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Effectiveness of Shared Versus Midwifery-Led Continuity of Care in Improving Pregnancy Outcomes: A Systematic Review with Meta-Analysis

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Abstract

Background: The choice of care models during childbirth, particularly midwife-led care versus shared obstetrician-led care, has significant implications for maternal and neonatal outcomes. Understanding the comparative benefits of these models is crucial for informing maternity care practices globally. This study aimed to evaluate the impact of midwife-led care compared to shared obstetrician-led care on assisted vaginal birth, caesarean section rates, APGAR scores, stillbirth/neonatal mortality, and postpartum haemorrhage through a systematic review and meta-analysis. **Methods**: A systematic search of databases (PubMed, ScienceDirect/Scopus, and ProQuest) identified 1,621 records. After duplicate removal, title and abstract screening, and eligibility assessment, 24 studies were included in the meta-analysis. Data were analyzed to determine the relative risk reduction and statistical significance of outcomes between midwife-led and shared models. **Results**: The midwife-led care model significantly reduced the risk of assisted vaginal birth by approximately 45% ($p < 0.010$) and caesarean section rates by about 47% ($p < 0.010$). However, no significant differences were observed between the two models in terms of APGAR scores < 7 at 5 minutes ($p = 0.150$), stillbirth/neonatal mortality ($p = 0.700$), and postpartum haemorrhage ($p = 0.61$). **Conclusions**: The midwife-led model of care demonstrates clear advantages in reducing the rates of assisted vaginal birth and caesarean sections without compromising neonatal outcomes such as APGAR scores or mortality. Additionally, the model does not increase the risk of postpartum haemorrhage compared to shared obstetrician-led care. Healthcare systems should prioritize implementing and scaling midwife-led care models for low-risk pregnancies, to improve maternal outcomes while maintaining neonatal safety. Further research should explore barriers to adopting this model in various healthcare settings.

Key words: Caesarean section, Maternal outcomes, Midwife-led care, Obstetrician-led care, Pregnancy, Shared care Model

Introduction

Maternity care models vary globally, reflecting cultural, economic, and healthcare system differences. Two key models are obstetrician-led care, which is prevalent in the United States and referred to as shared continuity of care in Australia, Europe, and parts of Africa, and midwifery-led continuity of care, which is dominant in countries such as the United Kingdom and New Zealand (Hewitt et al., 2024; Kuipers, 2024). The ongoing debate regarding which model optimises pregnancy outcomes focuses on balancing patient safety, cost-effectiveness, and patient satisfaction (Anderson et al., 2024).

Shared continuity of care is designed to provide a multidisciplinary approach, ensuring comprehensive maternal care. It is a collaborative maternity care model where obstetricians oversee antenatal, intrapartum, and postnatal care while sharing responsibilities with general practitioners (GPs) and midwives (Sriram et al., 2024). In shared continuity of care, midwives operate under the supervision or guidance of an obstetrician, who provides specialist expertise, technology, and services in cases of complications (Beier et al., 2024). Additionally, GPs can intervene when medical concerns arise, facilitating timely referrals and ensuring specialised input when necessary. The model combines the strengths of a multidisciplinary approach, promoting accessibility and flexibility for women throughout pregnancy. Advocates highlight its ability to integrate expertise across healthcare professionals, improving safety and patient satisfaction, particularly in rural or resource-limited settings (Kern et al., 2024). However, critics argue that fragmented communication between care providers may reduce continuity and personalisation, reinforcing the case for midwifery-led continuity of care as a more cohesive and patient-centred alternative (Varner et al., 2023).

Midwifery-led continuity of care emphasises personalised, relationship-based care, fostering trust and enhancing communication between the midwife and the woman. It is a maternity care model in which a midwife, or a small team of midwives, provides consistent care to a woman throughout the antenatal, intrapartum, and postnatal periods (Sorbara et al., 2024). The model focuses on woman-centred, holistic care, particularly for low-risk pregnancies, ensuring support tailored to individual needs (Bradford et al., 2022). However, critics argue that it may lack sufficient specialist input, which could be necessary to optimise pregnancy outcomes (Hoehn-Velasco et al., 2023).

Pregnancy outcomes refer to the health results for both the mother (maternal) and the baby (neonatal) during and after pregnancy (Simbar et al., 2023). Maternal outcomes consider conditions such as postpartum haemorrhage, infections, and maternal mortality, which can arise due to complications (Eslier et al., 2023). Maternal complications may warrant the medicalising the birth process (C-section and instrumental vaginal delivery). Neonatal outcomes focus on the baby's health and include measures such as APGAR score, and stillbirth/neonatal mortality (Norman et al., 2024). Access to skilled healthcare

professionals, adequate facilities, and antenatal monitoring significantly reduces adverse outcomes for both mother and baby (Molina et al., 2024). Improving pregnancy outcomes depends on quality maternal care, timely interventions, and appropriate models of care, such as midwifery-led or shared continuity of care (Grünebaum et al., 2024).
A low-risk pregnancy is operationalised in for the purpose of this study as one where the mother and foetus are unlikely to experience complications during the antenatal, intrapartum, or postnatal periods (Ravelli et al., 2023). This includes pregnancies without pre-existing maternal conditions (e.g., diabetes, hypertension), obstetric complications (e.g., multiple gestation, preterm labour), or foetal abnormalities. Women in this category are expected to have normal physiological pregnancies and births.

Statement of the Problem

Given the strengths and weaknesses of the midwifery-led and shared continuity of care, there is a need to determine which model more effectively improves pregnancy outcomes, such as reducing maternal complications and neonatal risks. Unfortunately, a scarcity of systematic reviews and meta-analysis on the subject matter exists, presenting a knowledge gap that needs to be filled (Sriram et al., 2024). This review and meta-analysis evaluated the comparative effectiveness of midwifery-led and shared continuity of care to inform evidence-based decisions and improve maternal and neonatal health outcomes. The problem statement was articulated using the Population, Intervention, Comparison, and Outcome (PICO, Hosseini et al., 2024) framework as thus: “Among pregnant women receiving maternity care, how effective is the Midwifery-led continuity of care compared to the Shared continuity of care (Obstetrician-led care) in improving pregnancy outcomes, by reducing maternal risks (postpartum haemorrhage, instrumental vaginal birth, and C-sections) and neonatal risks (APGAR Score < 7 and stillbirths/neonatal mortality).”

