will be kept for three years in a locked file in my personal office and then destroyed.

If you have any questions about this research project, please contact Dr. Gelmon at <u>gelmons@pdx.edu</u> or 503-725.3044. If you have questions regarding your legal rights as a research subject, you may contact the PSU Office of Research Integrity at (503) 725-2227 or <u>hsrrc@pdx.edu</u>.

Please respond to me at <u>crane3@pdx.edu</u> indicating if you are willing to participate. I would like to confirm participants by January 10, 2018.

Thank you for your consideration, and for assisting me in this important research.

Sincerely, Courtney Crane, MPH PhD Student in Health Systems and Policy OHSU & PSU School of Public Health

Appendix C: Recruitment FAQ Sheet for WIC



Increasing Access to Doulas: A Delphi Study

What are the goals of this study?

The primary aim of this study is to identify ways to increase access to doulas for women who are Oregon Health Plan (OHP) participants. A doula is a trained professional who provides continuous physical, emotional and informational support to a mother before, during and shortly after childbirth to help her achieve the healthiest, most satisfying experience possible. OHP recently created a mechanism for payment to doulas and rate schedule for specified doula services. However, it is unknown to what extent this has increased access to doulas for lower-income women.

Has the project been approved by an Institutional Review Board (IRB)?

Yes, it was approved by Portland State University's IRB (protocol 174249).

How is the study funded and who is conducting it?

This study is part a dissertation being conducted by Courtney Crane, a student at the OHSU-PSU School of Public Health. There is no external funding. The dissertation is being conducted under the supervision of Dr. Sherril Gelmon, Professor in the OHSU-PSU School of Public Health. Dr. Julie Reeder from WIC is providing additional supervision to the student researcher.

How will study data be collected?

A Delphi method, in which different panels of experts give feedback in two or more rounds of engagement will be the primary data collection technique. Health systems and maternity experts will comprise one panel and WIC mothers the other. Data collection will begin with a focus group with WIC participants to discuss the support they received during labor and delivery, what support they wished they had, and their opinions on doulas. A survey of healthcare experts will follow. The survey for healthcare staff will build from what was shared in the WIC focus group. A second focus group with WIC moms will be held to gather their input on what was identified in the health care professionals' survey.

Recruiting for the WIC Focus Groups

Who can participate in the focus group?

Women who are enrolled in WIC services or whose children are enrolled in WIC services and who have given birth or are going to give birth (i.e. are pregnant) are eligible to participate. She should have sufficient fluency in English to actively take part in a focus group.

How long will the focus group take to complete?

Each focus group will last about one hour.

Appendix D: Focus Group Recruitment Flyer







Take part in a fun focus group and receive a \$10 grocery store gift card! The group may also count as your WIC class.

Oregon WIC and OHSU/PSU School of Public Health are supervising a study to understand what kind of support moms want while pregnant, during labor and delivery and when they first get home with their newbaby.

The focus group will last about 1 hour and will be held in this WIC office. You'll be given a \$10 grocery gift card for your time. You'll be invited to take part in a follow-up session six weeks later where you can earn another gift card for your opinions.

Can you help by coming to this focus group?

If so, or if you'd like more information, please let WIC office staff know!

Focus group will be held:

[Date] [WIC Agency]



If you have questions, please call Julie Reeder at (971) 673-0051.



SCHOOL OF PUBLIC HEALTH

Appendix E: Focus Group Protocols

Initial Focus Group Protocol

Good afternoon and thank you for taking the time to come here and participate in this focus group. My name is Courtney Crane and I'm a doctoral student at the OHSU & PSU School of Public Health, and a mom to a 4 year old and 1 year old. I am conducting research for my dissertation on how to improve access to doula care in Oregon. In particular, I am hoping to learn the specific things that are barriers to, or make it harder for, women on Medicaid to get doula care, and what things make it easier for women to get doula care.

