Studies of midwives' and health visitors' interprofessional collaborative relationships

Maria Raisa Jessica (Ryc) Verceluz Aquino

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Centre for Maternal and Child Health Research
School of Health Sciences
City, University of London
England

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City, University of London
Northampton Square
London
EC1V 0HB
United Kingdom

T +44 (0)20 7040 5060

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Declaration

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Abstract

This thesis explored the processes underlying interprofessional working relationships between midwives and health visitors in UK maternity services; using a multi-method approach consisting of a systematic review, interviews, and focus groups. The systematic review synthesised the literature on midwife-health visitor collaboration, identifying barriers and enablers that are influential to successful interprofessional collaboration. Thus, the subsequent empirical studies attempted to explore these barriers and enablers in greater depth, from the perspectives of midwives and health visitors. Two studies utilised the Theoretical Domains Framework to explore the barriers and enablers to midwife-health visitor collaboration (Chapters 3-6). These are the first studies to examine midwives' and health visitors' perceived barriers and enablers to interprofessional collaboration using a psychologically-grounded theoretical framework. Midwives and health visitors identified barriers and enablers to interprofessional collaboration across each of the 12 theoretical domains, such as 'Knowledge' (e.g. awareness of processes involved in contacting midwives) and 'Memory, attention, and decision processes' (e.g. contacting health visitors when there is a concern). Chapter 6 compared midwives' and health visitors' perceived barriers and enablers to interprofessional collaboration, and discussed its research and practice implications, including approaches to intervention development for improving interprofessional collaboration. For example, various behaviour change techniques can be integrated as part of interventions aiming to enhance interprofessional collaboration. The final empirical study attempted to address the gap in the interprofessional literature by involving service users' views. Focus groups with recent mothers were conducted to gain explore their perspectives of interprofessional collaboration in maternity services. Findings suggest that women observe fragmentation between midwifery and health visiting. Participants recommended service changes including group-based antenatal classes jointly provided by midwives and health visitors. In summary, the findings indicate that midwife-health visitor interprofessional collaboration is important to professionals and women, but will require health professional behaviour change along with service changes.

List of Abbreviations

ALSPAC – Avon Longitudinal Study of Parents and Children

BME – Black and Minority Ethnic

CASP – Critical Appraisals Skills Programme

CEBMa – Center for Evidence-Based Management

CCG – Clinical Commissioning Groups

CRD – Centre for Reviews and Dissemination

GP – General Practitioner

NHS – National Health Service

PROSPERO – International Prospective Register of Systematic Reviews

TDF – Theoretical Domains Framework

TDI – Theoretical Domains Interview

Glossary of terms

Descriptive Model – identifies "problems and set the focus for process analyses by characterizing the distribution across segments of the population of specific diseases or of patterns of underuse of appropriate screening, prevention, or illness-management behaviors" (Leventhal, Musumeci, & Contrada, 2007, p. 381)

Framework – "a structure composed of parts framed together" (Michie et al., 2005, p. 33)

Perinatal Period – "generally defined as the interval between the decision to have a child and one year after the birth" (Rodríguez & Rivières-Pigeon, 2007, p. 1)

Postnatal Period – "first 6-8 weeks after birth" (National Institute for Health and Clinical Excellence, 2006, p. 3)

Process Model – explains "how things happen" (Leventhal et al., 2007, p. 381)

Theoretical Construct – "a concept specially devised to be part of a theory" (Michie et al., 2005, p. 33)

Theoretical Domain – "a group of related theoretical constructs" (Michie et al., 2005, p. 33)

Theory – "a consistent and well-defined framework to test a falsifiable hypothesis about the real world" (Suls, Luger, & Martin, 2011, p. 18)

Candidate contributions to the thesis/journal articles

The candidate, Maria Raisa Jessica Verceluz Aquino, conceived the studies and wrote the first drafts of all chapters within this thesis. The supervisors (Professor Rosamund M Bryar, hereafter RB, and Dr Ellinor K Olander, hereafter EO) of this doctoral research provided feedback on all chapters written. The candidate's contributions to each of the four studies within this thesis are detailed below.

Study 1: Systematic review

The candidate, under the supervision of her supervisory team, developed and designed the study, extracted and analysed the data, and led the write-up of the publication arising from this work. EO acted as second rater for the title and abstract screening process. Uncertainties regarding studies for inclusion in the review were resolved via discussion with EO, RB and Dr Justin Needle (hereafter JN). In addition, JN contributed to this systematic review by acting as second rater for the quality assessment of studies included, and oversaw the data extraction phase. Co-authors of the journal article (EO, JN, RB) contributed to redrafting the manuscript and read and approved the final version.

Studies 2 and 3: TDF studies – midwives' views, health visitors' views, and comparative analysis

The candidate, under the supervision of her supervisory team, developed and designed the study, collected and led data analysis, and wrote the first drafts of the relevant chapters within this thesis. Dr Fabiana Lorencatto (hereafter FL) oversaw the study design process, and acted as second coder for the topic guide development phase. RB and EO acted as coders for the consensus phase of the analysis, with FL providing advice as needed.

Study 4: Focus group study with mothers

The candidate, under the supervision of her supervisory team, developed and designed the study, collected and led data analysis, and wrote the first draft of the relevant chapter within this thesis. RB acted as a co-moderator in the data collection phase, and verified the initial set of themes in the data analysis phase. EO made recommendations regarding the final set of themes.

List of publications and presentations related to this research

Papers accepted for publication directly arising from this doctoral research

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Based on Chapter 2 (presented in reverse chronological order)

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- Oral presentation. Global Network of Public Health Nursing Conference, Billund, Denmark, September 20, 2016.

Aquino, M. R. J. V., Olander, E. K., Needle, J. J., & Bryar, R. M. Midwife-health visitor communication and collaboration: A systematic review.

- Poster presentation. 6th Annual Postgraduate Research Symposium, City Graduate School, City, University of London. London, UK, March 17, 2016. Won best poster runner up prize.

Aquino, M. R. J. V., Olander, E. K., Needle, J. J., & Bryar, R. M. A systematic review of midwife-health visitor collaborative practices.

- Poster presentation. UKSBM Annual Scientific Meeting. Newcastle, UK, December 8, 2015.

Aquino, M. R. J. V., Olander, E. K., Needle, J. J., & Bryar, R. M. Work in progress: A systematic review of midwives' and health visitors' collaborative working relationships.

- Poster presentation. 3rd Annual Doctoral Conference, School of Health Sciences, City, University of London. London, UK, April 27, 2015.

Aquino, M. R. J. V., Olander, E. K., Needle, J., & Bryar, R. Midwives' and health visitors' collaborative working relationship: A systematic review.

- Oral presentation. 5th Annual Postgraduate Research Symposium, City Graduate School, City, University of London. London, UK, March 25, 2015.

Based on Chapters 4, 5, and 6 (presented in reverse chronological order)

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1 Introduction

1.1 Summary

This chapter, organised into six sections, provides an overview of the origins and development of this PhD study. First, it explores the motivations for and the methodological considerations of this research (Section 1.2). It then presents a critical review of the literature concerning interprofessional collaboration in UK healthcare services generally, followed by a focussed discussion on midwife-health visitor collaboration, to help lay the foundations for this thesis (Section 1.3). A section presenting theories and models for understanding interprofessional collaboration follows (Section 1.4). Then, the overarching aims and objectives of this thesis are outlined (Section 1.5). This chapter closes by providing an overview of the thesis (Section 1.6).

1.2 Development of the PhD study

1.2.1 My interest in the research area.

Between 2012 and 2013, I undertook a Master's degree in Clinical and Health Psychology, a component of which was an empirical research project. Being new to the UK, and being unfamiliar with the health service, I became interested in how those like myself navigated the National Health Service (NHS). The NHS was particularly impressive because it offered free healthcare at the point of need to all those residing in the UK. This something I have never encountered, having previously lived in the Philippines where over 50% of healthcare is financed out-of-pocket, as well as Australia where free or subsidised healthcare is available only to those eligible (World Health Organization, 2012a, 2012b). My interest in healthcare and concern regarding health inequalities as experienced by Black and Minority Ethnic (BME) communities led me to focus on this for my Master's dissertation. I interviewed midwives in North Manchester regarding their experiences of providing care for women from BME backgrounds with a particular focus on their perceptions of the relationship between maternal health inequalities and care provision (Aquino, Edge, & Smith, 2015). Midwives in this study advocated for increased collaborative care, with women and other health professionals. This gave me an insight into the challenges surrounding maternity care provision from the perspective of midwives, such as differences in women's and midwives' expectations of care, as well as

women's increasingly complex needs which go beyond the remit of midwifery care. My studies and my research then propelled an interest in exploring, in greater detail, the processes relating to the interprofessional working relationships between various health professionals involved in providing maternity care, specifically midwives and health visitors. Several months following the completion of the MSc project, I applied for and was offered the current PhD project entitled, *Studies of midwives' and health visitors' interprofessional collaborative relationships*, which related directly to my interest in the provision of maternity care to women and their families.

1.2.2 A lack of research.

A fund of research evidence exists on interprofessional collaboration in various health care contexts including acute care (Atwal & Caldwell, 2002), community care (Schmidt, Claesson, Westerholm, Nilsson, & Svarstad, 1998), health promotion and illness prevention (J. Davies & Macdonald, 1998), and maternal and child health services (Psaila, Fowler, Kruske, & Schmied, 2014; Psaila, Kruske, Fowler, Homer, & Schmied, 2014; Psaila, Schmied, Fowler, & Kruske, 2014a, 2014b). Collaborative practice is recognised as a way through which health systems and outcomes could be improved (World Health Organization, 2010), in the midst of finite resources for example (Zwarenstein, Goldman, & Reeves, 2009). Established multidisciplinary teams achieve successful collaboration in public health through providing a range of services to address different needs (Axelsson & Axelsson, 2006), such as antenatal group classes (Harris, Lewis, & Taylor, 2015) and breastfeeding support (Hoddinott, Pill, & Chalmers, 2007) in maternal and child health. The World Health Organization defines interprofessional collaboration as "multiple health workers from different professional backgrounds working together with patients, families, caregivers and communities to deliver the highest quality of care" (World Health Organization, 2010, p. 7).

Collaboration is commonly used to describe relationships between different health professionals who share common goals such as improving health care (Fewster-Thuente & Velsor-Friedrich, 2008; Zwarenstein et al., 2009). It is generally recognised, however, that researchers, decision-makers, policy makers, and clinicians alike use a multitude of words such as 'multiprofessional',

'multidisciplinary', and 'interdisciplinary' interchangeably (Leathard, 2003a) to refer to collaborative working, without providing clear definitions of these (D'Amour, Ferrada-Videla, San Martin Rodriguez, & Beaulieu, 2005). This has been deemed problematic and a hindrance to the development of the interprofessional collaboration evidence base (Leathard, 2003a; Reeves et al., 2011). Leathard (2003a) suggests that translating the prefixes 'inter', and 'multi' – Latin for between and many, respectively – can shed light on this debate. She emphasises that in spite of the murky nomenclature, interprofessional collaboration essentially involves "learning and working together" (Leathard, 2003a, p. 5).

However, this commitment to interprofessional working is countered by organisations assigning specific roles unique tasks and responsibilities, which results in 'functional differentiation' or a distinction between roles (Axelsson & Axelsson, 2006). For example, public health practitioners have distinct tasks from those who deliver medical treatment (Public Health England, 2016b). At the other end of this spectrum is the need for integration, which arises from fragmented working practices and problems with achieving efficient and high-quality practice. Holistic approaches to public health are well-supported by governments both locally and internationally (National Health and Medical Research Council, 2010; Public Health England, 2013; World Health Organization, 2010), for several reasons including collaboration positively affecting practice, maximising resources, and strengthening service delivery through the amalgamation of different professionals' expertise and skills (Axelsson & Axelsson, 2006; D'Amour, Goulet, Pineault, Labadie, & Remondin, 2004).

Early explorations of the literature suggested a scarcity of research around the working relationships between midwives and health visitors, despite the clear overlaps between the professional remit of these two groups (Sandall et al., 2016) and the policy directives which support interprofessional working between these professionals (Department of Health, 2009; National Maternity Review, 2016). To illustrate this overlap between midwifery and health visiting services, a summary of these professionals' partnership pathway (Public Health England and Department of Health, 2015) is provided in Figure 1.1 below.

Figure 1.1. Summary of midwifery and health visiting partnership pathway (adapted from Public Health England and Department of Health, 2015).

	Antenatal						Birth	Postnatal	
When	Booking in (8- 12 weeks)		16-28 weeks		32-36 weeks			Birth visit to 10-14 days	
Who	Midwife	Health visitor	Midwife	Midwife or Health visitor	Midwife	Midwife or Health visitor		Midwife	Midwife or Health visitor
Action	Midwifery team to notify health visiting team of pregnancy, and Family Nurse Partnership if appropriate. Notification to include assessment of need, including needs of the father, and referrals to other	Health visitor or health visiting team to inform midwife of named health visitor for every woman.	Midwifery team to notify health visitor within one working day of any significant changes to maternal or child wellbeing.	Where a woman or father is identified as vulnerable the midwife and named health visitor should work collaboratively to assess the needs of the woman and it is recommended that they consider a joint meeting with the family (NICE 110).	Midwifery team to notify health visitor within one working day of any significant changes to maternal or child wellbeing.	Women with identified vulnerability to be considered for a joint antenatal meeting. All women with identified vulnerability (e.g. maternal mental health, learning disability, foetal developmental issues, obstetric issues, domestic violence etc.) or need to have		Midwife to update the health visitor on the health and social status of both mother and baby. Midwife Day 5-7 midwife to complete appropriate sections of the parent-held personal	It is recommended that by day 14 all women, particularly those with identified vulnerability or need, have received a joint handover/contact visit with their midwife and health visitor; it is recommended that this be a home visit. At discharge of vulnerable

	agencies and action plan.			Information exchange between health visitor and midwife. Early identification of need.		received an ‘individualised postnatal care plan’ prepared in conjunction with midwife and health visitor (NICE 37).		child health record to facilitate handover to the health visitor. Midwifery team to notify health visitor within one working day of any significant changes to maternal or child wellbeing.	women and women who require midwifery input after day 14, the midwife and health visitor to have completed and recorded a verbal handover in addition to a written handover (NICE 37).

The motivations for promoting interprofessional working between midwives and health visitors is derived from research highlighting the importance of a child's development, which starts in pregnancy. For example, a meta-analysis of 37 studies investigating physical activity in pregnancy demonstrated that light to moderate exercise can result in benefits for the woman such as reduced risk for gestational diabetes, hypertension, and pre-eclampsia (Schlüssel, Souza, Reichenheim, & Kac, 2008). More recent evidence emphasises the potential benefits for physical activity in pregnancy on child outcomes, for example, a reduced risk of preterm birth and adequate foetal growth (da Silva, Ricardo, Evenson, & Hallal, 2017). Health professionals such as midwives and health visitors have a role in promoting the health of women and their families (Bennett, Blundell, Malpass, & Lavender, 2001; Chief Nursing Officers of England, Northern Ireland, 2011; Department of Health, 2009; The Marmot Review, 2010). However, research exploring women's experiences of receiving support or advice concerning weight and physical activity show that this support is often generic and lacking (Ferrari, Siega-Riz, Evenson, Moos, & Carrier, 2014; Smith & Lavender, 2011). Women have stressed the importance of personalised care, that considers their wants and concerns (National Maternity Review, 2016). Relatedly, it is known that health professionals experience challenges in addressing weight-related issues in pregnancy due to the sensitivity of the topic and a lack of confidence associated with limited training (Atkinson, Olander, & French, 2013; Smith & Lavender, 2011). Thus, it is important to ensure that health professionals providing such services, including midwives and health visitors, offer women advice that is standardised, and at the same time accommodating of women's needs. Such continuity of information from health professionals has been found to be important to women's maternity care experience (Jenkins et al., 2015).