Table 1: PICO-based Problem statement

PICO Domains	**Details**
Population	Pregnant women receiving maternity care
Intervention	Midwifery-led continuity of care
Comparison	Shared continuity of care (Obstetrician-led care)
Outcome	Pregnancy outcomes, by reducing maternal risks (postpartum haemorrhage, assisted vaginal birth, and C-sections) and neonatal risks (APGAR Score < 7 and stillbirths/neonatal mortality).

Methods

Search Strategy

This systematic review and meta-analysis was conducted in accordance with the guidelines outlined in the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA, Grech et al., 2024). Two members of the research team conducted a thorough electronic search across PubMed, ScienceDirect (Scopus), and ProQuest databases. The search strategy was developed using a combination of keywords and synonyms, linked through Boolean operators (AND, OR, NOT) as follows: (Midwives OR Midwifery OR Midwifery-led OR Midwife-led) AND (Physician OR Doctor OR Obstetrician OR Obstetrician-Led OR Physician-led) AND (Birth OR Childbirth OR Delivery OR Labour OR Pregnancy) AND (Low risk NOT High). Search filters were applied to restrict the search to studies published in the last decade (2014–2024) to capture fairly recent evidence. Additional filters were used to limit the search to articles published in English and exclude preprints. To ensure inclusiveness, the reference lists of eligible studies were manually screened, and any relevant titles were further assessed for eligibility. This approach aimed to identify all pertinent studies for inclusion in the review.

Study Selection

After removing duplicates, studies retrieved from the database searches underwent a multi-step screening process. Titles and abstracts of the remaining studies were first reviewed, followed by a full-text assessment to determine eligibility. Screening was carried out independently by two members of the research team, with a third member cross-checking for inconsistencies. Discrepancies were resolved through discussion and consensus with the other members of the research team. The review and meta-analysis included studies that specifically compared midwife-led and shared (obstetrician-led) models of perinatal care. Only studies involving healthy women with low-risk pregnancies were eligible for inclusion. Exclusion criteria encompassed studies not published in English, case studies, conference abstracts, theses, books, grey literature, and unpublished materials.

Quality Appraisal of Eligible Studies

The quality of the eligible studies was assessed using the 11-item CASP tool for Randomised Clinical Trials (RCTs) and the 12-item CASP tool for Observational Studies (Maheshwarappa et al., 2023). Each CASP criterion satisfied by a study received a score of 1, while unmet criteria were scored as 0. The overall quality of the studies was categorised as follows: “good” (Sum score > 7), “fair” (Sum score 4–7), or “poor” (Sum score 0–3, Long et al., 2020). Only studies rated as “good” (scores above 7) were deemed eligible for inclusion in the systematic review and meta-analysis for reasons of methodological rigour.

Data Extraction from Included Studies

From the included studies, two members of the research team extracted data related to author and year of publication, country, study design, sample size, sampling method, outcome variables, and results. Baseline information, including participants' age, parity, marital status, and educational level, was also collected. The primary outcomes of interest for this systematic review and meta-analysis include postpartum haemorrhage, assisted vaginal delivery, caesarean section, APGAR score below 7 at 5 minutes of birth, and stillbirth/neonatal mortality. Accordingly, data pertaining to these specified outcomes were systematically extracted and recorded for analysis. To ensure accuracy, a third team member reviewed the extracted data for any inconsistencies, which were addressed and resolved through discussion and consensus with all members of the research team.

Assessment of Publication Bias

To assess publication bias, a funnel plot was used, which visually represents the effect estimates of individual studies plotted against their standard errors. Ideally, in the absence of publication bias, the plot should form a symmetrical, inverted funnel shape. However, if the funnel plot appears asymmetrical, it may suggest that smaller studies with negative or non-significant results are underrepresented. This potential asymmetry serves as a caution, as it indicates that the observed effects could be skewed by the selective publication of studies showing positive outcomes. The funnel plot was supported egger test for funnel asymmetry where a p value less than 0.05 indicated significant asymmetry.

Evidence Synthesis and Data Analysis Methods

Forest plots were used to synthesise and compare the pooled relevant evidence. Categorical outcomes were assessed using the risk ratio (RR) and corresponding 95% CI. The forest plots were supported with I^2 test of heterogeneity and a value of 50% or higher were considered indicative of significant heterogeneity, suggesting variability that must be accounted for when interpreting the findings. A p-value of less than 0.05 was considered the threshold for statistical significance. This rigorous approach ensured that both continuous and categorical data were analysed effectively to produce reliable and meaningful results.

Results

Study Selection Process

The study selection process followed PRISMA guidelines to identify, screen, and include studies for review and meta-analysis. The process began with a comprehensive database search, yielding a total of 1,621 records, sourced from PubMed (199), ScienceDirect/Scopus (872), and ProQuest (550). Following the removal of 22 duplicate records, 1,599 unique studies proceeded to the title screening phase, where 1,385 non-relevant titles were excluded, leaving 214 records for abstract review. During the abstract screening, 190 non-relevant abstracts were identified and removed, narrowing the selection to 24 studies. These 24 records were assessed for eligibility, and all were deemed appropriate for inclusion in the systematic review and meta-analysis. This rigorous process ensured that the included studies aligned with the outcome variables of interest.