Before we begin, I just want to remind everyone that your participation is voluntary. I will ask everyone to take a turn and participate, but you can stop participating at any time and you can refuse to answer a question. We will also respect confidentiality. We will only use first names here and I ask that participants not repeat who said what outside of this room. I will be recording this session to facilitate transcribing comments after the session. Nothing that is reported from this work will include the names of any of you who participate. Does anyone have any questions? Then let's begin.

- A. Introductions. I told you a little bit about me, please tell us your name, how old are your kids, and a little bit about what you know about doulas. You don't have to know anything about them coming into the group. But if you don't know what they are, just say so and we can talk about what exactly they do and how they help women.
 - a. If a woman indicates she doesn't know (or perhaps just to be clear), define doulas as someone who is a professional who is trained to provide support to women during labor. They meet with a woman at least twice in Oregon before birth to learn about what the woman wants from birth and how they can support women, sometimes providing information about birth options, and hearing what her birth plan is. Doulas stay with women throughout their entire birth and provide support. The support is tailored to whatever women want and is talked about in the first meetings. It's mostly physical comfort measures such as massage or pressure, help moving around, fluffing pillows, holding your hand. They also provide emotional support, such as empathy or encouragement. They also check in with the woman at least once after birth as well; some doulas can help with breastfeeding.
- B. Now that we've talked about what a doula is, tell me some of the things that might keep moms like you from having a doula. What are some things that help moms like you have a doula? For example, Oregon is the first state to pass a law where doulas can be paid through Medicaid. So we know that can help women to get doulas, but what else?

Think about all the things women need to consider when thinking about using a doula or not. We are going to take some time for you to work independently to make one list of things that help and one list of things that don't help moms like you to have doulas. We will start with facilitators. After about 10 minutes or so, we will come back together and everyone will share what they wrote down. I will write all of them down on this board.

I have a separate list of what research says can help or not help moms like you get doulas. I will then ask you some questions about things that appear on the board and about some things that appear on my list.

So we are going to work independently now. Do you have any questions before we begin?

-----Give participants 10 minutes to complete independent work. Once completed, ask for a volunteer to read her comments first and go around the room until everyone has shared. As people are sharing, cross off items that are covered from the model.

C. Model-prompted items. Thank you for sharing all of your responses. I have a few questions about some other things that could possibly make doula care work or not work. What about _____? Is this something that could make it easier or harder, or should it not go on the list?

Wrap up: Thank you so much for participating. I am going to take this information, and share it with health care professionals who work in maternity care to make an even bigger list of things that work and don't work. Once I have that list, and a list of ways to possibly help women like you who want doulas to get doulas, I am going to hold another focus group and ask you all what you think of what the experts say. Before you leave I would like to give each of you a gift card as a thank you. If you participate in the second focus group, you will receive another gift card.

Follow-up Focus Group Protocol

Good afternoon and thank you for coming back and participating in this second focus group. It's good to see everyone again and I look forward to hearing what you think of what the expert panel had to say about how to get doulas to women like you who want doulas. Again, I'm Courtney Crane and I'm here because I am a doctoral student at the OHSU & PSU School of Public Health and am conducting research for my dissertation on how to improve access to doula care in Oregon.

We talked about this before but I want to remind you that your participation is voluntary. I will ask everyone to take a turn and participate, but you can stop participating at any time and you can refuse to answer a question. We will also respect confidentiality. We will only use first names here and I ask that participants not repeat who said what outside of this room. I will be recording this session to facilitate transcribing comments after the session. Nothing that is reported from this work will include the names of any of you who participate. Does anyone have any questions?

A. Last time we met, you developed two separate lists: things that work and things that don't work for women like you to be able to have doulas if they want or need doulas. I shared that information with a panel of experts who also came up with their own list. They ranked the list based on which things they thought were most important, and for things that didn't work, they proposed actions. On these sheets that I am handing to you now are listed all of the things that work and don't work. The number to the left of each item is the number of experts who voted to say that it was one of the top 5 important things that either work or don't work. I am going to go down the list and read them. If you have any questions about what any of this means, please ask your question as it comes up. We are going to discuss the list and then I would like you to tell me what you think are your own top five items.

I would like to take a few minutes to get your thoughts on this list. Is this what you expect? Do you agree? Is there something you disagree with?

