MATERNITY CARE COLLABORATION IN ONTARIO: THE PERSPECTIVES OF OBSTETRICIANS AND MIDWIVES

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LAY ABSTRACT

This thesis examines the perceptions of interprofessional collaboration from the perspectives of midwives and obstetricians, and contrasts how these perceptions vary by the profession. Data was collected in two ways: through an online survey and semi-structured interviews. Midwives and obstetricians were asked about their experiences with collaboration, their perspectives on the barriers to collaboration and thoughts about an improved system in Ontario to facilitate enhanced maternity care collaboration. The results demonstrate the key barriers to collaboration including contentious views on scope of practice, the definition and interpretation of interprofessional collaboration and varying philosophies of care. The changing landscape of maternity care in Ontario is imminent; family doctors who provide obstetrical care are on the decline, increasing the workload for obstetricians and midwives necessitating the need to eliminate barriers to achieve successful interprofessional collaboration.

ABSTRACT

Introduction:

Interprofessional collaborative care is the gold standard in maternity care and has been proposed as the best way to manage the impending maternity care crisis in Ontario. This thesis researched the benefits and barriers to interprofessional collaboration from the perspectives of obstetricians and midwives. The goal was to understand how obstetricians and midwives view collaborative practice, how the different professions perceive collaboration, and to explore the attitudes and perceptions regarding collaboration of clinicians practicing in each discipline.

Methods:

This study adopted a mixed methods design. A province-wide survey was distributed to actively practicing obstetricians and midwives in Ontario. Following completion of the survey, participants were invited to contribute further opinions and perceptions in semi-structured interviews, conducted using a grounded theory approach.

Results:

Quantitative and qualitative data revealed three key findings. First, when comparing the opinions of obstetricians and midwives, scope of practice was viewed as a contentious issue with fee structures and turf protection being contributory factors. Second, the definition of interprofessional collaboration, and its application to clinical practice, varied by profession, and was viewed as a barrier to effective communication between disciplines. Finally, philosophy of care, particularly surrounding the provision of homebirth and women-centered care, varied starkly across the disciplines.

Conclusion:

Members of each profession need to develop strategies to ensure mutual respect is given in cases of philosophical and scope differences, an essential component to successful implementation of collaborative initiatives. Governing bodies and professional associations of each discipline need to strive for mutual agreement on appropriate scope of practice to ensure buy-in from members of each profession.

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LIST OF ABBREVIATIONS AND SYMBOLS

SOGC: Society of Obstetricians and Gynecologists
CMO: College of Midwives of Ontario
AOM: Association of Ontario Midwives
MCP2: Multidisciplinary Collaborative Primary Maternity Care Project
LHIN: Local Health Integration Network
WHO: World Health Organization
OMA: Ontario Medical Association
CIHC: Canadian Interprofessional Health Collaborative
MEP: Midwifery Education Program
OHIP: Ontario Health Insurance Plan
MOHLTC: Ministry of Health and Long-Term Care
SIT: Social Identity Theory
CPSO: College of Physicians and Surgeons of Ontario

DECLARATION OF ACADEMIC ACHIEVEMENT

The work described in this thesis was performed by Natalie Kirby (hereafter referred to as "the primary researcher") and supervised by Dr. Beth Murray-Davis.

Dr. Kelly Dore and Dr. Patricia Miller assisted with the research process and the completion of this thesis. Dr. Dustin Cotescu acted as external reviewer.

Chapter 1: Introduction

1.1 Maternity Care in Ontario

Pregnancy and childbirth are significant life events and profound experiences for women and their families. The maternity care model in Ontario is a unique health care system that allows women the choice between three primary maternity health care providers: registered midwives, family physicians or obstetricians (1). In the absence of an indication for high-risk care, typically classified when a woman has a pre-existing medical condition or pregnancy-related complication (2), women can choose which care provider best serves their needs, characteristically based on what style of care they are seeking (3).

1.2 Models of Maternity care

There are two models of maternity care in Ontario, the medical model, offered by family physicians and obstetricians, and the midwifery model, offered to women with low-risk pregnancies by registered midwives. Clinically, all three health service providers offer the same comprehensive services to low-risk women with safety of mother and baby considered paramount in both models of care (4,5).

1.2.1 The Medical Model of Care

The medical model of care is physician-led, and the traditional and dominant model of maternity care. In Ontario, obstetricians deliver approximately 75% of newborns per year (3). The medical specialty of obstetrics is defined as:

> A specialty that encompasses medical, surgical, and obstetrical and gynecologic knowledge and skills for the prevention, diagnosis and management of a broad range of conditions affecting women's general and reproductive health (6, Pg. 1)

Obstetricians in Ontario provide both low and high-risk obstetrics; meaning they care for women in all risk categories including women with no risk factors and women with multiple complications affecting pregnancy and delivery. In the medical model, women deliver in the hospital setting with a nursing team providing routine assessments, monitoring and support while the obstetrician will attend the

delivery (7). Typically, the medical model primarily uses a single professional model (7); meaning, an expectant mother will meet a physician, or team of physicians, who share on-call responsibilities and provide maternity care services to women and their newborns (7). This does not mean that this obstetrician will be available for labour and birth. Obstetricians do not provide clinical care to newborns, thus it becomes necessary to involve family physicians or pediatricians in the postpartum care team (7). The medical model of maternity care facilitates care for all women and their families seeking care, with no cap or limit to the number of women receiving care (7); all women can access an obstetrician as available in their community.

1.2.2. The Midwifery Model of Care

The International Confederation of Midwives defines 'Midwife' as:

> A person who has successfully completed a midwifery education program that is 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 (8, Pg. 1)

The role of the registered midwife is defined in Ontario as:

> Registered health-care professionals who provide care to women with low-risk pregnancies from the time of conception until six weeks after birth. Midwives work in a community-based group practices with a team of other midwives, providing care on a 24-hour, seven-day-a-week model (9, Pg 1)

In contrast to the medical model, the midwifery Model of Care is a midwifery-led approach that differs from the medical model in three fundamental ways: the philosophy of care, the scope of practice and the volume of women to whom care is provided (10).

First, the midwifery Philosophy of Care is based on three pillars of care: informed choice, continuity of care and choice of birthplace (11). The first pillar of midwifery care, informed choice, allows women and their families to be the central

decision makers in their pregnancy and birth (12). While there is no universally accepted definition of woman-centered care, this thesis refers to woman-centered care as the concept of personalized care, reflecting the unique needs of women and their families, while being respectful of choice, involving women in their care management decisions that best suit their psychological and physical needs (13). Midwives believe in women-centered care and that every woman and every pregnancy is different, and each woman should have the opportunity to discuss, understand and consider the care management options that best suits their needs (12). As part of informed choice, midwives will offer recommendations while following community standards and appropriate guidelines. Women and their families will sometimes choose care outside of standards, which may compromise the safety of mother or fetus; yet, midwives strive to support the informed decisions of women and their family, even when choosing care outside of standards of practice (14). Second, midwives offer women and their family's continuity of care. Every client will have a team of no more than four midwives who will provide complete care from their initial visit until six weeks postpartum, including labour and delivery. Midwives are available to their clients 24 hours a day, 7 days a week, to ensure a known care provider is available to laboring women and their families (15). Third, midwives are the only profession in Ontario who offer women the choice of birthplace, providing women the opportunity to choose where they give birth between home, hospital or birth center (16).

Along with differences in philosophy of care, the midwifery Model of Care is predicated on midwives having a well-defined scope of practice, with the focus of care being on women and newborns that are healthy and low-risk (17). The midwifery scope is defined as:

> Assessment and monitoring of women during pregnancy, labour and the post-partum period and of their newborn babies, the provision of care during normal pregnancy, labour and post-partum period and the conducting of spontaneous normal vaginal deliveries.(11, Pg 2)

The majority of births are normal and can be exclusively managed by midwives; in 2014, 71% of births were classified as "normal birth" based on

criterion from the Society of Obstetricians and Gynecologists (SOGC) (18). When care falls outside of the midwife's scope, consultation will be done with the most appropriate care provider (19). For example, a midwife would consult with an obstetrician if an expectant mother's pregnancy became clinically high-risk, or with a pediatrician for abnormal newborn findings. When a client's care falls outside of the midwife's scope of practice, for example if a woman develops preeclampsia or requires a caesarean-section, midwives continue to remain involved, offering clients a supportive care model "a midwife shall remain involved as a member of the health care team and provide supportive care within the scope of midwifery to the client" (11, Pg.1)

Finally, in contrast to the medical model of care, which does not typically have limitations on patient caseload, a full-time midwife is limited to care for 40 women per year, as defined by the College of Midwives of Ontario (CMO) and the Association of Ontario Midwives (AOM). This limit ensures appropriate time is given for women to feel comfortable with their care provider, and to establish a relationship of trust and respect (21).

Maternity care in both the medical model and the midwifery model requires collaboration between disciplines including physicians, nurses and midwives. A shared boundary around scope of practice and delivery of safe clinical care requires successful interprofessional and multidisciplinary collaboration to ensure patient safety and outcomes, while maximizing patient satisfaction.

1.3 Collaboration in Maternity Care: Why It's Needed

While the two models of maternity care are themselves distinctive, the midwifery Model of Care has a limited scope of practice compared with other disciplines, which creates a profession that relies on interprofessional collaboration for delivery of excellent clinical care when complications arise. As fewer family physicians continue to provide maternity care, and fewer medical students are choosing obstetrics as a specialty, Ontario is facing a maternity care crisis, lacking sufficient care providers to provide obstetrical care to women and their babies (22). These factors make interprofessional collaboration crucial to the sustainability of

maternity care in Ontario (22). In Ontario, many factors including historical relationships between care providers, geographical isolation and pressures for resources, and a willingness to facilitate midwifery integration, all impact the success of collaboration (23–25).

Interprofessional collaborative practice has been proposed as a solution to the maternity care crisis (22). The acuity of need varies across Ontario and many government initiatives have been funded to address the barriers to collaborative care. In 2004, the Society of Obstetricians and Gynecologists, in conjunction with Health Canada, The Association of Women's Health, Obstetrics and Neonatal Nurses, the Canadian Association of Midwives, the Canadian Nurses Association, The College of Family Physicians of Canada, and The Society of Rural Physicians of Canada, published a report titled Multidisciplinary Collaborative Primary Maternity Care Project, or MCP2 (22). Their goal was to:

> Reduce barriers and facilitate the implementation of national multidisciplinary collaborative primary maternity care as a means of increasing the availability and quality of maternity services for all Canadian women (17, Pg. 11)

They identified six barriers to multidisciplinary practice: regulatory issues, limitations and inflexibility in scope of practice, financial and economic issues, medico-legal and liability issues, lack of awareness of benefits of multidisciplinary collaborative care with women and their families, and overburdened health care providers with no time or energy to seek alternate models of primary maternity care (22). Their objectives were clear: to provide guidelines for models, to create national standards for terminology and scopes of practice, to harmonize standards and legislation, to facilitate collaboration among professionals, to facilitate change to practice patterns, to facilitate sharing of information, and to promote the benefits of multidisciplinary collaborative maternity care (22). Despite extensive promotion and positivity, and a number of goals met, the shortage of political and professional leadership, as well as lack of funding and resources, impeded the ability of a change in maternity care and successful enactment of the vision of the project to encourage greater interprofessional collaboration (26).

In daily practice, these barriers persist, despite provincial and national interprofessional initiatives. This research aims to address the gap in the research by understanding the perceptions of the benefits and barriers to interprofessional collaboration, from the perspectives of midwives and obstetricians.

1.4 Research Question

While the academic literature and the provincial and federal collaborative care initiatives, detail the persistent barriers to successful collaboration in maternity care in Ontario's health care system, and simultaneously promote the benefits to improved interprofessional collaboration, there is limited literature examining the perspectives of obstetricians and midwives regarding collaboration with the other discipline in Ontario. This perspective is critical for understanding why the policy initiatives have failed to be enacted.

This research will attempt to fill this gap, using a mixed methods approach, by addressing the research question: **"According to Registered Midwives and Obstetricians in Ontario, what are the perceptions of interprofessional collaborative behavior and how do they vary by profession?"**

This research aims to identify these benefits and barriers from the clinicians' perspective and to shed light on the obstacles to *implementing* these initiatives within the maternity care system by gaining insight into the factors that influence collaboration between obstetricians and midwives.

1.5 Researcher Characteristics

To ensure trustworthiness in qualitative research, reflexivity is an important tool throughout data collection and analysis. According to Creswell (2013), reflexivity has two important components: first, researchers must disclose their prior experiences that are relevant to the occurrence being studied (27). Second, researchers must self-reflect and demonstrate an awareness of how past experiences, along with values, attitudes and beliefs, might influence the interpretation of the data (27). Deliberately appreciating and reflecting on the influences of the researchers personal and professional identity was consistently

done throughout data collection and analysis, to improve the trustworthiness of the results.

As a full-time midwife for the past seven years, I am exposed to maternity care collaboration on a daily basis and interact with not only obstetricians, but fellow midwives, family doctors, pediatricians, respiratory therapists, medical residents, Labour and Delivery nurses and anesthesiologists. In my seven years of practice, I have worked full-scope and limited scope; meaning that I have worked in centers where midwives worked to their full defined scope according to the College of Midwives of Ontario by providing clinical care to women who choose or require epidural or oxytocin. My current center is limited-scope, which means that I am required, according to hospital policy, to transfer care to obstetricians when women access these modalities.

In both models, I have had both positive and negative collaborative interactions. In my experience, positive collaboration leads to better working relationships and care provider satisfaction and contributes to better patient satisfaction and outcomes. Clinical interactions have shaped my keen desire to explore ways of eliminating barriers to collaborative care barriers and to improve the dynamics between maternity care providers. Further, I have been a preceptor in the Midwifery Education Program for five years, mentoring student midwives in their clinical placements at various stages in their education, and want to teach in a positive environment with respectful interactions between care providers.

As the Head Midwife at my local hospital, I also sit on several policy and procedure committees, as well as being a member of the MoreOB Core Team, which is a "comprehensive performance improvement program that creates a culture of patient safety in obstetrical units", designed by the Society of Obstetricians and Gynecologists (26, Pg.1). In the role of Head Midwife, I am the midwifery voice, representing a practice of eight midwives, for the hospital. I not only collaborate clinically with multiple disciplines, but also work at the policy level as well to help integrate midwives into the health care system.

Finally, as a graduate student in Health Science Education, my research question was formulated through interests as a clinician, educator and policy contributor and was shaped by members of my thesis committee.

1.6 Project Implications

This project focuses on a deeper understanding of the interactions and roles in maternity care between obstetricians and midwives, from the perspective of each discipline. In light of the impending maternity care crisis with fewer clinicians providing maternity care to women and their newborns, improving the collaborative dynamic is fundamental to the future of obstetrical care in Ontario.

Chapter 2: Literature Review

This chapter will review the relevant bodies of literature relating to midwifery care in Ontario and around the world, the various definitions affecting maternity care collaboration, the benefits of maternity care collaboration and the barriers of maternity care collaboration. This chapter will also review two theoretical frameworks that explain the persistent barriers to maternity care collaboration in Ontario's current maternity care model.

2.1 Collaboration in Maternity Care

2.1.1 Midwifery in Canada and Around the World

A 2014 report by the World Health Organization (WHO) stated that 87% of essential maternity care for mother's and babies could be managed by an educated midwife (29). Further, the WHO released an executive summary titled "A Universal Pathway. A Woman's Right to Health" which detailed a 'Midwifery2030 Pathway' plan for focusing on midwife availability, accessibility, acceptability and quality of health services and health service providers (30). The goal is simple: to achieve improved access to midwives worldwide (30).

While Ontario was the first Canadian province to have legislated midwifery, Canada was the last industrialized country to have a formal midwifery profession (31). Midwifery in Canada continues to be a small, albeit growing, profession, with midwives in Canada attending less than 10% of overall births. In comparison, greater than 70% of births are attended by midwives in Australia, Denmark, France, Sweden, the Netherlands, New Zealand and the United Kingdom, other comparable industrialized countries with legislated midwifery (31).

Integration of midwives into the Canadian health care system has been a struggle when compared to other countries. In the United Kingdom, where midwifery has been regulated since 1936 (32), midwives provide the majority of maternity care services, reserving obstetrician involvement for only high-risk cases and complications (22,31,32). Integration across Canada, and in Ontario, has been

difficult primarily due to the struggles with defining midwives and midwifery, to the dilemma's surrounding regulation and to ensuring access to public funding (33).

Different models of midwifery care vary by country, and vary by state or province within a country. Understanding the midwifery model of care within the Ontario context is important for understanding the perspectives of obstetricians and midwives working within that model, and for understanding the ongoing struggle for integration and recognition.

2.2 History of Midwifery Care in Ontario

Midwifery integration into Ontario's health care system began in conjunction with the woman's movement in the 1970s (32). The recognition of midwifery as a self-regulating profession was facilitated by two key factors; first, consumer support for midwifery integration was pivotal, and viewed as progressive and women-friendly, being supported by strong feminists in the Ontario government in the early 1990s (34). Second, midwifery was viewed as cost-effective, which was important after the economic slump of the 1980s (32). In 1993, Ontario was the first Canadian province to regulate and fund Midwifery. To date, 10 of Canada's 13 provinces and territories have regulated and integrated midwifery. Prince Edward Island, Newfoundland and Labrador and the Yukon continue to work towards the establishment and recognition of the midwifery profession (35).

In Ontario, midwives are autonomous, primary maternal health care providers who provide comprehensive maternity care services to women and their newborns (11). There are two governing bodies that regulate midwifery in Ontario; the College of Midwives of Ontario (CMO), a regulatory body designed to protect the public by regulating the profession of midwives, and the Association of Ontario Midwives (AOM), representing midwives and the protection of midwifery as a profession (36) (17).

Since legislation in 1993, midwives have made considerable professional strides providing primary maternity care to 180,000 women and their babies (37). There are now over 807 midwives practicing at 100 clinics in all 14 Local Health Integration Networks (LHIN) across Ontario (17).

Midwives, by definition, are experts in low-risk pregnancy and birth and provide care to women and their newborns (17), therefore midwives have a well-defined scope of practice (19). It is relevant to note that midwives do not consistently work to their full-scope of practice, often transferring care based on hospital preferences to obstetricians for clinical management of modalities that are within a midwife's defined scope of practice. Currently in Ontario, approximately 50% of midwives provide full-scope practice, meaning they maintain primary care for women who access epidurals intrapartum or require oxytocin induction or augmentation during their labour (38). Working full-scope or limited-scope is largely due to individualized physician preference and hospital policy (21).

2.2.1 Midwifery in Ontario

Despite the hurdles of being a newly regulated profession, in the past 20 years, midwives have become increasingly integrated into Ontario's health care system. The SOGC stated in their 2009 Policy Statement on Midwifery: "The integration of midwifery into the obstetrical health care team is fostering excellence in maternity care for women living in Canada and their families, which is the goal of our organization" (21, Pg 1).

Further, in a joint statement in 2011 regarding the professional relations between physicians and midwives in Ontario, the Ontario Medical Association and the Association of Ontario Midwives said:

> The Ontario Medical Association (OMA) and the Association of Ontario Midwives (AOM) recognize that many situations arise in which physicians and midwives collaborate in the care of women and newborns. Optimal patient care is achieved through a working relationship characterized by mutual respect and trust as well as professional responsibility and accountability. When physicians and midwives collaborate, they should establish clear mechanisms for consultation and transfer of care recognizing and understanding their respective roles in the provision of care. Recognizing the high level of responsibility that physicians and midwives assume when providing care to women and newborns, the OMA and AOM affirm their dedication to the promotion of appropriate standards for education and certification of their respective members, to support clinical practice guidelines, and to facilitate communication and collegial relationships between physicians and midwives. (22, Pg 1)

Numerous provincial and federal policy initiatives have promoted the need for increased collaboration in maternity care for two main reasons: first, by definition, midwifery is an interprofessional discipline, consulting with various care providers when a client's care exceeds the midwifery scope of practice. Second, by the looming maternity care crisis which predicts 157,000 births per year in Ontario by 2024, and not enough care providers to appropriately care for these women and their newborns (41).

International, national and provincial policies and initiatives support increased collaborative practice and midwifery integration into health care models. Each policy initiative strives to promote the benefits of collaboration while addressing the barriers.

2.3 Defining Collaboration

2.3.1 Collaboration and Collaborative Practice

Interprofessional collaboration in health care is vital to patient safety and health service provider satisfaction (42). Successful collaboration in health care is defined as: "A complex phenomenon that brings together two or more individuals, often from different professional disciplines, who work to achieve shared aim and objectives" (1, Pg. 41) There are many attributes, each equally important, that contribute to successful collaboration in health care: joint venture, cooperative endeavor, willing participation, shared planning and decision-making, team approach, contribution of expertise, shared relationships, nonhierarchical relationships, and shared power based on knowledge and expertise(43). Each of these attributes as described by Henneman's 1995 research, have relevant applications to effective collaborative practice in maternity care (43).

