Enhancing Respectful Maternity Care through Birth Preferences:

A Quality Improvement Initiative

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Problem Description

Maternity care devoid of respect – manifested in ways such as abuse, discrimination, negligence, abandonment, or ineffective communication – is widespread in the United States and disproportionately affects Black, Hispanic, and multiracial birthing people (Cantor et al., 2024; Mohamoud et al., 2023). Respectful maternity care (RMC) prioritizes the dignity, autonomy, and rights of individuals throughout their childbirth journey (Puthussery et al., 2023). RMC philosophies have evolved to be guided by rightsand reproductive justice-based frameworks, and encompass shared themes of autonomy and choice, communication and shared-decision making (SDM), safety and support, dignity and respect, and freedom from abuse (Cantor et al., 2024).

Respectful maternity care (RMC) plays a crucial role in shaping birth experiences and maternal mental health outcomes, and a lack of it has been linked to significant psychological and postpartum complications. The absence of RMC during childbirth can contribute to psychological birth trauma, which studies estimate ranges from 20-68.6 percent in different countries (Leavy et al., 2023; Sun et al., 2023). Psychological birth trauma is a significant risk factor for postpartum depression (Bay & Sayiner, 2021). Further, a traumatic birth, particularly marked by a negative delivery experience or a sense of loss of control during childbirth, strongly predicts the onset of postpartum traumatic stress disorder (PP-PTSD) (Dekel et al., 2017; Leavy et al., 2023). Pregnant individuals who receive patient-centered care characterized by feelings of safety, support, and respect report more positive pregnancy outcomes and a reduced likelihood of pregnancy complications (Mohamoud et al., 2023). The World Health Organization (WHO) endorses RMC as the paramount recommendation for fostering a positive childbirth experience (WHO, 2018).

The WHO, the Joint Commission, and four leading obstetric professional organizations (the American College of Nurse-Midwives (ACNM), the American College of Obstetricians and Gynecologists (ACOG), the Association of Women's Health, Obstetric and Neonatal Nurses, and the Society for

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Maternal-Fetal Medicine (SMFM)) advocate for improved communication, coordination, and SDM as pillars of safe and reliable patient-centered care (Lyndon et al., 2015; Weiseth et al., 2022). Analysis of events reported in collaborative research studies among physicians, midwives, and nurses, conducted by Lyndon et al. (2015), indicate "profound disconnections among clinicians about patient-care needs", contributing to safety concerns and patient harm. A primary source of potential miscommunication includes differing expectations for information needs and varying communication preference and style among care providers and teams. Effective team communication is critical to delivering RMC, preventing adverse birth outcomes, and mitigating trauma in birth (Cantor et al., 2024; Lyndon et al., 2015).

A small midwifery practice in the Pacific Northwest (PNW) seeks to strengthen their provision of RMC and mitigate the prevalence of birth trauma in their practice through highlighting the RMC tenets of communication, shared decision making, autonomy, and patient choice. Currently, the practice does not have a standardized approach to ensure RMC surrounding birth preferences, leading to a lack of shared understanding regarding individualized patient care. This creates gaps in the collective provider understanding of a patient's history, preferences, and specialized needs. There is no consistent approach to discussing birth preferences, nor standardized tool, which leads to the potential for significant variability in patient experience and education. This deficiency constitutes a disservice to patients and can result in limited prenatal education regarding the labor experience. This creates a risk for misalignment between expectations and reality, increasing the likelihood of a perceived negative birth experience.

Available Knowledge

Health Disparities

The WHO endorses RMC as the paramount recommendation for fostering a positive childbirth experience, emphasizing the dignity, autonomy, and rights of individuals throughout their childbirth journey (WHO, 2018). Despite this, the US boasts the highest rates of maternal morbidity and mortality

among developed nations (Tikkanen et al., 2020). This holds particularly true for Native Hawaiian and other Pacific Islanders, Black, and American Indian and Alaskan Native birthing people, who have the highest rates of pregnancy related deaths (Mohamoud et al., 2023). These disparities in the United States are deeply rooted in histories of medical racism, discrimination, and inequality, leading to significant inequities in the experiences of birthing individuals, including obstetric racism, violence, and trauma (Dmowska et al., 2023).

Research has highlighted widespread mistreatment in maternity care, with systemic disparities affecting marginalized populations at higher rates. In 2015, researchers from the WHO conducted a systematic review of RMC tenets in childbirth that established seven domains of mistreatment including physical abuse, sexual abuse, verbal abuse, stigma and discrimination, failure to meet professional standards of care, poor rapport between women and providers, and poor conditions and constraints presented by the health system (Bohren et al., 2015). The Giving Voices to Mother's US Study (2019) was a large (n=2,138) US based survey that used the referenced Bohren typology to investigate mistreatment in maternity care quantified by race, socio-demographics, mode and place of birth, and context of care. Their results showed one in six birthing people reported experiences of mistreatment from healthcare providers, with highest rates of reporting from Indigenous (32.8%), Hispanic (25.0%), and Black (22.5%) individuals, and lowest rates (14.1%) from white individuals (Vedam et al., 2019).

Mistreatment and discrimination in maternity care is associated with pregnancy complications, as is highlighted by a 2022 systematic review on racial discrimination and adverse obstetric outcomes that confirmed previous findings, establishing a link between perceived racism and poor obstetric and neonatal outcomes (Pereira et. al). These include hypertensive disorders, infrequent prenatal and postpartum visits, and increased rates of low birth weight and preterm births (Larrabee et al., 2021; Pereira et al., 2022). Dmowska and colleagues (2023) further highlighted the impact of discrimination through examining the relationship between traumatic childbirth and obstetric racism. Their qualitative study (n=30) of women of color revealed that obstetric racism was a significant factor in their traumatic childbirth experiences, with nearly two-thirds reporting that their needs and preferences were dismissed due to stereotyping by healthcare providers. Most recently, a cross-sectional survey (n=1,036) on respectful maternity care in the US found that Black or African American participants and non-English-speaking patients were more likely to report discrimination. Overall, 19.5% of respondents felt neglected during or after birth (Patel et al., 2024).

Measurement and Implementation of RMC

Though RMC is increasingly recognized as a fundamental human right for birthing individuals and an expected standard of care, there is no best established and validated tool for its evaluation, nor method for implementation (AWHONN, 2022; Cantor et al., 2024; Mohamoud et al., 2023; Vedam et al., 2017). One RMC-focused tool is the CHOICES tool which evaluates shared decision-making (Cantor et al., 2024). It includes the MORi and MADM indexes, assessing respect in provider-patient relationships and the perception of autonomy in decision-making, respectively (Cantor et al., 2024; Vedam et al., 2017; Vedam et al., 2017). An additional good-quality rated RMC tool is the Disrespect in Abuse Questionnaire, which has is available in both English and Farsi languages (Cantor et al., 2024).