Moreover, in the UK, there is an expansive evidence base demonstrating the negative impact of adverse events in pregnancy. The Avon Longitudinal Study of Parents and Children (ALSPAC) is a remarkable birth cohort study which recruited over 10,000 pregnant women between 1991-1992 and subsequently followed them and their families until the children were seven years old (Golding, 1990). This ongoing cohort study aimed to investigate how genes interact with the environment and thus impact health outcomes. Over 1,000 publications have arisen from this

longitudinal study since its inception, providing extensive evidential support for supporting early intervention strategies, starting with pregnancy. For example, a study using the ALSPAC dataset found that iodine deficiency in pregnancy is associated with poor cognitive outcomes at eight years of age (Bath, Steer, Golding, Emmett, & Rayman, 2013). A study using the same dataset revealed that binge drinking – defined as having more than four drinks per day – in pregnancy is linked with behavioural problems and mental health issues in early childhood, specifically, hyperactivity and inattention (Sayal et al., 2009). Also, reports including the Marmot Review (2010) and the Allen Report (2011) have stressed the importance of focussing on early child health and consequently provided advice on promoting early intervention approaches. These include programmes such as the *Healthy Child Programme* (Department of Health, 2009) which offer support services for families from immunisations to parenting and social support. Such programmes require collaborative working amongst various health professionals including midwives and health visitors. In addition, women have expressly supported communication amongst health professionals (National Maternity Review, 2016).

Currently, limited evidence exists concerning midwife-health visitor interprofessional collaboration. However, this evidence suggests potential benefits from midwives and health visitors working together; for example, in relation to various initiatives for improving maternal and child health such as breastfeeding support, and mental health services. An evaluation of a complex intervention that used coaching methods to improve breastfeeding outcomes revealed that midwife-health visitor collaboration appeared to have a negative relationship with improvements with breastfeeding whereby groups that did not have strong interprofessional relationships were linked with a lack of improvements in breastfeeding (Hoddinott et al., 2007). There is also UK and international evidence to suggest that the relationship between midwives and health visitors is weak in the postnatal period and needs improvement (Barimani & Hylander, 2008; Farquhar, Camilleri-Ferrante, & Todd, 1998). Relatedly, women reported observing professional conflict which they felt was unhelpful to their successful breastfeeding (Hoddinott et al., 2007). Midwives and health visitors providing consistent messages and advice to women is important, as highlighted in the Swansea Flying Start programme, where these healthcare professionals, together, offered structured

specialist support to women and families (Harris et al., 2015). Joint training of midwives and health visitors can facilitate consistent information-giving, but this might not be feasible for universally delivered services (Harris et al., 2015).

Despite the clear rationale for encouraging interprofessional collaboration, the research area is fraught with challenges. For example, little empirical research exists demonstrating the impact of interprofessional working between midwives and health visitors in relation to clearly identified outcomes (Schmied et al., 2010) such as breastfeeding initiation and maintenance, identification and management of maternal mental health, and mother-child interaction. The literature presented thus far shows that there are numerous areas of maternal and child health which midwives and health visitors can work collaboratively on (Aquino et al., 2015; Hoddinott et al., 2007; Rodríguez & Rivières-Pigeon, 2007). However, the wider interprofessional collaboration literature indicates that concepts characteristic of interprofessional collaboration as a health professional behaviour are similar across various services or settings (D'Amour et al., 2005). Indeed, a lack of clarity in terms of what it means to work collaboratively has been identified as problematic (Leathard, 2003a). It is important therefore, to clarify the mechanisms of action which underpin interprofessional collaboration as a health professional behaviour. Therefore, this PhD study offered a unique opportunity to expand knowledge by attending to how midwives and health visitors work collaboratively in practice.

1.2.3 Situating the research: Epistemological and ontological considerations

> *"For science, I will argue, is a social activity whose aim is the production of the knowledge of the kinds and ways of acting of independently existing and active things." – Roy Bhaskar (1997, p. 24)*

Ontology concerns the objective reality that exists beyond our body of knowledge (Clark, Lissel, & Davis, 2008; Cruickshank, 2004) and epistemology concerns our approaches as to how we come to know (Chamberlain, Stephens, & Lyons, 1997). The exercise of identifying an appropriate epistemological approach is paramount to the selection of an appropriate theoretical framework(s), as well as research methods (including data collection tools) because these intersect, and can impact on research findings and meaning-making (Chamberlain et al., 1997). This

section concerns the epistemological and ontological underpinnings of this thesis. First, it discusses the assumptions of health psychology as a discipline, specifically positivist approaches to science. Then, it offers an alternative approach by considering critical realism as a framework for understanding the context in which this research takes place.

It is known that mainstream health psychology has tended to rely on applying a positivist approach to its research (Chamberlain et al., 1997; Rogers, 1996). Positivists argue that only the directly measurable and observable is what constitutes knowledge (Patton, 2015). Therefore, it relies on empirical data, which is drawn from experience and can be verified through experimentation. Empirical methods, which positivists ascribe to, are advantageous. Experiments inform us how to influence human behaviour (e.g. collaboration between health professionals). For example, in psychological research, Skinner (1953) argued that science aims to uncover relationships between events, in order to make sense of these and thereby predict future events. He argued that ultimately, the objective of science is to predict and control human behaviour. Therefore, he placed emphasis on what can be directly experienced and observed in order to predict and manipulate behaviour and ignored other aspects which cannot be directly observed such as cognition (Skinner, 1953). However, I would argue that such a position is reductionist in nature, and overlooks the complex nature of reality.

For example, a randomised controlled trial investigating the impact of teamwork on psychotropic drug prescription in Swedish nursing homes found that multidisciplinary team meetings led to a reduction in psychotropic medication prescription whilst the absence of multidisciplinary meetings did not (Schmidt et al., 1998). However, this study was unable to explain the processes that underlie the cause behind the effect produced. One explanation is such controlled studies neglect the influence of contextual factors, thereby limiting the potential for explaining variations and replicating the effect (Clark et al., 2008). Interprofessional collaboration is complex and is influenced by various factors such as service providers or authorities (Leathard, 2003b). The current evidence base remains lacking in terms of the processual factors leading to interprofessional collaboration and its impact on service or patient outcomes (Reeves, Pelone, Harrison, Goldman,

& Zwarenstein, 2017). Thus, in this thesis, applying a positivist approach can be limiting to the understanding of the causes behind collaborative behaviours. Uncovering the causal mechanisms behind such observed events is especially important in the study of health care and services, as this area is growing increasingly complex (Plsek & Greenhalgh, 2001). Therefore, understanding the interactions between contextual and individual factors is paramount to the development of strategies through which health could be improved (Clark et al., 2008).

Critical realism "acknowledges the possibility of science but recognises the social dimension of humans and science in a manner that does not fall into problematic versions of relativism or positivism" (Clark et al., 2008, p. E68). In particular, critical realism posits that physical reality exists independently of one's knowledge and perceptions of it. Second, it subscribes to an emergent ontology, which means that parts (e.g. body parts) which make up an entity (e.g. human being) can be understood from the bottom up, and that each part, or groups of parts interact with each other that result in a complex structure which is different to the parts in isolation (Clark et al., 2008). This emergent ontology is comprised of three levels: the empirical, the actual, and the real (Clark et al., 2008; Walsh & Evans, 2014). In the context of midwife-health visitor interprofessional collaboration, the *empirical* level is comprised of the directly observable, perceived and experienced, for example, a midwife and a health visitor communicating about a woman's care. Familiarity with each other, or developed professional competencies represent the *actual* level, which concerns the factors influencing the empirical, and is not always observable (Walsh & Evans, 2014). At the deepest level – the *real* – is the generative mechanisms causing the events in the actual level. Numerous factors are involved in this, including individual factors such as motivation (Cane, O'Connor, & Michie, 2012), relational factors such as mutual trust for each other (D'Amour, Goulet, Labadie, Martín-Rodriguez, & Pineault, 2008), professional and policy directives (Public Health England and Department of Health, 2015) and women's maternity care choices (Munro, Kornelsen, & Grzybowski, 2013). Finally, critical realism acknowledges that events or effects are caused by a combination of factors and circumstances, and underscores the importance of understanding ways these underlying mechanisms interact instead of inferring causation from repeated

observance of effects (Clark et al., 2008). Such an approach is fitting for exploring the processes which underlie interprofessional collaboration between midwives and health visitors.

Specifically, a critical realist approach is beneficial for understanding the various layers of interprofessional collaboration as a complex behaviour (see section 1.4). For example, it can shed light on the broader mechanisms (Walsh & Evans, 2014) which shape collaborative behaviours including women's experiences of care and how professionals are trained. Thus, I would argue that my theoretical positioning or stance in this thesis is in line with the tenets of critical realism. With particular reference to the context of this work, a complex critical realist approach recognises that health care research is nested in a complex system – a set of interdependent entities that freely behave in sometimes unpredictable ways (Plsek & Greenhalgh, 2001) – and therefore affords the researcher an opportunity to take into account these contextual factors, which impact outcomes. Such an approach will allow for a deeper understanding of the phenomenon in question (i.e. collaboration in maternal and child health services) through critically assessing the evidence this research will gather from various perspectives or data sources.

Of course, complex critical realism is not free of shortcomings. Whilst it provides flexibility and openness in researching complex situations (Patton, 2015) such as health care and systems (Clark et al., 2008), it subscribes to the notion of a single objective reality. This can be problematic particularly for those who subscribe to a constructivist worldview, where multiple realities or truths are assumed to be valid (Patton, 2015). However, a critical realist would argue that despite the assumption of an independent, objective reality, different perspectives on this are valid, and can be studied, such that causes or mechanisms which underpin the events in this reality can be identified. Such cannot be achieved if one subscribes to a constructivist worldview for example, as it asserts that all of which that is experienced is real, therefore, there is no "correct" truth or more "real" reality (Patton, 2015).

1.3 Interprofessional collaboration: Background

"What everyone is talking about is simply learning and working together."
–Audrey Leathard (2003a, p. 5)

1.3.1 The emergence of interprofessional collaboration in UK healthcare services.

Interprofessional collaboration between health and social care services in the UK has varied throughout history (Williams & Sullivan, 2010). In 1920, before the establishment of the NHS in 1948, the Dawson Report highlighted the importance of the coordination of services, recommending that midwifery, health visiting and the like (i.e. domiciliary care) be brought together (Ministry of Health, 1920). Following this, the provision of midwifery and health visiting services (commissioned by local authorities initially) were reinforced, in consideration of the evidence of high maternal death rates in the 1930s (Ham, 2009). It was also around this time that critics of the health service such as W.A. Robson called for service integration to promote health 'from womb to grave' (as cited in Webster, 2002, p. 4).

In 1942, the Beveridge Report was produced (The National Archives, n.d.-a), outlining social service reforms that could address the Five Giants – societal ills identified by Sir William Beveridge – which are want, disease, ignorance, squalor, and illness (The National Archives, n.d.-c). It is considered a landmark report that has led to various social reforms including the establishment of the NHS (The National Archives, n.d.-b). The NHS was then created in 1948 as a national organised service and is the world's largest publicly funded health service (White, 2006). NHS services provide universal, comprehensive healthcare that is free at the point of need (Talbot-Smith & Pollock, 2006). Its original structure was a tripartite system of hospitals, General Practitioners (GPs), and local authority health services, with each tier linked to each other providing care based on patients' needs (The National Archives, n.d.-b). Integration has been a constant feature of the NHS from the beginning, and its importance once again stressed in the 1960s where several reports revealed fragmentation between the different arms of the NHS (Ham, 2009; Ministry of Health, 1967). In 1968, the Ministries of Health and Social Services merged to form the Department of Health and Social Services (in England), which

was one of the structural reorganisations during that period (Webster, 2002). The purpose of assimilating these services was threefold: first, to consolidate services under one authority; second, to improve coordination between health authorities and related services such as community health councils; and finally, to improve management (Ham, 2009). Later in 1974, nursing and midwifery services were transferred from local authorities to health authorities (Cowley et al., 2013). Efforts to integrate services were not fully realised, as GPs continued to work as independent contractors within the NHS (Ham, 2009). Further policy changes led to the separation of the Department of Health and Social Services. In addition, the reorganisation of services in 1982 saw the abolition of Area Health Authorities and the transfer of management responsibility to district health authorities (Webster, 2002).

Historical evidence shows that the tripartite structure of the NHS has negatively impacted on interprofessional collaboration, in light of shifting responsibilities between the different elements of the service (Wistow, 2011). For example, resource allocation is dependent on changing resource needs; it is a systemic issue that health and local authorities grapple with and can hamper collaborative working as resources are taken away from one sector in order to afford different needs (Johnson, Wistow, Schulz, & Hardy, 2003). With regard to midwife-health visitor collaboration in particular, Local Authorities have recently gained the responsibility of tendering for health visiting services, whilst midwifery services remain under the control of Clinical Commissiong Groups (CCGs). Such differences in funding sources can make interprofessional collaboration more challenging (Leutz, 1999).

1.3.1.1 Policy developments aimed at supporting interprofessional collaboration.

Since its inception, the NHS has undergone a multitude of changes, most notably the decentralisation of services in 1990, which allowed for state health authorities to independently commission services (Nuffield Trust, 2012; The Stationery Office, 1990). Prior to this, other noteworthy policy developments which have been influential to concerning interprofessional collaboration include the Department of Health (1988) document *Working together under the Children Act*

1989: A guide to arrangements for inter-agency cooperation for the protection of children from abuse. This set out to respond to investigations pertaining to child abuse cases during this time, with a view to providing services meeting children's needs through introducing joint working between various professionals including midwives and health visitors and other services, thereby protecting them from significant harm (Leathard, 2003c).

Moreover, the white paper *Health of the Nation – a health strategy for England* (Department of Health, 1992), aimed to build on the strategies proposed by the World Health Organization's (1981) *Global Strategy for Health for All by the Year 2000*. An assessment of *Health of the Nation – a health strategy for England*, a policy implemented from 1992-1997, showed that it failed to achieve its aims fully. One of the reasons behind this shortfall was the pre-existing structures between local and health authorities that posed challenges to joint working (Universities of Leeds and Glamorgan and the London School of Hygiene and Tropical Medicine, 1998). In addition, *Saving lives: Our healthier nation* (Secretary of State for Health, 1999) aimed to bridge the health inequality gap through a variety of strategies including Health Improvement Programmes that are rooted in partnership working (Leathard, 2003c). An evaluation of these Health Improvement Programmes revealed a number of problems influencing its success such as different interpretations of the programme and the time- and labour-intensive nature of working in partnership (Arora, Davies, & Thompson, 2000). Efforts to encourage interprofessional collaboration in health and social care were cemented statutorily through the Health Act of 1999, which stipulates that different NHS bodies such as Primary Care Trusts and Health Authorities have a duty to work in partnership with each other (UK Government, 1999).

