Collaborative Implementation of Group Prenatal Care: Steering Committee Formation and Site Context Description

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Abstract

Group prenatal care (GPC) is an evidence-based model that improves maternal and neonatal outcomes, yet implementation remains limited due to organizational, structural, and cultural barriers. This project aimed to establish a foundation for GPC implementation at a community hospital in the Pacific Northwest by engaging a diverse steering committee to systematically identify contextual barriers and facilitators through structured qualitative sessions. Between September and December 2025, five steering committee sessions were conducted with stakeholders including certified nurse-midwives, medical assistants, nurses, and practice managers. Sessions explored five key implementation domains: staff support, patient population considerations, monitoring and evaluation, infrastructure and equipment, and funding and budgeting. Results demonstrated low stakeholder attendance with no participants attending 5+ sessions, but high-quality sessions where committee members identified over 3 implementation barriers and facilitators specific to the practice setting. The average readiness assessment score was 11.7 out of 21. Qualitative analysis using the Consolidated Framework for Implementation Research (CFIR) revealed high no-show rates, transportation/childcare challenges, language barriers, and staffing shortages as key barriers. While facilitators included adequate patient volume, strong community health worker support, Spanish-speaking clinicians, and staff with prior group care experience. An Implementation Blueprint was developed containing a tailored roadmap for GPC implementation that addresses site-specific challenges while leveraging existing organizational strengths.

Group prenatal care (GPC) represents an innovative model to improve patient outcomes, enhance care delivery, and optimize resource utilization by rethinking how prenatal services are delivered. Despite evidence supporting its effectiveness, implementing GPC as a program presents significant challenges related to organizational readiness, resource allocation, and clinical workflow adaptation. Implementation science provides a structured approach to understanding factors influencing the adoption of evidence-based practices like GPC. Successful implementation requires more than just evidence of effectiveness, but also consideration of context, stakeholder engagement, and systematic planning. The Consolidated Framework for Implementation Research (CFIR) offers a comprehensive model for examining multifaceted barriers and facilitators to implementing new healthcare interventions. Through a series of collaborative sessions with a diverse steering committee of clinical stakeholders, this project systematically examined potential implementation challenges across five key domains: staff support, patient population considerations, monitoring and evaluation processes, infrastructure and equipment needs, and funding and budgeting constraints. The aims of this project were to (1) establish a representative steering committee of key stakeholders; (2) conduct structured committee sessions to gather qualitative data on implementation barriers; and (3) develop a comprehensive context description to guide future GPC implementation efforts. By addressing these aims, this project created a foundation for the successful integration of an outpatient antenatal group education program into existing clinical services.

Problem Description

Substantial evidence supports the benefits of Group Prenatal Care (GPC), yet implementation of this model remains limited in many healthcare settings. Group-based care approaches like CenteringPregnancy® have demonstrated improved maternal and neonatal outcomes, including reduced preterm birth rates, increased birth weight, and enhanced maternal satisfaction (Gareau et al., 2016; Heberlein et al., 2016). Despite these documented benefits, the gap between evidence and practice remains significant, with organizational, structural, and cultural factors impeding the adoption of this evidence-based model. Most notably, the financial implications of shifting from individualized to collaborative care may not yield immediate returns (Pereira et al., 2022) as transitioning to GPC requires upfront investment in training and resources (Cunningham et al., 2017). This is compounded by the fact that healthcare organizations do not typically benefit from savings accrued through enhanced outcomes, creating a financial paradox that disincentivizes change (Cunningham et al., 2017). This is primarily because the existing healthcare reimbursement framework favors a traditional fee-for-service (FFS) model. The FFS payment model incentivizes healthcare providers to provide more services to generate more revenue (Kemble, 2023). Federal initiatives to tie Medicare payments to value and outcomes metrics rather than service volume (Burwell, 2015) indicate that the healthcare industry should migrate toward models that prioritize patient outcomes over service quantity.

Stakeholder engagement is crucial for ensuring that the program aligns with the needs and expectations of the community it serves. Without stakeholder involvement, the program may fail to address the specific needs and preferences of the target population, potentially leading to low participation rates and poorer health outcomes. In Waweru et al.'s study (2019), they

demonstrated that an absence of community involvement in health policies resulted in stagnation of health initiatives and limited uptake of services. Additionally, when stakeholders are excluded from decision-making processes, providers may be unclear in their role within the collaborative framework, undermining the program's effectiveness (Novick et al., 2015). Without ongoing feedback from stakeholders, programs are less likely to adapt dynamically to changing community conditions or emerging challenges (Helander et al., 2024). The participatory design process that includes stakeholder insights can lead to better resource allocation and more strategic planning, ensuring that interventions are both relevant and effective.

Misunderstanding the local context can significantly impede successful execution of Group Prenatal Care (GPC) and other collaborative care models. Context analysis refers to understanding the various internal and external factors that can influence how programs are implemented and sustained in healthcare settings. Contextual factors can either enhance or hinder the sustainability of healthcare programs (Masters et al., 2024). Adapting a GPC model without a comprehensive understanding of the unique challenges presented in different settings can lead to inconsistent implementation outcomes. Ickovics et al. (2016) discuss the necessity of evaluating socio-psychological contexts when migrating from individual to group care settings, particularly in urban health centers. Without assessing these contextual variables, research findings may not be generalizable, leading to failure in replicating successful outcomes across varied implementation sites. Cunningham et al. (2016) highlight that successful participation in group prenatal care is often linked to how well the model is tailored to meet the needs of specific populations. If implementation lacks consideration of cultural, linguistic, or socio-economic factors that characterize the patients served, the model may not resonate with potential

participants. The contextual factors surrounding patient demographics and community resources are critical for establishing trust and compliance with the prenatal program.

This project aims to address a significant gap in prenatal care delivery by systematically identifying and analyzing barriers to GPC implementation. By engaging stakeholders to understand what factors influence implementation in this specific context, targeted strategies can be developed to maximize the likelihood of successful and sustainable adoption (Powell et al., 2019).

Available Knowledge

Group prenatal care (GPC) is a model of health care delivery that groups pregnant people of similar gestational ages to receive prenatal care in a group setting. Unlike traditional one-on-one prenatal visits, GPC integrates health assessment, education, and support into a cohesive appointment with sessions that typically last 90-120 minutes and include 8-12 participants who meet regularly throughout their pregnancies, facilitated by healthcare providers (Carter et al., 2016). It is an alternative to traditional individual prenatal care, which typically involves a series of one-on-one encounters between a pregnant person and a healthcare provider, often lasting between 10-15 minutes per visit and potentially having limited opportunity for education and support (Masters, 2024; Pekkala, 2019; ACOG 2025).

Research has demonstrated numerous maternal and neonatal benefits of GPC, including improved knowledge about pregnancy and labor (Heberlein et al., 2016), a reduction in preterm birth (Carter et al., 2016; Abrams, 2018; Masters, 2024; Moyett, 2023; DeCesare et al., 2014), improved glycemic control and higher rates of postpartum glucose testing (Moyett, 2023; Parikh et al., 2017; Schellinger et al., 2017; Mazzoni et al., 2016), and patients that are more likely to present for hospital admission in active labor and at a greater cervical dilation (Moyett, 2023).

GPC participants consistently report higher satisfaction with their prenatal care experience compared to patients receiving traditional care (Heberlein et al., 2016) and demonstrate better attendance at prenatal visits (Andrade-Romo et al., 2019). Considering neonatal outcomes, some studies indicate lower rates of low-birth-weight infants (Tandon et al., 2012) and potential reductions in NICU admissions (Carter et al., 2017). The group format provides social support and reduces feelings of isolation during pregnancy (Adaji et al., 2019), addressing important psychosocial aspects of pregnancy that result in reduced symptoms of depression and anxiety (Heberlein et al., 2016).

Group prenatal care has also emerged as a promising intervention tailored to address the unique challenges faced by specific populations during pregnancy, including racial and ethnic minorities, low-income groups, adolescents, and those with complex medical or psychosocial conditions (e.g., diabetes, substance use disorders). GPC significantly benefits racial and ethnic minority populations, for Non-Hispanic Black women, GPC has been associated with improved preterm birth rates, increased breastfeeding rates, and decreased need for labor induction (Moyett, 2023; Byerley and Haas, 2017). Hispanic/Latinx pregnant individuals reported higher satisfaction, improved labor pain coping skills, stress reduction, and better understanding of pregnancy (Moyett, 2023). Cultural sensitivities can significantly affect the implementation and acceptance of different prenatal care models, emphasizing the need for flexible approaches that accommodate diverse populations (Alswaiti, 2023). GPC is notably effective with adolescent and teen pregnancies, as it creates a supportive environment where young people can share experiences and learn from their peers (DeCesare, 2014). GPC increases the time available for education, fosters behavior modification, social support, and the exchange of knowledge among participants, creating a positive environment where pregnant individuals can learn from one

another and gain a greater sense of agency over their pregnancies (Masters, 2024; ACOG, 2025; Maghalian, 2021).

The most widely recognized and implemented model of GPC is CenteringPregnancy®, developed by the Centering Healthcare Institute. This model follows a structured curriculum covering essential prenatal topics while emphasizing self-care activities, group discussions, and community building. Most of the visit is spent in facilitated discussions and group activities in a supportive environment (Avalos, 2024). The physical arrangement of the group in a circle is considered a critical component, aimed at creating a safe and supportive space. Providers in CenteringPregnancy® are trained to facilitate peer-to-peer learning rather than delivering didactic lectures (Moyett, 2023). Various adaptations of the CenteringPregnancy® model have been developed to address specific population needs including culturally-adapted programs tailored to specific cultural contexts, such as those for Hispanic women (Schellinger et al., 2017) or implementations in low-resource settings like Haiti (Abrams et al., 2018). There are also condition-specific models adapted for patients with specific conditions, like gestational diabetes (Parikh et al., 2017) or high-risk pregnancies (Byerley & Haas, 2017). GPC has also been modified for implementation in low-resource environments, focusing on essential components while adapting to local constraints (Abrams et al., 2018; Adaji et al., 2019). These alternatives to the CenteringPregnancy® model highlight a particular implementation issue of context adaptation.