Collaborative practice is defined by the Canadian Interprofessional Health Collaborative (CIHC) as "an interprofessional process for communication and decision-making that enables the knowledge and skills of care providers to synergistically influence the client/patient care provided" (44). The CIHC further published a definition on the requirements of collaborative practice (44):

> Collaborative practice occurs when healthcare providers work with people from within their own profession, with people outside of their profession and with patients/clients and their families. Collaborative practice requires a climate of trust and value, where health care providers can comfortably turn to each other and ask questions without worrying that they will be seen as unknowledgeable (3, Pg. 1)

The CIHC initiative promoted collaboration by discussing the benefits of appropriate language, respect and understanding of all health care providers, building trust amongst the team, welcoming new team members and supporting each other through mistakes and achievements (44). The CIHC statement further detailed how collaborative practice can impact and improve the health care system by reducing wait times, creating healthy workplaces, improving patient safety, access in rural and remote areas and overall population health and wellness (44).

Understanding the benefits of collaboration, and the definitions of collaboration and collaborative care are essential. Application of these concepts into daily clinical practice is reflected in the definitions of multidisciplinary and interprofessional care.

2.3.2 Multidisciplinary and Interprofessional Care

Multidisciplinary practice "refers to a clinical group whose members each practice with an awareness and toleration of other disciplines" but reflects different professions working alongside each other, than with each other(4, Pg. 1370). Conversely, interprofessional care is defined as "an integrated approach in which members of a clinical team actively coordinate care and services across disciplines" (4, Pg. 1370). The goal of interprofessional care and collaboration is striving for the best outcomes for patients and maximum care provider satisfaction (42).

Specific to maternity care, in 2002, Health Canada, and the National Primary Maternity Care Committee, funded a collaborative initiative in maternity care and defined collaborative care 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 clinic decision-making (within and across disciplines), and fosters contributions from all disciplines" (45, Pg. 1)

Collaboration, collaborative practice, interprofessional and multidisciplinary care are key elements in maternity care, and the provision of midwifery, with many proposals highlighting and discussing the benefits of working in an interprofessional model of collaborative care. Midwives are autonomous care providers, however the profession is not sustainable in segregation from other disciplines (47). Guidelines and standards reflecting the low-risk scope of midwives, making midwifery a collaborative profession that frequently consults and collaborates with other health care providers. Collaboration with other disciplines is essential to excellent midwifery care, and a fundamental building block in the integration of midwifery care in Ontario (47).

2.4 The Benefits to Collaboration

> Successful interprofessional collaboration:
>
> Provides mechanisms for ongoing communication among caregivers, optimizes participation in clinic decision-making within and across disciplines, and fosters respect for the contribution of all professionals within the group (22, Pg. 32)

The academic literature has documented the many benefits of a collaborative care maternity model to both women and care providers. Interprofessional care is an important strategy for increasing effectiveness of health care; successful collaboration has been shown to have many benefits including improved communication, increasing trust between care providers, reducing workload and burnout amongst care providers, all while improving patient safety, care, satisfaction and outcomes (24,45,47,48).

Further, a collaborative interprofessional model of maternity care ensures all women will have access to care providers with the presence of a looming maternity care crisis, and ensures continued improvement with perinatal and infant mortality rates and maternal morbidity rates (49).

Exploring the persistent barriers to collaboration and developing strategies to remedy the struggles, is imperative to successful interprofessional collaboration as the future of maternity care in Ontario.

2.5 The Barriers to Collaboration

Despite the multitude of initiatives discussed and midwifery becoming increasingly integrated into Ontario's health care system, and a respected alternative to traditional obstetrical care, barriers to interprofessional collaboration persist.

The prediction of declining number of maternity health care providers in Ontario is the impetus behind trying to better understand the barriers to a collaborative approach, from the perspective of midwives and obstetricians in Ontario. Working together and working alongside are different: professional culture and roles, differences in education and attitudes towards birth, scope of practice, funding structures, professional relationships and communication are important factors to help explain and understand the downfall of implementing successful collaborative initiatives in maternity care.

2.5.1 Professional Culture and Roles

The professional culture of both disciplines, midwifery and obstetrics, is complex (50). Hall (2005) describes professional cultures as including values, beliefs, attitudes, customs and behaviours (50) and states that:

> This has led to each health care profession working with its own silo to ensure its members have common experiences, values, approaches to problem-solving and language for professional tools. It is not only the educational experiences, but also the socialization process which occurs simultaneously during the training period that services to solidity the professionals' unique world view (28, Pg. 190).

Hall's research proposes that education further reinforces these values, furthering the immersion of clinicians into their professional culture (50). For example, in maternity care, a lack of understanding about the other discipline, or a previous adverse outcome when collaborating, can shape the clinicians view of

future interactions. For this reason, professional cultures create barriers, making for a complex collaborative relationship between midwives and obstetricians.

Research by Lane (2005) discusses the impact of the "silo effect", where care providers continue to deliver care within their respective disciplines, rather than collaborating, due to outdated ideas of professionalism defined by hierarchical divisions, divergent philosophies and competing domains (51). Lane discusses the conflicting definition of collaborative care amongst professions and states that for genuine collaboration to be successful, these barriers must be addressed and eliminated (51). The concept of 'new professionalism' is consistent with midwifery philosophies of informed choice and women-centered care, and challenges the 'old professionalism' characterized as hierarchical and top-down (51).

Reconciling the differences in professional cultures is pivotal to increased success with interprofessional collaboration. A shift in professional culture will require a change in education, and clinicians being taught in 'silos'.

2.5.2 Differences in Education And Attitudes Towards Birth

Professional education arguably has the strongest impact on collaboration, because as Hall (2005) suggested, it is through education that clinicians are cemented in their professional identity (50). The impact educational background has on collaborative relationships is multi-faceted; education varies across universities, provinces and countries in both midwifery and medical education. In Ontario, there are six universities with a School of Medicine and three universities offering the Midwifery Education Program (MEP) (52,53). Obstetricians will graduate from a three or four year undergraduate medical education degree and will continue their studies with a five-year residency in obstetrics and gynecology, typically done at a tertiary care facility or teaching center in the province. In contrast, the MEP is a four-year undergraduate degree combining academic and clinical studies focusing on health, social and biological sciences. The program is focused around the midwifery Model of Care in Ontario, which reflects a unique woman-centered approach to pregnancy and childbirth (11).

In addition to the differences in education, Klein (2009) surveyed obstetricians, midwives, physicians, nurses and doulas across Canada and found obstetricians and midwives had opposing views regarding their attitudes towards birth (54). Historically, and attributed to their education, Klein discusses the findings that obstetricians favour a technological approach, while midwives tend to use technology judiciously in labour and birth (54). Another study by Klein (2011) compared the attitudinal differences between the younger and older generation of practicing obstetricians (55). According to Klein, younger obstetricians were more likely to favour technology in birth and were less likely to provide woman-centered care, negating the importance of the woman's role in her birth (55). Klein's conclusions discussed the importance of examining the educational impact on clinical practice and the repercussions that increased interventions can have on maternity care across Canada and on collaboration with other disciplines (55).

Expanding on Klein's research, Schadewaldt (2013) found a correlation between interprofessional respect and trust and a familiarity with the educational background of fellow health care providers (56). Schadewaldt determined that when there was an increased familiarity with the educational background of another clinician, there was a noted increase in interprofessional trust and respect (56). The effect of silo education and training impacts a clinician's understanding of other disciplines, and thus impacts their ability and willingness to collaborate (56).

Interprofessional education is an often-proposed solution to resolve differences in education and thus a clinicians' approach to maternity care. Commonly defined, interprofession education: "occurs when two or more professions learn with, from and about each other to improve collaboration and the quality of care" (35, Pg. 183). The lack of understanding regarding each other's disciplinary differences creates confusion and systemic restrictions, impacting a successful collaborative relationship and demonstrating a need for improved integration of interprofessional education.

Research by Meffe (2012) proposed that an interprofessional education program in maternity care would improve participant knowledge of each others respective disciplines, improve skills and attitudes by promoting an environment of

mutual learning, and improve future collaborative behavior in the clinical setting (58). The study's focused workshops and clinical shadowing experiences demonstrated interprofessional training improved relationship development, communication, willingness to collaborate and improve delivery of woman-centered care (58).

Improved interprofessional education would help to reduce the impact of the barriers created by differences in professional education, and subsequent clinician immersion in their professional culture.

2.5.3. Scope of Practice

Another well-documented barrier is the marked difference between an obstetricians and a midwife's scope of practice. Scope of practice describes the professional boundaries within which a clinician is trained in specific skills, and are enabled to autonomously practice their work (59). Scope of practice is typically determined by the professions governing body, in conjunction with government legislation and regulatory bodies (21). Research done by D'Amour (2005) suggests collaboration is a professional endeavor and dynamic process, which requires communication and mutual trust (24). Lack of clarity around scope of practice creates a barrier to collaboration by creating confusion amongst clinicians. For example, it may not be within a midwife's pharmacopeia to order certain medications, however it is within their scope to monitor the administration of these medications. This can create ambiguity; clarity around scope of practice with all clinicians can work to improve the barrier created by clinician's scope.

Further, similar to Schadewaldt's (2013) research linking professional trust and respect with an understanding of each others respective professions, Martin and Kaperski (2010) found that promoting equality and moving away from hierarchical maternity care structures, improved the provision and organization of maternity care (60). Equality has been shown to improve collaboration which indicates a need for reforming the rigidity of the current maternity care system in Ontario by changing legislation, provider scope of practice and remuneration issues (60).

2.5.4 Funding Structures

Another barrier to collaboration is funding structures, especially in geographical areas where resources are limited and scarce. King (1998) discusses that the economically driven policy changes in obstetrical care supporting interprofessional collaboration models, can lead to compromising professional autonomy or professional identity which in turns impacts the success of collaboration (61). Further, inequities in compensation for services can create tensions which impacts successful collaboration (61).

In Ontario, obstetricians and midwives have different fee structures. Typically, obstetricians work for fee-for-service, meaning they are paid for services rendered through a plan designed and funded by the Ontario Health Insurance Plan (OHIP) (62). Whereas midwives are primarily salary-based, receiving a base fee per billable course of care. Differing from physicians, a billable course of care is defined as greater than 12 weeks of care and/or the midwife attends the birth (63). Midwives are funded through the Ministry of Health and Long Term Care (MOHLTC), which enables midwives to provide care to the uninsured, including refugees (63).

Different funding structures can create barriers and tensions to successful interprofessional collaboration. In maternity care, the unpredictability of volume of deliveries and competition over resources, contributes to collaborative struggles between obstetricians and midwives (22).

2.5.5 Professional Relationships and Communication

Along with the tangible realities of how education, scope of practice and funding structures contribute as barriers to collaboration, there is an overarching theme of professionalism and communications struggles. Berridge (2010) conducted a qualitative and quantitative longitudinal study evaluating the intra-and-interprofessional communication in delivery suites (64). The findings revealed many complexities in communication including the influence of workload pressures on communication, the differences in interprofessional jargon impacting effective communication and the influence of the organization architecture as an influencing

factor (64). Communication is essential to safe, quality health care (64). Successful communication in one's discipline is difficult; effective communication across multiple disciplines requires professional 'buy-in' and appropriate organization systems to facilitate the use of effective tools to improve communication, thus improving collaboration (64). Lyndon (2011) expanded on Berridge's (2010) research by speculating on the situational barriers which impact communication amongst maternity care providers (65). Sleep deprivation, a lack of confidence, relationship preservation, deference to hierarchy, conflict avoidance and fear of repercussions are all barriers to effective communication even in the presence of good collaborative relationships within a supportive organizational framework (65).

Further research done by Carlisle (2014) posed the question "Do none of you talk to each other?" to maternity care providers and attributed the struggles in professional practices that lack interprofessional education (66). Incorporating the importance of interprofessional communication at the undergraduate level, as well as post-registration, was favoured to improve communication across disciplines, thus improving patient care (66).

Understanding the benefits and barriers to collaboration is important to be able to propose solutions for change, and to be able to identify theoretical frameworks that could help improve the collaborative dynamic.

2.6 The Dynamics of Collaboration

Two key theories that explain the persistent barriers, despite the purported benefits and policy initiatives focused on collaboration, are the Social Identity Theory and King's Theory of Goal Attainment.

2.6.1 Social Identity Theory

Tajfel and Turner developed a perspective to describe the barriers between different groups in 1986 referred to as Social Identity Theory (SIT) (67). SIT describes "in-groups" and "out-groups" and proposes that individuals or clinicians, will favour their own professional group particularly when feeling threatened over

lack of resources, uncertainty with communication, and discrepancies in status and power (67). Individuals will self-categorize according to five key characteristics (68):

I. *Social Identity*: Individuals will self-categorize based on feelings of self-esteem and social worth. These individualized perceptions can be either positive or negative, depending on the context of any given situation.
II. *Social Structure*: Variations in status and power will affect inter-group dynamics, causing conflict or concord.
III. *Identity Content*: Value of identities is defined by acceptable norms and attributes. Threats to societal norms create tension and exclusion.
IV. *Strength of Identification*: Individuals cross groups and can belong to many "in-groups", with varying strength in identification to each group. Strong association to their in-group is directly correlated with desire the fight for their group against threats to the 'norm'
V. *Context*: Individuals identities change with flux in the social context, meaning that changes in the social context can change in-group behavior.

The principle of SIT underpins the inherent struggle with interprofessional and multidisciplinary communication, and its impact on collaboration. Research by Kreindler (2012) details the importance of examining collaboration with a social identity theory lens explaining that the pervasive education, training and clinical practice in silos dominate health care and this educational training perpetuates the barrier to collaborative practice (68).

However, the theory creates opportunity for shifting of in-group and out-group behavior and perceptions by changing the context of a situation (68). For example, by increasing the promotion of the collaborative dynamic and eliminating barriers by changing funding structures, increasing interprofessional education and creating clear guidelines around scope of practice, there is opportunity to shift the

in-groups to be more inclusionary of all maternity care providers versus segregation into various out-groups.

2.6.2 King's Theory of Goal Attainment

King's theory is a conceptual framework, extrapolating the General System Theory, originally published in 1971 (69). The General Systems Theory, the "science of wholeness" (35, Pg 74), is the scientific approach to perspectives. King's framework expanded this concept by suggesting a comprehensive view on the dynamic systems of interaction: society systems (society), interpersonal systems (groups) and personal systems (individuals) and how all three interact with their environments (69). Using this conceptual framework, King (1992) developed the theory of goal attainment (42). Originally, the theory was applied to nursing and looked at the relationship between nurses and patients in achieving health goals together. The theory utilizes perception, communication, interactions and transactions to explain the complex relationship required in successful interprofessional collaboration(70).

> Interactions in this framework are defined as a:
>
> Process of perception and communication between person and environment and between person and person, represented by verbal and non-verbal behaviors that are goal-directed. These interactions cause all involved to feel respected and positive about the mutual goals set (1, Pg. 42)

King also proposed barriers to achieving goals, and compared these five key barriers to interprofessional collaboration within the health care team (70):

i) *Patriarchal Relationship*: Historically, health care relationships have been hierarchical, deferring to physicians, often seen as leaders of the interprofessional team. Therefore, physician input and involvement is essential to successful collaboration and goal attainment.
ii) *Time:* Collaboration requires trust and King explains that to build trust, individuals need time for interactions. In healthcare, time is a precious commodity, and allocating time for team members, is essential to successful collaboration.

iii) *Lack of Role Clarification*: Lacking distinct boundaries and clarification around patient-care responsibility is a barrier to collaboration. Drawing on the theory, these transactions, when clear and well defined, allow team members to work together towards the shared goal. Lack of clarification creates ambiguity and confusion and therefore a breakdown in goal attainment.

iv) *Gender*: King discusses the impact of male versus female gender as a barrier to collaboration and references historical context to male versus female dominance and an imbalance of power, inhibiting collaboration.

v) *Culture:* King references that culture can be discussed from the perspective of a country, organization, professional or individual and the differing cultural mindset of health care providers can create tensions and barriers to successful collaboration.

Application of King's Theory of Goal Attainment to interprofessional healthcare collaboration to foster improved collaboration is relevant to interprofessional collaboration in maternity care. Each barrier described by King has relevance when applied to maternity care and may inform the discussion that is focused on addressing the barriers to interprofessional collaboration.

2.7 Summary of the Literature

The benefits and barriers to interprofessional collaboration have been clearly researched and documented. Yet, despite government initiatives and promotion of the advantages such as improved patient safety, decreased workload and decreased risk of burnout, the benefits of collaboration are limited by the persistent presence of barriers. According to an editorial by Davies (2000) on getting health professionals to work together, there's more to collaboration than working side-by-side (71). Further, Downe (2010), identified that women and families in a struggling maternity care model cannot receive appropriate care from health care professionals who are unable to work together (25). Understanding the perspectives of obstetricians and midwives is important to understanding the struggles of implementing the policy initiatives.

Chapter 3: Methods

3.1 Overview of Study Design

The purpose of this study is to understand how midwives and obstetricians view collaborative practice, how the different professions perceive collaboration, and to explore the attitudes and perceptions regarding collaboration held by clinicians practicing in each discipline. The goal was to develop a better understanding of any problems with interprofessional collaborative care integration. Successful identification of trending themes and system barriers could help implement educational reform leading to more successful collaboration and potentially improved patient care and safety.

For this study, we adopted a mixed methods design, using a quantitative and qualitative approach. Mixed methods is defined as:

> Collection or analysis of both quantitative and/or qualitative data in a single study in which the data collected concurrently, or sequentially, are given priority, and involve the integration of data at one or more stages in the process of research (1, Pg. 210)

Mixed methods research uses more than one method for data collection, which can mitigate the disadvantages associated with using any one study design (27). For example, the qualitative data achieved through interviews, can enhance the quantitative data achieved through survey design, by expanding on the quantitative data with the qualitative perspective (72). There is consensus that using a mixed methods study can improve a study's results (27).

Mixed methods research is also referred to as methodological triangulation, "the use of at least two methods usually qualitative and quantitative, to address the same research problem" (3, Pg 120). Mitcbell (1986) explains that methodological triangulation is best used when studying "complex concepts that contain many dimensions" (4, Pg 21*)*. Methodological triangulation can be done in two ways: simultaneous or sequentially (73). For this study, a simultaneous method was chosen, meaning that both the quantitative survey data and qualitative interview data were collected at the same time. With this method, there is minimal interaction

between the data throughout collection, however the results complement each other upon completion of the data collection to more broadly answer the research question (73).

The focus of this research was to better understand the perspectives of obstetricians and midwives and thus a quan+QUAL design was adopted; meaning that the quantitative research was used to solicit participation in the qualitative research, which was seen as the central method for gaining more depth and insight into the phenomena in question. This quan+QUAL study would facilitate a better understanding of the perspectives of obstetricians and midwives regarding the benefits and barriers to collaborative care. Mitcbell further explained that "by combining both qualitative and quantitative methods, a more complete picture of a phenomenon can arise" (4, Pg 22). The theory generated from the qualitative research was complemented by the quantitative data (73).

As previously discussed, the research question for this study was: **"According to Registered Midwives and Obstetricians in Ontario, what are the perceptions of interprofessional collaborative behavior and how do they vary by profession?"**

3.2 Quantitative Research

3.2.1 Survey

A survey design was selected for the quantitative data collection, to capture the thoughts and perceptions of collaborative care relationships across the province of Ontario from the perspectives of midwives and obstetricians. According to Steen (2011), survey methodology can record "facts, knowledge, opinions and views, behaviours, beliefs, attitudes and attributes" (5, Pg.224).

There are several benefits to using a self-administered, cross-sectional survey: it allowed for more than one theme to be examined, it was sufficient for recording facts as well as perceptions, and the anonymity allowed respondents to provide honest answers versus responding in a socially desirable way (75–77).

An online format of the survey was utilized for this study. Online surveys allow for larger sampling across a wider geographical area and are more accessible

for respondents, which in theory will improve response rates (75,76). Ontario is Canada's second largest province with a diverse landscape contrasting rural and urban. The delivery of maternity care varies dramatically according to geography with changes in population density, access to advanced technology and available care providers, thus an online survey design was chosen to capture the various perceptions to collaborative maternity care across diverse communities. Data collection through surveys is quicker and more affordable, however Burns (2008) contrasts the benefits of speedy data collection and low cost of survey design with a notoriously poor response rate, particularly in a poorly designed survey (76). To mitigate the effect of a poor response rate due to a poorly designed survey, the survey questions for this study were adapted from previous research done in Australia (78), modified to reflect the Canadian context, with permission from the authors. There was evidence the study questions were proven to be valid and reliable, which has been demonstrated to yield an improved response rate (76).

3.2.2. The Instrument

The survey (Appendix 1) used in this project had 78 questions divided into six categories: defining collaborative practice, current workplace practice, how does collaboration work for you, factors affecting collaborative practice, professional value and beliefs, and collaborative practice in Ontario. Each category had 1-3 sub-categories.

The survey used was developed in 2010 by the Queensland Centre for Mothers and Babies in Australia and has been used in four other studies (78–81). Their survey was piloted on researchers, educators and maternity care clinicians prior to distribution.