- B. Now we are going to take a few minutes for you to choose your own top 5 from each list. After you are done, we will go around the room and I am going to make a tally to see what the general consensus is but I don't expect that you will all agree. Give participants 5 minutes to complete independent work. Once completed, ask for a volunteer to read her numbers first and go around the room until everyone has shared.
- C. Great, thank you! I am going to hand out another list now. These are the things that experts said should be done to increase access to doulas, to help get doulas to women who want or need doulas. Let me read them. If you have any questions about what these mean, please ask as I go.

So, is there anything you'd like to talk about after hearing these proposed actions to help women get doulas? Do you think they would work?

We are almost done! We are going to take another 5 minutes and I would like you to either choose the top 5 actions you think would help women get doulas, or write new actions and share them with me. I will then add them to the list.

Give participants 5-10 minutes to complete independent work. Go around room and get answers.

Wrap up: Thank you so much for participating. I will compile this list and share it so that we can figure out how to help women who want or need doulas to get doulas. Before you leave, I would like to give each of you your gift card as a thank you for your time.

Appendix F: Decision Tree for Dimensions of Access to Doula Care

This decision tree was created by using the definitions of dimensions of access in Table 3.X and the model of access to doula care in Table 4.1.

- 1. Has the mother or gestational parent determined that doula care would be valuable to their own pregnancy or birth experience, needs during pregnancy or birth, and/or health?
 - a. Yes, this factor affects the decision-making process about the value of doula care for the mother or gestational parent
 - i. Does this come from the parent themselves, including their assessment of their needs?
 - 1. Yes: Ability to Approach
 - 2. No: Does this factor come from the mother or gestational parent's personal support network or relatives, or does this come from a healthcare professional or organization such as an OB provider, doula, WIC counselor, or birth educator?
 - a. Personal support: Ability to Approach
 - b. Professional or Organization: Approachability
 - b. No, this step comes after, or is a factor outside of, the mother or gestational parent's desire for doula care related to their own experience or needs during pregnancy or birth
 - i. At this point in the process, are we addressing secured doula care where mother or gestational parent has a doula, or is receiving doula services? Or is the mother or gestational parent not yet receiving services?
 - 1. Yes, they have secured doula services or are receiving doula services.
 - a. Is this factor related to the mother, gestational parent, or personal social network, or social or population-related factors? Or is this related to a component of the healthcare system that affects the implementation or quality of care delivery?
 - i. This is related to the mother or gestational parent's capacity to act or engage in services: Ability to Engage
 - ii. This is related to the healthcare system or healthcare providers: Appropriateness
 - 2. No, this is not talking about the receipt of or administration of doula care yet, this factor comes into play before that point.
 - a. Does this address the mother or gestational parent, their resources (including family and social network), or social/population factors? Or does this address issues related to doulas, healthcare providers, organizations, or the healthcare system?
 - i. This factor is related to the mother or gestational parent: Ability to Reach

- ii. This factor is related to the healthcare system or healthcare provider: Availability Acceptability, and Availability, Acceptability & Affordability
- 2. This factor is hard to place because it has more than one potential dimension of access, and it is not clear that there is a prominent category:
 - a. Does it deal with supply side or demand side factors?
 - i. Demand: Choose the one furthest along the access arrow. If it is between Ability to Approach and Ability to Reach, choose Ability to Reach. If it is between Ability to Reach and Ability to Engage, choose Ability to Engage.
 - ii. Supply: Is the theme of this factor some aspect of coordination between system elements or system communication?
 - 1. Yes: Appropriateness
 - 2. No: If the choice is between Approachability and Availability, Acceptability, and Availability, Acceptability & Affordability, choose Availability, Acceptability, and Availability, Acceptability & Affordability.