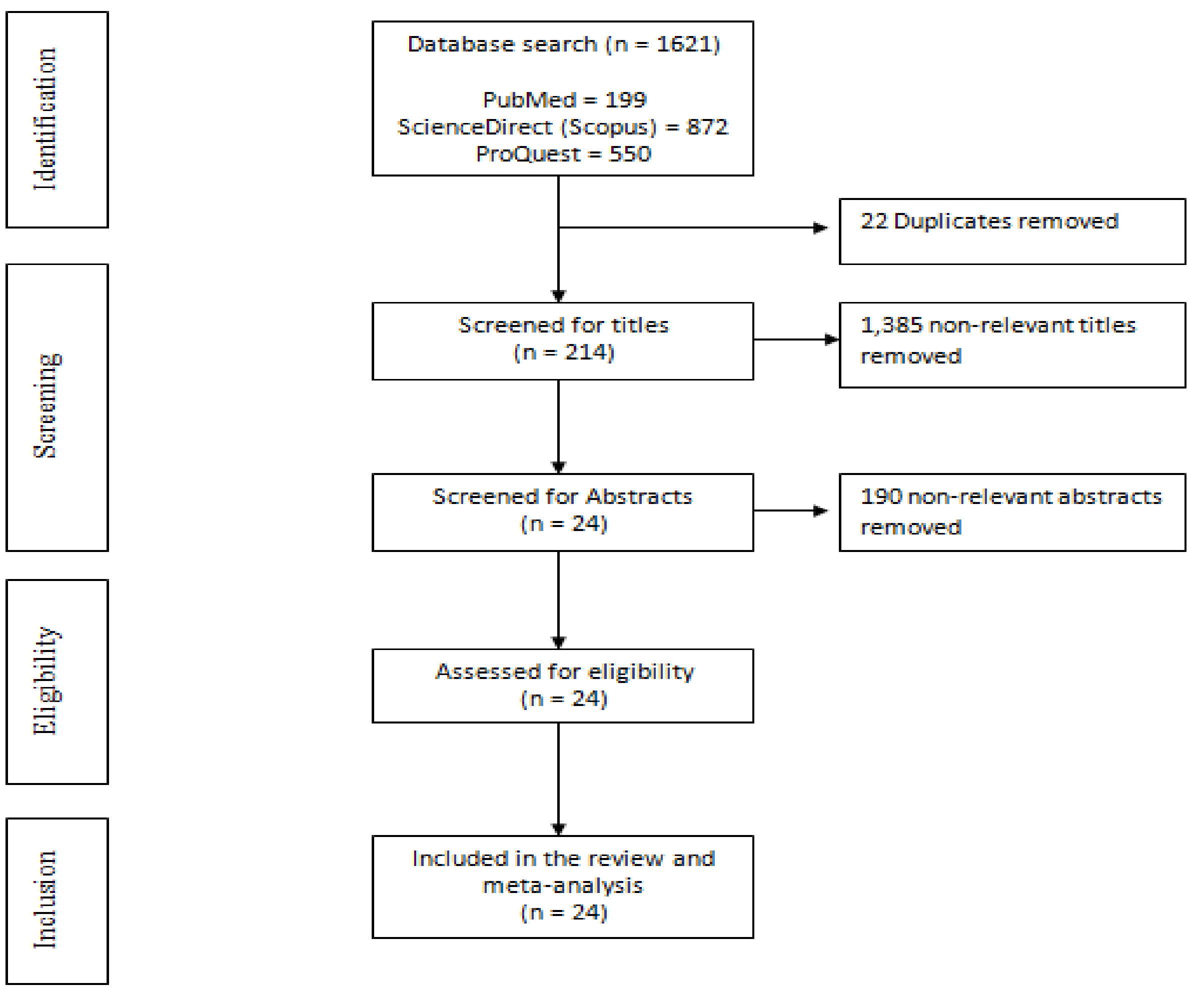


Figure 2: PRISMA flow diagram of the study selection process

Profile of Selected Studies

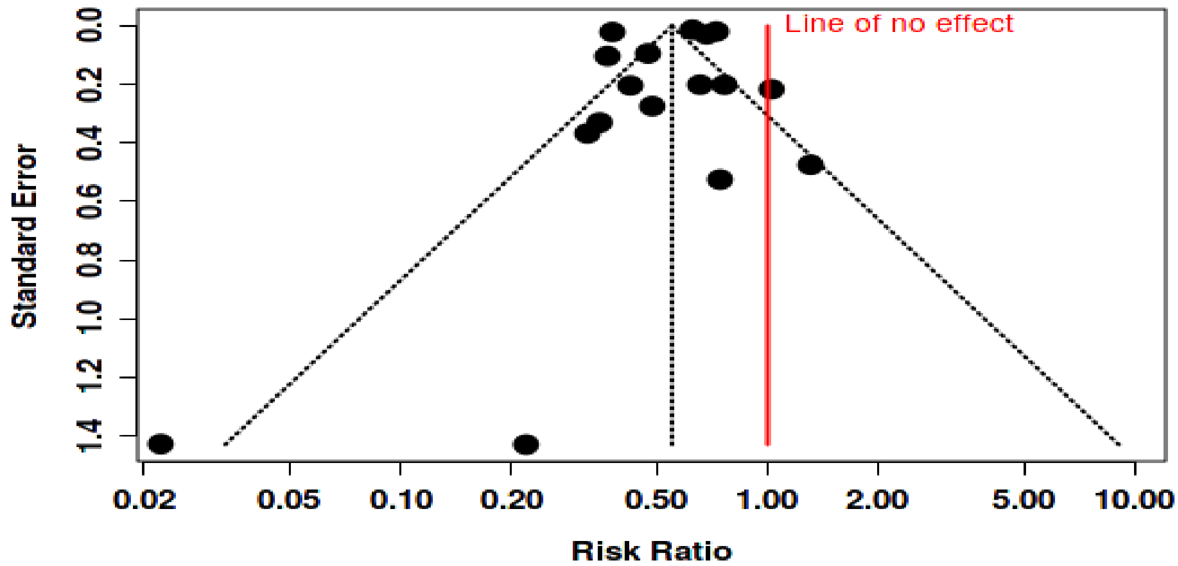
Table 2: Profile of studies included in the review and meta-analysis (n = 24)