The content validity was ensured and improved by clarifying some items, reducing the number of questions and soliciting expert evaluation and critiques from physicians and midwives prior to data collection (78). To reflect the Canadian context, the research team made minor modifications to the survey. First, the definition of collaborative practice was changed from the National Health and Medical Research Council, an Australian program, to Health Canada's definition of

collaborative practice (1). Further, any geographical reference to Queensland or Australia was replaced with Ontario or Canada, respectively. Finally, references to clinical practice guidelines were changed to the comparable Canadian guidelines from the SOGC or the CMO standards (19,82).

Finally, the modified survey questions were piloted on a group of five participants: three midwives and two obstetricians, all clinically practicing in Ontario. Purposive methods were used when piloting the revised survey by personally approaching midwives and obstetricians known to the researcher. The pilot group was provided with paper copies of the survey by the researcher and no feedback or suggestions for change were received. The group found the questions clear, easy to understand and relevant.

3.2.3 Data Collection

Data for the survey was collected from March 11th, 2016 – to May 12th, 2016. Survey Monkey, a web-based platform, was used for data collection. Survey Monkey's enhanced 'gold' version was used to improve security throughout collection (83).

All midwives and obstetricians in Ontario were invited to participate in this study. All actively practicing clinicians, according to the Association of Ontario Midwives and College of Physicians and Surgeons of Ontario, were contacted to participate in the online survey. Inclusion criterion was simple and included any registered midwife or obstetrician in Ontario, who provided consent to participate. The survey was only offered in English.

At the end of the survey, respondents were asked to answer six demographic questions, which included participant's age, sex, discipline, hospital level and geographical area. Respondents were also asked whether they were currently practicing clinically. This data was collected to analyze trending themes in the data, which could have been impacted by a respondents' discipline, geographical location or age. The data was also used to ensure appropriate and adequate representation from various experience levels, disciplines and geographical areas.

Open-ended responses from the survey will be discussed in the qualitative results section (Chapter 4.1) of this thesis.

3.2.4 Sampling and Recruitment

Midwives were recruited to participate in four ways: a) an invitation was included in the AOM weekly 'Midwife Memo', an e-blast that is emailed to all midwives in Ontario, with a reminder afterwards for two subsequent weeks; b) all 105 Midwifery practices in Ontario was contacted via email by the researcher with an invitation to participate; c) the researcher posted the invitation to participate on a known midwifery social media page and invited respondents to share with their colleagues to encourage participation and improve response rate and d) the Head or Lead midwife at all Ontario hospitals were contacted via an email listserv by the researcher and asked to share the survey with their midwifery colleagues using a web link.

Obstetricians were recruited to participate in three ways. First, obstetricians were contacted by a postcard (Appendix 2) sent to their listed mailing address on the CPSO's public website. Obstetricians were mailed a reminder postcard, two weeks after the initial invitation was sent. Second, professional contacts of the thesis committee were personally invited to participate via an email with a web link, and invited to share the survey with their colleagues. Finally, the Association of Ontario Midwives Head Midwife listserv was used as way to disseminate the information to obstetrical colleagues by asking the Lead Midwives in the province to share the survey with their local obstetricians.

Burns (2008) described the importance of reminders to improve response rate and decrease non-response bias; therefore, both disciplines were contacted a minimum of two times and participants were encouraged to share the link with their colleagues (76).

3.2.5 Sample Size

According to the CMO and the CPSO, there were 807 registered midwives and 989 practicing obstetricians/gynecologists in January 2016. Of the 807 midwives,

125 are listed as inactive and were therefore excluded from our sample size. Thus, 682 midwives were invited to participate. Of the 989 obstetricians listed on the CPSO website, only 905 were sent postcards. Obstetricians with primary addresses listed outside of Ontario were not invited to participate in the study. A further 39 addresses were removed from the sample size as the obstetrician/gynecologists primary address was a fertility clinic, and therefore were presumed to have minimal collaboration with midwives. In total, 1,548 participants were invited to participate in the survey.

It is important to note that not all listed obstetricians and gynecologists would have opportunities to collaborate with midwives.

3.2.6 Data Analysis

Data from the survey was analyzed using SPSS Software. One-way ANOVA's (one-way analysis of variance) were used to compare the means, and examine significant differences, of obstetricians and midwives. ANOVA's were used as a way to "generalize the two-sample t-test to three of more samples" (13, Pg. 165). One-way ANOVA's can also be used to determine if the means of the two or more groups being studied have significant difference (84). Analysis was done comparing the means of the obstetricians and the midwives survey responses.

Further, Bonferroni's Correction was used to adjust the p-values due to the large number of statistical tests being conducted simultaneously on a single data set (85). Bonferroni's Correction was used to reduce the chance of a false-positive results, which has an increased chance of occurring due to multiple tests being performed on the same data (85). The p-value was set at $p < 0.01$, less than the normal p-value of < 0.05 to ensure all significant results were given consideration.

Finally, the F-test, a value which reflects "whether the means between two populations are significantly different" was used to identify the questions with the most statistically significant and relevant results (84).

3.2.7 Defensibility

To ensure meaningful results, there must be evidence of validity, reliability and objectivity in the quantitative data from the survey.

Internal Validity

First, internal validity, where the data accurately and appropriately reflects reality, was achieved by ensuring survey distribution to all actively practicing midwives and obstetricians in the province, ensuring an appropriate sample size (86). According to Morse (1991), "the greatest threat to validity is the use of inadequate or inappropriate samples" (3, Pg 121) therefore efforts were made to contact all practitioners from both disciplines being studied.

In the context of survey design, validity is improved when the survey questions appropriately measure what they intend to measure (86). As discussed, survey questions for this study were adapted with permission from the Australia study that had proven validity and reliability (78) and were piloted on three midwives and two obstetricians who had no discernible difficulties understanding or interpreting the questions. No changes were made based on the pilot study and therefore, content validity was sufficiently ensured (86).

External Validity

External validity, or generalizability, where the results can be applied to other individuals, groups of people, or situations, were examined (87). External validity aims to ensure that the data can be appropriately applied to a wider population. Factors influencing generalizability, including response bias or poor response rate, were considered and will be further examined in Chapter 5: the discussion section of this thesis.

Objectivity

Objectivity was considered with appropriate removal of bias that arises from data collection or during analysis (88). Data collection for the survey was explicitly anonymous, and limited demographic information was collected, limiting the influence of the possibility of researchers bias impacting the survey results (87).

3.3 Qualitative Research

3.3.1 Interview

The final question of the survey invited respondents to volunteer to participate in a semi-structured follow-up interview using a grounded theory approach. Interviews were conducted until theoretical saturation was sufficiently achieved.

A grounded theory approach to the interviews was selected. This framework is ideal for this study design in consideration of the data being solicited as this methodology is designed to create theory from participants (89). In a maternity care environment, there will be variations according to geographical area and accessible resources, hospital staff and expertise, and historical factors influencing relationships (90). Given the complexity of the situation, a grounded theory framework is ideal for investigating the data from multiple perspectives.

The concept of grounded theory was first described by Glaser and Strauss in 1967 as a framework for using empirical data, either quantitative or qualitative, for theory generation (91). This novel approach was instrumental in validating qualitative data and providing legitimacy to social science research. In relation to a dynamic maternity care environment, grounded theory research is ideal for exploring the complexities and striving to understand the key psychosocial influences, as it impacts collaboration (88). Watling & Lingard (2012) further explore grounded theory and its application to medical education research by explaining: "grounded theory research is exploratory, seeking to understand the core social or social psychological processes underlying phenomena of interest" (18, Pg. 852).

3.3.2 Data Collection

Qualitative, semi-structured interviews were conducted in April and May of 2016. An interview guide (Appendix 3) was used, along with a grounded-theory approach, to allow the researcher to provide prompts and expand on new data collected during the interview. The interview guide was designed by the research

team and piloted on one clinician from each discipline of the target population prior to data collection. No changes were made to the interview guide.

Interviews were scheduled with the participants who volunteered at locations convenient to the respondent, and on the telephone at mutually convenient times. When conducted in person, various locations were used including respondents' home or office. Most commonly, interviews were done on the telephone. Efforts were made to ensure the interview was in a suitably quiet environment with consideration given to ensure both the respondent and the researcher felt comfortable. Consent was obtained at the beginning of each interview.

Free-hand written notes were taken during the interview using the memo writing technique proposed by Kennedy & Lingard in 2006 (92). Interviews were recorded using the researchers iPhone (iPhone 5s) using the "Voice Memo" application. The application was tested by the researcher prior to the interviews. The recordings were saved using an alphabetical system, with no identifying data, and uploaded to the researchers computer.

3.3.3 Recruitment & Sampling

Upon completion of the survey, respondents were invited to include their email if they were willing to participate in a follow-up interview. All survey participants were invited to volunteer to be interviewed. Purposive methods were not used as a recruitment strategy for the interviews.

Sampling for this study used a convenience sampling method, seeking participants whose disciplines were relevant to our research questions and who were accessible to the researcher and agreeable to participate.

Snowball sampling was also used as a technique for recruiting participants for the interview. Snowball sampling refers to the technique of using previous research to solicit future research respondents (93).

3.3.4 Sample Size

In qualitative research, it is often difficult to ascertain the appropriate sample size to ensure sufficient data for theoretical saturation (94). Watling & Lingard (2012) describe saturation as the point at which no new ideas are identified and there is a decision to end data collection (88). Often, the decision is subjective and based on judgment that the researcher has achieved informational redundancy (95). Where there is no novel data being sampled, a decision can be made to end data collection. In qualitative data, sample sizes that are too small fail to achieve informational redundancy or theoretical saturation, whereas sample sizes that are too large lack the authenticity of having completed thorough data analysis, required in qualitative research (94).

For this study, five interviews were conducted per discipline for a total of ten semi-structured interviews. A decision was made by three members of the research team to discontinue interviews at this time since theoretical saturation and informational redundancy was achieved (94).

3.3.5 Data Analysis

In preparation for data analysis, the researcher followed these steps: 1) recorded interviews from the researchers iPhone were uploaded to the principal researcher's computer; 2) recordings were transcribed verbatim by the researcher by playing the recording at 50% of its original speed; and 3) transcripts were saved as Microsoft Word documents using an alphabetical system with all identifying data removed. The data was transcribed by the research immediately following the interviews.

Data was analyzed using an iterative process; meaning that simultaneous data collection and analysis occurred subsequent to each interview (89). The transcription of the data was done by the primary researcher immediately following the interview, and the transcript was read and re-read by the primary researcher, creating the opportunity for early insights and ideas to guide subsequent interviews (89). In keeping with a grounded theory framework, immersing in the data is paramount for the coding process. The annonymized transcripts were shared with two members of the supervisory committee prior to open coding. In qualitative

research, consideration must be given to being an 'insider', when the researcher is a member of the population they are studying (96). To negate bias attributed to the primary researcher being an 'insider', open coding was done by three members of the research team: two 'insiders' and one 'outsider' (96).

Watling and Lingard (2012) describe effective coding as requiring "the researcher to interact with their data in order to make sense of it. Coding is an intrinsic and essential part of the process of theory building" (21, Pg. 82).

The data was coded using Watling and Lingard's (2012) iterative coding process, including four phases of the process: the initial phase, the secondary phase, the analytic process and the theory development.

i) *The Initial Phase*

During this phase, every line of the transcribed data was labeled with initial codes, ensuring the most relevant and salient ideas were coded appropriately (88). The researcher maintained an open-mind throughout the initial coding process, ensuring appropriate attention was given to all ideas (88). As discussed, two other members of the research team also did open coding of the data and consensus was achieved.

ii) *The Secondary Phase*

After the first phase of open coding, initial categories were formed by the primary researcher, that encompassed conceptually similar ideas coded during the initial phase (88). Two other members of the research team also participated in secondary coding phase.

iii) *The Analytic Process*

During the analytic phase, constant comparison was done, where incidents are compared with other, similar incidents and coding evolved to definitions of the categories (88). Categories were developed by uniting the similar codes and outliers were included under their own categories. Consensus of the categories was achieved through discussion among a team of three researchers.

iv) *Theory Development*

The stage of theory development, when the categories become concepts, was

done with the primary researcher and two experienced qualitative researchers who were members of the research team. Together, the axial codes generated during the analytic process were grouped together into themes, contributing to theory development (88). A model indicating the relationship among themes was created by the researchers (Figure 1). Representative quotes were selected to highlight the themes.

3.3.6 Trustworthiness

Rigour in qualitative research is established using different constructs than quantitative research. Trustworthiness, similar to validity in quantitative research refers to "demonstration that the evidence for the results reported is sound and when the argument made based on the results is strong" (29, Pg. 215). Qualitative research differs from quantitative in that what ensures trustworthiness is credibility, transferability, dependability and confirmability (98)

Credibility

First, credibility, similar to internal validity, was confirmed by using a variety of strategies to ensure the data collected appropriately reflects reality and there is confidence in the 'truth' of the findings (98). Shenton (2004) describes 14 provisions to provide confidence to the researcher in the results. For this study, credibility was ensured by adopting well-established research methods, ensuring honest information by selecting participants who willingly volunteered, using question probes and iterative questioning, methodological and researcher triangulation, peer scrutiny and frequent debriefing with supervisors (98). Each of these constructs if briefly described:

i) *Research Methods*

To ensure appropriate research methods were utilized, published literature on similar projects with successful outcomes was researched. The interview guide was designed by the principal investigator with input from an experienced researcher to ensure the questions were relevant and appropriate (98)

ii) Iterative Questioning

Grounded theory methodology was used as the framework for the interviews. The interview guide was designed with multiple probes to prompt the respondent for more detailed responses. Contradictions in responses were clarified at the time of the interview (98).

iii) *Triangulation*

Triangulation facilitates increased confidence in the results by gathering and integrating results from multiple sources (95). There are four forms of triangulation to improve validity. First, triangulation of the data, which combines data from "different sources and at different times, in different places or from different people" (23, Pg. 196). This was done by soliciting data across Ontario from both obstetricians and midwives, working in different centers. Second, investigator triangulation, which uses different observers, negating the bias of individuals was done during coding and theory development (99). Interview transcripts were ready and coded by three members of the research team, to eliminate individual limitation and increase confidence in the results. As previously discussed, two members were 'insiders', and were a part of the membership being studied. A third participant was an 'outsider' and was not a member of the membership being studied (96). Third, triangulation of theories, similar to investigator triangulation, was done by approaching the data from multiple perspectives of three researchers with varying professional backgrounds, during theory development (99). Fourth, and finally, methodological triangulation which works to maximize validity of field efforts by "playing each method off again the other" (30, Pg. 88). For this reason, a mixed methods design was chosen with respondents' comments from the survey being included in the qualitative analysis.

iv) *Debriefing & Peer Scrutiny*

Frequent debriefing sessions were done with the thesis committee

> through emails, teleconferences and in-person sessions. Communication with superiors can improve the investigators understanding and vision, and collaboration can improve the research by discussing alternatives and suggesting changes (98). The committee frequently provided feedback that resulted in many changes to the interview guide, throughout the coding process and during the production of the written results. (98)

Transferability

In quantitative research, transferability, which is comparable to external validity, ensures that the data can be applied to other individuals, peoples or situations (95). According to Krefting (1991), " a key factor in the transferability of the data is the representativeness of that particular group" (25, Pg 220). Dependent on the purpose of the data solicited, whether the intent is to describe ones perspective versus generalization on the subject, transferability can be inconsequential (97). However, in this study, the purpose is to generate theory and make inferences on the perspectives of obstetricians and midwives in relation to the benefits and barriers to interprofessional collaboration, transferability is an important construct.

To enhance transferability, is to ensure appropriate selection of informants "who are representative of the phenomenon being studied" (25, Pg 22). That means that the data being solicited was from persons typical of the membership, or a nominated sample (97). For this research, both survey and interview participants exclusively volunteered, however representation within the sample was ensured by interviewing members from both disciplines, who practiced at various hospitals, and with varying levels of experience. Further, transferability was enhanced by the use of "comparison of the characteristics", another strategy to improve transferability (28, Pg. 215).

Finally, transferability was enhanced by ensuring appropriateness of the interviewees, but also by ensuring the data collected during the interviews was reflective of the typical behaviours of the informants (97). To achieve this, we used

the quantitative results as a method of supporting the data collected from the interviews was typical of the disciplines being studied (95).

Dependability

Dependability, similar to reliability in the quantitative research context, reflects when the research can be reproduced with similar subjects and/or contexts (95). In qualitative research, and in consideration of dynamic and changing environments being studied, dependability can be a difficult psychometric property to achieve (95). However, Lincoln and Guba (1994), stress that ensuring exceptional credibility in the research is positively correlated to improve dependability (95). Lincoln and Guba (1994) argue that a researcher should be able to repeat the study, but perhaps will achieve different results (95). Changes to the process of data collection and re-evaluation of the process of the study should always be considered and discussed (95).

Confirmability

To ensure trustworthiness of qualitative data, confirmability, which refers to the extent to which the data is shaped by the respondents versus being shape by the researchers bias, motivation or personal interest, was considered (101). As previous discussed, to reduce the risk of researcher bias, triangulation, was used to negate the risk of researcher bias, ensuring the results were those of the interviewed participants versus the results of the researchers preferences (98).

Using a mixed-methods combination of qualitative and quantitative research, the study's design will ensure validity, generalizability, reliability and objectivity as well as credibility, transferability, dependability and confirmability. The mixed-methods study design of this research positively impacts the trustworthiness and defensibility of the data results.

3.4 Reflexivity

Reflexivity is pivotal in qualitative research (102). The qualitative researcher should "engage in continuous self-critique and self-appraisal and explain how his or her own experience has or has not influenced the stages of the research

process" (28, Pg 215). This relies on the researcher striving for self-revelation and acknowledges that the researcher is involved in both the process of data collection and product of theory development (103). There are two kinds of reflexivity: personal and epistemological (103). As previously discussed in the Researcher Characteristics section in Chapter 1, reflection on the researchers relationship to the topic and the "influences on the researchers internal and external responses" (31, Pg 121) was discussed and considered throughout data collection and analysis.

3.5 Ethical Considerations

This study was approved by the Hamilton Integrated Research Ethics Board (REB # 11-409). Prior to participating in the survey and the interviews, all participants were asked to read an Information Sheet detailing the specifics of the study and provide consent. Most importantly, participants were informed that there was no discernible risk in participating in this study. Consents were obtained electronically for the survey and signed forms were obtained for the interview. The signed forms were retained by the researcher, and the participants were also given a copy after participation.

To compensate participants for their participation, at the completion of the online survey, respondents were offered the opportunity to enter into a draw to win a $100 Starbucks gift card, donated by the researcher. The draw was done on May 12th and the selected winner was subsequently contacted to provide their mailing address. The gift card was mailed May 12th, 2016.

Chapter 4: Results

4.1 Qualitative Results

Ten clinicians participated in the semi-structured interviews. The average interview length was 40 minutes, with a total of 400 minutes of audio data for analysis. Open-ended qualitative survey responses were also incorporated into this section.

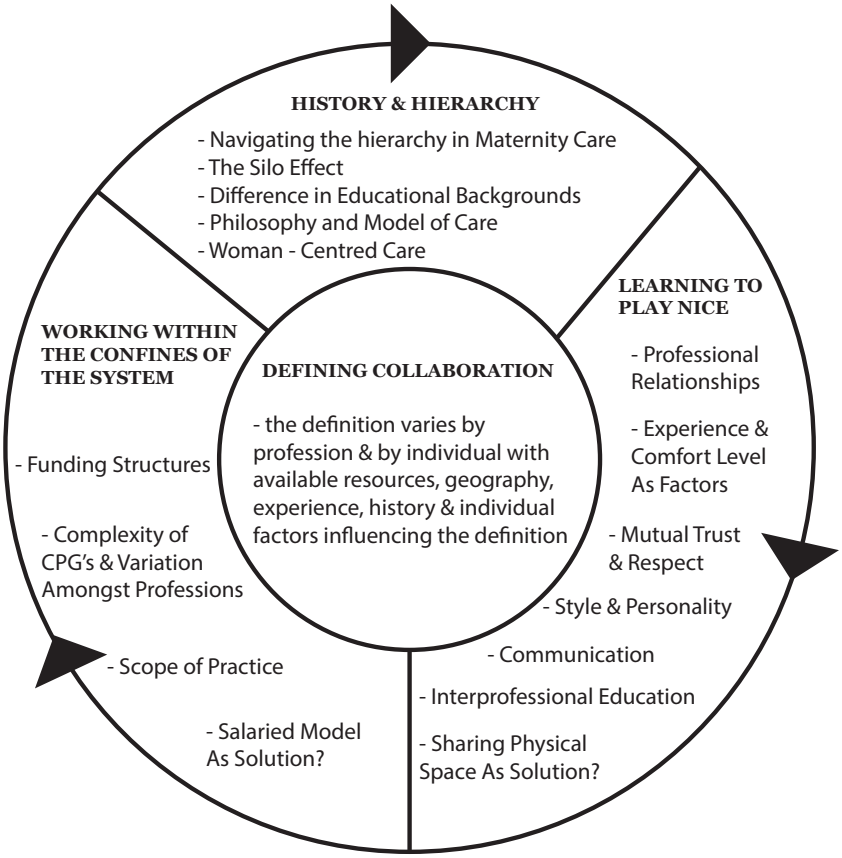
The interview participants were mostly female (90%) and were equally comprised of obstetricians (50%) and midwives (50%). All participants had experience teaching, working, consulting or collaborating with clinicians from the other discipline. The participants were geographically diverse across Ontario. Of the 10 participants, 10% practice at a Level 1 hospital, 70% from a Level 2 hospital and 20% from a Level 3 facility. Table 1 is a summary of the demographic characteristics of the participants.