The last decade has seen further change in the NHS structure which includes a shift towards *patient-centred care* (Department of Health, 2000, 2010a). This means patients have increased input regarding their care (Luker & McHugh, 2012). Presently, each of the four UK states (i.e. England, Scotland, Wales, and Northern Ireland) develop health policies independently. Although each of the administrations independently develop policies and commission services, a common goal amongst these is to provide patient-centred, integrated care for all (Department of Health,

2010a; Department of Health Social Services and Public Safety, 2012; NHS England, 2014c; NHS Scotland, 2013; Welsh Government, 2012). As the current research is situated in England, policy discussions within this thesis will focus mainly on the NHS in England, whilst acknowledging other evidence from other geographical areas as applicable.

This brief historical account has illustrated how the NHS is a constantly evolving, and clearly complex system. Notably, one of the threads running consistently throughout its fabric is the need for collaboration between professionals, services, and departments which has been heavily influenced by the organisational structure of the NHS. The next section provides an overview of the need for improving maternal and child health, in particular exploring the role of midwives and health visitors in achieving this objective.

1.3.2 The importance of maternal and child health.

> *"Maternity is a unique area of the NHS as the services support predominantly healthy people through a natural, but very important, life event that does not always require doctor-led intervention." –National Audit Office (2013a, p. 5)*

Pregnancy and the early years are one of the priority areas of national policy. There is strong evidence to suggest that pregnancy up until the baby's second year of life are critical phases to brain development and later life (Allen, 2011; First 1001 Days All Party Parliamentary Group, 2015; The Marmot Review, 2010), as discussed in section 1.2.2. There are three stages of maternity care in the UK. The antenatal period starts from conception up to 40 weeks, where women should be in contact with health professionals for a minimum of six appointments (Public Health England and Department of Health, 2015); this is followed by the intrapartum period (i.e. birth), and the postnatal period, which is defined in government documents as up to eight weeks after birth (National Audit Office, 2013a; National Institute for Health and Clinical Excellence, 2006). In England in particular, the white paper *Five Year Forward View* (NHS England, 2014b) pledged to increase midwife numbers, review services such that women are given choice regarding their place of birth, and direct attention to preventive care. Although maternal and child health has markedly

improved, and considered safe, as reflected in the drop in all maternal mortality rates from 13.95 per 100,000 maternities in 2003-2005 to 11.39 per 100,000 maternities[1] in 2006-2008 (Centre for Maternal and Child Enquiries, 2011), to 8.54 per 100,00 maternities in 2012-2014 (Knight et al., 2016), the level to which women are satisfied with their care still requires improvement (Hunter, Berg, Lundgren, Ólafsdóttir, & Kirkham, 2008; Redshaw & Henderson, 2014).

A large narrative systematic review of 137 international studies exploring women's experiences of birth found that the quality of a woman's relationship with her caregiver is a predictor of women's satisfaction with the service (Hodnett, 2002). In addition, a large consumer evaluation of maternity services in Australia found that women (*N*= 3635) felt uninvolved in their care, and were concerned about the conflicting advice they received from their healthcare professionals (McKinnon, Prosser, & Miller, 2014). This study argued that interprofessional collaboration is important to the provision of high-quality maternity care, and women's views should be considered regarding how interprofessional collaboration could be improved (McKinnon et al., 2014). However, the inclusion of women's views regarding interprofessional collaboration remains limited to date (Penny & Windsor, 2017).

Moreover, the recent National Maternity Review (2016) shows that in England, although most women report general satisfaction with their care, concerns regarding care that they receive in the postnatal period remain. For example, whilst 97% of women have been seen at least once by a midwife at home, only 77% had access (i.e. having health professionals' contact details) to a named midwife or health visitor (National Maternity Review, 2016). Women also stressed the importance of good communication amongst health professionals, and are supportive of health professionals sharing information with each other (National Maternity Review, 2016). This has led to the National Maternity Review (2016) to recommend that professionals be provided tools to be able to share information (e.g. electronic maternity records), and importantly, be provided with shared training opportunities to lay the foundations for effective interprofessional collaboration.

[1] "Maternities are the number of pregnancies that result in a live birth at any gestation or stillbirths occurring at or after 24 completed weeks of gestation and are required to be notified by law" (Centre for Maternal and Child Enquiries, 2011, p. 28)

1.3.3 Health professionals' role in maternal and child health service delivery.

Midwives and health visitors have seen various changes to primary care services particularly during the 1990s where the NHS was reformed such that patient needs were at the centre of the service (Department of Health, 2006). Despite having different remits, both have been identified as key maternity care providers (Department of Health, 2009) and are encouraged to work in partnership (Chief Nursing Officers of England, Northern Ireland, 2011; Department of Health, 2011b). Each profession will be described in turn.

1.3.3.1 Midwifery: profession.

Midwives are involved with women and their families from pregnancy throughout childbirth, and offer support regarding medical care needs as well as health promotion (International Confederation of Midwives, 2011). The development of midwifery in the UK led to the regulation of midwives in 1902 (Forbes, 1971). Since then midwifery has seen many changes, including the shift in perceptions of birth from normal to medical and increasing birth rates, which has impacted the midwife's role (Hunter, 2012). From 1949 onwards, home births declined as hospital births increased, amidst NHS maternity care system changes. Furthermore, hospital and community midwifery services were commissioned separately, contributing to the complexity of the service, which was found to result in fragmented care (Hunter, 2012). Presently, clinical commissioning groups commission maternity services from NHS Trusts, and this is overseen by NHS England (National Audit Office, 2013a).

In the UK, the Nursing and Midwifery Council (2017) set the standard competencies required in order to obtain a midwifery qualification. Registered midwives are expected to provide women and families support from pre-conception through to the postnatal period (i.e. up to eight weeks after birth), using evidence to support their clinical practice (Nursing and Midwifery Council, 2010). They are responsible for undertaking health assessments, provide referrals to other services where necessary, and work with women and other health professionals to identify and address health and other support needs (Nursing and Midwifery Council, 2010). In order to register as a midwife in the UK, one must complete a midwifery education programme that is at least three years, at least half of which is spent in

supervised clinical practice and at least 40% of which is dedicated to theory of midwifery (Nursing and Midwifery Council, 2009).

The report *Midwifery 2020: Delivering Expectations* (Chief Nursing Officers of England, Northern Ireland, 2011) was a collaborative effort between all four UK states, and revisits the role of the midwife and the goals for the profession in the context of changes to the service structure. For instance, the report highlights that midwives are to lead the care of women with straightforward pregnancies, and to co-ordinate the care of these women with other health professionals as needs arise (Chief Nursing Officers of England, Northern Ireland, 2011). This demonstrates midwives' pivotal role in the care of pregnant women and their babies. Further, the same report highlights the role of interprofessional collaboration in providing positive maternity care experiences and improving maternal and child outcomes (Chief Nursing Officers of England, Northern Ireland, 2011). However, midwives are faced with challenges to achieving their role remit completely. For example, there is a reported shortage of midwives in England, which influences midwives' workload (Royal College of Midwives, 2016). Increased workloads which include administrative work were reported to result in reduced opportunities to care for women, and impede interprofessional collaboration (National Maternity Review, 2016).

1.3.3.2 Health visiting: profession.

Health visiting can be traced back to 1862, and has come a long way since the health visiting qualification was founded by the Ministry of Health in 1919 (Adams, 2012). Initially, UK health visitors were recruited to address the public health and support needs of those from poorer backgrounds and health visitors had the role of visiting mothers after birth to give health and hygiene advice. From the early part of the 20th century, their role was increasingly focussed on the health and wellbeing of mothers and their children and they were expected to have contact with women during their pregnancy, and played a role in children's care until they started school (Baldwin, 2012). Health visitors during the mid-20th century worked closely with medical officers of health, who were leads for public health, and their preventive role spanned all age groups.

By 1974 health visitors moved from local authorities to the NHS (Cowley et al., 2013). Regulation of health visiting was taken over by the Nursing and Midwifery Council (2004), and the professional title 'Health Visitor' was replaced with 'Specialist Community Public Health Nursing'. It has been argued that this change in regulation contributed to the decline of health visitors in the following years, and since then, there have been calls to reinstate health visiting as a professional practice under statutory law (Grimson, 2007). In 2010, increasing recognition of the evidence regarding the importance of the early years on child and life development contributed to the government plan in England to increase health visitor numbers (Cowley et al., 2013; Department of Health, 2009). The *Health Visitor Implementation Plan* set out to increase health visitor numbers in England by 50% by 2015 to address this lack of service capacity, as well as health visitor education (Department of Health, 2011b). The goals set out in this plan are reported to have been achieved (Department of Health, 2015), however, recent developments show that there has been a reduction in the number of full-time health visitors in real terms (NHS Digital, 2017), as also discussed in section 5.2.3.3.12, Chapter 5. Reductions in health visitor numbers negatively impact on interprofessional collaboration (National Maternity Review, 2016).

At present, health visitors will hold a Specialist Community Public Health Nursing qualification on order to practice health visiting, which involves 1-year structured programme of 50% supervised practice and 50% theoretical knowledge (Nursing and Midwifery Council, 2004). Health visitors are expected to be competent at identifying and addressing the health and wellbeing needs of families, which also involves collaborating with other professionals and agencies (Nursing and Midwifery Council, 2004). Moreover, the role of the health visitor focusses on the delivery of the *Healthy Child Programme* (Department of Health, 2009) and also includes child protection (NHS England, 2014b). This is achieved through the '4-5-6 model' of health visiting, whereby services are delivered across four levels, on five unique contact points, and across six care areas (NHS England, 2014a). The '4-5-6 model' is summarised in Figure 1.2.

4 Service levels	Community
	Universal
	Universal plus
	Universal partnership plus
5 Contact points	Antenatal
	New baby
	6-8 weeks
	1 year
	2-2.5 years
6 High impact areas	Transition to parenthood
	Maternal mental health
	Breastfeeding
	Healthy weight
	Minor illness and accident prevention
	Healthy 2-year-olds and school readiness

Figure 1.2. '4-5-6 model' of the health visiting service (adapted from NHS England, 2014).

Health visiting services are currently – as of 1 October 2015 – commissioned and funded through Local Authorities, which was anticipated to be beneficial in particular for integrating early years services (NHS England, 2014a). Unfortunately, Local Authorities have also seen 3.9% reduction in public health funding from central government since the transfer of health visiting services (Department of Health, 2016), which has resulted in decreased health visitor numbers as explained earlier in this section.

1.4 Theories and models for understanding interprofessional collaboration

This section outlines how interprofessional collaboration is characterised in the literature. It begins by describing the constructs that underpin interprofessional collaboration. A discussion of the various theories and models for understanding interprofessional collaboration follows. This includes a brief explanation of interorganisational integration, in order to identify the position of interprofessional collaboration in the wider context. This is followed by suggestions regarding extending the understanding of midwife-health visitor collaboration, particularly through the application of theoretical frameworks drawn from health psychology. Throughout this section, examples of how these constructs or theories or models can be applied to midwife-health visitor collaboration are offered.

1.4.1 Core constructs concerning interprofessional collaboration and interorganisational integration.

1.4.1.1 Interprofessional collaboration - definition(s), concepts, and constructs.

D'Amour and colleagues (2005) summarised the core concepts concerning interprofessional identified in the academic literature. Following a systematic literature search, they found 27 papers for inclusion in the review, which was organised into two broad categories: 1) papers concerning collaboration concepts and definitions (n= 17), and 2) papers concerning collaborative care frameworks (n= 10). The first category is discussed below, with the papers concerning collaborative care frameworks described in section 1.4.2.

Two dimensions relating to definitions of collaboration were drawn from D'Amour et al.'s (2005) analysis. The first dimension: *Collaboration*, or the types of

interactions between actors, and teams, or the context in which the collaborative work takes place. The collaboration dimension commonly involves four concepts: sharing, partnership, interdependency and power, each of which is summarised in Table 1.1. The second dimension identified in this review – *Team* – includes teamwork as the essential condition in which collaborative care is delivered. Concepts related to *team* are summarised in Table 1.2. It was observed that there were multiple terms used to understand team structure and its functions (see Table 1.1 for a summary), and these were used interchangeably and were not clearly defined (D'Amour et al., 2005), as previously found in the literature (Leathard, 2003a).

Table 1.1. Concepts relating to collaboration (D'Amour et al., 2005).

Concept	Definition
Sharing	Shared decision making, philosophy, planning, responsibility, data (one or a combination)
Partnership	Two or more people collaborating towards a common goal, relationship grounded in trust and respect
Interdependency	Acknowledgement of individual expertise and contributions, common desire of addressing patient needs
Power	Empowering each participant, sharing power amongst the team (i.e. shared power is based on knowledge and experience); cannot be untangled from collaboration as a process

Table 1.2. Concepts relating to team (D'Amour et al., 2005).

Concept	Definition
Multidisciplinary team	Different professionals working in parallel on the same project
Interdisciplinary team	Different professionals exerting effort to integrate with some flexibility in professional boundaries; may share a common space
Transdisciplinary team	Open (almost no) professional boundaries; professionals actively exchange knowledge and skills

D'Amour et al. (2005) argue that terms referring to *team* were related to the extent of collaboration taking place. Furthermore, collaboration was identified as a process through which those involved in the collaborative relationship interact with each other and contribute to the relationship in unique ways (D'Amour et al., 2005). For example, they observed that clients are involved in the collaborative process, and may be part of the decision-making process. Previous research of various healthcare teams (e.g. acute care, community care) indicate that health professionals can espouse varying philosophies of teamwork which can either be beneficial or detrimental to the functions of the team (Freeman, Miller, & Ross, 2000). Such conflicts are negotiated as professionals become familiar with each other as the team undergoes relationship building (Axelsson & Axelsson, 2006). Moreover, there is evidence to suggest that clients may be unaware of collaborative efforts, and may even perceive the team as a barrier to engaging with other professionals (D'Amour et al., 2005).

D'Amour et al. (2008) developed a tool through which collaboration could be analysed that is based on the structuration model of collaboration that they developed. This is comprised of four dimensions (with 10 indicators): Shared goals and vision (indicators: goals, client-centred orientation vs. other allegiances), internalisation (indicators: mutual acquaintanceship, and trust), formalisation (indicators: formalisation tools, information exchange), and governance (indicators: centrality, leadership, support for innovation, connectivity) (D'Amour et al., 2008). The relationship between each of these four dimensions is depicted in Figure 1.3.

