The Experiences of Midwives and Nurses Collaborating to Provide Birthing Care: A Systematic Review of Qualitative Evidence

by

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Dedication

For my grandmother

Mildred Irene Pearson

(1921-2011)

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Abstract

The purpose of this systematic review was to identify, appraise, and synthesize qualitative evidence about the experiences of midwives and nurses collaborating to provide birthing care, using the Joanna Briggs Institute methods. Published and unpublished sources were searched. 993 records were identified. Duplicates were removed. 875 titles and abstracts, and 104 full text records were screened. 6 studies were included in the review, 5 studies included in the meta-synthesis. 38 findings were identified and aggregated into 5 categories resulting in two synthesized findings; 1) Negative experiences of collaboration between nurses and midwives may be influenced by distrust, lack of clear roles, or unprofessional or inconsiderate behaviour and 2) If midwives and nurses have positive experiences collaborating, then there is hope that the challenges of collaboration can be overcome. Given the limited studies synthesized in this review, more research is warranted to understand how collaborative experiences occur within multiple contexts.

List of Abbreviations Used

CNM	Certified Nurse Midwife
JBI	Joanna Briggs Institute
QARI	Qualitative Assessment and Review Instrument
SOGC	Society of Obstetricians and Gynaecologists of Canada

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Chapter One: Introduction

Collaboration

Collaboration in healthcare has been a topic of interest for many years for clinicians, administrators, politicians, and decision makers as health care evolves to efficiently meet the diverse and complex health needs of individuals and families. Several professional provider organizations in North America have released joint statements indicating their ongoing commitment to collaborative maternity care (American College of Nurse-Midwives & American College of Obstetricians and Gynecologists, 2011; Canadian Nurses Association, Canadian Association of Midwives, & Canadian Association of Perinatal and Women's Health Nurses, 2011). The committed response to the importance of collaborative practice in maternity care by national provider groups is commendable. However, the complexities involved in implementing and in sustaining collaborative practice as well as reaching a common understanding of collaboration requires an understanding of current collaborative experiences (D'Amour, Ferrada-Videla, Rodriguez, & Beaulieu, 2005).

Collaboration in primary care, has become a focus to improve the quality and efficiency of health care provided to individuals and families all over the world (Chavez, 2013). Birthing care is a part of primary care, where birthing care is the provision of safe care to a woman and child during pregnancy, labour and delivery, and the postpartum period. Geographic location influences a women's access to different kinds of care providers globally. For example, in The Netherlands, 50% of women are in the care of a midwife at the beginning of delivery (Posthumus et al., 2013) and in New Zealand 75% of women choose midwives as their primary care providers (Skinner & Foureur, 2010). However, midwives attended less than 5% of births in Canada in 2010 (Canadian Association of Midwives,

2010), which means that more births are attended by physicians and obstetricians. The global variations in maternity care provider attendance reflect different approaches to maternity care. There are also variations in types of maternity care providers. For example, midwives may be referred to as; nurse-midwives, direct entry midwives, traditional birth attendants or lay midwives. Physicians may include general practitioners or specialists such as obstetricians. The model of care may determine if and how nurses collaborate with midwives and physicians. These variations provide an opportunity to explore multiple models of collaborative maternity practice and to understand collaborative experiences from the perspective of numerous maternity care providers globally.

The normalization of the overuse of technology such as elective induction, elective cesarean sections, and continuous fetal monitoring in birth has led to the medicalization of birth (Shaw, 2013). The resurgence of midwifery care in countries such as Canada has occurred in response to this overuse (Shaw, 2013). In a Cochrane Collaboration systematic review of thirteen articles that involved 16,242 women with low and increased risk of complications (Sandall, Soltani, Gates, Shennan, & Devane, 2013), the authors found that the main benefits of midwife-led continuity of care models were fewer episiotomies or instrumental births and a reduction in the use of epidurals. Canadian researchers have noted that the increase in cesarean section rates has prompted an interest towards examining both collaborative efforts among health care providers and provider attitudes about birthing care as attempts to lower this rate (Harris et al., 2012; Klein et al., 2009; McNiven et al., 2011). In other countries, for example the Netherlands, a relatively high perinatal mortality rate and history of a siloed approach to maternity care has directed researchers to explore

collaborative care as an intervention to lower these rates and improve the delivery of quality maternity care (Posthumus et al., 2013).

The health care providers most frequently reported in the literature about collaboration in maternity care are physicians and midwives (Angelini, O'Brien, Singer, & Coustan, 2012; Jackson et al., 2003; Marshall et al., 2012; Menasche, 2013; Nielsen et al., 2012; Pecci et al., 2012; Rayner, McLachlan, Peters, & Forster, 2013; Stevens, Witmer, Grant, & Cammarano, 2012; vander Lee, Driessen, Houwaart, Caccia, & Scheele, 2014; Watson, Heatley, Kruske, & Gallois, 2012). Researchers and authors have attributed this focus on a dichotomy of philosophies between midwives and physicians and it is believed that this dichotomy is historically influenced (Munro, Kornelsen, & Grzybowski, 2013; vander Lee et al., 2014; Watson et al., 2012). For example, Munro, Kornelsen, and Grzybowski (2013), identified physicians' resistance to homebirth as a contributing factor to the current challenges of inter-professional collaboration with midwives in British Columbia, Canada in their qualitative study of 55 participants. In order to overcome this resistance, Watson, Heatley, Kruske, and Gallois (2012) concluded, in a study that surveyed 281 midwives, 35 obstetricians, and 21 general practitioners in Australia, that a transformation of philosophies of maternity care is required amongst care providers. Moreover, Van der Lee, Driessen, Houwaart, Caccia and Scheele (2014) concluded, in their literature review about the history of inter-professional collaboration in maternity care in the Netherlands, that an improved understanding of the historical efforts of collaboration could inform solutions to current challenges in collaborative maternity care.

While much of the literature has focused on the collaborative relationships and attitudes of midwives and physicians, there are other care providers who also contribute to

collaborative maternity care. These providers include nurses and doulas, and they work with midwives and physicians in the delivery of birthing care. Nurses, like midwives, provide direct care to women and families during labour and delivery. However, despite the similarity of their roles, there are differences (Canadian Nurses Association, Canadian Association of Midwives, & Canadian Association of Perinatal and Women's Health Nurses, 2011). For example, in Canada, although nurses have a long-standing history of providing maternity care within the health care system, midwives have not. Regulated midwifery was first introduced in Ontario, Canada in 1993 (College of Ontario Midwives, 2014) and has been ongoing throughout Canada since 1993.

As a result of recent midwifery integration, researchers have identified collaborative challenges for midwives and nurses in Canada (Bell, 2010; Bourgeault, 2000; Brown et al., 2009; Kornelsen, Dahinten, & Carty, 2003; Kornelsen & Carty, 2004; Munro, Kornelsen, & Grzybowski, 2013; Zimmer, 2006). For example, role confusion for nurses working with recently integrated midwives was a common theme identified in qualitative studies by several Canadian researchers (Bell, 2010; Kornelsen et al., 2003; Kornelsen & Carty, 2004; Munro et al., 2013; Zimmer, 2006). The theme of role confusion was highlighted due to the perceived similarity in roles shared by these two professions, resulting in nurses reporting feelings of redundancy (Munro et al., 2013; Zimmer, 2006). Of the regulated maternity care providers, midwives and nurses are the clinicians who spend time with women, particularly when providing care during labour and delivery. When midwives and nurses provide collaborative birthing care, the time they spend with the clients becomes the time spent with one another. This type of collaboration is different from a consultation or referral, or even a shared office space. The collaborative experiences of midwives and nurses is under

researched. Specifically, an exploration of what the experiences of collaboration are for midwives and nurses, how collaboration is supported, and how the similarity of their roles influences their collaborative efforts is needed. A synthesis of the current literature will contribute to an understanding of what is currently known about the collaborative experiences of midwives and nurses and assist in identifying future directions for researchers and policy makers.

Summary

Collaboration is recognized as an important component for the delivery of safe and effective maternity care. This recognition has been positively impacted by both the increase in the use of technology and a trend of medicalized births. However, there has been a tendency for researchers to primarily focus on the collaborative efforts of physicians and midwives with less attention paid to the collaborative efforts of midwives and nurses. Despite this tendency, as new models of care are introduced, in addition to new care providers, it has become increasingly important to examine the collaborative experiences of other members of the maternity care team. Of particular interest are the collaborative experiences of midwives and nurses. These providers spend the most time with clients during labour and delivery. Despite their respective contact time with clients, studies exploring the subject of midwife nurse collaboration have been limited by small numbers and have not been synthesized to provide clinicians with evidence to inform their practice. In order to further understand these collaborative experiences, a synthesis of the current literature will clarify our current understanding of midwives and nurses and will provide a backdrop for future research. These future efforts will enhance the experiences of care providers in these various contexts and of the women for whom midwives and nurses provide care.

Research Aims

The aim of this research is to explore the experiences of midwives and nurses who collaborate with each other to provide birthing care. Systematic review methodology will enable this exploration. A comprehensive understanding of the experiences of midwives and nurses, from a global perspective, has the potential to influence and shape collaborative maternity models of care in areas where midwives are members of maternity care teams and in areas where midwives are newly integrated or have the potential to become members of existing maternity care teams. It is expected that a comprehensive understanding of the collaborative experiences of midwives and nurses will provide anticipatory guidance to clinicians, administrators, politicians, and decision makers in developing and sustaining collaborative maternity care teams.

Chapter Two: Literature Review

The literature review contains three sections: 1) a definition of collaboration and exploration of how collaboration impacts health care, 2) an examination of the facilitators and barriers of collaboration and the provision of collaborative birthing care, and 3) the collaboration of care providers and care provider attitudes and beliefs about collaboration and birthing care. Collectively, these sections will provide a review of literature about collaboration in health care, more specifically collaboration for providers of birthing care.

Collaboration and Impact on Care

Multiple definitions and understandings of collaboration amongst health care professionals has been identified as a current challenge to the implementation of effective collaborative practice in health care (Nolte & Trembley, 2005). Contributing to the lack of a clear definition of collaboration is the tradition of health care providers working within the silos of their own disciplines (D'Amour et al., 2005; Nolte & Trembley, 2005). That is, health care providers have collaborated with members of their own disciplines and interacted with members of other disciplines, but each have not integrated in order to fully collaborate with colleagues from other disciplines (Steel, Buttaro, & Trybulski, 2008). The response to increasing demand for collaborative health care teams has been impeded by the various concepts of collaboration that have resulted from a tradition of this siloed approach to care. In this section, the concept of collaboration will be addressed and defined.

Definition.

Collaboration and collaborative practice have different meanings to different people (Watson et al., 2012). Researchers, organizations such as the World Health Organization, and professional health care associations have all developed definitions of collaboration. Many of

the definitions of collaboration share similar elements, however the challenge is having health care professionals agree upon one comprehensive definition that is inclusive of all variations within the meaning of collaboration.

Thomson, Perry, and Miller (2009) identified five overall dimensions of collaboration in their model of collaboration. The dimensions include: governance, administration, mutuality, norms, and organizational autonomy (Thomson, Perry, & Miller, 2009). Thomson et al. (2009) aimed to conceptualize and measure collaboration through the use of field research used to test the validity of a multidimensional model of collaboration. The field research included both interviews with directors of organizations and case studies to uncover these five dimensions (Thomson et al., 2009). Each of the five dimensions was categorized as either structural, social capital, or agency (Thomson et al., 2009). The five categorized dimensions were used by Thomson et al. (2009) to arrive at the following definition of collaboration,

> Collaboration is a process in which autonomous or semi-autonomous actors interact through formal and informal negotiation, jointly creating rules and structures governing their relationships and ways to act or decide on the issues that brought them together; it is a process involving shared norms and mutually beneficial interactions. (p. 25)

This definition of collaboration incorporates the dimensions identified by Thomson et al, (2009) and also refers to collaboration as a process. In other words, collaboration is not something to be arrived at, but rather a continually evolving concept that adapts to the interactions, rules, relationships, and shared norms of the participants. The notion of collaboration as a process and not an arrived at point in time has been echoed by D'Amour et

al. (2005) and captures the importance of time in the evolution of collaborative practice. Moreover, this definition highlights the roles of informal and formal interactions and acknowledges that collaboration occurs between autonomous and semi-autonomous participants. If applied to maternity health care collaboration, this definition would be inclusive of all members of the team, including the women being cared for, families, and care providers outside of the hospital, such as alternative health care providers.

A literature review conducted by a Canadian nurse and medical researchers examined literature that provided definitions of collaboration and theoretical frameworks for collaboration (D'Amour et al., 2005). Twenty-seven articles were selected and 17 articles met the criteria of the topics being examined (D'Amour er al., 2005). The concepts that were identified as contributing to collaboration were: interdependency, power, sharing, and partnership ((D'Amour er al., 2005). Another key aspect of collaboration that was identified by these authors was the concept that collaboration is a process (D'Amour er al., 2005). More specifically, collaboration is a process that is not limited to the professional realm of health care provision, but rather a process that extends to all aspects of being a human ((D'Amour er al., 2005). These concepts contribute to the definition of collaboration offered by D'Amour et al (2005), "The term collaboration conveys the idea of sharing and implies collective action oriented toward a common goal, in a spirit of harmony and trust, particularly in the context of health professionals," (p.116). The emphasis placed on the process of collaboration underlines an understanding of collaboration as ongoing and not something that has an ending.

Collaboration and collaborative care for clinicians and health care providers have been promoted through the identification of key elements of collaboration in textbooks. For

example, in a textbook about collaborative practice for primary care, Steel, Buttaro, and Trybulski (2008) discussed several components required for collaboration. The components included the need for health care providers to; recognize patient needs, understand other disciplines, and trust and respect team members (Steel, Buttaro, & Trybulski, 2008). In addition to these elements, the authors recognized the role of time and the need for clinicians and health care providers to have time for meetings (Steel et al., 2008). Although these authors did not provide a specific definition of collaboration, identifying elements of collaboration for health care providers is a beginning point for further conversation about the implementation of both collaboration and collaborative practice.

A definition of collaborative practice developed by the World Health Organization (Health Professions Network Nursing and Midwifery Office, 2010), as part of a framework for collaborative practice and inter-professional education, was adopted in a textbook for health care providers (Thistlethwaite, 2012). The definition stated that, "Collaborative practice in health-care occurs when multiple health workers from different professional backgrounds provide comprehensive services by working with patients, their families, carers and communities to deliver the highest quality of care across settings," (Thistlethwaite, 2012, p. 13). The purpose of the textbook was to provide a framework for collaborative practice in primary health care (Thistlethwaite, 2012). The interesting contribution of this definition of collaborative care is the use of plain language. Plain language may be a way to unify the understanding of collaboration and collaborative practice amongst health care providers with a variety of backgrounds.

The World Health Organization issued a report about inter-professional collaboration from the perspectives of nursing and midwifery (Chavez, 2013). The author of the report

argued that in order to strengthen health care systems and improve health outcomes, collaborative practice is required (Chavez, 2013). In the report, the authors identified barriers and enablers for collaborative practice. The enablers identified for collaborative practice included: leadership, institutional support, mentoring and learning, a shared vision, and a working environment that physically enabled collaboration (Chavez, 2013). This report, regarding collaborative practice within the context of nursing and midwifery, is particularly relevant for this study given the attention paid to midwifery and nursing perspectives.

Two examples of professional healthcare associations, which have defined or jointly addressed collaboration can be found in the United States and in Canada. First, the American College of Nurse-Midwives, together with the American College of Obstetricians and Gynecologists issued a joint statement regarding practice relations (2011). This joint statement highlighted the importance of mutual trust and respect, and professional accountability and responsibility for collaboration between these two professional groups (2011). Second, the Society of Obstetricians and Gynaecologists of Canada (SOGC) developed a definition of collaboration (2006) which was adopted by the Canadian Association of Midwives, the Canadian Nurses Association, and the Canadian Association of Perinatal and Women's Health Nurses in a joint position statement about collaborative care (2012). The SOGC definition of collaboration emphasized communication, care provider participation, and respect for other health disciplines. Moreover, the SOGC definition of collaboration has been chosen as to be used in definition of terms for this systematic review because of it has been adopted by midwives, nurses, and obstetricians to guide collaborative practice in maternity care. The adoption of one definition for collaboration to guide practice

by three maternity health care providers in Canada is unique and illustrates a unified understanding of collaboration not recognized in other countries.

Several common concepts associated with definitions and understandings of collaboration and collaborative practice in health care have been identified in this section. These concepts, in addition to others, will be explored in more depth in the section, Collaboration and the Provision of Care. For now, an exploration of the types of collaboration will be reviewed.

Inter-professional versus multi-professional.

The terms inter-professional or interdisciplinary and multi-professional or multidisciplinary are often referred to in the context of discussions about collaboration in health care. These terms relate to the dynamic of how health care providers work in relation to one another. For example, Thistlethwaite (2012), described the inter-professional approach to collaborative care as one which includes health care providers from various professions working together to provide health care. This is different from the multi-professional approach, which occurs when multiple health care provides work in parallel without working together (Thistlethwaite, 2012). In other words, the inter-professional approach to healthcare is collaborative and the multi-professional approach is not. What makes these concepts confusing is the impression that both types of approaches are collaborative because several different professional groups can be seen to be working side by side. Moreover, the provider groups themselves may view their collaboration as inter-professional by virtue of working parallel to one another, when in fact they are working multi-professionally because their interactions are not integrated. The strength of Thistlethwaite's (2012) definitions of inter-

professional and multi-professional collaboration is the succinctness and clarity in descriptions of these terms.

The Multidisciplinary Collaborative Primary Maternity Care Project report was published by the Society of Obstetricians and Gynaecologists of Canada in 2006. The objectives of the report were a) develop guidelines for multidisciplinary collaborative care models, b) determine current national standards for terminology and scopes of practice, c) harmonize standards and legislation, d) increase collaboration among professionals, e) change practice patterns, f) facilitate sharing information), and g) promote benefits of multidisciplinary collaborative maternity care (SOGC, 2006). Specific to collaboration were the objectives of increasing the collaboration of health professionals, and promotion of the beneficial aspects of multidisciplinary collaborative maternity care (SOGC, 2006). The objectives regarding collaboration identified the need to increase collaborative practice amongst maternity care providers, and the need to promote the benefits of collaborative maternity care. Multidisciplinary collaboration was referred to throughout the report; however, the definition of collaboration that was used in this report does not overtly refer to collaboration as specifically multidisciplinary. Instead, the references to the care providers working together include the need to sustain communication and respect within and amongst disciplines (SOGC, 2006). Despite a declaration of an interest in multidisciplinary collaboration, the language used in the SOGC definition indicated an understanding of collaboration from both a multidisciplinary and interdisciplinary approach. The lack of clarity around the meaning of collaboration and terms used to describe collaboration was identified as a challenge throughout the creation of the report (SOGC, 2006).

The author of a report published by the World Health Organization (Chavez, 2013) identified that the inconsistencies in the use of language and variations in understanding of collaborative practice are barriers to successful collaborative practice (Chavez, 2013). In addition to being barriers to collaborative practice, the variation in terms used to describe collaborative practice and the various understandings of collaborative practice created challenges in collecting data for the report (Chavez, 2013). The author of the report consistently described collaborative practice as inter-professional collaborative practice (Chavez, 2013). Given the stated observation about the variations in descriptions of collaborative practice, the consistency of using inter-professional collaborative practice throughout the document assists in bringing clarity to the terms used to describe collaborative practice. The presentation of clear terms through international organizations such as the World Health Organization can contribute to improved understandings of collaborative practice for health care providers.

Reflecting on the way that the terms interdisciplinary and multidisciplinary have been used in describing collaborative practice; it becomes evident that language plays a significant role in either facilitating or challenging the process of collaboration. A consistent definition of collaborative practice can support improved understandings of collaboration in health care. The integrative and inclusive approach to collaboration that inter-professional collaboration offers influenced the decision to use the definition of collaboration developed by the Society of Obstetricians and Gynaecologists of Canada (2006) to guide this systematic review.

Shared care and trans-disciplinary care.

Shared care has been defined as when care providers from different disciplines provide maternity care collaboratively (Posthumus et al., 2013; Sandall et al., 2013). In

shared care, providers from different professional backgrounds share the responsibility of care for women throughout the perinatal period (Sandall et al., 2013). In the Netherlands, researchers are suggesting a move toward a shared care model of maternity care in an effort to reduce high perinatal mortality rates (Posthumus et al., 2013). Shared care involves interdisciplinary collaboration where responsibility for the individuals receiving care is shared by the care providers providing the care (Posthumus et al., 2013; Sandall et al., 2013). In this model, it is a response to women's needs that drive the health care provided by health care professionals. Shared care moves away from a system of referrals toward an integrated approach of health care provision by health care providers with various professional backgrounds (Posthumus et al., 2013). Researchers in the Netherlands are piloting this model (Posthumus et al., 2013). These researchers aim to use the findings from their pilot study to inform future policy in the Netherlands and globally, where similar maternity health care systems exist.

Trans-disciplinary is a term that is used to describe collaborative health care teams consisting of providers who transcend the traditional boundaries of professional roles and embrace sharing of knowledge and skills (D'Amour et al., 2005). An example of trans-disciplinary care could be a model of shared care, where roles traditionally defined by discipline become blurred (D'Amour et al., 2005). Consensus is also a key element of trans-disciplinary collaborative care (D'Amour et al., 2005). Trans-disciplinary collaboration is perhaps the most integrated form of collaborative practice because responsibility is shared amongst all providers.

Shared care and trans-disciplinary collaborative care offer insight into potential innovations of the provision of maternity care. The implementation of different models of

care that embrace and support collaboration amongst health care providers are opportunities to learn about these new models and their implications for improving context specific health outcomes.

Outcomes of collaboration.

In 2006, the World Health Organization estimated a global shortage of over 4 million health care providers such as nurses, midwives, and doctors (Chen et al., 2006). The Multidisciplinary Collaborative Primary Maternity Care Project was initiated in Canada to address the projected shortage of health care providers, through the identification and support of collaborative practice amongst maternity care providers (Society of Obstetricians and Gynaecologists of Canada, 2006). Steel et al. (2008) recognized the potential of collaboration in health care as a method to provide high quality health care, but acknowledged that it has not yet fulfilled its potential. The attention paid to collaboration and the potential it holds for adding sustainability to a health care system that suffers from a lack of needed health care providers requires an exploration of the outcomes of collaboration and collaborative practice.

Outcomes of collaborative care can include both health outcomes and practice outcomes. The results of a literature review and collaborative framework analysis indicated that an improvement in the effectiveness of both treatment and quality of care were common outcomes of collaboration (D'Amour et al., 2005). D'Amour et al (2005) also reported findings of outcomes of collaborative practice such as, a reduced turnover of professionals, increased coordination, shared responsibility, and innovation. These additional findings were all related to the health care provider and how collaboration supported practice. At the time that this study was published, the authors suggested that collaboration and the outcomes of collaboration must be presented more clearly (D'Amour et al., 2005).

The Cochrane Collaboration published a systematic review about inter-professional collaboration and how practice-based interventions affect the outcomes for professional practice and healthcare (Zwarenstein, Goldman, & Reeves, 2009). Zwarenstein et al. (2009) defined inter-professional collaboration as a process that involves health care providers from various disciplines working together toward the goal of positive health outcomes. The results of the review were based on findings retrieved from five studies used to inform this systematic review (Zwarenstein et al., 2009). Of the five studies used for this systematic review, three reported improved patient care (Zwarenstein et al., 2009). Examples of improved patient care included; shortened hospital stay, drug use, and cost of hospital services (Zwarenstein et al., 2009). In the two remaining studies that were part of the systematic review by Zwarenstein et al. (2009), one study concluded that collaborative care did not impact patient care, while the other study provided mixed results for the effects of collaborative practice on health outcomes.

A limitation of the systematic review by Zwarenstein et al. (2009) was that the studies that were included were only randomized control trials. This limitation was reflected in a very small sample size, of five studies that were included for synthesis. The small sample size indicates a gap in the literature regarding interventions that improve collaboration between health care professionals. It also highlights the need to include qualitative research about collaboration in order to gain a more comprehensive understanding of the effects of collaboration on a variety of health outcomes (Zwarenstein et al., 2009). A synthesis of existing qualitative data about collaborative experiences between healthcare providers will begin to address this gap and provide direction for future research.

Health outcomes associated with the collaboration of health care providers in maternity care have been identified as, a) lower cesarean section rates (Avery, Montgomery, & Brandl-Salutz, 2012; Harris et al., 2012; Jackson et al., 2003; Nielsen et al., 2012), b) reduction in the use of epidural anesthesia for pain management (Cordell, Foster, Baker, & Fildes, 2012; Harris et al., 2012; Jackson et al., 2003), c) reduced rates of episiotomies (Jackson et al., 2003; Nielsen et al., 2012), d) increased breastfeeding rates (Harris et al., 2012; Jackson et al., 2003), and e) improved patient satisfaction (Avery et al., 2012; Pecci et al., 2012). The improved health outcomes are specific to maternity care and the evidence supporting improved outcomes of collaborative maternity practice was limited. Most of the research was context specific and was presented alongside qualitative explanations of the processes of collaborative practice. Although the authors of one study specifically examined the outcomes of collaborative care in a birth centre (Jackson et al., 2003), there were no large scale studies comparing the outcomes of collaborative birthing care to non-collaborative birthing care.

Jackson et al. (2003) concluded that the health outcomes for a collaborative and traditional model of maternity care were safe, however these authors demonstrated that collaborative care resulted in the use of fewer medical resources and fewer operative deliveries. In the collaborative model of care, certified nurse-midwives and obstetricians worked together in the same practice to provide perinatal care (Jackson et al., 2003). In the traditional model of care, physicians, obstetricians, and residents provided perinatal care to women (Jackson et al., 2003). Safety was demonstrated by similar outcomes for maternal morbidity between both models of care and similar neonatal outcomes for both models of care (Jackson et al., 2003). For example, 5.8% of women in the collaborative care model had

major antepartum complications compared with 6.4% of women in the traditional care model, and the collaborative model of care had a 0.2% rate of early neonatal deaths (0-28 days) compared with the traditional model, which had a rate of 0.3% (Jackson et al., 2003). The limitation of this study was that it was confined to only one birth centre and was not a large-scale study. Jackson et al. (2003) concluded that collaborative practice in maternity care results in the use of fewer medical resources and that supporting the efforts to implement collaborative care could be a means to improve the cost effectiveness of care provision. The relationship between overspending and overuse of technology in birthing care has been identified (Davis-Floyd, Barclay, Daviss, & Tritten, 2009) and warrants further study and recognition, especially as budgets for health care become more restrictive. The potential cost-effectiveness of collaborative practice is a particularly attractive outcome for administrators and government officials who are continually being expected to provide more services with less financial resources.

The outcomes of collaborative practice have generally been associated with improvements in health and improvements in the practice of health care providers. Given the paucity of research in the areas regarding the relationship between collaborative practice and improved health outcomes for patients, specifically in the area of birthing care, more research is needed. This additional evidence will support improved outcomes in collaborative maternity care practice and could be used to support innovative collaborative maternity care models, such as the creation of teams of midwives and nurses working together to provide home birth services to low-risk women and their families.

Collaboration and Provision of Birthing Care

Collaboration is not something that simply occurs. Collaboration has been referred to as a process (D'Amour et al., 2005; San Martín-Rodríguez, Beaulieu, D'Amour, & Ferrada-Videla, 2005; Thomson et al., 2009; Waldman & Kennedy, 2012). Collaboration, like any process involving human beings, is complex and contextually informed (Chavez, 2013; D'Amour, Goulet, Labadie, Martin-Rodriguez, & Pineault, 2008). Specific elements must be in place in order for collaboration to be successful. With this in mind, it is important to explore the facilitators for and the barriers to the provision of collaborative health care.

Facilitators.

Facilitators and enablers for collaboration and collaborative practice have been identified by several researchers (Avery et al., 2012; Chavez, 2013; Cordell et al., 2012; Downe, Finlayson, & Fleming, 2010; Munro et al., 2013; Posthumus et al., 2013; San Martín-Rodríguez et al., 2005; Thistlethwaite, 2012; Waldman & Kennedy, 2012). Each of the lists of facilitators varied, with some researchers including facilitators that others did not include. Examples of facilitators that only appeared in one list of facilitators are, leadership (Thistlethwaite, 2012), a positive attitude, (Downe et al., 2010), and professional competence (Waldman & Kennedy, 2012). There were, however, some common concepts listed as facilitators to collaboration and to collaborative practice throughout the literature. The common facilitators will be identified and addressed in the following paragraph. All of the studies included models or frameworks created for collaboration or collaborative practice, with the exception of three studies.

The three studies that were not models or frameworks for collaboration or collaborative practice were Downe et al. (2010), Cordell et al. (2012), and Munro et al.

(2013). Downe et al. generated findings from a literature review, Cordell et al. (2012) used findings from a case study, and Munro et al. used findings from a study that used a qualitative exploratory framework. Downe et al. did not state how many studies were included in their literature review, nor the types of studies included. Munroe et al. did not include details about the type of qualitative exploratory framework that was used to guide their study.

The most common facilitators identified by researchers were; communication, clarity of roles, respect, trust, supportive institutions/organizations/culture, shared values or shared vision, a willingness to collaborate, and inter-professional education (Avery et al., 2012; Chavez, 2013; Cordell et al., 2012; Downe et al., 2010; Health Professions Network Nursing and Midwifery Office, 2010; Munro, Kornelsen, & Grzybowski, 2013; Posthumus et al., 2013; San Martín-Rodríguez et al., 2005; Thistlethwaite, 2012; Waldman & Kennedy, 2012). Each of these concepts was identified in three or more studies by the authors listed previously. The most common facilitator identified for successful collaborative practice was communication (Avery et al., 2012; Cordell et al., 2012; Downe et al., 2010; Munro et al., 2013; Posthumus et al., 2013; San Martín-Rodríguez et al., 2005; Thistlethwaite, 2012; Waldman & Kennedy, 2012). The need for communication to be both open and clear between health care providers from different disciplines was also identified (Avery et al., 2012; Cordell et al., 2012; Downe et al., 2010; Munro, Kornelsen, & Grzybowski, 2013; Posthumus et al., 2013; San Martín-Rodríguez et al., 2005; Thistlethwaite, 2012; Waldman & Kennedy, 2012). It is interesting that this concept was the most common facilitator because the sustainment of this concept is reliant on many of the other concepts identified as facilitators to collaborative practice in health care.

Role clarity was identified as the second most important facilitator for collaboration in health care (Cordell et al., 2012; Downe et al., 2010; Munro et al., 2013; Posthumus et al., 2013; Thistlethwaite, 2012; Waldman & Kennedy, 2012). This was identified as an important facilitator for collaborative practice because in its absence health care providers worried about diminished roles and loss of professional identity, (Cordell et al., 2012) and providers experienced feelings of redundancy (Munro et al., 2013) when new health care providers were integrated into the maternity care team. In other words, ensuring that health care providers were clear about the expectations of their professional roles in collaborative models reduced anxieties of being replaced and concerns of being excluded.