To date, the Association of Women's Health, Obstetric, and Neonatal Nurses (AWHONN) is the only leading professional obstetric organization to present a unique framework guideline for implementation of RMC in maternity care settings. The framework connects patient and care team influences, patient-provider interactions, provision of and access to RMC, and RMC outcomes as concepts influencing RMC implementation (AWHONN, 2022). The International Federation of Gynecology and Obstetrics (FIGO) published a statement in 2021 on RMC promoting the ethical principles of beneficence, nonmaleficence, justice, and autonomy, and calling on other obstetric organizations to support these principles. The American College of Obstetricians and Gynecologists (ACOG) endorses free online courses dedicated to race, equity, and respectful care with the intention of helping empower clinicians to be well versed in providing RMC (ACOG, n.d.). With RMC quality improvement initiatives gaining momentum, Glover and colleagues (2024) emphasize the multidimensional, relational nature of respectful care, particularly for historically marginalized communities. Efforts to implement RMC should prioritize individualized care that acknowledges implicit bias and its impact on maternal health disparities, especially within hierarchical structures affecting interpersonal dynamics (Glover et al., 2024).

Prenatal Knowledge and Communication

Critical tenets of RMC include communication, shared decision-making, autonomy, and patient choice (Cantor et al., 2024). The prenatal period is a pivotal interaction between birthing people and the broader health system, serving as a foundation for establishing these tenets (Govender et al., 2022). According to a 2021 maternity care survey conducted by the Centers for Disease Control and Prevention (CDC) (n=2,407) nearly one half (44.7%) of respondents reported refraining from asking questions or discussing concerns with their provider during care.

The right to both informed consent and refusal is protected by adequate information, and respect for patient autonomy in choice. Unmet information needs and a lack of involvement in the decision-making process contributes to fear, inhibits preparation for birth, and has been associated with post-traumatic stress disorder (Got et al., 2024; Vedam et al., 2017). In their pilot study examining the MORi scale, Vedam et al. (2017) researched samples in the United States (n=1613) and Canada (n=2271). In Canada, 10% of individuals reported feeling coerced making decisions. The most common reasons for withholding questions or concerns were the perception that their provider was rushed and fear of being perceived as "difficult". Additionally, individuals from historically marginalized populations were more likely to score in the bottom 10th percentile, indicating higher levels of perceived disrespect in their interactions with care providers (Vedam et al., 2017). Similar results were discovered from Glover and

colleagues, indicating individuals with at least one social risk factor reported lower levels of informed choice and trust with their care provider (2024).

Informed choice and autonomy are affected by health literacy. Though many definitions exist, one can understand the concept of health literacy in pregnancy as an individual's "knowledge, motivation, and skills to access, understand, appraise, and apply health information to make decisions in everyday life concerning her health" (Meldgaard et al., 2022). Higher health literacy during pregnancy is linked to increased preconception counseling, more regular prenatal visits, greater self-efficacy and empowerment, improved decision-making satisfaction, and better communication with healthcare providers and support networks, leading to healthier behaviors. (Meldgaard et al., 2022; Tavananezhad et al., 2022). Conversely, lower health literacy may be associated with greater information needs and behaviors such as not breastfeeding postpartum, poor diabetes management, and difficulty understanding and enacting prenatal care recommendations (Meldgaard et al., 2022). A cross-sectional study conducted in Turkey (n=384) determined that perception of traumatic birth is impacted not only by socio-demographic and mental health factors, but also low health literacy level (Yazici Topçu & Aktaş, 2022).

Birth Plans

The concept of a birth plan first emerged in the 1980s, offering pregnant individuals a means to articulate their desires for their childbirth journey in the face of increasingly escalating interventions (Ghahremani et al., 2023; Lothian, 2006). Birth plans have been associated with improved maternal and neonatal outcomes including higher rates of vaginal birth, shorter labor lengths, less use of oxytocin, amniotomy, and epidural anesthesia, higher rates of immediate skin to skin and breastfeeding initiation, less NICU admissions and higher Apgar scores (Afshar et al., 2018; Hidalgo-Lopezosa, 2021; Mohaghegh et al., 2023; López-Gimeno et al., 2021). A 2010 Taiwanese study by Kuo et al. discovered significantly

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higher reports of positive childbirth experiences with the use of a birth plan, a finding that was echoed by a subsequent study they conducted in Egypt in 2015.

Despite recommendation from the WHO for personalized birth plans as a method of fostering positive birthing experiences, no universal birth plan exists, and approaches vary widely by setting (WHO, 2018). In Spain, hospitals modify a standard template for birth plans provided by the Ministry of Health, Social Policy and Equality, ensuring consistency while allowing for local adaptations (Artieta-Pinedo et al., 2024). The Netherlands incorporates birth plans into clinical routines through four openended questions, emphasizing communication and patient involvement (Westegren et al., 2020). Scotland integrates birth plans into the national maternity record, endorsed at a national level, to standardize maternal care across the country (Afshar et al., 2019). In contrast, the United States lacks a standardized approach to birth plans, despite endorsement from ACOG, ACNM, and AWHONN for the creation of them (ACNM, 2014; ACOG, 2022; AWHONN, 2022).

Over time, birth plans have become heterogenous in nature, ranging from detailed checklists to open-ended questions (Debaets, 2017; Medeiros et al., 2019). A 2019 U.S.-based survey involving 567 respondents, including midwives and physicians, revealed that 66.5% of healthcare providers did not recommend the use of birth plans, predominantly due to concerns that they might predict poor obstetrical outcomes. This skepticism is likely rooted in the content of birth plans, which has increasingly become standardized and institutionalized, mirroring the medicalization of childbirth itself (Medeiros et al., 2019). Typically, these plans include checkboxes focusing on specific interventions and outlining what the patient wishes to avoid, which may contribute to the perception that they set unrealistic expectations for labor and delivery. Much of the criticism of birth plans points to rigidity that creates a risk for a false sense of control over labor and birth events, both of which are inherently unpredictable in nature (Aragon, 2013). Birth plans with a higher number of specific requests, and unrealistic expectations in the form of inflexible plans are inversely related to patient birth satisfaction (Afshar et

al., 2019; Medeiros et al., 2019). Though multiple risk factors are contributory, a 2021 systematic reviewed conducted by Webb et al. highlighted an association between unmet birthing expectations and increased risk of PTSD after birth.

To encourage a positive birthing experience, the intention of a birth plan should not be simply a list of requests but rather a tool to facilitate communication between birthing people and those who will care for them in labor (Lothian, 2006). A systematic review performed by Bell and colleagues (2022) examined the purpose, process, and impact of birth plans demonstrated positive outcomes when patients and providers prioritize effective communication and collaboration. Importantly, that review found positive childbirth experiences are linked to feeling respected and heard, rather than obstetric outcomes alone. Birth plans can facilitate shared decision-making conversations and contribute to patient autonomy through encouraging realistic expectations and informed preferences (Gahremani et al., 2023). Overall, higher rates of autonomy and control in pregnancy are associated with better birth experiences (Shareef et al., 2023).

Despite the increasing recognition of birth plans in maternity care, there is minimal research on their use, and even less on their specific content. However, a few studies have explored this area. A Spanish study performed by Arieta-Pinedo and others (2024) explored the priorities of birthing people and providers regarding the content of birth plans and found a high consensus on the value of including options that cater to the emotional and relational needs of the birthing person. In Canada, a survey underscored that pain management and comfort measures are often deemed the most crucial elements of birth plans (Aragon et al., 2013). Meanwhile, in the Netherlands, birth plans are a routine part of clinical care and focus on open-ended questions that encourage discussion surrounding values, hopes and fears (Westegren et al., 2020).