Table 1: Demographic Characteristics for Qualitative Interviews

	Variables	Percentages
DISCIPLINE	Obstetrician	50% (n = 5)
n = 10	Midwife	50% (n = 5)
GENDER	Male	10% (n = 1)
n = 10	Female	90% (n = 9)
HOSPITAL LEVEL	Level 1	10% (n = 1)
n = 10	Level 2	70% (n = 7)
	Level 3	20% (n = 2)
CURRENTLY PRACTICING	Yes	100% (n = 10)
n =10	No	0%
GEOGRAPHICAL AREA	Erie St. Clair	0%
n = 10	South West	0%
	Waterloo Wellington	10% (n = 1)
	Hamilton Niagara Haldimand Brant	0%
	Central West	0%
	Mississauga Halton	10% (n = 1)
	Toronto Central	10% (n = 1)
	Central	0%
	Central East	30% (n = 3)
	South East	0%
	Champlain	40% (n = 4)
	North Simcoe Muskoka	0%
	North East	0%
	North West	

Four major themes were identified that illustrate the perceptions of interprofessional collaboration from the perspectives of obstetricians and midwives: defining collaboration, history and hierarchy (professional influences), working within the confines of the system (system influences), and learning to play nice (behavioural influences). Figure 1 is a graphic representation of the results. The themes will be explored in turn and where possible, the experiences will be illustrated through quotations from participants. To protect the respondents' anonymity, we have used pseudonyms when quoting the respondents.

Figure 1: Qualitative Interview Themes



4.1.1 Theme 1: Defining Collaboration

Health Canada defines interprofessional collaboration as: "working together with one or more members of the health care team who each make a unique, professional competency-based, contribution to achieving a common goal" (1, Pg. 1). This definition was used throughout the semi-structured interviews and the open-ended questions on the survey. Despite this national definition, the definition of collaboration and the interpretation of the definition, varied among the participants dependent on their profession and by the individual. The biggest struggle noted by participants was *how* to define collaboration and therefore, how to define interprofessional collaboration in maternity care.

One interview participant felt that the current model of maternity care was not appropriately set-up for collaboration and was not structured to efficiently incorporate the skills of various maternity care providers:

> "*The system isn't really set-up for collaboration. It's pretty antiquated and doesn't really reflect the ways in which we could all use our specific skills to make the woman's care the best that it could be. And therefore the most efficient, least interventive and least expensive" (Abigail, Midwife)*

Another interview participant agreed, stating that midwives and obstetricians work alongside one another, but don't technically collaborate in the current model:

> *"There's a lot of lip service given to collaboration but what we do isn't technically collaboration. We work in a chain reaction but we never sit down together, as equals, and work together on a client. Which is technically what collaboration is, and I don't think we do that" (Connie, Midwife)*

Multiple interviewees detailed that from their perspective, collaboration in maternity care is not a reality in the current health care system. Other respondents felt that how people define collaboration is directly correlated with their desire to collaborate. 'Emily' summarized this by explaining the different interpretations of the definition of collaboration:

> "*Sometimes when people say 'collaboration', what actually ends up intended or envisioned is this model of shared care across the disciplines with the broadest scope provider supervising those with a smaller scope… Which to me, is not that appealing. If the involvement of the various providers*

> *was predicated on the scope of the provider/acuity of the patient, collaboration could be an excellent tool" (Emily, Midwife)*

Finally, one interview respondent discussed the conflict that is created through the differing definitions of collaboration and consultation from their viewpoint, as the consultant:

> *"If I take over care because I believe the labour is abnormal, I'm happy for midwives to stay involved, I'm happy for them to run the oxytocin, I'm even happy for them to catch the baby. As long as I stay involved in the care. And midwives aren't happy with that, and that creates conflict" (Fred, Obstetrician)*

Multiple survey participants challenged Health Canada's definition of interprofessional collaboration and felt it lacked clarity around the model of maternity care, the shared goals of maternity care providers and the amount of integration between the disciplines.

For example, when referencing the current model of maternity care, one respondent felt that Health Canada's definition did not appropriately represent the contributions of each profession:

> *"I think the current model of maternity care really relies upon transfers of care and transitions, rather than collaboration. Also, the professional contributions are not really equally shared, so it makes this model hard to conceptualize" (Survey response, Obstetrician)*

Another survey respondent disagreed with the Health Canada definition in the context of maternity care and questioned whether professionals from different disciplines actually share a common goal:

> *"I don't know that there is a common goal in maternity care in Ontario. Although we all agree that we want quality care for our patients, I don't know that we agree on what the definition of quality is" (Survey Response, Obstetrician)*

Finally, one midwife who completed the survey spoke to the lack of integration in maternity care and the impact of integration of collaboration by speculating on the importance of incorporation in collaborative models:

> *"I wouldn't consider midwifery a profession that collaborates with medicine well. We consult with them, but to be collaborative, I think it requires a degree of integration"* (Survey response, Midwife)

The difficulty in defining collaboration is largely influenced by the clinician's discipline, their interpretation of collaboration, and collaborative clinical experiences in the current maternity care model. Participants cited the lack of a mutually acceptable definition is the basis for the collaborative struggles with conflicting interpretations of the definition of interprofessional collaboration, shared care models, common goals in maternity care and interprofessional integration being described as the main drivers behind differing perspectives on collaboration.

4.1.2 Theme 2: History and Hierarchy

Many interview participants discussed the impact of professional histories as a factor that influenced their perspectives of collaboration with the other discipline. Historical perspectives, or professional influences, included the 'silo effect', differences in educational background, differences in philosophy and model of care and the varying importance of woman-centered care. Further, obstetricians and midwives spoke of how to navigate the prevalent hierarchy in the maternity care model.

Clinicians spoke about learning and practicing in 'silos' and the impacts of primarily practicing independently from other disciplines. The 'silo effect', previously discussed in Chapter 2, was frequently cited by participants.

For example, one interview participant discussed the differences in working together versus working alongside each other and the struggles of collaborative decision-making in the current maternity care model:

> *"We're working alongside each other, but we're not working together. We're still in our own silos. I think there's an idea that somehow when we're working together to achieve something, but we're not working collaboratively at decision-making" (Connie, Midwife)*

Many respondents spoke of how there was a lack of system-support to facilitate integration between the disciplines. Specifically, participants highlighted that there were minimal opportunities for communication between professionals. This was seen to impact collaboration:

> *"Getting everybody on the team in the same room, on a regular basis, in a non-hierarchical, peer-to-peer environment. And I know we sort of do this with MoreOB, but not really. I mean, we have MoreOB meetings and one of the OBs walks in and tells everybody what the strip means and walks out. We don't actually collaborate, unfortunately" (Abigail, Midwife)*

In a model of maternity care that primarily sees clinicians working within their own silos, professionals spoke of the importance of frequent debriefings and creating opportunities for interactions in a positive way. Participants from each discipline reflected their collaborative experiences of working within their respective disciplines, and with others. Interprofessional rounds and reviews were noted to improve collaboration in individual centers. The positive impact of collaborating with disciplines outside your own, was summarized by one obstetrician:

> *"Our group has started doing a lot of interprofessional reviews and interprofessional debriefings and stuff like that. That's been really beneficial. We're getting a chance to talk to each other!" (Ilse, Obstetrician)*

The Silo Effect not only impacts clinical practice, but also was evident in educational background. As previously discussed in Chapter 2, midwives and obstetricians have a different educational backgrounds which cements their professional identity and can create tensions and confusion around other clinician's knowledge base and skillset. Further, each individual practitioner has a different interpretation of the impact educational background has on collaboration.

Two respondents described this impact, expressing the fundamental difference that education can have on a clinician's daily practice:

> *"I don't think midwives appreciate the fact that for most OBs, everything is abnormal until it's normal. For most Midwives, it's the opposite way around. For most Midwives, everything is normal until it becomes abnormal." (Ginny, Obstetrician)*

> *"I think sometimes there's a lack of understanding or appreciation for underlying medical issues that might be playing a part in somebody's care." (Jane, Obstetrician)*

Both clinicians expressed the differences in midwives and obstetricians' perceptions of normal labour and birth. One obstetrician further explained her

perspective by detailing how education can impact a clinician's clinical management and understanding of pathophysiology:

> *"It's different for OBs because I have all the tools that I need if it gets really bad. I can do a caesarean hysterectomy. Whereas, midwives don't have the tools. And by the time you graduate, you don't necessarily have the grounding in reproductive physiology to understand what's happening" (Ginny, Obstetrician)*

When asked if the problem was due to the curriculum of the Midwifery Education Program, Ginny further explained her perception that the Midwifery Education Program lacks an emphasis on reproductive physiology, which in turns affects a clinician's management of clinical care:

> *"I think because there's been a medical-bias, because that's your professional identify, they don't put as much an emphasis on reproductive physiology as I think they should. Because the other thing is, you also get respect if you can talk that way. To be able to talk about the physiologic changes of pregnancy, etc. There is a lack of the underlying understanding of things" (Ginny, Obstetrician)*

In addition to educational differences, the midwifery Model and the medical Model of Care have stark differences and interpretations from members of both disciplines. There was consensus among participants that while the models overlapped and had similarities, the pervasive differences in philosophy and models of care have created tensions and barriers to collaboration.

This was illustrated by one respondent who discussed their interpretation of how the different philosophies impacted collaboration by examining the barriers around consensus between midwives and obstetricians on philosophy of care:

> *"It's sort of a differing philosophy, I guess and you can't come to an agreement. Certainly around oxytocin, there's never been a meeting of the minds around that. Many OBs and Midwives feel differently about this." (Fred, Obstetrician)*

One obstetrician identified two key concerns around the impact of different philosophies of care on collaboration and how the differences in philosophy can create tensions and turf wars:

> *"It's one of the few places where there's an incredible role overlap and there is such a disparity in people's values and priorities that they look as things very differently… You have long-standing professional issues between midwives and*

> *obstetricians and there is a real blurring of roles. There's just such an overlap of roles that people don't know where the edges of their turf end. There are turf wars all the time and a real conflict in values." (Ginny, Obstetrician)*

In contrast, another respondent was very positive about the future of collaboration, stating that there is improved alignment of the midwifery and medical model of maternity care, reducing the need to defend or protect ones practice:

> *"I think that the way that we're being taught, the way that we're learning, the way that we're practicing, is shifting to be more women-centered. And I think as OBs we're doing a better job of practicing woman-centered care and I think that brings us more in line with Midwifery and if we're practicing more on the same page, there doesn't need to be any defensiveness coming from Midwifery, to defend your philosophy of care." (Ilse, Obstetrician)*

Finally, while some respondents favoured a collaborative approach to maternity care with increased involvement from obstetricians, one interview respondent felt that there was potential to lose important parts of the Midwifery Model by amalgamating the models of care including key philosophical underpinnings such as continuity of care, informed decision and women-centered care:

> "*I think really there are elements to how Midwifery is organized that the research supports makes care better. And time spent with women, making women the center of the decision-making relationship, continuity of care, etc… Letting the patient decide what is valuable. Letting the patient decide what their goal is in terms of outcome… All the things that are built into midwifery, aren't currently built into medical care. And one of the things that I think is a struggle, is that right now often when we talk collaboration, it's this notion of somehow melding the two together but there really isn't anything in the infrastructure of medicine that allows medical providers right now to provide care in those ways… And that means, by default, that she's giving up some of those things that are really valuable elements of Midwifery that makes Midwifery have good outcomes and high satisfaction rates and good records… The infrastructure of medicine needs to change to be able to provide care in a way that is optimal… I'm not sure there's either the desire, willingness or ability to make some of those changes. As long as that's not considered or possible, for a whole host of reasons – liability, funding – then I'm not sure how we're truly going to get to a collaborative model." (Emily, Midwife)*

When discussing professional philosophy and models of care, and the impact on collaboration, the interview participants frequently discussed the provision of

woman-centered care. The perception among respondents was that midwives over-emphasize the importance of woman-centered care, whereas obstetricians favour woman-centered 'involvement' while keeping client safety of paramount concern, regardless of a woman's choice.

One participant spoke of the challenges to providing woman-centered care, particularly around providing care in high volumes, predominantly seen in the medical model. She articulated the importance of tailoring delivery of care to meet the woman's needs by providing care that is focused on the woman's needs versus the needs of the clinician:

> *"If we're doing woman-centered care but always providing the same care, that's not woman-centered. That's me-centered. So there has to be some flexibility within the care that anybody delivers because the 16-year-old that has an unplanned pregnancy is very different to care for than the 36-year-old educated woman having her fourth baby. The dynamics can always be different." (Darlene, Midwife)*

Another respondent summarized that a woman's involvement in her care is predicated on external factors including community standard and the subjective interpretation of the woman's education:

> *"The further outside the community standard their choices are, the less respected they are. So I think that there's different tolerances between individuals, between different professions, for choices outside of community standards. It also depends on the woman and what their superficial impression is – if they find she's well-educated and they think she's intelligent, and she presents well, they're respect her more for making a decision like that than a woman who they think is, you know, they'll be more dismissive of a woman who they think is less capable of understanding her decision" (Abigail, Midwife)*

Women-centered care, and its relation to different philosophies of care, also contributed to the cultural mistrust of midwifery. Respondents spoke of the pervasive cultural mistrust of midwifery by explaining that by design, midwives are consistently representing their profession versus themselves, and must work harder than other professions to be accepted in the maternity care community.

This was captured by one respondent who explained how midwives are questioned about their skills and scope and must work harder to prove themselves as competent clinicians when compared to other maternity care providers:

> *"And then we're constantly working against this deep-cultural mistrust of Midwifery where it's like "Do they really know what they're doing? But they're not doctors!" and even then the most collaborative staff at the hospital would say otherwise. When it comes down to it, we have to do things better and prove ourselves more than other practitioners." (Abigail, Midwife)*

Another respondent discussed how individual midwives represent the profession as a whole, versus being seen as an independent contractor with individual clinical judgment and skills:

> *"One distinction that I really feel is that each Midwife, somehow, represents the whole profession. Where each OB/GP, that is not the case. If you have someone who is less professional, you don't suddenly think "All Obs aren't professional", but there does seem to be this You consulted inappropriately so Midwives in general are going to consult inappropriately" (Betty, Midwife)*

An obstetrician echoed this belief by stating:

> *"Midwives are in a situation where they have to be better than the average, just to be accepted." (Ginny, Obstetrician)*

Working within a maternity care model that distrusts the midwifery model of care was noted to be difficult by participants, especially in navigating the hierarchical structure of maternity care clinicians. Historically, maternity care has been delivered in a hierarchical model with obstetricians maintaining their position at the top of the pyramid while midwives struggle with integration and respect, while maintaining their autonomy.

This hierarchy was challenged by one respondent who spoke of a collaborative model made up of a midwife-led approach with obstetrical involvement as necessary:

> *"I wish it [Collaboration] would come more. I wish every birthing suite was staffed with Midwives. I think that every low-risk woman in Canada would be much better served seeing a Midwife and having Midwife-run birthing suites with Obstetricians around and once they're asked to come in, then they should stay involved in that care until the baby is safely delivered. That's to me is the ideal model. We'd lower our caesarean section rate, we'd lower our interventions and there'd be zero increased morbidity." (Fred, Obstetrician)*

Another respondent elaborated by explaining how education and personality impacts the hierarchical dynamics. Some clinicians do not have a willingness to collaborate and want to remain in a hierarchical model of maternity care:

> *"We're a group of six and there are two specifically that wouldn't speak very positively of a collaborative model and want to be at the top of a hierarchical process. And that is a function of the way they were trained and a function of their personality. And also a function of not wanting to change." (Ilse, Obstetrician)*

This theme of History and Hierarchy has illustrated how professional influences impact maternity care collaboration. The effect of education and practicing within silos, differences in philosophy, models of care and educational backgrounds, differing importance on woman-centered care and a cultural mistrust of midwifery were found to be trending characteristics in the data.

4.1.3 Theme 3: Working Within the Confines of the System

Individual buy-in is important to successful collaboration, however facilitation through organizational structures built into the system, is of equal importance. The system, which can be the individuals hospital, the clinicians' governing body or the government bodies which fund health care, have a pivotal role in clinicians willingness and ability to collaborate. Funding structures, clinical practice guidelines and scope of practice were ubiquitous in discussions around barriers to collaboration with interview respondents. Some clinicians reported willingness and a desire to collaborate, but noted that a lack of support from government systems, created barriers to achieving successful collaboration. Many respondents proposed a salaried model of care as a potential solution to addressing some of the inequities in the current system.

Funding structures were universally discussed with participants as an obstacle to successful collaboration across disciplines. Primarily, respondents reported that the system lacks a reasonable way for obstetricians and midwives to successfully collaborate, which would facilitate clinicians continuing to be compensated for their skills and service. Current remuneration practices were consistently cited as a barrier to achieving collaborative models of maternity care.

One respondent spoke about the overall impact of government funding cuts to maternity care providers and coping with reduced wages:

> *"Compensation is a hot-button issue. I think that probably what will be happening is that we're all going to take a compensation hit. With the government changing, our incomes are already being deducted 7%. I don't mind that, I think that's fine to preserve the public health care system. Funding models are going to change and I think traditionally the Ministry of Health has just changed things without physician input. The funding is always going to be an issue and I don't think it will ever mutually acceptable." (Ilse, Obstetrician)*

Another clinician spoke about the lack of financial incentives in our current model stating:

> *"If there's financial disincentive, I don't see physicians buying into it because that's not the culture that we live in." (Abigail, Midwife)*

Expanding on the financial disincentives to collaboration in our current system, one respondent spoke of the struggles for compensation, even among clinicians who have a desire and willingness to collaborate with other disciplines:

> *"I think the biggest barrier is the payment schemes. I think there's lots of Midwives and OBs who want to collaborate, but our own professional culture, but there's lots of willingness to figure these things out, and figure out what working together means – but I can't get paid for working with an OB without special permission from the CMO/AOM and when you ask them, they can't really figure it out either… There's lots of pet projects that come up and get abandoned, because none of us can figure out how to get paid." (Connie, Midwife)*

The lack of adequate funding structures that are designed to facilitate successful collaboration was described by one clinician; who articulated the remuneration concerns when collaborating with other disciplines by describing the disincentives stemming from the vulnerabilities of working as a consultant:

> *"I think it might require a funding change. Right now, obstetricians get paid for doing a delivery. Other than that, they get almost nothing. I think they need to go to a salaried model and have obstetricians supervising midwives and having obstetricians going to see a patient when asked. The midwives are an independent professional, and when they ask the obstetrician to see a patient, then the OB becomes involved. And once they're asked, the OB should stay involved until the delivery. Doesn't mean they're changing anything. But if they've been asked to see the patient, there's something wrong, they should stay involved. And many of us do anyways, even if we're not MRP. And then that*

> *means we just get to do more work without any pay. And for some people that doesn't work very well." (Fred, Obstetrician)*

In addition to remuneration concerns, physician liability was also frequently discussed when examining current funding structures. This was described by one respondent who was concerned about having little or no control in the clinical scenario, which was further exacerbated by minimal compensation:

> *"I don't know if Midwives always realize the advice we get in terms of medical-legal conferences and stuff. Whenever Midwives consult us for oxytocin, and once we write the order, anything that happens afterwards is our responsibility basically. That's what we get told. So when we write the oxytocin order and then return care to Midwives, whatever happens in that room, ultimately, we're technically responsible. And that creates tension. Especially if I get asked to re-assess and look at the strip or something – well now I have my name twice on this chart and it makes me nervous. And also – I get a set fee for the consult, but the bigger fee is for delivery and I feel like I'm stressing and working for 8hrs – why don't I just take over this when I've been watching from the background to make sure everything's okay and I'm not getting paid." (Hannah, Obstetrician)*

This same respondent also discussed her frustrations around supportive models of care, explaining that when midwives remain involved in the care of a women whose care has transferred to an obstetrician for a high-risk indication, she felt there should be a different fee structure to avoid midwives 'double-billing' the government:

> *"I find it a barrier sometimes in terms of funding that Midwives are taking on patients that they know they shouldn't be, that are outside their scope but they continue on with the woman knowing I'm going to manage all the shit but they still bill a full course of care. Even though you don't have to deal with the stress – in some ways I agree that it's good for the patients' postpartum care but overall billing the health care system, I find that to be irritating. If the Midwife's not going to have a significant role in this pregnancy, should the government be billed twice? Or could there be some other kind of fee structure? Versus getting paid the same." (Hannah, Obstetrician)*

In addition to remuneration and liability concerns, one respondent also spoke of the importance of preserving maternity care to all Ontarians, despite problems in the current funding model:

> *"I'm not wildly enthused by the current funding model but I think for Ontario it works, because we aren't concentrated geographically. If you want to have an*

> *OB available to do your high-risk and your sections and whatever else, but you only have 20 high-risk births/year, that's just not enough for them. So all the small places would stop doing obstetrics." (Ginny, Obstetrician)*

Funding concerns were discussed most commonly as a barrier to collaboration from a systems perspective, however the complexity of clinical practice guidelines and variation amongst professions was also frequently cited by interview and survey respondents as a barrier to successful collaboration. For example, some respondents valued clinical practice guidelines as a unifier of the professions, and an enabler to collaboration, while other participants found clinical practice guidelines to be barriers to collaboration, creating confusion and tensions surrounding the relationship between midwives and obstetricians.