The third most common facilitators related to collaborative practice for health care providers were trust (Avery et al., 2012; Downe et al., 2010; Munro et al., 2013; San Martín-Rodríguez et al., 2005; Waldman & Kennedy, 2012), respect (Avery et al., 2012; Cordell et al., 2012; Munro et al., 2013; San Martín-Rodríguez et al., 2005; Waldman & Kennedy, 2012), and supportive organizations/institutions/culture (Avery et al., 2012; Chavez, 2013; Cordell et al., 2012; Downe et al., 2010; Health Professions Network Nursing and Midwifery Office, 2010; San Martín-Rodríguez et al., 2005). Trust and respect were identified as important facilitators of collaborative practice as they relate to the process of health care providers building relationships that support collaborative practice (Avery et al., 2012; Cordell et al., 2012; Waldman & Kennedy, 2012). Support from organizations, institutions, and culture was identified as important in sustaining collaborative practice. Organizational or institutional support was categorized by San Martin-Rodriguez et al. (2005) as determinants of collaborative practice. Organizational determinants through formalized means support individuals who engage in collaborative practice (2005). Cultural support would be

categorized as a systemic determinant of collaborative practice (San Martín-Rodríguez et al., 2005).

Shared values and vision, (Chavez, 2013; Posthumus et al., 2013; Waldman & Kennedy, 2012) willingness to collaborate, (Avery et al., 2012; Cordell et al., 2012; San Martín-Rodríguez et al., 2005) and inter-professional education (Chavez, 2013; Posthumus et al., 2013; Waldman & Kennedy, 2012) were the final three common facilitators identified in the literature. Shared values and shared vision were important in uniting health care providers in the care that they provide (Chavez, 2013). San Martín-Rodríguez, Beaulieu, D'Amour, and Ferrada-Videla (2005) highlighted, in their literature review, that a willingness to collaborate was not only a facilitator to collaborative practice, but a necessity because health care providers could not be made to collaborate if they were not willing to do so. In other words, all other facilitators of collaboration could not overcome the absence of a willingness to engage in collaboration.

Inter-professional education was discussed by authors in several studies (Avery et al., 2012; Blanchard & Kriebs, 2012; Chavez, 2013; Cordell et al., 2012; Health Professions Network Nursing and Midwifery Office, 2010; Marshall et al., 2012; Nielsen et al., 2012; Waldman & Kennedy, 2012; Watson et al., 2012). For example, inter-professional learning opportunities that begin with integrated education/training of health professional students from multiple disciplines was identified by Waldman, Kennedy, and Kendig (2012) as essential for the creation of a shared culture of maternity care. This argument, for integrated education for students in health care, was based on a presentation by Waldman et al. (2012) for the American College of Obstetricians and Gynecologists, and the American College of Nurse Midwives. Collaborating through the training and education required to become a

health care professional serves as a blueprint for future collaborative practice, enhancing understandings of various disciplines within health care, and supporting transformative health care delivery (Health Professions Network Nursing and Midwifery Office, 2010).

The facilitators for collaboration and collaborative health care have been explored and the findings illustrate an interrelatedness of concepts. That is to say, many of the concepts identified as facilitators for collaboration in health care support the existence of other facilitators. Collaboration in health care could be threatened by an absence of one or more of these interdependent facilitators. Given the multitude and variety of facilitators that contribute to successful collaboration, it is important to explore the experiences of collaboration in order to understand how these facilitators influence the process of collaborative practice.

Barriers.

Researchers have presented the absence of previously discussed facilitators as a barrier to collaboration and collaborative practice. Lack of respect, (Kennedy & Lyndon, 2008a; Peterson, Medves, Davies, & Graham, 2007) lack of clearly defined roles, (Bell, 2010; Kornelsen, Dahinten, & Carty, 2003) and lack of knowledge of other health disciplines (Chavez, 2013; Kornelsen et al., 2003) are three examples of facilitators that become barriers when they are absent from collaborative care. Given the interdependence of these factors of collaboration, the absence of one can affect the presence of another and as such become a barrier for effective collaborative practice.

Poor communication was highlighted as the most common barrier to collaboration and collaborative practice in health care (Bell, 2010; Brown et al., 2009; Chavez, 2013; Kornelsen et al., 2003). According to Chavez (2013), the inability to use terms consistently

to refer to various aspects of collaboration is a barrier to collaborative practice. For example, consistency in the terminology and language of collaboration would help to unify an understanding of collaboration for health care providers.

Other barriers identified by researchers were: resistance to change (Brown et al., 2009; Cordell et al., 2012), different philosophies (Kennedy & Lyndon, 2008; Smith et al., 2009), perceived threat to professional role (Kornelsen, Dahinten, & Carty, 2003; Peterson et al., 2007), and insurance and liability (Peterson et al., 2007; Smith et al., 2009). Resistance to change was identified as a barrier for collaborative practice for nurses who were questioned about working with different maternity care providers in Canada (Brown et al., 2009). The different philosophies of care were a barrier when midwives and members of the traditional medical model collaborated to provide birthing care (Kennedy & Lyndon, 2008; Smith et al., 2009). For example, in Kennedy and Lyndon's ethnographic study (2008) about how nurses and midwives collaborate, she uncovered the impact that different philosophies of care had on health care providers' ability to engage in genuine collaboration. Similarly, in the descriptive study by Smith et al. (2008), the findings indicated that different philosophies of the provision of birthing care were barriers to both midwives and physicians. This is not to say that philosophical differences do not impact the collaborative practice of professions with a history in traditional medical, but rather that the differences in philosophies of care is an evident barrier when midwives enter maternity care teams.

A perceived threat to the professional role of health care providers (Kornelsen et al., 2003; Peterson et al., 2007) is another example of a barrier to successful collaborative practice. Peterson et al. (2007) identified territoriality of professional roles as a barrier to collaboration. Peterson et al. interviewed participants in their qualitative descriptive study

and found that the history of midwifery, nursing, and medicine had contributed to role territoriality. In the mixed methods study by Kornelsen et al. (2003), the perceived threat to the professional role of midwives by nurses was attributed to nurses' concerns of being replaced due to the similar scope of practice employed by both professions.

Finally, structural barriers such as insurance and liability (Peterson et al., 2007; Smith et al., 2009) were identified as barriers to collaborative practice. Obstetricians and physicians reported concerns about insurance and liability when working in a model of care that included midwives (Smith et al., 2009). Peterson et al. (2007) reported that differences in insurance coverage and the potential of being liable for another provider were significant barriers to collaborative practice. The barriers highlighted by Smith et al. (2009) and Peterson et al. illustrate a need to examine structural components of collaborative practice.

Multiple facilitators and barriers for collaboration have been identified in this section. Given variety and interdependency of facilitators and barriers, it is important to gain an understanding of the impact these factors have on the experiences of collaboration. It is important to explore how facilitators support collaboration and how barriers challenge collaboration, specifically in maternity care, with particular attention to the collaboration between midwives and nurses. This initial exploration of common facilitators and barriers in collaborative practice provide insight into potential findings that will result from a systematic review of the collaborative experiences of midwives and nurses.

Care Provider Collaboration and Birthing Care

Many researchers who focus on collaborative practice in maternity care have explored and examined the similarities and differences in attitudes and beliefs about birthing care between physicians and midwives (Munro et al., 2013; Smith et al., 2009; vander Lee et

al., 2014; Watson et al., 2012). It is important to remember that collaborative practice embraces the collaborative efforts of many health care providers and in maternity care this can include: midwives, nurses, obstetricians, physicians, and alternative care providers such as doulas. In this section the beliefs and attitudes about birthing care that are held by maternity care providers will be explored.

Attitudes, beliefs, and philosophies.

There are several factors that have contributed to the attitudes, beliefs, and philosophies that maternity care provider's hold about birth and birthing care. In this section, four areas of care provider collaboration relating to birthing care will be presented: midwifery and home birth, models of collaborative care, interventions, and historical influences.

Midwifery and home birth.

Three themes of maternity care provider attitudes and beliefs about care providers, and their understanding of midwifery and home birth were identified in this exploration of the literature. Each of the following themes was discussed in three or more studies. The three themes are, negative perceptions about midwifery (Bell, 2010; Kornelsen et al., 2003; Munro et al., 2013), concerns about safety and the safety of homebirth (Bell, 2010; Kornelsen et al., 2003; Munro et al., 2013), and differences in philosophies of birth (Kennedy & Lyndon, 2008; Klein et al., 2009; Smith et al., 2009; Watson et al., 2012). Two of the three studies that uncovered negative perceptions of midwifery were qualitative studies (Bell, 2010; Munro et al., 2013) and the remaining study used a mixed methods approach (Kornelsen et al., 2003).

Munro, Kornelsen, and Grzybowski (2013), in their qualitative exploratory study identified the negative perceptions that physicians and nurses had of midwives, as the largest challenge to inter-professional collaboration. Bell's (2010) research, part of a larger case study, uncovered initial fears about abilities and competencies of midwives to practice as care providers. Bell related these fears to a history of emergency transfers of clients from home births, attended by lay midwives, prior to midwifery regulation in Canada. Kornelsen et al. (2003), surveyed 129 nurses and found that the more knowledgeable nurses were about midwifery, the more likely they were to have positive perceptions of midwifery, more specifically the impact midwifery would have on nursing. Of the nurses surveyed, 62% identified a lack of or slight knowledge of midwifery, 79% of nurses reported that lines of authority and communication among health care providers would be affected by the integration of midwifery, and 57% reported an anticipation of conflict between nurses and midwives as a result of midwifery practice (Kornelsen et al., 2003). Munro et al. (2013) attributed the negative perceptions held by physicians and nurses about midwifery to a lack of education about midwifery, midwifery scopes of practice, and limited experience collaborating with midwives. Bell observed that as nurses developed working and personal relationships with midwives, their attitudes about midwifery changed. This is an example of the evolution of collaborative practice and the process of collaboration as identified by D'Amour et al. (2005). Knowledge about midwifery and building relationships with midwives were identified as two contributors to improving negative perceptions of midwifery and midwifery practice.

The second theme identified in the literature was safety, concerns about the safety of working with other providers and the safety of homebirth (Bell, 2010; Kornelsen & Carty,

2004; Munro et al., 2013). Bell (2010) uncovered findings where nurse's concerns about the safety of midwifery practice was linked to a history of transfers of care from lay midwives prior to midwifery regulation and the concern that dangerous practices would be brought into the hospital with registered midwives. Klein et al. (2009) surveyed 549 maternity care providers in a national cross-sectional exploratory study about maternity care provider attitudes in Canada and identified home birth as a contentious subject, with obstetricians opposing home birth despite evidence to demonstrate its safety. In the study by Kornelsen et al. (2003), nurses were found to disagree with women choosing to birth their babies at home. This was related to concern about the safety of home birth and perceptions about inadequate systems for transferring from home to hospital in the event of an emergency (Kornelsen et al., 2003). Munro et al. (2013) identified safety concerns of home birth among physicians and nurses about midwives who provided home birth services. Specifically, concerns about the safety of home birth included what would happen if a complication occurred and transfer to hospital care was required (Munro et al., 2013). For the physicians and nurses who did not support home birth, this resulted in poor relationships between midwives and the other providers (Munro et al., 2013). The examples of safety concerns all related to midwives and homebirth in Canada, where midwives are newly integrated members of the maternity care team.

The differences in philosophies of birthing care were identified in three studies (Kennedy & Lyndon, 2008; Smith et al., 2009; Watson et al., 2012). Kennedy and Lyndon (2008) discussed how American nurse-midwives and nurses arrived at different philosophies of birthing care. Midwives are educated to view birth as a normal physiologic event where nurses, who often provide birthing care to women along a continuum of risk are likely to

question the safety of birth (Kennedy & Lyndon, 2008). In a Canadian study by Smith et al. (2009), midwives, obstetricians, and physicians each identified different philosophies of care as a barrier to collaborative practice. Watson et al. (2012) suggested that a transformation of philosophies is needed in order to provide collaborative care. The dichotomy of philosophies between midwives and the traditional medical model of care in countries such as Canada (Munro et al., 2013), The Netherlands (vander Lee et al., 2014), and Australia (Watson et al., 2012) requires attention and renewed efforts to be unified.

Models of collaborative care.

Attitudes about models of collaborative care were also found to be important in understanding the attitudes, beliefs, and philosophies held by maternity care providers. Three studies explored the attitudes and philosophies about models of collaborative care (Brown et al., 2009; Liva, Hall, Klein, & Wong, 2012; Watson et al., 2012). Brown et al. (2009), mailed surveys with Likert-type scales to 750 nurses in Ontario, Canada, to examine nurse opinions about five collaborative models of care. The response rate was 74%. In this quantitative study, the authors found that while nurses were interested in working in collaborative maternity care models; they had minimal interest working in collaborative care models with midwives (Brown et al. 2009). Brown et al. (2009) suggested that the variations of birthing philosophies may influence communication, which in turn reinforces a resistance to change in practice.

Liva et al. (2012) used a secondary analysis of a cross-sectional survey of 545 registered nurses and uncovered findings that the environment in which nurses provide maternity care influenced their attitudes towards birth, and their personal decisions for care when they had babies. For example, 45% of nurses who worked in tertiary care settings were

more likely to choose an obstetrician as a care provider, 31% would choose a family physician, and 24% would choose a midwife for care (Liva et al., 2012). This contrasted with the results for care provider choice of nurses working in a community hospital where 56% of nurses would choose a family physician, 23% would choose an obstetrician, and 21% would choose a midwife to provide their own birthing care (Liva et al., 2012). The nurses who would choose an obstetrician as a care provider were more likely to have positive attitudes about interventions compared with the nurses who would choose family physicians or midwives as their care providers (Liva et al., 2012). Liva et al. (2012) defined an attitude as having a negative or positive judgement. The authors were clear not to assume that exposure to a working environment alone impacted nurses' attitudes.

In an Australian study that surveyed 337 participants about their preferred models of care for midwives and physicians, Watson et al. (2012) found that 72% of physicians had a preference for working in models of care that were physician led where 99.3% of midwives preferred a model of care that was midwife-led (Watson et al., 2012). The participants of the study all agreed with the concept of collaboration, however the authors suggested that the difference of preferences for models of care might reflect a need to develop a definition of collaboration that is more clear (2012). Watson et al. (2012) suggested that a transformation in the philosophies of maternity care provision and the attitudes about the roles of other maternity care providers is required in order for collaboration to be successful.

Interventions.

Attitudes about interventions in the provision of birthing care were found in two studies (Klein et al., 2009; Liva et al., 2012). Klein et al. (2009) examined the attitudes of maternity care providers in Canada. The providers included in the study were: midwives,

nurses, physicians, obstetricians, and doulas (Klein et al., 2009). Generally, the authors found obstetricians to be most favourable about using technology in their approach to birthing care (Klein et al., 2009). Examples of where this technology was favoured were epidural use, active management of labour, and repeat caesarean sections for women with uterine scaring (Klein et al., 2009). Moreover, 42% of obstetricians supported a woman's right to choose an elective caesarean section (Klein et al., 2009). Obstetricians were most likely to be strongly opposed to homebirth, although the statistical comparisons were not reported by the researchers so as not to detract from their conclusions (Klein et al., 2009). The researchers also highlighted that 15% of the obstetricians surveyed for this study shared similar attitudes with midwives about maternity care. Nurses were found to have attitudes in between other care providers, which the authors linked to the necessity of nurses having to balance the variations of attitudes of their co-workers (Klein et al., 2009).

In terms of interventions in maternity health care, Liva et al. (2012) found that generally, nurses have negative attitudes about episiotomies, epidurals, and electronic fetal monitoring (Liva et al., 2009). Nurses were found to have positive attitudes about the safety of birth, factors to decrease the rate of caesarean section, and doulas (Liva et al., 2009). Nurses were found to have neutral attitudes towards the importance of vaginal birth (Liva et al., 2009). Limitations of this study include the use of a convenience study, which may limit the generalizability of these findings. The challenge of reconciling variations in attitudes about maternity health care with other health care providers can hinder the process of collaboration through lack of communication, lack of trust, and lack of respect. These factors were identified as barriers to collaboration previously.

The variations of attitudes about interventions amongst various maternity care providers illustrate how a wide range of approaches to care may be difficult to unite though collaboration. The literature also suggests that nurses may be uniquely positioned to bring maternity care teams together for successful collaboration given their skill to work with other care providers who have various attitudes about interventions. Klein et al. (2009) makes the point of highlighting similarities in attitudes about maternity care by highlighting the percentage of obstetricians that share similar attitudes about maternity care with midwives. Perhaps more focus on the similarities of attitudes about interventions amongst different care providers would reinforce and support collaborative practice in maternity care.

Historical Influences.

The histories of care provider practice and collaboration, particularly how it has shaped current attitudes and beliefs about collaborative practice, in developed countries, have been highlighted by several authors (Biggs, 2004; Kornelsen & Carty, 2004; Lane, 2012; MacDonald, 2004; MacDonald & Bourgeault, 2009; Plummer, 2000; Price, Doucet, & Hall, 2014; Relyea, 1992; Rooks, 1997; Shaw, 2013; vander Lee et al., 2014). Understanding the histories of how three main care providers in maternity care have provided care, in relation to each other, can illuminate where some of the barriers to collaborative practice originate. This historical understanding can provide insight into how to anticipate the challenges of collaboration and assist with the integration of new collaborative care models. The provider histories that focus on collaborative relationships and will be explored include; a) physicians and midwives b) physicians and nurses c) midwives and nurses.

Physicians and midwives.

In a historical literature review of inter-professional collaboration in the Netherlands, vander Lee et al. (2014) argued that midwifery has been controlled by physicians and the medical system. The authors stated that this could be related to the introduction, of a formal exam for practicing midwives, which was once administered by physicians (2014). The formalization of midwifery education was also governed by medical authorities (vander Lee et al., 2014). Despite the efforts of the medical community to control and dominate midwifery, midwives are currently an essential part of maternity care in the Netherlands (vander Lee et al., 2014). The authors observed that the collaboration between midwives and physicians needs to improve by moving from a model of multi-disciplinary practice to one of inter-professional practice (vander Lee et al., 2014).

In an article about the current maternity care policies in Australia, Lane (2012) discussed how the concept of normal throughout pregnancy, throughout labour, and throughout birth has been defined by the obstetrics field. Lane argued that the obstetrical profession claimed it has been better able to distinguish normal from abnormal than midwives through an adept ability to recognize risk (Lane, 2012). Additionally, she argued that the ability to distinguish normal from abnormal, in relation to risk, has been used to institutionalize the obstetrical field through health policy, supporting obstetrics as the authority in maternal health (Lane, 2012). Lane then related this argument to the challenges of inter-professional collaboration that existed between physicians and midwives when midwives were granted more autonomy in Australia in the early 2000's.

The history of midwifery in Canada has often highlighted the role of the replacement of midwives by physicians as a contributing factor to the marginalization of midwifery

(Biggs, 2004; MacDonald, 2004; MacDonald & Bourgeault, 2009; Rooks, 1997; Shaw, 2013). The move to physician attended births was motivated in part by a belief in birth as a medical event (MacDonald, 2004) and the promise of economic reward for physicians who attended birth (Biggs, 2004; Rooks, 1997). The history of the replacement of midwives by physicians has contributed to tensions between these professions throughout the integration of midwifery into the Canadian healthcare system (Kornelsen & Carty, 2004; MacDonald & Bourgeault, 2009). The relatively recent integration of midwifery into Canadian maternity care teams provides an opportunity to explore the collaborative experiences of midwives and other clinicians.

Physicians and nurses.

Price, Doucet, and Hall (2014) identified three themes, in a global literature review of English language sources, exploring the historical and social influences on the collaborative practice of nurses and physicians. The authors uncovered the themes of: knowledge wars, nursing as second best, and nursing as morally superior due to the profession's monopoly on caring (2014). The first theme, knowledge wars, illustrated a hierarchy where physicians were perceived to have superior knowledge than nurses because they were traditionally educated through university degrees (Price et al., 2014). Nurses have a history of being trained in the vocation of nursing (Price et al., 2014). The perceived discrepancy of the value of each of the education models supported the hierarchy between physicians and nurses, where physicians were superior to nurses (Price et al., 2014).

In the theme, nursing as second best, Price et al. (2014) argued that the perceived inferiority of nurses to physicians originated in the educational models of nurses and physicians described above. Although education models for nursing have changed in present

day, the authors argued that the hierarchy is still perpetuated through the use of popular media and language used to describe health care (Price et al., 2014). For example, the common use of medical care to refer to health care, continues to reinforce the social superiority of physicians over nurses (Price et al., 2014).

In the final theme, nurses are perceived to hold a moral superiority due to the monopolization that nursing seemingly has on caring. Price et al. (2014) argued that nurses often use the concept of caring to position themselves as separate and morally superior to physicians. In fact, the concept of caring has been considered a foundational factor in nursing practice and has often been used to clearly distinguish nursing from medicine (Price et al., 2014).

In addition to the identification of historical dichotomies between nurses and physicians, the literature review by Price et al. also uncovered a tradition of nurses and physicians working collaboratively and collegially (2014). Despite historical tensions and dichotomies in the collaboration of nurses and physicians, the history of nurses and physicians working together collegially supports the move toward inter-professional collaboration and an evolution toward successful models of collaborative care (Price et al., 2014).

Midwives and nurses.

In Canada, nursing and midwifery share similar, yet distinct, roles in providing birthing care to women and families (Canadian Nurses Association, Canadian Association of Midwives, & Canadian Association of Perinatal and Women's Health Nurses, 2011). Both of these professions also share a history where there was a fluid or overlapping referral to one another (Plummer, 2000; Relyea, 1992). For example, in Canada, nurses were provided with

midwifery training (Relyea, 1992) or advanced obstetrical training (Plummer, 2000; Relyea, 1992) to work in rural regions in provinces such as Alberta, Newfoundland, and Northern Canada.

In Alberta, the decision to refer to the training that nurses received as advanced obstetrics rather than midwifery was deliberate (Relyea, 1992), yet the training provided to nurses for the outpost nursing programme at both Dalhousie University in Nova Scotia and Memorial University in Newfoundland was referred to as midwifery (Plummer, 2000; Relyea, 1992). Plummer (2000) argued that nurses played a role in Canadian midwifery, which addressed the lack of maternity care providers in isolated areas and regions. The contribution of nursing to the provision of maternity care in isolated or rural areas has perpetuated a blurred understanding of midwifery and maternity nursing. For example, in Newfoundland, the term "maternity nurse" acknowledged that a nurse had more training and experience than a "midwife" who had 3 months of training (Relyea, 1992) however, the maternity nurse may have received midwifery training at Memorial University (Plummer, 2000; Relyea, 1992). Thus, the terminology used to describe and define a midwife reflects a difference in attitudes about midwifery care and the role of midwives, based on how midwifery was practiced regionally. The historical regional differences in terminology and attitudes about midwifery arguably impact current understandings and attitudes about midwifery care.

McNiven et al. (2011) used the findings from the same Canadian cross-sectional survey of Klein et al. (2009) to conduct a secondary analysis of the variations in birth attitudes amongst 400 midwives, and between midwives and other maternity care providers. In reporting the findings of the variation of birth attitudes between midwives and other

maternity care providers, the authors focused on the findings of the attitude variations between midwives and obstetricians (Klein et al., 2009). McNiven et al reported that less than 1% of midwives believed home birth was dangerous, reflective that home birth is a core value for Canadian midwives. McNiven at el. identified the following core values of Canadian midwives as a result of the analysis of these findings; a belief in normal birth, place of birth, belief in women, and approaches to reduce the cesarean section rate. A closer inspection of the data presented in the tables of the report illustrated that the nurse scores were often located in between the scores of midwives and obstetricians about topics including; using a natural approach to pain management in labour, safety of home birth, safety of birth centres for low-risk birth, and the Canadian caesarean section rate (McNiven et al., 2011). These findings illuminated a range of differences of opinions and attitudes between maternity care providers about birthing care illustrate the potential of nurses as facilitators for collaborative maternity care, given the likelihood less extreme attitudes about maternity care and interventions. Based on this research, nurses could be strategically placed to unite care providers with different attitudes about maternity care in collaborative maternity care models (Kennedy & Lyndon, 2008).

Kennedy and Lyndon (2008) published an American ethnography that explored the relationships of midwives and nurses collaborating in the provision of maternity care. Their findings were categorized into two categories: tension and teamwork (Kennedy & Lyndon, 2008). In the category of tension, the researchers identified: philosophic tension, tensions about communication and respect, and tensions about pain management (Kennedy & Lyndon, 2008). In the category of teamwork, the researchers identified: working together for the woman, commitment to teamwork, and teaching midwifery as themes (Kennedy &

Lyndon, 2008). These themes are reflective of themes identified in facilitators and barriers of collaboration, such as respect and communication and they are reflective of the philosophic and attitudinal differences amongst care providers in maternity health care. A thorough exploration of the literature about the experiences of nurses and midwives collaborating to provide birthing care must be undertaken in order to gain a comprehensive understanding of this phenomenon.

Summary

The aim of this literature review was to provide an understanding of collaboration and collaborative practice within the provision of birthing care. The literature review was divided into three sections; collaboration and impact on care, collaboration and provision of birthing care, and care provider collaboration and birthing care. Each of the three sections explored concepts related to both collaboration and how collaboration relates to the provision of maternity care.

In the first section, an exploration of the literature regarding the definition of collaboration uncovered the challenges of finding a universally adopted definition of collaboration. The various definitions of collaboration and the different types of collaboration illustrated in the literature review have made it challenging for all stakeholders in the provision of maternity care to agree on one that can be used to create a consistent approach to collaborative practice.

Impact on care, that is, outcomes of collaboration, was comprised of practice outcomes for care providers and for patient health outcomes. Several health outcomes were identified by researchers as related to collaborative practice within maternity care such as: lower cesarean section rates (Avery et al., 2012; Harris et al., 2012; Jackson et al., 2003;

Nielsen et al., 2012), reduction in the use of epidural anesthesia for pain management (Cordell et al., 2012; Harris et al., 2012; Jackson et al., 2003), reduced rates of episiotomies (Jackson et al., 2003; Nielsen et al., 2012), increased breastfeeding rates (Harris et al., 2012; Jackson et al., 2003), and improved patient satisfaction (Avery et al., 2012; Pecci et al., 2012). This outcome research was limited to a small number of studies that examined the outcomes of collaboration in maternity care. Moreover, the published research about health outcomes of maternity collaboration was context specific, where the specifics of sample sizes and settings limited the generalizability of the findings. In terms of provider outcomes in relation to collaboration, D'Amour et al. (2005) stated that quality of care and effectiveness are both common outcomes for collaborative practice. However, D'Amour et al. suggested the need for more clearly researched provider outcomes for collaborative care, based on their literature review of 80 papers.

In the second section, common facilitators and barriers for collaboration were identified. These facilitators included communication, clarity of roles, respect, trust, supportive institutions/organizations/culture, shared values or shared vision, a willingness to collaborate, and inter-professional education (Avery et al., 2012; Chavez, 2013; Cordell et al., 2012; Downe et al., 2010; Health Professions Network Nursing and Midwifery Office, 2010; Munro et al., 2013; Posthumus et al., 2013; San Martín-Rodríguez et al., 2005; Thistlethwaite, 2012; Waldman & Kennedy, 2012). The reported barriers included, lack of respect (Kennedy & Lyndon, 2008; Peterson et al., 2007), absence of clearly defined roles (Bell, 2010; Kornelsen et al., 2003), poor understanding of the roles of other providers (Chavez, 2013; Kornelsen et al., 2003), poor communication (Bell, 2010; Brown et al., 2009; Chavez, 2013; Kennedy & Lyndon, 2008), resistance to change (Brown et al., 2009; Cordell

et al., 2012), different philosophies (Kennedy & Lyndon, 2008; Smith et al., 2009), perceived threat to professional role (Kornelsen et al., 2003; Peterson et al., 2007), and insurance and liability (Peterson et al., 2007; Smith et al., 2009). The identification of facilitators and barriers in relation to collaboration offers insight into areas of collaboration that require support and improvement.

In the third section of the literature review, the attitudes and beliefs of maternity care providers were explored. This section illuminated four common areas identified in the literature regarding the attitudes and beliefs of collaboration held by maternity care providers. The four common areas were midwifery and homebirth, models of collaborative care, interventions, and historical influences. In addition, three themes were identified in the literature that related to the area of midwifery and homebirth. The three themes were negative perceptions of midwifery, (Bell, 2010; Kornelsen et al., 2003; Munro et al., 2013), concerns about safety and the safety of homebirth (Bell, 2010; Kornelsen, Dahinten, & Carty, 2003; Munro et al., 2013), and differences in philosophies of birth (Kennedy & Lyndon, 2008; Klein et al., 2009; Smith et al., 2009; Watson et al., 2012). Negative perceptions and concerns about safety were findings informed by the attitudes and beliefs of maternity care providers who had traditional or institutional roles within the health care system. These care providers were physicians, obstetricians, and nurses. In addition, the differences in philosophies of birth ranged between and among nurses, physicians, obstetricians, and midwives.

There were only two studies that examined the attitudes about interventions in maternity care (Klein et al., 2009; Liva et al., 2012). Obstetricians generally were found to favour the use of technology and to oppose home birth (Klein et al., 2009). Liva et al. (2012)

found that nurses are generally negative about the use of technology in birth and held positive attitudes about the overall safety of birth.

The final theme in this section related to the historical influences on the modern day collaborative efforts of maternity care providers. Histories of collaboration between midwives and physicians, physicians and nurses, and midwives and nurses have arguably influenced current challenges in collaboration. For example, vander Lee (2014) highlighted the role of physicians in controlling midwives in the Netherlands and the replacement of midwives by physicians contributed to the marginalization of midwifery in Canada (Biggs, 2004; MacDonald, 2004; MacDonald & Bourgeault, 2009; Rooks, 1997; Shaw, 2013). An historical division between professions has existed between nurses and physicians through what Price et al. (2014) referred to as 'knowledge wars' and 'nursing as second best'. Finally, Plummer (2000) and Relyea (1992) highlighted the shared history of nursing and midwifery in Canada. Plummer and Relyea suggested that this shared history has contributed to an overlapping or fluid understanding of these two professions in maternity care.

Based on this literature review, research that has been conducted about collaboration has primarily focused on definitions of collaboration and the identification of health outcomes, facilitators, barriers, attitudes, beliefs, and philosophies. While this literature review is not exhaustive according to the Joanna Briggs Institute methodology for systematic reviews, these contributing factors of collaboration, could be examples of findings resulting from the proposed systematic review. This literature review has uncovered limited evidence about the experiences of collaborating in maternity care, and this gap in the literature is more pronounced regarding the collaborative experiences of midwives and nurses.

To date, there has not been a systematic review of the evidence about the experiences of collaboration specifically with regard to the collaborative experiences of midwives and nurses. D'Amour et al. (2005) argued that many of the frameworks and articles reviewed in literature reviews identified issues related to the structure of collaborative teams, but few actually accounted for the experiences and dynamics that occur when health professionals work collaboratively. It is necessary to synthesize current evidence in order to contribute to improved collaborative practice in maternity care and to inform future directions for research about collaboration. A synthesis of existing qualitative data about the experiences of midwives and nurses collaborating can address this gap and contribute to an improved understanding of how to support the collaborative effort s of frontline health care providers.

Synthesizing the evidence about the collaborative experiences of midwives and nurses will aid us to better support successful collaborative models, to understand the context in which successful collaborative models exist, and to identify areas of research to support collaboration for midwives, nurses and all members of the birthing team. Moreover, Waldman and Kennedy (2012) argue that in order to plan accordingly for future access to maternity care providers and cost effective maternity care, there needs to be an increase in research and analysis of the models of collaborative maternity care that work. Furthermore, the Canadian Association of Midwives, the Canadian Nurses Association, and the Canadian Association of Perinatal and Women's Health Nurses have highlighted the importance of collaboration in a joint position statement about collaborative practice (Canadian Nurses Association, Canadian Association of Midwives, & Canadian Association of Perinatal and Women's Health Nurses, 2011). A synthesis of the collaborative experiences of midwives

and nurses who provide birthing care will contribute to sustainable maternity care and account for the roles and strengths of all members of the inter-professional team.