Implementation in Clinical Settings

There are several organizational factors that may impede successful implementation of GPC: infrastructure, scheduling, staffing, funding, etc. Andrade-Romo et al. (2019) point out that GPC requires dedicated space large enough to accommodate groups of 8-12 pregnant people and

their partners plus providers, which many clinical settings may not have readily available. Coordinating the schedules of multiple patients and providers for 1.5-2-hour sessions and the strain on staff resources can be logistically complex (Breathett et al., 2018). Traditional fee-for-service payment models may not adequately compensate providers or the clinic for the time invested in group sessions (Carter et al., 2016). GPC is often paid using the same billing code as individual visits, meaning low group enrollment or frequent no-shows can result in inadequate revenue. Some sites report generating less revenue than individual care even with full enrollment. Payers, rather than provider practices, often reap the financial savings from improved outcomes. Research shows that centers administering group prenatal visits may see reduced healthcare costs due to fewer emergency visits and hospitalizations, prevention of adverse outcomes like preterm birth, and reduced newborn hospitalization costs (Maghalian, 2021; Masters, 2024; Moyett, 2023).

While these organizational barriers can be addressed with proper implementation and funding, healthcare providers accustomed to traditional care models may be reluctant to adopt new approaches to prenatal care delivery, citing concerns with the quality of care in group settings, privacy, and individualized attention (Andrade-Romo et al., 2019). However, clinicians offering GPC report higher rates of satisfaction because they develop more trusting relationships with patients and find gratification in seeing patients grow in confidence and knowledge (ACOG, 2025; Masters, 2024; Moyett, 2023). An understanding of the patient population also remains imperative as patient-related factors can also impact implementation. The longer duration of group sessions may create challenges for patients with work, childcare, or transportation constraints (Gesell et al., 2015). Some patients may share privacy concerns with providers and have discomfort discussing personal health matters in a group setting (Heberlein et al., 2016).

For instance, Alswaiti highlights that certain populations, such as Muslim women in Jordan, may prefer traditional individual care due to the cultural emphasis on privacy (Alswaiti, 2023). In diverse patient populations, language differences and cultural factors may complicate group dynamics and content delivery (Tandon et al., 2012). Understanding and addressing these sociocultural factors is crucial to expanding the accessibility and effectiveness of group prenatal care across diverse populations.

Despite these barriers, successful implementation strategies like stakeholder engagement and adaptation to the local context have effectively aided in GPC program development. Involving key stakeholders, including administration, providers, staff, and patients, in the planning and implementation enhances buy-in and sustainability (Andrade-Romo et al., 2019). The formation and use of a steering committee engages staff members in collaborative discussions about implementation barriers and potential solutions that align with the organization's resources, culture, and capabilities (Pekkala et al., 2019). This "community ownership" promotes matching program delivery to local needs, preferences, and cultural norms. Successful implementation requires modifying the GPC model to fit the specific needs and resources of the clinical setting while maintaining core elements (Abrams et al., 2018). GPC's effectiveness as an intervention for improved outcomes in prenatal health care delivery is significantly influenced by local adaptation, participant engagement, and sustainability (Martens, 2022). Cultural adaptations may include tailoring interventions to the languages, cultural values, lifestyles, and unique risk/protective factors of the targeted ethnocultural groups (Barrera, 2017). Context description, therefore, represents a crucial initial step in addressing implementation challenges. The Consolidated Framework for Implementation Research (CFIR) provides a comprehensive framework for systematically evaluating barriers specific to clinical settings

(Damschroder et al., 2022). By applying CFIR to GPC implementation, we can develop targeted strategies that account for the unique features of our organization. Successful GPC implementation requires addressing multiple levels of influence, including provider attitudes, administrative support, and organizational readiness (Novick et al., 2015). This approach recognizes that implementation is not a one-size-fits-all process but requires careful adaptation to local contexts. Identifying anticipated challenges during the pre-implementation phase for GPC can prevent significant resource investment in unsustainable initiatives. Continuous monitoring of context and planning for adaptations throughout the project creates an iterative process that allows for responsiveness to emerging challenges and opportunities, ensuring the intervention remains relevant and effective in its specific setting.

Context

State and County

In Oregon, midwives have full independent practice and prescriptive authority, making them autonomous in practice (NCSL, 2025). According to the Oregon ACNM Affiliate, 14% of all births in Oregon are attended by certified nurse-midwives (CNMs), mostly in hospitals (2021). Because of the proximity to obstetrician (OB) colleagues, integration of the OB team could strengthen the GPC program's sustainability, especially in cases where group prenatal care participants require supplemental care for high-risk conditions. This hospital system is in Washington County, part of the Portland metropolitan area and the second largest county by population in Oregon according to 2024 census data (United States Census Bureau, 2025). In 2024, the percentage of live births with low birthweight (< 2,500 grams) was 6.71% in Washington County, OR (County Health Rankings, 2025). When disaggregated by race low birth rate for non-Hispanic Black population was 8% and non-Hispanic White population was 6%

(County Health Rankings, 2025). In 2024, the number of infant deaths (within 1 year) per 1,000 live births was 3.9 in Washington County, OR. This value increased to 6 per 1,000 live births in Hispanic populations of all races and dropped to 3 in 1,000 for non-Hispanic White populations (County Health Rankings, 2025). Other relevant health statistics of Washington County for the adult population (age 18 and older) in 2024 include:

- a body mass index (BMI) greater than or equal to 30 kg/m2 (age-adjusted) was 31%
- the number of drug poisoning deaths per 100,000 population was 10.9, increasing from 8.99 in 2023.
- the percentage of adults reporting 14 or more days of poor mental health per month (age-adjusted) was 15.1%, consistently increasing from 13.2% in 2023 and 10.6% in 2020.
- the percentage of adults under age 65 without health insurance was 7% (County Health Rankings, 2025).

The Practice

The Group Prenatal Care program will be developed at a small community hospital in the Pacific Northwest affiliated with a large university hospital system. The practice utilizes a collaborative practice model of obstetricians and certified nurse-midwives. In the clinic, providers offer antenatal, postpartum, gynecology, and reproductive health care. The facility operates on an individual prenatal care model where patients schedule appointments with either CNMs or OBs for prenatal care. CNMs are the providers for the majority of prenatal care. The practice physician team is typically composed of two gynecologists and three obstetricians, with a recent physician shortage that temporarily reduced the obstetrician team to a single provider. The inpatient obstetrician team is shared with the affiliated university hospital's generalist practice and their per diem physicians. As many as 100 providers rotate through the schedule.

The CNM team is composed of 5 full-time midwives, two regular .2 FTE midwives and several inpatient per-diem midwives. One midwife staffs the clinic every weekday. The clinic runs with the help of medical assistants, typically one on one with a provider, as well as nursing staff and secretarial support for scheduling. According to practice data from Jan 1st, 2025, to May 1st, 2025, the patient demographic is largely pregnant people that identify as White (78%), ages 27-37 (62%), with English as their preferred language (79%). 17.8% of the patient population seeking prenatal care is Spanish speaking, 20% have a preferred language other than English, and 33% of patients are on Medicaid. This site has approximately 30-40 deliveries per month. This hospital also has a NICU for babies 32 weeks and above; 15% of deliveries come from transfers around the state.

The practice has ongoing changes in staffing and leadership; over the course of this project's cycle, additional obstetricians and a new practice manager were onboarded. The previous practice manager has been historically supportive of GPC implementation. Some stakeholders have raised concerns over GPC feasibility due to lack of staffing. The practice benefits from having CNMs with prior experience in facilitating group prenatal care.

Rationale

Based on this county and practice data, it is important to implement a program that addresses a diverse population, minimizes health disparities, and addresses key components of pregnancy outcomes like low birth weight. A primary concern for stakeholders at this site based on preliminary interviews are staffing changes, so the proposed intervention should be sustainable in low resource settings and designed to withstand flux of staff turnover. Currently, patients at the clinic are only offered a traditional, individual prenatal care model, however, group prenatal care is an evidence based prenatal care delivery model that excels in low resource

settings (Martens, 2022), decreasing health disparities related to race (Moyett, 2023), and decrease incidence of low birth weight (Moyett, 2023). Martens et al. (2022) illustrate how group care can be adapted using contextually driven implementation to low, middle, and high resources settings.

The ultimate outcome of this innovation would be the establishment of a Group Prenatal Program as an outpatient, midwifery-led, clinical program focusing on perinatal education in a group setting. The American College of Obstetricians and Gynecologists (ACOG) has recently recognized GPC as a potential alternative prenatal care modality in their May 2025 Clinical Consensus document on tailored prenatal care delivery. The document further supports implementing GPC as a care adjustment strategy that can address unmet social needs, particularly social isolation and low health literacy (ACOG, 2025). To establish and build a strong program, understanding the context and site-specific barriers is imperative (Van Damme, 2024). Context describes the many dynamic characteristics or circumstances that influence implementation (Mielke, 2022). Research has shown that contextual factors are the cause of most implementation failures, so evidence-based interventions may not result in improved health outcomes when implemented in a new setting (Bauer & Kirchner, 2020). Performing a contextual description clarifies feasibility, addresses implementation barriers specific to the needs of this site's organization and population (Mielke, 2022). Mielke et al. (2022) developed the Basel Approach for coNtextual ANAlysis (BANANA) to guide developing a well performed contextual description. The Basel Approach has six components: choosing/combining a theory, model, or framework; identifying empirical evidence and stakeholders; choosing a study design; identifying relevant context for interpretation of outcomes; and reporting. Using this approach to

guide the development of my project, the Consolidated Framework for Implementation Research (CFIR) was chosen to address the first component of the Approach.

CFIR Description

This framework was used to guide the elements necessary to identify within the contextual analysis. CFIR utilizes five key components: innovation characteristics, outer setting, inner setting, individuals involved and their characteristics, and implementation process. This framework addresses multiple stages of development, highlighting potential barriers to implementation, local and systemic considerations, and strategies for sustainability. The Innovation Domain in CFIR evaluates the characteristics of the intervention itself rather than the implementation strategy. The relevant characteristics within this domain include relative advantage, adaptability, and cost. Adaptability considers how well the innovation can be modified to fit local needs. Relative advantage assesses whether the innovation offers improvements over current practices and ties into costs that consider whether purchase and operating costs are feasible. The Outer Setting domain in CFIR refers to the external environment in which an organization exists, such as a hospital system or state level. The key components addressed are critical incidents (unexpected events that can disrupt implementation), local factors (values and beliefs that affect environmental conditions that may pose limitations), external relationships (partnerships and connections with external entities, like hospital policy or limitations in clinician scope), and external pressures (societal expectations, market competition, and performance measurement). The Inner Setting domain describes the environment that an innovation gets implemented in. Structural characteristics must be addressed, including physical infrastructure, IT systems, and work organization. Context should also consider relational connections, tension for change, relative priority to other system changes, and available

resources (ei. funding, space). Understanding various individual roles informs context: including high-level leaders, implementation leads, team members, and the innovation deliverers and recipients. Individual characteristics drive the capability (skills and competence), motivation, and need (addressing deficits in well-being or fulfillment) within context as well. The planning, documenting, engaging, and reflecting on the innovation is the implementation process. Tracking progress identifies what needs adapting for optimal integration (Damschroder et al., 2022).