Describing the positive aspects of guidelines, clinicians spoke of guidelines promoting collaboration and creating common ground and establishing expectations amongst clinicians who work together. By creating common ground in maternity care, one clinician felt that clinical practice guidelines helped to ensure everybody was speaking the same language:

> *"I actually think that they promote collaboration because they're common ground that we can all agree on. If we can all agree on recommendations based on clinical guidelines and include that in our informed choice discussions, if we all agree on that, then the OBs and RNs and RMs know we're all speaking the same language." (Abigail, Midwife)*

Another respondent felt that guidelines helped to establish clear expectations and found them helpful, especially when working in new centers:

> *"They don't have to be set in stone but there are guidelines to say "This is what everybody's expectations are". I need them there to know how to guide my delivery of care. I've done a lot of locum work and it's helpful to step in and be able to provide care that's similar to what's already being provided. It creates less confusion. There can be hundreds of people in a birthing unit and it's a way of getting everybody on the same page without the expectation that everybody is providing care in exactly the same way." (Darlene, Midwife)*

However, overall there were far more negative comments about current clinical practice guidelines and practice standards than positive remarks. Guidelines and standards were viewed as problematic by creating confusion around delivery of care, and misunderstandings or misinterpretations of transfer of care

guidelines established by different governing bodies. Several respondents felt the College of Midwives of Ontario standards (19) created ambiguity and tensions around collaboration. Specifically, one respondent felt that weak or inappropriate governing standards developed conflict between the two professions:

> *"I think it's more so that the College of Midwifery has very weak mandatory transfer guidelines… It's mostly the idea that Midwives have to consult us [OBs] for certain indications but they don't have to transfer care. There's a great deal of pressure put on us to not become the MRP. And that sort of the basis of all negative interactions, I think. But then the CMO says Midwives can look after twins and breeches and insist that they can manage oxytocin without any physician input, except we have to write the order, it develops conflict." (Fred, Obstetrician)*

This perspective was also reiterated in the open-ended survey responses with several participants stating the College of Midwives standards were inappropriate for use in Ontario. One respondent felt that midwives were inappropriately taking high-risk patients into care, despite having low-risk women requesting their services:

> *"Change midwifery consultation and transfer of care guideline. Needs to be more restrictive. For example, risk factors like previous Cesarean section and twins should require transfer of care. Non-cephalic presentation should require consult prior to 38 weeks (~36 weeks) in order to counsel woman about options and arrange ECV [External Cephalic Version] if appropriate. Breech in labour should require transfer of care. Midwives should be selecting appropriate LOW-RISK patients in order to provide high quality care. In the city where I work, there is a waiting list to see a midwife so there is no reason for them to take on higher risk patients when there are plenty of low-risk patients who want to see a midwife" (Survey Respondent, Obstetrician)*

Another survey respondent felt that the CMO standards were too vague and created confusion as a consultant, which inhibited collaboration:

> *"I would really like greater clarity and specification as to when consultation is required in the CMO guidelines. Current wording remains vague in many circumstances leading practitioners to both over and under consult. This causes consultants confusion as well. Some take over care when it isn't required, some refuse when its needed" (Survey Respondent, Midwife)*

Finally, one survey respondent felt that the CMO standards were inappropriate, in relation to the risk stratification of clients:

> *"Ridiculous that CMO thinks midwives should be able to care for didi twins, by definition a high risk pregnancy or should be able to do a breech delivery. Also issue with guidelines in the "consult only" section is that often times clients are not appropriately risk stratified. Morbid obesity an easy example But have also had midwives fail to understand that just because a women came off her antihypertensive due to physiologic drop in blood pressure during pregnancy, she still has essential hypertension and the cardiovascular changes that are associated with it!" (Survey Respondent, Obstetrician)*

There was frequent discussion around concerns about the appropriate use of the College of Midwives transfer of care standard from the consultants perspective, however one respondent spoke of how these standards can create complications from the midwives perspective:

> *"The more research and thinking I've done, the more I think they're [Clinical Practice Guidelines] problematic, especially for Midwives. But if we as a profession, that we are independent professionals capable of good judgment, then it's one thing to have a scope of practice, but outside of that, guidelines are a problem." (Connie, Midwife)*

Clinical practice guidelines and practice standards were viewed as both positive and negative. The majority of the negative comments were in relation to a clinician's scope of practice. Scope of practice was discussed with every participant and opinions varied noticeably between the two professions. The main point of contention surrounded clinical delivery of care, primarily intrapartum epidural anesthesia and oxytocin induction and augmentation of labour.

One obstetrician detailed the concerns around midwives managing oxytocin intrapartum by saying:

> *"But, you know, oxytocin is the biggest complaint that we run into. When someone needs oxytocin, they've now left the realm of a normal labour. A lot of OBs should feel they should be supervising the care of that patient and a lot of Midwives feel that's inappropriate because their College says they can run oxytocin." (Fred, Obstetrician)*

As previously discussed in Chapter 2, scope of practice can be limited at the physician or hospital level. Not working to your full scope of practice was also discussed as a barrier to providing safe maternity care, increasing chances of miscommunications and medical error by limiting clinicians scope based on hospital policy or physician preference (versus by governing body defined scope of practice):

> *"I imagine the more people who are involved in somebody's care, the more places there are for mistakes to happen and miscommunications to happen and I would imagine that impacts on client safety. So it would seem to me that if we could collaborate by allowing each other to work to our scope, that it would reduce the number of people involved in each birth." (Abigail, Midwife)*

The importance of working to a clinician's full scope of practice, was detailed by one participant who spoke about when policy inhibits disciplines to provide full scope of care, it creates barriers to collaboration:

> *"I think if you're working in an environment where you have to consult for an IV start, the perception, and it might not be a very generous or collaborative one, but the perception is "God, you can't even do that, how can we expect you to do anything?". So if you're constantly consulting I think two things happen. One, I think it leaves nursing and medical staff with the perception that you can't do even the most basic of things, they're not within your scope. And that you can't do these things not because you're not allowed, but because you're not capable… What starts to happen is that the OB starts intervening earlier with the next patient and wants more frequent updates. It creates this really nasty biofeedback loop in both directions of over-intervention by the consultant and delayed intervention by the consultee. I think when you have full-scope and the person who you consult with responds reasonably to that full-scope consult, it gives trust that we'll each consult appropriately" (Emily, Midwife)*

Some clinicians' discussed their lack of motivation to research the midwifery scope of practice. A lack of understanding of respective scopes, creates confusion and tension when delivering care collaboratively:

> *"The other thing I find hard, and I think it goes both ways, but in terms of the Midwife's scope of practice. I'm sure if I cared enough I could look up the document, but in terms of what the guidelines are in terms of what Midwives can and cannot take care of – it's difficult" (Hannah, Obstetrician)*

Finally, defensiveness and protectiveness of ones' scope was discussed as a barrier to collaboration. One respondent felt that by shielding one's patients under the defense of scope of practice created tensions and contributed to lack of communication with each other:

> *"I think there's some Midwives who are very protective around their patients, around their scope that can sometimes make these conversations difficult. There's some people who maybe don't agree with their scope of practice and they're frustrated with that." (Jane, Obstetrician)*

Funding structures, the influence of clinical practice guidelines and professional standards, and scope of practice were all discussed as system influences that created barriers to collaboration. Many respondents, both midwives and obstetricians, discussed the possibility of a salaried model of care as a solution to address these barriers to collaboration. Respondents spoke of the potential benefits: turf wars would be mitigated due to fair compensation and there would be increased incentive to collaboration without the present struggle for compensation. Further, while the present struggle surrounding clinical practice guidelines and scope of practice would not be resolved under a salaried model, there would not be the turf wars that create tensions around remuneration, consultation and transfer of care.

One respondent felt that a salaried model would improve collegial collaboration by facilitating discussions between disciplines:

> *"When I think about it, we did have lots of chats, in both directions. There was lots of that collaborative, collegial talk. It's only in this most recent bout of "is this a consult or not" that has shifted that. There used to be more collaboration. And interestingly in those new OBs who have raised this issue, I heard a willingness to being salaried. Which came from them because they were recognizing that for them to be salaried, this wouldn't be issue." (Emily, Midwife)*

Another respondent spoke of how the changes of a salaried model would facilitate a different model of care:

> *"I think they need to go to a salaried model and have obstetricians supervising midwives and having obstetricians going to see a patient when asked" (Fred, Obstetrician)*

Two obstetricians spoke of the negative aspects of a salaried model, describing its effects on their quality of life and ability to practice independently and create their own work schedule:

> *"I'm on salary at [specific hospital omitted] and I hate it. Because when you're salaried, you have to be there certain days, certain responsibilities… You can't play with your life. When I have my own office, I have to work on my call schedule, but that's about it when I want to go on vacation. Being salaried, you*

> *would have certain clinic in the hospital and it would be a nightmare to fix your life up." (Ginny, Obstetrician)*

> *"I don't want to work in that model because I like fee-for-service and setting my own hours. I don't want to be told what and when to work. My resistance is that I want to be my own boss and have flexibility in terms of my own practice and planning." (Ilse, Obstetrician)*

Another clinician spoke of the realities of a salaried model, increasing wait times for patients and workload shifting between care providers:

> *"I have two young kids and I don't want to work as much so in some ways, being salaried would be amazing! But truthfully, I'd probably see less patients in my clinic and I don't structure my clinic thinking about how much money I'm going to make but I definitely would structure my clinic so that I never felt rushed. The downside of being salaried would be that you wouldn't make any money from being crazy busy versus having slow call, so there'd probably be more sloughing off work to the next shift. If you saw a patient at 4pm in Emerg but they were stable and could wait to go to section the next day, there's less incentive to take them if you're going to get paid either way. I worry about that. Right now, while I don't want to work as much, I'd be pro-salary. But in 15 years when my kids are older, if I wanted to make more, I could pick up a call shift and boost my income." (Hannah, Obstetrician)*

There are multiple issues, from the perspectives of both disciplines that create barriers to collaboration and tensions created from system influences on collaborative care. A salaried model of care was presented as a potential solution by multiple participants, with some clinicians favouring a model of care and new funding structures, while others opposed it. The system barriers that prevent collaboration are important to evaluate, along with the various behavioural influences which will be addressed next.

4.1.4 Theme 4: Learning to Play Nice

Behavioural influences, such as professional relationships, clinician mood, experience and comfort level, perceptions from other care providers, mutual trust and respect, clinician's style and personality, communication and practitioner burnout were raised by all interview participants. Interprofessional education was

proposed as a potential solution to addressing the barriers created by behavioural influences.

Participants identified ranging importance placed on social relationships, however the importance of professional relationships and mutual trust and respect were unanimously supported amongst respondents. Other external factors such as clinician experience, mood, comfort level, style and personality were seen to be essential influences on collaboration, which had the possibility to change with varying clinical scenarios. Perceptions of other care providers were also seen as an influence, particularly around how each discipline perceived the other. Improved communication was supported by all respondents and was considered instrumental to improving relationships.

The importance of professional relationships was frequently discussed. Respondents spoke of the benefits of being 'colleague friends'; better relationships led to improved collaboration and thus better outcomes for both the patients and care providers. Respondents consistently supported the positive impact good relationships can have on collaboration through improved communication:

> *"I think if there are good relationships between the different care givers that are collaborating, that has a positive effect and in fact women, may feel like "Oh my gosh, I have all of these people looking after me, this is amazing, I had no idea it could be like that". On the other hand, if it's not positive collaboration, and there are not good relationships and the communication isn't good, if it's a bad day for any one of the players in the group, it can have a negative impact." (Abigail, Midwife)*

Another respondent spoke about how improved relationships, improve the consulting relationship, and thus the care of the client. Comfortable consulting relationships ensured improved consultation:

> *"When the social relationships are good, I think the patient experience is fantastic. When the social relationships are good, you do the consult but you also get the chance to get the extras in – and they listen to you because they know you. You can explain the woman's history (ex: sexual assault) and explain the difficulties the woman might be experiencing. But if I don't have a comfortable relationship, some parts will get left off." (Connie, Midwife)*

The benefits of having good relationships was described by one midwife, who articulated that with a positive rapport, came 'the benefit of the doubt' and facilitated clinicians interactions with each other, in relation to positive or negative outcomes:

> *"Being colleague friends. I don't think you need to be deep friends (although that does help too), but when you work with somebody for a long time, when people know you, and you know them, and you've worked together, when you f**k-up, and we all f**k-up, you can say "I know her. She tries hard. She cares about her clients. She's clinically sound. She f**ked-up." But there is the feeling that "We don't need to help this clinician, we need to see how we all contributed to the f**k-up and make sure it doesn't happen again". And then we move on as a team. But when we don't know the clinician, we don't like them (because we don't know them well enough to have a sense of who they are), there's no comfort to ask what happened or believing their explanation – then instead of thinking "They're a good practitioner who f**ked-up", people think "They are not a good practitioner, look how they f**cked-up!"" (Connie, Midwife)*

Another respondent spoke of the importance of *maintaining* good collaborative relationships through consistent positive interaction:

> *"Even in an environment where relationships are built on good foundations, there are circumstances that can evolve that have nothing to do with those relationships that can create vulnerabilities and create friction/challenges. It's important to be diligent even when you think you have a good situation that you don't let that event derail things." (Emily, Midwife)*

Finally, one respondent spoke of the importance of having good working relationships and using the positive relationships as an avenue for eliminating or minimizing negative working relationships with other clinicians:

> *"So fostering good relationships with the people who have good relationships with is important because it makes the guys who are on the outside, look worse. It doesn't look as good for them to be a huge jerk if everybody else isn't being a huge jerk. That cultural stuff is important. Some of it is education but I don't know if you're going to get to the bottom of the root offenders – and those people who aren't the root offenders, already know" (Ilse, Obstetrician)*

Good working relationships were generally viewed as being an enabler to collaboration. However, even in good working relationships, clinicians' experience, mood and comfort level can have an impact on the collaborative dynamic. Clinicians

spoke of the high-intensity environment of maternity care and how clinician exhaustion, hunger, stress or frustration can impact the collaborative relationship:

> *"And [collaboration] can vary day-by-day and depending on the mood of the consultant and depending on which one it is. Everybody has good intentions at our center but does everybody behave properly? Or always be on their best behavior? Not always. And that's true of everybody. But I certainly find it's true of physicians. So on good days, it works that way." (Abigail, Midwife)*

Variations in the clinician's mood can impact collaboration, but independent clinician style and personality was also noted to impact the collaborative dynamic. Respondents spoke of how stereotypes based on discipline can create pre-conceived notions prior to clinical interactions:

> *"We've already made up our mind about somebody based on their title, or based on the position that they hold, whether that's a position of authority or of less authority. We've already decided that they're going to behave in such a way and often we get a self-fulfilling prophecy. They behave that way because we expect them to and we actually contribute to that happening (the way we act)" (Betty, Midwife)*

It was also noted that some personalities are more difficult to work with than others, which creates widespread barriers when one or more players in the collaborative dynamic refuses to cooperate:

> *"It's hard to work with some personalities. If there's no willingness to collaborate…. If you have an institution where 50% that want to work at it and 50% that don't… How do you work with the people who don't?" (Darlene, Midwife)*

> *"It comes down to crucial conversations with specific offenders, changing your culture so that the norm is that we all work together well – and if you're being a dick, you're outside of that norm" (Ilse, Obstetrician)*

Clinicians style, personality, and mood, were all seen as variables that impact collaboration. External perceptions from other care providers, can also impact collaboration. Several respondents spoke about the unspoken perceptions of each other's discipline. There was a prevailing opinion, from both disciplines, that obstetricians are perceived as the "bad guy" in maternity care, who minimize the importance of the women and push interventions. In contrast, participating midwives felt they were perceived as the "good guy", always following the woman's

wishes and working harder to minimize unnecessary intervention. These perceptions, regardless of their truth or merit, had an impact on collaboration between the disciplines.

One respondent summarized their perception from the consultants' point of view, feeling that in collaboration they've been set up to be the interventionist:

> *"I guess there's just the whole stereotype that goes both ways. I feel like I'm set up as the interventionist. I'm going to want to do a section or do a vacuum or whatever. And I appreciate that's how it appears but it's not how any of are thinking and I'm sure there's OBs who set midwives up in the opposite way and that messaging in front of patients makes the joint-care picture uncomfortable." (Jane, Obstetrician)*

While another respondent explained the viewpoint from the midwifery point of view, explaining her perspective of working hard to eliminate preconceived notions in women:

> *"I feel and I've heard from the medical staff, the RNs and the OBs, that when we come to them with a client, I think they often feel that the client doesn't want to be coming to them. "Oh things aren't going according to the plan, I'm not with the good, lovely Midwives anymore, I have to have the bad, evil obstetricians and nurses". And I really try to dispel that on the side of the docs and nurses and let them know that they're valued and that we've brought this woman here and we've prepared them to expect excellent care and painted the picture of You know what, the team is just getting bigger, and these guys are awesome and make it positive and not negative. I think that's what I try and bring to it because I feel badly for them that they feel they would have to take care of something who they think doesn't want their care." (Abigail, Midwife)*

Preconceived notions or stereotypes work against care providers practicing in both disciplines. These notions can create tensions that can contribute to practitioner burnout. Conversely, respondents spoke about the benefit of improved collaboration on improving their job satisfaction and longevity in their chosen career:

> *"There's so much good intent about what needs to be done but momentum is gone. Basically people just seem to be trying to get by. Myself included." (Darlene, Midwife)*

Another participant discussed how important it is for obstetricians to provide low-risk obstetrics, not only to facilitate their ability to care for high-risk patients, but also to reduce the risk of burnout:

> *"We need to know how to manage low-risk! If you're always expecting the worst, there's going to be too much intervention. And also for burnout – always doing really difficult tough, hard, not-fun stuff is not great. And for your skillset – the reminder of normal is normal. To effectively manage high-risk pregnancies, it's part of a broader scope" (Ilse, Obstetrician)*

Practitioner burnout was discussed as an obstacle to continued working and collaborating in maternity care. Improvement of mutual trust and respect, also viewed as a potential barrier to collaboration, could help to improve collaboration between obstetricians and midwives. In environments with trust and respect for the respective disciplines, collaboration was noted to be a smoother, more cooperative practice which improved woman and caregiver satisfaction.

One respondent believed that the length of time working together was directly correlated with improved trust and respect:

> *"The longer you've been there, the more the trust, in some ways, and so I would say it's easier for us to collaborate more with the staff, where with some of the newer people, it just takes time, right?" (Abigail, Midwife)*

Another respondent spoke about the process of developing trust and respect, by demonstrating competence:

> *"I think that part of developing trust and respect is showing capability and capacity. And demonstrating that you will call when help is needed and then the consultants demonstrating that they will respond appropriately when called" (Emily, Midwife)*

Trust and respect for individual clinicians and for the midwifery profession as a whole was also highlighted. Similar to midwives working against the deep cultural mistrust of midwifery, the ignorance around midwives scope and skills, was discussed as a barrier to collaboration:

> *"I think Midwifery is still not completely respected or trusted for our skills. It's not understood what we bring to homebirths, our education, all of these things work against us. We're kind of fighting a current a lot of times. Not always" (Abigail, Midwife)*

Mutual trust and respect for individual clinicians and for the respective professions was addressed as being important for enhanced collaboration. To achieve improved trust and respect, respondents spoke about the importance of communication. Communication was discussed as being pivotal to creating positive or negative collaborative relationships. Improving communication across disciplines was described as pivotal for improving patient safety and outcomes. One clinician described that better relationships might lead to better communication, but more importantly improved relationships lead to fewer medical errors:

> *"At least to better communication which is where 80-90% of medical errors happen." (Connie, Obstetrician)*

Communication on the Labour and Delivery Unit was also discussed. Improved communication, versus practicing independently within ones own silo with a distinctive lack of updating other members of the unit, was discussed as a way of improving relationships:

> *"Sometimes there's the problem with the 'closed door'. The Midwife arrives and goes down the hall and closes the door – and nobody knows what's going on. I can 100% understand it – it's privacy, etc. But in terms of an OB who's managing a labour floor, the black hole in Room 6 is a problem. And so in a lot of hospitals where it works well, the Midwives will come out and update people." (Ginny, Obstetrician)*

Clear expectations, with clinicians openly discussing clinical management plans and decisions was seen to facilitate improved communication, and thus by extension, collaboration:

> *"But in any relationship, it's hard to get good communication. Having it clear about what the Midwife is expecting from me, what they've told the patient.. It would be nice when I got a consult if it said what the Midwife wanted without being too directive." (Hannah, Obstetrician)*

To improve collaboration, respondents favoured clear, open and transparent communication. Participants also discussed the importance of creating opportunities for communication by increasing and improving interprofessional education. Teaching and learning together as physicians and midwives was viewed positively by all respondents as a way to improve mutual trust and respect,

professional relationships, communication and cultural perceptions of each other's discipline. The pervasive 'silo effect' and its impacts on education and clinical practice impact every area of maternity care collaboration.