Purpose

The purpose of this systematic review is to explore and synthesize qualitative evidence about the collaborative experiences of midwives and nurses as they provide birthing care using the Joanna Briggs Institute methodology for systematic reviews. A greater understanding of the global collaborative experiences of midwives and nurses has the potential to inform policy and practice with the result of the delivery of efficient, quality, and cost-effective maternity care.

Research Question

What are the experiences of midwives and nurses collaborating to provide birthing care?

Chapter Three: Methodology

A systematic review of studies reporting qualitative findings was used to examine the collaborative experiences of midwives and nurses as they provide birthing care. A systematic review consists of a structured methodical process aimed to bring together and synthesize the findings of quality research to inform clinical practice, policy, and decision making in health care (Aromataris & Pearson, 2014; Guyatt, 2008; Moher, Liberati, Tetzlaff, Altman, & PRISMA Group, 2009). Systematic reviews are rigorous, follow explicitly formulated protocols, and can be replicated or audited (Aromataris & Pearson, 2014; Moher et al., 2009; Polit & Beck, 2012; Sandelowski, 2008). Moreover, this process provides a means to evaluate and disseminate a vast amount of research in a concise format and through a transparent way (Aromataris & Pearson, 2014). The purpose of the synthesis of evidence in the form of systematic reviews is to increase the accessibility of quality research in order to inform evidence-based practice and health decisions at all levels (Moher et al., 2009). Systematic reviews are considered to be key elements for evidence-based practice (Polit & Beck, 2012; Sandelowski, 2008). A strength of systematic reviews is that the findings contribute to the identification of areas in need of quality research and provide direction for future research studies (Moher et al., 2009). Numerous review strategies exist, including; meta-analyses, traditional literature reviews, and scoping reviews (Grant & Booth, 2009). For the purpose of this study the methodology and the methods of the Joanna Briggs Institute (JBI) have been chosen to guide and inform this systematic review. This section provides the rationale for this choice as well as an overview of the steps of the JBI review process.

Joanna Briggs Institute

The Joanna Briggs Institute (JBI) methodology for systematic reviews provides a rigorous and methodical process for the conduct and production of systematic reviews (The Joanna Briggs Institute, n.d.). The JBI was established in 1996 with a mission, "To be a leader in producing, disseminating, and providing a framework for the use of the best available research evidence to inform health decision-making to improve health outcomes globally", (The Joanna Briggs Institute, n.d., slide 6). The JBI aims to support a concept of evidence-based practice that furthers the ability to make clinical decisions informed by the incorporation of the best available evidence, the preferences of clients, the professional judgements of health professionals, and the context where such practice takes place (Pearson, Wiechula, Court, & Lockwood, 2005). The commitment that JBI has made to this concept of evidence-based practice has resulted in a methodology that is being used in more than 80 JBI Collaborating Centres and groups throughout the world (The Joanna Briggs Institute, 2014).

JBI Model.

The JBI developed a model for evidence-based healthcare (see Appendix A). This model explains the influence of evidence-based healthcare on global health and includes the following four elements; generation, synthesis, transfer, and utilization (Pearson et al., 2005). Each of the four elements outlined in this model inform global health in a continuous cycle (Pearson et al., 2005). In determining what evidence is acceptable for use at the generation stage of the JBI model, JBI reviewers apply the FAME framework referred. As an acronym, FAME uses the concepts of feasibility, appropriate, meaningful, and effective (Pearson et al., 2005). These concepts are used when evaluating the generation of evidence from the three possible sources of discourse, experience, and research (Pearson et al., 2005). Once evidence

has been generated; (the first step); and meets the concepts of feasibility, appropriateness, meaningfulness, and effectiveness, the evidence can then be considered for potential use in the synthesis stage of the model (Pearson et al., 2005). The second step of this model, synthesis, relates to the process of synthesizing evidence using JBI methods to create systematic reviews (Pearson et al., 2005). These reviews are then used in the transfer stage of the JBI model, the third step, where the results of the systematic reviews are shared with health care providers, decision makers and interested stake-holders (Pearson et al., 2005). The final step of this model occurs when the evidence from the systematic review is implemented into practice (Pearson et al., 2005). The creation and conduct of this systematic review relate to the synthesis stage of the model, where generated evidence is synthesized.

Strengths of the JBI approach.

There are several strengths of the JBI approach to evidence synthesis that make it suitable for use in this review. These strengths include; recognition of the value of qualitative and quantitative evidence, a holistic understanding of the provision of health care, a systematic approach to evidence synthesis, and a global presence. The JBI understanding of evidence recognizes the value of multiple sources of evidence. For example, JBI supports the use of evidence derived from discourse, experience, and research (Pearson et al., 2005). The JBI approach recognizes and validates the importance of synthesizing both quantitative and qualitative data to inform clinical practice and decision making (Pearson, 2003; Pearson et al., 2005).

A second strength of the JBI approach to the synthesis of evidence is that it mirrors the nursing approach to client care, which is holistic and aims to balance both the scientific and humanistic characteristics of health (Jasmine, 2009). This approach is important for not

only nurses and nursing, but for all health care providers as healthcare moves toward a client and family centered focus. According to Pearson (2003), "Methodological approaches in nursing need to be eclectic enough to incorporate both the classical, medical and scientific designs as well as the more recent qualitative and action-oriented approaches drawn from the humanities and the social and behavioural sciences," (p. 441). The research question that has guided this review is an example of a question that requires an approach more rooted in the social or behavioural sciences.

A third strength of the JBI approach is that it provides rigorous and systematic methods that can be used to identify, evaluate, and synthesize the best available evidence (The Joanna Briggs Institute, 2014). The JBI methods are clearly outlined (The Joanna Briggs Institute, 2014) and peer review occurs at two stages; prior to both the publication of a protocol and publication of the systematic review itself. Peer review is considered an important element that enhances the transparency and quality of JBI systematic reviews (The Joanna Briggs Institute, 2014).

Finally, the JBI has a global presence through its collaborations with over 80 centres and groups around the world (The Joanna Briggs Institute, 2014). This global presence supports the JBI goal to translate evidence into practice globally (The Joanna Briggs Institute, 2014) because it is not limited to one country or context. This further illustrates JBI's commitment to the improvement of global health.

The JBI methodology for systematic reviews was chosen due to the strengths outlined above. According to Pearson (2004), it is common to find that the best available evidence in health care is not quantifiable in nature. The question that guides the conduct of this systematic review, *what are the experiences of midwives and nurses collaborating to*

provide birthing care?, is an example of a topic whereby a quantitative numerical expression does not adequately reflect the subject matter. Answering this question required a methodology that provided a systematic approach to the synthesis of qualitative evidence.

Design and Methods

The JBI methods were followed throughout the conduct of this review as outlined in Table 1. Each stage of the review methods will be described in further detail throughout this section.

Table 1 Overview of JBI Systematic Review Stages

JBI Systematic Review Stages		
1.	**Research Question**	- development of research question, - initial literature review to ensure question not already addressed - title registration
2.	**Protocol** • **Definition of terms** • **Inclusion criteria** • **Search strategy**	- protocol developed, submitted, accepted
3.	**Conduct of Systematic Review** • **Search strategy** • **Screening of studies** • **Critical appraisal** • **Data extraction** • **Data synthesis**	- published and unpublished sources searched - titles and abstracts screened, full text review - included studies critically appraised - methodological data, findings and illustrations extracted - aggregation of findings into categories and synthesis of categories into synthesized findings
4.	Submission and Publication of Review	- review submitted, accepted, published

Adapted from The Joanna Briggs Institute (2014). *Joanna Briggs Institute Reviewer's Manual: 2014 Edition.* South Australia: The Joanna Briggs Institute.

Research question.

A JBI systematic review begins with the research question. For a qualitative systematic review, it is guided by the PICo approach for the formation of a question (Polit & Beck, 2012). This has been adapted from the use of PICO, commonly used in the formulation

of quantitative questions (Pearson, Robertson-Malt, & Rittenmeyer, 2011; The Joanna Briggs Institute, 2014). In using PICo to define a question for a JBI qualitative systematic review, P refers to population, I refers to phenomena of Interest, and Co refers to Context (Pearson et al., 2011; The Joanna Briggs Institute, 2014).

The population that was considered for the question, *what are the experiences of midwives and nurses collaborating to provide birthing care* was composed of midwives and nurses. The phenomena of interest are the experiences of collaborating to provide birthing care. The context included areas located globally, where midwives and nurses work together, which included, hospitals, clinics, communities, and the home.

Following the development of the research question, a preliminary literature search of three databases was conducted; CINAHL, PubMed, and the Joanna Briggs Institute Evidence Based Practice Database (Appendix B). This initial literature search ensured that this question had not already been addressed by a systematic review. The preliminary search was the first part of a three step search process, the rest of which will be explained in the Search strategy section. Following this initial search, the title for the review was registered with JBI. After the title for the systematic review was registered with JBI, the protocol was developed and then the review was conducted.

Protocol.

As a requirement of conducting a JBI systematic review, a protocol was developed, submitted, and published (Pearson et al., 2011; The Joanna Briggs Institute, 2014) prior to the conduct of the final stages of the review (see Appendices C and D). The protocol provided a map that was followed explicitly throughout each stage of the systematic review. It also provided a transparent account of the decisions, rationale, and process of the

completion of the systematic review, such that another researcher could replicate the process (Pearson et al., 2005).

A preliminary literature search provided information about the existing research as it related to the research question. The results of this literature search provided a background and rationale for this systematic review. In addition to a background, the protocol explicitly outlined the; definition of terms, inclusion criteria, exclusion criteria, search strategy, data collection methods, and data synthesis methods (Pearson et al., 2011; The Joanna Briggs Institute, 2014).

Definition of terms.

Terms used in the research question were defined to provide clarity for the search strategy and to ensure transparency and reproducibility. The terms were; midwives, nurses, collaboration, and birthing care. For the purpose of this systematic review, the definition for midwives outlined by the International Confederation of Midwives was used,

> A midwife is a person who has successfully completed a midwifery education programme that is duly recognized in the country where it is located and that is based on the ICM *Essential Competencies for Basic Midwifery Practice* and the framework of the ICM *Global Standards for Midwifery Education*; who has acquired the requisite qualifications to be registered and/or legally licensed to practice midwifery and use the title 'midwife'; and who demonstrates competency in the practice of midwifery". (International Confederation of Midwives, 2014, para 1)

Two definitions were used to reflect the inclusion of nurses, first, "…self-regulated health-care professionals who work autonomously and in collaboration with others"

(Canadian Nurses Association, 2007, p. 6). Second, the International Council of Nurses recognizes that nursing is more broadly defined,

> Nursing encompasses autonomous and collaborative care of individuals of all ages, families, groups and communities, sick or well and in all settings. Nursing includes the promotion of health, prevention of illness, and the care of ill, disabled and dying people. Advocacy, promotion of a safe environment, research, participation in shaping health policy and in patient and health systems management, and education are also key nursing roles (International Council of Nurses, 2010) (para 1).

Nurses who were not trained or educated in midwifery, and who work in pre-natal care, labour and delivery, post-partum care, public health, and community health were considered for inclusion in this systematic review.

A definition of collaboration used was adopted by (a) The Canadian Association of Midwives, (b) Canadian Nurses Association, and (c) Canadian Association of Perinatal and Women's Health Nurses in a joint position statement about collaborative practice in maternity care (2011) and created by the Society of Obstetricians and Gynaecologists of Canada,

> Collaborative woman-centred practice designed to promote the active participation of each discipline in providing quality care. It enhances goals and values for women and their families, provides mechanisms for continuous communication among caregivers, optimizes caregiver participation in clinical decision-making (within and across disciplines), and fosters respect for the contributions of all disciplines. (Society of Obstetricians and Gynaecologists of Canada, 2006) p.15)

The term birthing care was used to refer to (a) supportive care throughout the pregnancy, labour, delivery and postpartum, (b) administrative tasks throughout the pregnancy, labour, delivery and postpartum, and (c) clinical skills throughout the pregnancy, labour, delivery and postpartum. The definition that most clearly reflects these attributes of birthing care is the World Health Organization's definition of obstetric care, defined as, "…the term used to describe the elements of obstetric care needed for the management of normal and complicated pregnancy, delivery and the postpartum period," (World Health Organization, 2014). The postpartum period included the date of birth, through to six weeks after delivery (Durham & Chapman, 2014).

Inclusion criteria.

The inclusion criteria outlined the types of studies and findings, years of publication, languages of publication and possible study settings (Pearson et al., 2011; The Joanna Briggs Institute, 2014). Qualitative studies and mixed methods studies with qualitative findings were included. The criteria also included international studies published in English that were conducted after 1981 until the present. The reason for choosing this time frame was that it corresponded to initial efforts to regulate and integrate midwifery into the health care system in Canada and provided an adequate timeframe to capture collaborative experiences of midwives and nurses in other countries. Study settings could include; hospitals, birth centres, client homes, health clinics, and other public or community health settings. Studies that explored the experiences of many maternity care providers were considered if qualitative findings reflected the experiences of midwives and nurses working collaboratively. Any collaborative experience between a midwife and a nurse was considered for inclusion, there were no limitations on the duration of collaboration between midwives and nurses.

Exclusion criteria.

Studies that reported experiences of nurses and midwives who were not registered or licensed to practice were excluded. This was based on the definition of midwife chosen for the review, which required that midwives have received midwifery education and are licensed and/or registered to practice midwifery (International Confederation of Midwives, 2014). Examples of care providers who are not registered or licensed to practice midwifery included; traditional birth attendants, lay midwives, and granny midwives.

Search strategy.

The search strategy followed three steps with the goal of identifying published and unpublished studies (Pearson et al., 2011; The Joanna Briggs Institute, 2014). The first step, described previously, was a search of three databases; CINAHL, PubMed, and the JBI EBP Database (see Appendix B). This initial search was conducted to ensure that this topic had not been addressed by a systematic review. From each database, text words contained in the titles and abstracts of relevant articles and index terms that were used to describe the articles were analyzed (see Appendix E). These were identified in the protocol as initial key search terms that were used to build the search strategy for all included databases. In the second step, the keywords and index terms identified in the initial search were used to create comprehensive search strategies for all included databases. Finally, the reference lists of all included reports and articles were hand searched to ensure additional studies were not missed. The second and third steps of this search strategy will be described in more detail in the following section.

Conduct of Systematic Review.

Following JBI approval of the submitted protocol, conduct of the review commenced with the second and third steps of the search strategy. As outlined in the protocol, this was followed by critical appraisal, data extraction, and data synthesis (Pearson et al., 2011; The Joanna Briggs Institute, 2014).

Search strategy.

The second step of the search strategy involved developing a comprehensive search strategy and searching the databases identified in the protocol. The databases that were searched included Anthrosource, CENTRAL (The Cochrane Library), CINAHL, EMBASE, PsycINFO, PubMed, Social Sciences Abstracts, Sociological Abstracts. There were additional databases initially included, however they were removed prior to the submission of the protocol as they either shared indexing with more exhaustive databases that were already included, or initial search strategies did not yield articles of relevance to the research question. The databases that were removed were; BioMed Central, Psych ARTICLES, and socINDEX. A librarian (M.H.) was consulted to ensure accuracy and relevance of search terms and MeSH headings. A final search strategy was developed and translated for each database (see Appendix F). This was done through the location of appropriate MeSH headings (where possible) and key terms (Parker, 2014). See Appendix G for the final search strategies and results of all searched databases. The Canadian Journal of Midwifery Research and Practice, a relevant journal not indexed in the databases was hand searched. The searches of all databases occurred between October 22, 2014 and October 28, 2014.

A search of grey literature was conducted for unpublished studies that included dissertations and research papers/reports/posters presented at scientific meetings/conferences.

The grey literature sources that were searched included; New York Academy of Medicine Grey Literature Report, ProQuest Digital Dissertations, GrayLit Network, Conference Proceedings, Institute for Health & Social Care Research (IHSCR), The Grey Literature Bulletin, Grey Source, SIGLE, Canadian Association of Midwives, Canadian Midwifery Regulators Consortium, Canadian Nurses Association, Canadian Association of Perinatal and Women's Health Nurses, American College of Nurse Midwives, Midwives Alliance of North America, American Midwifery Certification Board, North American Registry of Midwives, American Nurses Association, Association of Women's Health Obstetric and Neonatal Nurses, Royal College of Midwives, Nursing and Midwifery Council (UK), Royal British Nurses' Association, Australian College of Midwives, Australian Nursing and Midwifery Federation, Australian College of Nurses, New Zealand College of Midwives, Midwifery Council of New Zealand, Nursing Council of New Zealand, New Zealand Nurses' Organisation, Royal Dutch Organisation of Midwives, Dutch Nurses Association, International Confederation of Midwives, and International Council of Nurses. Initially Conference Proceedings and Institute for Health & Social Care Research (IHSCR) were included under the database heading, but were moved to the grey literature heading as they are sources more in keeping with grey literature and did not have formal systematic databases. Three additional grey literature sites were uncovered and searched during the grey literature searching process. These three additional sites included Nursing and Allied Health Resources Section, Virginia Henderson International Nursing, and The Source for Women's Health. All grey literature sources were searched between October 16, 2014 and October 22, 2014. Records of the grey literature search results and search dates for each grey literature source were maintained (see Appendix H).

Screening of Studies.

Once the searches were completed, duplicates were removed. This was followed by the review of the titles and abstracts. Studies deemed relevant for further consideration at this stage were included in the full text review. Studies considered relevant after the full text review were then included for critical appraisal. Finally, the third step of the search strategy was conducted, where the reference lists of included studies and reports that met the criteria at the critical appraisal stage were hand searched.

The titles and abstracts review and full text review required two JBI trained reviewers, who worked together to locate and select the studies to be included in the review (Pearson et al., 2011; The Joanna Briggs Institute, 2014). The primary reviewer (D.M.) and co-supervisors (E.S.C and M.C.Y), who shared the second reviewer role, were all JBI reviewer trained. Decisions, about which studies to include for the critical appraisal stage, were made through consensus (Pearson et al., 2011; The Joanna Briggs Institute, 2014). If consensus had not been reached between two reviewers, a third reviewer could have been consulted (Pearson et al., 2011; The Joanna Briggs Institute, 2014). Consensus was achieved at each stage of the review and a third reviewer was not needed. Studies that were not suitable for inclusion at the full text review stage were removed and rationale for removal was recorded (Pearson et al., 2011; The Joanna Briggs Institute, 2014). Included studies were next considered for critical appraisal.

Critical appraisal.

At the critical appraisal stage, the aim was to assess the methodological quality of the studies that had met the inclusion criteria. Two JBI trained reviewers participated (D.M) the secondary reviewer (shared by co-supervisors, E.S.C. and M.C.Y.) in the iterative

inclusion and exclusion decision-making (Pearson et al., 2011; The Joanna Briggs Institute, 2014). The JBI reviewers independently appraised all articles chosen for consideration in this critical appraisal stage. Consensus was reached for all decisions.

The JBI created a specific tool for use during the critical appraisal process for qualitative systematic reviews. The tool, referred to as the Qualitative Assessment and Review Instrument (QARI), is composed of ten criteria regarding the methodology, rigor, and ethical considerations, and is employed with each included study. See Table 2 for details.

Table 2 Criteria for Critical Appraisal

	Criteria
1.	There is congruity between the stated philosophical perspective and the research methodology.
2.	There is congruity between the research methodology and the research question or objectives.
3.	There is congruity between the research methodology and the methods used to collect data.
4.	There is congruity between the research methodology and the representation and analysis of data.
5.	There is congruity between the research methodology and the interpretation of results.
6.	There is a statement locating the researcher culturally or theoretically.
7.	The influence of the researcher on the research, and vice-versa, is addressed.
8.	Participants, and their voices, are adequately represented.
9.	The research is ethical according to current criteria or, for recent studies, there is evidence of ethical approval by an appropriate body.
10.	Conclusions drawn in the research report do appear to flow from the analysis, or interpretation, of the data.

From The Joanna Briggs Institute (2014). *Joanna Briggs Institute Reviewer's Manual: 2014 Edition.* South Australia: The Joanna Briggs Institute.

QARI provides a systematic approach for reviewers to follow when appraising the literature for methodological quality. Selected studies were critically appraised by the primary reviewer (D.M.) independently of each of the co-second reviewers (E.S.C. and M.C.Y). Following this independent appraisal process, the primary reviewer met with the co-second reviewers and, through consensus, decided which studies to include. There were no

disagreements at this stage and therefore no need to consult with a third reviewer. The study excluded at this point in the critical appraisal process was recorded along with the reason for exclusion.

Data extraction.

Data extraction, which consisted of two stages, commenced after the completion of the critical appraisal stage. Data extraction included the use of the JBI tool, QARI (see Appendices I & J). In a qualitative JBI systematic review, there are two stages of data extraction. During the first stage, general data regarding each study was extracted. The general data collected at this stage included; methodology, method, phenomena of interest, setting, geographical context, cultural context, participants, data analysis, authors conclusions, reviewers conclusions (A. Pearson et al., 2011; The Joanna Briggs Institute, 2014).

The second stage of data extraction included the extraction of findings from the included studies. Findings were represented through a variety of forms such as themes, metaphors, findings, concepts, and conclusions (Pearson et al., 2011; The Joanna Briggs Institute, 2014). Each extracted finding had a corresponding illustration. Illustrations are considered a way of ensuring the credibility of the data and are the exact verbatim words of the researchers (Pearson et al., 2011; The Joanna Briggs Institute, 2014). Findings and illustrations were extracted and entered into QARI (Pearson et al., 2011; The Joanna Briggs Institute, 2014). In this review, the illustrations that were extracted were quotations of participants reported by the researchers of the primary studies.

Each finding was assigned a level of credibility. This levelling aided with determining the strength of the finding. Studies could have an unequivocal, credible, or

unsupported credibility (Pearson et al., 2011; The Joanna Briggs Institute, 2014). If a finding was unequivocal, it meant that there was no doubt about the credibility of the finding (Pearson et al., 2011; The Joanna Briggs Institute, 2014). If a finding was found to be credible, it meant that the finding was logical, but could be challenged because it was an interpretation (Pearson et al., 2011; The Joanna Briggs Institute, 2014). If a finding was unsupported, it was not credible and therefore not supported by the data (Pearson et al., 2011; The Joanna Briggs Institute, 2014). This criteria was used when reading and re-reading the findings, and corresponding illustrations to decide the level of credibility to assign to each one. After extracting all the findings from the included studies, the findings were shared and discussed with the second reviewers. These discussions ensured that the selection of the findings was rigorous. There were no disagreements between members of the review team.

Data synthesis

There are two components of data synthesis in qualitative JBI systematic reviews; meta-aggregation and synthesis (Pearson et al., 2011; The Joanna Briggs Institute, 2014). Findings from the included primary studies were meta-aggregated into categories. The categories were then synthesized into synthesized findings (Pearson et al., 2011; The Joanna Briggs Institute, 2014). The JBI tool QARI was used to organize the aggregation of findings into categories and the synthesis of categories into synthesized findings (Pearson et al., 2011; The Joanna Briggs Institute, 2014). Reviewers were encouraged to create the categories and synthesized findings together (Pearson et al., 2011; The Joanna Briggs Institute, 2014). See Table 3.

Table 3 Meta-aggregation and Synthesis

Finding	**Category**	**Synthesized Finding**
Finding		
Finding		
Finding	**Category**	
Finding		
Finding		

Adapted from The Joanna Briggs Institute (2014). *Joanna Briggs Institute Reviewer's Manual: 2014 Edition.* South Australia: The Joanna Briggs Institute.

The first step was creating and assigning categories to the findings that were extracted. This was done through repetitive reading of the findings, and grouping them according to conceptual similarity. Findings were grouped according to similarity. This process occurred over several days to allow for re-evaluation of the groupings to confirm that the findings were indeed similar. Following completion of this process, a category name, representing the content, was assigned to each category. If a finding was not descriptive enough to understand the conceptual context of the finding, the illustration was re-read as needed to enhance understanding in order to assign it to one of the categories. Descriptions for each category were than created. The categories and corresponding descriptions were shared with the second reviewers (E.S.C. and M.C.Y.) and with committee members to ensure that all were in agreement.

The synthesized findings were created following identification of the categories. The process for the synthesized findings was similar to the process used to create the categories, where the categories were grouped based on conceptual similarities. Descriptions were created for the synthesized findings and then shared with the second reviewers (E.S.C. and M.C.Y) and committee members. There were no disagreements about the synthesized findings and their descriptions.

Submission and Publication of Systematic Review.

The final step of the JBI systematic review will be to write the systematic review and submit it to the JBI to be peer reviewed and published. The systematic review will be written and submitted to the JBI Library following approval of the thesis. The findings of this study will be shared with key stakeholders to enhance collaboration strategies among midwives, nurses, and maternity care providers.

Instrumentation.

The JBI provides software for the critical appraisal, data extraction, and data synthesis stages of the review. The name of the software is QARI and it is available to JBI trained reviewers (Pearson, 2004). QARI is a web-based software that has undergone testing for validity and reliability by systematic reviewers internationally (Pearson, 2004). Considerable attempts were made to procure the results of the testing, however they are unavailable at this time. The QARI software includes forms for critical appraisal that include the ten criteria (Pearson, 2004). There is a form for data extraction of methodological data, and a form for the extraction of findings and illustrations (Pearson, 2004). Finally, there are forms for data synthesis for the creation of categories and synthesis (Pearson, 2004).

Ethical considerations.

This study critically appraised, analyzed, and synthesized literary evidence to inform a systematic review. Neither live subjects nor primary data collected from live subjects were used at any point throughout the conduct of this systematic review. Therefore, ethical approval was not required for this study.

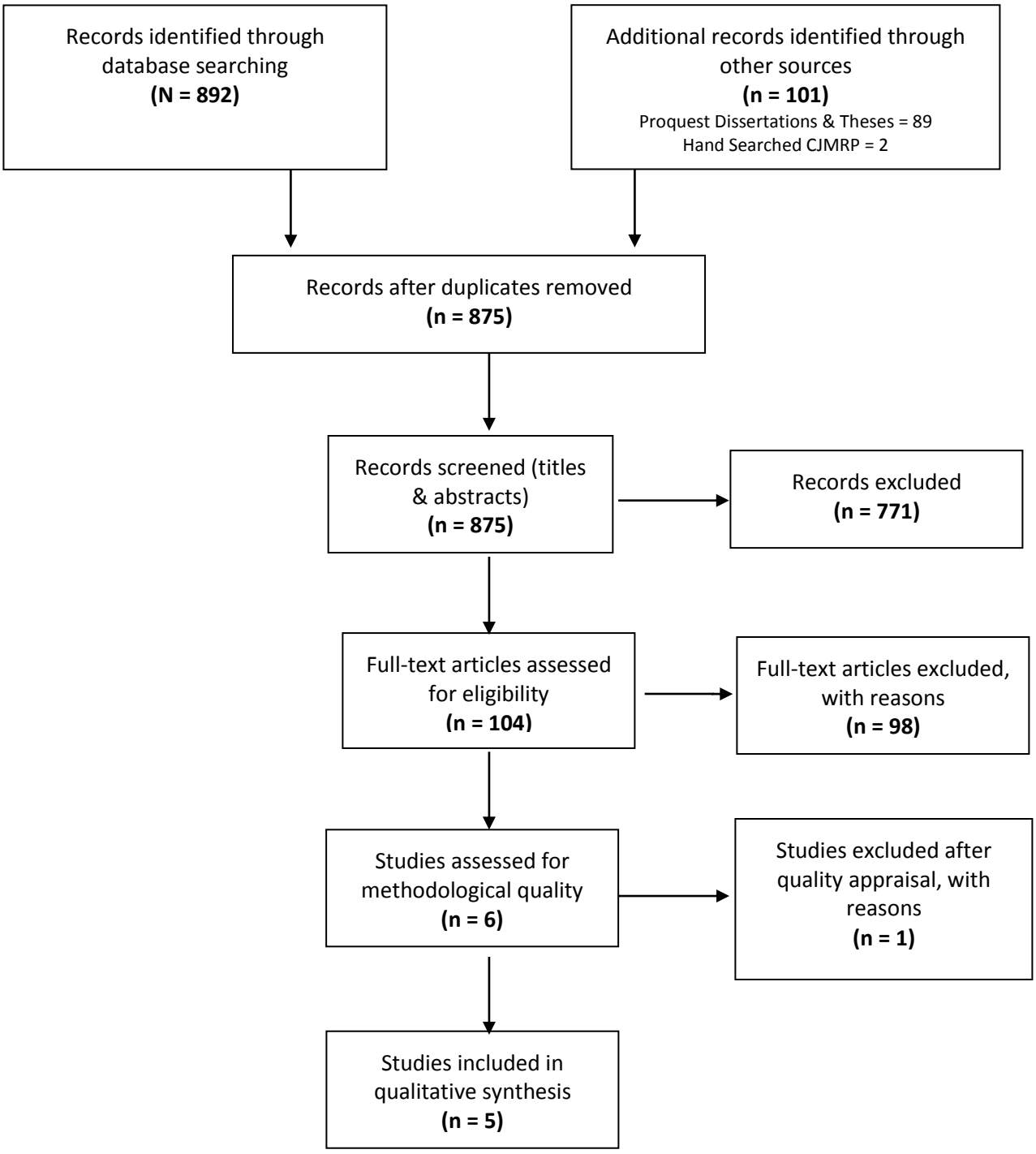
Chapter Four: Results

This chapter will begin with an overview of the identification and selection of studies. Description of the studies and the methodological quality of the studies will follow. The findings, categories, and synthesized findings will be presented and additional results will be discussed using a narrative approach.

Identification and selection of studies

All databases and grey literature sources were searched using the search strategies outlined in chapter three. Following the search for studies, a total of 993 studies and additional records were identified. Of these, 892 were identified through the database search and 101 records were identified through the grey literature search. Duplicates were removed, leaving a total number of 875 records that were screened at the titles and abstracts screening stage. During the titles and abstracts review, 771 records were excluded. The remaining 104 records were retrieved and assessed for their eligibility through a thorough full text review. At the full text review stage, 98 articles were excluded for the following reasons; 83 did not meet inclusion criteria, 10 had only quantitative data, 4 were unavailable or had data documented in two sources. In addition, one article was excluded from the final synthesis at the critical appraisal stage due to methodological weakness. Five studies were included in the final meta-synthesis. See Figure 1 for details.

Figure 1 Search Results



Search result flow chart following the PRISMA flow diagram for reporting. Adapted from (D. Moher, Tetzlaff, Altman, & The PRISMA Group, 2009)

Despite considerable attempts to contact one author and the use of extensive searching techniques, there were several examples where sources were unavailable, or where data was documented in two sources. See Table 4.