Empirical Evidence for Stakeholder Involvement

The next step was to use the available knowledge to determine what is already known about the contextual features of GPC implementation (Mielke et al., 2022). Mielke et al. (2022) assert that there are four sources of evidence: (1) local data and information, (2) professional knowledge/clinical experience, (3) patient experiences and preferences, and (4) research. GPC specific implementation determinants were identified and summarized based on practice data, initial interviews with CNM's within the practice, and documented barriers to GPC implementation in the literature, these are documented in Appendix 1. Further contextual analysis throughout the project identified more relevant determinants and missing contextual data.

Integral to this project was the involvement of stakeholders. The CFIR framework recommends engaging not only key decision-makers (outer setting) but also local health care professionals and patients (inner setting) (Damschroder et al. 2022). The Basel Approach explains that interdisciplinary teams combines different expertise and skills, offering instrumental benefit in planning and executing a contextual analysis (Mielke, 2022). It is important then to include stakeholders within the design of the project. The literature has demonstrated that formation of a steering committee is a necessary step in successful

implementation of a GPC program (Sayinzoga et al., 2018; Martens 2022). As part of the Basel Approach, this project identified relevant stakeholders and their characteristics, verified their availability and commitment to involvement, and adapted the approach for enhanced engagement as needed (Mielke, 2022).

Structuring Steering Committee Sessions

Component 4 in the Basel Approach includes developing a study design for context description using Rapid Qualitative Inquiry (RQI) (Mielke, 2022). RQI is a team-based assessment for collecting and interpreting qualitative data, the design of the intervention considers RQI's core principles: (1) use an iterative approach for themes to emerge, (2) gather data using observations, interviews, and literature review, (3) center insider perspectives of key stakeholders (Beebe, 2014). While not used to conduct qualitative research, RQI formed the foundation of the session questions so the facilitator could effectively run the meetings. The intervention design is described in the Intervention section.

Tools for Analysis

The main aims of this project were to engage a successful steering committee, identify contextual barriers that limit GPC implementation, and identify the most important initial steps for implementation. The Analysis section details the approach to "determining the relevance of contextual factors for implementation strategies" (Mielke, 2022). The readiness assessment survey used (Appendix 2) is an adapted scoring sheet from GC1000 with GPC specific considerations (Martens, 2022). The context description was completed using identified CFIR domains and sub-constructs to make localized meaning out of the information provided in the steering committee sessions.

Specific Aims

The global aim of this project is to offer evidence-based prenatal care and optimize health outcomes for patients served by the practice. To initiate implementation, this project creates a context description framed by CFIR using stakeholder-centered committee sessions.

Steering Committee Aims

- By September 15, 2025 a diverse steering committee with specified members (a CNM, medical assistant, nurse, and clinical manager) was confirmed.
- By September 15, 2025 interviews were scheduled via an online survey and scheduling platform, and virtual meeting invites extended through secure video meeting platform, with identified steering committee members.
    - Members chose from 15 available meeting times, offered between September and December 2025.
- By December 31, 2025, all stakeholders attended steering committee sessions.
    - These interviews aim to elicit factors in the social, political, or economic environment that may affect the implementation of a new model of antenatal and/or postnatal care.

Contextual Description Aims

- By February 1, 2026, all meeting notes were reviewed and stratified into sub-constructs for the contextual description table (Appendix 1) as described in Study of Interventions.
- By March 1, 2026 the contextual description was presented to stakeholders within an "Implementation Blueprint": the context description table, survey graphs, timeline of documented challenges, and identified next steps. An opportunity for questions and feedback were held at the March practice meeting.

Interventions

Steering Committee

To initiate this GPC implementation process, the facilitator identified and co-created an interdisciplinary team of stakeholders that formed the steering committee. The facilitator contacted the outpatient OB clinician, administrative personnel including schedulers and front desk staff, clinic midwives, nursing staff, medical assistant staff, and the clinical manager. All communication regarding the project was done over secure, end-to-end encrypted emails. Initial contact was made over email formally detailing the nature of the project, time commitment, meeting times and dates, and the sign-up sheet. The time commitment was five 1-hour sessions between September and December, the sessions took place virtually over Webex or in-person at the clinic site.

Structured Steering Committee Sessions

The facilitator was present at every meeting, documented the members in attendance, their roles, and contribution to the meeting discussion. The sessions operated in a “drop-in” style to accommodate varied schedules and offer flexibility. Each member’s first session was used to establish baseline data: characteristics of the members, general attitudes toward group prenatal care feasibility at this site and rank the priority of pre-established barriers. The characteristics identified were the members' role in the clinic, the responsibilities of their role, how long they have worked at the clinic, and any additional responsibilities they take on beyond their typical work expectations. To gauge initial attitudes toward group prenatal care, the members will complete a pre-made “readiness assessment” survey. Then, the members will rank five pre-identified barriers in order of importance to address. These barriers are as follows: staff support, patient population, monitoring and evaluation, infrastructure and equipment, and funding and

budgeting. The following sessions focused on specific barriers; the facilitator prepared questions to prompt iterative and collaborative discussions related to the topic, outlined in Appendix 4.

Context Description

After each session, the facilitator wrote meeting notes that documented the session process as described in the Analysis section. The information collected at these meetings were resented as an "Implementation Blueprint" with the context description table, survey data, timeline of documented challenges, and identified next steps; this packet was presented to committee members in March 2026.

Study of Interventions

Recruitment was evaluated based on the number of email responses and number of scheduled meetings. Stakeholder engagement was evaluated based on attendance; with presence at five sessions is considered successful engagement. A successful meeting had at least 3 members in attendance. The diversity of the steering committee was evaluated by the number of different roles represented overall and at a given meeting, at least 2 different roles in attendance is considered successful.

Based on the members' initial rankings, the subsequent sessions focused on the two most important barriers. Answering 3 questions per barrier is considered a successful discussion. Addressing 5 barriers prior to completion of all the sessions was considered successful. Throughout the process, the facilitator documented any challenges that impact ability to conduct the intervention (steering committee sessions). These included but are not limited to: how many members attended each meeting, the variety of member characteristics at each meeting, any organizational limitations, or relevant/major current events. Completion of the GPC-Specific Determinants Table (Appendix 1) signals successful context description.

Measures

Measures according to intervention are as follows:

- Establishing a Steering committee
    - Recruitment: Number of members scheduled for any sessions divided by total number of stakeholders contacted, expressed as a percentage.
    - Commitment: Number of members scheduled for at least 5 sessions divided by total number of scheduled stakeholders, expressed as a percentage.
- Steering Committee sessions
    - Attendance: defined by the number of attendees divided by the total number of scheduled members, expressed as a percentage.
        - Percentage of members that attended 5 meetings, 4 meeting, 3 meetings, etc.
    - Engagement:
        - Total length of session in minutes
        - Number of barriers addressed in each session
        - Number of unique sub-constructs (from CFIR framework) addressed in each session
    - Quality of sessions:
        - Number of sessions where at least 2 barriers are addressed divided by total number of sessions, expressed as a percentage
        - Number of sessions where at least 2 unique sub-constructs (from CFIR framework) are addressed divided by total number of sessions, expressed as a percentage

    - Diversity of sessions:
        - Number of unique roles represented at each session
- Contextual Description
    - The number of implementation barriers addressed.
    - Number of new barriers identified.
    - Completion of the GPC-Specific Determinants Table
- Readiness for GPC implementation (Appendix 2)
    - Pre-intervention score (out of 21)
    - Post- intervention score (out of 21)
    - Higher score indicates increased readiness for implementation
- Stakeholder experience measured in satisfaction survey (Appendix 3) on a 5-point scale.
    - Post-intervention score (out of 75)
    - Higher score indicates increased satisfaction

Project Analysis

There are two primary components of this project requiring analysis: (1) the engagement of stakeholders and (2) the evaluation of sessions into meaningful data. The first assessment looked at the successful development of the steering committee and successful conduction of steering committee sessions. Success was analyzed and determined based on attendance, engagement, quality, and diversity of sessions. The meetings were intended to be collaborative and iterative, with discussions questions to prompt the sessions to run conversationally. Diverse and varied responses were anticipated and considered for the development of the localized context description. After each session, the facilitator wrote meeting notes that documented the barriers addressed, sub-constructs discussed, and other stakeholder comments. This information

was catalogued into a table for easy reference. These notes prompted the next component of analysis: successful completion of the context description. The facilitator used the GPC-Specific Determinants Table (Appendix 1) to display complete understanding of the site's context. Finally, members of the steering committee completed a readiness assessment (Appendix 2).

Ethical Considerations

The primary ethical concern for this project was the burden on healthcare providers and staff who are already managing heavy workloads. Adding additional meetings and responsibilities could contribute to stress or burnout. To mitigate this concern, participation in the steering committee was completely voluntary; scheduling was flexible to accommodate participants' availability, and meetings aimed to be focused and time limited. All stakeholders were fully informed about the purpose, process, and expected outcomes of the project. The project did not access or utilize any protected health information (PHI) or individually identifiable health information from patients. This project was submitted to the Institutional Review Board (IRB) for review.

Results

September 2025 to December 2025 was focused on identifying the unique characteristics of the clinical site that would impact the development of an outpatient antenatal group program. Understanding the specific dynamics of this women's health clinic required the recruitment of volunteers into the steering committee. This process required the cooperation of the site's new clinical manager, who was integral in the recruitment process of non-provider volunteers. The steering committee included a student midwife, the clinical manager, one clinical receptionist, three registered nurses, a community health worker, two medical assistants (MAs), two CNMs, and digital communication with the clinical financial analyst. There was a total of 6 meetings,

the student facilitator was present for all meetings, the clinical manager present for 2, a registered nurse (RN) present for 3, and the community health worker (CHW) present for 3. The CNMs were consulted in separate meetings due to scheduling conflicts. Table 1 summarizes the results of key contextual information about the clinic site that was not previously known before the intervention.