What can be widely agreed upon is that effective communication and patient-centered shared decision-making are standard elements of respectful care (Cantor et al., 2024). Developing, discussing,

and reviewing patient birth preferences through a birth plan can facilitate information exchange and foster a trusting relationship between patient and provider (Mohaghegh et al., 2023; Shareef et al., 2023). Afshar et al. (2019) suggest that the true value of a birth plan lies more in the opportunity it presents for communication rather than the specifics of the plan itself. A comprehensive 2022 systematic review by Bell et al. underscored communication as the primary purpose of birth plans, highlighting the critical importance of collaborative creation. This collaborative aspect was notably supported by a 2010 Taiwanese study by Kuo et al., which found that birth plans, when discussed with healthcare professionals, significantly enhanced the birthing person's sense of control, satisfaction, and expectation. Conversely, those who created plans independently, without input from their care team, reported lower satisfaction levels (Afshar et al., 2018). Additionally, creating a birth plan with collaborative review from the care team can educate birthing people and contribute to improved health literacy, which is associated with greater self-efficacy and empowerment, improved decision-making satisfaction, and better communication (Meldgaard et al., 2022; Tavananezhad et al., 2022).

Organizational Response

While provider and patient communication is a critical component of facilitating a positive pregnancy and birth experience, equally important is communication within and among the care team itself (Cantor et al., 2024; Lyndon et al., 2015). Analysis of events reported in collaborative research studies among physicians, midwives, and nurses, conducted by Lyndon et al. (2015), indicate "profound disconnections among clinicians about patient-care needs", contributing to safety concerns and patient harm. Healthcare team communication and information sharing are dynamic processes that undergo frequent and rigorous evaluation across various domains to mitigate healthcare-associated harm stemming from communication failures (Buljac-Samardzic, et al., 2020). The electronic health record (EHR) is intended to enhance team communication and streamline information sharing. However, complexities emerge regarding the content of the documentation, its location within the EHR, and the methods of information dissemination. These factors can complicate effective communication among healthcare teams (Thate et al., 2020).

A Netherlands-based systematic review focused on interventions to improve healthcare team effectiveness identified three categories of intervention: training, tools, and organizational redesign (Buljac-Samardzic, et al., 2020). Widely utilized healthcare trainings in acute settings include Crew Resource Management (CRM) and Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS). CRM combines didactic elements with simulations and debriefing, while TeamSTEPPS emphasizes leadership, situation monitoring, mutual support, and communication (Buljac-Samardzic et al., 2020; Buljac-Samardžić et al., 2021). Among the most well-supported tools are the situation, background, assessment, recommendations (SBAR) and (de)briefing checklists, though many others exist, and new ones are rapidly introduced. Organizational redesign focuses on restructuring with an emphasis on standardizing processes, roles, responsibilities, and the physical environment (Buljac-Samardzic, et al., 2020).

Effective team communication and information sharing in obstetrics are crucial not only for reducing perinatal deaths but also for preventing obstetric violence and psychological birth trauma through improving respectful care (Lippke et al., 2021). A 2023 cross-sectional study in Sweden (n=539) surveyed midwives, physicians, and nurse assistants, revealing that their sense of organizational belonging and professional roles are linked to support for vaginal birth. Additionally, the researchers found an organizational culture that promotes vaginal birth and respects women's informed choices correlates with a positive interprofessional team culture (Johnson et al., 2023).

Two initiatives designed to reduce communication errors in obstetrics are the Purposeful, Unambiguous, Respectful, and Effective (P.U.R.E.) process and TeamBirth. The P.U.R.E. process enhances care coordination and communication in high-risk perinatal settings by combining the SBAR (Situation, Background, Assessment, Recommendation) method with clear communication goals, respectful interactions, and continuous evaluation through debriefings (Gephart et al., 2012). TeamBirth emphasizes brief team meetings, or "huddles," in labor and delivery. Guided by a shared planning board, these huddles facilitate communication among the patient, their support partner, the nurse, the provider, and other care team members. They review patient preferences, subjective experiences, labor progress, care plans, and the timing of the next huddle, promoting transparent communication and psychological safety (Aggarwal et al., 2021). In a review of TeamBirth, 2,669 patients responded, with 96-99% reporting a positive experience, feeling involved in decision-making, understanding their care, and believing their preferences impacted their treatment. A correlation was observed between the number of huddles and positive experiences. Among clinicians, 90% of nurses, midwives, and obstetricians indicated they would definitely (68%) or probably (22%) recommend TeamBirth (Weiseth et al., 2022).

Effective patient care and healthcare communication hinge on accurate documentation of language data. Non-native speakers face heightened risks of adverse health outcomes, with linguistic barriers further exacerbating potential disparities by impeding their ability to convey healthcare needs and concerns (Sudhinaraset et al., 2023). A small qualitative study (n=18) conducted in 2023 explored the experiences of pregnant Chinese, Taiwanese, and Mexican immigrants, identifying language as a primary obstacle in navigating healthcare. The study revealed issues such as inadequate translator services, complex medical terminology, insufficient informed consent, and diminished decision-making autonomy (Sudhinaraset et al., 2023).

Language barriers intersect with obstetric racism, contributing to inequities in obstetrics and maternity care - women of color and minoritized individuals with language barriers face higher rates of unscheduled cesarean births and greater incidences of obstetric trauma and mistreatment during childbirth (Sanserino et al., 2020; Staniczenko et al., 2022; Vedam et al., 2019). To ensure equitable, person-centered reproductive health, it is essential to address the quality of care at the intersection of language access, ethnicity, and structural racism (Dmowska et al., 2024; Sanserino et al., 2020).

Rationale

A birth preference sheet serves as a vital communication tool, conveying a patient's childbirth preferences to the healthcare team and aiming to reduce the risk of disrespectful care (Bell et al., 2022). Despite the lack of a universal approach to their development, birth plans in the literature have been linked to improved maternal and neonatal outcomes, including higher rates of vaginal births, shorter labor durations, and better initial breastfeeding and Apgar scores (Afshar et al., 2018; Hidalgo-Lopezosa, 2021; Mohaghegh et al., 2023; López-Gimeno et al., 2021). Preference development is most effective when used to promote open communication, informed preferences, and mutual understanding between the patient and the healthcare team, rather than as rigid checklists (Afshar et al., 2019; Medeiros et al., 2019). This collaborative approach enhances health literacy and self-efficacy while also strengthening the trust and transparency crucial for positive birthing outcomes (Meldgaard et al., 2022; Tavananezhad et al., 2022).

Critical tenets of RMC include communication, shared decision-making, autonomy, and patient choice (Cantor et al., 2024). The prenatal period is pivotal for establishing these tenets, providing a foundation for effective interaction between birthing people and the broader health system (Govender et al., 2022). In parallel, the right to informed consent and refusal is protected by adequate information and respect for patient autonomy. Unmet information needs and lack of involvement in decision-making contribute to fear, inhibit birth preparation, and have been associated with post-traumatic stress disorder (Got et al., 2024; Vedam et al., 2017). Studies have shown that individuals from historically marginalized populations are more likely to perceive disrespect in their interactions with care providers, affecting their birth experiences and outcomes (Vedam et al., 2017).

Despite some healthcare providers' skepticism, fearing that birth plans might set unrealistic expectations, their true value lies in facilitating communication. Effective birth plans emphasize shared decision-making and patient autonomy, resulting in better birth experiences where patients feel

respected and heard (Gahremani et al., 2023; Shareef et al., 2023). Research has shown that collaboratively created and discussed birth plans with healthcare professionals significantly enhance the patient's sense of control, satisfaction, and overall experience (Bell et al., 2022).