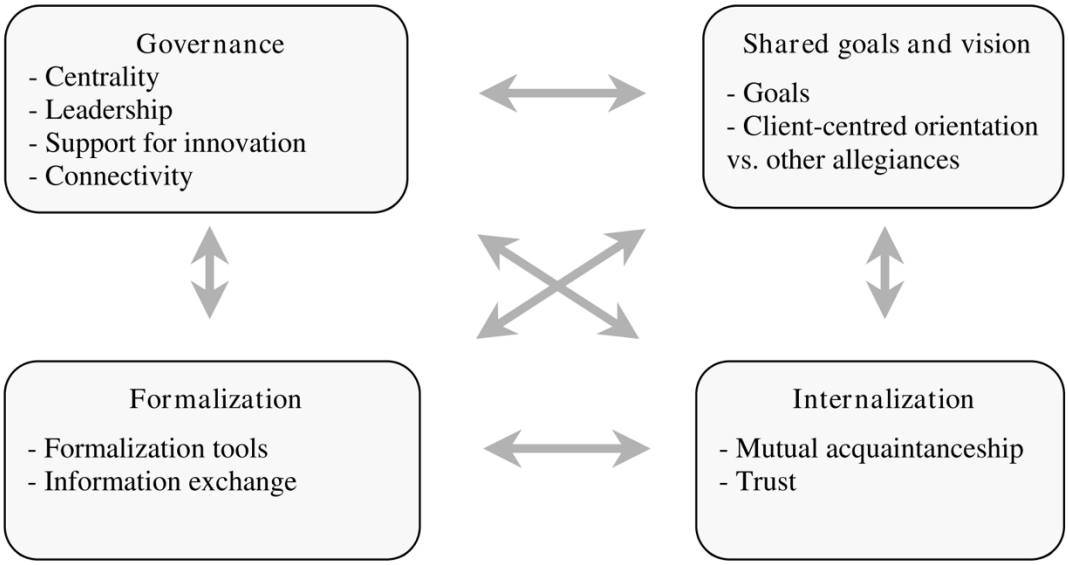

Figure 1.3. Four-dimensional model of collaboration (used with permission from D'Amour et al., 2008).

Each of the indicators are scored using a 3-point scale, where a score of one illustrates potential or latent collaboration, two illustrates developing collaboration, and three illustrates active collaboration. The tool is useful in that it provides visual representations of the extent to which each of the indicators are successfully achieved through Kiviat graphs, an example of which is presented in below. For a detailed discussion, see D'Amour et al. (2008, 2004).

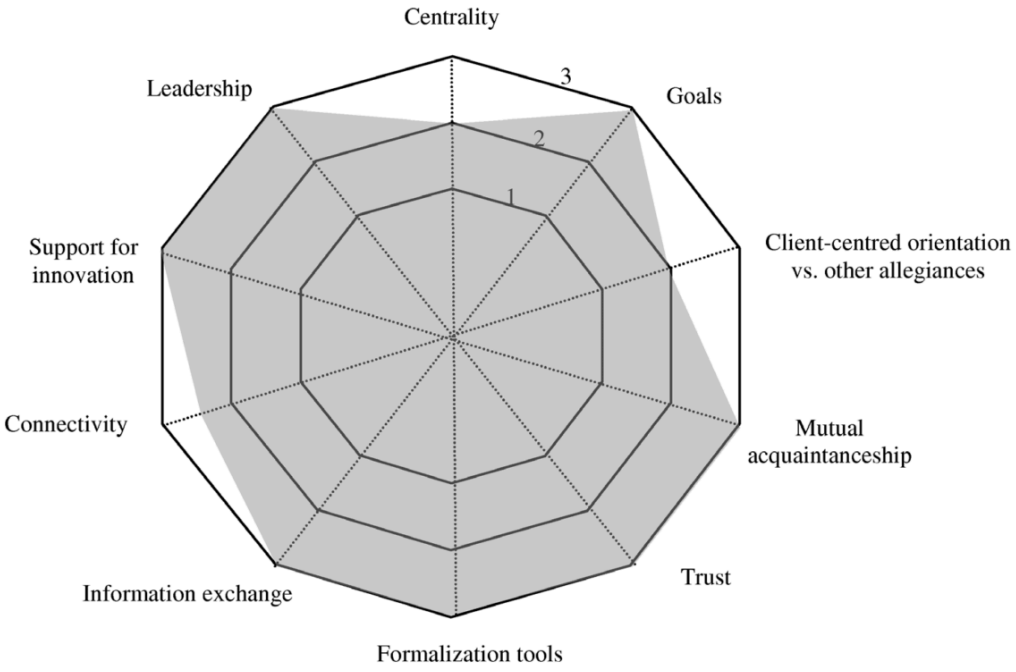

Figure 1.4. Kiviat graph example (used with permission from D'Amour et al., 2008).

1.4.1.2 Interorganisational integration – definition(s), concepts and constructs.

In recognition of organisational researchers' apparent focus on individuals in organisations, Lawrence and Lorsch (1967) proposed shifting the focus of research to the wider organisations, at the same time acknowledging individuals as "feeling, reasoning, and motivated beings" (p. 3). In this seminal work, they defined integration as a "process of achieving unity of effort among the various subsystems in the accomplishment of the organization's task" (Lawrence & Lorsch, 1967, p. 4), and differentiation as the division of the organisation into unique subsystems which include individuals' behavioural characteristics that feed into this.

Integration has also been defined as the pursuit of connecting health systems with human service systems, with the goal of improving outcomes (Leutz, 1999). Utilising evidence drawn from acute and long-term care settings in the USA and UK, integration is said to occur at various levels (e.g. policy, clinical), and can be achieved through various means including joint planning, purchasing, and training (Leutz, 1999). Similarly, other identified constructs underlying collaborative working include: Shared vision, shared governance, government infrastructure, supportive legislation for health and education sectors, dedicated funding and

resources and strong linkages between academia and clinical sites (World Health Organization, 2013).

Leutz (1999) argues, using acute and long-term care settings as an example, that there are three levels of service integration: Linkage, coordination, and integration. The level of integration required relies on four needs domains, and seven operational domains (Leutz, 1999). *Linkage* relates to the understanding of the needs of patients without reliance on external systems, such as referrals and follow up. Considered more structured than linkage, coordination is when service users receive care from two systems of care either simultaneously or sequentially on either a short or long-term basis. An example of this is when women are discharged from midwifery care to health visiting services where a transition between care settings takes place (Public Health England and Department of Health, 2015).

Meanwhile, Axelsson and Axelsson (2006) identified that the literature concerning collaboration in public health and welfare services can cause confusion due to the variety of terms used and the lack of clarity in defining relevant constructs. As such, they developed a framework of interorganisational collaboration and integration in the context of public health, as informed by organisational theory (Axelsson & Axelsson, 2006) to help simplify the understanding of the complex nature of public health. A schematic of this framework is provided in Figure 1.5.

		Horizontal integration	
		-	+
Vertical integration	-	Cooperation	Coordination
	+	Contracting	Collaboration

Figure 1.5. Forms of integration (adapted from Axelsson & Axelsson, 2006).

Building on from previous work, Axelsson and Axelsson (2006) argue that there are two dimensions of integration: 1) Vertical integration which relates to integration between hierarchically different units or departments (e.g. NHS

England's CCGs and Primary Care), and horizontal integration which relates to the integration between units that are hierarchically the same (e.g. NHS local public health services and community services). A combination of these two axes reveals four possible forms of integration, which reflect either low or low integration on both dimensions; or high vertical integration and low horizontal integration; or high horizontal integration and low vertical integration. Public health organisations sit somewhere between co-operation and collaboration, a position which has been argued to be associated with the level of differentiation and government involvement. This illustrates the complicated nature of achieving inter-organisational collaboration, which is highly influenced by the extent to which horizontal integration is needed (Axelsson & Axelsson, 2006).

Using Axelsson and Axelsson's (2006) model of integration and collaboration, midwives' and health visitors' relationship can be categorised under *coordination*, where there is low vertical integration and high horizontal integration. Currently there is low integration between midwifery and health visiting services as both professions are under the control of different authorities as discussed in sections 1.3.3.1 and 1.3.3.2. Midwife-health visitor collaboration can be considered of high horizontal integration, where women (i.e. service users) receive two different services simultaneously and/or sequentially dependent on need (Public Health England and Department of Health, 2015). In addition, using Leutz' (1999) model, looking at the needs dimension in particular, coordination seems to relate closely to the current context of midwife-health visitor collaboration in the UK in that these professionals work together with women who may have moderate/severe needs; work with them either for the short or long-term, provide mostly routine care, and cover a moderate-broad range of services and have varied levels of self-direction. Based on Axelsson and Axelsson's (2006) work, midwives and health visitors are considered a 'multidisciplinary team' (along with other health professionals), from different organisations who have shared interests and goals, and also offer a range of services. Co-ordinated services are therefore expected to: provide screening services at key points to identify support needs, be knowledgeable of key professionals to link patients to, deliver smooth transition of care, provide patient information to involved professionals routinely, have access to case managers or liaisons, decide on who will bear costs, and deal with benefits to ensure the delivery of appropriate coverage.

The enactment of the *Health and Social Care Act* (United Kingdom, 2012) introduced service commissioning changes in a bid to respond to rising demands and costs, quality improvement needs, and funding issues. In particular, commissioning of children's public health services, previously commissioned by NHS England and of which health visiting is a part, became the responsibility of local authorities (from 1 October 2015). Maternity services, on the other hand, are commissioned by CCGs. Although one of the themes of the *Health and Social Care Act* is aimed at improving service integration, having different funding bodies can present challenges to midwives and health visitors working together as costs for working collaboratively are not clearly set out (NHS Future Forum, 2012; United Kingdom, 2012). For example, it is not clear who bears the costs of joint meetings, should midwives and health visitors decide to meet to discuss women who are under their care. The NHS Future Forum (2012) report found that collaboration between local authority and NHS services were challenging placed within local NHS services, such as financial constraints. Accordingly, previous research indicates that the more differentiated services are, the more difficult integration becomes (Lawrence & Lorsch, 1967). Thus, differences in service commissioning and consequently fragmentation in responsibilities (Axelsson & Axelsson, 2006) can make it more difficult for midwives and health visitors to work collaboratively.

Calls for (good) application of theory in the interprofessional field have been repeatedly made in the last decade (Reeves & Hean, 2013), similar to many other areas of research including health psychology (Michie, Rothman, & Sheeran, 2007) and maternal health (Ayers & Olander, 2013). The literature discussed thus far illustrated the core constructs concerning interprofessional collaboration and interorganisational integration. What follows is a discussion on the theories informing these frameworks. A theory is defined as "a consistent and well-defined framework to test a falsifiable hypothesis about the real world" (Suls et al., 2011, p. 18). In particular, this discussion covers the following theories: systems theories and organisational theories. Each of these will be discussed sequentially. This section also offers a new perspective by critically examining the potential role of health psychology in advancing research concerning interprofessional collaboration.

1.4.2 Theories as applied to interprofessional collaboration.

There are a number of theories applied to the exploration of interprofessional collaboration as identified in previous research (D'Amour et al., 2005; Reeves et al., 2007; Suter et al., 2013). In D'Amour et al.'s (2005) review for example, the authors identified seven theoretical frameworks for collaboration, a number of which were based on organisational theory (N= 2), organisational sociology (N= 1) and social exchange theory (N= 2). Two others were empirically driven frameworks. A summary is provided in Table 1.3.

Table 1.3. Identified theoretical frameworks of collaboration (adapted from D'Amour et al., 2005).

Overarching theory (where applicable)	Theoretical framework	Author (year)
Organisational theory	Model of team effectiveness	West, Borrill & Unsworth (1998)
	Analytical framework of interdisciplinary collaboration	Sicotte, D'Amour & Moreault (2002)
Organisational sociology	Structuration model of interprofessional collaboration	D'Amour, Sicotte & Lévy, (1999); D'Amour, Goulet, Pineault & Labadie (2004)
	Structuration model of interorganizational collaboration	D'Amour, Goulet, Pineault & Labadie (2004)
Collaboration and social exchange theory	Five-stage model of collaboration	Gitlin, Lyons & Kolodner (1994)
	Interdisciplinary Alliance Model	Hayward, DeMarco & Lynch, 2000
Models not based on theory	Conceptual model of collaborative nurse-physician interaction	Corser (1998)

Overarching theory (where applicable)	Theoretical framework	Author (year)
	Certified nurse-midwife, physician and client collaborative cycle	Miller (1997)

D'Amour et al.'s (2005) review shows that theoretical frameworks explaining interprofessional collaboration have either used organisational or sociological theories. None of these were applied to maternal health, and none specifically to midwife-health visitor collaboration. Suter and colleagues (2013) found more recently, however, that theories informing interprofessional collaboration focus largely on social psychology and adult learning. The authors recommended the increased use of systems and organisational theories for understanding interprofessional collaboration, and demonstrated these theories' relevance in particular for illuminating how organisational structures impact on interprofessional collaboration (Suter et al., 2013). Both systems and organisational theories are briefly explored in the subsequent sections.

1.4.2.1 Systems theories.

Systems theories posit that organisations are interdependent and dynamic, with each part impacting on the rest of the system (Suter et al., 2013). It was originally developed by Ludwig von Bertalanffy, upon recognising the "obvious" (1968, p. 12) gaps within biological research and theory. Examples include complexity theory and chaos theory, which look at the interactions between the subsystems (i.e. organisations) to make sense of the events in the entire system. To date, the use of systems theory in interprofessional collaboration research has been reportedly low (Suter et al., 2013; Thompson, Fazio, Kustra, Patrick, & Stanley, 2016). In Thompson and colleagues' (2016) review, only 23% were found to explicitly apply complexity theory to explore interprofessional collaboration. Seven studies applying systems level theories were identified in a previous review (Suter et al., 2013).

1.4.2.1.1 Organisational theories.

Modern organisational theories are categorised into systems theories, and both are used in health research (Suter et al., 2013). Organisational theories usefully lend themselves to the context of this thesis as these concern the investigation of organisations at both macro (i.e. structural relations) and micro (i.e. individual behaviours) levels (Suter et al., 2013). A review of studies on the associations between culture and performance has found that there is some evidence that strong relationships between professional groups are associated with effectiveness, particularly in crisis units. These studies demonstrate that altering organisational culture can affect individual behavioural performance (Scott, Mannion, Marshall, & Davies, 2003).

Whilst neither systems nor organisational theories have been used specifically to explore midwife-health visitor collaboration, the consideration of these theories may have potential benefits. In particular, systems/organisational theories can help to gain insight into the issues beyond the individual that might influence interprofessional collaboration such as the accessibility of interprofessional training opportunities within an organisation, or an organisation's goals and interests (Suter et al., 2013). A knowledge of such influences can be helpful for identifying where it is most useful to intervene at an individual/behavioural level.

1.4.2.2 A critical perspective of theories for understanding interprofessional collaboration.

Based on the discussion in the preceding sections, it is apparent that there is a wealth of knowledge existing regarding interprofessional collaboration. In particular, the drivers of collaboration have been researched extensively, however, provision of clear definitions of 'constructs' 'domains' and 'concepts' in theorising collaboration is still in development. In addition, research into interprofessional collaboration has largely focussed on organisational theories (D'Amour et al., 2005; Suter et al., 2013).