Table 1: Summary of Results

Metric	Outcome
Recruitment Rate	50% (11 participants from 22 stakeholders contacted)
Commitment Rate	0% (no participants attended 5+ sessions)
Total Meetings	6 sessions
Session Quality	83% addressed ≥2 implementation barriers; 83% addressed ≥2 CFIR sub-constructs
Session Length	30-70 minutes (1 session via email)
Readiness Scores	Range: 8-15 out of 21 points Highest: CHW and RNs (14-15) Middle: Clinical Manager and MAs (10-11) Lowest: Receptionist and CNM (8-10)
Key Barriers Identified	High no-show rates (27-45 patients per month), transportation/childcare challenges, language barriers, staffing shortages (3 midwives leaving), patient unfamiliarity with group care, immigration concerns, staff overwhelm
Key Facilitators Identified	Adequate patient volume (24-45 new OB visits/month; 217-384 completed visits/month), strong CHW support, Spanish-speaking clinicians, positive L&D relationships, new supportive leadership, staff with prior group care experience, favorable billing structure

Recruitment and Commitment

Recruitment efforts include three individual email communications that reached 22 total stakeholders, resulting in 11 participants who were scheduled for at least one session (recruitment rate of 50%). Commitment proved challenging: no participants attended five or more sessions, resulting in a 0% commitment rate by the predefined metric. Looking at

attendance patterns across the implementation window, 36% of members attended one meeting, 36% attended two meetings, and 27% attended three meetings. No members attended four or five meetings.

Table 2: Summary of Recruitment and Commitment

Score	Role	Meetings Attended
10	Midwife	2
12	Midwife	2
10	Clinical Manager	2
15	RN	1
12	RN	1
14	RN	2
11	MA	2
15	CHW	3
14	MA	1
8	Receptionist	1
8	Financial Analyst	1

Session Quality and Engagement

Despite variable attendance, the quality of sessions remained high. Five out of six sessions (83%) addressed at least two implementation barriers, and similarly, 83% of sessions addressed at least two unique sub-constructs from the CFIR (Consolidated Framework for Implementation Research) framework, see Table 3. Session lengths ranged from 30 to 70 minutes, with one session conducted via email communication with the clinic's Finance and Accounting Analyst. The email interview focused on billing, reimbursement, and economic feasibility, for a total of 4 emails. The diversity of roles represented varied by session, with between one and four unique roles present at each meeting.

Table 3: Visualizing Session Quality and Engagement

CFIR Construct	9/29/25	10/9/25	10/16/25	10/27/25	11/20/25	12/5/25
Intervention Characteristics	✓	✓	✓	✓	✓	✓
Evidence Strength & Quality	✓		✓			
Relative Advantage	✓	✓	✓			
Trialability					✓	
Complexity		✓	✓	✓		
Outer Setting	✓	✓	✓	✓		✓
Patient Needs & Resources	✓	✓	✓	✓		✓
External Policy & Incentives		✓			✓	
Inner Setting	✓	✓	✓	✓	✓	✓
Structural Characteristics					✓	
Networks & Communications			✓			
Culture	✓					✓
Implementation Climate		✓	✓	✓		
Readiness for Implementation		✓	✓	✓		
Characteristics of Individuals	✓	✓	✓	✓		✓
Knowledge & Beliefs	✓	✓	✓	✓		✓
Individual Stage of Change	✓	✓	✓	✓		
Process	✓	✓	✓	✓		✓
Planning		✓	✓	✓		✓
Engaging	✓	✓	✓	✓		
Total Unique CFIR Constructs	**4**	**5**	**5**	**5**	**3**	**4**
Total Sub-Constructs	**7**	**10**	**11**	**9**	**3**	**5**

Readiness Assessment

Readiness for GPC implementation was assessed using a structured tool administered after initial meetings, with 11 total responses. Scores ranged from 8 to 15 out of a possible 21 points, with higher scores indicating greater readiness for implementation. The community health worker and several registered nurses demonstrated the highest readiness scores (14-15), while receptionists and some midwives scored lower (8-10). The clinical manager and medical assistants fell in the middle range (10-11).

Identifying administrative support was mixed across staff, CNMs ranked low readiness in this area, meaning they see little support that needs developing, some RNs ranked high readiness indicating a fully supportive staff with administrative motivation for group care, while the clinic manager, community health worker (CHW), and other staff rank in the middle with administrative support beginning but needing some more development. Clinical staff involvement was reported largely as developing, with 7 respondents across diverse roles (RNs, CNMs, front desk administration, and MAs) participating in early planning. Another marker for readiness is identification of patient population, which 6 respondents across diverse roles marked as developing. Specific at-risk populations were clarified through interviews and throught the meeting. Stakeholders seem to agree that there is space available to dedicate to group care, all respondents claimed there was at least access to an appropriate space, with one CNM and an RN identifying a dedicated space that doesn't need to be set up/rearranged for every group. Funding for group care has not been identified by any stakeholders, except for the Financial Analyst noting feasibility through the global pregnancy package. There were mixed results regarding availability of data collection systems, CNMs and the clinic manager responded that there was currently no data collection system available or accessible for evaluation. Finally, CNMs, RNs, MAs, and the CHW responded that there is a developing availability of diverse educational materials available for Spanish-speaking patients, but not any other non-English-speaking clients. Post-intervention scores and stakeholder satisfaction surveys were not assessed during this initial phase due to the variability of attendance.

Contextual Understanding

Through the steering committee sessions, robust contextual information was gathered regarding the current model of care and potential barriers to GPC implementation. Four

participants mentioned high no-show rates (27-45 per month), 8 mentioned transportation, childcare, and language challenges, 5 identified current staffing shortages, and 4 (primarily RNs and MAs) expressed concerns about patient familiarity with the group care model. During the implementation period, multiple stakeholders expressed concern regarding significant Immigration and Customs Enforcement (ICE) activity and anti-immigration sentiment, that considerably affect participation and attendance in prenatal care overall. Almost all (9 participants) expressed feeling overwhelmed by existing demands, creating resistance to additional programmatic changes.

Breakdown of Steering Committee Sessions

To establish the initial steps of program development and implementation of GPC, a multidisciplinary steering committee was held to establish a comprehensive context description and identify site-specific facilitators and barriers. This work emphasizes pragmatic program development, focusing on adapting the GPC model to local contexts, building organizational capacity, and creating sustainable systems for improved prenatal care delivery. This project's primary outcome was developing an implementation blueprint through steering committee discussions structured around CFIR components (Appendix 6). Five core sessions successfully identified priorities to address before and during implementation: resource and staff constraints, patient barriers, and use of multidisciplinary engagement. Conflicting schedules affected these steering committee sessions, yet the diversity in attendance demonstrates both the commitment to and value of multidisciplinary engagement. This steering committee represents an essential first step in developing a robust program; this is the first time components such as an implementation team, program infrastructure, and patient recruitment have been addressed.

Because of scheduling conflicts, two sessions with two CNMs from the practice were held via Webex separate from the other collaborative meetings. These meetings were 30 and 60min long. CNM feedback highlighted the importance of a team-based workflow for GPC, understanding of patient volume to assess financial stability, recruitment systems that ensure consistent attendance, addressing potential resentment among coworkers regarding differences in patient load, and technical difficulties related to documentation, setup, storage, and physical space requirements. A primary concern stated by one CNM was the patient volume and staffing needed to make groups operationally and financially attainable. Both had previous experience with CenteringPregnancy® models of GPC and recalled that previous models they were familiar with required a minimum group size of 6-7 participants and given the current CNM staffing constraints, allocating a 3-hour group block may not be feasible until more CNMs are onboarded. One midwife had experience facilitating bilingual and monolingual Spanish groups, noting that success depended on group dynamics. Both CNMs highlighted that a monolingual Spanish group would be a priority to better support recent immigrant patients through community building and culturally/linguistically concordant care. From their perspective the key health-related challenges the clinic's population was vulnerable to included gestational diabetes management (GDM), hypertensive disorders, mental health conditions, intimate partner violence (IPV), and adverse childhood experiences (ACEs). The midwives also identified that new leadership (clinic manager and physician manager), a strong relationships with labor and delivery, continuity of care with clinic midwives, the presence of some fluent Spanish-speaking clinicians and auxiliary staff, Community Health Worker (CHW) funding, and the medical director's encouragement of increased data collection are potential facilitators for implementing group care.

The first multi-disciplinary session was 70 minutes. A receptionist, the clinical manager, the Community Health Worker (CHW), and a Registered Nurse (RN) were present. The session focused on understanding the various roles of each stakeholder in attendance and their current understanding of GPC. Regarding the current model of care, the receptionist and RN noted that individual prenatal care is a familiar system that patients have come to expect. However, the attendees agree there is not enough Spanish-speaking staff to support system's level navigation of insurance, paid leave, scheduling lab visits, and more. The CHW and receptionist also highlighted that most patient cancellations are due to illness (patient or children), transportation issues, and work conflicts. The CHW clarified that transportation challenges are compounded by partners working, childcare needs, lack of driver's licenses, and the significant time commitment (up to 2 hours) required for appointments. After watching an introductory video about GPC, the attendees expressed general apprehension regarding the implementation of such a drastic change. The receptionist and clinical manager saw possible benefits but requested more information. The CHW saw potential for connecting patients to services in a group setting and acknowledged potential benefits for community building, especially among marginalized populations. The clinical manager stated they were willing to support from an administrative perspective, and the CHW expressed interest in an expanded role that involves engagement in group care. The receptionist and RN stated that the patient population is not familiar with group care and that patients probably wouldn't be interested in group care if it was offered. Concerns were raised about language barriers, insurance coverage understanding, Epic templating needs for scheduling, and the requirement for designated space for group sessions.