Ultimately, birth preference sheets, when used effectively, enhance the tenets of respectful maternity care by fostering open communication, informed consent, and shared decision-making (Bell et al., Mohaghegh et al., 2023; Shareef et al., 2023). This approach not only improves health literacy and self-efficacy but also builds trust and psychological safety, leading to more positive birthing outcomes (Aggarwal et al., 2021; Tavananezhad et al., 2022. By addressing the critical needs for information and involvement in decision-making, the development of birth preferences plays a crucial role in ensuring respectful and patient-centered care.

Frameworks

The development of this project is guided by two multidimensional frameworks: the AWHONN Respectful Maternity Care Framework and the Birth Equity Measurement Framework. The AWHONN RMC framework is designed to inform the creation of practice initiatives aimed at enhancing maternity care and improving maternal health outcomes by delivering RMC. This approach aligns with the WHO's foremost recommendation for cultivating a positive childbirth experience (WHO, 2018). The AWHONN framework encompasses a multifaceted array of factors that impact RMC practices, intersecting with both patient and provider dynamics (Figure A1). Central tenets include influences from patients and care teams, interactions between patients and providers, fundamental rights related to RMC, and the implementation of RMC principles (AWHONN, 2022).

The AWHONN RMC framework does not explicitly address the concepts of equitable care pertaining to the right to equality and nondiscrimination (Cantor et al., 2024). To bridge this gap, the Birth Equity Measurement framework will be integrated with the AWHONN framework. This integration acknowledges the significant impact of racism and discrimination as key drivers of maternal health disparities and negative birthing experiences. The Birth Equity Measurement framework places the birthing person at its core, encircled by three dynamic layers: stages of care, birth equity factors, and accountable entities (Figure A2). The guiding principles of this framework are: 1) centering the birthing person's background and perspective; 2) promoting accountability throughout all stages of birthing care; 3) addressing the influence of social conditions and systems of oppression; and 4) fostering collective accountability across the healthcare system. (RHI & NCQA, 2022).

While the above frameworks guided development of the project, the implementation was directed by the Institute for Healthcare Improvement (IHI)'s Model for Improvement framework. This framework guides quality improvement efforts in healthcare settings through a structured approach to problem-solving and enhancing processes through iterative testing and learning. Central to this framework is the use of Plan-Do-Study-Act (PDSA) cycles to test and adapt changes on a small scale before broader implementation – this helps create improvements that are sustainable and based on reliable data (IHI, 2017).

Specific Aims

The global aim of this project was to reduce the risk of disrespectful maternity care by introducing a birth preference sheet, which will facilitate patient-provider communication within multidisciplinary inpatient and outpatient teams and encourage patient health literacy. The specific aims were: 1) 75% of all antepartum charts with the gestational age of 30-32 weeks will contain the designated antepartum smart phrase by December 13th, 2024; 2) 75% of all eligible intrapartum charts will contain the designated intrapartum smart phrase by December 13th, 2024; 3) 100% of the midwifery team will complete a pre-project implementation survey by September 30th, 2024, prior to initiation of PDSA cycle 1; and 4) 75% of the implementation team (midwives and student midwives) will successfully complete a post-project survey by December 20th, 2024, following completion of PDSA cycle 4.

Context

The designated Pacific Northwest practice is a collaborative obstetric group consisting of five fulltime midwives and three part-time or per-diem midwives. This practice operates within a community hospital that maintains a business relationship with a prominent academic university. As a result, midwifery and nurse practitioner students frequently work alongside the primary providers. The practice maintains three physicians who deliver outpatient prenatal care, complemented by over 100 additional physicians responsible for team inpatient care on the labor floor. As a collaborative team, the midwives and obstetricians manage the care of pregnant individuals with a variety of complex medical conditions, including hypertensive disorders, which affect 44% of their patient population. The midwives frequently serve as the primary care providers for patients in labor and delivery, with physicians helping as necessitated by patient and unit acuity. There is a considerable number of both midwives and physicians who do not engage in prenatal care but do participate in inpatient care of labor, birth and postpartum recovery. This leads to scenarios where primary providers are meeting patients for the first time upon arrival to the hospital and are unfamiliar with a patient's values and preferences.

While race is a social construct and its misuse in medicine serves to perpetuate biases and health disparities, understanding the diverse community this practice serves is valuable for identifying and addressing opportunities for disrespectful and inequitable care (Braveman & Dominguez, 2021). From 2021 to 2023, 25% of patients at the designated practice identified Spanish as their preferred language, and 51% of respondents identified as Hispanic, Mexican, Mexican American, Latinx, Puerto Rican, or of Spanish origin. Additionally, 39% of respondents identified as non-Hispanic white, and the remaining 10% of the community comprises patients who identify as non-Hispanic Black, African American, Asian, or Pacific Islander. Notably, the practice has maintained cesarean rates above, or just barely under the national average from 2021-2023 at 43%, 36%, and 30%, respectively (Hamilton et al.,

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2024). These demographics are significant, as Black, Hispanic, and multiracial birthing individuals face the greatest threats to respectful maternity care (Cantor et al., 2024; Mohamoud et al., 2023).

Interventions

The primary intervention for this project was the integration of an evidence-based birth preferences sheet into routine prenatal care through a newly developed workflow. Although the term "birth plan" is widely used, some literature described it as "misleading" or contributing to unrealistic expectations due to the unpredictable nature of birth. Therefore, "birth preferences" was adopted for this intervention (Ghahremani et al., 2023; Webb et al., 2021; Welsh & Symon, 2014).

Before its initial implementation, the birth preferences sheet was reviewed using the Flesch-Kincaid readability test to ensure it maintained a sixth grade reading level, making it accessible and understandable for a wide range of patients. The sheet was first offered to all patients in the clinic after 30 weeks of gestation, alongside a one-page educational handout outlining the site's standards of practice to support health literacy (Meldgaard et al., 2022; Tavananezhad et al., 2022). It was made available to patients planning for spontaneous or induced labor, as well as those scheduled for cesarean births. Patients beyond 30 weeks who had not received the sheet before the project's initiation were also offered a copy.

Upon accepting a paper copy, patients were encouraged to bring it back for review with the midwifery team before 36 weeks. The timing of the 30-week offering was intended to allow for discussion between the patient and midwifery team and to ensure the sheet could be scanned into the electronic health record (EHR) before delivery, making it accessible in the "Media" section. Patients were also encouraged to bring a paper copy with them upon arrival at the hospital for review with the admitting care team. The midwife documented the process in the health record using a smart phrase at three key points: when the patient initially accepted the preference sheet, during the prenatal review, and upon review at hospital admission.

Key participants in the implementation included the midwifery team, student midwives, and medical assistants (MAs). The birth preference sheet was first introduced to the midwifery team during a monthly meeting on September 10, 2024. A PowerPoint presentation provided an overview of the birth preference sheet and outlined the new workflow process. Given that the project aimed to enhance communication and collaboration through birth preferences, it was critical to review the sheet with patients both before 36 weeks of pregnancy and again upon hospital admission. This approach reinforced the primary purpose of birth planning—facilitating effective communication—and was emphasized in both the presentation and accompanying provider handouts.