Interestingly, in spite of the plurality of concepts identified in the literature, parallels across these models exist (D'Amour et al., 2005). For example, environmental factors which influence interprofessional collaboration were

identified, although the influential factors did vary across the models. In addition, interactions were considered in the models reviewed, but were considered differently by the authors (e.g. some considered interaction as integral to the collaborative process, and some considered it as one of multiple integral factors influencing interprofessional collaboration). Equally, the models evaluated in this review had unique characteristics. For example, authors differed in the ways in which they described collaborative processes (i.e. how professionals, in practice, work together). Some referred to these processes as a group process or a negotiation process. Others offered a different way to explain interprofessional collaboration processes by suggesting that it occurs in stages (D'Amour et al., 2005). However, none of these appeared to refer to individuals' behaviours, and the effects of such actions on interprofessional collaboration as a complex behaviour. This finding highlights the importance of exploring interprofessional collaboration as a health professional behaviour. A discussion of a novel approach to exploring this research area capitalising on health psychology theory now follows.

The Medical Research Council (MRC) guidance for developing and evaluating complex interventions (Craig et al., 2006) provides recommendations concerning the selection of suitable methods within the parameters of the context in which these interventions are developed including the state of the existing knowledge. According to this guidance, the development and evaluation process has four key stages: 1) development, 2) feasibility/piloting, 3) evaluation, and 4) implementation. This is summarised in Figure 1.6 below.

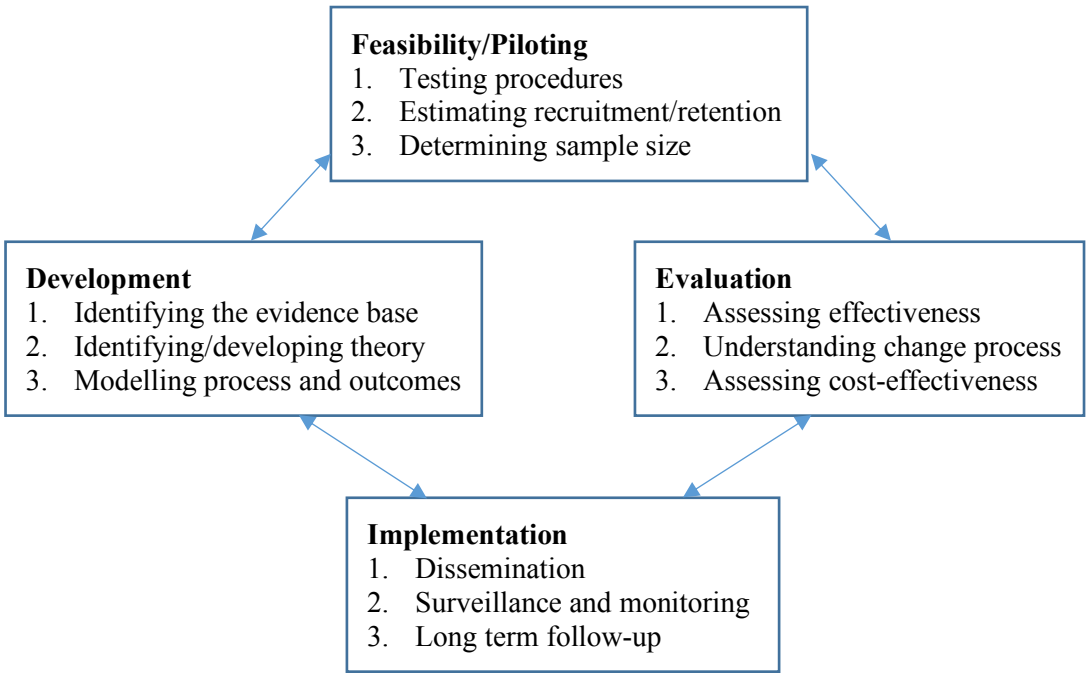

Figure 1.6. Elements of the development and evaluation process (adapted from Craig et al., 2006).

Aligned with this guidance, the focus of this PhD thesis is the *development* phase, synthesising and expanding the evidence base for the development of interventions to enhance midwife-health visitor interprofessional collaboration. This involves the following: 1) evaluating the evidence relating to the area of interest, 2) selecting or developing a theoretical framework to inform the intervention, and 3) modelling a complex intervention before going forward (Craig et al., 2006). This thesis focusses on evaluating the evidence concerning midwife-health visitor collaboration (e.g. Chapter 2), as well as expanding current models for understanding the processes relating to this (e.g. Chapter 6).

Considering these best practices, the Theoretical Domains Framework (TDF, Michie et al., 2005) is particularly useful tool for understanding health professional behaviours. A synthesis of 33 psychological theories, it offers a comprehensive framework to systematically identify perceived influences that may act as barriers and/or enablers to performing a specified behaviour (Atkins et al., 2017). In the case of this thesis, that would be interprofessional collaboration. The TDF is also useful for deciding which theory of behaviour change could be the best fit for explaining and modifying health professional behaviours thereby guiding intervention

development (Atkins et al., 2017; Islam et al., 2012), in accordance with MRC guidance. Another strength of using the TDF lies in its applicability to a broad range of contexts. For example, the framework has been used to understand healthcare professional behaviours in areas such as blood transfusion (Islam et al., 2012), trauma services redesign (Roberts, Lorencatto, Manson, Brundage, & Jansen, 2016), smoking cessation in pregnancy (Beenstock et al., 2012), and obesity in pregnancy (McParlin, Bell, Robson, Muirhead, & Araújo-Soares, 2017) using various research methods. Using the TDF provides the opportunity to offer a response to the questions: what are the barriers and enablers to interprofessional collaboration for midwives and health visitors?, and in what areas can interventions be developed to enhance collaborative working between these professional groups? The framework is described in further detail in section 3.2.1, Chapter 3.

Following the discussion above of systems/organisational theories it is proposed to use the TDF in the context of systems/organisational theory and a critical realist perspective to support the development of understanding of interprofessional collaboration. Its specific contribution lies in expanding the understanding of interprofessional collaborative behaviours between midwives and health visitors, and allowing for the identification of factors that are perceived to be important or influential to collaborative working. In turn, this can inform the wider interprofessional field particularly in the arena of practice-based intervention development.

Beyond the application of theoretical frameworks for understanding interprofessional collaboration as a healthcare professional behaviour, within this thesis, intervention components are also considered, in line with the development stage (modelling processes) of the MRC guidance. Prior to testing whether an intervention is feasible, it is critical to consider intervention design, specifically, intervention components (including the hypothesised mechanisms of change), how these can be implemented, and for whom the intervention will be useful (Craig et al., 2006). As such, behaviour change techniques, the ‘active ingredients’ shaping behaviour change interventions (Dombrowski, O’Carroll, & Williams, 2016; Michie et al., 2013), are also considered in this thesis (section 6.4.5). The Behaviour Change Taxonomy (Michie et al., 2013) is a comprehensive, standardised classification of

behaviour change techniques which can aid intervention development (Michie et al., 2013). This taxonomy of 93 behaviour change techniques categorised into 16 groups is applicable to a broad range of behaviours (Michie et al., 2013) including clinician behaviours (French et al., 2012; Taylor, Lawton, Slater, & Foy, 2013). In addition, the Behaviour Change Taxonomy has been used in combination with the TDF in a number of studies (French et al., 2012; Steinmo et al., 2015; Taylor et al., 2013), thus it was deemed appropriate for purpose in the context of the present research.

1.5 Aims and objectives

This chapter detailed the existing literature concerning interprofessional collaboration, and related this to current directives that promote collaborative between midwives and health visitors in providing maternity services. This also highlighted the gap in the literature that the understanding of the underlying processes involved in interprofessional collaboration as a health professional behaviour (as defined in section 3.4.2, Chapter 3) remains limited. Thus, the overarching aim of this PhD research is to explore the processes underlying interprofessional working relationships between midwives and health visitors in UK maternity services.

Linked with this aim are the following research questions:

1. How do midwives and health visitors collaborate in maternal and child health services?
2. What are midwives' and health visitors' experiences of interprofessional collaboration?
3. What are women's experiences of midwife-health visitor collaboration?
4. Does the collaborative relationship between midwives and health visitors need strengthening and if so, how?

In order to meet the overarching research aim, the specific project objectives were to:

1. Systematically review the literature concerning interprofessional collaboration between midwives and health visitors;
2. Identify the barriers and enablers to interprofessional collaboration between midwives and health visitors;

3. Apply psychological theory to develop a conceptual framework of understanding interprofessional collaboration between these two groups, and
4. Explore women's views and experiences of collaborative care as provided by midwives and health visitors.

This study's original contribution to the literature includes a critical examination of midwife-health visitor interprofessional collaboration in England, drawing evidence from relevant stakeholders and the existing body of evidence, as well as the provision of a new lens of understanding this complex behaviour using psychological theory.

1.6 Thesis overview

This thesis contains eight chapters, which began with this introduction to the PhD study. The remaining chapters are outlined below:

- Chapter 2, provides an in-depth examination of the international evidence base relating to collaborative working between midwives and health visitors. It identifies the key areas of collaboration between these health professionals and considers the barriers and facilitators to interprofessional working in the selected literature. Finally, it sets out to discuss the gaps in the current evidence base, forming the basis for the next phases of this thesis.
- Chapter 3, details the method to the qualitative interview studies which explore midwives' and health visitors' barriers to collaborative working using the Theoretical Domains Framework.
- Chapter 4, presents the findings from an interview study with midwives and health visitors using the Theoretical Domains Framework, focussing on midwives' perceived barriers and enablers to interprofessional collaboration.
- Chapter 5, presents the findings from an interview study with midwives and health visitors using the Theoretical Domains Framework, focussing on health visitors' perceived barriers and enablers to interprofessional collaboration.
- Chapter 6, compares the findings from Chapters 4 and 5, making suggestions for potential areas of intervention using behaviour change techniques. This chapter also provides alternative models of interprofessional collaboration, using data drawn from the preceding chapters and the wider literature.

- Chapter 7, concerns the final study which forms this thesis. This study explored women's experiences of maternity care as collaboratively delivered by midwives and health visitors in England. This study was developed in response to the noted absence of users' perspective in the interprofessional collaboration literature.
- Chapter 8, summarises and discusses the key findings from this body of work in relation to the existing literature to demonstrate its unique contribution to interprofessional collaboration literature. In addition it discusses the strengths and limitations of the research, the implications of the research findings, and closes by giving suggestions for future research.

2 A systematic review of midwives' and health visitors' collaborative relationships[2]

2.1 Introduction

This chapter aims to present a systematic review concerning midwives' and health visitors' collaborative working relationships in maternal and child health services. This is the first step in addressing the overall thesis aim, which is to explore the processes underlying interprofessional working relationships between midwives and health visitors in UK maternity services. The roles of midwives and health visitors in the context of maternal and child health services will be outlined, and will include a brief discussion of the international equivalents of health visitors. The systematic review synthesises international evidence concerning collaboration between midwives and health visitors. Specifically, the areas or settings in which collaboration occurs, the methods which these health professionals employ to facilitate collaboration, the available evidence for the effectiveness of these professionals' collaborative relationships, and finally, the evidence for collaborative practice between midwives and health visitors meeting current policies and practice guidelines. Drawing from the findings of this published narrative systematic review (Appendix A), suggestions are made in relation to improving the quality of research and clinical practice.

2.1.1 Midwifery and health visiting practice

Throughout history, midwives have been tasked with the care of women in pregnancy (King, 2012). Presently, a recognised midwife will have completed approved training in the country of practice based on the International Confederation of Midwives' (2011) essential competencies, and have adequate registration or licensure to practice as a 'midwife'. According to the International Confederation of Midwives (2011), midwives provide women with support throughout pregnancy and the postpartum period (i.e. the 6-8-week period after birth), which should also include health promotion. In the UK, there is evidence to suggest that, whilst most midwives welcome a public health role (Bennett et al., 2001), their ability to fulfil

[2] This systematic review draws heavily from, and in parts, verbatim from the following published article: Aquino, M. R. J. V, Olander, E. K., Needle, J., & Bryar, R. (2016). Midwives' and health visitors' collaborative relationships: A systematic review of qualitative and quantitative studies. *International Journal of Nursing Studies*, *62*, 193–206. https://doi.org/10.1016/j.ijnurstu.2016.08.002

this aspect of their profession can be challenged either by the breadth of the scope of health promotion (Beldon & Crozier, 2005; Lee, Haynes, & Garrod, 2012), or a lack of time, resources (Lee et al., 2012) or familiarity with the requirements to adequately implement the role (Bennett et al., 2001).

Health visitors, on the other hand, are known in the UK as trained professionals in nursing and/or midwifery, who will have had specialist training in community public health nursing (NHS England, 2014a). They are key providers to families with children from 0-5 years, and provide health support and advice to these families (NHS England, 2014a). Health visitors in England are expected to be in contact with families for at least seven unique time points, from pregnancy until the child is 4.5 years of age (NHS England, 2014a), as part of a universal service provided, as detailed in Figure 1.2, Chapter 1. The number of these contacts varies upwards of seven in Scotland (The Scottish Government, 2015), Wales (NHS Wales, 2015) and Northern Ireland (Department of Health Social Services and Public Safety Northern Ireland, 2010). International equivalents of health visitors such as Child and Family Health Nurses (Australia), health visitors or Sygeplejefaglig Diplomeksamen som sundhedsplejerske (Denmark), Plunket nurses (New Zealand), and Public Health Nurses (Canada) play a similar role, caring for women, their babies and families. Their role, as with UK health visitors, has a specific focus on child health, health promotion and early intervention, and caring for the mother after birth (Barimani & Vikström, 2015; Penny, 2015).

In the UK, both midwives and health visitors have seen many changes throughout the history of their clinical practice (Bryar & Bannigan, 2003; Cowley et al., 2013). Today, both are called upon to facilitate maternal and child health services, with the ultimate goal of delivering holistic care, thereby improving public health outcomes. For example, the report *Standards for Maternity Care: Report of a Working Party* (Royal College of Obstetricians and Gynaecologists, 2008), emphasises the importance of collaboration during the early stages of pregnancy and pre-pregnancy to ensure the health of women and their babies, the impact of which is known to extend to the child's later years (see Standards 1.1-1.4). The international community also advocates collaboration in maternity care (World Health Organization, 2013; World Health Organization Regional Office for the Western

Pacific, 1997). One such example is the Australian Government which has published national guidelines on achieving collaboration in maternity care (Australian Government National Health and Medical Research Council, 2010). Furthermore, the UK Royal College of Obstetricians and Gynaecologists (2008) report also emphasised the importance of collaborative care for women with social needs. For example, as cited in Standard 7.6, a named team comprising a specialist midwife and/or obstetrician, social worker and a health visitor, should deliver care to women suffering from alcohol and drug problems (Royal College of Obstetricians and Gynaecologists, 2008). Additionally, the UK midwifery and health visiting services overlap at three key time points, as per their service specifications: in the antenatal period, after birth, and towards the end of the postpartum period (National Audit Office, 2013a; NHS England, 2014a). Linking up services shows promise, though clarity in operationalising collaboration and service integration is yet to be achieved (Dickinson, Attawell, & Druce, 2009). Thus, a synthesis of the evidence relating to midwife-health visitor collaboration is warranted.