Respondents spoke of the importance of understanding each other's daily activities, and how that would help clinicians to better collaborate together. One respondent spoke of the benefits of interprofessional education as students:

> *"Yes, helping consultants understand what midwives do – they might not be trying to be nasty, but they don't understand what you do. All students should have required IPE [Interprofessional Education] and be in the same classes to start" (Connie, Midwife)*

Another participant referenced the importance of learning together as clinicians and how education across disciplines could positively impact collaboration:

> *"And we can't paint OBs will all the same brush – they have wonderful skills, skills I don't have and are a valuable member of the team. As a Midwife, I don't want to fan the flames of "Obs are bad" so I do a lot of education with women who are resistant to "entering the system". And Midwives too, right? We're taught in these silos. And if we grew-up as students doctors/Midwives together, from the get go, there's basic understanding…" (Darlene, Midwife)*

The same respondent spoke of the benefits of interprofessional education from the clinician's perspective:

> *"Interprofessional education. A mutual understanding of each other's professions would improve collaboration. Understanding the profession from the other's point of view. Mutual respect and understanding of each other's skills would improve collaboration. Let's have systems in place that promotes collaboration and eases the burden on everybody." (Darlene, Midwife)*

Interprofessional education was described as a positive way to teach and learn together, to create increased understanding of each other's scope of practice and facilitate educational initiatives as a group:

> *"There has to be a lot more interprofession education and more interprofessional training together. You don't have to go to the same parties – but you have to spend time together. Rounds should be together, in-services, etc. And because a Midwife has a role overlap with OBs, GPs, Peds & RNS, they*

> *have to develop relationships with all of those professions." (Ginny, Obstetrician)*

One obstetrician had experience with teaching and researching interprofessional education, and spoke of its benefits on collaboration:

> "*We did a project at [site omitted], where we took Midwifery, Medical and nursing students and put them together. We educated them together and did modules and small group learning and when we looked at them two years later, they were much more collaborative. They understood and they had real people associations. I think we need to start educating everybody together, early." (Ginny, Obstetrician)*

Professional relationships, individual clinician mood, experience, style and personality, perceptions of profession from other care providers, mutual trust and respect, practitioner burnout, communication and interprofessional education were all discussed as behavioural influences on the collaborative dynamic. Two respondents spoke of sharing physical space as one strategy to facilitate communication and collaboration, and to mitigate the barriers caused by each behavior. Specifically, sharing physical space was thought to improve access to each discipline, sharing common areas and creating more opportunities for collaboration and communication:

> *"Sometimes I think that access to care could be improved – sometimes that can be physically – if we all shared the same area so you could pop down the hall and talk to somebody. If you had a birthing center that included office space for everybody, and we all worked in the same area – physical space might be a way to improve barriers." (Ilse, Obstetrician)*

Sharing physical space could also eliminate competition between the disciplines, and thus improving collaboration by facilitating professional and personal communication, and improving mutual trust and respect:

> *"Well, here we've had a few conversations around collaborative care models where you're sharing the same office. Because one of the huge issues in the competition between midwives and obstetricians is the postpartum care. The breastfeeding support, etc. And OB can't do a lot in that regard so we feel like we're not giving care for what the women want. But if we had a whole different care model where those women who were low-risk stayed with the low-risk care providers and if those people had a change in their risk category,*

> *the OB would do what they had to do and the patient would still have their postpartum support. It could just be better. Almost like a family health team. Sharing the office, doing their thing and working together. To improve patient care." (Jane, Obstetrician)*

The behavioural influences on collaboration are variable across disciplines, professions and individual centers', however building professional relationships was seen as important by all interviewed respondents. Positive professional relationships fostered mutual trust and respect, communication and clinician perception. Variable factors included style and personality, along with mood, experience and comfort level. Interprofessional education was favoured as a potential solution for improving these barriers.

4.1.5 Summary

In summary, our participants identified multiple benefits, barriers and enablers to collaboration. Some participants proposed solutions to improve the collaborative dynamic. Defining collaboration must be mutually acceptable to both disciplines. Modifying parts of the current health care system, including funding and education, were both seen as favourable measures to improve collaboration, from the perspectives of obstetricians and midwives.

4.2 Quantitative Results

4.2.1 Characteristics of Respondents

A total of 245 participants responded to the invitation to complete the online survey out of a possible total of 1548 possible participants for a response rate of 15.8%. Of the 245 respondents' who gave consent to participate; approximately 200 completed half of the survey while 177 finished the full survey. The study respondent's were predominantly midwives (70%) with 124 respondents out of a possible 682 for a response rate of 18.18 % registered midwives. Forty-six out of a possible 905 obstetricians (26%) participated for a response rate of 5.08%. Seven participants listed themselves as "Other" and were removed from the statistical analysis. The respondent's demographic characteristics are outlined in Table 2.

Table 2: Demographic Characteristics of Survey Respondents

	Variables	Percentages
DISCIPLINE n = 177	Obstetrician	26.0 % (n = 46)
	Midwife	70.0 % (n = 124)
	Other	4.0 % (n = 7)
AGE n = 177	<24	1.1 % (n = 2)
	25-34	27.7 % (n = 49)
	35-49	44.6 % (n = 79)
	50-65	23.7 % (n = 41)
	66+	3.4 % (n = 6)
GENDER n = 178	Male	9.6 % (n = 17)
	Female	89.3 % (n = 159)
	Prefer not to Say	1.1 % (n = 2)
HOSPITAL LEVEL n = 175	Level 1	17.7 % (n = 31)
	Level 2	53.7 % (n = 94)
	Level 3	22.3 % (n = 39)
	Other	6.3 % (n = 11)
CURRENTLY PRACTICING n = 177	Yes	95.5 % (n = 169)
	No	4.5 % (n = 8)
GEOGRAPHY AREA (LHIN) n = 173	Erie St. Clair	0.6 % (n = 1)
	South West	13.9 % (n = 24)
	Waterloo Wellington	6.4 % (n = 11)
	Hamilton Niagara Haldimand Brant	14.5 % (n = 25)
	Central West	4.1 % (n = 7)
	Mississauga Halton	6.9 % (n = 12)
	Toronto Central	11.0 % (n = 19)
	Central	5.2 % (n = 9)
	Central East	5.8 % (n = 10)
	South East	6.4 % (n = 11)
	Champlain	7.5 % (n = 13)
	North Simcoe Muskoka	10.4 % (n = 18)
	North East	4.1 % (n = 7)
	North West	3.5 % (n = 6)

The survey used for data collection in this study was divided into six content sections. Results will be summarized according to the sections identified in Methods for likert-scale items.

4.2.2 Defining Collaborative Practice

This first section of the survey included five questions on the participant's beliefs regarding the benefits of collaborative practice.

Obstetricians and midwives both agreed with Health Canada's definition of interprofessional collaboration ($x = 5.53$, $F = 1.556$, $p = 0.214$) and ($x = 5.29$, $F = 1.556$, $p = 0.214$). The majority of obstetricians and midwives (91.3% and 87.1%) demonstrated some degree of agreement with the definition. No significant differences were found in any areas across the definition and benefits of collaborative practice between the two professions.

4.2.3 Current Workplace Practice

The second section of the survey explored current workplace practice and whether the respondents' current workplace environment was collaborative. In four of the 13 questions obstetricians and midwives demonstrated statistically significant differences in opinions.

Specifically, while midwives and obstetricians felt valued as members of the collaborative team, obstetricians ($x = 5.57$, $F = 9.756$, $p = 0.002$) felt more valued in their role in comparison to midwives ($x = 4.81$, $F = 9.756$, $p = 0.002$). Only 7.2% of midwives strongly agreed that they felt valued as a member of the team compared to 30.4% of obstetricians. Similar results were found for sharing decision-making on the maternity care team, where both professions felt they shared decision-making, however obstetricians ($x = 5.48$, $F = 13.550$, $p = < 0.01$) agreed more strongly than midwives ($x = 4.63$, $F = 13.556$, $p = < 0.01$); 19.6% of obstetricians strongly agreed that they shared decision-making with other members of the maternity care team. However only 3.3% of midwives strongly agreed with the statement. Obstetricians ($x = 2.89$, $F = 30.380$, $p = < 0.01$) found it less difficult to exchange ideas with medical staff in comparison to midwives ($x = 4.44$, $F = 30.380$, $p = < 0.01$) who neither agreed nor disagreed that it was difficult. Only 13% of obstetricians demonstrated a level of agreement in comparison to 61.3% of midwives, when asked if clinicians found it difficult to exchange ideas with the medical staff. Both professions respected the decision-making and skills of midwives they worked with, however obstetricians ($x = 4.91$, $F = 16.971$, $p = < 0.01$) less strongly agreed that they respected their fellow midwives in comparison to midwife respondents ($x = 5.71$, $F = 16.971$, $p = < 0.01$). More than one third, 35.5%,

of surveyed midwives strongly agreed they respected the professional decision-making of fellow midwives. In contrast, only 4.4% of obstetricians strongly agreed.

Table 3 – Current Workplace Practice

QUESTION	MEAN - OB	MEAN-RM	F-VALUE	P-VALUE
I am a valued member of the team (n = 195)	5.57	4.81	9.756	0.002
*Generally, I find it difficult to exchange ideas easily with medical staff (*n = 195)	2.89	4.44	30.380	0.000
*I share decision-making with other members of the maternity care team (*n = 194)	5.48	4.63	13.550	0.000
*I respect the professional decision-making and skills of the midwives I work with (*n = 194)	4.91	5.71	16.971	0.000

4.2.4 How Does Collaboration Work for You?

Section three of the survey demonstrated a statistical significant difference between obstetricians and midwives in 16 out of the 18 questions. The section was divided into three sub-categories: Medical Models of Care, Midwifery Models of Care and Delivering Woman-Centered Care.

Medical Models of Care

There was statistical significance between responses among midwives and obstetricians for all seven questions asked.

A smaller percentage obstetricians when compared to midwives (13.9% versus 36.2%) disagreed and strongly disagreed that doctors are the most competent in making the final decision in collaborative models. Overall, obstetricians ($x = 5.04$, $F = 76.508$, $p = < 0.01$) demonstrated more agreement with this statement whereas midwives ($x = 2.91$, $F = 76.508$, $p = < 0.01$) slightly disagreed. There were similar means and statistical significance found in two questions asking whether a doctor should review women in pregnancy or labour; 26.1 % of obstetricians and 84.7% of midwives ($x = 3.04$, $x= 1.35$, $F = 81.057$, $p = < 0.01$) strongly disagreed and disagreed that women should see a doctor at least once

in her pregnancy. Thirty percent of obstetricians and 87.8% of midwives (x = 2.83, x = 1.35, F = 105.004, p = < 0.01) strongly disagreed and disagreed that doctors should review all women in labour. Obstetricians (x = 5.07, F = 9.640, p = < 0.01) felt more strongly that they were viewed as ultimately responsible in collaborative models compared to midwives (x = 4.18, F = 9.640, p = < 0.01). Sixty-seven percent of obstetricians demonstrated some degree or agreement in comparison to 48.3% of midwives. Seventy-five percent of obstetricians (x = 4.91, F= 114.882, p = < 0.01) demonstrated significantly more agreement that they were legally responsible in collaborative models of maternity care when compared to 14.6% of midwives (x = 2.37, F = 114.882, p = < 0.01). When asked if women should experience labour and birth in a place where anesthetic and surgical facilities were available on site, obstetricians and midwives significantly differed in their responses with obstetricians (x = 4.46, F = 209.998, p = < 0.01) slightly agreeing that women should only labour and delivery in the hospital and midwives strongly disagreeing (x = 1.42, F = 209.998, p = < 0.01); 96.8% of midwives demonstrated some degree of disagreement in comparison to 39.1% of obstetricians. Obstetricians and midwives also disagreed on their perceptions that physicians provide women-centered maternity care; 56.5% of obstetricians slightly agreed and 34.7% of midwives slightly disagreed (x = 5.04, x = 3.06, F = 60.748, p = < 0.01) that in the current medical model of maternity care, obstetricians provide women-centered care.

Table 4 – Medical Models of Care

QUESTION	MEAN - OB	MEAN-RM	F-VALUE	P-VALUE
*Collaboration involves midwives and doctors working together but the doctor is most competent in making the final decision (*n = 192)	5.04	2.91	76.508	0.000
*Low-risk women should see a doctor at least once in their pregnancy (*n = 192)	3.04	1.35	81.057	0.000
*Doctors should review all women in labour (*n = 191)	2.83	1.35	105.004	0.000
*Most women believe doctors are ultimately responsible, even in collaborative models (*n = 192)	5.07	4.18	9.640	0.002
*Legally, doctors are ultimately responsible, even in collaborative models (*n = 190)	4.91	2.37	114.882	0.000

*Women should only experience labour and birth in a place where anesthetic and surgical facilities are available on site (*n = 192)	4.46	1.42	209.998	0.000
*Generally speaking, doctors provide women-centered care (*n = 192)	5.04	3.06	60.748	0.000

Midwifery Models of Care

The results reported by midwives and obstetricians demonstrated statistical significant difference in opinion in all six questions asked in this section. Specifically, obstetricians disagreed that women with risk factors were appropriate for care with a midwife whereas midwives slightly agree that all women were appropriate for care by a midwife (x = 2.61, x = 4.63, F = 46.775, p = < 0.01). Eighty-three precent of obstetricians demonstrated some degree of disagreement when compared to 31.5% of midwives. Both professions agreed that physicians do not need to be involved when a birth is progressing normally, 93.5% of obstetrician's demonstrated agreement and 97.6% of midwives strongly agreed (x = 5.41, x = 6.66, F = 68.124, p = < 0.01). Obstetricians and midwives disagreed on whether or not obstetricians should exclusively care for high-risk pregnancies; 26.1% of obstetricians demonstrated disagreement (x = 3.24, F = 87.630, p = < 0.01) whereas 89.5% of midwives demonstrated agreement (x = 5.60, F = 87.630, p = < 0.01) that obstetrical care should be reserved for women experiencing a high-risk pregnancy. Both professions agree that midwives have the skills to provide safe care to women with no risk factors, 91.2% of obstetrician's demonstrated agreement and 99.2% of midwives agreed (x = 5.35, x = 6.89, F = 140.804, p= 0.000). Obstetricians and midwives differed in their opinions of reducing interventions to improve maternal outcomes in maternity care. Obstetricians agreed (x = 4.59, F = 85.931, p 0.000) whereas midwives strongly agreed that reducing interventions would improve maternal outcomes (x = 6.39, F = 85.931, p = < 0.01). Obstetricians and midwives were very similar in their responses to reducing interventions would benefit infant outcomes. Obstetricians neither agreed nor disagreed and midwives agreed that reducing interventions would improve infant outcomes (x = 4.35, x = 6.13, F =

73.185, p = < 0.01); 53.3% of obstetricians agreed that reducing interventions would improve maternal outcomes and 47.8% agreed reducing interventions would improve neonatal outcomes. In comparison, 96.7% of midwives agree that maternal outcomes would be improved by reducing interventions and 94.3% agreed neonatal outcomes would be improved by reducing interventions.

Table 5 – Midwifery Models of Care

QUESTION	MEAN - OB	MEAN-RM	F-VALUE	P-VALUE
*Women in all risk categories should be able to receive continuous care from a known midwife (*n = 192)	2.61	4.63	46.775	0.000
*A doctor does not need to be involved in a birth which is progressing normally (*n = 192)	5.41	6.66	68.124	0.000
*Obstetricians should care for high-risk of complicated pregnancies only (*n = 192)	3.24	5.60	87.630	0.000
*Midwives have the skills to provide safe care as the primary carer for women with no identified risk factors (*n = 192)	5.35	6.89	140.804	0.000
*Reducing Canada's rates of interventions will improve maternal outcomes (*n = 192)	4.59	6.39	85.931	0.000
*Reducing Canada's rates of interventions will improve infant outcomes (*n = 192)	4.35	6.13	73.185	0.000

Delivering Woman-Centered Care

Obstetricians and midwives demonstrated statistically significant difference in opinion in three out of the five questions posed in this sub-category.

First, both professions agreed in the importance of involving women in care management decisions. However, compared to 82.6% of obstetricians, 92.6% of midwives demonstrated agreement on the importance of the final decision resting with the woman (x = 5.17, x = 5.98, F = 13.354, p = < 0.01). Obstetricians and midwives differed in their perceptions of how traditional hospital policies impact the delivery of woman-centered care. 58.7% of obstetricians demonstrated disagreement (x = 3.65, F = 76.487, p = < 0.01) and did not perceive traditional

policies as impacting collaborative care, whereas 90.4% of midwives demonstrated agreement (x = 5.71, F = 76.487, p = < 0.01) that these traditions were barriers to collaboration. While both professions disagreed, when compared to 45.7% of obstetricians who demonstrated disagreement, 88.6% of midwives more demonstrated disagreement that encouraging women to be involved and have control of their care compromised their safety (x = 3.39, x = 2.15, F = 28.991, p = < 0.01).

Table 6 – Delivering Women-Centered Care

QUESTION	MEAN - OB	MEAN-RM	F-VALUE	P-VALUE
*In collaborative practice, working with primary carers, the final decision should always rest with the woman (*n = 190)	5.17	5.98	13.354	0.000
*Traditional models of care and hospital policies results in the woman often not the focus of care (*n = 191)	3.65	5.71	76.487	0.000
*Encouraging women to have more control over their childbearing compromises safety (*n = 190)	3.39	2.15	28.991	0.000

4.2.5 Factors Affecting Collaborative Practice

Section four was divided into three sub-categories: the current maternity care system, referral between professionals and guidelines and barriers to collaboration. There were 22 questions in this section and 12 were statistically significant. Results will be discussed by sub-category.

The Current Maternity Care System

There were statistically significant results demonstrating a difference of opinion between obstetricians and midwives in five out of the nine questions in this category.

To start, when asked if the current maternity care system encouraged collaboration, 35.6% of obstetricians demonstrated disagreement and whereas 67.7% of midwives disagreed (x = 4.22, x= 3.26, F = 12.766, p = < 0.01). Both

professions disagreed that the current maternity care system provided adequate support for collaboration by facilitating equal opportunity, however only 43.5% of obstetricians disagreed compared to the 79.8% of their midwifery counterparts (x = 3.91, x = 2.84, F = 18.781, p = < 0.01). Obstetricians and midwives agreed that payment schedules do not allow for collaborative practice in the current maternity care system and both professions disagreed that the current maternity care system provides adequate funding to support collaboration however obstetricians felt less strongly than midwives (63.1% compared to 84.5%) (x = 4.89, x = 5.77, F = 12.541, p = 0.001). Obstetricians and midwives differed in their perception of culture as a barrier to collaboration in the current maternity care system; 41.3% of obstetricians demonstrated agreement however overall obstetricians slightly disagreed (x =3.96, F = 12.840, p = < 0.01) whereas 72.9% of midwives demonstrated agreement (x – 4.89, F = 12.840, p= 0.000) that the current culture in maternity care creates an environment that is not conducive to collaboration.

Table 7 – The Current Maternity Care System

QUESTION	MEAN - OB	MEAN-RM	F-VALUE	P-VALUE
*Encourages maternity care professionals to work collaboratively (*n = 187)	4.22	3.26	12.766	0.000
*Provides adequate support to allow equal and appropriate contribution to collaborative practice (*n = 188)	3.91	2.84	18.781	0.000
*Does not provide payment schedules to maternity care professionals that cultivate appropriate contribution to collaborative practice (*n = 187)	4.89	5.77	12.541	0.001
*Provides adequate funding to support collaboration in my workplace (*n = 188)	3.33	2.65	7.543	0.007
*Cultivates a culture non-conducive to collaborative practice (*n = 187)	3.96	4.89	12.840	0.000

Referral Between Professionals and Guidelines

Results of two out of the five questions in this category demonstrated statistical significance.

The first question, 51.2% obstetricians disagreed (x = 4.30, F = 52.371, p = < 0.01) that the College of Midwifery guidelines were appropriate, however 99.2% of midwives agreed (x = 5.76, F = 13.851, p = < 0.01) that the guidelines were appropriate for use in Ontario; 43.2% of obstetricians were in favour of new referral guidelines for women in Ontario however only 22.2% of midwives agreed that new referral guidelines would be more appropriate for women in Ontario (x = 4.68, x = 3.86, F = 13.851, p = < 0.01.

Table 8 – Referral Guidelines

QUESTION	MEAN - OB	MEAN-RM	F-VALUE	P-VALUE
The CMO Guidelines are appropriate for use in Ontario: (n = 181)	4.30	5.76	52.371	0.000
*New guidelines would be more appropriate for the referral of women in Ontario (*n = 181)	4.68	3.86	13.851	0.000

Barriers to Collaboration

Results of five of the 13 questions asked in this section demonstrated statistical significance in the perceptions of obstetricians and midwives.