Following the presentation, a PDF summary was emailed to the midwifery team for their reference. The same summary was also distributed to student midwives scheduled to work in the clinic during the fall term. A meeting was held before the first week of implementation with the MAs, who were responsible for offering and administering the birth preferences sheet to patients during visits after 30 weeks. During the first week of implementation, a reminder email was sent to all midwives, student midwives, and MAs regarding the project's initiation. Laminated copies of the birth preferences sheet and smart phrases were made available in the clinic, ensuring easy access. Weekly updates on the intervention were shared alongside updates from two other simultaneous DNP projects.

To evaluate the intervention, an initial Likert scale survey assessing the midwifery team's perceptions of the new workflow was distributed following the intervention presentation, prior to the first Plan-Do-Study-Act (PDSA) cycle. The same Likert scale survey was administered at the end of the fourth PDSA cycle, accompanied by a multiple-response survey to gather feedback on implementation success, barriers, and opportunities for future improvements.

While MAs were responsible for offering the birth preferences sheet to eligible patients, the midwifery team in the clinic (midwife and student midwife) confirmed its use and documented the process using two designated Epic smart phrases (see Appendix D). The specific aims of the project were

measured through documentation in the "Pregnancy Checklist," a familiar workflow component for the midwifery team, and in the "History and Physical" admission note of the medical record. The antepartum smart phrase was entered in the third trimester section of the pregnancy checklist, and when used, it automatically transferred to the provider's prenatal note for the day. Laminated copies of the smart phrases were readily available in the clinic and on labor and delivery to serve as documentation reminders.

Study of Interventions

The Institute of Healthcare Improvement's (IHI) Plan-Do-Study-Act (PDSA) cycles facilitated the project's implementation, enabling iterative evaluation and adjustment of changes (IHI, 2017). This project utilized four PDSA cycles, each lasting approximately 2-3 weeks, beginning on September 30, 2024. Each cycle employed a PDSA cycle worksheet to guide observations, set goals, and draw conclusions for the next cycle.

Weekly prenatal chart notes of patients between 30 and 42 weeks of gestation were reviewed for the presence of the antepartum and intrapartum smart phrases. Once documented in the pregnancy checklist, the antepartum smart phrase automatically transferred to the provider's prenatal note, and its use was tracked. The intrapartum smart phrase appeared in the history and physical (H&P) note upon admission. The percentage of charts containing the antepartum smart phrase in the prenatal note each week was monitored and compared against the project's specific aims. Weekly chart reviews focused on tracking the antepartum smart phrase, while daily reviews examined intrapartum documentation and smart phrase use. For specific aim goals one and two, the number of eligible patients was determined each week, and the rate of smart phrase documentation and intervention implementation was measured.

Established midwifery meetings and informal supplemental emails requesting feedback from MAs were used to gather input and guide subsequent PDSA cycles. On the first day of each cycle, an

email was sent to the midwifery team and MAs to relay adjustments, progress, and encouragement for the project's continuation. After the second PDSA cycle, a feedback survey was distributed to gather opinions and identify barriers to the adoption of the birth preference sheet. A summarizing email was then sent to the implementation team to review changes and modifications for the next cycle.

Weekly tracking rates of smart phrase use and uptake were analyzed and presented as a table or line graph, depending on data volume. These results were compared across PDSA cycles to assess whether adjustments were needed regarding workflow or documentation.

Measures

Process measures include 1) the percentage of completed smart phrases indicating patients were offered the birth plan in prenatal care; 2) the percentage of completed smart phrases indicating birth preference sheets were reviewed prior to labor onset; 3) the percentage of midwives who completed the survey after initial project implementation presentation; and 4) the Likert scale responses prior to PDSA cycle1, and following PDSA cycle 4, assessing perceptions of birth preference discussions.

The uptake of the birth preference sheet workflow was evaluated by weekly tallying the number of eligible chart notes that included the antepartum and intrapartum smart phrases. To assess satisfaction with the new workflow process and its integration, Likert scale responses and response counts were collected from surveys administered before PDSA cycle 1 and after PDSA cycle 4. Additionally, qualitative responses from a combined open-ended and multiple-choice survey, administered after PDSA cycle 4, were gathered to identify implementation barriers and guide future iterations of the project. Rates of participation in formal feedback surveys were recorded for the appropriate cycles (two and four) as a percentage. A secondary comparison focused on specific aims two and three, examining how often patients had both review steps completed.

Analysis

The analysis of the interventions was primarily quantitative. To summarize and describe the data, frequencies and percentages for each specific aim were calculated. Specific aims two and three were evaluated separately as independent outcomes. All aims were measured weekly and displayed visually at the end of each PDSA cycle. Weekly trends provided insight into implementation gaps and areas for improvement within each cycle.

A line graph was used to visually display and compare data from each PDSA cycle for specific aims one and two. A Likert scale was administered before and after project implementation, with descriptive statistics—such as frequencies, measures of central tendency, and variability trends analyzed to interpret responses. Any shift toward agreement in responses was considered a marker of success. Likert scale responses were displayed through a pie chart to illustrate the distribution of responses.

A Mann-Whitney test was conducted to compare differences between independent response groups without assuming a normal data distribution. Success was measured by reviewing the percentage of antepartum and intrapartum chart notes containing the designated smart phrases and comparing these numbers to the specific aims. Successful implementation of the project was indicated by stable or increasing percentages over time, reflecting appropriate uptake, growth, and integration into practice.

Ethical Considerations

This quality improvement project was reviewed by the Institutional Review Board (IRB) to confirm its non-research design. Transparency was a priority, with the project team providing regular updates to all stakeholders, including healthcare providers and administrative personnel, to foster an environment of openness and trust. Recognizing logistical and time constraints, the birth preferences sheet was available in English and Spanish to accommodate the majority primary languages of the organizational team and patients but did exclude individuals who speak other primary languages. This could be addressed through PDSA feedback and implemented in further iterations. Additionally, the project introduced a new initiative to a small practice that already managed a high-risk patient population, potentially adding strain to an already burdened healthcare team and system. This was attempted to be mitigated by responsiveness to team needs throughout the systematic feedback cycles.

Results

Implementation and Documentation of Birth Preference Sheets

Over the course of four PDSA cycles, a total of 74 birth preference sheets were offered to eligible patients. While the initial eligibility criteria aimed to target patients between 30–32 weeks gestation, the criteria were revised prior to project initiation to include all patients beyond 30 weeks who had not previously been offered the birth preference sheet. Of the 74 sheets distributed, documentation in 73 patient charts confirmed the use of the antepartum birth preference sheet smart phrase, indicating a 99% acceptance rate during prenatal visits. Distribution of sheets varied by cycle: 16 sheets were offered in cycle one, 34 in cycle two—the longest cycle with the highest number of clinic days—16 in cycle three, and 7 in cycle four. Trends across the cycles – seen in Figure 1 -- demonstrated an overall increase in uptake following week one, apart from week seven, which had only three clinic days instead of the typical four. Notably, only one clinic day during that week offered birth preference sheets to patients.

Figure 1





The percentage of eligible patients offered the birth preference sheet, as documented using the intended antepartum smart phrase, was 46% (16/35), 79% (34/43), 80% (16/20), and 78% (7/9) across the four PDSA cycles, respectively.