Author	Year	Country	Design	Sample Size in Midwife-led	Sample size in Shared model
Altman et al.	2017	The United States	Retrospective cohort	361	1,080
Bartuseviciene et al.	2018	Lithuania	Retrospective cohort	910	1,757
Carlson et al.	2018	The United States	Retrospective cohort	590	749
De Jonge et al.	2015	The Netherlands	Retrospective cohort	170,430	53,300
Hua et al.	2018	China	Prospective cohort	451	1,117
Isaline et al.	2019	Belgium	Retrospective cohort	59	30
Koto et al.	2019	Canada	Retrospective cohort	753	11,475
Martin-Arribas et al.	2022	Spain	Cross-sectional	10,844	693
Merz et al.	2020	Germany	Retrospective cohort	612	612
Palau-Costafreda et al.	2023	Spain	Retrospective cohort	255	623
Pérez-Martínez et al.	2019	Spain	Retrospective quasi-experimental	1,308	1,313
Poskienc et al.	2021	Lithuania	Case-control	184	1,664
Schroeder et al.	2017	The United Kingdom	Retrospective cohort	167	164
Sorbara et al.	2024	Canada	Retrospective cohort	23,124	81,871
Souter et al.	2019	The United States	Retrospective cohort	3,816	19,284
Stoll et al.	2023	Canada	Retrospective cohort	46,632	76,694

Thiessen et al.	2016	Canada	Retrospective cohort	3,979	72,249
Thornton et al.	2016	The United States	Retrospective cohort	8,776	2,527
Tietjen et al.	2021	Germany	Prospective cohort	391	391
Voon et al.	2017	Singapore	Retrospective cohort	170	198
Walters et al.	2015	Canada	Retrospective cohort	248	3,603
Welffens et al.	2019	Belgium	Retrospective cohort	590	394
Wiegerinck et al.	2020	The Netherlands	Retrospective cohort	206,642	52,569
Wiegerinck et al.	2018	The Netherlands	Retrospective cohort	46,764	10,632
Total				528,056	394,989

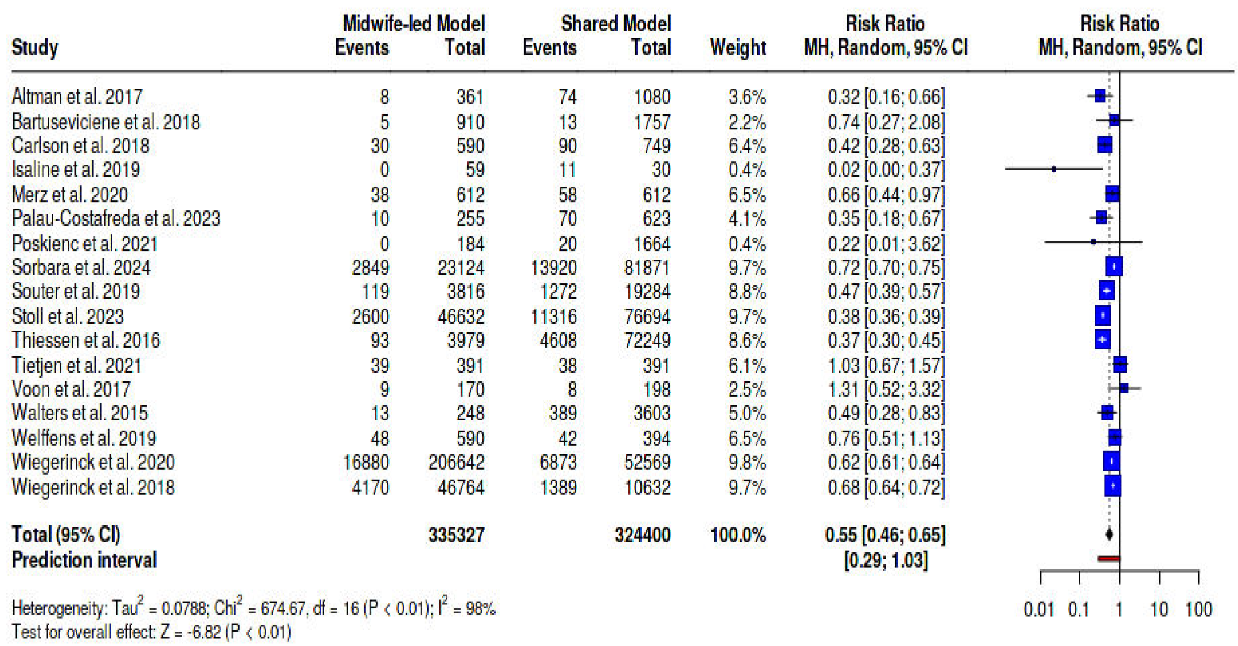
Table 2 summarizes studies included in the review and meta-analysis comparing midwife-led care and shared (obstetrician-led) care across various countries, highlighting sample sizes, study designs, and geographic representation. A total of 528,056 participants were in midwife-led care, while 394,989 participants received shared care. The majority of studies (20 out of 24) utilized a retrospective cohort design, reflecting the prevalence of this approach in perinatal research. The largest study, conducted by Wiegerinck et al. (2020) in the Netherlands, involved 206,642 participants in midwife-led care and 52,569 in shared care, while the smallest study, Isaline et al. (2019) in Belgium, included only 59 participants in midwife-led care and 30 in shared care. Geographically, the studies span North America, Europe, and Asia, with notable contributions from Canada (6 studies), Spain (3 studies), and the United States (5 studies). Other countries represented include Germany, Belgium, Lithuania, China, Singapore, and the United Kingdom. This diverse representation underscores the global interest in evaluating maternal care models.

Assisted Vaginal Birth



The Egger's test did not support the presence of funnel plot asymmetry (p-value: 0.672), hence no publication bias **Figure 3:** Funnel plot on studies involving Assisted vaginal birth data

Figure 3 illustrates that the literature on assisted vaginal birth did not have publication bias.