The next in-person collaborative meeting was 55 minutes and had the clinical manager, community health worker and 2 certified nurse assistants in attendance. This session focused on

identifying gaps in care that are currently prevalent at the clinic; the CNAs noted that the clinic could benefit from providing more comprehensive education on hypertension and gestational diabetes management (GDM). In addition to the barriers noted at the previous session, the CHW also pointed out the difficulty securing in-person interpreters, challenges accessing low-income services, and significant fear related to the current political climate, particularly ICE raids and immigration enforcement. In this session, the staff also offered insight regarding their perception of GPC and potential patient perceptions of group care in general. One CNA expressed concerns about patient readiness for GPC; explaining the model to patients and getting them on board would be challenging since group care is not widely known and they have limited time and capacity for additional education. Another CNA pointed out that there would need to be a system to manage high-risk patients who may need to break off from the group setting. With these considerations, the CNAs acknowledged that implementing GPC could be time-consuming, they had no personal experience with a group care model, and felt stand-offish about any additional changes due to current overwhelm with existing responsibilities. The clinical manager expressed concerns about staffing the program with actual providers, particularly given that three midwives were leaving the clinic at the time, resulting in low census. Regardless, the team reported being somewhat motivated to implement GPC and expressed no negative attitudes toward the concept. However, GPC would only be supported as a priority if adequate staffing and resources were available.

At the last multidisciplinary session, the CHW, two RNs, and a CNA were present, the session lasted 45 minutes. The RNs present offered additional insight to the current model of care structure explaining that they perform 40-minute in-person or phone intake appointments that establish patients by reviewing medical, family, and social history, orienting patients to the

practice, and initiating appropriate scheduling. The RNs present reported high motivation and interest in supporting GPC implementation. They pointed out additional areas of improvement for patient care, stating there is no dedicated nursing educator in the outpatient setting, with most supplemental education provided by nurses via MyChart messages or phone calls rather than through a formalized system. As a result, MyChart messaging has become a safety net for education, especially for non-English speakers who can use auto-translate features online. The CNA expressed concern about getting enough patients interested in GPC, because there are already many no-shows for individual care appointments. The RNs and CNA had not previously been present at a session before, they reinforced previously established patient barriers including language barriers, transportation and childcare barriers, cultural concerns related to ICE and the political climate, resistance to change among patients, and the need for in-person rapport building before patients would feel comfortable in a group setting.

The clinic's Finance and Accounting Analyst clarified that GPC is billed the same way as individual obstetric care, using the global pregnancy package, so there is no difference in reimbursement rates. While there is no billing-related restriction on group size, a minimum of 6 patients is recommended to make group care financially sustainable. There are no specific CPT codes for group sessions; instead, billing is based on individual care provided to each patient during the group visit. She referenced patient volume data with the clinic having variable numbers of new OB visits monthly (ranging from 24-46 at the end of 2025), with completed visits ranging from 736-884 total and 257-384 for midwife-only care. No-show rates are significant, ranging from 27-45 per month for midwife patients.

Discussion and Analysis

CFIR Analysis

CFIR framework discussions provided a broad understanding of what is necessary for successful program implementation, evaluating the characteristics of GPC, the outer and inner setting of the clinical site, the characteristic of the stakeholders, and the necessary components of the implementation process allowed for a systematic progression of sessions. The CFIR framework is practical for designing, evaluating, and implementing evidence-based interventions, it proved to be somewhat redundant for this project in such early stages of planning. This analysis considers the relevant determinants of each CFIR construct and its relevance to constructing the implementation blueprint.

Intervention Characteristics

CNMs and several staff members are familiar with GPC and strongly believe it improves outcomes, reduces no-shows, and supports provider satisfaction based on prior positive experience and perceived evidence-based benefits. Compared with individual care, GPC offers a relative advantage: improved patient education, community building, better no-show rates, enhanced provider satisfaction, and more efficient use of visit time and CHW resources (Liu, 2021; Martens, 2022; Masters, 2024). The intervention demonstrates good trialability, clinic data available from the financial analyst show a volume of 24-45 new OB visits monthly and 217-384 completed visits supporting feasibility of piloting with a small cohort before full scale-up. However, complexity is high due to necessary group scheduling workflows, designated space requirements, storage and setup needs, documentation changes, and coordination across multiple staff roles. Adaption of GPC design are currently underdeveloped locally; staff express clear need for protocols, standardized workflows, training materials, and patient-facing resources to explain GPC benefits and set expectations. Regarding cost, interviews with the clinic's financial analyst demonstrate that GPC would be reimbursed as individual OB visits within the global

pregnancy package with no difference in reimbursement, though sustainability depends on maintaining adequate group size (minimum approximately 6 patients) and addressing high no-show rates of 27-45 per month.

Outer Setting

The outer setting for this project considers the hospital system, clinic conditions, patient barriers, and impactful policies and laws that create external pressure. Patients face substantial and intersecting barriers that shape their ability to access and engage with prenatal care: transportation challenges, childcare needs, work schedule conflicts, language barriers, limited technology access, and immigration concerns driven by the current political climate and ICE raids. While the community health worker and RN advice via MyChart messaging partially address some needs, significant gaps remain in education delivery, interpreter availability, and low-income resource access. Clinic leadership (midwives and the medical assistant lead) referenced successful GPC programs in other healthcare systems and broader evidence from the literature (Liu, 2021; Martens, 2022; Masters, 2024), has generated interest and pressure to adopt models that improve outcomes and engagement for marginalized populations. External policy and incentives are somewhat favorable: the global pregnancy package billing structure allows group visits to be billed as individual OB care. However, sustainability is constrained more by patient volume and no-show rates than by reimbursement policy, with no clear external incentives beyond broader quality and equity goals.

Inner Setting

The clinic is experiencing staff turnover among midwives and physicians (with multiple transitioning out of this practice during the assessment period) and has limited dedicated staffing for new program development. Existing networks and communications show collaboration

between midwifery, OBs, RNs, MAs, and other support staff (CHW and front desk receptionists). Leadership engagement includes the clinic manager, physician manager, midwifery leadership, and medical director as key stakeholders who are generally supportive conceptually but constrained by competing demands and resource limitations. The CHW and receptionists already coordinate around transportation and scheduling, though communication around new workflows and education remains informal and not standardized.

The organizational culture reflects strong tension for change: staff demonstrate genuine desire to improve education, address inequities, and support Spanish-speaking patients, yet simultaneously experience overwhelm, system issues, and staffing shortages, creating both motivation for change and reluctance to take on new initiatives. This tension is addressed in the blueprint by clearly defining the roles of those on the steering committee team, making key roles fairly compensated with adjusted FTE or voluntary, and integrate the use of a student for primary data collection and organization. In terms of relative priority, clinicians see GPC as important but not currently the top priority given staffing shortages, turnover, and other pressing systems problems. Interest is notably higher for models specifically tailored to Spanish-speaking patients or condition-specific groups. The Spanish-speaking population was identified by multiple stakeholders to benefit the most from additional outpatient prenatal education and community engagement.

Based on feedback from CNM interviews, GPC shows good compatibility with core midwifery values of patient autonomy, education, and patient-led conversation, as well as with existing CHW-driven social support structures. However, implementation would require major changes to established one-on-one scheduling workflows and clinic routines. Organizational incentives are significantly downstream at this point, potential future incentives include

improved patient satisfaction, reduced no-shows, better outcomes, and provider satisfaction, but no formal internal rewards or protected time have been identified for GPC work. Available resources include CHW capacity, bilingual clinicians and staff, MA capacity for co-facilitation, and MyChart infrastructure. Missing resources include a dedicated outpatient educator, protected staff time, consistent interpreter availability, and reliable physical space for groups. Regarding access to knowledge and information, staff understand general GPC concepts but request more detailed information, protocols, and education about benefits and implementation logistics. Current patient education is fragmented and delivered ad hoc via MyChart or brief visits.

Individual Characteristics

CNMs and some staff members strongly believe in GPC's benefits based on prior experience or evidence exposure. Others, like the clinic manager and lead medical assistant, are apprehensive about the scale of operational development necessary, although they recognize potential for community building and improved support for marginalized patient populations. Several providers and staff are motivated and see themselves as capable contributors to implementation, but current workload and systems issues are constraining and limit self-efficacy and stage of change. The current immigration climate may influence patients' ability to attend and engage consistently in group care, making tailored scheduling, robust support services, and culturally responsive design essential.

Key roles to start a prenatal education program are an implementation lead, ideally a CNM champion, that gets protect time to manage the development of the project and train staff. The clinical manager also holds a critical role in managing operations related to resource allocation, staff coordination, and necessary budget approval. A critical role for the continued development of this project is a Student Partner/Fellow that focuses on the granular steps of

implementation and development. They would be responsible for primary program development of steering committee meetings, curriculum development support, evaluation of metrics (including burnout), and fidelity to implementation science framework.

Process

Planning is in early stages: steering committee conversations have identified the need for space allocation, group scheduling workflows, and criteria for group size and patient selection, and a formal implementation plan has not yet been approved. Engaging stakeholders remains informal: potential engagement includes clinical leadership, front desk staff, CHW, MAs, the Nurse Director, and childbirth educators. Opinion leaders have been identified and include midwifery leadership with prior GPC experience that can endorse the model and influence broader staff attitudes. Formally appointed implementation leaders have not yet been designated, though roles for the clinic manager and operational leads are implied for overseeing scheduling, space, and resource coordination (Appendix 6, Phase 1). Potential champions include motivated CNMs, MAs identified as enthusiastic about the model, the CHW interested in an expanded role, and staff passionate about serving Spanish-speaking and high-risk patients. External change agents include academic partners and evidence from other successful GPC sites (Liu, 2021).

No execution has occurred yet. Key execution tasks would include workflow integration, staff training, patient recruitment and education, scheduling workflow implementation, and running pilot groups while monitoring attendance and no-show patterns. The clinic's growing emphasis on data collection creates favorable conditions for reflecting and evaluating once implementation begins, with potential metrics including no-show rates, patient satisfaction, maternal and neonatal outcomes, and provider burnout.

Blueprint Development

This hybrid GPC pilot was shaped by interconnected barriers that characterize the clinic's operational reality: staffing constraints and provider burnout, language and cultural barriers, high patient no-show rates, transportation and childcare access challenges, and staff resistance rooted in low morale. The blueprint attempts to mitigate these barriers with strategies directly embedded into a phased structure that prioritizes feasibility and staff protection over fidelity to traditional group care models. Staffing and burnout emerged as the most critical constraint; this drove the pilot's "mini" scale and its reliance on an external student partnership for further implementation. The pilot limits sessions to three total meetings. While attending 3 consecutive sessions is recommended, patients interested can theoretically attend all or one of them, abandoning the "cohort" model of GPC but also facilitating some group cohesion with overlap. This shift in structure aims to protect clinical midwives with minimal prep time, promote job satisfaction with more time for education, and target an underserved population with direct education.