Table 4 Unavailable or Duplicated Studies

Author	Title	Journal	Year	Volume	Issue	Explanation
Allen,D.	Social Perspectives on Pregnancy and Childbirth for Midwives, Nurses and the Caring Professions	Sociology of Health and Illness	2001	23	3	This article was titled and indexed improperly
Bourgeault,I.V. Luce,J. MacDonald,M.	The Integration of the "New" Midwifery into Ontario Hospitals: The Views of Midwives, Nurses and Physicians	International Sociological Association (Conference Proceeding)	1998			Further information unavailable based on emails sent to author
Kornelsen,J.; Dahinten,V. S.; Carty,E.	On the road to collaboration: nurses and newly regulated midwives in British Columbia, Canada	Journal of midwifery & women's health	2003	48	2	This study used data from the report "In Transition: Nurses Respond to Midwifery Integration", so this study was excluded and the original report was included in the critical appraisal.
Zimmer, L.	The Midwifery Way: A National Forum Reflecting on the State of Midwifery Regulation in Canada	Conference Proceedings	2005			Presented findings from her PhD dissertation, which was the original source of her data. Zimmer's PhD dissertation has been included in this review.

The Allen study (2001) would have been included in the full text review, however I was unable to retrieve the study because it did not exist. This failure to retrieve was confirmed by librarian (M.H.). The article had been improperly titled and indexed. Conference proceedings by Bourgeault, Luce, and MacDonald (1998) would have been included in the full text review, but were unable to be retrieved. Requests were made for more information about

these conference proceedings (Bourgeault et al., 1998); however, more information was unavailable. The conference proceedings by Bourgeault et al. (1998) may have contained data that could have added to the findings of this review.

Conference proceedings by Zimmer were found from a midwifery conference (2005). Upon further examination, Zimmer presented data from her PhD dissertation in the conference proceeding. She referenced her conference presentation at this conference in her PhD dissertation and her PhD dissertation had already met the criteria for inclusion. After discussion with the co-second reviewers, it was decided, through consensus, to exclude the conference proceeding and include the PhD dissertation, as it was the original source of data. A similar situation occurred with a report (Kornelsen, Dahinten, & Carty, 2000) and a published article (Kornelsen, Dahinten, & Carty, 2003), both written by Kornelsen, Dahinten, and Carty. The report was the original source and then the study was published using the data from the report. The primary and secondary reviewers agreed, to include the original source, as it was more comprehensive in outlining the findings, and excluded the published article.

Following the full text review, six studies were identified for methodological quality assessment at the critical appraisal stage. See Table 5 for more details.

Table 5 Selected Studies For Critical Appraisal

Bell, I. (2010). Maternity nurses and midwives in a British Columbia rural community: Evolving relationships. *Canadian Journal of Midwifery Research and Practice, 9*(2), 7-16.
Everly, M. C. (2012). Facilitators and Barriers of Independent Decisions by Midwives During Labor and Birth. *Journal Of Midwifery & Women's Health*, *57*(1), 49-54. doi:10.1111/j.1542-2011.2011.00088.x
Kennedy, H. P., & Lyndon, A. (2008). Tensions and teamwork in nursing and midwifery relationships. *JOGNN: Journal of Obstetric, Gynecologic & Neonatal Nursing, 3*7(4), 426-435. doi:10.1111/j.1552-6909.2008.00256.x
Kornelsen, J., Dahinten, V.S., & Carty, E. (2000). *In transition: Nurses respond to midwifery integration*. British Columbia Centre of Excellence for Women's Health.
Munro, S., Kornelsen, J., & Grzybowski, S. (2013). Models of maternity care in rural environments: Barriers and attributes of interprofessional collaboration with midwives. *Midwifery, 29*(6), 646-652. doi:10.1016/j.midw.2012.06.004
Zimmer, L. V. (2006). *Seeking common ground: Experiences of nurses and midwives.* (Doctoral dissertation). Available from ProQuest Dissertations and Theses Database. (304958018)

No additional studies were located when references were reviewed for each of the identified studies. Of the six included studies, five are included in the synthesis (Bell, 2010; Everly, 2012; Kennedy & Lyndon, 2008; Munro, Kornelsen, & Grzybowski, 2013; Zimmer, 2006) and one has been reported narratively due to methodological quality concerns (Kornelsen et al., 2000).

Methodological Quality

Six studies were appraised for their methodological quality using the critical appraisal questions that were outlined in the Methods chapter (see page 58). Based on this assessment of methodological quality, five of the six studies were selected for meta-synthesis (Bell, 2010; Everly, 2012; Kennedy & Lyndon, 2008; Munro, Kornelsen, & Grzybowski, 2013; Zimmer, 2006). See Table 6 for details about the methodological quality of the six studies.

Table 6 Critical Appraisal Results

Citation	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10
Bell, I. (2010)	U	Y	Y	Y	Y	U	Y	Y	Y	Y
Everly, M. C. (2012)	U	Y	Y	Y	Y	U	U	Y	Y	Y
Kennedy, H. P., & Lyndon, A. (2008).	U	Y	Y	Y	Y	Y	Y	Y	Y	Y
Munro, S., Kornelsen, J., & Grzybowski, S. (2013)	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
Zimmer, L. V. (2006)	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
*Kornelsen, J., Dahinten, V.S., & Carty, E. (2000)	U	U	U	U	U	N	N	Y	Y	Y

Note. Y = yes N = no U = unsupported
*Not included in synthesis due to poor qualitative methodological quality
Adapted from The Joanna Briggs Institute (2014). *Joanna Briggs Institute Reviewer's Manual: 2014 Edition.* South Australia: The Joanna Briggs Institute.

One study met all of the critical appraisal criteria (Zimmer, 2006). The philosophical perspective was unclear in four of the studies (Bell, 2010; Everly, 2012; Kennedy & Lyndon, 2008; Kornelsen et al., 2000). Two studies were unclear in locating the researcher culturally or theoretically within the study (Bell, 2010; Everly, 2012) and one study did not locate the researcher culturally or theoretically (Kornelsen et al., 2000). One study was unclear about the influence of the researcher on the research, or influence of research on the researcher (Everly, 2012) and two studies did not include a statement about the influence of the researcher on the research or the influence of the research on the researcher (Kornelsen et al., 2000; Munro et al., 2013). The assessment of the mixed methods study (J. Kornelsen et al., 2000) only met the critical appraisal criteria for three of the ten criteria; the actual representation of participant voices, evidence of ethical approval, and conclusions that appear

to be drawn from the data. This is the reason for the exclusion of the mixed-methods study (Kornelsen et al., 2000) from the synthesis.

Description of studies

The following is a description of the general data that was extracted from the six studies included in the review, including details about; study designs, study participants, settings, and the phenomena of interest and methodology. This will be followed by a description of the categories, findings, and synthesized findings. Finally, the results from the mixed methods study will be reported narratively.

Study designs.

Study designs included in the systematic review were qualitative methods and qualitative methods from mixed methods. Of the six studies included in the review, only the five studies, included in the synthesis, were purely qualitative studies (Bell, 2010; Everly, 2012; Kennedy & Lyndon, 2008; Munro, Kornelsen, & Grzybowski, 2013; Zimmer, 2006). One study, by Kornelsen, Dahinten, and Carty (2000), using a mixed methods approach was deemed to be poor in terms of qualitative methodological quality, although the findings were relevant to the research question of this review. It was therefore decided not to include the findings of the mixed-methods study in the synthesis, but to report the findings narratively in the review (Pearson et al., 2011). Only general data from the mixed methods study (Kornelsen et al.) was extracted during the first stage of data extraction

The authors of the six studies included in the review used a variety of data collection techniques. These data collection techniques included; semi-structured, unstructured interviews, or focus groups (Bell, 2010; Everly, 2012; Kennedy & Lyndon, 2008; Munro et al., 2013; Zimmer, 2006) observations (Bell, 2010; Kennedy & Lyndon, 2008; Zimmer,

2006), field notes (Kennedy & Lyndon, 2008), and journaling (Zimmer, 2006). The mixed methods study used surveys with open-ended questions (Kornelsen et al., 2000). See Table 7 for details. Thematic analysis was used for analysis in all of the qualitative studies (Bell, 2010; Everly, 2012; Kennedy & Lyndon, 2008; Munro et al., 2013; Zimmer, 2006). While the authors of the mixed methods study did not state that thematic analysis was used, the data was expressed through themes and thematic illustrations (Kornelsen et al., 2000).

Table 7 Study Design Results

Study	Methods
(Bell, 2010)	semi-structured focus group interviews, observations
(Everly, 2012)	one-on-one interviews
(Kennedy & Lyndon, 2008)	field notes, observations, in-depth interviews
(Munro, Kornelsen, & Grzybowski, 2013)	interviews
(Zimmer, 2006)	conversational, unstructured, one-on-one interviews, observations, journaling
(Kornelsen, Dahinten, & Carty, 2000) * not included in synthesis, reported narratively	survey with open-ended questions

Study Participants.

In the six studies included in the review, the sample sizes varied from 10 participants (Everly, 2012) to 258 participants (Kornelsen et al., 2000). Of the six studies included in the review, one study, collected data from nurses and a nurse manager (Bell, 2010). Researchers from one study collected data from nurses only (Kornelsen et al., 2000). One study collected data from midwives only (Everly, 2012). Two studies collected data from both nurses and midwives (Kennedy & Lyndon, 2008; Zimmer, 2006). One study collected data from nurses,

midwives, physicians, birthing women, community-based providers, administrators, and decision makers (Munro et al., 2013).

A variety of participants with respect to professional identities, were included in the reviewed studies. For example, participants who were nurses were referred to as maternity nurses (Bell, 2010), public health nurses (Bell, 2010; Munro et al., 2013), nurse manager (Bell, 2010), labour and delivery nurses (Munro et al., 2013; Zimmer, 2006), perinatal registered nurses (Kornelsen et al., 2000; Zimmer, 2006), registered nurses (Kennedy & Lyndon, 2008), and community health registered nurses (Kornelsen et al., 2000). Participants who were midwives were referred to as Certified Nurse Midwives (CNMs) (Everly, 2012; Kennedy & Lyndon, 2008), community-based registered midwives (Zimmer, 2006), and midwives (Munro et al., 2013). The following additional participants were included in one study; physicians, birthing women, community-based providers, administrators, and decision makers (Munro et al., 2013). See Table 8 for details.

Table 8 Study Participants Results

Study	Participants
(Bell, 2010)	10 nurses maternity nurses, 1 public health nurse, 1 nurse manager
(Everly, 2012)	10 Certified Nurse Midwives (CNMs)
(Kennedy & Lyndon, 2008)	11 Certified Nurse Midwives (CNMs), 14 Registered Nurses (RNs)
(Munro, Kornelsen, & Grzybowski, 2013)	7 midwives, 27 physicians, 11 labour and delivery nurses, 7 public health nurses, 5 birthing women, 5 community-based providers, 5 administrators, 6 decision makers
(Zimmer, 2006)	11 community-based Registered Midwives (RMs), 10 perinatal Registered Nurses (RNs)
(Kornelsen, Dahinten, & Carty, 2000) * not included in synthesis, reported narratively	258 perinatal and community health Registered Nurses

Settings.

Studies included in the synthesis had multiple heterogeneous settings. Three of the studies were conducted in Canada (Bell, 2010; Munro et al., 2013; Zimmer, 2006), and two studies were conducted in the United States (Everly, 2012; Kennedy & Lyndon, 2008). Two studies were focused on rural settings, one in a hospital (Bell, 2010), and one in a community (Munro et al., 2013). One study was set in an urban hospital (Kennedy & Lyndon, 2008) and two of the studies (Everly, 2012; Zimmer, 2006) did not specify whether the setting used was urban or rural. Of these later studies, one recruited participants throughout the province of British Columbia, Canada (Zimmer, 2006) and one of these studies recruited participants at a national conference in the United States (Everly, 2012). It is possible that these three studies had a melange of participants from rural and urban settings. See Table 9 for details.

The mixed methods study (Kornelsen et al., 2000), included in the review but not included in the synthesis, invited nurses throughout the province of British Columbia, Canada to participate. The type of clinical setting was not reported, nor whether the settings were urban or rural. Given that participants were recruited throughout the province of British Columbia, it is possible that the settings were both rural and urban.

Table 9 Settings Results

Study	Setting
(Bell, 2010)	British Columbia, Canada Rural hospital
(Everly, 2012)	United States National Conference
(Kennedy & Lyndon, 2008)	United States Urban hospital
(Munro, Kornelsen, & Grzybowski, 2013)	Canada Rural community
(Zimmer, 2006)	British Columbia, Canada
(Kornelsen, Dahinten, & Carty, 2000) * not included in the synthesis, reported narratively	British Columbia, Canada

Phenomena of interest and methodology.

The data provided by the six studies included in the review was concerned with experiences of midwives and nurses (Zimmer, 2006b), relationships between midwives and nurses (Bell, 2010; Kennedy & Lyndon, 2008), how midwives make decisions (Everly, 2012), facilitators and barriers for interdisciplinary collaboration amongst maternity care providers (Munro et al., 2013), and perceptions of nurses (Kornelsen et al., 2000). A variety of methodologies were used including; a case study (Bell, 2010), grounded theory (Everly, 2012), ethnography (Kennedy & Lyndon, 2008), an exploratory framework (Munro et al., 2013), and hermeneutic phenomenology (Zimmer, 2006). The authors of the mixed methods study did not specify a qualitative methodology used for the qualitative portion of their study (Kornelsen et al., 2000). Please see Table 10 for details.

Table 10 Phenomena of Interest and Methodology Results

Study	Methodology	Phenomena of Interest
(Bell, 2010)	case study	evolving relationships of maternity nurses and midwives
(Everly, 2012)	grounded theory	factors that affect how midwives make decisions about the management of labor and birth
(Kennedy & Lyndon, 2008)	ethnography	the relationships of midwives and nurses working together on the same unit
(Munro, Kornelsen, & Grzybowski, 2013)	exploratory framework	barriers and facilitators of interprofessional models of maternity care between physicians, nurses, and midwives
(Zimmer, 2006)	hermeneutic phenomenology	the experiences of interprofessional interaction of midwives and nurses in shared care situations
*(Kornelsen, Dahinten, & Carty, 2000)	mixed-methods	perceptions and knowledge that obstetrical and community health nurses have of midwives * not included in the synthesis, reported narratively

Findings, categories, and synthesized findings

Thirty-eight findings were extracted from the five studies included in the synthesis (see Appendix K). The findings were predominantly composed of themes or sub-themes from the primary studies. The findings and illustrations of the findings were extracted using the verbatim words of the authors of the primary studies. In the identification of the findings from the primary studies, a level of credibility was assigned to each finding. Of the three possible levels of credibility, unequivocal, credible, and unsupported credibility, all findings in this review were found to be credible. The 38 findings were used to create five categories by being grouped together based on conceptual similarity. Names were given to each category of findings, after rechecking each finding in the group for similarity and after careful consideration about what the conceptual similarity was. The five categories are;*unclear roles*, *lacking professionalism or consideration*, *the challenges of sharing care*, *distrust*, and *positive experiences of teamwork*. See Table 11 for details.

Table 11 Categories and Corresponding Findings

Category 1: Unclear roles	
Finding	Philosophic tensions
Finding	Nurses described scenarios where limited communication with midwives and lack of clarity around roles and responsibilities left them feeling their role was superfluous
Finding	Second pair of hands or handmaiden?
Finding	Maintaining distance
Finding	Painful and punishing
Finding	Lacking rapport
Finding	Grey areas
Finding	Threat to job satisfaction
Finding	Tensions about communication and respect
Finding	Policing
Finding	Confusion about roles and concerns about competence
Finding	Feeling like a third wheel
Finding	Stuck in the middle
Finding	Treating them like the doctors do
Category 2: Lacking professionalism or consideration	
Finding	Intimidating?
Finding	Unwelcome
Finding	Meanness
Finding	Rudeness and inhospitality
Category 3: The challenges of sharing care	
Finding	Missing a sense of team
Finding	Avoiding
Finding	Need help- placating the nurses
Finding	The bad medical person
Finding	Ongoing challenges
Category 4 Distrust	
Finding	The team
Finding	Home birth history
Finding	Tensions over pain management
Finding	Dealing with the odds
Finding	Us vs them
Finding	That nurse has a problem
Finding	Trouble waiting to happen
Finding	That nurse flipped it around
Category 5: Positive experiences of teamwork	
Finding	Changing relationships
Finding	Commitment to teamwork
Finding	Working together for the woman
Finding	Admiration and anxiety
Finding	Teaching midwifery
Finding	Collegial respect
Finding	That sort of irony

The meaning was summarized for each of the five categories (Pearson et al., 2011; The Joanna Briggs Institute, 2014). The category, *unclear roles* was summarized as; midwives and nurses experienced a lack of clarity in their roles when they work together. Tension or confusion about roles, or difficulty engaging in collaboration due to lack of clarity around roles influenced their experiences working together. The category *lacking professionalism or consideration* was summarized as; midwives and nurses experienced interactions that were inconsiderate or that lacked professionalism. This occurred when members from one provider group interacted with members from the other provider group. The category, *the challenges of sharing care* was summarized as midwives and nurses experienced challenges when they shared the birthing care of women and babies. Some of these challenges included; sharing the care during interventions, sharing charts, and not feeling like a part of the team. The category *distrust* was summarized as; midwives and nurses experienced distrust when they collaborate. Distrust concerned either a general distrust of the other care provider group or distrust of the care the other provider group provided to women and babies. The category, *positive experiences of teamwork* was summarized as; midwives and nurses had positive experiences of working together in the provision of birthing care. Some of these positive experiences included; learning from each other, relieving each other for breaks, and being united in helping women birth.

The five categories were synthesized into two synthesized findings. The synthesized findings were informed by the five categories created from the author findings, and supported by illustrative excerpts. A summary for each of the two synthesized findings was created to provide further explanation.

The first synthesized finding was, *Negative experiences of collaboration between nurses and midwives may be influenced by distrust, lack of clear roles, or unprofessional or inconsiderate behaviour.* This was summarized as; distrust, lack of clear roles, and unprofessional or inconsiderate behaviour may be influencing experiences of collaboration between midwives and nurses negatively. See Table 12.

Table 12 Findings, Categories, & Synthesized Finding 1

Finding	Category	Synthesized Finding 1
Philosophic tensions	**Unclear roles**	**Negative experiences of collaboration between nurses and midwives may be influenced by distrust, lack of clear roles, or unprofessional or inconsiderate behaviour.** Distrust, lack of clear roles, and unprofessional or inconsiderate behaviour may be influencing experiences of collaboration between midwives and nurses negatively.
Nurses described scenarios where limited communication with midwives and lack of clarity around roles and responsibilities left them feeling their role was superfluous		
Second pair of hands or handmaiden?		
Maintaining distance		
Painful and punishing		
Lacking rapport		
Grey areas		
Threat to job satisfaction		
Tensions about communication and respect		
Policing		
Confusion about roles and concerns about competence		
Feeling like a third wheel		
Stuck in the middle		
Treating them like the doctors do		
Intimidating?	**Lacking professionalism or consideration**	
Unwelcome		
Meanness		
Rudeness and inhospitality		
The team	**Distrust**	
Home birth history		
Tensions over pain management		
Dealing with the odds		
Us vs them		
That nurse has a problem		
Trouble waiting to happen		
That nurse flipped it around		

The second synthesized finding was*, if midwives and nurses have positive experiences collaborating, then there is hope that the challenges of collaboration can be overcome.* This synthesized finding was summarized as, the positive experiences of midwives and nurses who collaborate with each other provide encouraging examples of overcoming the challenging experiences of sharing care and working together. See Table 13

Table 13 Findings, Categories, & Synthesized Finding 2

Finding	Category	Synthesized Finding 2
Missing a sense of team	**The challenges of sharing care**	**If midwives and nurses have positive experiences collaborating then there is hope that the challenges of collaboration can be overcome.** The positive experiences of midwives and nurses who collaborate with each other provide encouraging examples of overcoming the challenging experiences of sharing care and working together.
Avoiding		
Need help- placating the nurses		
The bad medical person		
Ongoing challenges		
Changing relationships	**Positive experiences of teamwork**	
Commitment to teamwork		
Working together for the woman		
Admiration and anxiety		
Teaching midwifery		
Collegial respect		
That sort of irony		

Additional results

One of the six studies that met the inclusion criteria was deemed to have poor qualitative methodological quality based on the criteria for critical appraisal. As discussed earlier, this study was excluded from the meta-aggregation and synthesis (Kornelsen et al., 2000). The findings from the study have been reported narratively as they are relevant to the purpose of this review.

Kornelsen et al. (2000) produced a report based on the data collected from a survey of perinatal nurses. This report included data collected from the open-ended questions on the surveys. The authors identified several themes from the open-ended questions. Following is a

discussion about the themes that were relevant to the experiences of collaboration that midwives and nurses have when providing birthing care.

Kornelsen et al. (2000) presented two main themes with several sub-themes. The main themes were; 1) negative experiences with midwives (Kornelsen et al., 2000, p.15), and 2) positive experiences with midwives (Kornelsen et al., 2000, p.18). The theme 'negative experiences with midwives', was divided into several sub-themes; 'interactional conflicts – personality' (Kornelsen et al., 2000, p.15), 'interactional conflicts –socio-professional' (Kornelsen et al., 2000, p.16), or 'interactional conflicts – skills and competencies' (Kornelsen et al., 2000, p.16). The other sub-theme for 'negative experiences with midwives' was structural conflicts (Kornelsen et al., 2000, p.17). The second theme 'positive experiences with midwives' was divided into two sub-themes; 'positive structural experiences' (Kornelsen et al., 2000, p.18) or 'positive interactional experiences' (Kornelsen et al., 2000, p.19).

When considered within the context of the synthesized findings of this review, the two main themes from the study by Kornelsen et al. (2000) support the two synthesized findings of the review. Positive and negative experiences of collaboration between midwives and nurses were reflected in both the synthesized findings of this systematic review and the study by Kornelsen et al. (2000). The study by Kornelsen et al. only included the experiences of nurses and therefore did not give voice to the experiences of midwives who collaborate with nurses. The findings from the mixed methods study (Kornelsen et al., 2000) reflect the synthesized findings in this review.

Summary

In this chapter, the study results were described beginning with the results from the completion of the literature search, titles and abstracts review, and full text review. The results of the critical appraisal and the first stage of data extraction were presented. The data extracted during the second stage of data extraction was presented as the findings from the primary studies. In addition to the findings, illustrative excerpts for each finding were extracted which have been presented to demonstrate the credibility of the findings.

The categories that were created were identified as; *unclear roles*, *lacking professionalism or consideration*, *the challenges of sharing care*, *distrust*, and *positive experiences of teamwork*. These categories were also presented alongside their corresponding findings to provide a comprehensive picture of how the findings informed the categories. Summaries have been included to provide more detail about the categories.

Two synthesized findings were formed through the meta-aggregation of the five categories and their supporting findings. The synthesized findings are; 1) *Negative experiences of collaboration between nurses and midwives may be influenced by distrust, lack of clear roles, or unprofessional or inconsiderate behaviour* and 2) *If midwives and nurses have positive experiences collaborating, then there is hope that the challenges of collaboration can be overcome.* Summaries were also included to provide a more comprehensive understanding of the synthesized findings.

Additional results were presented narratively from a study that was included in the review but not the synthesis (Kornelsen et al., 2000). In the subsequent chapter, these synthesized findings will be discussed in further detail.

Chapter Five: Discussion

In this chapter, the results from this systematic review will be discussed with a focus on the two synthesized findings and five categories used to create the synthesized findings. Strengths and limitations of this review will be discussed and the implications for clinical practice and research will be presented. To my knowledge, this is the first systematic review of qualitative evidence about the collaborative experiences of midwives and nurses who provide birthing care.

Synthesized Finding 1

The first synthesized finding of this review identified negative experiences of collaboration between midwives and nurses, and three categories that may be influencing the negative experiences that informed the first synthesized finding; *negative experiences of collaboration between midwives and nurses may be influenced by distrust, lack of clear roles, or unprofessional or inconsiderate behaviour* included unclear roles, distrust, or lack of professionalism or consideration. Each of these three categories will be explored in further depth in relation to relevant literature, as they are integral parts of this synthesized finding.

Distrust.

Eight review findings were aggregated to create the category *distrust*. The findings included; (a) dealing with the odds (Zimmer, 2006), (b) home birth history (Bell, 2010), (c) tensions over pain management (Kennedy & Lyndon, 2008), (d) that nurse that flipped it around (Zimmer, 2006), (e) that nurse has a problem (Zimmer, 2006), (f) the team (Everly, 2012), (g) trouble waiting to happen (Zimmer, 2006), and (h) us versus them (Zimmer, 2006). These experiences occurred in both Canada and the United States and represented four of the five studies included in the synthesis. It is not surprising that the absence of the

facilitator trust may result in negative experiences of collaboration, given that trust has been reported by other authors as an important facilitator for collaboration (Avery et al., 2012; Downe et al., 2010; Munro et al., 2013; San Martín-Rodríguez et al., 2005; Waldman & Kennedy, 2012) and for successful collaboration by professionals (Myors, Schmied, Johnson, & Cleary, 2013; Schadewaldt, McInnes, Hiller, & Gardner, 2013). For example, in an integrative review about the experiences of nurse practitioners and medical practitioners who work in a collaborative practice, researchers identified that developing a good relationship over time assisted in creating trust between providers (Schadewaldt et al., 2013). Myors et al. (2013) also reported that trusting professional relationships make it easier for a variety of perinatal mental health care providers to work together. Trust was also identified as an important factor in facilitating collaboration between acupuncturists who were newly integrated into a hospital setting with other care providers (Kielczynska, Kligler, & Specchio, 2014). Time has also been identified as important for building trusting relationships amongst acupuncturists and other care providers (Kielczynska et al., 2014), nurses and nurse practitioners (Moore & Prentice, 2013), and nurse practitioners and medical practitioners (Schadewaldt et al., 2013).

The findings from these studies support the category of distrust and the influence it may have on negative collaborative experiences for midwives and nurses. If trust is not present amongst midwives and nurses, then collaboration may be challenging, and providers may have negative experiences. Moore and Prentice (2012) recognized that time spent together professionally and personally assisted in the development of trust and enhanced collaboration. Building trust among midwives and nurses may be enhanced over time by

enabling both professional and personal opportunities that enable them to acquaint with one another.

Unclear Roles.

Fourteen findings were aggregated to create the category *unclear roles*; (a) confusion about roles and concerns about competence (Bell, 2010b), (b) feeling like a third wheel (Zimmer, 2006), (c) grey areas (Zimmer, 2006), (d) lacking rapport (Zimmer, 2006), (e) maintaining distance (Zimmer, 2006), (f) nurses described scenarios where limited communication with midwives and lack of role clarity left them feeling their role was superfluous (Munro et al., 2013), (g) painful and punishing (Zimmer, 2006), (h) philosophic tensions (Kennedy & Lyndon, 2008), (i)policing (Zimmer, 2006), (j) second pair of hands or handmaiden? (Zimmer, 2006), (k) stuck in the middle (Zimmer, 2006), (l) tensions about communication and respect (Kennedy & Lyndon, 2008), (m) threat to job satisfaction (Bell, 2010), and (n) treating them like the doctors do (Zimmer, 2006). Given that role clarity has been identified as a facilitator for collaboration (Cordell et al., 2012; Downe et al., 2010; Munro et al., 2013; Posthumus et al., 2013; Thistlethwaite, 2012; Waldman & Kennedy, 2012), it is not surprising that an ambiguity of professional roles may negatively influence the experiences of collaboration. The category unclear roles is consistent with the findings that identified lack of role clarity as a barrier for inter-professional collaboration (Supper et al., 2014). In terms of inter-professional collaboration, issues of role clarity have also impacted other health care providers.

Similar to midwives and nurses, nurse practitioners have experienced a lack of role clarity in their collaborative experiences. Clarity of the nurse practitioner role and scope of practice was ranked as the top facilitator that impacted collaboration in an integrative review

that reported findings from 30 quantitative, qualitative, and mixed methods studies (Schadewaldt et al., 2013). The most common barrier for collaboration was identified as the medical practitioner's lack of clarity around the scope of practice of nurse practitioners (Schadewaldt et al., 2013). The lack of clarity around the nurse practitioner scope of practice made collaboration difficult for both providers. Uncertainty about the role of newly integrated nurse practitioners was identified as contributing to a sense of threated professional boundaries in a meta-synthesis of 26 qualitative studies about the integration of nurse practitioners into health care teams (Andregard & Jangland, 2015). These examples are consistent with the synthesized finding that unclear roles for midwives and nurses may negatively influence collaboration for two provider groups with similar expertise.

Lack of role clarity for Canadian midwives and nurses could be related to the similarities of clinical expertise and shared history of providing primary birthing care. For example, the integration of midwifery into mainstream maternity care in Canada is relatively new. Midwifery regulation and integration began in some provinces in the 1990s, however it has not yet been universally regulated or integrated throughout all of Canada (Canadian Association of Midwives, 2014). Both professions have histories of independently managing birth prior to the regulation of midwifery (Plummer, 2000; Relyea, 1992). It may be that the similarities in expertise evident in the histories of providing primary birthing care may be contributing to the experiences of unclear roles.

In the United States, the presence of unclear roles and their negative influence on collaboration uncovered in this review, may be related to the blurred professional identities of American nurses and nurse-midwives and to the ongoing debate about the professional identity of nurses-midwives (Burst, 2005; Dawley, 2005). The debate has been whether an

American nurse midwife is an advanced practice nurse with midwifery training or a midwife with previous nursing training (Burst, 2005; Dawley, 2005; Dole & Nypaver, 2012). While there are a variety of midwives that practice in the United States, such as nurse-midwives, direct-entry midwives and lay midwives, nurse-midwives were the midwife participants, in the two American studies (Everly, 2012; Kennedy & Lyndon, 2008) included in this review. More research is required to explore how a history of similar expertise for midwives and nurses, and how the ongoing debate about the professional identities of nurse-midwives may be influencing a lack of role clarity for midwives and nurses.

Lack of professionalism or consideration.

Four findings were aggregated to create the category *lack of professionalism or consideration*; (a) intimidating? (Zimmer, 2006), (b) meanness (Zimmer, 2006), (c) rudeness and inhospitality (Zimmer, 2006), and (d) unwelcome (Zimmer, 2006). Lack of professionalism or consideration was an interesting finding of this review and its presence was supported by the similarity between the illustrations of the review findings and examples of lateral violence presented in the literature. For example, the findings of this systematic review; intimidating? (Zimmer, 2006), unwelcome (Zimmer, 2006), and rudeness and hospitality (Zimmer, 2006) were similar to a form of lateral violence referred to as undermining activities (Griffin, 2004, p.259). According to Griffin, examples of undermining activities could include turning away, or not being available (2004, p.259). These three review findings illustrate Griffin's two examples. The final finding of this systematic review category, meanness (Zimmer, 2006); is related to what Griffin refers to as sabotage, where there is a deliberate attempt to set up a negative situation (p.159). Undermining activities, and sabotage are two forms of identified lateral violence (Griffin, 2004) that are consistent

with the systematic review category of lack of professionalism or consideration. This synthesised finding and the similarity between the category lack of professionalism or consideration and lateral violence is not surprising given that the first reports of horizontal violence, also referred to as lateral violence in nursing (Brunt, 2011; Crabbs & Smith, 2011; Dong & Temple, 2011; Griffin, 2004; Purpora, Blegen, & Stotts, 2012; Roberts, DeMarco, & Griffin, 2009) occurred 30 years ago (Roberts, 1983). Thus, lateral violence is not a new topic for nurses, however it may be new to midwives and to midwives and nurses working together.