Appendix G: Remaining Barriers to Access to Doula Care

Barrier	Mean	Rank by Mean	Number of Responses	System Level	Access Dimension
Women Do Not Know How to Get a Doula	4.13	15	23	Parents	Ability to Reach
Lack of Support in Choosing to Use a Doula	4.09	16	22	Families & Communities	Ability to Reach
Inadequate Representation of Stakeholders in Legislative and Administrative Rulemaking Process	4.07	17	15	Policy & Legislative	Appropriateness
Lack of Doula Input on Administrative Rulemaking Process	4.06	18	16	Policy & Legislative	Appropriateness
Lack of System- Level Communication	4.06	18	18	Healthcare System	Appropriateness
Loss of Key Personnel at OHA and the Institutional Memory That Comes With It	4.06	18	17	Healthcare System	Appropriateness
Low Reimbursement Rates for Obstetrical Providers/ Demands Placed on Obstetrical Providers	4.05	19	20	Healthcare System	Approachability
Lack of Dedicated Administrative Support from OHA	3.94	20	16	Healthcare System	Appropriateness
Cultural Discrepancy with Doula Role	3.91	21	22	Families & Communities	Ability to Reach
Lack of Content about Doulas in Childbirth Education	3.91	21	22	Healthcare System	Approachability
Lack of Understanding of Doulas or Support	3.91	21	22	Families & Communities	Ability to Reach

Barrier	Mean	Rank by Mean	Number of Responses	System Level	Access Dimension
for Doula Use from Partner					
Societal Value of Doulas	3.91	21	22	Families & Communities	Ability to Reach
Current Structure of the Healthcare System	3.81	22	21	Healthcare System	Availability, Acceptability & Affordability
Social Factors, such as religion, LGBTQ Status, languages or immigration status, socioeconomic status, or geography that would influence access to doula care.	3.79	23	19	Parents	Ability to Reach
Initial Reliance on OB Providers to Bill for Doula Services	3.75	24	16	Policy & Legislative	Availability, Acceptability & Affordability
Lack of Implementation Plan	3.75	24	16	Policy & Legislative	Appropriateness
Doula Registration Process is Cumbersome	3.74	25	19	Healthcare System	Availability, Acceptability & Affordability
Population characteristics, such as age, sex, health status, race, and ethnicity	3.74	25	19	Parents	Ability to Reach
Insufficient Workforce of Qualified Doulas	3.68	26	19	Doulas	Availability, Acceptability & Affordability
Doula Services May be Taken for Granted	3.65	27	23	Doulas	Appropriateness
Negative or Incorrect Perceptions of the Doula Role	3.65	27	23	Parents	Ability to Approach
Overcoming Negative Repercussions from Unprofessional Doulas	3.59	28	22	Doulas	Appropriateness

Barrier	Mean	Rank by Mean	Number of Responses	System Level	Access Dimension
Low-Quality Doula Training Organizations	3.53	29	19	Organizations	Availability, Acceptability & Affordability
Worthiness of Personalized Care During Birth	3.45	30	20	Parents	Ability to Approach
Perceptions and Expectations of Women Who Use Doulas	3.26	31	23	Parents	Ability to Approach
Doulas Provide an Additional Burden on Women	3.24	32	21	Parents	Ability to Engage
Conflicting Ideas about Birth between Mom and Doula	3.09	33	23	Parents	Ability to Engage
Women Already Have Enough Support	3.05	34	21	Parents	Ability to Approach
Bad Doula Experiences	2.85	35	20	Families & Communities	Ability to Approach
Criteria to Qualify for OHP are Too Restrictive	2.85	35	20	Healthcare System	Availability, Acceptability & Affordability

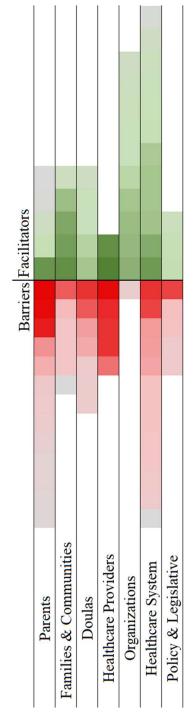
Appendix H: Remaining Facilitators to Access to Doula Care