Language and cultural barriers identified in the collaborative sessions shaped the pilot's population focus and facilitator requirements. The decision to prioritize a Spanish-speaking cohort aligns with the clinic's patient demographics and concentrates limited resources on the population most likely to benefit. The blueprint mandates Spanish-fluent facilitators or consistent in-person interpreters and requires culturally tailored curriculum that explicitly addresses immigration-related concerns and community resources. High no-show rates, usually secondary to transportation and childcare barriers, are a persistent challenge in the clinic's prenatal care. The blueprint scaffolds an engagement strategy in Phases 3 and 4 that utilize the CHW as a partner to coordinate barrier reduction. Phase 1 infrastructure planning includes identifying these resources and establishing procurement pathways, ensuring they are in place before recruitment begins in Phase 3. The blueprint includes development of an evaluation system in

Phase 4 that tracks attendance data to directly inform adaptations to scheduling, outreach strategies, or session content. This integration reflects an understanding that healthcare access equity requires addressing structural barriers, not simply offering services and expecting patients to navigate obstacles independently.

Collectively, barrier-mitigation is woven into the pilot's phased timeline: Phase 1 infrastructure work includes securing CHW coordination, external facilitators, and space; Phase 2 curriculum development prioritizes cultural relevance and non-didactic facilitation that reduces provider burden; Phase 3 staff training ensures transparency and cohesion across the clinic; and Phase 4 monitoring tracks not only clinical outcomes but also staff satisfaction, attendance patterns, and the effectiveness of mitigation strategies, allowing for successful adaptation. This blueprint treats context as the foundation of a sustainable and equitable program pilot.

Limitations

There are several limitations to consider when interpreting these findings: misrepresentation, reliance on qualitative data, bias, status of the project, and depth of engagement. First, steering committee membership was multidisciplinary but may not fully represent all stakeholder perspectives. Especially those of patients who would participate in GPC, because of the inability to sample patient perspective in this setting. Broader patient input through focus groups or surveys could strengthen future planning efforts. Second, the context analysis relied on data from discussions and organizational assessments. While in alignment with implementation science methodologies, there is an absence of quantitative baseline data (such as current prenatal care utilization patterns, patient satisfaction scores, or outcome metrics). This currently limits the ability to establish measurable benchmarks for future evaluation. Third, the steering committee members' responses and participation might be influenced by their existing

organizational roles and personal perspectives. Some staff that wouldn't choose GPC for themselves might be more reluctant to onboard the project compared to others with personal experience. And those with clinical responsibilities may prioritize different factors than administrative staff, and some these differing priorities may not have been fully recognized let alone reconciled during the planning phase. Fourth, this project only represents the planning phase. The context analysis provides potential and anticipated barriers but cannot account for emergent challenges that may arise during actual GPC delivery. Finally, the project timeline limited the depth of community stakeholder engagement beyond the healthcare organization. Broader input from community organizations, insurance payers, and social service agencies could enhance implementation planning, particularly given GPC's emphasis on addressing social determinants of health.

Conclusion

Through engagement with stakeholders in collaborative discussion, this project established the foundational elements of successful implementation of GPC at a community hospital. The steering committee process and CFIR framework created a structured supported by literature that effectively revealed site-specific challenges, built organizational readiness, and increased buy-in for practice change (Pekkala, 2020; Van Damme, 2024). The complete context description (Appendix 1) provides critical insights into the unique organizational, structural, and cultural factors that will influence GPC implementation at this site. These concepts were mapped using the CFIR framework and adapted into an implementation blueprint (Appendix 6) that hopes to moves beyond generic best practices to address the specific realities of this practice setting.

The steering committee approach was valuable for data collection and relationship building; themes emerged organically while maintaining focus on priority implementation domains. The flexibility of the in-person, drop-in format for collaborative sessions accommodated busy clinical schedules and increased diversity of staff representation; however consistent participation and continuity of discussions was a challenge. Future directions for program development are detailed in the blueprint and include developing targeted strategies to address high-priority barriers, establishing a timeline for phased implementation to begin pilot program, and creating mechanisms for ongoing monitoring and adaptation as the program develops. Additionally, insights from patients on barriers would be complementary to provider and staff perspectives captured in this project.

This project was focused on pre-implementation development and context description; future research should explore whether organizations that conduct context description experience better implementation outcomes compared to those that proceed without it. Research on optimal stakeholder engagement during the pre-implementation phase, like ideal committee size, meeting frequency, and duration of engagement, would also streamline this process. Ultimately, this project demonstrated that successful implementation of evidence-based practice innovations requires attention to local context, meaningful stakeholder engagement, and thoughtful planning that addresses the complex realities of healthcare delivery settings. The foundation established through this work positions the practice for informed, sustainable advancement toward offering group prenatal care for the diverse population it serves.

Appendices

Appendix 1: Context Description

CFIR Construct	Sub-Construct	Site-Specific Determinants (relevant context)
Intervention Characteristics	Evidence Strength and quality	CNMs and several staff are familiar with GPC and strongly believe it improves outcomes, reduces no-shows, and supports provider satisfaction (prior positive experience, perceived evidence-based benefits).
	Intervention Source	GPC is perceived by CNMs and RNs as an externally established, evidence-informed model that the clinic would be adopting locally, with adaptation for their largely Spanish-speaking, high-risk population.
	Relative Advantage	Compared with individual care, GPC is expected to improve patient education, community building, no-show rates, and provider satisfaction, and to create more efficient use of visit time and CHW resources.
	Trialability	Clinic visit volume (24–45 new OBs per month, 217–384 completed visits) and ability to run unlimited group sessions suggest feasibility of piloting GPC with a small cohort before full scale-up.
	Complexity	High complexity due to group scheduling workflows, storage and setup, documentation changes, and coordination across multiple staff roles.
	Design Quality and Packaging	Underdeveloped locally; staff need for clear protocols, standardized workflows, training, and patient-facing materials to explain GPC and set expectations.
	Cost	Reimbursed as individual OB visits within the global pregnancy package with no difference in reimbursement, but sustainability depends on maintaining adequate group size (minimum ~6) and addressing high no-show rates (27–45 per month).
Outer Setting	Patient Needs and Resources	Patients face substantial transportation, childcare, work, language, immigration, and technology barriers; CHW and MyChart messaging partially address needs, but gaps

		in education, interpreters, and low-income resources remain.
	Cosmopolitanism and Peer Pressure	Clinic leadership references successful GPC programs and broader evidence. Interest and pressure to adopt models that improve outcomes and engagement for marginalized populations.
	External Policy and Incentives	Global pregnancy package billing allows group visits to be billed as individual OB care; sustainability is constrained more by volume and no-shows than by reimbursement policy, with no clear external incentives beyond quality and equity goals.
Inner Setting	Structural Characteristics	Busy OB-focused clinic with high prenatal volume, multiple provider types (CNMs and OBs operate collaboratively). CNMs, RNs, the CHW, front desk staff, CNAs, and budgeter were key staff input. Significant turnover among midwives causes limited staffing for new programs.
	Networks and Communications	Existing collaboration between midwifery, OBs, RNs, CHW, and front desk; CHW and receptionists already coordinate around transportation and scheduling, but communication around new workflows and education is informal and not standardized.
	Culture, Implementation Climate, and Tension for Change	Strong desire to improve education, address inequities, and support Spanish-speaking patients, but staff are experiencing overwhelm, system issues, and staffing shortages, creating both tension for change and reluctance to take on new initiatives.
	Compatibility	GPC aligns with midwifery values (patient autonomy, education, patient-led conversation) and existing CHW-driven social support.
	Relative Priority	Clinicians see GPC as important but not currently the top priority due to staffing shortages, turnover, and other systems problems; interest is higher for models tailored to Spanish-speaking patients.
	Organizational Incentives and Rewards	Potential future incentives include improved patient satisfaction, reduced no-shows, better outcomes, and provider satisfaction; at present there are no formal internal rewards or protected time identified for GPC work.

	Learning Climate	Presence of new leadership, openness to data use, and interest in new care models coexist with staff burnout and skepticism about additional changes, producing a mixed learning climate.
	Readiness for Implementation	Partial readiness: motivated champions and sufficient clinical volume exist, but inadequate staffing, lack of formal workflows, high no-show rates, and limited space hinder immediate implementation.
	Leadership Engagement	Clinic manager, physician manager, midwifery leadership, and medical director are key stakeholders; leadership is generally supportive conceptually but constrained by competing demands and resource limitations.
	Access to Knowledge and Information	Staff understand general GPC concepts but request more information, protocols, and education about benefits and logistics; current education is fragmented and often delivered ad hoc via MyChart or brief visits.
Characteristics of Individuals	Knowledge and Beliefs about the Intervention	CNMs and some staff strongly believe in GPC's benefits; others are apprehensive about the magnitude of change but see potential for community building and improved support for marginalized patients.
	Self-Efficacy and Individual Stage of Change; Personal Attributes	Several providers and staff are motivated and see themselves as capable contributors, yet feel constrained by current workload and system issues; many are in contemplation or preparation stages, interested but not yet ready to act.
	Patient/Client Circumstances	Patients experience complex social and structural barriers (transportation, childcare, work schedules, immigration climate, language) that influence their ability to attend and engage in GPC, making tailored scheduling and support essential.
Process	Planning	Early-stage planning conversations have identified the need for space allocation, scheduling workflows, and criteria for group size and patient selection, but no formal implementation plan is in place yet.
	Opinion Leaders	Midwifery leadership and experienced CNMs with prior GPC experience function as opinion leaders who can endorse the model and influence broader staff attitudes.

	Champions	Potential champions include motivated CNMs, MAs identified as enthusiastic, CHW interested in expanded roles, and staff passionate about serving Spanish-speaking and high-risk patients.
	External Change Agents	External change agents may include academic partners, evidence from other successful GPC sites, and external quality or equity initiatives that encourage implementation of group care models.
	Executing	No execution has occurred yet.
	Reflecting and Evaluating	Evaluate GPC through metrics such as no-show rates, patient satisfaction, maternal and neonatal outcomes, and provider burnout once a pilot is launched.