Obstetricians and midwives differed in their perception of physicians being called late and left to deal with 'train wrecks'. Specifically, 80.5% of obstetricians agreed this was a barrier to collaboration however 82.3% of midwives disagreed (x = 5.37, x = 2.89, F = 122.192, p = < 0.01). Both professions agree that a barrier to collaboration was a culture of isolation and mistrust; 76.1% of obstetricians demonstrated agreement on their perception of this as a barrier to collaborative care in comparison to 52.8% of midwives (x = 5.13, x = 4.40, F = 7.404, p = 0.007). Obstetricians and midwives both disagreed, 87% of obstetricians compared to 94.3% of midwives (x = 2.54, x = 1.77, F = 16.703, p = < 0.01), that changes to maternity care collaboration would undermine Ontario's obstetrical safety record. Obstetricians slightly disagreed and midwives agreed that collaborative care models in maternity care would exclude junior doctors from attending enough births (x= 3.67, x = 2.26, F = 38.037, p = < 0.01). Both professions agreed in the importance of

family doctors advising women of all their maternity care choices, however obstetricians less strongly agreed than midwives (82.6% compared to 89.2%) (x = 5.17, x = 6.89, F = 115.674, p = < 0.01).

Table 9 – Barriers to Collaboration

QUESTION	MEAN - OB	MEAN-RM	F-VALUE	P-VALUE
*"Doctors are being called late, barred from rooms and left to deal with the "train wrecks"" (*n = 184)	5.37	2.89	122.192	0.000
*"There has been an isolation of medical staff due to mistrust" (*n = 183)	5.13	4.40	7.404	0.007
"Changes towards more collaboration in maternity services will undermine the excellent obstetric safety record in Ontario" (n = 183)	2.54	1.77	16.703	0.000
"More collaborative care would exclude junior doctors from attending enough normal births" (n = 183)	3.67	2.26	38.037	0.000
*"General practitioners should advise women of all options for their maternity care, including midwifery models of care" (*n = 183)	5.17	6.89	115.674	0.000

4.2.6 Professional Values and Beliefs

There were five questions in this category with the results of three of the questions demonstrating statistically significant difference.

Obstetricians slightly agreed and midwives slightly disagreed that midwives tend to understate the risks in pregnancy and births (x = 5.28, x = 3.31, F = 46.868, p = < 0.01); 78.2% of obstetricians demonstrated agreement in comparison to 24.3% of midwives when asked whether midwives understate the risks of pregnancy and birth. In comparison, 58.8% of obstetricians demonstrated agreement while 76.7% of midwives agreed that physicians tend to overstate the risks involved in pregnancy and birth (x = 4.20, x = 5.01, F = 10.386, p = 0.002). Both professions demonstrated agreement (76% of obstetricians and 67% of midwives) on the best

way to manage the care of women with no risk factors (x = 4.89, x = 4.09, F = 8.718, p = 0.004).

Table 10 – Professional Values and Beliefs

QUESTION	MEAN - OB	MEAN-RM	F-VALUE	P-VALUE
*Generally, Midwives tend to understate the risks involved in pregnancy and birth (*n = 183)	5.28	3.31	46.868	0.000
*Generally, doctors tend to overstate the risks involved in pregnancy and birth (*n = 183)	4.20	5.01	10.386	0.002
*Doctors and midwives generally agree on the best way to manage the care of women with uncomplicated pregnancies (*n = 183)	4.89	4.09	8.718	0.004

4.2.7 Collaborative Practice in Ontario

The results of two of ten questions indicated statistically significant differences. First, more than a quarter, 26.1%, of obstetricians neither agreed nor disagreed on the importance of social activities with staff in a successful collaboration model of maternity care (x = 4.20, F = 10.582, p = 0.001) while 25% of midwives slightly agreed about the importance of social activities with all staff (x = 5.04, F = 10.582, p = 0.001). Both professions agreed, obstetricians less strongly than midwives, on the importance of increased joint education opportunities in a successful collaboration model (x = 5.33, x = 6.16, F = 21.164, p = < 0.01); 89.1% of obstetricians and 97.5% of midwives demonstrated agreement on the importance of joint education.

Table 11 – Collaborative Practice in Ontario

QUESTION	MEAN - OB	MEAN-RM	F-VALUE	P-VALUE
*Social activities with all staff (*n = 178)	4.20	5.04	10.582	0.001
*Increased joint education between doctors and midwives (*n = 177)	5.33	6.16	21.164	0.000

4.2.8 Summary

In summary, the survey responses compared the opinions of obstetricians and midwives, and identified areas of similarities and differences. These findings will be explored the Discussion chapter.

Chapter 5: Discussion

5.1 Overview

The academic literature, along with regulatory bodies for both disciplines and government policy initiatives, agree that collaboration is the gold standard in maternity care (20,39,78). Collaboration in maternity care provides the best outcomes for mothers and babies (9,22,44,49) and has been proposed as the best way to manage the impending maternity care crisis in Ontario (22). However, successful collaboration in maternity care is the exception, not the rule, despite guidelines and recommendations promoting its benefits (25).

To identify the challenges of implementing collaboration in maternity care, this research focused on the benefits and barriers to collaboration, from the perspectives of obstetricians and midwives, by combining data from ten semi-structured qualitative interviews and a province-wide quantitative survey. The data revealed three key findings.

First, the midwifery scope of practice is a contentious issue due in part to differing attitudes towards birth between midwives and obstetricians, which has resulted in disagreement on appropriate guidelines and standards for clinical management of women and infants. Further, the disagreement on guidelines has contributed to differing perceptions of obstetrical risk stratification of pregnant women and therefore, who is an appropriate care provider for women. Second, there is a discrepancy between the professions on the interpretation and application of how to define and practice interprofessional collaboration; there are inconsistencies between practitioners agreement with the definition of interprofessional collaboration, and how it is applied to clinical practice. Finally, differing philosophies of care between obstetricians and midwives, primarily around provision of homebirth and delivery of women-centered care, demonstrated stark areas of contrast, indicative of an area of discord between the professions and thus a barrier to successful collaboration between the disciplines.

Each of these key findings creates barriers to successful interprofessional collaboration and will be discussed in detail below.

5.2 Scope of Practice as a Contentious Issue

All health disciplines have a mandated scope of practice (59). Midwives have a defined scope of practice which focuses on the care of low-risk women and their newborns during pregnancy, labour and the postpartum period (10). In addition to this defined scope, midwives follow the CMO Consultation and Transfer of Care Standard, which indicates when a midwife will initiate a consultation or transfer of care with a physician (19). According to this Standard, a consultation is "an explicit request from a midwife of a physician, or other appropriate health care provider, to give advice on a plan of care and participate in the care as appropriate" (7, Pg. 1). A transfer of care "occurs when the primary care responsibilities required for the appropriate care of the client fall outside of the midwife's scope of practice" (7, Pg. 2).

Our research demonstrated there is ambiguity in how the CMO Standard is enacted. This creates tensions, confusion and a breakdown in collaboration. For example, according to the CMO Standard (19), there are clinical indications where a midwife must consult with an obstetrician, but according to the Standard, does not need to transfer care. This means that midwives can continue to manage clinical situations with physician input or orders. Many consultants disagreed with the Standard and felt if their input was solicited, they should remain a part of the care team. The quantitative data reflected that there was significant disagreement on whether the CMO Standard was appropriate for use in Ontario. Both obstetricians and midwives agreed that the SOGC guidelines were appropriate for use in Ontario, but these guidelines do not address who is the most appropriate care provider for specific clinical situations.

This discord between the professions reflected disagreement on what is appropriate for a midwife's scope of practice. Data from the qualitative interviews indicated a disagreement surrounding oxytocin induction and augmentation, care for twins, and management of a breech baby in labour. The CMO Standard mandates that clinical management of each of these scenarios is appropriate for care by a midwife, and physicians strongly disagreed with these clinical situations being managed by midwives. Obstetricians' felt that even the suggestion was

inappropriate, which further contributed to their distrust of the CMO Standard, and by extension, the midwives themselves. The fundamental disagreement across the disciplines on appropriate consultation guidelines and standards reflects incongruity in the perceptions of obstetricians and midwives regarding the midwifery scope of practice.

According to our research, the basis for this disagreement is rooted in concerns around fee structure and turf protection. First, an obstetrician receives minimal compensation for consultation from a midwife; however, once a consultation has been initiated without a transfer of care, there is increased liability to the consultant, with little or no control of the clinical management. Obstetricians voiced their concerns with being consulted for care management without a transfer of care; they were implicated in the clinical care of the patient, and therefore, felt uncomfortable not remaining a part of the care management team. For example, a midwife would be required to consult with an obstetrician to receive an order for oxytocin to augment a woman's labour. However, after receiving the order, a midwife can continue to care for the patient, according to the CMO standard, which can make the obstetrician uncomfortable.

To explain the dissention, survey data reflected that when collaboration occurs, the perception of obstetricians was they are the most competent in making the final clinical decisions. Results reflected that obstetricians felt increased responsibility in collaborative models; however, this feeling was not shared by surveyed midwives. This dichotomy creates professional concerns from the consultant's perspective, in relation to professional liability concerns, and is exacerbated by the lack of remuneration as an incentive. In the end, obstetricians felt that they were accepting too much risk, without being appropriately compensated and without having ongoing input in the care management decisions of the patient.

Along with the burden of feeling like the most responsible care provider in collaborative models, survey data also revealed that physicians felt more *legally* responsible in collaborative models. Midwives disagreed and did not view obstetricians as being the most legally responsible when collaboration occurs. This

perception contributes to the issues affecting scope of practice; obstetricians do not want to be consulted without a transfer of care, particularly around intraprtum care where liability risk is increased, stress levels are higher and obstetricians want to be fairly compensated for the stress and risk.

Previous Canadian studies have found similar results. Peterson (2007) found fee structures and liability and insurance issues to be a major structural barrier to collaboration (46). Our research showed that in collaborative models, obstetricians felt ultimately responsible for clinical care. Similarly, Peterson found that physicians considered themselves "financially liable for the actions of other collaborative team members", which was seen as a significant barrier to collaboration (8, Pg. 883). Further, Peterson's research found remuneration to be a disincentive to collaboration, similar to our qualitative and quantitative data (46).

Further, Munro (2013) interviewed physicians and midwives practicing in rural environments in British Colombia and found similar findings (105). Interviewed physicians by Munro highlighted "inequities in payment and differences in scope of practice" as considerable barriers to collaboration (105). Financial disincentives and concerns about liability have considerable impacts on disparities regarding scope of practice and are issues across multiple provinces.

Our research revealed that midwives and obstetricians agreed that current payment schedules do not cultivate appropriate contribution to collaborative practice. Multiple participants from both disciplines suggested a change in the funding structures by exploring a salaried model of compensation for obstetricians. A salaried model could help eliminate the animosity of consultant's feeling legally and professionally responsible with little compensation, and could permit for increased collaboration between the professions. Many respondents were in favour of this model, however some expressed concern over having decreased flexibility over their schedule, longer health care wait times and workload shifting for non-urgent concerns. For example, without the incentive of financial compensation, non-emergent on-call work might be pushed to the following day, and obstetrical clinics would not be booked to the same capacity if fee-for-service were no longer the dominant funding structure.

Along with perceived compensation inequities contributing to scope of practice as a barrier to collaboration, our results reflected that turf protection is also a significant barrier. Turf protection, often described as "being based on varied factors including fears (loss of autonomy, loss of income), lack of knowledge about scope of practice in other disciplines, and perceived inequities in professional standing and earning capacity" (46, Pg. 883). This thesis discusses turf protection primarily surrounding protection of income and scope of practice.

When discussing remuneration in the current funding model, protection of one's turf, and thus income, was discussed. Survey data demonstrated discord between obstetricians and midwives surrounding provision of antenatal care in high-risk pregnancies. Midwives felt obstetricians should only take care of women with high-risk indicators, and obstetricians disagreed. The qualitative data helped to explain this phenomenon by exploring the perspectives of obstetricians. Obstetricians felt low-risk obstetrics was essential in clinical practice for maintaining their clinical skills as well as in prevention of practitioner burnout through improved job satisfaction. Financial compensation may also play a factor. If compensation was increased for care of high-risk patients, or a salaried model of compensation was implemented, it remains unclear if obstetricians would continue to want to provide low-risk obstetrics.

With competing interests for low-risk births, especially in rural areas where delivery numbers are low, protection of turf and income, was viewed as a contributing factor to scope of practice as a barrier to collaboration. Peterson (2007) also found similar results and described turf protection as being a barrier to successful collaboration.

Understanding the ambiguity around current clinical practice guidelines and standards, and the implications on scope of practice, while incorporating problematic fee structures and turf protection, is fundamental to understanding the breakdown in collaboration between physicians and midwives from the clinician's perspective.

5.3 The Struggle to Define Interprofessional Collaboration

Health Canada's defines interprofessional collaboration as "working together with one or more members of the health care team who each make a unique, professional competency-based, contribution to achieving a common goal" (15, Pg. 1). While obstetricians and midwives indicated agreement with the definition, the participants reported a marked difference in the application of the definition into clinical practice. This revealed the fundamental problem that in fact, the professions are not speaking the same language. Professional jargon has been proven to create barriers (64), and despite a supposed unified agreement with how Health Canada defines interprofessional collaboration, the differences in how the respective professions are interpreting and applying the definition, creates barriers to collaborative practice. A lack of trust and mutual respect across disciplines were identified as key factors negatively impacting collaboration.

Our results demonstrated that obstetricians did not seem to respect the role of the midwives as much as they did that of their medical colleagues. The survey data indicated that obstetricians found it easier to exchange ideas with medical staff than with midwives, and obstetricians felt more valued as members of the team, when compared to their midwifery counterparts. This reflects the obstetricians' perception of a hierarchy present in the current maternity care model where they feel more valued, and with a greater role on the team. Midwives supported this sentiment; they felt they needed to work harder than other disciplines to demonstrate their competence. This attitude leaves the midwives struggling for integration, status and recognition. Furthermore, obstetricians indicated that, from their perspective, midwives needed to be better than average to be accepted and integrated, validating the midwifery perception.

Along with a noted lack of respect, our results demonstrated there was a lack of trust for the role of midwives among obstetricians. Midwives also felt that they did not share decision-making with other members of the maternity care team. Obstetricians went even further to say that they did not respect the decision-making and skills of midwives with whom they worked.

There can be several explanations for why these barriers to collaboration may occur. This principles of Social Identity Theory state there is a tendency to

favour one's "in-group" versus an "out-group" (67). The data shows that obstetricians find it easier to communicate and share decision-making with fellow obstetricians, versus with midwives, which is contradictory to the definition of interprofessional collaboration encouraging equal and shared contributions. Further, the principles of King's Theory of Goal Attainment can also be applied. The present struggle in maternity care is evidence of patriarchal relationships, lack of role clarification and culture as barriers to collaboration, as described by King (70).

Furthermore, in our current education and healthcare model, clinicians are educated, trained and practice in silos, and data demonstrating the perspectives of midwives is evidence of the 'silo effect'. Midwives felt that while they work alongside obstetricians, they do not work together, and in some cases, they don't share the same goals, reflective of a fourth barrier proposed by King, the lack of time allocated between the disciplines to foster a relationships of mutual trust and respect, facilitating collaboration (70).

To explain why midwives and obstetricians disagree on decision-making and on their perceived value on the team, we examined the areas of disagreement between the disciplines. The data indicated that midwives and obstetricians fundamentally disagreed on the appropriateness of midwife-led models of care, which in turn impacted how the professions define interprofessional collaboration. An example of the pervasive lack of trust for midwifery skills and scope came when obstetricians only slightly agreed that midwives have the skills to provide safe care to women with no identified risk factors. As such, obstetricians do not have the confidence and trust in midwives to clinically manage the care of low-risk women and newborns. From the obstetrician's perspective, this lack of trust stemmed from the perception that midwives understate the risks of pregnancy and birth, and they felt that doctors should review all women in labour and see women at least once in their pregnancy, even for those patients under the care of a midwife. Lack of mutual trust and respect for each discipline, due to varying perspectives on decision-making and value, highlights the innate struggle for successful collaboration in maternity care.

Heatley and colleagues (2011) reported similar findings in Australia. Their research found that their working definition of collaborative practice: "maternity care professionals 'working together' to produce a 'common goal' of a health outcome for both women and babies", did now allow for different philosophies of maternity care to be applied in the interpretation of the definition (14, Pg. 54). Professionals' different values, beliefs and identities vary across disciplines and therefore they proposed a change in the definition to be more inclusive (106):

> A reflexive and dynamic process that involves maternity care professionals from multiple professions working together with the woman to produce quality outcomes. Responsibility and accountability is shared in terms of appropriate levels of involvement from of a professional with the woman from pregnancy through to the postnatal period. All involved trust, respect and understand each others' approach to practice which utilizes knowledge and expertise from various professions as required by the woman (14, Pg. 55)

The struggle to agree on a common definition of interprofessional collaboration and collaborative practice is a barrier to collaboration. Agreement on a mutually acceptable definition, that has applications to maternity care from the perspectives of all participating disciplines, is essential for successful implementation of collaborative care initiatives.

To improve relations and align viewpoints, a comprehensive definition should be developed by midwives, obstetricians, Labour and Delivery nurses and family physicians. Ensuring agreement on 'common goals', incorporating promotion of evidence-based practice and adding the importance of mutual trust and respect, while applying the theoretical concepts from King's Theory of Goal Attainment, could foster more unified application of Health Canada's definition of interprofessional collaboration by ensuring the disciplines are speaking the same language and have sufficient time to clarify roles, build trust, and develop a respect for differing philosophies in maternity care.

5.4 Philosophy of Care as a Barrier to Collaboration

Along with contentious views on scope of practice and variations in defining interprofessional collaboration, divergent opinions on philosophy of care was the

third key finding in our research. Obstetricians' and midwives have differing attitudes towards birth as reflected in our research, and in research done by Klein in 2009 (54). According to our findings, obstetricians and midwives differed in two main areas. First, offering women a choice of birthplace was an issue where clear differences were demonstrated between obstetricians and midwives. The second issue was the role of the woman in decision-making and the delivery of women-centered care. This was approached from very different perspectives across the disciplines. Differing philosophies and models of care were demonstrated to have significant impacts on interprofessional care.

While the provision of homebirth was not discussed specifically with interview participants, one survey question asked participants to rate their agreement with out-of-hospital births. The answers showed vast difference in the perspectives of obstetricians and midwives. Disagreement on the safety and appropriateness of out of hospital birth is not a new topic in maternity care; multiple researchers have studied the safety of homebirth and the opposing views of clinicians in the medical model versus the midwifery model (55,107,108). Research done by Klein in 2009 reflected similar results that found obstetricians to be more in favour of technological approaches to maternity care (54), indicative of a different philosophy of care, compared to midwives who used technology judiciously (108). Klein's research also showed obstetricians to be strongly opposed to homebirth, similar to our results (54), which is contradictory to the evidence-based research supporting the safety of homebirth in low-risk women who are attended by trained professionals (107). Klein explains that: "the lack of consensus on the safety of home birth between disciplines should be addressed, because these disciplines need to cooperate in order to support what is an important part of midwifery practice" (15, Pg. 834).

Second, along with differences in agreement on homebirth, midwives and obstetricians reflected disagreement on the provision and delivery of women-centered maternity care. Interview and survey participants reflected the differences in the models of care utilized by the two professions. Obstetricians felt that in the current model, they were providing women-centered care, while midwives

disagreed. Yet, both professions agreed that each discipline was capable of this provision, and obstetricians indicated that midwives needed to stop seeing themselves as the only care provider capable of providing women-centered care. One obstetrician felt that the medical model was shifting to provide improved women-centered care and felt obstetrics was becoming increasing aligned with the midwifery philosophy and provision of care, which could eliminate this difference over time.

The implications of having contrasting views on philosophy of care as a barrier to collaboration is not a novel concept (59,105,109). However few suggestions for change have been explored to eradicate this barrier. Interview participants suggested sharing physical space as a solution to align the professions, theorizing that the closer contact could lead to increased communication and thus collaboration, more inclusivity and a greater mutual understanding of day-to-day roles. This would allow the professions to meet in the middle on their philosophies and learn how to respectfully disagree with contrasting philosophical views.

According to Klein (2009), "Women and infants should not be caught in interprofessional conflicts" (8, Pg. 834). The disparities surrounding philosophy of care, in particular provision of homebirth and delivery of woman-centered care, demonstrated a need for the two professions to work together to reach a consensus since supporting women and their choices is imperative in maternity care.

5.5 Limitations to the Study

There were three main limitations to this study: poor response rate, unequal survey responses from obstetricians and midwives and the lack of obstetrical involvement in the qualitative analysis process.

Survey research has been shown to have improved validity when response rate is as close to 100% as possible (110). A response rate of greater than 20% is advised to avoid significant non-response bias (110). Response rate for this survey was difficult to calculate; it is unknown how many respondents received the invitation to participate in the survey, and further, while there were 905

obstetricians invited to participate, an Obstetrics and Gynecology report from the Canadian Medical Association in 2015, indicated there were only 794 practicing obstetricians in Ontario. The response rate for this study was therefore between 15.8% - 16.6%, which demonstrates a potential risk that the non-respondents perspectives differed from those of the respondents. While a poor response rate inhibits the generalizability and robustness of the data (76), a mixed methods study design and methodological and researcher triangulation was used to mitigate the effects of the poor response rate, and improve the robustness of the results.