The negative collaborative experiences of midwives and nurses, related to a lack of professionalism or consideration, may correspond to the negative consequences of lateral violence. According to a literature review conducted by Brunt (2011), possible consequences of lateral violence in the provision of health care include; decreased productivity, low morale, absence from work, and health problems for recipients of lateral violence (Brunt, 2011). Negative consequences of lateral violence in nursing include; retention of nurses, job satisfaction, and the ability of nurses to work amongst themselves and with other professionals (Roberts et al., 2009). These consequences are consistent with the synthesized finding that suggested a lack of professionalism or consideration may be negatively influencing the collaborative experiences of midwives and nursing.

Midwives and nurses both work as professionals within a medical hierarchy of the health care system. In nursing, it has been argued that oppression is the result of working within a hierarchy that excluded nurses from positions of power and contributed to the occurrence of lateral violence amongst nurses (Brunt, 2011; Crabbs & Smith, 2011; Purpora et al., 2012; Roberts, 1983; Roberts, 2000; Roberts et al., 2009). Given the similarities of

clinical expertise and the context of working within a hierarchical medical system, it may be that unprofessionalism or inconsideration may be a response to feelings of oppression for midwives and nurses. A critical understanding and discussion of oppression and lateral violence could assist with future efforts to reduce and eliminate social and institutional constructions that contribute to this behaviour, which may ultimately result in better collaborative experiences for midwives and nurses.

To improve collaborative experiences for midwives and nurses, systemic and individual strategies to reduce or prevent unprofessional or inconsiderate experiences, must be explored and initiated, particularly if these experiences are consistent with lateral violence. Unfortunately, a lack of research about the effectiveness of interventions used to prevent or reduce lateral violence in nursing was identified in a systematic review of 16 qualitative and 4 quantitative studies about the experiences of lateral violence in nursing (Rittenmeyer, Huffman, Hopp, & Block, 2013). For this reason, efforts must be made to explore systemic and individual strategies to prevent or reduce unprofessionalism or inconsideration. This exploration requires more research about the ways that unprofessionalism or inconsideration may be contributing to lateral violence between midwives and nurses, and how unprofessionalism and inconsideration is experienced when midwives and nurses collaborate. Qualitative exploratory studies using a variety of methodologies that can account for relations of power, such as feminist post structuralism, critical social theory, and phenomenology could be used for further examination about lateral violence amongst these groups. Further research examining the effectiveness of systemic and individual interventions to prevent or reduce unprofessional or inconsiderate experiences

could provide insight to ensure that collaborative work experiences are positive, healthy and safe.

Synthesized Finding 2

The second synthesized finding of this review identified positive experiences of collaboration between midwives and nurses and suggested that these positive experiences may provide hope to overcome the challenges of sharing care. The two categories that were synthesized for the second synthesized finding *if midwives and nurses have positive experiences collaborating then there is hope that the challenges of collaboration can be overcome* were; positive experiences of teamwork and the challenges of sharing care.

Positive experiences of teamwork.

Seven findings were aggregated to create the category of *positive experiences of teamwork*; (a) admiration and anxiety (Zimmer, 2006), (b) changing relationships (Bell, 2010), (c) collegial respect (Zimmer, 2006), (d) commitment to teamwork (Kennedy & Lyndon, 2008), (e) teaching midwifery (Kennedy & Lyndon, 2008), (f) that sort of irony, and (g) working together for the woman (Kennedy & Lyndon, 2008). These findings represented experiences of midwives and nurses in both Canada and the United States, indicating that the positive experiences were not limited to one specific context of practice or geographical area. A strength of this category is the variety of settings.

Like the midwives and nurses in this review, other professionals have had positive experiences of teamwork and collaboration. For example, clinical nurse specialists and physicians reported positive experiences collaborating in a phenomenological study about the lived experiences of collaboration (Arslanian-Engoren, 1995). In a qualitative study of 897 professionals from 14 different fields of occupation, work was identified as a source of 17

positive experiences (Lutgen-Sandvik, Riforgiate, & Fletcher, 2011). Included in the 17 identified positive experiences was the experience of teamwork (Lutgen-Sandvik et al., 2011). These findings are consistent with the category, positive experiences of teamwork. The ability to overcome challenges in demanding work situations was also identified as a positive experience (Lutgen-Sandvik et al., 2011). This is important for the synthesized finding, *if midwives and nurses have positive experiences collaborating then there is hope that the challenges of collaboration can be overcome*, because the ability of midwives and nurses to overcome the challenges of sharing care may result in further positive experiences of teamwork.

The challenges of sharing care.

Five findings were aggregated to create the category *challenges of sharing care*; (a) avoiding (Zimmer, 2006), (b) missing a sense of team (Zimmer, 2006), (c) needing help – placating the nurses (Zimmer, 2006), (d) ongoing challenges (2010), and (e) the bad medical person (Zimmer, 2006). This category identified that sharing care was challenging for midwives and nurses. According to D'Amour et al. (2005), sharing is part of collaboration. Collaboration is also a process (D'Amour et al., 2005; San Martín-Rodríguez et al., 2005; Thomson et al., 2009; Waldman & Kennedy, 2012), not a stationary point in time. With this in mind, the challenges of sharing care are an inevitable result of the evolution of collaborative experiences. Acknowledging that this is an expected part of collaboration, and facilitating hope to overcome challenges of sharing care, through examples of positive experiences of teamwork, could assist in building a resilient collaborative team of midwives and nurses.

The synthesized finding *if midwives and nurses have positive experiences collaborating then there is hope that the challenges of collaboration can be overcome* suggests that hope is needed for overcoming the challenges of sharing care. In a post-modern ethnography that explored the clinical and academic workplaces of nurses and midwives in England, Scotland, and New Zealand; hope, optimism and resilience were found to be connected, where the role of hope had to be realistic in order increase professional and personal resilience (Glass, 2009). Positive experiences of teamwork that midwives and nurses have are examples that positive experiences of teamwork can be achieved. For midwives and nurses facing challenges in sharing care, knowledge that other midwives and nurses have had positive teamwork experiences can be the source of realistic hope for overcoming challenges. Consistent with this argument is the need for people to search for ways to be grounded in a sense of hope (Stephenson, 1991). For nurses and midwives, examples of positive experiences of teamwork may provide this grounding in hope. Furthermore, awareness of a history of collaboration has also been identified as a possible characteristic of successful collaboration (Downe et al., 2010). Creating an awareness that teamwork has been positively experienced by midwives and nurses, and cultivating a sense of hope, based on this history, that challenges can be overcome is consistent with this synthesized finding. More research is required to provide greater understanding to the concept of hope and how it may facilitate collaboration when care providers experience challenges in their collaborative experiences and relationships.

Positive and Negative Experiences of Care

The synthesized findings of this review have illustrated that midwives and nurses have a variety of positive and negative experiences when they collaborate. The categories

that were synthesized for the creation of these findings illustrate that positive and negative experiences consist of many varied experiences. The study by Kornelsen et al. (2000), excluded from the synthesis but reported narratively, also produced qualitative results that midwives and nurses had both positive and negative experiences collaborating. The qualitative findings indicated a range of experiences that contributed to positive experiences and negative experiences of collaboration (Kornelsen et al., 2000). This is consistent with the synthesized findings of this review.

Negative and positive experiences of collaboration have not been limited to only midwives and nurses who collaborate. Midwives and physicians have had positive and negative experiences of collaboration. In a qualitative study of 10 midwives and 9 physicians in 11 maternity units in Australia, midwives and physicians recognized tensions or struggles for power in negative interactions and regarded positive interactions as being collaborative, inclusive of the family receiving care and having a relationship to positive outcomes (Hastie & Fahy, 2011). Negative experiences, described by both physicians and midwives occurred in the context of a hierarchical or medically dominating model of care (Hastie & Fahy, 2011). This raises the question of how hierarchy within the medical system may be impacting efforts to build collaborative relationships and teams for midwives and nurses, and for other professionals working together in this area of care. This research (Hastie & Fahy, 2011) and the synthesized findings of this review illustrate a need for more research that explores the complexity of the collaborative experiences of professionals within maternity care.

Strengths

There are several strengths of this qualitative systematic review including, (a) in-depth examination of a particular phenomenon (b) adherence to a protocol, (c) the fit of the

JBI methodology to the research question, (d) the JBI training of the first, co-secondary reviewers, and all members of the thesis committee, and (e) comprehensiveness of the search strategies.

The completion of a qualitative review provided an examination of a variety of in depth qualitative sources that addressed the collaborative experiences of midwives and nurses. The studies included in the synthesis addressed this phenomenon comprehensively and critically, reflected by the variety of qualitative methodologies used in the primary studies. Although the findings are not generalizable, the findings go beyond cause and effect to offer ideas about complexity and the processes involved in collaborative experiences. A qualitative systematic review also requires an element of interpretation during the creation of the categories and synthesized findings, which requires the reviewers to critically examine the themes, metaphors, findings, and conclusions of included studies.

A protocol was developed to guide the completion of this systematic review. It was created following the rigorous methods and methodology of the JBI. The protocol provided a clear and transparent account of the methods used to conduct a systematic review. The protocol also provides one part of an audit trail for the systematic review, the second part will be the publication of the systematic review itself.

The third strength of the review was that the Joanna Briggs Institute is an organization that has a global reach in the synthesis of evidence, knowledge transfer, and implementation of evidence into practice. JBI recognizes the importance of synthesizing the best available evidence, which includes qualitative and quantitative evidence. This holistic understanding of evidence and the methods created by JBI to synthesize qualitative evidence provided the tools required to answer the research question of this systematic review.

A fourth strength of this review was that the primary (D.M.) and co-secondary reviewers (E.S.C. and M.C.Y) have all received Joanna Briggs Institute training for the conduct of JBI systematic reviews. Additionally, all members of the committee have been JBI trained. This enhanced the adherence to the JBI methodology and methods for completion of the systematic review.

The final strength of this review was that the search strategies that were developed for this systematic review were comprehensive. The search strategies were finalized through repeated testing and consultation with a librarian (M.H.) throughout their development and use. This enhanced the specificity and breadth of scope of the search strategies to answer the research question.

Limitations

Despite the strengths of this review, there were still potential limitations related to the; (a) generalizability of the results, (b) inclusion criteria, (c) search strategy, (d) translation of search terms, (e) grey literature sources, and (f) inclusion of studies. Many of these limitations are aspects of the use of this JBI design. However, they will be addressed in the context of this study.

A systematic review of qualitative evidence is limited in terms of being able to conclusively identify cause and effect for the occurrence of phenomena. Like qualitative research, the results and conclusions of a qualitative systematic review are specific to the context of the included studies. This means that the findings and results are not generalizable to all possible contexts or occasions. A qualitative systematic review requires an element of interpretation during the creation of the categories and synthesized findings. The co-secondary reviewers of this review and the JBI trained committee members were provided an

opportunity for review and feedback regarding the results. This was in keeping with the JBI methodology to ensure the credibility of the results of the review.

The second limitation of this systematic review was the inclusion criteria. Only studies that were published in English were included. It is possible that there are studies about this phenomenon that may be published in other languages, which were not included. Another aspect of the inclusion criteria that was limiting was that the definition of midwife used for this review excluded traditional birth attendants, lay midwives, and midwives who have not received formal training. Including a broader definition of midwife may have resulted in the retrieval of studies that could have added to the findings.

The third limitation is the possibility that all studies meeting the inclusion criteria may not have been retrieved due to the MeSH headings and key words that were used in the search strategy. Recognizing that this could be a limitation of this study, ongoing consultation with a librarian (M.H) occurred throughout the development of the search strategies and the searching process itself.

Another limitation of this review was the challenge of translating search terms in the search strategy for each database that was searched. This was done to account for the differences in how studies were indexed by databases. Each database that was searched indexed studies differently and these were translated from one database to the next to ensure that the search strategy was as consistent as possible. Not all databases shared similar terms for indexing, so they were translated and equivalent search terms and MeSH headings were identified across the databases. It is possible that studies were not included due to the challenge of translating search terms and MeSH headings.

The fifth limitation of this review was the possibility that there could be additional grey literature sources that, if searched, could have added to the findings. Anticipating that this could be a limitation, the primary reviewer (D.M.) consulted with a librarian (M.H.) throughout the development of the grey literature list of sources to search. Three additional grey literature sources, not included in the original list of sources were searched. These were found during the grey literature search.

The final limitation of this review was the possibility that studies that met the criteria may not have been included. Definitions were used for clarity in the use of inclusion criteria. Using the three-step search strategy that JBI outlined provided a transparent and systematic approach for each aspect of searching, retrieving and selecting studies to include. Having two reviewers agree at each point of the title and abstract review, full text review, and critical appraisal enhanced the rigour in the selection of studies for inclusion in the review. It is still possible, however, that despite the attempts to ensure the clarity of the inclusion criteria and agreement between two reviewers about selected studies for inclusion, there exist studies that may have been missed.

Implications for practice

The results of this systematic review provided insight into areas of practice that could be improved. Based on the results of this review and supporting literature, these are some specific recommendations for practice;

- Distrust between midwives and nurses must be addressed to overcome negative experiences of collaboration. Strategies to improve trust between midwives and nurses could include the provision of time and ongoing opportunities for midwives and nurses to work together and learn with each other such as; shared lunch and

learns, shared education sessions, shared staff room, mentoring that transcends professions.

- Professional roles for midwives and nurses who collaborate must be clarified, discussed, debated and perhaps written into policy and educational curricula to begin to overcome negative experiences of collaboration. Strategies to assist with role clarity for midwives and nurses could include; ongoing communication, increased awareness about the scope of practice for each provider group, creation of guidelines with input from midwives and nurses about expectations for collaboration.
- Experiences that lack professionalism or consideration must be prevented or reduced amongst midwives and nurses to overcome negative experiences of collaboration. Strategies to assist in reducing unprofessionalism or inconsideration could include; increased awareness about the scope of practice for each provider group, improved role clarity, mentoring that transcends professions, ongoing opportunities for midwives and nurses to be acquainted professionally and personally.
- Positive experiences of teamwork must be made available to midwives and nurses, as examples that the challenges of sharing care can be overcome. Strategies to increase awareness of the positive experiences of teamwork could include; presentations by midwives and nurses about their positive experiences collaborating, descriptions of positive experiences between midwives and nurses in regional, national, and international publications, the use of social media to share positive experiences of collaboration amongst midwives and nurses

- The challenges of sharing care must be identified as part of the process of collaboration and hope that midwives and nurses can overcome the challenges of sharing care must be cultivated and supported. Strategies that may assist with overcoming the challenges of sharing care include; ongoing support for challenges of sharing care, recognition that collaboration is a process, recognition that challenges are an expected part of the process of collaboration.

Implications for research

That only five studies were methodologically sound and met the inclusion criteria for this review indicated that there is a gap in the literature regarding this phenomenon. As a result, more research is needed in this area. The synthesized findings of this systematic review need to be further explored from a relations of power perspective. Based on the results of the review and supporting literature, these are specific suggestions for future areas of research;

- How trust can be cultivated amongst midwives and nurses who collaborate
- How unclear roles may be influenced by the ongoing debate about professional identities of nurse-midwives
- How the similarities of clinical expertise and shared history of providing primary birthing care influence role clarity for midwives and nurses
- How experiences that lack professionalism or consideration may be contributing to lateral violence for midwives and nurses who collaborate
- The experiences of lateral violence for nurses and midwives who collaborate

- Further examination of relations of power and lateral violence amongst midwives and nurses through qualitative exploratory studies, using methodologies such as feminist post structuralism, critical social theory, and phenomenology
- An examination of the effectiveness of interventions to reduce or prevent unprofessionalism, inconsideration, and lateral violence in maternity care
- How care providers make collaboration a positive experience
- How collaboration and teamwork is experienced positively
- The challenges of sharing care and identification of the types of challenges that exist for midwives and nurses
- The experiences of collaboration amongst maternity care providers groups, specifically midwives and nurses in a variety of clinical practice contexts

Summary

In this chapter, the results from this study, including the five categories and two synthesized findings were discussed. The results were discussed in relation to supporting literature. Strengths and limitations of this review were identified. The implications for clinical practice and implications for research were presented.

Chapter Six: Conclusions

This systematic review provided results that addressed the research question, *what are the experiences of midwives and nurses who collaborate to provide birthing care?* The two synthesized findings of this systematic review have illustrated collaborative experiences that can be positive and negative for midwives and nurses who work together. Such things as; unclear roles, distrust, or a lack of professionalism or consideration may influence the negative experiences. The positive experiences offer the possibility of hope that the challenges of sharing care, experienced by midwives and nurses, can be overcome. Together, the synthesized findings provided evidence that midwives and nurses have a variety of negative collaborative experiences that may be influenced in multiple ways. Midwives and nurse also have positive collaborative experiences that could provide examples for overcoming the challenges of sharing care. This is not surprising given the facilitators and barriers that can impact collaboration that were identified in the literature review.

To my knowledge, this is the first qualitative systematic review to explore the collaborative experiences of midwives and nurse who collaborate in the provision of birthing care. Given the limited number of studies that met the criteria for inclusion in the review, more research is required about the collaborative experiences of midwives, nurses, and other maternity care providers. A call for more research that explores the experiences and processes of collaboration in inter-professional teams is not new. D'Amour et al. (2005) argued in their literature review that much of the research about collaboration has been about the structure, settings, and the composition of collaborative teams, but has not focused on the processes of collaboration (D'Amour et al., 2005). The result of this, according to D'Amour et al. is that there is little research that provides insight or greater understanding about how

collaborative teams work together, and what the dynamics of interacting are for professionals who collaborate (D'Amour et al., 2005). That only five studies met the inclusion and critical appraisal criteria for this systematic review is evidence of a gap in the literature about the experiences of midwives and nurses who collaborate, how they collaborate, and interactional dynamics between the two provider groups. Closing this gap through more qualitative research that explores collaborative experiences between midwives and nurses, how they collaborate, and the dynamics of interactions within a variety of contexts of practice will serve to advance our knowledge and ultimately enhance these collaborative relationships.

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Appendix A: The Joanna Briggs Institute Model of Evidence-Based Care

(Pearson et al., 2005)

Appendix B: Initial Searches

CINAHL (May 19, 2014)

	Search Term	Results	Notes
S75	S67 AND S72 AND S73	5,283	X (nurse midwife test)
S74	S16 AND S25 AND S67 AND S72	**304**	*** Best!
S73	S16 OR S47	447,604	X (midwife + Nurse test)
S72	S26 OR S27 OR S28 OR S29 OR S30 OR S31 OR S32 OR S33 OR S34 OR S35 OR S36 OR S37 OR S38 OR S39 OR S40 OR S41 OR S42 OR S43 OR S44 OR S45 OR S46 OR S59 OR S68 OR S69 OR S70 OR S71	109,597	Obstetric
S71	home N2 birth*	897	
S70	(MH "Home Childbirth")	2,184	
S69	child N2 birth	650	
S68	(MH "Childbirth")	5,506	
S67	S48 OR S49 OR S50 OR S51 OR S52 OR S53 OR S54 OR S55 OR S56 OR S57 OR S58 OR S60 OR S61 OR S62 OR S63 OR S64 OR S65 OR S66	126,371	Collaborative
S66	Work N2 Environment	17,008	
S65	TI teamwork OR AB teamwork	2,913	
S64	Multidisciplinary N2 Health* N2 Team*	192	
S63	Multidisciplinary N2 Care N2 Team*	22,034	
S62	collaborat*	46,358	
S61	joint n2 practice	674	
S60	Interdisciplinary N2 Health* N2 Team*	169	
S59	(MH "Alternative Birth Centers")	893	
S58	(MH "Alternative Health Facilities")	343	
S57	(MH "Health Facility Environment")	3,858	
S56	(MH "Work Environment")	14,936	
S55	(MH "Teamwork")	7,748	
S54	(MH "Midwife Attitudes")	982	
S53	(MH "Nurse Attitudes")	17,983	
S52	(MH "Attitude of Health Personnel")	18,594	
S51	(MH "Education, Interdisciplinary")	2,513	
S50	(MH "Multidisciplinary Care Team")	21,865	
S49	(MH "Joint Practice")	568	
S48	(MH "Collaboration")	20,782	

S47	S26 OR S27 OR S28 OR S29 OR S30 OR S31 OR S32 OR S33 OR S34 OR S35 OR S36 OR S37 OR S38 OR S39 OR S40 OR S41 OR S42 OR S43 OR S44 OR S45 OR S46	107,081	X
S46	nurs* N2 midwi* N2 service*	220	
S45	midwi* N2 service*	1,378	
S44	nurs* N2 service*	7,143	
S43	matern* N2 child*	5,643	
S42	(MH "Nurse-Midwifery Service")	136	
S41	(MH "Maternal-Child Health")	1,677	
S40	(MH "Maternal-Child Care")	695	
S39	Obstetric* N2 Deliver*	3,716	
S38	Obstetric* N2 Service*	838	
S37	Obstetric* N2 Patient*	622	
S36	Obstetric N2 Care	4,762	
S35	Intrapartum N2 Care	1,274	
S34	Prenatal N2 Care	9,259	
S33	(MH "Obstetric Emergencies")	375	
S32	(MH "Delivery, Obstetric")	3,579	
S31	(MH "Obstetric Service")	631	
S30	(MH "Obstetric Patients")	152	
S29	(MH "Obstetric Care")	4,259	
S28	(MH "Intrapartum Care")	1,127	
S27	(MH "Prenatal Care")	7,892	
S26	(MH "Pregnancy")	91,538	
S25	S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24	21,700	Midwife
S24	TI midwi* OR AB midwi*	17,426	
S23	(MH "Australian Rural Nurses and Midwives")	10	
S22	(MH "Education, Nurse Midwifery")	616	
S21	(MH "Students, Midwifery")	780	
S20	(MH "Nurse-Midwifery Service")	136	
S19	(MH "Midwifery Service")	944	
S18	(MH "Nurse Midwives")	1,581	
S17	(MH "Midwives")	6,257	
S16	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14 OR S15	355,190	Nurse
S15	Nurs* N2 postpartum	250	
S14	Nurs* N2 postnatal	40	
S13	Nurs* N2 prenatal	125	
S12	Nurs* N2 Obstetric*	3,240	
S11	Nurs* N2 Perinatal	944	
S10	TI nurs* OR AB nurs*	329,555	
S9	(MH "Students, Nursing, Masters")	230	
S8	(MH "Students, Nursing")	17,477	

S7	(MH "Students, Nurse Midwifery")	25	
S6	(MH "Association of Women's Health, Obstetric, and Neonatal Nurses")	314	
S5	(MH "Obstetric Nursing")	2,671	
S4	(MH "Perinatal Nursing")	759	
S3	(MH "American College of Nurse-Midwives")	181	
S2	(MH "Maternal-Child Nursing")	1,074	
S1	(MH "Nurses")	40,712	

PubMed (May 19, 2014)

	Search Term	Results
#112	Search ((((((((((("Nurses"[Mesh]) OR "Maternal-Child Nursing"[Mesh]) OR "Obstetric Nursing"[Mesh]) OR "Students, Nursing"[Mesh]) OR ((TI nurs*) OR AB nurs*)) OR ((nurs*) AND perinatal)) OR ((nurs*) AND obstetric)) OR ((nurs*) AND prenatal)) OR ((nurs*) AND postnatal)) OR ((nurs*) AND postpartum))) AND (((("Midwifery"[Mesh]) OR "Nurse Midwives"[Mesh]) OR ((TI Midwi*) OR AB midwi*))) AND ((((((((((((((((("Pregnancy"[Mesh]) OR "Prenatal Care"[Mesh]) OR "Obstetrics"[Mesh]) OR ((intrapartum) AND care)) OR ((obstetric) AND care)) OR ((obstetric) AND service)) OR ((obstetric) AND deliver)) OR "Maternal-Child Health Centers"[Mesh]) OR ((matern*) AND child*)) OR ((nurs*) AND service*)) OR ((midwi*) AND service*)) OR (((nurs*) AND midwi*) AND service*)) OR "Parturition"[Mesh]) OR "Natural Childbirth"[Mesh]) OR "Home Childbirth"[Mesh]) OR "Prenatal Education"[Mesh]) OR ((child) AND birth)) OR ((home) AND birth))) AND ((((((((((("Cooperative Behavior"[Mesh]) OR "Attitude of Health Personnel"[Mesh]) OR "Workplace"[Mesh]) OR "Health Facility Environment"[Mesh]) OR (((interdisciplinary) AND health*) AND team*)) OR ((joint) AND practice)) OR collaborat*) OR (((multidisciplinary) AND care) AND team)) OR (((multidisciplinary) AND health*) AND team*)) OR ((TI teamwork) AND AB teamwork)) OR ((work) AND environment))	**1801**
#111	Search ((((((((("Cooperative Behavior"[Mesh]) OR "Attitude of Health Personnel"[Mesh]) OR "Workplace"[Mesh]) OR "Health Facility Environment"[Mesh]) OR (((interdisciplinary) AND health*) AND team*)) OR ((joint) AND practice)) OR collaborat*) OR (((multidisciplinary) AND care) AND team)) OR (((multidisciplinary) AND health*) AND team*)) OR ((TI teamwork) AND AB teamwork)) OR ((work) AND environment)	333403
#110	Search (work) AND environment	67560
#109	Search (TI teamwork) AND AB teamwork Schema: all	0
#108	Search (TI teamwork) AND AB teamwork	0
#107	Search ((multidisciplinary) AND health*) AND team*	9073
#106	Search ((multidisciplinary) AND care) AND team	12007
#105	Search collaborat*	97776

#104	Search (joint) AND practice	12606
#103	Search ((interdisciplinary) AND health*) AND team*	5652
#102	Search "Health Facility Environment"[Mesh]	5736
#100	Search "Workplace"[Mesh]	13298
#95	Search "Attitude of Health Personnel"[Mesh]	118519
#90	Search "Cooperative Behavior"[Mesh]	28368
#88	Search ((((((((((((((("Pregnancy"[Mesh]) OR "Prenatal Care"[Mesh]) OR "Obstetrics"[Mesh]) OR ((intrapartum) AND care)) OR ((obstetric) AND care)) OR ((obstetric) AND service)) OR ((obstetric) AND deliver)) OR "Maternal-Child Health Centers"[Mesh]) OR ((matern*) AND child*)) OR ((nurs*) AND service*)) OR ((midwi*) AND service*)) OR (((nurs*) AND midwi*) AND service*)) OR "Parturition"[Mesh]) OR "Natural Childbirth"[Mesh]) OR "Home Childbirth"[Mesh]) OR "Prenatal Education"[Mesh]) OR ((child) AND birth)) OR ((home) AND birth)	922087
#87	Search (home) AND birth	7457
#86	Search (child) AND birth	58626
#85	Search "Prenatal Education"[Mesh]	19
#83	Search "Home Childbirth"[Mesh]	2001
#80	Search "Natural Childbirth"[Mesh]	2047
#79	Search "Parturition"[Mesh]	7989
#73	Search ((nurs*) AND midwi*) AND service*	7521
#72	Search (midwi*) AND service*	10343
#71	Search (nurs*) AND service*	131885
#70	Search (matern*) AND child*	81624
#69	Search (matern*) AND child	63560
#68	Search nurse midwifery services	11431
#64	Search "Maternal-Child Health Centers"[Mesh]	2107
#61	Search (obstetric) AND deliver	987
#60	Search (obstetric) AND service	2917
#59	Search (obstetric) AND patient	24161
#58	Search (obstetric) AND care	19242
#57	Search (intrapartum) AND care	2092
#56	Search (prenatal) AND care	32216
#52	Search "Obstetrics"[Mesh]	15391
#50	Search "Delivery, Obstetric"[Mesh]	60758
#46	Search "Prenatal Care"[Mesh]	19934
#44	Search "Pregnancy"[Mesh]	703139
#41	Search (("Midwifery"[Mesh]) OR "Nurse Midwives"[Mesh]) OR ((TI Midwi*) OR AB midwi*)	19503
#40	Search (TI Midwi*) OR AB midwi*	406
#33	Search "Nurse Midwives"[Mesh]	5792
#31	Search "Midwifery"[Mesh]	14267

#29	Search (((((((("Nurses"[Mesh]) OR "Maternal-Child Nursing"[Mesh]) OR "Obstetric Nursing"[Mesh]) OR "Students, Nursing"[Mesh]) OR ((TI nurs*) OR AB nurs*)) OR ((nurs*) AND perinatal)) OR ((nurs*) AND obstetric)) OR ((nurs*) AND prenatal)) OR ((nurs*) AND postnatal)) OR ((nurs*) AND postpartum)	110669
#28	Search (nurs*) AND postpartum	6017
#27	Search (nurs*) AND postnatal	3331
#26	Search (nurs*) AND prenatal	6036
#25	Search (nurs*) AND obstetric	8919
#22	Search (nurs*) AND perinatal	3343
#21	Search (TI nurs*) OR AB nurs*	3619
#18	Search "Students, Nursing"[Mesh]	16901
#13	Search "Obstetric Nursing"[Mesh]	2726
#12	Search "Maternal-Child Nursing"[Mesh]	4879
#11	Search "Nurses"[Mesh]	6971

The Joanna Briggs Institute EBP Database (May 19, 2014)

	Search Terms	**Results**
1.	(midwi* adj4 nurs*).mp. [mp=text, heading word, subject area node, title]	**316**
2.	(nurs* adj2 midwi*).mp. [mp=text, heading word, subject area node, title]	312
3.	(collaborat* or teamwork or (joint adj2 practice)).mp. [mp=text, heading word, subject area node, title]	977
4.	2 and 3	217
5.	(birth or obstetric* or perinatal or (maternal adj2 child*)).mp. [mp=text, heading word, subject area node, title]	495
6.	2 and 3 and 5	76

A formalized search strategy will be created through the use of an iterative process and informed by the use of these initial key words.

Appendix C: Approved Protocol

The experiences of midwives and nurses collaborating to provide birthing care: a systematic review protocol

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Review question/objective

The objective of this review is to identify, appraise, and synthesize the qualitative evidence about the experiences of midwives and nurses collaborating to provide birthing care. This qualitative review aims to answer the following question:
What are the experiences of midwives and nurses collaborating to provide birthing care?

Background

The focus of this systematic review is upon collaboration between midwives and nurses for the provision of birthing care. Collaboration is defined as:
Collaborative woman-centered practice designed to promote the active participation of each discipline in providing quality care. It enhances goals and values for women and their families, provides mechanisms for continuous communication among caregivers, optimizes caregiver participation in clinical decision-making (within and across disciplines), and fosters

respect for the contributions of all disciplines [1.(p.15)]
Interest in collaboration and the provision of health care, as a means to meet the growing complexity and diversity of patient needs is increasing for clinicians, administrators, politicians and decision makers. Specific to the provision of maternity care, several professional provider organizations in North America have released joint statements indicating their commitment to collaborative maternity care.[2,3] Commitment to collaborative practice in maternity care, through joint statements, by national provider groups is commendable. However, the complexities involved in implementing and in sustaining collaborative practice require an understanding of current collaborative experiences.[4]

Facilitators for and barriers to collaboration have been commonly identified in the literature. Examples of facilitators for collaboration include; communication,[5-12] clarity of roles,[6-9,11,12] respect,[5,6,8,10,12] trust,[5,7,8,10,12] supportive institutions/organizations/culture,[5-7,10,13,14] shared values or shared vision,[9,12,13]and a willingness to collaborate.[5,6,10] Examples of barriers include: poor communication,[13,15-17] resistance to change,[6,16] different philosophies,[17,18] perceived threat to professional role,[19,20] insurance and liability,[18,20] lack of respect,[17,20] lack of clearly defined roles,[15,19] and lack of knowledge of other health disciplines.[13,19] The interdependency of the facilitators and barriers is apparent, where the presence of one facilitator such as a willingness to collaborate often supports the presence of other facilitators such as communication and trust. Similarly, the presence of one barrier, such as poor communication, becomes a challenge to collaboration as a whole. Although these lists are not exhaustive, they do provide insight into the kinds of support and challenges that maternity health care providers may be experiencing in the establishment and maintenance of collaborative practice.