2.1.2 Review aims

This systematic review aimed to synthesise the evidence concerning interprofessional collaborative practice between midwives and health visitors, spanning the entire perinatal period, "generally defined as the interval between the decision to have a child and one year after the birth" (Rodríguez & Rivières-Pigeon, 2007, p. 1). The specific review questions were:

1. In what ways (i.e. areas of practice/settings) do midwives and health visitors communicate and work collaboratively?
2. What methods of collaborative working and communication do midwives and health visitors employ?
3. How effective is the collaboration between midwives and health visitors?
4. Do the identified examples of communication and collaboration between midwives and health visitors adhere to policy recommendations and guidelines?

Conclusions drawn from this review informed the rest of the empirical work conducted as part of this PhD, and offer recommendations for policy development

and maternal and child health practice, through the identification of good practice examples that are in accordance with current scientific evidence.

2.2 Method

2.2.1 Review registration

In accordance with the Preferred Reporting Items for Systematic Review and Meta-analysis Protocols guidelines (PRISMA-P, Shamseer et al., 2015), this systematic review was registered with the International Prospective Register of Systematic Reviews (PROSPERO) on 18th March 2015 (Registration number: CRD42015016666, see Appendix B). PROSPERO records were updated on 8th December 2016 to reflect completion of this review following its publication.

2.2.2 Search procedure

The literature search took a two-pronged approach. First, electronic databases were searched. This was followed by contacting key authors, relevant research mailing lists and citation searches (i.e. backward and forward referencing). The search strategy was developed in accordance with the Centre for Reviews and Dissemination's (CRD, 2009) recommendations, and with guidance from members of the research team (EO, JN, RB) and a specialist librarian. Each of these searches will be discussed in turn.

2.2.2.1 Electronic database searches

Fourteen electronic databases were searched for this systematic review. These were selected with the guidance of a specialist librarian, and finalised following conducting pilot searches in December 2014. The electronic database searches were completed in January 2015. The electronic databases searched were the following:

1. EMBASE, 1974- January 2015
2. Global Health, 1973- January 2015
3. MEDLINE, 1946- January 2015
4. Maternity and Infant Care (MIDIRS), 1971-January 2015
5. CINAHL, all (no time limiters)
6. PsycARTICLES, all (no time limiters)
7. PsycINFO, all (no time limiters)
8. SocINDEX, all (no time limiters)

9. Social Policy and Practice (1890s to present)
10. POPLINE (no time limiters)
11. TRIP (no time limiters)
12. Cochrane Library (no time limiters)
13. SCOPUS (no time limiters)
14. British Library EThOS (no time limiters)

2.2.2.2 Subsequent searches

Further papers were sought through conducting citation searches (i.e. backward and forward referencing), as well as consulting key authors in the field and relevant research mailing lists (see Appendix C and Appendix D, respectively). These searches were completed in June 2015. In addition, literature searches were conducted in July 2017, to allow newer literature to be examined for inclusion in the review. In the literature search update conducted in 2017, none of the key authors and mailing lists in the initial search were contacted, and no citation searches were conducted. The search terms were tailored according to each database. Full search strings for each database are provided in Appendix E.

To facilitate an inclusive search, no restrictions were placed in terms of study design, meaning both quantitative and qualitative studies were eligible for this review. Further, both published and unpublished studies were searched. The only search limit implemented was the English language filter. Studies were included if these met at least one of the specified inclusion criteria, as presented in Table 2.1.

Table 2.1. Eligibility criteria.

Inclusion criteria
Studies which explore the areas of practice in which midwives and health visitors work collaboratively
Studies which explore the methods that midwives and health visitors employ when communicating and collaborating with each other
Studies which explore the effectiveness of collaboration between midwives and health visitors
Studies which explore whether collaborative practice between midwives and health visitors adhere to policy recommendations and guidelines
Exclusion criteria
Animal studies, study protocols, conference proceedings, editorials and opinion pieces or commentaries, reports, reviews, news items
Studies that do not involve midwives and/or health visitors
Studies not written in the English language

2.2.2.3 Article identification and selection

Following the searches, all identified records were exported to a reference management software, EndNote X7 (Thomson Reuters, n.d.). Article identification was approached by having two raters (RA, EO) independently screen titles and abstracts generated from the searches against the full eligibility criteria. Interrater agreement was calculated for every 10% of the records screened, and at 40% an interrater kappa agreement value of $\kappa = 0.68$ was achieved. After which, the author independently screened the remaining 60% of the titles and abstracts drawn from the literature search. Full-texts of articles deemed to meet the review's eligibility criteria were accessed and were screened by the author against the full eligibility criteria, and any uncertainties were resolved through discussion with the research team (EO, JN, RB).

2.2.2.4 Quality assessment

To determine the strength of the evidence collated in this review, all articles retained were assessed for study quality. Qualitative studies were assessed using the Critical Appraisals Skills Programme (CASP) Qualitative Checklist (Appendix F), whilst quantitative studies were assessed using the Center for Evidence-Based

Management (CEBMa) Appraisal of a Survey Checklist (Appendix G). Where a study had both quantitative and qualitative data, both tools were used. The CASP qualitative checklist was selected as this is a widely-used study appraisal tool, which was developed specifically for assessing healthcare evidence (Critical Appraisal Skills Programme, 2013). The CEBMa checklist was selected as it is specifically designed for the appraisal of surveys (Center for Evidence Based Management, n.d.). Two members of the research team (RA, JN) assessed all studies included for methodological quality, and disagreements were discussed until a consensus was reached.

2.2.2.5 Data extraction and synthesis

In keeping with Centre for Research and Dissemination's (CRD, 2009) recommendations, data extraction forms developed for this review were piloted by two coders (RA, JN) to ensure all relevant information pertaining to the review objectives were gathered. One researcher (RA) extracted all the data from the included studies, with another member of the research team overseeing and checking the data extraction process (JN). The key findings were synthesised, in accordance with the review's aims. Multiple tools were used, including groupings and clusters and tabulation, in accordance with Popay et al.'s (2006) guidance on conducting narrative syntheses. Each of these findings is discussed in relation to each review question in the following section.

2.3 Results

The electronic database searches in 2015 generated 5,329 articles. Backward and forward reference searches in 2015 (i.e. citation searches) generated 155 further articles. In the original search in 2015, no other records were identified from contacting mailing lists. Two further records were identified from contacting key authors in 2015, however these were already identified in the database searches. In addition, the updated search conducted on 8th July 2017 generated 2,057 new records, which sum to 7,541 papers for screening. There were 7,293 articles excluded after screening the title and abstract for relevance against the full eligibility criteria. Following full-text screening of the remaining 248 records, 19 articles (16 studies) met the eligibility criteria and were included in the synthesis. Eighteen of

these were from the original search, and one was from the updated search which is a published article of an unpublished PhD thesis that was part of the original 18 articles. The study selection flowchart is presented in Figure 2.1.

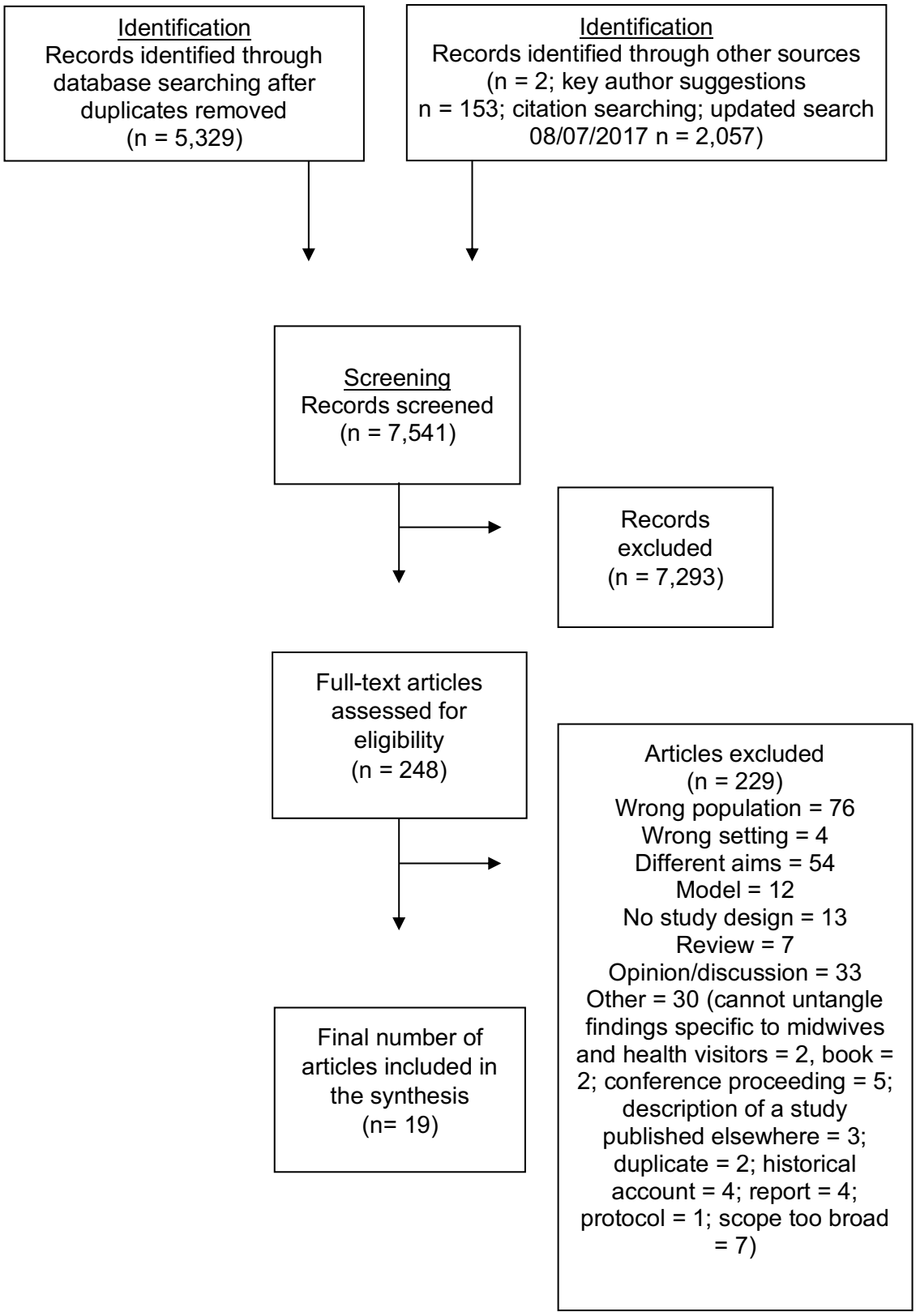

Figure 2.1. Study selection flowchart.

2.3.1 Characteristics of included studies

There were six studies from Australia, five from the UK, three from Sweden, one from Norway, and one from Canada. Studies varied in terms of research design and methods. Nine employed a qualitative design, five employed a mixed-methods design, and two employed a quantitative design. Specific data collection methods are outlined in Table 2.2. Nine of the 11 qualitative studies used interview methods or similar (e.g. focus or discussion groups). One did not have a clearly reported data collection method (Regan & Ireland, 2009), and one used a qualitative questionnaire (Wiles & Robison, 1994).

All included studies were published in peer-reviewed journals. One of these was an unpublished PhD thesis identified in the original search and later identified as a published journal article in the 2017 literature search (Penny, 2015; Penny & Windsor, 2017). Nine studies (11 articles) with a qualitative design were included. Two studies with a quantitative design were included. Five studies (six articles) with mixed-methods design were included. The included studies have an approximated total sample size of 6,652, comprised of several participant groups including 1,720 midwives, 2,363 health visitors, and other health professionals and women. One of the studies (Psaila et al., 2014) failed to report the breakdown of the sample, thus only an approximation could be made. Further details on the characteristics and key findings of the included studies are presented in Table 2.2.

Table 2.2. Summary of study findings.

Reference	Aim(s)	Methods		Sample	Main findings
		Setting	Design/data collection method(s)		
Qualitative studies					
Bar-Zeev, Barclay, Farrington, & Kildea, 2012	Examine the quality and safety of the postnatal transition of care from a regional hospital to remote health services.	Australia (Regional and remote areas)	<u>Design:</u> Cross-sectional <u>Methods:</u> retrospective cohort, interviews, observation <u>Sampling:</u> Purposive, snowball	Total sample size (N= 60) Midwives = 14 Health visitors = 7 Others (district medical officers, remote area nurses, Aboriginal health workers, doctors, paediatric nurses) = 39	Participants identified significant problems with the postnatal discharge processes. **Problems encountered:** Poor communication, lack of coordination; lack of clinical governance and leadership, and poor knowledge of roles and working practices in health centres by hospital staff.
Barimani & Hylander, 2008	Explore care providers' experience of cooperation in the antenatal, postnatal, and child health care chain of care	Sweden (Large city)	<u>Design:</u> Cross-sectional <u>Data collection:</u> Focus groups (60–90 min); two	Total sample size (N= 32) Midwives = 19 Child healthcare nurses = 13	All midwives and child health care nurses agreed linkage was non-existent in the antenatal-postnatal-child health care chain.

Reference	Aim(s)	Methods		Sample	Main findings
		Setting	Design/data collection method(s)		
			interviews (20–30 min) Sampling: Theoretical sampling		**Facilitators of linkage:** - Information transfer - Connection - Adjustment **Barriers and enablers to linkage:** - Position in chain of care - Distance - Gain
Barimani & Hylander, 2012	Investigate strategies for continuity of care for expectant and new mothers, as experienced by both midwives/child health care nurses and mothers, and to build upon the grounded theory model of 'linkage in the chain of care'.	Sweden (Large city)	Design: Cross-sectional Data collection: Interviews; observation and documents Sampling: Theoretical sampling based on	Total sample size (N= 20) Midwives = 9 Child healthcare nurses = 11	When staff perceived that strategies for continuity were both present and implemented jointly, continuity of care was realized. However, the data also suggest that vision of joint action was not realised. No common protocols or goals were established and implemented.