Of the 73 birth preference sheets offered, 35 charts (48%) documented evidence of review at subsequent prenatal visits, as indicated by the appropriate smart phrase. Eligible sheets for review included those from patients who had previously accepted the birth preference sheet with the intent to use it and attended a subsequent prenatal appointment. Opportunities for review began in week 3 of PDSA cycle two, allowing time for patients who received the sheet at the start of the cycle to complete the form and return for review with the midwifery team at their next visit. Review rates by cycle were 50% (18/36) in cycle two, 54% (12/22) in cycle three, and 63% (5/8) in cycle four. Deviations from this trend were observed in weeks five and 11. Week 5, which occurred during PDSA cycle two, included the highest number of eligible sheets for review (n=36) and the most instances of patients forgetting their

sheet at home (n=10). Of the nine sheets eligible for review during that week, four patients forgot to bring the sheet to the clinic. Among the remaining five, only two were reviewed, resulting in a particularly low weekly review rate of 22%.

Throughout the four PDSA cycles, 21 of 26 eligible patients (81%) had their birth preference sheets reviewed upon arrival to labor and delivery. Eligible patients were defined as those who had previously accepted a birth preference sheet in the antepartum period and were subsequently admitted to labor and delivery during the project timeline. No eligible patients presented to labor and delivery until week three, marking the start of PDSA cycle two. Review rates by cycle were 90% (9/10) in cycle two, 75% (9/12) in cycle three, and 75% (3/4) in cycle four. Notably, low review rates were observed in weeks seven and eleven. During week seven, two eligible patients presented to labor and delivery. One patient's birth preference sheet was reviewed and documented, while the other was attended by a perdiem midwife, with no documentation indicating that a review occurred. In week eleven, a single eligible patient presented to labor and delivery and was admitted by the physician team, with no review of the birth preference sheet documented. Visual representation of both antepartum and intrapartum review rates is presented in Figure 2.

Charts missing both antepartum and intrapartum review documentation were more likely to have intrapartum reviews than prenatal reviews. Overall, there were more charts indicating intrapartum review without prior antepartum review (n=6) compared to charts with antepartum review but no intrapartum review upon admission to labor and delivery (n=3).

Figure 2



Percentage of Antepartum and Intrapartum Birth Preference Sheets Reviewed by Week

Note. Eligible charts for review were first available in week 3.

Organizational Feedback

A Likert scale survey was administered to the midwifery team before the start of PDSA cycle one and again after the conclusion of PDSA cycle four. Analysis using a Mann-Whitney U test revealed no statistically significant differences in survey responses across time points (p-values: 0.93, 0.39, 0.62, and 0.48). The initial survey had a response rate of 70% (7/10), while 60% (6/10) of team members completed the final survey.

Figure 3



Comparison of Pre- and Post-Intervention Likert Scale Survey Results

To further explore barriers and facilitators, a formal three-question open-response survey was administered midway through the intervention at week six. Of the 10 recipients, 4 team members responded. Respondents highlighted several successful aspects of incorporating the birth preference sheet into care, including helping patients "have more realistic expectations," "providing more context on preferences," "explaining benefits to patients," and creating opportunities to educate about "options for care during labor, birth, and postpartum." The primary barrier, noted by 75% of respondents, was patients forgetting to bring the physical copy; one respondent reported no barriers. Suggestions for improvement centered on optimizing time management to facilitate review during appointments, such as having patients complete the sheet during a visit or prioritizing review upon admission to labor and delivery. One respondent recommended implementing electronic copies that could be printed on demand if patients forgot their physical sheet.

A combined multiple-choice and open-ended survey administered alongside the final Likert survey captured additional barriers and successes, with 6 team members responding. Among respondents, 67% reported no barriers or only minor barriers to implementing the birth preference sheet in the antepartum period, and 83% expressed being very satisfied with the format of the birth preference sheet. Key components of the final survey are illustrated in Figure 4.

Figure 4

Did you encounter any barriers to implementing the birth preference sheet? How satisfied are you with the current birth preference sheet format? 17% 83% 10% barriers Minor barriers Significant barriers Very satisfied Satisfied Neutral Unsatisfied Very unsatisfied

Key Themes and Feedback from Final Open-ended Survey

Project Modifications

Modifications to the intervention were implemented between weeks two and four and communicated to the ten-member midwifery team through weekly update emails. In week two, the process of scanning birth preference sheets into patient charts was discontinued. A pink sticky note system was introduced to visually flag eligible patients and document workflow steps, with checkboxes labeled "offer birth preference sheet at next visit" and "review birth preference sheet at next visit." In week four, a Spanish translation of the birth preference sheet was completed and implemented. Responses from a formal open-response feedback survey conducted prior to PDSA cycle three did not suggest the need for additional modifications.

Discussion

This project aimed to advance RMC by implementing an evidence-based birth preference sheet, guided by the AWHONN Respectful Maternity Care and Birth Equity Measurement frameworks. Through four PDSA cycles, the intervention demonstrated feasibility and strong patient engagement, with 99% of eligible patients beyond 30 weeks' gestation accepting the birth preference sheet during prenatal visits. Offering rates improved over time, though logistical challenges such as shorter clinic weeks and patients losing sheets occasionally impacted consistency.

Antepartum review rates peaked at 75% in the final cycle, reflecting integration into clinical workflows despite barriers. Intrapartum review rates were high, with 81% of eligible patients having their sheets reviewed upon admission to labor and delivery, ensuring alignment of care with patient preferences even when antepartum reviews were missed. Feedback from the midwifery team highlighted the sheets' value in managing expectations and educating patients about labor, birth, and postpartum options.

Modifications such as visual workflow aids and the addition of a Spanish translation addressed initial barriers, though delays in the organizational process of translating the document into Spanish may have created early disparities. While quantitative survey data showed no significant changes, qualitative feedback suggested opportunities for improvement, including integrating both completion and review into prenatal visits and offering electronic copies. These findings underscore the intervention's potential to enhance patient-centered care and identify areas for further refinement.

Interpretation

Integration into Clinical Workflows

This initiative successfully addressed a gap in patient-centered care by implementing a standardized birth preference sheet, achieving a 99% acceptance rate. Offering rates increased significantly during the first three PDSA cycles before declining in the fourth, likely due to a reduced number of eligible patient charts (9 vs. an average of 36 in previous cycles) and the temporary leave of two midwives, which may have disrupted clinic workflows. Despite these challenges, the intervention demonstrated progressive integration into routine care.

Specific Aim 1, to achieve 75% documentation of the designated antepartum smart phrase in patient charts for those greater than 30 weeks' gestation by December 13, 2024, was successfully met in PDSA cycles two, three, and four. Key modifications, including a pink sticky note system for identifying eligible patients and the introduction of a Spanish translation by week four, improved workflow efficiency and expanded equitable access.

Figure 5

Percentage of Eligible Antepartum Charts Containing the Designated Smart Phrase Across PDSA Cycles





Antepartum and Intrapartum Review

The goal of ensuring birth preference sheets were reviewed demonstrated moderate success, with 48% of sheets reviewed during subsequent prenatal visits and 81% of eligible sheets reviewed upon admission to labor and delivery. Specific Aim 2, to achieve 75% documentation of the designated intrapartum smart phrase by December 13, 2024, was successfully met in cycles two, three, and four but was not applicable in cycle one, as no eligible patients had yet presented to labor and delivery.