Access to maternity care providers is influenced by geography for women around the world. For example, in New Zealand, midwives are chosen as primary care providers by 75% of women requiring perinatal care,[21] and in The Netherlands, midwives provide care to 50% of women at the beginning of delivery.[9] However, in Canada, midwives in 2010 attended less than 5% of births.[22] The different approaches to maternity care are reflected by the global variations in access to maternity care providers. These global variations of maternity care provision provide an opportunity to explore multiple models of collaborative maternity practice and to understand collaborative experiences from the perspective of numerous maternity care providers.

Collaboration in primary care, of which birthing care is a part, has become a focus for the improvement of the quality and efficiency of health care provided to individuals and families worldwide.[13] Improved health outcomes identified as a result of collaborative care have included: lower caesarean section rates,[5,23-25] reduction in the use of epidural anesthesia for pain management,[6,23,24] reduced rates of episiotomies,[24,25] increased breastfeeding rates,[23,24] and improved patient satisfaction.[5,26] The positive impact of collaboration on health outcomes in maternity care supports the need to explore the collaborative experiences of the professionals providing the care. Such an exploration can inform how best to support collaborative practice with the aim of achieving the best possible health outcomes.
There has been a focus on the collaborative relationships and attitudes between midwives and physicians in the literature.[24-32] Midwives will be defined using the definition of a midwife

from the International Confederation of Midwives,
"A midwife is a person who has successfully completed a midwifery education programme that is duly recognized in the country where it is located and that is based on the ICM *Essential Competencies for Basic Midwifery Practice* and the framework of the ICM *Global Standards for Midwifery Education*; who has acquired the requisite qualifications to be registered and/or legally licensed to practice midwifery and use the title 'midwife'; and who demonstrates competency in the practice of midwifery."[34]

However, apart from midwives and physicians, other care providers also contribute to collaborative maternity care. For example, nurses work with both midwives and physicians in the provision of birthing care. Nurses will be defined as, "…self-regulated health-care professionals who work autonomously and in collaboration with others".[35(p.6)] The International Council of Nurses recognizes that nursing is more broadly defined,
Nursing encompasses autonomous and collaborative care of individuals of all ages, families, groups and communities, sick or well and in all settings. Nursing includes the promotion of health, prevention of illness, and the care of ill, disabled and dying people. Advocacy, promotion of a safe environment, research, participation in shaping health policy and in patient and health systems management, and education are also key nursing roles.[36]
Nurses, like midwives, provide direct care to women and families during labour and delivery. However, despite the similarity of their roles, differences exist.[2] In Canada, for example, nurses have a history of providing maternity care within the health care system and midwives have not. The first introduction to regulated midwifery occurred in Canada in the province of Ontario in 1993.[37] Health care providers and administrators continue to adjust to the integration of midwives into maternity care teams differently in each province.[38] Challenges with collaborative practices amongst midwives and nurses have been identified by several Canadian researchers using qualitative methodology.[8,14,39-42] An example of a common theme that was identified was the role confusion experienced by nurses working with recently integrated midwives.[8,15,40-42]

Despite these similarities and challenges, no comprehensive synthesis of the current evidence related to the experiences of collaboration among midwives and nurses has been conducted. Such a review would provide invaluable information to care providers and families providing or receiving birthing care. This systematic review of existing qualitative data will contribute to a comprehensive understanding about the collaborative experiences of midwives and nurses, and help to identify future directions for researchers and policy makers. A preliminary search of the Joanna Briggs Database of Systematic Reviews and Implementation Reports, CINAHL and PubMed has revealed that there is currently no systematic review published about this topic.

Keywords
Collaboration; Midwives; Nurses; Obstetrics; Experiences

Inclusion criteria

Types of participants

This review will consider studies that include midwives and nurses. Midwives and nurses with any length of practice will be included. Nurses who work in labor and delivery, post-partum care, pre-natal care, public health, and community health will be included in this systematic review.

Phenomena of interest

This review will consider studies that investigate the experiences of midwives and nurses collaborating during the provision of birthing care. Experiences will include any interactions between midwives and nurses working in collaboration to provide birthing care. Experiences can be any length in duration. Birthing care will refer to (a) supportive care throughout the pregnancy, labor, delivery and postpartum, (b) administrative tasks throughout the pregnancy, labor, delivery and postpartum, and (c) clinical skills throughout the pregnancy, labor, delivery and postpartum. The postpartum period will include the six weeks after delivery.

Context

This review will consider qualitative studies that have explored the experiences of collaboration in areas where midwives and nurses work together. Examples of these areas include: hospitals, birth centers, client homes, health clinics, and other public or community health settings. These settings can be located in any country, cultural context, or geographical location.

Types of studies

The review will consider English language studies that focus on qualitative data including, but not limited to, designs such as phenomenology, grounded theory, ethnography, action research and feminist research. In the absence of research studies, other text such as opinion papers, discussion papers, and reports will be considered.

Search strategy

The search strategy aims to find both published and unpublished studies. A three-step search strategy will be utilised in this review. An initial limited search of PubMed and CINAHL will be undertaken followed by an analysis of the text words contained in the title and abstract, and of the index terms used to describe article. A second search using all identified keywords and index terms will then be undertaken across all included databases. Thirdly, the reference list of all identified reports and articles will be searched for additional studies. Studies published in English will be considered for inclusion in this review. Studies published from 1981 until the current date will be considered for inclusion in this review, given that the initiation of collaboration between nurses and midwives in Canada and internationally occurred 25 to 30 years ago.

The databases to be searched include:

Anthrosource
CENTRAL (The Cochrane Library)
CINAHL
EMBASE
PsycINFO
PubMed
Social Services Abstracts
Sociological Abstracts.

Journals deemed relevant but not indexed in databases will be hand searched such as: Canadian Journal of Midwifery Research and Practice.

The search for unpublished studies will include:

New York Academy of Medicine Grey Literature Report
ProQuest Digital Dissertations
GrayLit Network
Conference Proceedings
Institute for Health & Social Care Research (IHSCR)
The Grey Literature Bulletin
Grey Source
SIGLE
Canadian Association of Midwives
Canadian Midwifery Regulators Consortium
Canadian Nurses Association
Canadian Association of Perinatal and Women's Health Nurses
American College of Nurse Midwives
Midwives Alliance of North America
American Midwifery Certification Board
North American Registry of Midwives
American Nurses Association
Association of Women's Health Obstetric and Neonatal Nurses
Royal College of Midwives
Nursing and Midwifery Council (UK)
Royal British Nurses' Association
Australian College of Midwives
Australian Nursing and Midwifery Federation
Australian College of Nurses
New Zealand College of Midwives
Midwifery Council of New Zealand
Nursing Council of New Zealand
New Zealand Nurses' Organisation
Royal Dutch Organisation of Midwives
Dutch Nurses Association

International Confederation of Midwives
International Council of Nurses.

Initial keywords to be used will be:

CINAHL

MeSH headings: Nurses, Maternal-Child Nursing, American College of Nurse-Midwives, Perinatal Nursing, Obstetric Nursing, "Association of Women's Health, Obstetric, and Neonatal Nurses", Midwives, Nurse Midwives, Midwifery Service, Nurse-Midwifery Service, Australian Rural Nurses and Midwives, Pregnancy, Prenatal Care, Intrapartum care, Obstetric Care, Obstetric Patients, Obstetric Patients, Obstetric Service, "Delivery, Obstetric", Obstetric Emergencies, Maternal-Child Health, Maternal-Child Care, Nurse-Midwifery Service, collaboration, joint practice, multidisciplinary care team, Attitude of Health Personnel, Nurse Attitudes, Midwife Attitudes, Teamwork, Work Environment, Health Facility Environment, Alternative Health Facilities, Alternative Birth Centers, childbirth, home childbirth

Key terms: nurs*, perinatal, obstetric, postpartum, prenatal, postnatal, midwi*, care, intrapartum, service*, patient, deliver, matern*, child*, interdisciplinary, health, team, joint, practice, collaborat*, multidisciplinary, teamwork, environment, home, birth, home visit, home visitors, experience, perception, perspective, qualitative

PubMed

MeSH headings: Nurses, Maternal-Child Nursing, Obstetric Nursing, Nursing, Midwifery, Nurse Midwives, Pregnancy, Prenatal Care, Obstetrics, Maternal-Child Health Centers, parturition, natural childbirth, home childbirth, prenatal education, cooperative behavior, attitude of health personnel, workplace, health facility environment

Key terms: nurs*, perinatal, obstetric, postpartum, prenatal, postnatal, midwi*, care, patient, service, deliver, intrapartum, nurse midwifery services, matern*, child*, service*, birth, home, interdisciplinary, team, health, multidisciplinary, teamwork, work, environment, home visit, home visitors, experience, perception, perspective, qualitative

Assessment of methodological quality
Qualitative papers selected for retrieval will be assessed by two independent reviewers for methodological validity prior to inclusion in the review using standardized critical appraisal instruments from the Joanna Briggs Institute Qualitative Assessment and Review Instrument (JBI-QARI) (Appendix I). Any disagreements that arise between the reviewers will be resolved through discussion, or with a third reviewer.
In the absence of research studies, textual papers selected for retrieval will be assessed by two independent reviewers for authenticity prior to inclusion in the review using standardized critical appraisal instruments from the Joanna Briggs Institute Narrative, Opinion and Text Assessment and Review Instrument (JBI-NOTARI) (Appendix I). Any disagreements that arise between the reviewers will be resolved through discussion, or with a

third reviewer.

Data collection
Qualitative data will be extracted from papers included in the review using the standardized data extraction tool from JBI-QARI (Appendix II). The data extracted will include specific details about the phenomena of interest, populations, study methods and outcomes of significance to the review question and specific objectives.
In the absence of research studies, textual data will be extracted from papers included in the review using the standardised data extraction tool from JBI-NOTARI (Appendix II). The data extracted will include specific details about the phenomena of interest, populations, study methods and outcomes of significance to the review question and specific objectives.

Data synthesis
Qualitative research findings will, where possible be pooled using JBI-QARI. This will involve the aggregation or synthesis of findings to generate a set of statements that represent that aggregation, through assembling the findings rated according to their quality, and categorizing these findings on the basis of similarity in meaning. These categories are then subjected to a meta-synthesis in order to produce a single comprehensive set of synthesized findings that can be used as a basis for evidence-based practice. Where textual pooling is not possible the findings will be presented in narrative form.
In the absence of research studies, textual papers will, where possible be pooled using JBI-NOTARI. This will involve the aggregation or synthesis of conclusions to generate a set of statements that represent that aggregation, through assembling and categorizing these conclusions on the basis of similarity of meaning. These categories are then subjected to a meta-synthesis in order to produce a single comprehensive set of synthesized findings that can be used as a basis for evidence-based practice. Where textual pooling is not possible the conclusions will be presented in narrative form.

Conflicts of interest
The authors Danielle Macdonald BA BScN RN and Erna Snelgrove-Clarke RN PhD are both obstetrical nurses.

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Appendix C:1: Critical appraisal instruments

QARI appraisal instrument

JBI QARI Critical Appraisal Checklist for Interpretive & Critical Research

Reviewer _____ Date _____

Author _____ Year _____ Record Number _____

	Yes	No	Unclear	Not Applicable
1. Is there congruity between the stated philosophical perspective and the research methodology?	☐	☐	☐	☐
2. Is there congruity between the research methodology and the research question or objectives?	☐	☐	☐	☐
3. Is there congruity between the research methodology and the methods used to collect data?	☐	☐	☐	☐
4. Is there congruity between the research methodology and the representation and analysis of data?	☐	☐	☐	☐
5. Is there congruity between the research methodology and the interpretation of results?	☐	☐	☐	☐
6. Is there a statement locating the researcher culturally or theoretically?	☐	☐	☐	☐
7. Is the influence of the researcher on the research, and vice- versa, addressed?	☐	☐	☐	☐
8. Are participants, and their voices, adequately represented?	☐	☐	☐	☐
9. Is the research ethical according to current criteria or, for recent studies, and is there evidence of ethical approval by an appropriate body?	☐	☐	☐	☐
10. Do the conclusions drawn in the research report flow from the analysis, or interpretation, of the data?	☐	☐	☐	☐

Overall appraisal: ☐ Include ☐ Exclude ☐ Seek further info. ☐

Comments (Including reason for exclusion)

_____

_____

_____

NOTARI appraisal instrument

JBI Critical Appraisal Checklist for Narrative, Expert opinion & text

Reviewer _____ Date _____

Author _____ Year _____ Record Number _____

	Yes	No	Unclear	Not Applicable
1. Is the source of the opinion clearly identified?	☐	☐	☐	☐
2. Does the source of the opinion have standing in the field of expertise?	☐	☐	☐	☐
3. Are the interests of patients/clients the central focus of the opinion?	☐	☐	☐	☐
4. Is the opinion's basis in logic/ experience clearly argued?	☐	☐	☐	☐
5. Is the argument developed analytical?	☐	☐	☐	☐
6. Is there reference to the extant literature/evidence and any incongruency with it logically defended?	☐	☐	☐	☐
7. Is the opinion supported by peers?	☐	☐	☐	☐

Overall appraisal: Include ☐ Exclude ☐ Seek further info ☐

Comments (Including reason for exclusion)

_____

_____

_____

Appendix C:2: Data extraction instruments

QARI data extraction instrument

JBI QARI Data Extraction Form for Interpretive & Critical Research

Reviewer _____ Date _____

Author _____ Year _____

Journal _____ Record Number _____

Study Description

Methodology

Method

Phenomena of interest

Setting

Geographical

Cultural

Participants

Data analysis

Authors Conclusions

Comments

Complete Yes ☐ No ☐

Findings	Illustration from Publication (page number)	Evidence		
		Unequivocal	Credible	Unsupported

Extraction of findings complete Yes ☐ No ☐

NOTARI data extraction instrument

JBI Data Extraction for Narrative, Expert opinion & text

Reviewer _____ Date _____

Author _____ Year _____ Record Number _____

Study Description

Type of Text:

Those Represented:

Stated Allegiance/ Position:

Setting

Geographical

Cultural

Logic of Argument

Data analysis

Authors Conclusions

Reviewers Comments

Data Extraction Complete Yes ☐ No ☐

Conclusions	Illustration from Publication (page number)	Evidence		
		Unequivocal	Credible	Unsupported

Include Yes ☐ No ☐

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Manuscript no. (if known):

Names of all authors in the order in which they appear in the Article: Danielle Macdonald, BA BScN RN, Marsha Campbell-Yeo, PhD NNP-BC RN, Co-Supervisor, Erna Snelgrove-Clarke, RN PhD, Co-Supervisor, Megan Aston, RN PhD, Thesis Committee Member, Melissa Helwig, MLIS, Thesis Committee Member

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Date of form: 30 May 2013

Appendix E: Initial Search Terms

CINAHL

MeSH headings: Nurses, Maternal-Child Nursing, American College of Nurse-Midwives, Perinatal Nursing, Obstetric Nursing," Association of Women's Health, Obstetric, and Neonatal Nurses", "Students, Nurse Midwifery", "Students, Nursing", "Students, Nursing, Masters", Midwives, Nurse Midwives, Midwifery Service, Nurse-Midwifery Service, "Students, Midwifery", "Education, Nurse Midwifery", Australian Rural Nurses and Midwives, Pregnancy, Prenatal Care, Intrapartum care, Obstetric Care, Obstetric Patients, Obstetric Patients, Obstetric Service, "Delivery, Obstetric", Obstetric Emergencies, Maternal-Child Health, Maternal-Child Care, Nurse-Midwifery Service, collaboration, joint practice, multidisciplinary care team, "Education, Interdisciplinary", Attitude of Health Personnel, Nurse Attitudes, Midwife Attitudes, Teamwork, Work Environment, Health Facility Environment, Alternative Health Facilities, Alternative Birth Centers, childbirth, home childbirth

Key terms: nurs*, perinatal, obstetric, postpartum, prenatal, postnatal, midwi*, care, intrapartum, service*, patient, deliver, matern*, child*, interdisciplinary, health, team, joint, practice, collaborat*, multidisciplinary, teamwork, environment, home, birth

PubMed

MeSH headings: Nurses, Maternal-Child Nursing, Obstetric Nursing, Students, Nursing, Midwifery, Nurse Midwives, Pregnancy, Prenatal Care, Obstetrics, Maternal-Child Health Centers, parturition, natural childbirth, home childbirth, prenatal education, cooperative behavior, attitude of health personnel, workplace, health facility environment

Key terms: nurs*, perinatal, obstetric, postpartum, prenatal, postnatal, midwi*, care, patient, service, deliver, intrapartum, nurse midwifery services, matern*, child*, service*, birth, home, interdisciplinary, team, health, multidisciplinary, teamwork, work, environment

Joanna Briggs Institute EBP Database

Key Terms: midwi*, nurs*, collaborat*, teamwork, joint practice, birth, obstetric*, perinatal, maternal child

Appendix F: Search Term Translations

	CINAHL	PubMed	PsycINFO	EMBASE
Nurse	**MeSH Headings** "Nurses" "maternal-child nursing" "american college of nurse-midwives" "perinatal nursing" "obstetric nursing" "community health nursing" "association of women's health, obstetric, and neonatal nurses" **Key words:** TI nurs* OR AB nurs* nurs* N2 perinatal nurs* N2 obstetric* nurs* N2 prenatal nurs* N2 postnatal	**MeSH Headings** “Nurses” Maternal-child nursing Obstetric nursing **Key Words:** ((TI nurs*) OR AB Nurs*) (nurs* AND (perinatal OR prenatal OR obstetric OR postnatal OR postpartum))	**Descriptors (DE)** "Nurses" “Nursing **Key Words:** TI nurs* OR AB nurs* Nurs* n/2 perinatal Nurs* n/2 obstetric* Nurs* n/2 prenatal Nurs* near/2 postnatal Nurs* near/2 postpartum health near/3 visitor	**Explosion searches** 'nurse'/exp 'perinatal nursing'/exp 'obstetrical nursing'/exp 'community health nursing'/exp **Key Words:** nurs*:ab,ti nurs*NEAR/2 perinatal nurs*NEAR/2 prenatal nurs*NEAR/2 postnatal nurs*NEAR/2 postpartum
Midwife	**MeSH Headings** "Midwives" "nurse midwives" "midwifery service" "nurse-midwifery service" australian rural nurses and midwives" **Key Words:** TI midwi* OR AB midwi*	**MeSH Headings** Midwifery Nurse Midwives **Key Words:** ((TI midwi*) OR AB midwi*)	**Descriptors (DE)** midwifery **Key Words:** TI midwi* OR AB midwi*	**Explosion searches** 'midwife'/exp 'nurse midwife'/exp **Key Words:** midwi*:ab,ti
Birthing Care	**MeSH Headings** "Pregnancy" "childbirth" "home childbirth"	**MeSH Headings** Pregnancy Parturition Home childbirth	**Descriptors (DE)** "Pregnancy" “birth” "prenatal care"	**Explosion searches** 'pregnancy'/exp 'childbirth'/exp

	"prenatal care" "intrapartum care" "obstetric care" "obstetric patients" "obstetric service" "delivery, obstetric" "obstetric emergencies" "maternal-child care" "maternal-child health" "maternal health services" "nurse-midwifery service" **Key Words:** obstetric* N2 (deliver* OR service* OR care* OR patient* OR health) intrapartum N2 (patient* OR care OR health) prenatal N2 (patient* OR care OR health) home N2 birth child N2 birth	Prenatal Care Natural Childbirth Prenatal Education Obstetrics Delivery, obstetric Maternal child health centers Maternal health services **Key Words:** (obstetric AND (care OR patient OR service OR deliver)) (care AND (prenatal OR intrapartum OR obstetric)) (birth AND (home OR child OR service OR deliver) ((matern*) AND child*) (((nurs*) OR midwi*) AND service*)	"postnatal period" "perinatal period" "prenatal development" "natural childbirth" "obstetrics" "obstetrical complications" **Key Words:** obstetric* N2 (deliver* OR service* OR care* OR patient* OR health) intrapartum N2 (patient* OR care OR health) prenatal N2 (patient* OR care OR health) home N2 birth child N2 birth	'home delivery'/exp 'prenatal care'/exp 'maternity ward'/exp health NEAR/3 service 'natural childbirth'/exp 'obstetric procedure'/exp 'delivery'/exp 'obstetric emergency'/exp 'maternal care'/exp **Key Words:** obstetric* NEAR/2 (deliver* OR service* OR care* OR patient* OR health) intrapartum NEAR/2 (care* OR patient* OR health) prenatal NEAR/2 (care* OR patient* OR health) home NEAR/2 birth child NEAR/2 birth
Collaboration	**MeSH Headings** "Collaboration" "joint practice" "multidisciplinary care team" "teamwork" "Role Conflict" "work environment" "health facility environment" "alternative health facilities" "alternative birth centers" "midwife attitudes"	**MeSH Headings** Cooperative Behavior Workplace Health facility environment Attitude of health personnel **Key Words:** ((TI team*) OR (AB team*)) Collaborat* Joint AND	**Descriptors (DE)** "Collaboration" "teams" "role conflicts" "working conditions" "employee attitudes" **Key Words:** TI teamwork OR AB teamwork collaborat* joint N2 practice	**Explosion searches** 'teamwork'/exp 'conflict'/exp 'work environment'/exp 'public-private partnership'/exp 'attitude'/exp 'health personnel attitude'/exp 'cooperation'/exp **Key Words:** teamwork:ab,ti collaborat*:ab,ti

	"nurse attitudes" "attitude of health personnel" "cooperative behavior" **Key Words:** TI teamwork OR AB teamwork collaborat* joint N2 practice transdisciplinary work N2 environment team* N2 (interdisciplinary OR transdisciplinary OR multidisciplinary OR work)	practice Work AND environment Team AND (interdisciplinary OR transdisciplinary OR multidisciplinary OR work OR care) (multidisciplinary AND care AND team) (multidisciplinary AND health AND team*)	transdisciplinary work N2 environment team* N2 (interdisciplinary OR transdisciplinary OR multidisciplinary OR work) interdisciplinary multidisciplinary	joint NEAR/2 practice transdisciplinary work NEAR/2 environment team* NEAR/2 (interdisciplinary OR transdisciplinary OR multidisciplinary OR work)

	Sociological Abstract	**Social Sciences Abstracts**	**Cochrane Library**	**Anthrosource**
Nurse	midwi* near/4 nurs*	midwi* near/4 nurs*	Midwi* near/4 nur*	Nurse
Midwife	See above	See above	See above	Midwife Midwife and nurse
Birthing Care	birth OR obstetric* OR perinatal maternal near/2 health	birth OR obstetric* OR perinatal maternal near/2 health		
Collaboration	teamwork cooperation cooperation OR teamwork	teamwork cooperation cooperation OR teamwork		

Appendix G: Final Search Strategies and Database Results

Anthrosource - October 22, 2014

Keyword	Results
Midwife and nurse	1
Nurse	80
Midwife	29

CENTRAL Cochrane Library FINAL Search Strategy - October 23, 2014

Query	Results	
Midwi* near/4 nur*	Cochrane Reviews	16
	Other Reviews	13
	Methods Studies	17
	Economic Evaluations	7
	Total	53

CINAHL Search Strategy FINAL - October 28, 2014

#	Query	Results
S63	S15 AND S22 AND S42 AND S62	336
S62	S43 OR S44 OR S45 OR S46 OR S47 OR S48 OR S49 OR S50 OR S51 OR S52 OR S53 OR S54 OR S55 OR S56 OR S57 OR S58 OR S59 OR S60 OR S61	134,031
S61	team* n2 (interdisciplinary OR transdisciplinary OR multidisciplinary OR work)	27,011
S60	work n2 environment	17,502
S59	transdisciplinary	349
S58	joint n2 practice	681
S57	collaborat*	46,768
S56	TI teamwork OR AB teamwork	3,010
S55	MH "cooperative behavior"	3,044
S54	MH "attitude of health personnel"	18,994
S53	MH "midwife attitudes"	1,004
S52	MH "nurse attitudes"	18,425
S51	MH "alternative birth centers"	914
S50	MH "alternative health facilities"	347
S49	MH "health facility environment"	3,926
S48	MH "work environment"	15,381
S47	MH "role conflict"	1,179
S46	MH "teamwork"	8,012
S45	MH "multidisciplinary care team"	22,528
S44	MH "joint practice"	572
S43	MH "collaboration"	21,372
S42	S23 OR S24 OR S25 OR S26 OR S27 OR S28 OR S29 OR S30 OR S31 OR S32 OR S33 OR S34 OR S35 OR S36 OR S37 OR S38 OR S39 OR S40 OR S41	104,298
S41	child n2 birth	661
S40	home n2 birth	888
S39	prenatal n2 (patient* OR care OR health)	9,660

S38	intrapartum n2 (patient* OR care OR health)	1,326
S37	obstetric* n2 (deliver* OR service* OR care* OR patient* OR health)	10,063
S36	MH "nurse-midwifery service"	137
S35	MH "maternal health services"	4,222
S34	MH "maternal-child health"	1,697
S33	MH "maternal-child care"	704
S32	MH "obstetric emergencies"	386
S31	MH "delivery, obstetric"	3,688
S30	MH "obstetric service"	646
S29	MH "obstetric patients"	168
S28	MH "obstetric care"	4,314
S27	MH "intrapartum care"	1,150
S26	MH "prenatal care"	8,042
S25	MH "home childbirth"	2,238
S24	MH "childbirth"	5,685
S23	MH "pregnancy"	93,375
S22	S16 OR S17 OR S18 OR S19 OR S20 OR S21	21,921
S21	TI midwi* OR AB midwi*	17,845
S20	MH "australian rural nurses and midwives"	10
S19	MH "nurse-midwifery service"	137
S18	MH "midwifery service"	968
S17	MH "nurse midwives"	1,610
S16	MH "midwives"	6,473
S15	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9 OR S10 OR S11 OR S12 OR S13 OR S14	365,189
S14	health visitor	894
S13	nurs* n2 postpartum	262
S12	nurs* n2 postnatal	40
S11	nurs* n2 prenatal	130
S10	nurs* n2 obstetric*	3,321
S9	nurs* n2 perinatal	963
S8	TI nurs* OR AB nurs*	335,217
S7	MH "association of women's health, obstetric, and neonatal nurses"	320
S6	MH "community health nursing"	19,906
S5	MH "obstetric nursing"	2,731
S4	MH "perinatal nursing"	768
S3	MH "american college of nurse-midwives"	185
S2	MH "maternal-child nursing"	1,089
S1	MH "nurses"	41,448

EMBASE Final Search Strategy - October 28, 2014

No.	Query	Results
#51	#11 AND #15 AND #32 AND #47 AND #50	**231**
#50	#48 OR #49	**174,398**
#49	qualitative NEAR/4 study	**29,823**
#48	qualitative	**174,398**
#47	#33 OR #34 OR #35 OR #36 OR #37 OR #38 OR #39 OR #40 OR #41 OR #42 OR #43 OR #44 OR #45 OR #46	**756,858**
#46	team* NEAR/2 (interdisciplinary OR transdisciplinary OR	**24,510**

	multidisciplinary OR work)	
#45	health NEAR/2 facility	**56,257**
#44	work NEAR/2 environment	**25,183**
#43	transdisciplinary	**1,717**
#42	joint NEAR/2 practice	**300**
#41	collaborat*:ab,ti	**111,602**
#40	teamwork:ab,ti	**6,912**
#39	'public-private partnership'/exp	**2,673**
#38	'cooperation'/exp	**41,374**
#37	'health personnel attitude'/exp	**131,869**
#36	'attitude'/exp	**511,647**
#35	'work environment'/exp	**19,814**
#34	'conflict'/exp	**20,837**
#33	'teamwork'/exp	**11,890**
#32	#16 OR #17 OR #18 OR #19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31	**1,225,887**
#31	home NEAR/2 birth	**808**
#30	child NEAR/2 birth	**2,724**
#29	prenatal NEAR/2 (care* OR patient* OR health)	**31,702**
#28	intrapartum NEAR/2 (care* OR patient* OR health)	**1,590**
#27	obstetric* NEAR/2 (deliver* OR service* OR care* OR patient* OR health)	**14,897**
#26	health NEAR/3 service	**436,861**
#25	'natural childbirth'/exp	**2,172**
#24	'maternal care'/exp	**30,624**
#23	'obstetric emergency'/exp	**396**
#22	'maternity ward'/exp	**2,495**
#21	'delivery'/exp	**124,375**
#20	'obstetric procedure'/exp	**349,308**
#19	'prenatal care'/exp	**111,257**
#18	'home delivery'/exp	**2,694**
#17	'childbirth'/exp	**49,133**
#16	'pregnancy'/exp	**601,412**
#15	#12 OR #13 OR #14	**28,736**
#14	midwi*:ab,ti	**18,357**
#13	'nurse midwife'/exp	**5,717**
#12	'midwife'/exp	**23,181**
#11	#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10	**436,507**
#10	nurs* NEAR/2 postpartum	**233**
#9	nurs* NEAR/2 postnatal	**261**
#8	nurs* NEAR/2 prenatal	**200**
#7	nurs* NEAR/2 obstetric	**545**
#6	nurs* NEAR/2 perinatal	**1,112**
#5	nurs*:ab,ti	**384,732**
#4	'community health nursing'/exp	**25,646**
#3	'obstetrical nursing'/exp	**2,599**
#2	'perinatal nursing'/exp	**9**
#1	'nurse'/exp	**117,025**

PsycINFO FINAL Search Strategy - October 27, 2014

S44	S10 AND S13 AND S28 AND S42 Limiters - Publication Year: 1981-2014	34
S43	S10 AND S12 AND S28 AND S42	34
S42	S28 OR S29 OR S30 OR S31 OR S32 OR S33 OR S34 OR S35 OR S36 OR S37 OR S38 OR S39 OR S40	155,495
S41	DE "role conflicts"	3,493
S40	DE "employee attitudes"	13,317
S39	TI teamwork OR AB teamwork	3,492
S38	multidisciplinary	16,724
S37	team* N2 (interdisciplinary OR transdisciplinary OR multidisciplinary OR work)	10,643
S36	work N2 environment	8,356
S35	interdisciplinary	40,027
S34	transdisciplinary	1,182
S33	joint N2 practice	111
S32	collaborat*	58,506
S31	DE "working conditions"	17,836
S30	DE "teams"	7,559
S29	DE "collaboration"	5,948
S28	S13 OR S14 OR S15 OR S16 OR S17 OR S18 OR S19 OR S20 OR S21 OR S22 OR S23 OR S24 OR S25 OR S26	33,246
S27	child N2 birth	3,866
S26	home N2 birth	398
S25	intrapartum N2 (patient* OR care OR health)	77
S24	prenatal N2 (patient* OR care OR health)	2,985
S23	obstetric* N2 (deliver* OR service OR care* OR patient* OR health)	999
S22	DE "obstetrical complications"	1,171
S21	DE "obstetrics"	880
S20	DE "prenatal care"	1,317
S19	DE "prenatal development"	3,501
S18	DE "postnatal period"	3,672
S17	DE "perinatal period"	1,764
S16	DE "natural childbirth"	99
S15	DE "birth"	6,088
S14	DE "pregnancy"	15,980
S13	S10 OR S11	2,139
S12	TI midwi* OR AB midwi*	2,063
S11	DE "Midwifery"	882
S10	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8 OR S9	73,511
S9	Health near/3 visitor	468
S8	nurs* N2 postpartum	102
S7	nurs* N2 postnatal	102
S6	nurs* N2 prenatal	33
S5	nurs* N2 obstetric*	640
S4	nurs* N2 perinatal	237
S3	TI nurs* OR AB nurs*	71,721
S2	DE "Nursing"	14,549
S1	DE "Nurses"	19,113