A second limitation of this study is the unequal responses from midwives and obstetricians. The sample of obstetricians was significantly smaller than that of midwives (26% compared to 70%). This hinders the ability to generalize the findings across maternity care providers. A similar limitation was found in the Australian study using the same survey tool (78). The cause of this inequity is likely attributed to the sampling technique of obstetricians. Obstetricians were primarily invited to participate by postcard invitation mailed to their office address as listed on the College of Physicians and Surgeons of Ontario public database. It is impossible to discern how many postcards were received by obstetricians, as opposed to being sent to the wrong address or discarded by administrative staff. This discrepancy could also be attributed to midwives keen desire to contribute to academic literature and improve interprofessional collaboration, demonstrated in their increased response rate when compared to obstetricians.

A third limitation to this study is the lack of an obstetrician's perspective in the qualitative data analysis process. The results of the study could be strengthened by sharing the qualitative interview transcripts with an obstetrician to ensure appropriate attention is given to emerging concepts and trending themes in the coding process.

5.6 Summary

With the changing landscape of maternity care across Ontario, aligning the viewpoints of the professions to create a mutually agreeable interprofessional model of collaborative maternity care is essential.

Profound disagreements around scope of practice and consultation guidelines for midwives have created barriers to interprofessional collaboration in Ontario. This is exacerbated by different interpretations of Health Canada's definition and its application to clinical practice. Further, varying opinions of obstetricians and midwives on philosophy of care and provision of out-of-hospital birth and women-centered care, have all created barriers to interprofessional collaboration in Ontario.

Failing to address the professional concerns of both disciplines will perpetuate the issues that surround practice standards and scope of practice, the definition and interpretation of interprofessional collaboration and differing philosophies and models of care. (46,105). Primary maternity care providers must be on the same page; without this, collaborative initiatives will continue to fail.

Chapter 6: Conclusion

6.1 Overview of Key Findings

Evaluation of the perspectives of collaborative care from the viewpoint of obstetricians and midwives revealed three key findings. First, scope of practice was a contentious barrier. Varying opinions on clinical practice guidelines and practice standards highlighted the inequities surrounding scope of practice, with funding structures and turf protection being viewed as contributing factors. Second, how the two professions interpret the definition of interprofessional collaboration was incongruent with the clinical application of the definition, indicating a difference in the perspectives of obstetricians and midwives. Finally, philosophy of care, particularly around provision of homebirth and women-centered care, varied between the two professions.

These findings demonstrated that Ontario's maternity care model has a long way to go to achieve successful interprofessional collaboration. Aligning the perspectives of the members of the disciplines is pivotal to effective implementation of collaborative care initiatives, which has proven to be easier said than done.

6.2 Implications of Findings

Our findings reveal there is demonstrated need for interprofessional collaboration across the disciplines, which is supported by multiple academic and governmental literature cited in this thesis. Our findings established the discord in the perspectives of obstetricians and midwives on scope of practice, defining interprofessional collaboration and philosophy of care.

Understanding these barriers is pivotal to successful interprofessional collaboration in maternity care. These findings could be instrumental in two important ways. First, by demonstrating the importance that regulatory bodies and professional associations need to work together to achieve harmony across the disciplines by aligning viewpoints, and second, by restructuring interprofessional education programs to promote collaboration throughout education, and by utilizing interprofessional education strategies to promote collaboration.

These findings could assist the regulatory bodies and professional associations for obstetricians and midwives to set aside their differences to work together, and to address those differences that are impeding collaboration. While preserving autonomy, regulatory bodies could join forces and create new policies, clinical practice guidelines and funding structures that would be agreeable for each discipline.

Second, understanding the perspectives of obstetricians and midwives highlights the need for increased interprofessional education initiatives across the disciplines. Obstetricians disagreed with midwife-led models, despite evidence that touts its cost-efficiency, decreased use of intervention, and most importantly, patient safety and satisfaction (29,31,109,111). Further understanding the rationale for this disagreement and introducing teaching methods to address misconceptions and change attitudes (eradicate the bias), could help to minimize or eliminate these barriers to interprofessional collaboration. Our research reflected that both obstetricians and midwives agreed that increased joint education, throughout education and clinical practice, between doctors and midwives would improve successful collaboration. In 2004, McMaster University instituted a Program for Interprofessional Practice, Education and Research (PIPER) (112). Recognizing the importance of collaboration and interprofessional teaching and learning, the goal of the program states: "We believe that students who gain a better understanding and appreciation of one another's' roles in the provision of health care services, and who learn to respect and value the input of other disciplines in the team decision making process, will be better prepared for interprofessional collaboration following graduation. Therefore, we are committed to providing high quality interprofessional experiences to health professional students during their education" (112). Interprofessional programs in maternity care are still a new endeavor; studies evaluating the long-term effectiveness of interprofessional education initiatives for midwifery and obstetrics are being conducted but have yet to be published.

Along with changes in standards and education, our results also suggested three propositions for change: a salaried model of remuneration for obstetricians, alteration of Health Canada's definition of interprofessional collaboration to include

the different perspectives of clinicians, and the sharing of physical space, to increase opportunities for communication and collaboration, across disciplines. In keeping with the goals of MCP2 and other provincial and federal initiatives, while using the theoretical framework from King's Theory of Goal Attainment, striving for change and agreement across regulatory bodies, along with implementation of joint education initiatives that directly address the barriers, would assist in facilitating improved interprofessional collaboration.

As discussed in Chapter 2, King proposes five key barriers that inhibit goal achievement: patriarchal relationships, time, lack of role clarification, gender and culture. King also suggests ways to reduce the impacts of these barriers to achieve goals. Each barrier can be applied to maternity care; use of this theoretical framework to improve the complex relationships between midwives and obstetricians could be instrumental in achieving successful interprofessional collaboration.

6.3 Future Research

More comprehensive research regarding maternity care collaboration from the perspectives of obstetricians and midwives, could help to improve the understanding of the perceptions of the clinicians working in each discipline. There are three key areas that future research could include to improve the generalizability and robustness of the results: a larger sample size, inclusion of other maternity care providers including family physicians who practice obstetrics along with Labour and Delivery nurses, and expanded research to include all Canadian maternity care providers.

First, a larger sample size would improve the ability to generalize the data across the care providers. Lengthening the time for data collection, and using governing bodies and professional associations of the disciplines for contact information, could help to improve the response rate. Future research could solicit the SOGC for survey distribution to increase the sample size, which would improve our understanding of the barriers, and potentially elicit other barriers to

interprofessional collaboration from the clinician's perspective. The use of incentives to increase sample size could also be considered.

Second, the studied disciplines could be expanded to included family physicians that practice obstetrics and Labour and Delivery nurses. Inclusion of these disciplines could help to improve the perspectives of barriers to collaboration by inviting all of the disciplines that collaborate in maternity care. Targeted research could also be done with the disciplines to better understand the dynamics at play in each key finding demonstrated from our research.

Finally, research could be extended beyond Ontario to survey and interview maternity care clinicians across Canada. Comparing maternity care collaboration in different provinces would help to expand the narrative on barriers to interprofessional collaboration from the perspectives of obstetricians, midwives, family physicians and Labour and Delivery nurses.

6.4 Conclusion

The results from this study create fundamental building blocks for understanding the perspective of obstetricians and midwives on the barriers to successful interprofessional collaboration, an under-studied area of maternity care collaboration. The members of the two professions demonstrated stark areas of contrast in their perspectives, signifying need to further explore these perceptions, and to strive to align the viewpoints of the members of the disciplines. Provincial and national collaborative initiatives will continue to fail without professional buy-in from the clinicians who are themselves working within the day-to-day collaborative dynamic.

Aligning the viewpoints of the professions by eliminating barriers and fostering an environment of mutual trust and respect, will allow the implementation of collaborative initiatives to be easier done than said.

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APPENDIX 1: SURVEY

Collaboration in Ontario Maternity Care: Your Thoughts

DEFINING COLLABORATIVE PRACTICE

Please read the following statement:

Health Canada defines interprofessional collaboration as: *"working together with one or more members of the health care team who each make a unique, professional competency-based, contribution to achieving a common goal"*.

Do you agree with Health Canada's definition for use in defining collaborative maternity care in Ontario?

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Please comment on what you find particularly use about this definition (if anything), and how you would change it (if you would).

The published literature has suggested many benefits to collaborative health care. Do you believe the following benefits result from high-quality collaboration in maternity care?

Improved maternal and neonatal outcomes

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Increased efficiency of maternity care

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Benefits for maternity care professionals on a professional level

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Benefits for maternity care professionals on a personal level

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

CURRENT WORKPLACE PRACTICE

One aim of this survey is to explore actual current workplace practice and whether behaviour by members in your workplace is collaborative. Please rate your agreement (or disagreement) with the following statements.

The woman is an equal contributor to the collaborative team

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

There is respect in the capabilities of both medical and midwifery professions

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

There is trust in the capabilities of both medical and midwifery professions

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Midwives and doctors work together to achieve the best possible outcomes for childbearing women

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Maternity care professionals do not always communicate openly with each other

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

I am a valued member of the team

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Generally, I find it difficult to exchange ideas easily with midwifery staff

Strongly Disagree	Disagree	Slightly disagree	Neither disagree	Slightly agree	Agree	Strongly agree

			or agree			

Generally, I find it difficult to exchange ideas easily with medical staff

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

I share decision-making with other members of the maternity care team

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Interprofessional social relationships outside of work are important

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

I respect the professional decision-making and skills of midwives I work with

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

I respect the professional decision-making and skills of doctors I work with

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Midwives are routinely involved in formal interprofessional review of adverse events

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

HOW DOES COLLABORATION WORK FOR YOU?

Please remember that certain statements below represent views obtained from pilot participants. It is likely that you will agree with some but disagree with other statements. To allow us to determine the prevalence of these comments in a broad population of maternity care professionals, please state your level of agreement with each statement. This section relates specifically to research that suggests professional groups in maternity care often have a different understanding of „collaboration".

Medical Models of Care:

Collaboration involves midwives and doctors working together but the doctor is most competent in making the final decision

Strongly Disagree	Disagree	Slightly disagree	Neither disagree	Slightly agree	Agree	Strongly agree

			or agree			

Low-risk women should see a doctor at least once in their pregnancy

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Doctors should review all women in labour

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Most women believe doctors are ultimately responsible, even in collaborative models

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Legally, doctors are ultimately responsible, even in collaborative models

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Women should only experience labour and birth in a place where anesthetic and surgical facilities are available on site

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Generally speaking, doctors provide women- centered care

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Midwifery Models of Care:

Women in all risk categories should be able to receive continuous care from a known midwife

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

A doctor does not need to be involved in a birth that is progressing normally

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Obstetricians should care for high-risk or complicated pregnancies only

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Midwives have the skills to provide safe care as the primary carer for women identified with no risk factors

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Reducing Canada's rates of interventions will improve maternal outcomes

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Reducing Canada's rates of interventions will improve infant outcomes

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Delivering Women-Centered Care:

In collaborative practice, working with primary carers, the final decision should always rest with the woman

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Traditional models of care and hospital policies result in the woman often not the focus of care

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

For the safety of the baby, the maternity care team sometimes need to override the needs of the woman

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Encouraging women to have more control over their childbearing compromises safety

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Maternity care professionals require guidelines for women who choose birthing options that are not appropriate to level of risk

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

FACTORS AFFECTING COLLABORATIVE PRACTICE

Please remember that certain statements below represent views obtained from pilot participants. It is likely that you will agree with some but disagree with other statements. To allow us to determine the prevalence of these comments in a broad population of maternity care professionals, please state your level of agreement with each statement. This section relates specifically to elements that have been identified by maternity care professionals and researchers to affect the collaboration process.

The Current Maternity Care System:

Encourages maternity care professionals to work collaboratively

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Has inconsistent policies, procedures, and guidelines regarding collaboration

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Fosters managerial support for collaborative practice

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Provides adequate support to allow equal and appropriate contribution to collaborative practice

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Does not provide payment schedules to maternity care professionals that cultivate appropriate contribution to collaborative practice

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Has time structures in place to allow collaboration between maternity care professionals to occur

Strongly	Disagree	Slightly	Neither	Slightly	Agree	Strongly

Disagree		disagree	disagree or agree	agree		agree

Provides adequate funding to support collaboration in my workplace

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Cultivates a culture non-conducive to collaborative practice

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Allows all to be legally accountable for their own actions in a collaborative team

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Referral between professionals and guidelines
Are you familiar with the following guidelines:

The Society of Obstetricians and Gynecologists Statements of Normal Birth:

YES	NO

The College of Midwives of Ontario Mandatory Consult and Transfer of Care Document:

YES	NO

Where you are familiar with the set of guidelines, please indicate your agreement (or disagreement) with each statement below (please mark "not applicable" if you are not familiar with a set of guidelines).

The SOGC Guidelines are appropriate for use in Ontario:

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree	N/A

The CMO Guidelines are appropriate for use in Ontario:

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree	N/A

New guidelines would be more appropriate for referral of women in Ontario

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree	N/A

If you indicated that new guidelines would be more appropriate, what you find particularly useful in new guidelines, or what would you change about old guidelines.

Barriers to collaboration

Please note: Participants in the pilot study indicated a number of barriers to high-quality collaboration, including contested areas ("turf wars") between midwives and doctors. Please rate your agreement with the following statements taken from the pilot feedback and other published literature. You may find some of these statements extreme, so we appreciate you giving us your views.

"Collaboration fails due to „turf wars‟"

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

"Doctors are being called late, barred from rooms and left to deal with the „train wrecks‟"

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

"There has been an isolation of medical staff due to mistrust"

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

"There is a culture of bullying, disrespect, and resentment between obstetricians and midwives"

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

"There is historical animosity between doctors and midwives"

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

"Midwives need to stop being so precious about seeing themselves as the only people capable of providing woman centered care"

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

"Respectful relationships between maternity care professionals are difficult to develop"

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

"Interprofessional groups do not work because one profession usually dominates the proceedings"

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

"Collaboration does not work because doctors dominate decision-making"

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

"Changes towards more collaboration in maternity services will undermine the excellent obstetric safety record in Ontario"

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

"More collaborative care would exclude junior doctors from attending enough normal births"

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

"General practitioners should advise women of all options for their maternity care, including midwifery models of care"

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

PROFESSIONAL VALUES AND BELIEFS

Please note: These questions relate specifically to maternity care professionals" attitudes towards birth and the perceived worldviews of other maternity care professionals. There is research evidence suggesting that differences in the worldviews and attitudes of maternity care professionals can impede the process of collaboration. Please help us assess whether these findings apply in Ontario by indicating your agreement (or disagreement) with each statement.

Successful collaboration requires:

Generally, midwives tend to understate the risks involved in pregnancy and birth

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Generally, doctors tend to overstate the risks involved in pregnancy and birth

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Doctors and midwives share the same values and beliefs around maternity care

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Doctors and midwives generally agree on the best way to manage the care of women with uncomplicated pregnancies

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Midwives and doctors generally agree on the best way to manage the care of women with complicated pregnancies

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

COLLABORATIVE PRACTICE IN ONTARIO

Shared definitions of "collaboration", "woman-centered care", along with open communication, respect and trust between professionals have been identified as important in enhancing collaborative practice. The literature suggests that other variables are also important. Please rate your agreement (or disagreement) about the importance of the variables in this section.

Individual staff members who are confident and self aware

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Willingness to collaborate

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Ongoing commitment to collaboration

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Structured information sharing (i.e. case review with all staff)

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Unstructured information sharing (i.e. huddles, coffee, informal telephone calls)

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Social activities with all staff

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

A clear process for resolving disagreements and conflicts

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Working together to provide optimal care whilst taking individual responsibility for own actions

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Each member of the team being accountable for their own actions

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

Increased joint education between doctors and midwives

Strongly Disagree	Disagree	Slightly disagree	Neither disagree or agree	Slightly agree	Agree	Strongly agree

What other conditions would enhance your collaboration with other maternity care professionals (if any)?

DEMOGRAPHIC INFORMATION

SEX	A) Female B) Male C) Prefer not to answer
AGE	A) 24 or under B) 25-34 C) 35-49 D) 50-65 E) 66 or over
CURRENT QUALIFICATION	A) Registered Midwife B) Obstetrician C) Other
DO YOU CURRENTLY PRACTICE CLINICALLY?	A) YES B) NO
WHAT IS THE LEVEL AT YOUR PRIMARY HOSPITAL?	A) Level 1 B) Level 2 C) Level 3
WHAT BEST DESCRIBES YOUR GEOGRAPHICAL AREA?	A) Erie St. Clair B) South West C) Waterloo Wellington D) Hamilton Niagara Haldimand Brant E) Central West F) Mississauga Halton G) Toronto Central H) Central I) Central East J) South East K) Champlain L) North Simcoe Muskoka M) North East N) North West

APPENDIX 2: RECRUITMENT POSTCARD

FRONT:

BACK:

We are inviting all obstetricians and midwives in Ontario to participate in an online survey about Collaboration in Maternity Care.

We are hoping to understand your perceptions of interprofessional
collaboration. How does collaboration work? What might promote or prevent collaborative care?

To access this survey and share your thoughts, please visit:
www.maternitycarecollaboration.com

The survey takes 15-20 minutes of your time. Participants can enter into a draw for a $100 Starbucks giftcard upon completion of the survey.

Please contact Natalie Kirby, Masters Thesis Candidate, McMaster University with any questions: kirbynk@mcmaster.ca.

Your feedback is valuable and can positively contribute to improved collaboration in Maternity care. We look forward to hearing your thoughts!

McMaster University

APPENDIX 3: INTERVIEW GUIDE

Research Question: According to midwives and obstetricians in Ontario, what are the perceptions of interprofessional collaborative behavior and how do they vary by profession?

Introduction: The purpose of this study is to understand how midwives and obstetricians view collaborative practice in Ontario and to explore the attitudes and perceptions held by clinicians practicing in each discipline. All your answers will confidential. Results from the interviews will be presented as themes with no personal identifiers used. Do you have any questions?

Tell me about your experiences with collaborative maternity care.
a) Probe: have these been positive or negative experiences and why?

How would you describe the collaboration in your current workplace?
a) Probe: What factors impact this collaboration?
b) Probe: trust, respect, communication, family-centered care, models of care?

In your opinion, what role do women and families play during care management and decision-making?

In what ways do clinical practice guidelines, policies and procedures either promote or prevent collaboration?

What do you perceive as the barriers to collaboration?
a) Probe: Examples: education, funding structures, differing approaches to care

When working in a collaborative model, what are your biggest apprehensions working with other professions?

In what way do your professional values and beliefs impact your collaborative care relationships?

Describe how individual personality characteristics impact your collaborative relationships?

How do you think collaboration impacts the care women in Ontario receive?
a) Probe: Specifically, how does collaboration impact patient safety in maternity care and patient satisfaction?

What other strategies or systems could promote improved collaboration in maternity care in Ontario?

Do you have any other comments about collaboration to add?

APPENDIX 4: QUALITATIVE INTERVIEW CODES

THEMES	AXIAL CODES	OPEN CODES
Defining Collaboration	- the definition of collaboration varies by profession - the definition of collaboration varies by the individuals with skills, resources, geography, history and frequency of collaboration as contributors	- Consulting versus collaborating - varying involvement with collaboration - Collaboration varies by individuals and by center - lip-service to collaboration
History and Hierarchy	- cultural mistrust of midwifery - navigating the hierarchy in maternity care - external perceptions of care providers - The Silo Effect - differences in educational background - variations in philosophy and model of care as barrier to collaboration - definitions of woman-centered care	- pervasive culture of mistrusting midwives - woman-centered care - informed choice - cultural barriers - midwifery education program - history of intimidation - "in-group" versus "out-group" - hostility towards medical model - historical influences as barrier to collaboration - scare tactics and intimidation - "good guys" versus "bad guys" – midwives versus OBs - integration into institution
Working within the confines of the "System"	- funding structures as incentive (or lack thereof) to collaboration - salaried model as proposed solution - complexities of clinical practice guidelines - physician-midwife liability – collaboration as a medical-legal consideration - midwives and role overlap with OBs, RNs, GPs, Peds - scope of practice	- full scope versus limited scope of practice - RMs wasting skills - system prevents collaboration - clinical practice guidelines as barrier or enabler - funding structures as barrier - physician liability - governing bodies as barrier/enabler to collaboration - hospital policies versus clinical practice guidelines versus governing bodies - weak transfer of care guidelines - remuneration - role overlap & blurring of roles
Leaning to Play Nice	- importance of professional relationships - "colleague friends" - interprorfessional education	- mutual trust in skillset - professional relationships - variations in trust - personalities impact trust - communication amongst

	- sharing physical space as a solution - Level of experience and practitioner comfort level as factor in collaboration - practitioner burnout - communication amongst practitioners - importance of mutual trust & respect in collaboration - clinician style and personality	practitioners - comfort levels - clinician style - personalities - mood as factor - trusting care providers - perceptions of care providers - social connections - training and education in each others profession - perspectives of each other's roles & responsibilities - educational rounds - learning from each other - teamwork - continuing education - desire/willingness to collaborate - burnout