Reference	Aim(s)	Methods		Sample	Main findings
		Setting	Design/data collection method(s)		
			Barimani et al. (2008)		
Munro et al., 2013	Explore barriers and facilitators of interprofessional models of maternity care between physicians, nurses, and midwives in rural British Columbia, Canada, and the changes that need to occur to facilitate such models.	Canada (Rural communities)	Design: Cross-sectional Method: One in-depth interview or one focus group, plus the optional review of the findings to assess their accuracy, relevance, and comprehensiveness. Sampling: Extreme case sampling	Total sample size (N= 73) Midwives = 7 Public health nurses = 7 Others (labour and delivery nurses, doctors, birthing women, community-based providers, administrators, decision-makers) = 59	There were various models of interprofessional collaboration identified across the communities in this study. Midwives reported that resistance (from health professionals including nurses) based on negative perceptions of midwifery was the biggest challenge to interprofessional collaboration. Public health nurses reported that increased interprofessional collaboration with midwives could be beneficial in managing

Reference	Aim(s)	Methods		Sample	Main findings
		Setting	Design/data collection method(s)		
Penny, 2015; Penny & Windsor, 2017	Understand concept of collaboration as it exists in the care continuum between maternity and community healthcare settings. To generate critical insight into the social processes that underpinned collaboration as it manifests in the research context.	Australia	Design: Cross-sectional Method: Interviews Sampling: Purposive; theoretical	Total sample size (N= 30) Midwives = 10 Child health nurses = 10 Women = 10	postpartum care for women. Role knowledge was important in securing a position in the care process. Child health nurses and midwives used structured frameworks to assess need, and focussed on professional and organisational obligations. Collaboration serves an important social function in healthcare. Midwives and health visitors identified collaboration to be part of their identity as

Reference	Aim(s)	Methods		Sample	Main findings
		Setting	Design/data collection method(s)		
					professionals, and as part of institutional work. Various strategies were implemented to achieve transition of care, from service restructure to introducing co-location. **Innovations identified:** - Streamlining information exchange - Roles supporting coordination of care - Using funding and resources in innovative ways - Joint working - Co-locating services
Psaila et al., 2014	Describe innovations designed to improve continuity for women and their babies, specifically focused on the transition between maternity and Child and Family Health services.	Australia (State, rural and metropolitan data)	<u>Design:</u> Cross-sectional <u>Method:</u> Interviews (four face-to-face and three via telephone), and three focus groups (60-90 min) <u>Sampling:</u> Purposive	Total sample size (N= 33) Split not reported	
Psaila, Schmied, et al., 2014a;	Examine concept of continuity across	Australia	<u>Design:</u> Cross-sectional	Total sample size (N= 132)	Continuity was applied variably, and several

Reference	Aim(s)	Methods		Sample	Main findings
		Setting	Design/data collection method(s)		
Schmied et al., 2015	maternity and child and family health service continuum; explore health professionals' perceptions of the challenges and opportunities related to implementing a national approach to universal Child and Family Health services		Method: Discussion groups; teleconference; face-to-face focus groups; e-conversation Focus groups; teleconferences (60 to 90 min). Sampling: Purposive	Midwives = 45 Child health nurses = 60 Others (GPs, practice nurses) = 27	challenges to implementation existed. For example, information transfer was inconsistent, services were not equally accessible to all, policy expectations and workforce equity were mismatched, and role knowledge was poor. Opportunities and strategies identified were integrating midwifery and child and family health, having regular multidisciplinary meetings, and linking all child health services under one funding arrangement.
Regan & Ireland, 2009	To explore clinical experiences and perceptions of working	UK	No clear method reported	Total sample size (N= 2) Midwives = 1	Good communication was facilitated by flexible funding arrangements

Reference	Aim(s)	Methods		Sample	Main findings
		Setting	Design/data collection method(s)		
	within an exemplar cross-organisational practice model			Health visitors = 1	between trusts, continued maintenance of professional boundaries and practice, shared office and resources, and immediate feedback by midwives and health visitors.
Wiles & Robison, 1994	Evaluate teamwork by exploring views and experiences of health professionals	UK	<u>Design:</u> Cross-sectional <u>Method:</u> Semi-structured interview questionnaires <u>Sampling:</u> 20 practices randomly selected from a pool of 86	Total sample size (N= 133) Midwives = 17 Health visitors= 17 Others (district nurses, receptionists, GPs, practice managers, practice nurses) = 99	The themes that emerged as important to midwives and health visitors are outlined below: Team Identity - 59% of midwives and 76% of health visitors felt part of a team Shared philosophies of care - 53% of health visitors and 41% of midwives reported shared

Reference	Aim(s)	Methods		Sample	Main findings
		Setting	Design/data collection method(s)		
					philosophies of care Understanding of roles and responsibilities - 71% of midwives and 53% of health visitors felt other health care professionals understood their role clearly Disagreement with team members regarding roles/responsibilities - 41% of both midwives and health visitors reported disagreement - Unclear cut-off point for transition from midwifery to health visiting led

Reference	Aim(s)	Methods		Sample	Main findings
		Setting	Design/data collection method(s)		
					to confusion and conflicting advice
Quantitative studies					
Clancy, Gressnes, & Svensson, 2013	Examine collaboration issues relating to public health nursing in Norwegian municipalities	Norway (national data)	<u>Design:</u> Cross-sectional <u>Method:</u> National survey <u>Sampling:</u> Convenience (questionnaire sent to public health nurses, midwives, and doctors working in clinics and school health services and child protection workers in all municipalities in Norway)	Total sample size (N= 1,596) Midwives = 115 Health visitors = 849 Others (child protection workers, doctors) = 632	Most important factors for successful collaboration: - Trust, respect, and collaborative competence Importance of collaboration in carrying out role: - Midwives rated collaboration with public health nurses as useful, at the same time gave the lowest ratings for the importance of collaborating with them.

Reference	Aim(s)	Methods		Sample	Main findings
		Setting	Design/data collection method(s)		
Farquhar et al., 1998	Views and satisfaction of health visitors working alongside midwifery teams.	UK (South-East England)	Design: Cross-sectional Method: Survey Sampling: Convenience (questionnaire sent to all health visitors – 42 at the time of study – in relevant districts)	Total sample size (N= 35) Midwives = 0 Health visitors = 35	Defining team midwifery: - Only 2/35 (5.7%) of health visitors identified three of the four components of team midwifery, as defined by the team midwifery steering group Perception of team midwifery: - 9/35 (26%) reported it was working well locally Link midwives (n= 35, one missing data): - 21/35 (60%) reported having a link midwife Working relationships with community midwives:

Reference	Aim(s)	Methods		Sample	Main findings
		Setting	Design/data collection method(s)		
					- 18/35 (51%) reported having a good relationship - 12/35 (34%) reported having a poor relationship - 3/35 (9%) reported having an excellent relationship - 2/35 (6%) reported having a poor relationship Communication with community midwives: - Significantly poorer communication reported during the postnatal period compared to the antenatal period (p= .002244)

Reference	Aim(s)	Methods		Sample	Main findings
		Setting	Design/data collection method(s)		
					Structuring work with midwives: - 70% reported preferring the old system to team midwifery 60% of participants reported that team midwifery has negatively affected quality of care
Mixed-methods studies					
Bennett et al., 2001	Discover how midwives feel about the public health strategy as outlined in *Making a Difference* (Department of Health, 1999); explore midwives' views of their role in public health	UK (Metropolitan county)	Methods taken from Lavender et al. (2001): <u>Design:</u> Cross-sectional <u>Method:</u> Survey with open-ended questions	Total sample size (N= 468) Midwives = 468 Health visitors = 0	Partnership with health visitors: - 85% reported working with health visitors, noting that they could communicate better and should work more

Reference	Aim(s)	Methods		Sample	Main findings
		Setting	Design/data collection method(s)		
			Sampling: Purposive		closely/share expertise Midwives acknowledged that a stronger relationship with other professionals could be beneficial.
Draper et al. (1984)	Discuss the relationship between the health visitor and the community midwife	UK (Urban and rural)	Methods taken from Field et al. (1984): Design: Cross-sectional Method: mixed-methods (survey with open-ended questions and interviews) Sampling: Purposive	Total sample size (N= 40) Midwives = 0 Health visitors) = 40	Ratings of relationship with community midwives: - 65% reported it was very good/good - 17.5% reported it was poor Frequency of meeting midwives responsible for the same patients: - 15/40 (37.5%) of health visitors reported meeting with midwives more than once a week, and

Reference	Aim(s)	Methods		Sample	Main findings
		Setting	Design/data collection method(s)		
					- communicated either face-to-face or via phone - 15/40 (37.5%) reported rarely meeting with midwives, and reported that contact by phone/messages was uncommon No statistical relationship was found between involvement in clinics or antenatal classes and quality of relationship with midwives.
Edvardsson et al., 2012	Evaluate the impact of a child health promotion programme on collaboration; assess whether there are significant changes	Sweden (Västerbotten county)	Design: quasi-experimental (before-and-after case study)	Total sample size (N= 144) Midwives = 33 Child health nurses = 66	Antenatal midwives and child health nurses reported the extent of collaboration with each other pre- and post-intervention as large/very

Reference	Aim(s)	Methods		Sample	Main findings
		Setting	Design/data collection method(s)		
	in professionals' self-reported collaboration between sectors following programme implementation.		Methods: Mixed-methods (intervention – Salut Programme, surveys with open-ended questions) Sampling: Convenience (questionnaires sent to all involved in intervention programme)	Others (dental hygienists/dental nurses, open pre-school teachers) = 45 Mean years of experience: Midwives = 15 Child health nurses = 14	large (no statistical differences). Facilitators for implementing programme: - Collaboration with other sectors - Colleagues and working climate positive and supportive - All professionals working towards the same goal - Support from work manuals and questionnaires Barriers to implementing programme: - Workload and staff/time/resource shortage - Difficulties to start/maintain

Reference	Aim(s)	Methods		Sample	Main findings
		Setting	Design/data collection method(s)		
					collaborative relations - Missing collaborative partners - Geographical distance - Competing demands, goals and tasks
Homer et al., 2009	Examine the characteristics and nature of effective transitions of care in New South Wales between midwives and Child and Family Health Nurses; describe current approaches to transitions of care from midwives to Child and Family Health Nurses;	Australia (New South Wales)	Design: Cross-sectional Method: Descriptive questionnaire (with open-ended questions) Sampling: Purposive	Total sample size (N= 67) Midwives = 33 Health visitors = 25 Others (families first co-ordinator, others not specified) = 9	Models of transition of care: - Structured non-verbal: centralised referral - Structured non-verbal: centre-based referral - Liaison - Purposeful contact - Unstructured - Shared visits The implementation of models of transition of

Reference	Aim(s)	Methods		Sample	Main findings
		Setting	Design/data collection method(s)		
	understand barriers and facilitators to effective transition of care.				care is reportedly inconsistent across services and is developed according to local need. Common facilitators: - Effective communication - Child and family health nurse visiting maternity unit regularly - Verbal handover - Using similar assessment tools - Co-location - Central intake point/designated person - Complete and up-to-date summaries and contact details for the woman

Reference	Aim(s)	Methods		Sample	Main findings
		Setting	Design/data collection method(s)		
					Common barriers: - Lack of staff - Removal of nursing and midwifery posts - Lack of understanding and respect for one another's role/expertise - Women's lack of knowledge of child and family health nurses
Psaila et al., 2014; Psaila, Schmied, et al., 2014b	Explore and describe the process of Transition of Care between maternity services and the Child and Family Health service; Examine collaborative practice in the provision of universal health	Australia	Design: Cross-sectional Method: Mixed-methods (cross-sectional survey with open-ended questions)	Total sample size (N= 1753) Midwives = 655 Health visitors = 1098	Collaboration was reported to serve the purpose of effectively transferring client information, and worked in smaller communities. Information transfer: - 77.4% of midwives sent

Reference	Aim(s)	Methods		Sample	Main findings
		Setting	Design/data collection method(s)		
	services for children and families		Sampling: Convenience		discharge summaries to child and family health nurses - 88.5% of midwives routinely sent discharge summaries - 82.7% of child and family health nurses received discharge summaries within 5 days of discharge - 17.8% of child and family health nurses reported having antenatal contact with women

Reference	Aim(s)	Methods		Sample	Main findings
		Setting	Design/data collection method(s)		
					Quality of information transferred: - 66.7% of child and family health nurses indicated that all necessary information was received all the time Effectiveness of transition of care: - 36.6% of midwives rated the transition process as effective or extremely effective for majority of families (vs. 40.4% for women/babies at risk)

Reference	Aim(s)	Methods		Sample	Main findings
		Setting	Design/data collection method(s)		
					Intensity/level of collaboration - Midwives rated the intensity of collaboration with child and family health nurses as 3.5/5, whilst child and family health nurses rated the intensity of their collaboration with midwives as 3/5 Improving transition of care: - Liaison role - Joint visits, regular meetings - Providing information antenatally - Opt-out system

Reference	Aim(s)	Methods		Sample	Main findings
		Setting	Design/data collection method(s)		
					- Improved information content and communication pathways - Allocation of child and family health nurses to visit hospital - Shared assessment tools - Verbal handover

2.3.2 Study quality

Quality appraisal ratings, per tool, are presented in Table 2.3 and Table 2.4. Only two of the qualitative studies considered and described the participant-researcher relationship adequately. None of the studies with quantitative components reported basing sample sizes on statistical power and confidence intervals. No article was excluded because of methodological quality.

Table 2.3. Methodological quality of qualitative studies.

	Bar Zeev et al. (2012)	Barimani et al. (2012)	Barimani et al. (2008)	Bennett et al. (2001)	Draper et al. (1984)	Edvardsson et al. (2012)	Homer et al. (2009)	Munro et al. (2013)	Penny et al. (2015)
Was there a clear statement of the aims of the research?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Is a qualitative methodology appropriate?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Was the research design appropriate to address the aims of the research?	Yes	Can’t tell	Can’t tell	Yes	Can't tell	Yes	Yes	Yes	Yes
Was the recruitment strategy appropriate to the aims of the research?	Yes	Yes	Yes	Can't tell	Can't tell	Yes	Yes	Yes	Yes
Was the data collected in a way that addressed the research issue?	Can’t tell	Can’t tell	Can’t tell	Can't tell	Can't tell	Yes	Can't tell	Yes	Yes
Has the relationship between researcher and	No	No	Yes	No	Yes	No	No	No	Yes

	Bar Zeev et al. (2012)	Barimani et al. (2012)	Barimani et al. (2008)	Bennett et al. (2001)	Draper et al. (1984)	Edvardsson et al. (2012)	Homer et al. (2009)	Munro et al. (2013)	Penny et al. (2015)
participants been adequately considered?									
Have ethical issues been taken into consideration?	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes
Was the data analysis sufficiently rigorous?	Yes	Yes	Yes	Can't tell	Can't tell	Yes	No	Yes	Yes
Is there a clear statement of findings?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
How valuable is the research?	Valuable	Valuable	Valuable	Valuable	Valuable	Valuable	Valuable	Valuable	Valuable

	Penny et al. (2017)	Psaila et al. (2014a)	Psaila et al. (2014b)	Psaila et al. (2014c)	Psaila et al. (2014d)	Regan et al. (2009)	Schmied (et al. 2015)	Wiles et al. (1994)
Was there a clear statement of the aims of the research?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

	Bar Zeev et al. (2012)	Barimani et al. (2012)	Barimani et al. (2008)	Bennett et al. (2001)	Draper et al. (1984)	Edvardsson et al. (2012)	Homer et al. (2009)	Munro et al. (2013)	Penny et al. (2015)
Is a qualitative methodology appropriate?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Was the research design appropriate to address the aims of the research?	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	
Was the recruitment strategy appropriate to the aims of the research?	Yes	Yes	Yes	Yes	Yes	Can't tell	Yes	Yes	
Was the data collected in a way that addressed the research issue?	Can’t tell	Can't tell	Can't tell	Can't tell	Yes	Can't tell	Can't tell	Can't tell	
Has the relationship between researcher and participants been adequately considered?	Yes	No	No	No	No	No	No	No	
Have ethical issues been taken into consideration?	Yes	Yes	Yes	Yes	Yes	No	Yes	No	

	Bar Zeev et al. (2012)	Barimani et al. (2012)	Barimani et al. (2008)	Bennett et al. (2001)	Draper et al. (1984)	Edvardsson et al. (2012)	Homer et al. (2009)	Munro et al. (2013)	Penny et al. (2015)
Was the data analysis sufficiently rigorous?	Can't tell	Yes	Yes	Yes	Yes	No	Yes	No	
Is there a clear statement of findings?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
How valuable is the research?	Valuable	Valuable	Valuable	Valuable	Valuable	Not valuable	Valuable	Valuable	

Table 2.4. Methodological quality of quantitative studies.