PubMed Final Search Strategy - October 22, 2014

#39	Search (((((((("Nurses" [Mesh]) OR "Maternal-Child Nursing" [Mesh]) OR "Obstetric Nursing" [Mesh]) OR (((TI nurs*) OR AB nurs*))) OR ((nurs* AND (perinatal OR prenatal OR obstetric OR postnatal OR postpartum))))) AND ((("midwifery" [Mesh]) OR "nurse midwives" [Mesh]) OR ((TI midwi*) OR AB midwi*))) AND ((((((((((("pregnancy" [Mesh]) OR "maternal health services" [Mesh]) OR "prenatal care" [Mesh]) OR "delivery, obstetric" [Mesh]) OR "obstetrics" [Mesh]) OR "maternal-child health centers" [Mesh]) OR "parturition" [Mesh]) OR "natural childbirth" [Mesh]) OR "home childbirth" [Mesh]) OR "prenatal education" [Mesh]) OR (care AND (prenatal OR intrapartum OR obstetric))) OR ((obstetric AND (care OR patient OR service OR deliver))) OR (matern* AND child*)) OR (((nurs* OR midwi*) AND service*))) OR (birth AND (home OR child OR service OR care)))) AND ((((((((("cooperative behavior" [Mesh]) OR "workplace" [Mesh]) OR "health facility environment" [Mesh]) OR (joint AND practice)) OR collaborat*) OR (team* AND (interdisciplinary OR transdisciplinary OR multidisciplinary OR work OR care))) OR (multidisciplinary AND care AND team)) OR (multidisciplinary AND health AND team*)) OR (work AND environment)) OR (((TI team*) OR AB team*)))) AND "attitude of health personnel" [Mesh]	127
#40	Search (((((((("Nurses" [Mesh]) OR "Maternal-Child Nursing" [Mesh]) OR "Obstetric Nursing" [Mesh]) OR (((TI nurs*) OR AB nurs*))) OR ((nurs* AND (perinatal OR prenatal OR obstetric OR postnatal OR postpartum))))) AND ((("midwifery" [Mesh]) OR "nurse midwives" [Mesh]) OR ((TI midwi*) OR AB midwi*))) AND ((((((((((("pregnancy" [Mesh]) OR "maternal health services" [Mesh]) OR "prenatal care" [Mesh]) OR "delivery, obstetric" [Mesh]) OR "obstetrics" [Mesh]) OR "maternal-child health centers" [Mesh]) OR "parturition" [Mesh]) OR "natural childbirth" [Mesh]) OR "home childbirth" [Mesh]) OR "prenatal education" [Mesh]) OR (care AND (prenatal OR intrapartum OR obstetric))) OR ((obstetric AND (care OR patient OR service OR deliver))) OR (matern* AND child*)) OR (((nurs* OR midwi*) AND service*))) OR (birth AND (home OR child OR service OR care)))) AND ((((((((("cooperative behavior" [Mesh]) OR "workplace" [Mesh]) OR "health facility environment" [Mesh]) OR (joint AND practice)) OR collaborat*) OR (team* AND (interdisciplinary OR transdisciplinary OR multidisciplinary OR work OR care))) OR (multidisciplinary AND care AND team)) OR (multidisciplinary AND health AND team*)) OR (work AND environment)) OR (((TI team*) OR AB team*)))) AND "attitude of health personnel" [Mesh] Filters: Publication date from 1981/01/01 to 2014/10/22	127
#38	Search "attitude of health personnel" [Mesh]	121233
#37	Search (((((((("cooperative behavior" [Mesh]) OR "workplace" [Mesh]) OR "health facility environment" [Mesh]) OR (joint AND practice)) OR collaborat*) OR (team* AND (interdisciplinary OR transdisciplinary OR multidisciplinary OR work OR care))) OR (multidisciplinary AND care AND team)) OR (multidisciplinary AND health AND team*)) OR (work AND environment)) OR (((TI team*) OR AB team*))	311724
#36	Search ((TI team*) OR AB team*)	2575

#35	Search work AND environment	70465
#34	Search multidisciplinary AND health AND team*	9128
#33	Search multidisciplinary AND care AND team	12562
#32	Search team* AND (interdisciplinary OR transdisciplinary OR multidisciplinary OR work OR care)	105087
#31	Search collaborat*	103357
#30	Search joint AND practice	13118
#29	Search "health facility environment" [Mesh]	5816
#28	Search "workplace" [Mesh]	13753
#27	Search "cooperative behavior" [Mesh]	29752
#26	Search ((((((((((("pregnancy" [Mesh]) OR "maternal health services" [Mesh]) OR "prenatal care" [Mesh]) OR "delivery, obstetric" [Mesh]) OR "obstetrics" [Mesh]) OR "maternal-child health centers" [Mesh]) OR "parturition" [Mesh]) OR "natural childbirth" [Mesh]) OR "home childbirth" [Mesh]) OR "prenatal education" [Mesh]) OR (care AND (prenatal OR intrapartum OR obstetric))) OR ((obstetric AND (care OR patient OR service OR deliver)))) OR (matern* AND child*)) OR (((nurs* OR midwi*) AND service*))) OR (birth AND (home OR child OR service OR care))	964551
#25	Search birth AND (home OR child OR service OR care)	95603
#24	Search ((nurs* OR midwi*) AND service*)	137717
#23	Search matern* AND child*	84855
#22	Search (obstetric AND (care OR patient OR service OR deliver))	37701
#21	Search care AND (prenatal OR intrapartum OR obstetric)	47297
#20	Search "prenatal education" [Mesh]	31
#19	Search "home childbirth" [Mesh]	2084
#18	Search "natural childbirth" [Mesh]	2087
#17	Search "parturition" [Mesh]	8372
#16	Search "maternal-child health centers" [Mesh]	2138
#15	Search "obstetrics" [Mesh]	15729
#14	Search "delivery, obstetric" [Mesh]	61840
#13	Search "prenatal care" [Mesh]	20315
#12	Search "maternal health services" [Mesh]	35127
#11	Search "pregnancy" [Mesh]	713541
#10	Search (("midwifery" [Mesh]) OR "nurse midwives" [Mesh]) OR ((TI midwi*) OR AB midwi*)	20365
#9	Search (TI midwi*) OR AB midwi*	427
#8	Search "nurse midwives" [Mesh]	6033
#7	Search "midwifery" [Mesh]	14908
#6	Search ((((("Nurses" [Mesh]) OR "Maternal-Child Nursing" [Mesh]) OR "Obstetric Nursing" [Mesh]) OR (((TI nurs*) OR AB nurs*))) OR ((nurs* AND (perinatal OR prenatal OR obstetric OR postnatal OR postpartum)))	96955
#5	Search (nurs* AND (perinatal OR prenatal OR obstetric OR postnatal OR postpartum))	22137
#4	Search ((TI nurs*) OR AB nurs*)	3747
#3	Search "Obstetric Nursing" [Mesh]	2743
#2	Search "Maternal-Child Nursing" [Mesh]	4939
#1	Search "Nurses" [Mesh]	70800

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S7	((midwi* near/4 nurs*) AND (birth OR obstetric* OR perinatal)) OR ((maternal near/2 health) AND (cooperation OR teamwork))	25°
S6	cooperation OR teamwork	4190*
S5	teamwork	462°
S4	cooperation	3788°
S3	maternal near/2 health	552°
S2	birth OR obstetric* OR perinatal	4042*
S1	midwi* near/4 nurs*	221°

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S8	((midwi* near/4 nurs*) AND (birth OR obstetric* OR perinatal)) OR ((maternal near/2 health) AND (cooperation OR teamwork))Limits applied	85°
S7	((midwi* near/4 nurs*) AND (birth OR obstetric* OR perinatal)) OR ((maternal near/2 health) AND (cooperation OR teamwork))	90°
S6	cooperation OR teamwork	22029*
S5	teamwork	4234*
S4	cooperation	18228*
S3	maternal near/2 health	836°
S2	birth OR obstetric* OR perinatal	24416*
S1	midwi* near/4 nurs*	350°

Appendix H: Grey Literature Search Strategy & Results

New York Academy of Medicine Grey Literature Report
Website: http://www.greylit.org/
Date Searched: 10.18.14
Method for Searching: site search engine with keywords
Keywords Used: midwife, nurse, midwife and nurse, collaboration, midwife nurse collaboration, collaborative practice, collaborative practice birth
Results: Searched, no results found
Number of Results Found: 0
Additional information:

GrayLit Network
Website: No longer available (defunct)
Date Searched: 10.18.14
Method for Searching:
Keywords Used:
Results: Not searched
Number of Results Found: 0
Additional information:

ProQuest Digital Dissertations
Website: http://search.proquest.com.ezproxy.library.dal.ca/pqdtft/advanced?accountid=10406
Date Searched: 10.21.14
Method for Searching: Database search
Keywords Used: See saved search strategy
Results: Searched, Results found
Number of Results Found: 89
Additional information: This source had a database – Proquest and a search strategy was used to procure the results

Conference Proceedings: American Nurses Association
Website: http://www.nursingworld.org/
Date Searched: 10.21.14
Method for Searching: site search engine with keywords, searched through title banner on homepage
Keywords Used: conference proceedings, conference proceedings and midwife
Results: Searched, no results found
Number of Results Found: 0
Additional information: Searched under title "conferences" but information was available for upcoming conferences only.

Conference Proceedings: Canadian Nurses Association
Website: http://www.cna-aiic.ca/en
Date Searched: 10.21.14
Method for Searching: site search engine with keywords, searched through title banner on homepage
Keywords Used: conference proceedings
Results: Searched, no results found
Number of Results Found: 0
Additional information: Searched under title "events" but information was available for upcoming conferences only.

Conference Proceedings: AWHONN Conference Proceedings
Website: https://www.awhonn.org/awhonn/
Date Searched: 10.21.14
Method for Searching: site search engine with keywords, searched through title banner on homepage
Keywords Used: conference proceedings, conference proceedings midwife
Results: Searched, no results found
Number of Results Found: 0
Additional information: Searched under title "events & webinars" but information was available for upcoming conventions and events only.

Conference Proceedings: International Confederation of Midwives
Website: http://www.internationalmidwives.org/
Date Searched: 10.21.14
Method for Searching: site search engine with keywords, searched through title banner on homepage
Keywords Used: conference proceedings, conference proceedings nurse
Results: Searched, no results found
Number of Results Found: 0
Additional information: Searched under title "events" but information was available for upcoming conventions and events. Followed link to past ICM 2014 Triennial Congress at website http://www.midwives2014.org/ however no conference proceedings available.

Conference Proceedings: International Council of Nurses
Website: http://www.icn.ch/
Date Searched: 10.21.14
Method for Searching: site search engine with keywords, searched through title banner on homepage
Keywords Used: conference proceed*
Results: Searched, no results found
Number of Results Found: 0
Additional information: Searched under title "events" but information was available for upcoming conventions and events only.

Conference Proceedings: Canadian Association of Perinatal and Women's Health Nurses
Website: http://www.capwhn.ca/en/capwhn/About_CAPWHN_p3185.html
Date Searched: 10.21.14
Method for Searching: site search engine with keywords, searched through title banner on homepage
Keywords Used: conference proceedings, conference proceedings midwife
Results: Searched, result found
Number of Results Found: 1
Additional information: Searched under title "conferences & educational activities" > "past conferences" > Found a result at link from 3rd CAPWHN conference http://www.capwhn.ca/en/capwhn/2013_p3788.html
Saved as a screen shot and word document.

Conference Proceedings: Midwifery Way
Website: http://www.dal.ca/diff/Atlantic-Centre-of-Excellence-for-Womens-Health/activities/international_conferences/midwifery-way.html
Date Searched: 10.21.14
Method for Searching: Link to conference proceedings found on main page
Keywords Used: x
Results: Searched, result found
Number of Results Found: 1
Additional information: Searched google for "Midwifery Way Halifax 2004", aware of this conference from attendance. Found link to conference proceedings on main page. Saved as a screen shot and word document.

Institute for Health & Social Care Research (IHSCR) (called NIHR School for Social Care)
Website: http://www.lse.ac.uk/lsehealthandsocialcare/aboutus/nihrsscr/home.aspx
Date Searched: 10.18.14
Method for Searching: site search engine with keywords
Keywords Used: midwife, nurse, midwife and nurse, collaboration, midwife nurse collaboration, collaborative practice, collaborative practice birth
Results: Searched, no results found
Number of Results Found: 0
Additional information: Site is called NIHR School for Social Care)

The Grey Literature Bulletin
Website: No longer available (defunct)
Date Searched: 10.18.14
Method for Searching:
Keywords Used:
Results: Not searched
Number of Results Found: 0
Additional information:

Grey Source
Website: http://www.greynet.org/greysourceindex.html
Date Searched: 10.18.14
Method for Searching: No site search engine, searched links under "biological and medical sciences" section to other sites with suggested grey literature websites
Keywords Used: x
Results: Searched, no results found
Number of Results Found: 0
Additional information: Found grey sites in the "biological & medical sciences" section that suggested other grey literature sites to search
http://sites.google.com/site/nahrsnursingresources/Home/grey-literature-1 (Nursing and Allied Health Resources Section)
http://thesurvey.womenshealthdata.ca/ (The source for women's health)

***Nursing and Allied Health Resources Section**
Website: http://sites.google.com/site/nahrsnursingresources/Home/grey-literature-1
Date Searched: 10.22.14
Method for Searching: read listing of suggested grey literature sites to search
Keywords Used: x
Results: Searched, no results found
Number of Results Found: 0
Additional information: Found link to the Virginia Henderson International Nursing site http://www.nursinglibrary.org/portal/main.aspx.

***Virginia Henderson International Nursing site**
Website: http://www.nursinglibrary.org/portal/main.aspx.
Date Searched: 10.22.14
Method for Searching: site search engine with keywords
Keywords Used: nurse, midwife, midwife and nurse, collaboration, midwife and nurse and collaboration, collaborative practice, collaborative practice and birth
Results: Searched, no results found
Number of Results Found: 0
Additional information: x

***The Source for Women's Health**
Website: http://thesurvey.womenshealthdata.ca/
Date Searched: 10.22.14
Method for Searching: site search engine with keywords
Keywords Used: nurse, midwife, midwife and nurse, collaboration, midwife nurse collaboration, collaborative practice, collaborative practice birth, collaborative practice and birth and midwife
Results: Searched, results found
Number of Results Found: 2
Additional information: Retrieved two reports from
http://www.womenshealthdata.ca/advancedsearch/default.aspx
Saved as screen shot and two pdf documents

SIGLE
Website: http://www.opengrey.eu/
Date Searched: 10.18.14
Method for Searching: site search engine with keywords
Keywords Used: midwife, nurse, midwife and nurse, collaboration, midwife nurse collaboration, collaborative practice, collaborative practice birth
Results: Searched, no results found
Number of Results Found: 0
Additional information:

Canadian Association of Midwives
Website: http://www.canadianmidwives.org/
Date Searched: 10.18.14
Method for Searching: site search engine with keywords, searched through title banner on homepage
Keywords Used: midwife, nurse, midwife and nurse, collaboration, midwife nurse collaboration, collaborative practice
Results: Searched, results found
Number of Results Found: 1
Additional information: Result found at http://www.canadianmidwives.org/position-statements.html CAM journal (Canadian Midwifery Journal of Research and Practice) was identified in protocol as a journal not indexed in databases and was therefore handsearched.

Canadian Midwifery Regulators Consortium
Website: http://www.cmrc-ccosf.ca/node/2
Date Searched: 10.16.14
Method for Searching: site search engine with keywords
Keywords Used: midwife, nurse, collaboration
Results: Searched, results found
Number of Results Found: 1
Additional information: Saved as a word document from web address http://cmrc-ccosf.ca/node/60

Canadian Nurses Association
Website: http://www.cna-aiic.ca/en
Date Searched: 10.18.14
Method for Searching: site search engine with keywords, searched through title banner on homepage
Keywords Used: midwife, nurse, midwife and nurse, collaboration, midwife nurse collaboration, collaborative practice
Results: Searched, no results found
Number of Results Found: 0
Additional information: Search engine did not find anything

Canadian Association of Perinatal and Women's Health Nurses
Website: http://www.capwhn.ca/en/capwhn/About_CAPWHN_p3185.html
Date Searched: 10.16.14
Method for Searching: site search engine with keywords
Keywords Used: midwife, nurse, collaboration
Results: Searched, no results found
Number of Results Found: 0

American College of Nurse Midwives
Website: http://www.midwife.org/
Date Searched: 10.16.14
Method for Searching: site search engine with keywords
Keywords Used: midwife, midwife and nurse, collaboration, midwife nurse collaboration, collaborative practice
Results: Searched, results of peripheral interest found
Searched, results found
Number of Results Found: 2
Additional information: Saved as a screen shot and pdf from link at web address (peripheral) http://www.midwife.org/Ob-Gyns-and-Midwives-Seek-to-Improve-Health-Care-for-Women-and-Their-Newborns **x**
Saved as a screen shot and word document from web address http://www.midwife.org/The-Latent-P1hase-Building-Collaborative-Relationships

Midwives Alliance of North America
Website: http://mana.org/
Date Searched: 10.16.14
Method for Searching: no site search engine, searched through title banner on homepage
Keywords Used: x
Results: Searched, results of peripheral interest found; Searched, results found
Number of Results Found: 2
Additional information: Found through title "About Midwives" > "collaborative care" Saved as a screen shot and word document from web address http://mana.org/about-midwives/collaborative-care **x**
Found through title "research" > "for researchers" > "section e: studies on provider attitudes & experiences" Saved as a screen shot
http://mana.org/research/section-e-studies-on-provider-attitudes-experiences

American Midwifery Certification Board
Website: http://www.amcbmidwife.org/
Date Searched: 10.17.14
Method for Searching: no site search engine, searched through title banner on homepage
Keywords Used: x
Results: Searched, no results found
Number of Results Found: 0
Additional information: site primarily about certification and process for certification

North American Registry of Midwives
Website: http://narm.org/
Date Searched: 10.17.14
Method for Searching: site search engine with keywords,
Keywords Used: midwife, nurse, midwife and nurse, collaboration, midwife nurse collaboration, collaborative practice
Results: Searched, no results found
Number of Results Found: 0
Additional information: site primarily about certification and process for registration, certification

American Nurses Association
Website: http://www.nursingworld.org/
Date Searched: 10.17.14
Method for Searching: site search engine with keywords, searched through title banner on homepage
Keywords Used: midwife, midwife and nurse, collaboration, midwife nurse collaboration, collaborative practice
Results: Searched, no results found
Number of Results Found: 0
Additional information: x

Association of Women's Health Obstetric and Neonatal Nurses
Website: https://www.awhonn.org/awhonn/
Date Searched: 10.17.14
Method for Searching: site search engine with keywords, searched through title banner on homepage
Keywords Used: midwife, midwife and nurse, collaboration, midwife nurse collaboration, collaborative practice
Results: Searched, results of peripheral interest found
Number of Results Found: 2
Additional information: Found through title "AWHONN position statements"
https://www.awhonn.org/awhonn/content.do?name=07_PressRoom/07_PositionStatements.htm
Found through title "AWHONN position statements" under "AWHONN joint statements"
https://www.awhonn.org/awhonn/content.do?name=07_PressRoom/07_PositionStatements.htm
Saved screen shots and documents

Royal College of Midwives
Website: https://www.rcm.org.uk/
Date Searched: 10.17.14
Method for Searching: site search engine with keywords, searched through title banner on homepage
Keywords Used: midwife, nurse, midwife and nurse, collaboration, midwife nurse collaboration, collaborative practice
Results: Searched, result found
Number of Results Found: 1
Additional information: Found through title "Evidence based Midwifery"
https://www.rcm.org.uk/content/organisational-culture-in-maternity-care-a-scoping-review
Unable to access more than a title for several searched items without being a member of the Royal College of Midwives "You are not authorized to access this page"
Saved screen shot and article

Nursing and Midwifery Council (UK)
Website: http://www.nmc-uk.org/
Date Searched: 10.17.14
Method for Searching: site search engine with keywords, searched through title banner on homepage
Keywords Used: midwife, nurse, midwife and nurse, collaboration, midwife nurse collaboration, collaborative practice
Results: Searched, result found
Number of Results Found: 1
Additional information: Found on http://www.nmc-uk.org/templates/pages/search?q=collaborative+practice&btnG=Search&entqr=0&output=xml_no_dtd&sort=date%3AD%3AL%3Ad1&entsp=a&client=NMC_Live&ud=1&oe=UTF-8&ie=UTF-8&proxystylesheet=NMC_Live&site=NMC_Live
Saved screen shot and document

Royal British Nurses' Association
Website: http://www.rbna.org.uk/
Date Searched: 10.17.14
Method for Searching: searched through title banner on homepage
Keywords Used: midwife, nurse, midwife and nurse, collaboration, midwife nurse collaboration, collaborative practice
Results: Searched, no results found
Number of Results Found: 0
Additional information: x

Australian College of Midwives
Website: http://www.midwives.org.au/scripts/cgiip.exe/WService=MIDW/ccms.r
Date Searched: 10.17.14
Method for Searching: site search engine with keywords, searched through title banner on homepage
Keywords Used: midwife, nurse, midwife and nurse, collaboration, midwife nurse collaboration, collaborative practice
Results: Searched, no results found
Number of Results Found: 0
Additional information: x

Australian Nursing and Midwifery Federation
Website: http://anmf.org.au/
Date Searched: 10.17.14
Method for Searching: no site search engine, searched through title banner on homepage
Keywords Used: x
Results: Searched, no results found
Number of Results Found: 0
Additional information: x

Australian College of Nurses
Website: http://www.acn.edu.au/
Date Searched: 10.17.14
Method for Searching: site search engine with keywords, searched through title banner on homepage
Keywords Used: midwife, nurse, midwife and nurse, collaboration, midwife nurse collaboration, collaborative practice
Results: Searched, no results found
Number of Results Found: 0
Additional information: x

New Zealand College of Midwives
Website: http://www.midwife.org.nz/
Date Searched: 10.17.14
Method for Searching: searched through title banner on homepage
Keywords Used: x
Results: Searched, no results found
Number of Results Found: 0
Additional information: *needed to be a member in order to use search engine

Midwifery Council of New Zealand
Website: http://www.midwiferycouncil.health.nz/
Date Searched: 10.17.14
Method for Searching: site search engine with keywords, searched through title banner on homepage
Keywords Used: midwife, nurse, midwife and nurse, collaboration, midwife nurse collab, collaborative practi
Results: Searched, no results found
Number of Results Found: 0
Additional information: search engine had a maximum number of digits that could be entered (hence shortened key words used)

Nursing Council of New Zealand
Website: http://www.nursingcouncil.org.nz/
Date Searched: 10.17.14
Method for Searching: site search engine with keywords, searched through title banner on homepage
Keywords Used: midwife, nurse, midwife and nurse, collaboration, midwife nurse collaboration, collaborative practice
Results: Searched, no results found
Number of Results Found: 0
Additional information: x

New Zealand Nurses' Organisation
Website: http://www.nzno.org.nz/
Date Searched: 10.17.14
Method for Searching: site search engine with keywords, searched through title banner on homepage
Keywords Used: midwife, nurse, midwife and nurse, collaboration, midwife nurse collaboration, collaborative practice
Results: Searched, no results found
Number of Results Found: 0
Additional information: x

Royal Dutch Organisation of Midwives
Website: http://www.knov.nl/samenwerken/tekstpagina/489/midwifery-in-the-netherlands/
Date Searched: 10.17.14
Method for Searching: searched through title banner on homepage
Keywords Used: x
Results: Searched, results of peripheral interest found
Number of Results Found: 1
Additional information: *unable to use site search engine as the search function is in Dutch
Found document at http://www.knov.nl/samenwerken/tekstpagina/489/midwifery-in-the-netherlands/
x

Dutch Nurses Association
Website: http://www.nu91.nl/
Date Searched: 10.17.14
Method for Searching: unable to search site as it was entirely in Dutch
Keywords Used: x
Results: Not searched
Number of Results Found: O
Additional information: *unable to search site as it was entirely in Dutch

International Confederation of Midwives
Website: http://www.internationalmidwives.org/
Date Searched: 10.17.14
Method for Searching: site search engine with keywords, searched through title banner on homepage
Keywords Used: midwife, nurse, midwife and nurse, collaboration, midwife nurse collaboration, collaborative practice
Results: Searched, results of peripheral interest found
Number of Results Found: 1
Additional information: Found in http://www.internationalmidwives.org/who-we-are/policy-and-practice/icm-position-statements-general/
Screen shot and document saved

International Council of Nurses
Website: http://www.icn.ch/
Date Searched: 10.17.14
Method for Searching: site search engine with keywords, searched through title banner on homepage
Keywords Used: midwife, nurse, midwife nurse, collaboration, midwife nurse collab, collaborative practi
Results: Searched, no results found
Number of Results Found: 0
Additional information: x

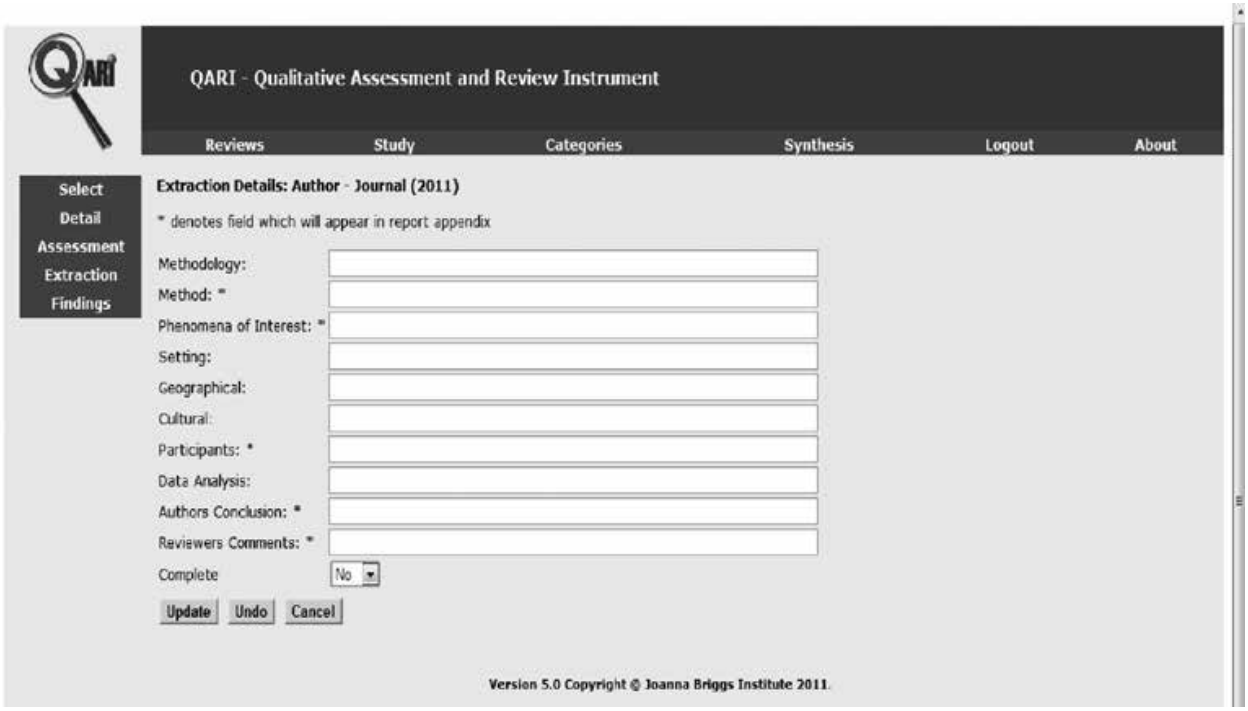
16 is the total number of articles and articles of peripheral interest found

10 is the total number of relevant articles found

Thus, **10** articles have been reported for consideration of use

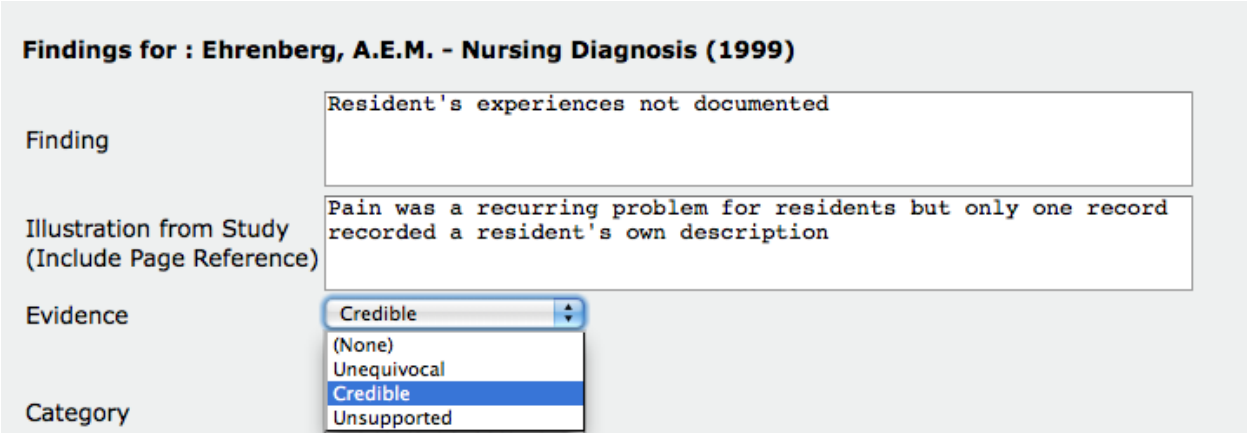
* sources prefaced with an asterisk were uncovered throughout the grey literature search

Appendix I: Joanna Briggs Institute – QARI Data Extraction Tool



(The Joanna Briggs Institute, 2014)

Appendix J: Joanna Briggs Institute – QARI Extraction Tool (Example)



The Joanna Briggs Institute. (n.d.). *Session 4: Data Extraction* [PowerPoint Slides]