Figure 6

Percentage of Eligible Intrapartum Charts Containing the Designated Smart Phrase Across PDSA Cycles





While intrapartum reviews appeared more frequent, the smaller sample size of eligible intrapartum charts requires cautious interpretation. Higher intrapartum review rates may reflect the opportunity to align care with patient preferences at the time of birth, but they also highlight missed opportunities for earlier discussions during prenatal care. The literature strongly supports the importance of these discussions, with Bell et al. (2022) emphasizing communication as the primary purpose of birth plans and Kuo et al. (2010) demonstrating that collaborative birth plan discussions

enhance patient satisfaction and control. Missed antepartum reviews in this project may have limited these benefits, highlighting the need for stronger prenatal integration.

Notably, this project found that when charts lacked evidence of both antepartum and intrapartum reviews, they were more likely to contain documentation of an intrapartum review rather than an antepartum review. This suggests that, while the intervention aimed to facilitate discussions at both time points, review upon admission to labor and delivery may have been more consistently prioritized than review during prenatal visits.

This pattern may reflect existing clinical practices and workflow norms. Nurses and midwives may be more accustomed to reviewing birth plans and discussing patient preferences upon admission to labor and delivery, as this is often a routine part of intrapartum care. In contrast, birth preference reviews may be less established in the antepartum period, where clinic visits are typically limited to 20minute appointments. Given these constraints, opportunities to prioritize birth preference discussions during routine prenatal visits may have been limited. This underscores the need for systematically integrating these reviews into standard antepartum workflows while recognizing that time is a perceived barrier for both providers and patients.

Survey Findings: Staff Perceptions and Workflow Implementation

Pre- and post-intervention Likert scale surveys revealed important trends, though no statistically significant differences were observed across time points—likely influenced by the small sample size (7/10 initial respondents, 6/10 final). However, a notable shift in understanding was observed: in the initial survey, at least one respondent "Strongly Disagreed" with questions related to role clarity, workflow, and implementation, whereas in the post-survey, no respondents selected "Strongly Disagree," and more reported "Strongly Agree." This suggests improved team confidence and workflow understanding despite statistical insignificance.

An open-response survey midway through the project highlighted several strengths of the birth preference sheet, including its role in setting realistic expectations, providing context for patient preferences, and improving discussions around labor, birth, and postpartum options. This positive reception contrasts with prior research, such as a U.S.-based survey where 66.5% of healthcare providers did not recommend birth plans due to concerns about unrealistic expectations (Medeiros et al., 2019). One reason for the difference in this project may be the open-ended design of the birth preference sheet, which encouraged flexibility and dialogue rather than rigid, checkbox-style planning.

The most frequently reported barrier (noted by 75% of respondents) was patients forgetting to bring their physical sheet to appointments. Suggestions for improvement included providing electronic copies that could be printed on demand and incorporating time during clinic visits for patients to complete the sheet. Additionally, respondents emphasized prioritizing review upon admission to labor and delivery, where providers had more time to engage with patients over their preferences.

Specific Aims 3 and 4, which sought 100% completion of the pre-project survey and 75% completion of the post-project survey by December 20, 2024, were not met. Potential barriers included email fatigue, scheduling conflicts, holiday staffing shortages, and the simultaneous demands of multiple DNP projects, which likely placed an additional burden on the midwifery team.

Limitations

Several factors limited the implementation and evaluation of this project, including administrative delays, the inability to offer a Spanish translation initially, which limited access for Spanish-speaking patients, the lack of an electronic version, the exclusion of medical assistants from formal feedback, and workflow constraints within the clinic. Additionally, competing institutional demands and a small sample size may have influenced engagement and statistical significance.

A two-month discussion occurred prior to project implementation regarding an unexpected requirement for the birth preference sheet to undergo review by the practice's formal forms committee

to ensure adherence to institutional and legal formatting standards. This contradicted prior guidance and led to prolonged back-and-forth discussions before a last-minute decision exempted DNP projects from this process. The delay postponed the Spanish translation by three weeks, creating early disparities for Spanish-speaking patients, who represent a large portion of the clinic population.

The lack of an electronic version limited accessibility and may have contributed to missed review opportunities. Patients frequently forgot their physical sheets – an electronic version could have mitigated this issue by allowing providers to access patient preferences directly in the EHR, eliminating reliance on physical copies and streamlining documentation. Given the increasing reliance on digital health tools, a paper-based format may present sustainability challenges in modern clinical settings. A practical solution could involve collaborating with the information technology (IT) team to develop an editable version of the birth preference sheet, accessible through the patient's "After Visit Summary." Future iterations should explore the feasibility of this approach and assess whether this format supports seamless documentation within the electronic health record (EHR).

Although medical assistants were briefed on their roles before implementation and worked closely with midwives to identify eligible patients, they were not included in pre- or post-implementation surveys. As MAs were responsible for offering the birth preference sheets, their insights into workflow challenges and patient receptivity could have provided valuable feedback for improving implementation. Time constraints within 20-minute prenatal appointments likely impacted antepartum review rates. Intrapartum review rates were higher, which may reflect existing clinical practices where birth plans are more commonly discussed upon admission to labor and delivery. Additionally, this project was implemented alongside multiple DNP projects, increasing the workload on the midwifery team and potentially contributing to email fatigue and reduced survey engagement. Further, the 11-week duration perhaps did not allow the faculty practice sufficient time to fully incorporate the birth preference sheet into their individual workflows. The small overall sample size of this project limits the applicability of findings to broader populations. Beyond the small survey response rate (7/10 initially, 6/10 post-intervention), the total number of patients who received a birth preference sheet was low. Understanding patient experiences with the birth preference sheet could have provided valuable insights into its effectiveness and how it might be further refined to better support shared decision-making and individualized care within a research context.

Conclusion

This project successfully implemented an evidence-based birth preference sheet to enhance respectful maternity care (RMC) by improving communication, shared decision-making, and patient autonomy. With a 99% acceptance rate, the intervention demonstrated strong patient engagement and was effectively integrated into clinical workflows. Despite barriers, the project remained feasible and was positively received by both patients and midwifery staff.

While the collected data captured acceptance and documentation rates, it may not fully reflect the deeper impact of this initiative. Patients who received the birth preference sheet may not have formally completed or returned it, yet the act of receiving it may have encouraged them to consider their birth preferences in ways they hadn't before. This project may have planted the seeds for greater self-advocacy, fostering reflection and dialogue about birth choices even if those preferences were not explicitly documented. The true impact of this intervention extends beyond measurable uptake, potentially influencing how patients engage with their care and communicate their needs.

Sustainability is supported by its alignment with existing clinical practices, particularly in intrapartum care, where providers are accustomed to discussing patient preferences. Successful modifications facilitated adoption. However, electronic integration within the EHR would likely improve long-term sustainability by reducing reliance on physical copies and minimizing documentation gaps. Further research should evaluate patient perceptions, particularly among historically marginalized communities, and assess the impact of structured birth preference discussions on patient satisfaction, provider communication, and clinical outcomes.

Next steps should focus on overcoming barriers by digitizing the birth preference sheet, incorporating structured review time into prenatal visits, and expanding feedback collection to include medical assistants and patients. Strengthening these processes could enhance RMC, improve health literacy, and empower patients with the knowledge needed to make informed decisions. By embedding birth preference discussions into routine prenatal care, this initiative has the potential to transform maternity care experiences and ensure patient preferences remain central to their birth journey.