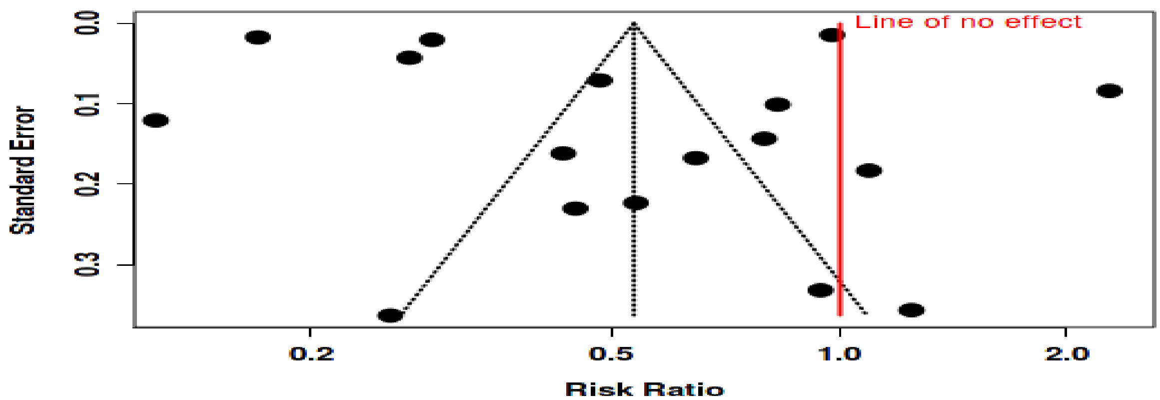
Study	Midwife-led Model Events	Midwife-led Model Total	Shared Model Events	Shared Model Total	Weight	Risk Ratio MH, Random, 95% CI
Altman et al. 2017	8	361	74	1080	3.6%	0.32 [0.16; 0.66]
Bartuseviciene et al. 2018	5	910	13	1757	2.2%	0.74 [0.27; 2.08]
Carlson et al. 2018	30	590	90	749	6.4%	0.42 [0.28; 0.63]
Isaline et al. 2019	0	59	11	30	0.4%	0.02 [0.00; 0.37]
Merz et al. 2020	38	612	58	612	6.5%	0.66 [0.44; 0.97]
Palau-Costafreda et al. 2023	10	255	70	623	4.1%	0.35 [0.18; 0.67]
Poskienc et al. 2021	0	184	20	1664	0.4%	0.22 [0.01; 3.62]
Sorbara et al. 2024	2849	23124	13920	81871	9.7%	0.72 [0.70; 0.75]
Souter et al. 2019	119	3816	1272	19284	8.8%	0.47 [0.39; 0.57]
Stoll et al. 2023	2600	46632	11316	76694	9.7%	0.38 [0.36; 0.39]
Thiessen et al. 2016	93	3979	4608	72249	8.6%	0.37 [0.30; 0.45]
Tietjen et al. 2021	39	391	38	391	6.1%	1.03 [0.67; 1.57]
Voon et al. 2017	9	170	8	198	2.5%	1.31 [0.52; 3.32]
Walters et al. 2015	13	248	389	3603	5.0%	0.49 [0.28; 0.83]
Welffens et al. 2019	48	590	42	394	6.5%	0.76 [0.51; 1.13]
Wiegerinck et al. 2020	16880	206642	6873	52569	9.8%	0.62 [0.61; 0.64]
Wiegerinck et al. 2018	4170	46764	1389	10632	9.7%	0.68 [0.64; 0.72]
Total (95% CI)		**335327**		**324400**	**100.0%**	**0.55 [0.46; 0.65]**
Prediction interval						**[0.29; 1.03]**

Heterogeneity: $Tau^2 = 0.0788$; $Chi^2 = 674.67$, df = 16 ($P < 0.01$); $I^2 = 98\%$
Test for overall effect: $Z = -6.82$ ($P < 0.01$)

Events = Assisted vaginal Births

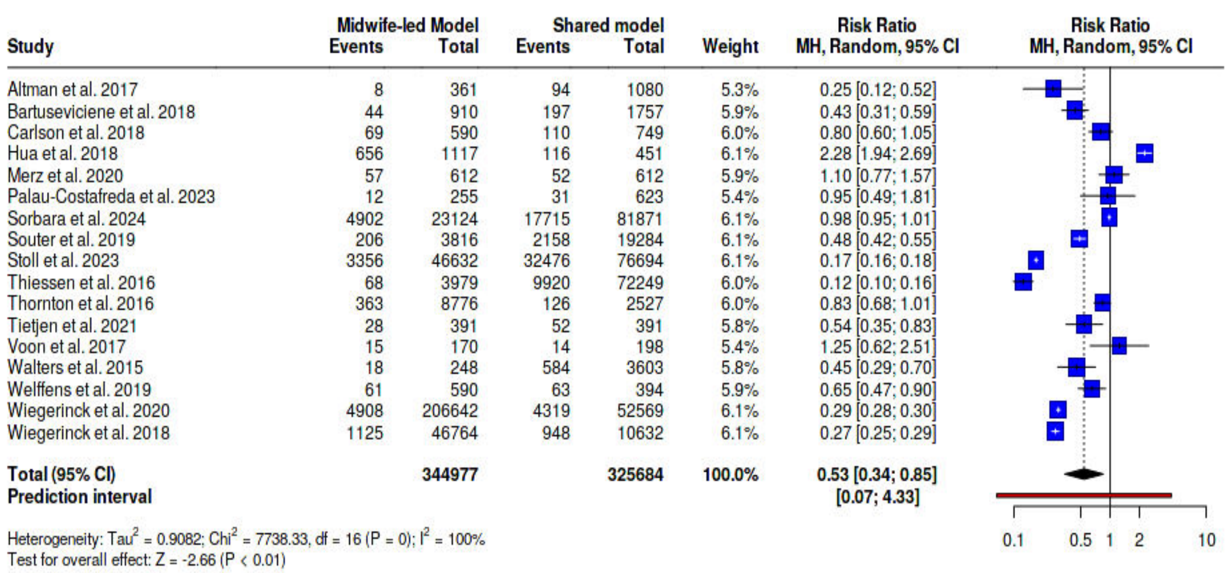
Figure 4: Forest plot showing comparison between midwife-led and shared models in terms of Assisted vaginal birth (n = 17)

Figure 4 reveals that Midwife-led model reduced the risk of assisted vaginal birth by about 45% ($p < 0.010$)



The Egger's test did not support the presence of funnel plot asymmetry (p-value: 0.907), hence no publication bias **Figure 5:** Funnel plot on studies involving C-section data