Appendix 2: Site Readiness Assessment for Implementation of Group Prenatal Care

Date completed (Day/Month/Year)
Completed by
Title

Please mark the number that best indicates the readiness of the site, according to each category

Administrative Support	
1	**None or unknown**
2	**Beginning support** Key administrator(s) have been contacted about plans to begin work on possible model implementation and indicated initial support/interest
3	**Fully supportive; part of planning** Key administrator(s) supportive of moving forward with implementation work and are part of the planning team

Clinical Staff Involvement	
1	**None or unknown**
2	**Early involvement in planning** Key clinicians are interested in participating in the model project Beginning understanding of group care model
3	**Champion involved** Familiarity with group care models. There are key providers, including midwives and physicians, actively involved in the planning

Population Served	
1	**Not identified** or fewer than 15 pregnant women of similar gestational age available per month to make a cohort
2	**Between 15-30 women available per month to make a cohort** Some data regarding general risk factors, suitability for group care
3	**30+ women available per month to make a cohort** Numbers available on antenatal registrants/month, assurance that there are enough pregnant people to easily make *monthly* cohorts of 10-12 women with similar gestation

Space for Groups	
1	**No identified appropriate space**
2	**Access to appropriate space** The space available is private and will hold at least 20 chairs/pillows in an open circle.
3	**Dedicated appropriate space available** All the above but space is dedicated to group care and doesn't need to be set up/rearranged for every group.

Funding for Group Care	
1	**None identified**
2	**In-kind funding available to support group needs**
3	**Internal or ongoing grant funding available** for sustaining the model after the grant ends

Evaluation of Group Care	
1	**No data available or accessible for evaluation**
2	**Data collection taking place at the site** Site has a process for collecting basic data on patients including baselines, such as registration for care and attendance
3	**Site committed to data collection and evaluation** Besides basic data collection there is evaluation of health outcomes based on site benchmarking

Language: Group Participant cohort formation	
1	Forming group cohorts difficult due to multiple language challenges
2	Separate groups based on language needed for communication Education materials available in a variety of languages
3	Language not an issue for placement in groups Education materials available

Total: _____/21

Notes:

Appendix 3: Steering Committee Satisfaction Survey

Please rate your level of satisfaction with the following aspects of the committee process on a scale from 1-5 (1 = Very Dissatisfied, 5 = Very Satisfied):

Meeting Structure and Collaboration

1. How satisfied are you with the length of committee meetings?
2. How satisfied are you with the committee's respect for your time constraints and other professional obligations?
3. How satisfied are you with the committee leader's facilitation of discussions?
4. How satisfied are you with the collaboration among committee members?
5. How satisfied are you with the leadership's responsiveness to committee members' concerns?

Professional Fulfillment

1. How satisfied are you with the opportunity to contribute ideas and feedback during meetings?
2. How satisfied are you with the committee's impact on your professional growth?
3. How satisfied are you with how committee work aligns with your professional goals?
4. How satisfied are you with the sense of accomplishment from committee participation?
5. How satisfied are you with your personal experience as a committee member?

Overall Experience

Please rate your agreement with the following statements on a scale from 1-5 (1 = Strongly Disagree, 5 = Strongly Agree):

1. The time I spend on committee work is reasonable given my other responsibilities.

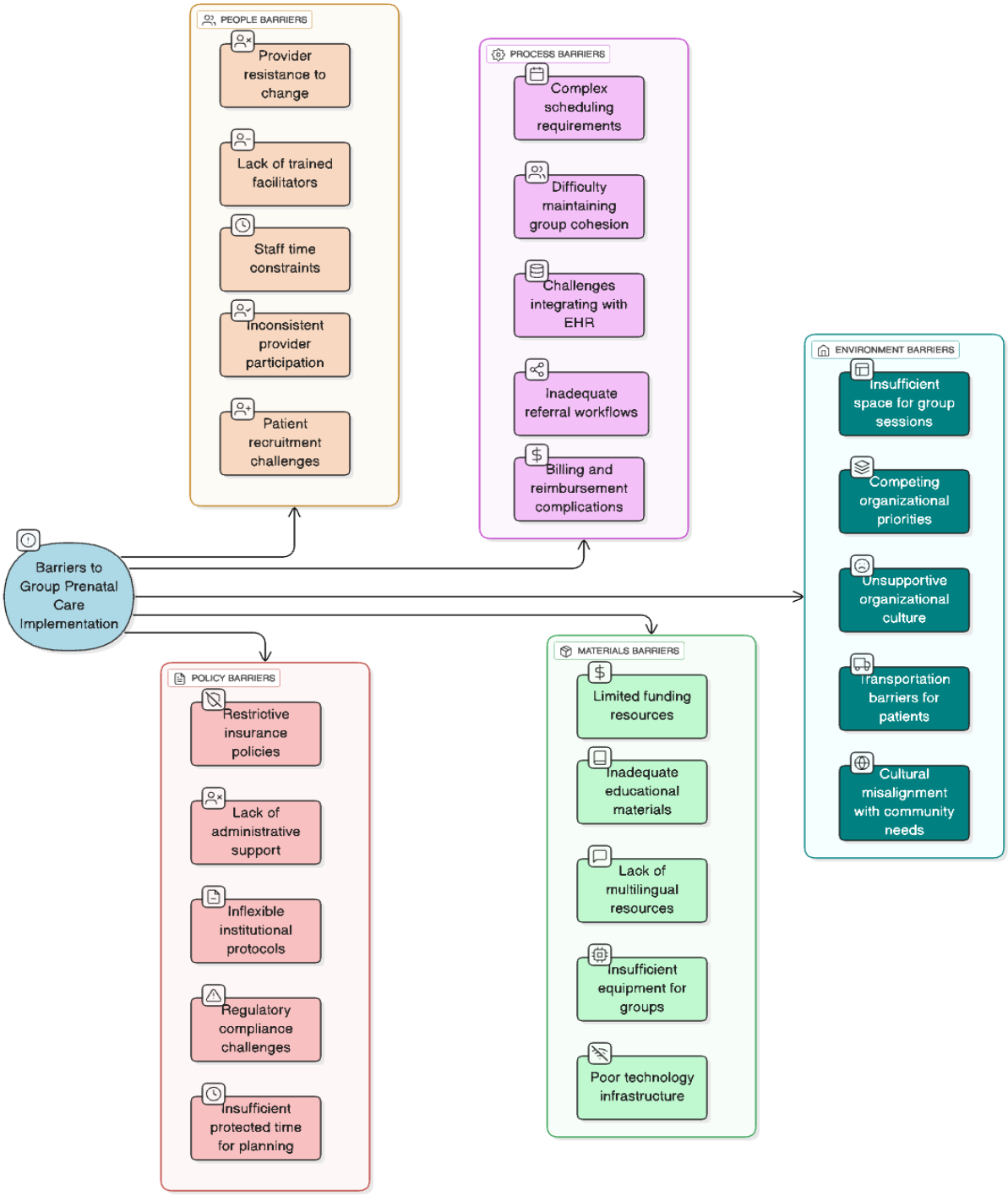
2. Participating in this committee provides me with professional satisfaction.
3. My contributions to this committee are valued by leadership and other members.
4. I feel the committee makes meaningful progress toward its goals.
5. I would recommend serving on this committee to colleagues.

Appendix 4: Goals and Discussion Questions

Barrier	Goal of Steering Committee Sessions	Discussion Questions
Staff Support	1.Identify important decision-makers. 2.Consider potential changes to all levels within your organization. 3.Explore experience with group care at administrative, clinician, and support staff level.	1. Describe how familiar your administration is with Group Care. 2. Outline any experience your health care providers have with the Group Care model and/or group facilitation.
Patient Population	1.Consider demographics, language and literacy, and recruitment strategies. 2.Define the characteristics of the participants that will be part of antenatal and postnatal Group Care sessions	1.What is the availability of the population being served to attend Group Care? Do prospective participants work, will participants need childcare? 2.Will groups only be for pregnant women and parenting people? 3.Does the population being served have the means to travel to the place where Group Care is being held? 4.Will other support people be included? 5.What is/are the language(s) of the population being served? 6.What are the age ranges of the population being served? 7.What is the literacy level of the population being served? 8.What are the priority health issues of the population being served? 9.Are there any cultural issues that may influence the way in which Group Care is facilitated?
Monitoring/ Evaluation	1.Define how to monitoring or audit staff workload, patient attendance rates, and patient outcomes. 2.Identify existing record systems, routinely collected data, and ways to distinguish Group from standard care to evaluate outcomes.	1.What kinds of monitoring and evaluation should be considered? 2.Who should lead the routine monitoring and auditing? 3.How to monitor fidelity?

Infrastructure/Equipment	1.Identify group space, materials, supplies, snacks 2.Identify equipment and items needed	1.What infrastructure is required to be available to support implementation now and in the long term? 2.How many people can we get in an open circle of chairs in the center? 3.Is there room for four stations outside the circle – Check in; self- check; medical check-up with some privacy and water/snacks (if planned)? 4.Is there a bathroom nearby? 5.Where will Group Care supplies/equipment be stored? 6.Is the space easy for patients to access, if not how will access be managed? 7.Fill out equipment checklist.
Funding/Budgeting	1.Identify implementation costs (site-specific v. central costs), one-off costs (especially in the design and initiation phases) and annual recurring cost (maintenance phase). 2.Locate start-up funding sources and sustainable financing of group care	1.Are the budgets for antenatal and postnatal care allocated from national, regional, and/or local health authorities? Which levels pay for what and how does funding flow from one budget to the other? 2.Will Group Care be free for pregnant women and parenting people at the point of service? Or will there be out-of-pocket expenses related to Group Care? 3.Will the payment for Group Care, if relevant, in any way negatively affect the access that different population groups have to healthcare? Or does Group Care improve the affordability of healthcare? 4.How will healthcare providers be paid for providing Group Care? Will they be reimbursed by healthcare insurers or as part of the normal budget from the government? Will it be incorporated within their normal workload? 5.Will there be costs linked to needing to use different care venues or are existing locations suitable (e.g. community-based location with large enough rooms for a group). 6.Fill out cost components table.