Facilitator	Mean	Rank by Mean	Number of Responses	System Level	Access Dimension
Initial Advocacy Efforts to Introduce Doula Care into Legislation	4.11	17	18	Policy & Legislative	Availability, Acceptability & Affordability
Autonomy and Agency of Birthing Women	4.10	18	21	Parents	Ability to Approach
Doula Services are Reimbursable Through Legislation and Administrative Policies	4.10	18	20	Policy & Legislative	Availability, Acceptability & Affordability
Childbirth Courses that Incorporate Doulas as Part of the Curriculum	4.10	18	21	Healthcare System	Approachability
Presence of Information about Doulas on the Internet and Social Media	4.05	19	20	Healthcare System	Approachability
Flexibility of Doulas for Reimbursement for Private Pay Women on Medicaid	3.96	20	23	Doulas	Availability, Acceptability & Affordability
Established Doula Groups	3.95	21	20	Doulas	Availability, Acceptability & Affordability
Advertisements for Doulas	3.95	21	21	Organizations	Approachability
Quality Doula Training and Credentialing Organizations	3.95	21	20	Organizations	Appropriateness
Recent Increase in Payment Rate	3.95	21	21	Healthcare System	Availability, Acceptability & Affordability
Supportive Political Environment and Political Actors for the Use of Doulas	3.94	22	17	Policy & Legislative	Appropriateness
Organizations or Practices or Policies that Incorporate Doulas	3.91	23	22	Organizations	Availability, Acceptability & Affordability

Facilitator	Mean	Rank by Mean	Number of Responses	System Level	Access Dimension
Medical Culture: Oregon is a Birth- Friendly State	3.89	24	19	Healthcare System	Approachability
Presence of Hospital- Based Doula Programs	3.86	25	21	Organizations	Availability, Acceptability & Affordability
Oregon's Collective Knowledge of Doulas	3.83	26	18	Families & Communities	Ability to Approach
The Existence of the Traditional Health Worker Registry Website	3.78	27	18	Healthcare System	Approachability
Knowledge of Birth and Needs During Birth	3.76	28	21	Parents	Ability to Approach
Doula Self-Promotion and Marketing	3.74	29	23	Doulas	Approachability
Doula Training Organization Diversity	3.74	29	19	Organizations	Availability, Acceptability & Affordability
The Utility of DoulaMatch to Find Local Doulas	3.25	30	16	Healthcare System	Approachability
Social Factors, such as religion, LGBTQ Status, languages or immigration status, socioeconomic status, or geography that would influence access to doula care.	3.17	31	18	Parents	Ability to Reach
Population characteristics, such as age, sex, health status, race, and ethnicity	3.06	32	18	Parents	Ability to Reach

Appendix I: Heat Maps

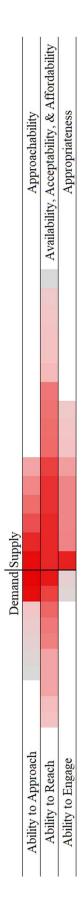
Round 2 Heat Map of the Average Score for Barriers and Facilitators, by System Level



Round 3 Heat Map of the Percentage of Respondent-Identified Top Barriers and Facilitators, by System Level

Barriers Facilitators							
Barrier	Parents	Families & Communities	Doulas	Healthcare Providers	Organizations	Healthcare System	Policy & Legislative

Round 2 Heat Map of the Average Score for Barriers, by Dimension of Access



Round 3 Heat Map of the Percentage of Respondent-Identified Top Barriers and Facilitators, by System Level

	Approachability	Availability, Acceptability, & Affordability	Appropriateness
oly			
l Supp			
DemandS			
	Ability to Approach	Ability to Reach	Ability to Engage

Round 2 Heat Map of the Average Score for Facilitators, by Dimension of Access

	Approachability	Availability, Acceptability, & Affordability	Appropriateness
Demand Supply	Ability to Approach	Ability to Reach	Ability to Engage

Round 3 Heat Map of the Percentage of Respondent-Identified Top Facilitators, by Dimension of Access

	Approachability	Availability, Acceptability, & Affordability	Appropriateness
Supply			
DemandS	Ability to Approach	Ability to Reach	Ability to Engage