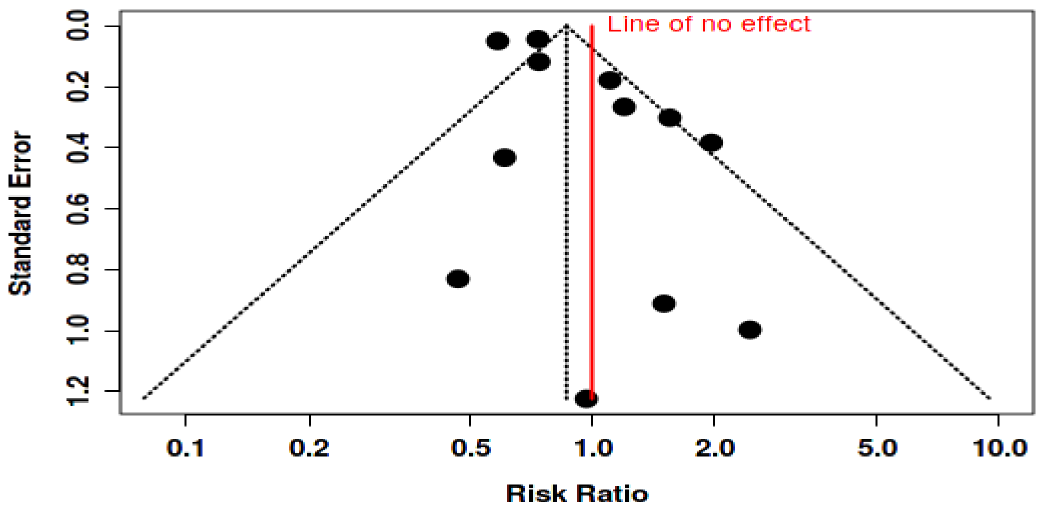
Figure 5 illustrates that the literature on C-section did not have publication bias.



Events = C-sections

Figure 6: Forrest plot showing comparison between midwife-led and shared models in terms of C-section (n = 17)

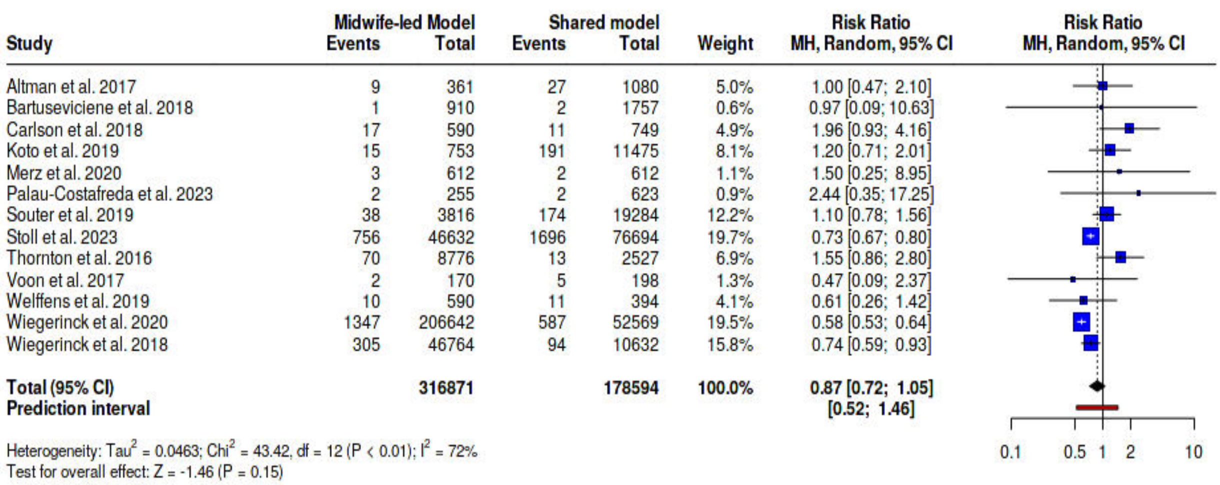
Figure 6 shows that Midwife-led model reduced the risk of C-sections by about 47% ($p < 0.010$)



The Egger's test did not support the presence of funnel plot asymmetry (p-value: 0.055), hence no publication bias

Figure 7: Funnel plot on studies involving APGAR score < 7 at 5 minutes data

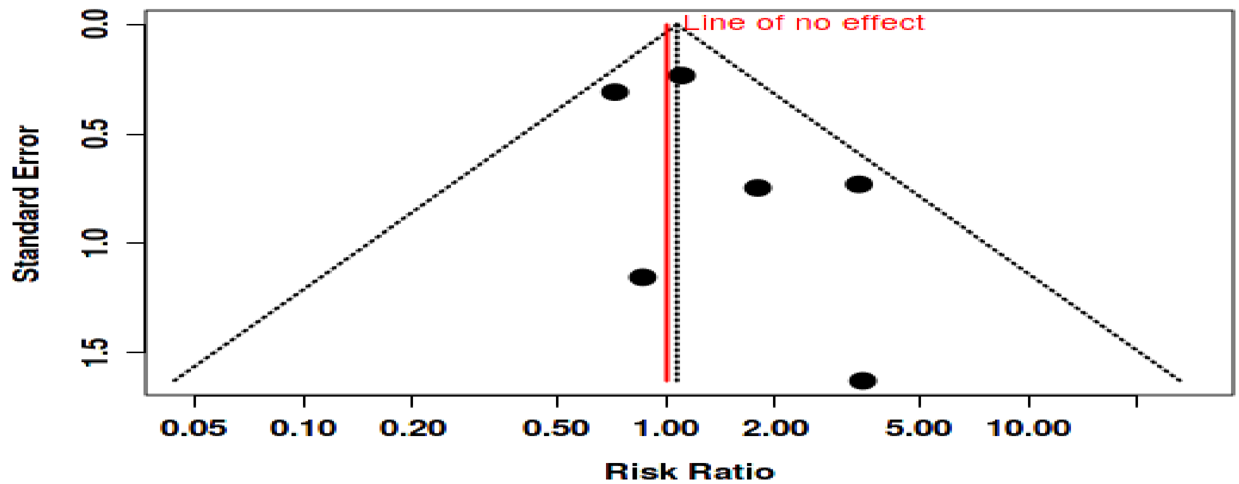
Figure 7 illustrates that the literature on APGAR score < 7 at 5 minutes did not have publication bias.