Appendix 5: Fishbone Analysis of Barriers to Group Prenatal Care Implementation



Appendix 6: Hybrid Group Prenatal Education Pilot Program: "Mini-GPC"

Purpose: Offer a group-care pathway that runs *in tandem* with standard individual prenatal care to provide culturally specific and more robust prenatal education
Pilot population: Spanish-speaking, nulliparous patients
Scheduling: Group session replaces one to three eligible routine OB visits

- With an add-on model available when replacement is not appropriate and group session is scheduled in addition to the usual individual visit schedule

Session descriptions

1. **2nd trimester session (common pregnancy complaints/symptoms)**
    a. GA: 16 to 20 weeks
    b. N/V, GERD, constipation, back pain, headaches, sleep, fatigue
    c. Danger signs + when to call/come in
    d. Comfort measures + evidence-informed self-care
    e. Peer problem-solving + normalization
2. **3rd-trimester prep session (timed with 3rd trimester labs; resource navigation)**
    a. GA: 24-28 weeks
    b. Finding a doula/labor support
    c. Pediatrician selection / establishing care
    d. Lactation education + IBCLC/community supports
    e. Postpartum support planning (family/community, WIC, home visiting if available)
    f. Mental health supports (screening, crisis resources, culturally/linguistically appropriate counseling)
    g. Childcare planning/resources
3. **3rd trimester session (labor + labor interventions)**
    a. GA: 30-34 weeks
    b. Early labor vs active labor; when to come in
    c. Pain coping options; epidural basics
    d. Induction of labor, augmentation, AROM, continuous monitoring
    e. Assisted vaginal birth, cesarean overview, consent + shared decision-making
    f. Birth preferences + communication plan

Phase 1: Foundation Building (Months 1-2)

1.1 Formalize Steering Committee Roles and Responsibilities
Objective: Create a small, sustainable implementation team with clear expectations
Actions:

- [ ] Appoint GPC Implementation Lead (recommend CNM experienced with GPC)
    - **Negotiate 0.1-0.2 FTE protected time OR substantial stipend**

    - Description
        - Overall project management
        - Facilitator training and support
        - Problem-solving and decision-making
- [ ] Recruit External Implementation Support (student project/academic collaboration or a hired consultant)
    - Primary data collection, analysis, and evaluation
    - Curriculum development support
    - Upholds implementation science framework
    - (When appropriate) Co-facilitation or full facilitation of sessions
- [ ] Expand CHW role (if deemed appropriate)
    - Barrier assessment and mitigation (securing transportation and childcare)
    - Community resource connection
    - Involved in patient recruitment and enrollment
- [ ] Clinical manager able to function as Operations Coordinator
    - Space and resource allocation (one-time)
    - High-level staff coordination
    - Budget approvals
    - Time commitment: 2-3 hours/month
- [ ] Identify CNA/**MA Champion** (1-3, VOLUNTARY ONLY)
    - Not required for pilot to proceed
    - Co-facilitation support if interested
- [ ] Establish **Streamlined Steering Committee** with realistic expectations:
    - Regular meetings, monthly in Phases 1-2, quarterly after initial setup
    - **Involve Front Desk Staff to support recruitment**

1.2 Secure Resources & Infrastructure

Objective: Address identified resource barriers before patient recruitment

Actions:

Space & Equipment

- [ ] Identify and reserve dedicated group space (accommodates 8-12 people)
- [ ] Draft equipment procurement list and submit - CNM lead in partnership with CHW or CNA/MA champion
- [ ] Procure equipment: BP cuffs, dopplers, measuring tapes, scale, flip charts, educational materials
- [ ] Arrange storage solution for GPC supplies
- [ ] Test room setup and flow

Budget

- [ ] Confirm billing codes and reimbursement (global pregnancy package)
- [ ] Allocate budget for:

One-Time Start-Up Costs
- BP cuffs
- dopplers
- scale
- measuring tape
- chairs
- massage table or patient chair

Per-Session Operating Costs
- Educational materials and handouts
- Snacks/refreshments
- Staff stipends (for any MA/CNA facilitators)

(consider)
- Transportation vouchers
- Childcare support

Phase 2: Curriculum & Recruitment (Months 2-3)

2.1 Develop GPC Curriculum

Objective: An external partner develops structured, evidence-based curriculum addressing site-specific needs

Priority Focus Areas (gathered from steering committee feedback):
- Gestational diabetes education and management
- Hypertensive disorders of pregnancy
- Postpartum mood screening and support
- Breastfeeding preparation
- Community resource navigation
- Birth planning and preferences

Actions:
- [ ] External partner (student/consultant) leads curriculum development
  - Adapt evidence-based GPC curriculum (CenteringPregnancy® or similar model)
  - Clinical staff provide input/feedback (not development)
- [ ] Create patient education materials
  - Welcome packet explaining GPC model
  - Session schedules and topics
  - Develop guide for each session (3 sessions total for pilot)
  - Self-assessment tools
- [ ] Customize for Spanish-speaking patients:
  - All relevant materials and handouts available in English and Spanish
  - Address/acknowledge immigration concerns

    - Incorporate CHW resource connections
- [ ] Include facilitation questions and ice-breakers to develop group cohesion
- [ ] Create documentation SmartPhrases to integrate into Epic documentation system
- [ ] CNM lead reviews final curriculum and provides approval

2.2 Patient Selection & Recruitment

Objective: Recruit 6-8 patients per session for inaugural pilot (first 3 months of sessions)

Eligibility Criteria:

- Spanish-speaking
- <16 weeks gestation at initial recruitment, but can be recruited at any GA
- Interested in group format

Recruitment Strategy (brainstorm further with future DNP projects):

- [ ] CHW-led outreach to existing and new OB patients
- [ ] Provider referrals during NOB/ROB appointments
- [ ] Front desk scripting when scheduling OB care
- [ ] Create patient-facing materials:
    - Flyers in waiting room
    - MyChart messages (with auto-translate)
    - FAQ sheet addressing common concerns
- [ ] Address transportation and childcare proactively:
    - CHW coordinates transportation resources
    - Explore on-site childcare or referrals to ERDC alternatives
    - Consider weekend or evening sessions if work schedules are barrier

Actions:

- [ ] Launch recruitment 6-8 weeks before target group start
- [ ] Develop scripts for interested patients that explains the GPC model, this modified, hybrid model, and the benefits group care.
- [ ] Create and maintain waitlist for future groups (in Teams or other workplace documentation system)
- [ ] Plan for no-show mitigation:
    - CHW or front desk staff reminder calls/texts before sessions
    - Can develop a peer buddy system at first session

Phase 3: Training & Pilot Preparation (Month 4)

3.1 Train Facilitators & Staff

Objective: Prepare team for successful GPC delivery

Training Topics:

- [ ] **CNM Facilitator Training** (2-3 hours):
    - Review curriculum materials

    - Option to shadow GPC sessions at local academic hospital or Childbirth Education sessions
    - Review documentation SmartPhrases
    - Collaborate with co-facilitators if applicable
- [ ] **MA Training** (if applicable):
    - <1 hour
    - Focus on logistics, co-facilitation basics (open-ended questions, building rapport, etc.)
- [ ] **CHW Training**:
    - Review and finalize recruitment strategies
    - Follow-up on logistics of addressing transportation and childcare barriers
- [ ] **Front Desk Training** (30 minutes, at staff meeting):
    - One-page script overview for recruitment and scheduling
    - FAQ sheet provided
    - Student implementor to do check in Q&A before and during pilot run
- [ ] **All-Staff Brief**:
    - GPC overview and benefits
    - FAQ sheet provided
    - Most staff unaffected

3.2 Pre-Implementation Check

Objective: Ensure all systems functional before first group session

Actions:

- [ ] Dry-run with implementation team:
    - Walk through session flow with facilitators (3 sessions/month)
    - Practice documentation
    - Test equipment
- [ ] Finalize patient schedules (3 sessions/pregnancy)
- [ ] Prepare session materials
- [ ] Confirm facilitator and MA schedules
- [ ] Alert all clinic staff on pilot launch dates
- [ ] Establish communication plan for real-time problem-solving during pilot

Phase 4: Pilot Launch & Iteration (Months 4-10)

4.1 Run Pilot Group

Objective: Successfully deliver 3 sessions a month for 3 months to inaugural cohorts

Session Structure (typical 2-hour format):

1. **Provider assessments** (30 min):
    a. Brief individual check-ins
    b. Fundal and doppler assessment

2. **Self-assessment and ice-breakers** (30 min):
    a. Patients check own vitals, weight with co-facilitator support
    b. Facilitation questions to encourage conversation or
    c. Educational videos reviewing session relevant information
3. **Circle time** (60 min): Facilitated discussion on session topic

Actions Per Session:

- [ ] Pre-session setup (30 min before)
- [ ] Welcome and icebreaker
- [ ] Self-care activities
- [ ] Facilitated education and discussion
- [ ] Individual assessments
- [ ] Next session preview and reminders
- [ ] CHW follow-up within 48 hours for no-shows
- [ ] **Documentation** using SmartPhrase template
- [ ] **Debrief** after first 3 sessions with facilitators, implementation lead, and student partner to review
    - What went well
    - Challenges encountered
    - Adjustments for next session

4.2 Monitor & Evaluate

Objective: Collect data to assess pilot success and inform scale-up

Data Collection

- [ ] External partner establishes data tracking system (spreadsheet or database)
    - Tracks attendance and feedback from facilitators, CHW, and staff
    - Document **lessons learned** in shared log (external partner maintains)
- [ ] Quarterly data review with implementation team

Patient-Centered Metrics

- [ ] **Attendance** (per session and overall completion)
- [ ] **Clinical outcomes**:
    - Prenatal visit completion rates
    - Postpartum follow-up attendance
    - Breastfeeding initiation rates
- [ ] **Patient feedback** (qualitative):
    - Exit interviews or focus group
    - Open-ended feedback on experience

Provider/Staff Metrics

- [ ] Facilitator satisfaction and burnout (pre/post pilot)
- [ ] Time/workflow efficiency
- [ ] Perceived quality of patient education compared to individual care

Phase 5: Evaluation & Scale-Up Planning (Months 10-12)

5.1 Comprehensive Pilot Evaluation

Objective: Assess pilot against pre-defined success criteria and prepare for scale-up decision

Actions:

- [ ] **Quantitative analysis**:
  - Compile all metrics from Phase 4.2
  - Compare to baseline and targets
- [ ] **Qualitative synthesis**:
  - Analyze patient feedback themes
  - Review facilitator and staff experiences
  - Identify unexpected benefits or challenges
- [ ] **CFIR Post-Implementation Assessment**:
  - Reassess readiness scores (compare to baseline 8-15/21)
  - Identify which barriers were successfully addressed
  - Document persistent or new barriers
- [ ] **Stakeholder feedback sessions**:
  - Facilitators and implementation team
  - Clinic leadership
  - Broader clinic staff

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