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Appendix A

Frameworks



Figure A1. AWHONN Respectful Maternity Care Framework



Figure A2. The Birth Equity Measurement Framework

Appendix B

Birth	preferences	sheet

OHSU With Hillsboro Medical Center		
rstand what's nd birth. Every history, completed, bring preview together.	l am plai	nning a nal birth 🗌 Cesarean birth
rategies:		
Without pain medication	ı	
Visualization + b	reathing	Movement tools (Birthing ball,
Freedom to mov	ve (Wireless	peanut ball, squat bar)
monitoring avail	able)	Water/heat therapy (Shower)
Yes – please let my announce	partner	yes – please have the provider announce
	h birth	
Cesarear		
ny I would	like	son in the operating room (OP)
ny I would to be my	like y support per	son in the operating room (OR)
Cesarear ny I would to be my I wou see r	like y support per uld like the su ny baby bein	son in the operating room (OR) ırgical drape to be lowered so I can g born
Cesarear ny I would to be my I wou see r al values that are impo	like y support per uld like the su ny baby bein rtant for us to	son in the operating room (OR) Irgical drape to be lowered so I can g born know?
	rstand what's nd birth. Every history, completed, bring preview together. without pain medication Visualization + b Freedom to mov monitoring avail	rstand what's nd birth. Every history, completed, bring preview together. without pain medication Visualization + breathing Freedom to move (Wireless monitoring available) rth?

plan to take my placenta home No Yes – I will bring a container to safely transport it	Preferred Feeding choice Breastfeed only Formula feed only Combination	If supplementation is recommended, I prefer: Formula Donated breast milk
lave vou given birth before? If so. wh	nat did vou find eniovable or cl	allenging?
s there anything else we should know	w about you to support you in	his birth?
s there anything else we should know	w about you to support you in t	his birth?
s there anything else we should know As you get ready for your birth, routine parts of care we p	w about you to support you in i it's important to know what rovide – if you have any que	his birth? options are available at HMC. Here are some stions, please talk with your care team.
is there anything else we should know As you get ready for your birth, routine parts of care we p CHOICES FOR PAIN MED	w about you to support you in t it's important to know what rovide – if you have any que ICINE SK	his birth? options are available at HMC. Here are some stions, please talk with your care team. IN-TO-SKIN

- control without affecting your ability to move or push.
 IV Opioids: A small dose of intravenous (IV) Fentanyl can help take the edge off labor pain. It works quickly but doesn't last long, and can be given every hour for a few doses. It may cause dizziness or drowsiness and is avoided if your baby is arriving soon to prevent any
- impact on their breathing.
 Epidural: An epidural provides strong pain relief by numbing the lower part of your body. It's given through a small tube in your lower back. You'll stay awake and alert, but while it reduces sharp pain, it doesn't take away all discomfort or pressure.
- Post cesarean birth: After surgery, pain is managed with a mix of medications, including oral pain relievers like ibuprofen or acetaminophen, and IV and topical medications. Stronger medicine can be provided if needed. Your care team will help make sure your pain is controlled so you can rest and care for your baby.

Skin-to-skin contact right after birth helps your baby stay warm, keeps their heart rate steady, and reduces stress. It also helps you bond with your baby and makes breastfeeding easier. After a cesarean birth, this can be done by holding your baby close to your cheek or on your chest if you feel well. If you're unable to hold your baby, they can be placed on your partner's chest with a warm blanket around them. If your baby needs assessment by the pediatric team, skin-to-skin can be initiated once they are stable.

FEEDING SUPPORT

We support you however you choose to feed your baby. Breastfeeding provides important nutrients and antibodies that help your baby grow and stay healthy. It also strengthens the bond between you and your baby. Our lactation team is available Monday-Friday at HMC to help with breastfeeding, formula feeding, and donor milk.

DOULAS

A doula is someone who gives you important support during labor and birth. They help you physically, emotionally, and by helping you process information. Having a doula can make your birth experience more positive and empowering. HMC does not offer doula services. Here are some doula groups that offer different backgrounds and languages, and offer affordable pricing:

1. Community Doula Alliance - www.communitydoulaalliance.com

2. PDX Doulas - www.pdxdoulas.org

Appendix C

PDSA schedule.

Cycle	Dates	Details
1	Monday, September 30th - Friday, October 10th	 Implementation presentation and Likert scale administered prior to PDSA cycle 1 Summary PDF sent out Brief check-in with midwifery team during midwifery meeting, Tuesday, October 8th
2	Tuesday, October 15th - Friday, November 8th	 Formal feedback survey administered following PDSA cycle 2 at midwifery meeting Tuesday, November 12th
3	Wednesday, November 13th - Wednesday, November 27th	 Informal feedback from implementation team gathered following PDSA cycle 3
4	Monday, December 2nd - Friday, December 13th	 Likert scale administered following PDSA cycle 4 during midwifery meeting Tuesday, December 10th Accompanied by open-ended feedback for overall project impressions

Appendix D

EHR smart phrases.

.HMCBIRTHPREFERENCESANTE

- [] Birth preferences sheet was offered to patient
 - [] Patient declined
 - [] Patient accepted
- [] Completed birth preferences sheet reviewed with patient

.HMCBIRTHPREFERENCESINTRA

[] Birth preferences sheet reviewed with care team upon admission

Appendix E

Likert scale on incorporating birth preferences into prenatal care.

Introduced at midwifery meeting following initial project presentation September 10th, 2024, and on

December 10th, 2024, following the end of PDSA cycle 4.

.

Purpose: To assess perceptions about birth preference workflow in prenatal care.

Please rate your answers to the following questions:

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
I feel confident in discussing and documenting a birth preference sheet with patients	0	0	0	0	0
The workflow for documenting the birth preferences sheet is well- organized and easy to follow	0	0	0	0	0
The workflow for administering and reviewing the birth preferences sheet is well- organized and easy to follow	0	0	0	0	0
I understand my role as a team member in the implementation of the birth preferences sheet	O		0	0	0
1 = Strongly Disagree	z = Disagree	3 = Neutral	4 = Agree	5 = Strong	iy Agree

Appendix F

Survey on implementation of the project and feedback for future iterations.

Introduced alongside Likert scale at midwifery meeting on December 10th, 2024, following the end of

PDSA cycle 4.

Purpose: To gather feedback on the overall implementation of the project and suggestions for future

iterations.

Please	rate your a	answers to the following q	uest	tions:				
1. How easy was it to implement the birth preferences sheet into your workflow?								
	a. Ver	y easy	c.	Neutral	e.	Very difficult		
	b. Eas	ý	d.	Difficult				
2.	2. Did you encounter any barriers to implementing the birth preference sheet?							
	a. N	No barriers						
	b. N	Vinor barriers (e.g., time co	onst	traints, patient understanding)				
	c. S	Significant barriers (e.g., wo	orkf	low issues, documentation cha	lleng	ges)		
3.	What res	ources or support would h	elp	improve the implementation p	roce	ess? (Select all that		
	apply)							
	a. N	Nore training on introducir	ng a	nd using the birth preference s	heet			
	b. S	Simplified documentation p	proc	esses				
	c. I	ncreased staffing or time a	lloc	ation				
	d. E	Better patient education m	ater	rials				
	e. (Other (please specify)						
4.	How sati	sfied are you with the curr	ent	birth preference sheet format?				
	a. Ver	y satisfied	с.	Neutral	e.	Very unsatisfied		
	b. Sati	sfied	d.	Unsatisfied				
_					<i>.</i>			
5.	5. What changes would you suggest for future iterations of the birth preference sheet or its							
	impleme	ntation?						

Appendix G

Antepartum workflow algorithm