Events = APGAR score < 7 at 5 minutes

Figure 8: Forest plot showing comparison between midwife-led and shared models in terms of APGAR score < 7 at 5 minutes (n = 13)

Figure 8 shows no significant difference between midwife-led and shared models in terms of APGAR score < 7 at 5 minutes (p = 0.150)

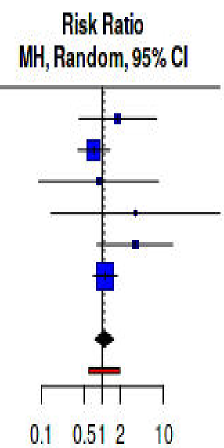


The Egger's test did not support the presence of funnel plot asymmetry (p-value: 0.261), hence no publication bias

Figure 9: Funnel plot on studies involving Stillbirth/Neonatal Mortality data

Figure 9 shows that the literature on Stillbirth/Neonatal Mortality did not have publication bias.

Study	Midwife-led Model Events	Midwife-led Model Total	Shared model Events	Shared model Total	Weight	Risk Ratio MH, Random, 95% CI
Koto et al. 2019	2	753	17	11475	5.9%	1.79 [0.41; 7.75]
Thiessen et al. 2016	11	3979	276	72249	31.9%	0.72 [0.40; 1.32]
Thornton et al. 2016	3	8776	1	2527	2.5%	0.86 [0.09; 8.30]
Voon et al. 2017	1	170	0	198	1.3%	3.49 [0.14; 85.18]
Wiegerinck et al. 2018	30	46764	2	10632	6.2%	3.41 [0.82; 14.27]
Wiegerinck et al. 2020	100	206642	23	52569	52.3%	1.11 [0.70; 1.74]
Total (95% CI)		**267084**		**149650**	**100.0%**	**1.07 [0.75; 1.54]**
Prediction interval						**[0.60; 1.92]**

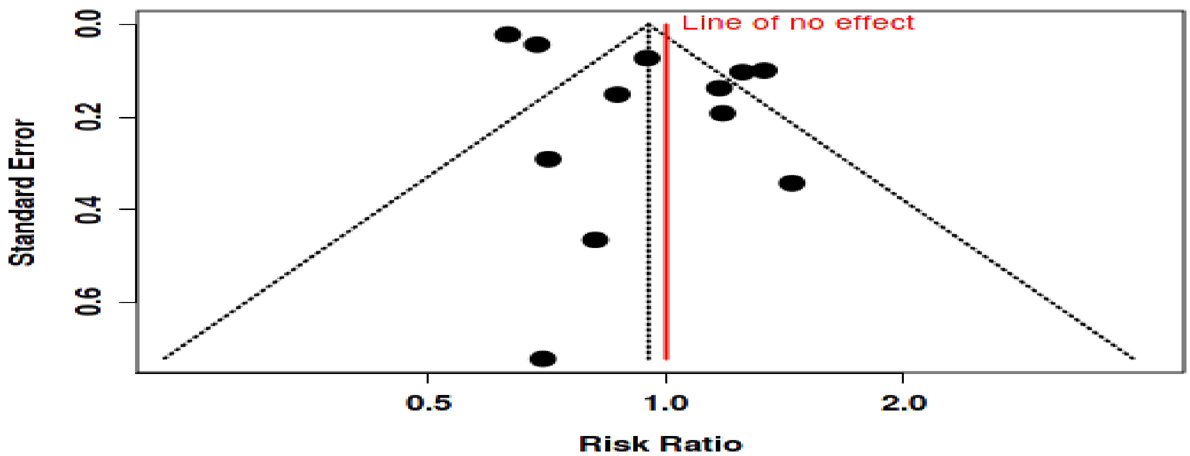


Heterogeneity: $Tau^2 = 0.0106$; $Chi^2 = 5.22$, df = 5 (P = 0.39); $I^2 = 4\%$
Test for overall effect: Z = 0.39 (P = 0.70)

Events = Stillbirth/Neonatal Mortality

Figure 10: Forest plot showing comparison between midwife-led and shared models in terms of Stillbirth/Neonatal Mortality (n = 6)

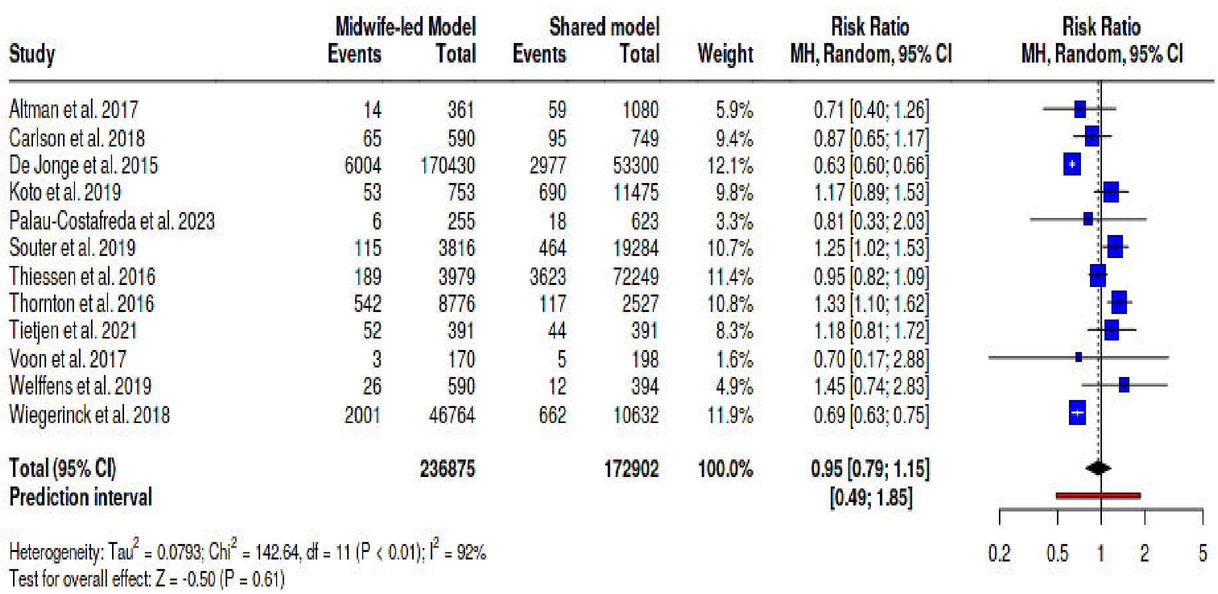
Figure 10 illustrates no significant difference between midwife-led and shared models in terms of Stillbirth/Neonatal Mortality (p = 0.700)



The Egger's test did support the presence of funnel plot asymmetry (p-value: 0.012), hence there is publication bias

Figure 11: Funnel plot on studies involving Post partum haemorrhage data

Figure 11 demonstrates that the literature on Stillbirth/Neonatal Mortality had publication bias.