Appendix K: Extracted Findings of Included Studies

Maternity nurses and midwives in a British Columbia rural community: Evolving relationships (Bell, 2010)	
Finding 1	home birth history
Illustration	"We were coming from the history... of just hearing the stories in the community, and you only heard the bad stories, you don't even know if they are true stories. You just heard stories." (page 10)
Finding 2	confusion about roles and concerns about competence
Illustration	"I think nurses want to have a little bit more of a controlled environment whereas the midwives are a little bit more laid back and more into what the woman wants. That was one of the big issues I think when it first started. It was "this is how it should be, this is how we've always done it". And the midwives are more into patient satisfaction, maybe. Not that the nurses aren't into that too... the philosophy of maybe the nurses wanting a little more control and midwives wanting the patient to feel they are in control a little more. Sometimes that's to their detriment, sometimes we need to move fast. We've got a baby in trouble... we can't be sitting here for the next 20 minutes or half an hour to see whether the woman is going to consent to a section or not. We need to move, we need to go now. And sometimes that is an issue. The midwives want to talk it through and let the patients talk it through, let them make their decision. And sometimes we're losing time." (page 10)
Finding 3	threat to job satisfaction
Illustration	"I loved being a part of the coaching, that's when I'm at my best to be with my moms... and giving that up was really hard. I went through a grieving process of letting that go, and I did, and then I embraced the midwives." (page 10).
Finding 4	changing relationships
Illustration	"...it was a slow building of trust, it's almost like building a level of trust with your co-worker. You don't know what their skill level is, you don't really know what their commitment is, you don't know how conscientious they are, and it's just over the years that you realize that when somebody says I'm going to do this, I'm going to do that... I'll watch her. It's just a matter of trial and error, just how you develop trust with a co-worker, with a friend." (page 11)
Finding 5	ongoing challenges
Illustration	"...when it's a doctor delivery, it's basically our chart and we take care of it. When it's with the midwives, we're sharing this chart, and sometimes I don't know how to share. And I keep thinking it's your patient and you should be charting the way I chart, but you're not. Or sometimes you're not. Right, so we're sharing a chart, it's like sharing a journal, it's weird and it gets messy sometimes." (page 13)

Facilitators and barriers of independent decisions by midwives during labor and birth (Everly, 2012)	
Finding 1	the team
Illustration	"The biggest problem I have had was having a nurse that was comfortable with natural child birthing. If she had some high-risk patients in a relatively close time period, they were less willing to be more flexible." (page 51)
Tensions and teamwork in nursing and midwifery relationships (Kennedy & Lyndon, 2008b)	
Finding 1	philosophic tensions
Illustration	"I feel like a lot of the midwives don't understand or respect what it is that the nurse is sort of required to do in this setting... I guess I don't like being asked not to do things that sort of by my own professional standards and guidelines [re:IA]... so that's more I guess where I've had conflict" (Nurse/Interview).(page 430)
Finding 2	tensions about communication and respect
Illustration	"It's hard for me when a midwife comes out of triage and says 'Can you get the patient a juice?' And I'm like, '... you're a midwife! You're supposed to have this whole like holistic view to your patient... And it's clear I'm running, 'I'm like, 'You can't go get your patient juice?' But interesting, I don't have the same expectation of the doctor (smiles)" (Nurse/interview). (page 430)
Finding 3	tensions over pain management
Illustration	"...and I found out that every time I was walking out of the room, the nurse was undermining what I said. And so the patient was caught in the middle... and it ended up that the patient got the epidural without me knowing - and I just felt so betrayed and so angry. I didn't handle it the best [laughs] 'cause I sort of blew up when I found out she did that.' But I was just like, 'Oh my God! You- you totally don't trust me" (Midwife/interview). (page 431)
Finding 4	working together for the woman
Illustration	"... there was time to sit and really brainstorm about what would work best for this patient... the midwife was really committed in that situation to helping the patient have what she wanted... and you know, working collaboratively with the nurse" (Nurse/interview). (page 431)
Finding 5	commitment to teamwork
Illustration	"It's like, I'll sit here with you at the bedside and push as long as I can and then I'm gonna have to go out and do something for awhile'... I had this funny period where I came back [from maternity leave]... pumping, you know, new baby, sleep deprived, need to eat, need to pump. And so the midwives would gladly sit and be with a patient for me for fifteen minutes while I did those things. And I always really respect that" (Nurse/interview). (page 432)

Finding 6	teaching midwifery
Illustration	"I've learned a tremendous amount just from hearing them [midwives] teach their own students... I've been able to say to the students, 'Okay, she's gonna come in now. She's gonna ask you what you should do... the answer should be that you're going to do straight cath...' I've learned enough in advance to be able to coach the students to give the right answer. And it always is the right answer, you know (smiles)." (Nurse/interview). (page 432)
Models of maternity care in rural environments: Barriers and attributes of interprofessional collaboration with midwives (S. Munro, Kornelsen, & Grzybowski et al., 2013)	
Finding 1	nurses described scenarios where limited communication with midwives and lack of clarity around roles and responsibilities left them feeling their role was superfluous
Illustration	"They [midwives] do all of the pain control and comfort measures, and everything. So we felt like we were being pushed out, like there was no place for us. So there's a lot of discomfort... It's hard to change the way you've seen things done. We found a lot that midwives tend to let things go a lot more naturally and longer, where we feel 'Okay, it's time to intervene!'" (page 650)
Seeking common ground: Experiences of nurses and midwives (Zimmer, 2006)	
Finding 1	second pair of hands or handmaiden?
Illustration	"I think the most common comments that we hear from nurses are, "What do you guys do that we don't do? What do you do differently?" And, of course, the nurses in our hospital come in for the delivery; they don't really spend much time in the labour room with us; they don't really see that much of what we do. And even then, they wait for us to call them in. So, they come in at the time of delivery basically to be our second pair of hands, just the same as when we call a second midwife for a homebirth. It's exactly the same role. They're basically just there for the delivery of the baby and the placenta and then they're gone. My expectation of the nurse, and I know this varies a little bit from community to community, but in this community it's pretty clear that their role would be for the baby. And, of course, to help out with the mom if we need anything, like if there was a hemorrhage. In that case I would be saying, "Give the oxytocin, start the IV, blah, blah, blah." But they're there mainly for the baby. They come in and check the warmer and the resuscitation equipment and stuff. In the case of a resuscitation they would start, and if they couldn't bring the baby around, then I would expect them to call me to do it." (Judith, midwife) (page 138)
Finding 2	avoiding
Illustration	"I think I make them feel welcome to come in and to spend as much time as they want with us, and certainly I introduce them when I first come in with a client. But they're reluctant to come in and then just can't seem to get out of the room fast enough." (Judith, midwife) (page 141)
Finding 3	painful and punishing
Illustration	"So if you get a nurse that hasn't done that many cases with midwives, or avoids working with us, or whatever, she comes into the room and says, "What do you want me to do?" Meanwhile, we're in the middle of the head crowning and stuff. Now we used to just say, "Well, just do

	exactly what you would do if this was a physician case." But they just go nuts. You know? And so now we have to sort of 'parent' them. We talk to the nurses and say, "I want you to listen to the fetal heart. I want you to listen at least every five minutes. I want you to chart it in the usual place." Like it's just every single step of the way. It takes a lot of energy; a lot of energy. And after the baby, "Can you please help me dry the baby off here? Can you make sure the baby has a good airway? Can you give the oxytocin? Can you...?" Like, it's just a pain!" (Judith, midwife) (page 142)
Finding 4	lacking rapport
Illustration	"What they say, the nurses that I have talked to, they say they don't have a rapport with the woman. So they don't feel they can get in there. And we say, "Well, the second midwife that comes to a home birth doesn't have a rapport with the woman either. And how is it that she can fit in and why can she do it and you can't? It's the same role." Here is an example of how, when nurses are in the room, they just stand back and let you do entirely your own thing. So, here I am with this nurses in the room, whom I know; I've known her for twenty-five years. We used to work together when I nursed here, and I know her personally. So I'm with this woman, my client, and she's pushing, pushing, and the head's crowning and she goes and grabs my arm. The woman is grabbing my arm, right? And I love this nurse; but I'm thinking, if I were a physician she would have been here sort of gently prying the woman's hand off. And, of course, I couldn't let go of the baby's head because it would pop out. And so I basically, very firmly, had to say to my client, "Let go of my arm!" But I felt like, why did I have to do that? You know? Especially at that moment. It just doesn't make sense." (Judith, midwife) (page 145)
Finding 5	maintaining distance
Illustration	"This is the case: I had a postpartum hemorrhage, and everything else, and so there was nothing charted at all for half an hour. Nothing! So I'm writing a late entry, and I said to the nurse who was in the caseroom with me, "I'm going to leave a blank space here for your vital signs on the baby. How many did you do?" She said, "Oh I didn't do any." I guess the look on my face was just, "Huh?" She said, "Well, Dr. [X] examined the baby. You can track her down if you want for the vital signs." And I said, "I'm sure she just listened to the heart and lungs. She didn't count anything and there was no temperature taken." I just kind of stared at her, dumbfounded, and so she walked away. I didn't say a word. I think the look on my face was kind of puzzlement and stunned at the same time. And I didn't take the nurse to task on it, I just let it go. But, that's not totally unusual and there is not just one nurse like that. Later the nurse manager said to me, "Val, there is some confusion. I don't know what it is, but some of these nurses still don't know what they're supposed to do when the go in the caseroom with you." I said, "Okay, I hear that. I will have to do something about that." So this morning I sat down with the nurse clinician and said, "You need to go back to everybody on the ward. When I ask for somebody to come in, they are not just there as a wallflower, they have a role. And they don't need to give eye drops and vitamin K to my babies, but they do need to

	do vital signs. And they do have to hang around and do what I ask them to do if I need help; which is exactly what they would for the physician. And chart it! Chart it! They're leave and there is nothing on the chart!" (Val, midwife) (page 148)

Finding 6	missing a sense of team
Illustration	"I had a client about a month ago who was being induced for post dates (far enough past her due date to cause concern). I met my client at the hospital at about eight in the morning, started the oxytocin, and then went to the clinic and did a full day. I came back at five to check on my client, and she was still just niggling (having frequent, mild, ineffectual contractions). The nurses hadn't upped the oxy! In two hours there had been no increase of the oxytocin! So I was mad, and I said to the nurse who was on - a junior nurses who is a bit uppity and a little over confident and full of herself - "How come the oxytocin hasn't been upped for two hours?" And she said, "Well, she's contracting every three minutes." And I said, "It doesn't matter that she's contracting every three minutes, she's talking through them; she's not in labour. You need to be more aggressive with the oxytocin. This woman needs to be in labour. She's not contracting strongly enough." But the nurses said they couldn't do it because they were too busy. So Dianne, my conditional registrant, stayed with my client and upped the oxytocin after her day of doing home visits. I went back to the office and did two hours of paperwork. At about seven-thirty I came back to the hospital. Dianne said, "She is starting to feel them (the contractions) a little bit." So I said, "I'm taking you for dinner. You get dinner." Like we'd both been working all day. Bu first I sat with my client for half an hour before we left, just to assess things. So it was about eight o'clock when we left for dinner. And a nurse came up to us, kind of blocking the hallway. I said to her, "We need to go. I'm taking Dianne for dinner." The nurse said, "Well, we're really busy. There are only the two of us, you know." I looked at the board, and there was one person delivered, one person in labour, and my client. I said, "You've got two patients, mine and the one in labour. The third person is going out to the ward. What's the problem?" "Well, we're really busy." So I said, "We are going. Call the supervisor. Do something. You don't need somebody to sit by my client's bed. She needs to walk the hall. You can up the oxy in half an hour and we'll be back in an hour." (Val/midwife) (page 153)
Finding 7	needing help - placating the nurses
Illustration	"When we bring clients into the hospital we kind of share the nursing care with the nurses to some degree, and that's a really difficult one. This is one of the nurses' big complaints; they don't like that situation. They actually want us to do our own epidurals and our own augments; but we don't want to do them for two reasons. One is that by the time we get an epidural and an augment, we're usually exhausted and we actually want the help. The other is that as midwives we don't do that many epidurals and augments in a year, and we feel like we will forever be asking, "how does this pump work? What are we doing now? What's the protocol?" (Darya, midwife) (page 157)

Finding 8	feeling like a third wheel
Illustration	"In my experience working with midwives I feel like my autonomy is encroached upon. When you're working with a doctor's patient, the doctor isn't there. You do it all. You admit the woman you examine her, you talk to her about pain control, you find out what her hopes are for this labour. You find out what is going on and what kind of experience she has had before with labour. And then you just call the doctor in as you need them most of the time. And I like that. I like having that autonomy. That's one thing I like about nursing in the perinatal setting; that you are on your own. You know, the doctor will call and ask you, "What's going on? What do you need from me? How are things? Whereas with midwives, they are there all the time and I often feel like a third wheel." (Jenna, perinatal nurse) (page 163)
Finding 9	the bad medical person
Illustration	"I have often felt that when I walk into a room where a midwife and her patient are that they have had months to establish their relationship, so they are really close. It's great and I like the concept of that continuity of care and that closeness. My presence in the room - and I don't know if it's the patients that the midwives attract or what - but they don't want any kind of intervention. Which I can totally appreciate and would go to the end of the earth to support if that is their goal. But when I walk in as the nurse, I often feel like I'm seen as the bad medical person who is going to come and interfere. Do you know what I mean? And I really resent that because that is not... We are all here for the same purpose: to have a happy mother and a happy baby. So it doesn't feel like a team to me very often. And I think that the agendas are often very different. I have a hard time with that. A lot of them are really nice people and they do a great job. But I think the philosophy is different, for me anyway, in my own practice. (Jenna, perinatal nurse) (page 166)
Finding 10	grey areas
Illustration	"We are assigned to the midwife's client and I think this is when another sort of grey area happens. The role, even though my name is on the chart and I am legally part of this case, I'm very hands off. The midwife is in the room most of the time; she is doing auscultations, or monitoring or whatever, so she is primarily responsible for that patient. And my job is break relief, and in second stage I'm there. But I'm the nurse. Like, I'm very comfortable working with medical staff. Our roles are very different. We have two separate tasks in the same location. Whereas midwifery crosses that line a little bit and so it's hard to know, as a nurse, what my role is. As an obstetrical nurse you can so easily get what you want per se. Like you can say to the medical staff, "Listen, I'm not happy with this, and I need help here; or how about this? I don't like this fetal strip; can we put on a scalp clip?" So, you know, you are the determining... In a lot of ways you have a very direct impact on how that care is going to go. But with the midwives you don't have that much control. I think it's harder to sort of have you suggestions or you input put into practice. And it's hard when you feel uncomfortable, maybe, with what is happening with the car." (Jenna, perinatal nurse) (page 169)

Finding 11	policing
Illustration	"I had a client who was 32 weeks gestation with ruptured membranes. Because of this we had to do a transfer of care to an obstetrician at and institution, but I could still do supportive care. So she went to the hospital to have IV antibiotics and I went with her. The nurses were very annoyed with her because she held them up by questioning them. She wouldn't let them start the IV until she knew more about what they were going to give her. She asked, "Why are you giving this to me? Can I make a decision?" And I said to the nurses, "Give the woman the information and then she can make the decision about whether she wants this. But she can't just hear you, put this information through her head, and give you an answer straight away. She feels that you are getting at her. Please let he make the decision. We have got time." This client also had an ultrasound and she wanted to know what the result was. So I took the ultrasound report from the nursing station and brought it to her so we could look at it and talk about it together. I went back to the desk and the nurse said to me, "Sheila, you are out of line. Don't you realize that the doctor will talk to the patient about this ultrasound report?" I said, "Well this piece of paper is the patient's paper, it's not your paper, this is a communication tool." She was very, very angry with me. I said, "The patient has a right to look at her notes." and she said, "No she hasn't!" I said, "Yes, she has!" And I walked away thinking, 'you can do what you like, go ahead, report me.' And then I turned around and laughed. I said, "Are you the midwifery police?" She said, "Well, I'm going to talk to the head nurse." I said, "Fine, but this patient has every right to look at her notes when she likes and how she likes." "Oh," she said, "She has to sign the form." I said, "She is in the hospital, she doesn't have to sign any forms." "It's not your duty, Sheila." And I said, "It is my duty. I can give supportive care." So here we were arguing. The nurse was quite happy to let the doctor do the doctor thing, show my client the notes, but resented me saying, let the woman look at her notes." (Sheila, midwife) (page 199)
Finding 12	stuck in the middle
Illustration	"One example that comes to mind, when midwifery was first integrated - and this was when I was working in a smaller community on the lower mainland - there was a situation where the nurse was called in to interpret the monitor strip because at that point the midwives were not credentialed to be interpreting them. And the nurse was concerned about the fetal heart, but the midwife overrode her concerns and got the patient into the shower, you know. And that, to me, sort of epitomizes what the dilemma often is. The nurse is kind of stuck in the middle sometimes. If you are going to put the nurse in a situation where they have got autonomy over the monitor strip, or over the epidural, or over the oxytocin that really means that they should be in charge of what's happening. Because it's pretty hard to separate those functions from what is going on with the whole experience. It's pretty unfair to put the nurse in that position of being responsible for only that part, but not the rest. And especially when, because of inexperience or lack of judgement or plain disagreement about what is going on, there is... And this is where it's different from the general practitioner's role, because we don't have that sort of piecing together of functions when you have

	got a situation where a GP is looking after the patient. The nurse is handling the epidural, the oxytocin, the activity, and you are not going to find a physician that's going to say, "Oh shut everything off and put her in the shower," you know, that kind of thing. So I think some of those things are still in the process of being worked out." (Vivian, perinatal nurse) (page 172)
Finding 13	dealing with the odds
Illustration	"Another thing about which we're been very concerned - only in the respect that we should be aware - the midwife does give her patients herbal things. And we don't know what they are; she won't tell us. And when they are in labour and it's something that's going in that patient's mouth, it should be documented on the chart, as far as I'm concerned. Some herbal things do affect people. That was an issue that was supposed to be talked about at one of the meetings. it came to a head a couple of months ago. So we have to get things sorted out. But she gave her patient some potion to drink or something. And that's not to say that the woman can't have it; just, what is it? Document it and then we could learn. Some herbal substances are anticoagulants and others could affect you if you have an anesthetic. But no, I didn't see anything documented on the chart. One of the nurses was very concerned because she saw the midwife give the patient something and she said, "What is it?" And the midwife said, "Oh just a little something. It will help her." But if it's not a big deal, then why not say what it is? And also, if you want to teach, then give us something to learn. But it seems to be this tight-lipped stuff. And like I say, I don't know if she feels she can't tell us, or she's getting vibes that make her not want to tell us, or whatever. There is a personality conflict for sure there. It seems like she comes with a chip on her shoulder, because she knows that she is dealing with the odds already, I think. (Alison, perinatal nurse) (page 194)
Finding 14	intimidating?
Illustration	"Let me tell you about one time, it was probably about a year after we were legislated and were given hospital privileges. The hospital as a policy that once an epidural goes in a Foley catheter [urinary catheter] must be inserted. They won't let women try to pee on a bedpan and stuff. So the catheter goes in and it stays in. I was caring for a client who had an epidural and, of course, the nurse put in a Foley. I fought with a few nurses over this stupid catheter issue but I thought, I will let it go, I'll just let it go for now, but when she's fully dilated I'm going to take it out for the pushing. So my client gets to fully, and she gets pushing, and I go to take the catheter out. But the nurse says no, I'm not allowed to do it. And I thought, I'm not going to fight in front of the woman. I should have just said, "I'm taking the catheter out," but I didn't. So anyway, the baby delivers, and afterward, the woman's whole vulva area was swollen, and she had these abrasions right where the catheter was. So I just said to the nurse, "Come here, I would like to just show you." And I said it in a very nice way, and educative way, "This is why I personally don't like to leave catheters in when women are pushing because, as you can see here, this is going to be very bothersome." And the nurse went un-glued, totally unglued! She left

	the room; she was in tears in the nurse manager's office saying that she would never ever work with midwives again. She said that I embarrassed her, and blah, blah, blah. And the Nurse Manager tried to get her to talk to me; no she wouldn't talk to me. Absolutely no. No. So, I mean I wouldn't have done it to be intimidating or anything like that. Fortunately my client was so involved with her baby that she never even know this was going on. I did it very, very discreetly." (Judith, midwife) (page 185)
Finding 15	treating them like the doctors do
Illustration	"We talked about that situation at a meeting with the charge nurses and the nurse manager. The midwives get together with them two or three times a year to discuss any problems that come up. And so I raised this issue about the catheter and stuff. And, of course, the charge nurses were just black and white: "Well you're in charge of your client's care. You can order whether the catheter comes out or not. Just order it." And I go, "Oh okay, I'll just treat them like the doctors do and just say it is coming out." And so I have changed my approach a little bit. And it the nurse gets a little bit snippy, well, then I do; I just bark orders at them. And it's a shame because it's not my personality and I don't think that's what we're about. We've intended midwives to sort of work on an equal basis with nurses. But made me realize that there is a medical hierarchy and that's how nurses respond. And without a doubt, physicians are first and nurses think that they are second and that we are under them. But, clearly, because we're primary care providers, we do have authority over the nurses. And that's how nurses respond. That's how they're trained, they're trained to take orders, I guess; and to be clear, to be clear. They believe everybody should have a clear role. But... I didn't anticipate this in the beginning, this hierarchy stuff. I thought, my communication skills with nurses were good, I sort of knew where they're at, that this would be all right. No, I wasn't expecting this at all. (Judith, midwife) (page 188)
Finding 16	us versus them
Illustration	"There are a couple [of midwives] I prefer not to work with because their skills are not... it's a dangerous situation. They do things that are not medically safe and they don't allow people to know about it. What sometimes happens is that when I come into the room I see that this isn't safe and that isn't safe. But, if anything goes wrong, "It's not my fault," says the midwife, "It's you. You are the nurse." And that makes it really uncomfortable. And if things go untoward some of them will also say to their clients that it's the nurse's fault. It just reinforces that, 'I never should have come to the hospital. I should have had the baby at home. It's because of the nurse that I had the [caesarean] section.'" (Deborah, perinatal nurse) (page 206)
Finding 17	that nurse flipped it around
Illustration	"I had a birth a few months ago where there was thick meconium in the amniotic fluid. My client went really quickly so I called the pediatrician stat. The nurse was there for us, she knew there was meconium. I was the second, because Dianne [the conditional registrant] was delivering this baby. So, there are two midwives and a nurse in the room. The pediatrician runs in just as the baby is being suctioned on the perineum.

	So now we've got a nurse and a pediatrician at the isolette [radiant warmer and baby bed with attached resuscitation equipment]. There should be no question about who was doing what. The baby is handed immediately to the pediatrician by me. Two people at the isolette, so I stood back and went to help Dianne, because I thought this is fine. But after the birth the nurse grabs me and she says, "Your suction wasn't hooked up right." And I go "What??" She says, "your suction wasn't hooked up right." And I said, "It was! I checked it, it was working fine." and she said, "Well, there was a problem with the suction." So then later, the pediatrician grabs me and says, "Val!" And I said, "What happened in there? I'm sorry if I hooked up the suction wrong." He said, "The suction was working fine. You checked it, I checked it. It was fine. The nurse didn't know what she was supposed to do! She didn't even block the hole on the meconium aspirator! The suction was working fine. But I am really mad!" And I said, "Are you mad at me?" And he said, "No, it's not your fault. I'm just venting. You are an NRP [Neonatal Resuscitation Program] instructor, you run our NRP program; this is what I need you to do." He said, "I suctioned the baby visually, and then I intubated and put the meconium aspirator on, and she [the nurse] is supposed to pull it out and she didn't pull it out. She tried to hook it up backwards, and then when she did hook it up properly she didn't put her thumb over the hole." He said, "I abandoned it; the baby didn't get suctioned well enough because she didn't assist me properly." The pediatrician admitted the baby to the SCN too, because he was worried enough about it that he wanted it observed. He was concerned that he hadn't aspirated all the meconium because he saw some on the vocal cords. I think that's what agitated him the most, he visualized the cords and he saw stuff there, and he wasn't able to get it out because the nurse didn't know how to assist him. And then, that nurse flipped it around and said that I didn't put the suction on right! So at first I was mortified because I thought I had done something wrong. I had been up all night and I couldn't really remember; it was one of those moments when you go... I mean I checked the suction, I always check the suction. Then I wondered, did I think it, and didn't do it? Like I had all these thoughts running through my head, and so, until I talked to the pediatrician, which was an hour after the fact, I was just going, 'oh shit!" But the nurse was very quick to lay it at my feet and I was so mortified that I accepted it. Here I am, an NRP instructor, and now she might go around telling people that I didn't set the suction up properly." (Val, midwife) (page 210)
Finding 18	that nurse has a problem
Illustration	"I had one young woman it was her first baby. However, she had - I can't remember the number of therapeutic abortions - between two and four. I went on a break, and when I came back she was very upset. Apparently the nurse who relieved me had taken it upon herself to do some 'counseling,' saying, "Were you raped? I see that you had these abortions. Why did you have these abortions?" She was in there for half an hour while I was gone. And I don't know what she thought she was going to do with that information. It didn't matter why my client had her abortions; especially at that time, when she was in labour. It brought up all kinds of stuff for her, and after that she didn't want that

	nurse or any of the nurses in the room. But then, what are we supposed to do? We can't do it all by ourselves. We need these people [nurses] to work with us, to support us. But that particular nurse has a problem." (Deanna, midwife) (page 216)
Finding 19	rudeness and inhospitality
Illustration	"And just to give you just one little example of how we are not part of the system at all up there on the ward: when you are there in the middle of the night, they often make tea and toast or scones. You know, you can smell it. You'll come out to the desk, but they have never once offered some to any of the midwives as far as I know. This is the big joke among us, 'Has anyone been offered tea in the middle of the night yet?' But there will be a doctor coming up the hallway behind you. 'Oh doctor so and so, would you like a cup of tea?' And you know it's just downright rude. I don't want to be a part of their group, but it's just common courtesy, especially if they know you have been there with your client for twelve hours." (Deanna, midwife) (page 220)
Finding 20	unwelcome
Illustration	"One of the hospitals where I have privileges is just horrible. I won't go there anymore. There are a couple of nurses that are wonderful, but you can't rely on them being there all the time. And the rest of them, I have to say... This is typical: I mean I walked up to the floor, and I have been up there several times. I walked up to the desk, and the nurse knows who I am, we've seen each other before. I smiled at her and said, "Hi, I'm Val and I'm looking for my client." She just looked away and she goes, "Oh, I don't know where she is." No smile, no 'Hi Val,' nothing; no niceties whatsoever.. Like, I would say that's rude. If you don't smile back at someone and greet them, then you have been rude. And every moment after that is unpleasant. So I said, "Actually, I'll find her myself." Why would you want to go to a place where when you walk up and say 'hi' to someone they don't say 'hello' back? And when you say, 'hi, I'm Val,' they don't say who they are. And the clients do perceive it. I mean they're not idiots. They're in labour but they're not totally tuned out to everything. They know when the nurses are in and out of the room. And for the women who didn't want to come to the hospital it really increases their anxiety. You, they say "We're choosing a midwife. We're getting flack from our family and friends. Are we going to get flack from the hospital too?" The client is concerned about kind of care they will get in the hospital. "Will the obstetrician come if my midwife calls him? Will the pediatrician be okay? What is the relationship like with the nurses?" Because that does influence care." (Val, midwife) (page 223)
Finding 21	meanness
Illustration	"I love what one of my co-workers did - and I think that's why she got reported by the midwife. We were really busy this one particular night, and the midwife had two patients deliver back to back. And none of the nurses was free; we all had patients pushing, you know, getting close to delivery. It was just a crazy, crazy night. And the midwife left her first lady unattended about ten minutes after the delivery because she had to go and deliver the next lady. Which, you know... what are you going to do? My co-worker was the charge nurse, and she and the midwife don't

	really get along; but she was the only on available to do both deliveries with the midwife. I felt really bad, but there was nothing else we could have done that night. So I guess, because it was so busy, my co-worker couldn't stay. When the placenta was delivered and she felt that everything was okay with the second delivery she said, "I'm done." But the midwife wanted her to say and do all of the baby paperwork. But my co-worker said, "No, that's your job. It's unfortunate that you had two ladies deliver back-to-back, but that's not my problem." That was the midwife's problem. Those are her patients and we did what we could for them. But she should sign out to someone or get some extra help in. That's what we would do when we're really busy. We call in the extra staff. She should really think ahead that this could happen and prepare for it. And it came up that night that we don't treat her like a doctor. Whatever my co-worker was doing in the delivery, the midwife was saying that, "You wouldn't treat a doctor like that." I think my co-worker said to the midwife that she shouldn't expect us to cater to her." (Theresa, perinatal nurse) (page 226)
Finding 22	trouble waiting to happen
Illustration	"I've been in a resuscitation situation with our midwife. She thinks if you deliver the baby and it's limp and blue, you are still able to put the baby on the mother's tummy so that mother can talk to it. "Call your baby's name. Call your baby's name." That will resuscitate the baby in her eyes. I don't know what the hell they do at home. But I just go and take the baby. She'll say, "I'm just going to put the baby up on the mother's tummy." "No, you are not!" That's how I have to talk to her when I'm in there. I don't know what the other girls do but that is what I do. "No, you are not putting the baby up there. We will bring the baby back when it's pink." That has happened to me with her a couple of times. And so then I talk to the midwife afterwards about why I did that. Yeah, I don't know if she knows how to resuscitate a baby because I have done NRP [the Neonatal Resuscitation Program] with her and she doesn't seem to have... I don't now, maybe she isn't familiar with the equipment. But I think she has to have that equipment with her, does she not? I don't think they use it... I would have to guess that they don't use it. It all looks foreign to her." (Theresa, perinatal nurse) (page 231)
Finding 23	admiration and anxiety
Illustration	"And I think that the midwife has a lot to offer us too, as nurses. When I worked with her just a little while ago the baby had a lot of decels. When she delivered it she did a maneuver I hadn't seen before to untangle the baby's head from the cord. I really liked that. Now, if I ever get stuck with a tight cord, I will be doing that. When the baby was born it was quite blue and having a hard time breathing. And the midwife said that this was not the medical model so she wasn't worried about it. I really bit my tongue and just let everything be. But it all turned out just fine." (Alison, perinatal) (page 237)
Finding 24	that sort of irony
Illustration	"I actually feel badly for some of the midwives because I think a lot of the problems arise out of good old-fashioned bravado on their part. They don't want to come across like they are insecure and so they go

	too far. I mean some of them are obviously really inexperienced. And, you know, it's clear that they are in over their heads. And if they could, maybe, be just a little bit more up front about that... For example, you know, just basic running across complications and not really knowing how to deal with them. And needing a lot of guidance about what to do next and how long it is appropriate to wait, not recognizing some of the signs of fetal distress even. Like basic fetal monitoring stuff. They're just not as experienced, and so on. But on the positive side, what I do see, in my view that is, in the same way that I remember being nurtured myself as an inexperienced nurse, and the way that I see the interns being nurtured by the experienced nursing staff, there is a lot of nurturing that I am seeing. There is an attempt on the part of the nursing staff to do some of that nurturing of midwives. You know, in a respectful king of way. So I think if they're open to it, it could be a good thing. But having said that there is still that sort of irony that the nurses are nurturing the midwives, who have put themselves in a situation where they're saying that they have autonomy. But we nurture the young doctors too; so I mean, we have to do this." (Vivian, perinatal nurse) (page 241)
Finding 25	collegial respect
Illustration	"It's wonderful to work with them. It's good working with midwives. Usually I will go in and say 'Hello' to the family the same as I always do... And I work with the midwife to provide care, so we will talk about who will chart, in particular. These things have to be negotiated. The midwife is there, usually continuously, unless she is absolutely exhausted, in which case she might go for a bit of a nap, and leave me. Or, if things are going fine, she might have a break and leave me looking after the woman. But I think the expectation of the families is that the midwife will be there caring for them and taking the lead in coaching for birth positions or trying a bath or aromatherapy. It's a wonderful opportunity to work with them and to see that in action - and to be part of the team. And so I get in there as much as I can. If the midwife is fine, and the family is fine with having me there partnering with her, it's usually very pleasant... So, my role as a nurse is quite different because I'm not in charge of the woman's care; but I'm still there to be a support to the family and to the midwife. It's fun, it's wonderful, quite wonderful." (Kathleen, perinatal nurse) (page 243)