Events = Post partum haemorrhage

Figure 10: Forest plot showing comparison between midwife-led and shared models in terms of Post partum haemorrhage (n = 12)

Amidst the noted publication bias, figure 10 reveals no significant difference between midwife-led and shared models in terms of Post partum haemorrhage (p = 0.61)

Discussion

The findings of this review and meta-analysis demonstrate the effectiveness of the midwife-led continuity of care model in reducing the incidence of assisted vaginal births by approximately 45% compared to the shared care model. This outcome is particularly significant as assisted vaginal births, such as vacuum or forceps deliveries, are often associated with maternal and neonatal complications, including perineal trauma, postpartum haemorrhage, and neonatal injuries. The midwife-led model likely contributes to this reduction by emphasizing personalized, continuous care throughout pregnancy, labour, and delivery. The midwife-led care model focuses on informed decision-making, shared between the midwife and the woman, reducing reliance on interventions that may arise from miscommunication or lack of personalized care. In midwife-led care, a dedicated midwife or team of midwives provides holistic and woman-centred care, fostering trust and continuity between the care provider and the mother. Women receiving continuous care from a familiar midwife are more likely to feel supported and informed, which reduces anxiety and promotes vaginal delivery. Midwife-led care emphasizes individualized care plans, evidence-based decision-making, and careful monitoring of labour progression, which can prevent unnecessary surgical intervention. This approach contrasts with shared care, where fragmented interactions with different health professionals may lead to inconsistencies and unnecessary interventions. The findings align with broader evidence from two key systematic reviews conducted by Ernawati et al. (2024) and Fikre et al. (2023), where midwife-led care is associated with better maternal outcomes, higher satisfaction rates, and fewer invasive procedures compared to traditional obstetric care.

The results of this review and meta-analysis underscore the significant impact of the midwife-led care model in reducing caesarean section (C-section) rates by approximately 47% ($p < 0.010$) compared to the shared care model. This finding is particularly critical in the context of global concerns surrounding the rising rates of C-sections, which are often associated with higher healthcare costs, prolonged recovery for mothers, and increased risks of complications in future pregnancies, such as uterine rupture, abnormal placentation, and adhesions. The midwife-led care model focuses on continuous, personalized, and woman-centred care, which plays a pivotal role in promoting natural birth processes. Midwives are trained to support physiological labour and delivery while minimizing unnecessary interventions. This approach often includes non-pharmacological pain management, active labour support, and techniques to enhance maternal confidence and comfort during childbirth. In contrast, shared care models, where care is often fragmented across multiple providers, may lead to an over-reliance on medicalized interventions, including C-sections, which can sometimes be performed for non-medical reasons such as provider preference, perceived convenience, or fear of litigation. This finding aligns with existing evidence from a systematic review by Fitriana et al. (2024) supporting midwife-led care as a safe and effective model for low-risk pregnancies, reducing medical interventions while achieving comparable or improved maternal and neonatal outcomes. Lower C-section rates also have broader implications for healthcare systems, including cost savings, reduced burden on surgical services, and improved maternal satisfaction (Bagheri et al., 2021).

The findings of this review and meta-analysis highlight that there were no significant differences between the midwife-led care model and the shared obstetrician-led care model regarding key neonatal and maternal outcomes, specifically APGAR scores below 7 at 5 minutes, stillbirth or neonatal mortality, and postpartum haemorrhage. The lack of statistical difference in APGAR scores suggests that neonatal well-being immediately after birth is comparable in both models. This indicates that midwife-led care does not compromise immediate neonatal health, reinforcing its safety for low-risk pregnancies. Similarly, the absence of significant variation in stillbirth or neonatal mortality rates between the two care models further supports the notion that midwife-led care is just as effective as shared obstetrician-led care in ensuring positive survival outcomes for newborns. These results dispel concerns that midwife-led care may be associated with higher risks for neonatal mortality or adverse outcomes. The meta-analysis showed no significant difference in postpartum haemorrhage rates. This finding is particularly important because postpartum haemorrhage is a major contributor to maternal morbidity and mortality worldwide. The comparable rates suggest that midwife-led care provides adequate monitoring and management of maternal health during and after childbirth. These results emphasize that midwife-led care is not only safe but also equally effective in maintaining maternal and neonatal health outcomes as shared obstetrician-led care as corroborated systematic reviews conducted by Fikre et al. (2023) and Wallace et al. (2024). This finding supports the argument for scaling midwife-led care models, particularly for low-risk pregnancies.

Limitations of the study

Two notable limitations of this review and meta-analysis should be acknowledged. Firstly, while the review provides robust evidence comparing midwife-led and shared obstetrician-led care, the findings were limited by the heterogeneity of the included studies. Variations in healthcare settings, care protocols, and resource availability across different regions could introduce inconsistencies in the reported outcomes. Secondly, the study primarily focuses on low-risk pregnancies, which limits its applicability to high-risk pregnancies or complex obstetric cases. Women with medical complications or pre-existing conditions often require more intensive obstetric care, and the outcomes for such populations may differ significantly when managed under midwife-led versus shared care models. As a result, the findings cannot be extrapolated to all pregnancies, and further research is needed to evaluate the effectiveness and safety of midwife-led care in high-risk settings.

Conclusions:

The midwife-led care model has many advantages, including reducing the number of assisted vaginal births and caesarean sections without affecting newborn outcomes like APGAR scores or mortality rates. In addition, this care model does not increase the risk of postpartum haemorrhage compared to care led by obstetricians. To improve maternal health and keep newborns safe, healthcare systems should work on expanding and promoting midwife-led care, especially for low-risk pregnancies. Future studies should look into the barriers that make it difficult to adopt and implement this model in different healthcare settings.

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