	Psaila et al. (2014b)	Psaila et al. (2014d)	Farquhar et al. (1998)	Edvardsson et al. (2012)	Draper et al. (1984)	Clancy et al. (2013)	Bennett et al. (2001)
Did the study address a clearly focused question / issue?	Yes	Yes	No	Yes	No	Yes	Can't tell
Is the research method (study design) appropriate for answering the research question?	Yes	Yes	Yes	Yes	Yes	Yes	Can't tell
Is the method of selection of the subjects (employees, teams, divisions, organizations) clearly described?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Could the way the sample was obtained introduce (selection) bias?	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Was the sample of subjects representative with regard to the population to which the findings will be referred?	Can't tell	Can't tell	Yes	Yes	Can't tell	No	Yes
Was the sample size based on pre-study considerations of statistical power?	No	No	No	No	No	No	No
Was a satisfactory response rate achieved?	Can't tell	Can't tell	Yes	Yes	Can't tell	Yes	Yes

	Psaila et al. (2014b)	Psaila et al. (2014d)	Farquhar et al. (1998)	Edvardsson et al. (2012)	Draper et al. (1984)	Clancy et al. (2013)	Bennett et al. (2001)
Are the measurements (questionnaires) likely to be valid and reliable?	Can't tell	Can't tell	No	Yes	No	Can't tell	No
Was the statistical significance assessed?	Yes	No	Yes	Yes	Yes	Yes	No
Are confidence intervals given for the main results?	No	No	No	No	No	No	No
Could there be confounding factors that haven't been accounted for?	Yes	Yes	No	Yes	Yes	Yes	Yes
Can the results be applied to your organization?	Yes	Yes	Can't tell	Can't tell	Can't tell	Yes	Can't tell

2.3.3 Research question 1: In what practice areas or settings do midwives and health visitors communicate and work collaboratively?

All studies identified examples of communication and collaboration in antenatal care, transition of care, and/or postnatal care, reflecting known maternity care pathways. Caring for women after handover through to postnatal care – ensuring continuity – was the chief reason reported for collaboration for midwives and child and family health nurses during this period (Psaila et al., 2014). Specific areas of postnatal care include breastfeeding (Schmied et al., 2015), referral to social (Penny, 2015; Penny & Windsor, 2017) and local community services (Homer et al., 2009). Primary care and public health were also identified as areas of collaboration for midwives and health visitors (Bennett et al., 2001; Clancy et al., 2013). Although all key stages of maternity care were identified as areas for collaboration, levels of collaboration between midwives and health visitors varied widely in practice. For example, Psaila and colleagues (2014b) found that, on a 5-point scale, midwives rated the extent to which they collaborated with child and family health nurses a 3.5, whereas child and family health nurses rated the extent to which they collaborated with midwives a 3.0.

2.3.4 Research question 2: What methods of collaborative working and communication do midwives and health visitors employ?

This section discusses the methods of communication and collaboration utilised by midwives and health visitors. Each of these will be presented in turn.

2.3.4.1 Face-to-face contact

Face-to-face contact was the most widely reported method of communication, which included group meetings, joint visits, or joint discharge planning (Bar-Zeev et al., 2012; Barimani & Hylander, 2008, 2012; Clancy et al., 2013; Draper, Farmer, & Field, 1984; Farquhar et al., 1998; Homer et al., 2009; Munro et al., 2013; Penny, 2015; Psaila, Schmied, et al., 2014a; Schmied et al., 2015). Group meetings attended by midwives and health visitors were reported to be beneficial, especially when supporting families with psychosocial needs (Barimani & Hylander, 2012; Schmied et al., 2015). In addition, regular meetings were indicated as means of improving working relationships with midwives (Farquhar et al., 1998),

and afforded midwives and health visitors a chance to gain a comprehensive picture of a client's needs, increased their ability to address these needs, and enabled them to plan discharge (Bar-Zeev et al., 2012; Penny, 2015). Informal methods of face-to-face contact were also identified, which included tea breaks and shared lunchrooms (Barimani & Hylander, 2008, 2012; Munro et al., 2013). These informal contacts were perceived as opportunities to give immediate feedback and discuss client support needs, particularly when these health professionals have a shared office space (Clancy et al., 2013; Regan & Ireland, 2009).

2.3.4.2 Telephone contact

Telephone contact was reported in four studies as a means of communication (Bar-Zeev et al., 2012; Draper et al., 1984; Psaila et al., 2014; Psaila, Schmied, et al., 2014a). Telephone contact was found helpful for facilitating interprofessional working (Psaila et al., 2014) or enabling joint discharge planning (Bar-Zeev et al., 2012). Indeed, 25.6% (n= 164/650) of participants reported using telephone contact to access support from child and family health nurses, with some variation dependent on geographical location (Psaila et al., 2014). In a UK study, 37.5% (n= 15/40) of health visitors reported using telephone contact to liaise with midwives (Draper et al., 1984).

2.3.4.3 Women's medical records

Four studies (six articles) identified women's medical records as a means to communicate (Homer et al., 2009; Psaila et al., 2014, 2014, Psaila, Schmied, et al., 2014a, 2014b; Schmied et al., 2015). Records were shared between the professionals either through hard copies or electronically, and found to be used largely in transition of care, in conjunction with other collaboration methods. For instance, maternity staff advised women to book their first postnatal appointment with the child and family health centre; following this, women's discharge notes were sent via fax (Homer et al., 2009).

An Australian state-wide initiative utilised an electronic database to link women with local child and family health nurses. Women's physical and psychosocial needs, entered into the system by midwives, were emailed to the

relevant child and family health nurse (Psaila et al., 2014; Psaila, Schmied, et al., 2014a). National survey data revealed that 35.7% (n= 232/650) of midwives reported using electronic referral (Psaila et al., 2014) with some variation across locations (Psaila et al., 2014; Schmied et al., 2015). Sharing electronic medical records provided convenient access to accurate information, especially for families with complex needs (Psaila et al., 2014; Psaila, Schmied, et al., 2014b).

2.3.5 Research question 3: How effective is the collaboration between midwives and health visitors?

No controlled studies assessing the effectiveness of collaboration in relation to identified outcome measures were found for inclusion in this review. However, nine studies explored collaboration's effectiveness using self-report measures (Bar-Zeev et al., 2012; Barimani & Hylander, 2008; Clancy et al., 2013; Draper et al., 1984; Farquhar et al., 1998; Psaila et al., 2014, 2014, Psaila, Schmied, et al., 2014a, 2014b; Regan & Ireland, 2009; Schmied et al., 2015; Wiles & Robison, 1994). Some reported that the collaborative relationships between these health professionals were somewhat effective (Clancy et al., 2013; Psaila et al., 2014; Regan & Ireland, 2009) but needed improvement. Weaknesses reported included poor coordination and communication between midwives and health visitors (Glazener, 1999; Psaila, Schmied, et al., 2014a; Schmied et al., 2015). A small UK community practice reported that their success was largely due to having a shared office where communication barriers could be overcome (Regan & Ireland, 2009). Although it was reported that a closer relationship between midwives and child and family health nurses could be established in rural Australia, midwives reported having stronger collaborative relationships with other healthcare professionals than with child and family health nurses (Psaila, Schmied, et al., 2014a).

Although 51% (n= 18/35) of health visitors in a UK study reported having 'good' working relationships with midwives, only 8% (n= 3/35) rated their relationship with midwives as 'excellent' (Farquhar et al., 1998). Health visitors who worked with midwives antenatally were found to have positive relationships with their colleagues, illustrated by reports of frequent and good communication (Draper et al., 1984). However, during transition of care, international data suggest that

collaboration is ineffective. For instance, only 20% of participants (including midwives and health visitors, amongst others) in Bar-Zeev et al.'s (2012) study found at least one aspect of the discharge process to be effective. Similarly, midwives and child health care nurses in Sweden reported that relationships with parents in the postpartum period deteriorated because of poor collaboration (Barimani & Hylander, 2008). Therefore, as part of this analysis, a number of enablers and barriers to collaboration and communication were identified. Each of these, beginning with the enablers of communication and collaboration will be discussed sequentially.

2.3.5.1 Enabling factors of collaboration

Enablers of collaboration included good communication (Clancy et al., 2013; Homer et al., 2009; Psaila, Schmied, et al., 2014b; Regan & Ireland, 2009), mutual respect and support for colleagues (Psaila et al., 2014; Psaila, Schmied, et al., 2014b; Regan & Ireland, 2009), liaison staff roles (Penny, 2015; Penny & Windsor, 2017), co-location (Schmied et al., 2015) and joint working (Farquhar et al., 1998).

2.3.5.1.1 Good communication

A UK case study found that good communication enabled the midwife and health visitor to address women's needs early, which resulted in continued support until two years after the birth (Regan & Ireland, 2009). This also enabled midwives and child and family health nurses to transfer or share relevant and accurate information with each other on time (Penny, 2015; Penny & Windsor, 2017; Psaila, Schmied, et al., 2014b).

2.3.5.1.2 Mutual respect and support for colleagues

A large UK survey (Bennett et al., 2001) found that the majority of midwife respondents (n= 325/468, 85%) reported working alongside health visitors. Shared experiences and learning were found to enrich the midwife-health visitor collaborative relationship (Bennett et al., 2001). Being part of a 'team' was reported to be influential in fostering collaboration between midwives and health visitors (Homer et al., 2009; Munro et al., 2013; Penny, 2015; Wiles & Robison, 1994). A large Norwegian study found that midwives valued collaborating with health visitors

(Clancy et al., 2013). Moreover, a Swedish study found that supportive and positive colleagues contributed to service delivery (Edvardsson et al., 2012). Espousing a team approach with families was reportedly beneficial, enabling families to seek support actively, connect with local services, and have a platform for raising issues and concerns with the relevant health professionals (Psaila et al., 2014). In sum, respecting and supporting colleagues' role and ability enabled collaboration (Barimani & Hylander, 2008) and afforded these health professionals the opportunity to meet their own responsibilities and uphold policy recommendations.

2.3.5.1.3 Co-location

Geographical proximity allowed for increased contact (Clancy et al., 2013), a finding that was made by four international studies and one UK study (Clancy et al., 2013; Edvardsson et al., 2012; Homer et al., 2009; Psaila, Schmied, et al., 2014b; Regan & Ireland, 2009; Schmied et al., 2015). Shared office space provided the opportunity to give immediate feedback and discuss client support needs (Clancy et al., 2013; Regan & Ireland, 2009).

2.3.5.1.4 Joint working, activity or action

Joint working offered an opportunity to deliver accurate information and advice, and to establish trusting relationships with families (Psaila et al., 2014). This involved joint home visits, meetings, needs assessments, antenatal education classes and parenting support groups (Draper et al., 1984; Edvardsson et al., 2012; Farquhar et al., 1998; Penny, 2015; Regan & Ireland, 2009). Joint working enabled midwives and child and family health nurses to obtain a comprehensive picture of a client's needs and conduct joint discharge planning, thereby addressing these needs adequately (Bar-Zeev et al., 2012; Penny, 2015; Penny & Windsor, 2017). Joint discharge planning was described as particularly advantageous for supporting women with more complex needs such as extended hospital stays (Penny, 2015), and socially and/or emotionally vulnerable women (Homer et al., 2009). A UK case study demonstrated that conducting joint assessments and referrals, as well as sharing relevant resources and information offered women maximum support in a team context (Regan & Ireland, 2009). Similarly, Barimani and Hylander (2012) found that joint action facilitated successful transition of care. Through established

connections and set meetings where information could be shared, midwives and health visitors reported to achieve continuity of care (Homer et al., 2009). To ensure continuity when these opportunities were absent, relevant information was acquired through informal contacts with staff members (Penny, 2015).

2.3.5.1.5 Liaison staff

Homer et al. (2009) found that around a quarter (n= 17/67) of their study participants considered liaison staff important in providing continuity of care. Having liaison staff meant that information was transferred, clients were referred, and visits were arranged as needed. Thus, support to women and families was adequately provided (Psaila et al., 2014; Psaila, Schmied, et al., 2014b). This role was associated with good communication, established contact with families, and timely and accurate information sharing. In Australia, liaison staff facilitated the transfer of discharge summaries to relevant child and family health services after babies were born (Homer et al., 2009).

2.3.5.2 Barriers to collaboration

Barriers to collaborative practice reported in the reviewed articles included poor communication (Bar-Zeev et al., 2012; Psaila, Schmied, et al., 2014a; Regan & Ireland, 2009), geographical distance (Barimani & Hylander, 2012; Edvardsson et al., 2012), limited resources and support (Penny, 2015; Penny & Windsor, 2017; Psaila et al., 2014), divergent philosophies of care (Psaila, Schmied, et al., 2014a; Wiles & Robison, 1994), and poor knowledge of each other's roles (Homer et al., 2009). Each of these will be discussed in turn.

2.3.5.2.1 Poor communication

Poor communication was associated with delays in care (Regan & Ireland, 2009), inaccurate information transfer (Homer et al., 2009), and missed opportunities for early intervention (Regan & Ireland, 2009). Four studies identified poor communication as an impediment to collaboration in antenatal care (Farquhar et al., 1998; Psaila et al., 2014; Psaila, Schmied, et al., 2014a; Regan & Ireland, 2009; Schmied et al., 2015). Another example is a study involving health visitors in South-East England reporting poorer communication with midwives during the postnatal

period as compared to the antenatal period (n= 22/35, p= .002244), with only 62% of health visitors (n= 21/35) reporting links with midwives (Farquhar et al., 1998).

2.3.5.2.2 Distance

UK midwives reported that their detachment from GP practices contributed to reduced levels of team working (Wiles & Robison, 1994). Collaboration in larger communities was reported to be difficult to achieve, which had negative impacts (Clancy et al., 2013). The same was found in remote and urban Australian communities (Schmied et al., 2015), as well as in other urban areas in the UK and Sweden (Draper et al., 1984; Edvardsson et al., 2012). Similarly, the physical distance between antenatal clinics and child health care services in a large Swedish city reportedly hindered midwives from conducting joint activities with child health care nurses, resulting in weakened connections (Barimani & Hylander, 2008).

2.3.5.2.3 Limited resources and support

High workloads and staff shortages were reported impediments to collaboration in three studies (Edvardsson et al., 2012; Penny, 2015; Schmied et al., 2015). Limited resources (e.g. limited staff and funding) and managerial support meant that midwifery and child and family health nursing capacity was stretched especially in remote areas where few staff were willing to work (Schmied et al., 2015). Limited resources and support was associated with the fragmentation of information collected and shared, making workloads difficult to manage amongst available staff members (Penny, 2015). Further, a lack of funds was associated with delayed interventions in one UK case study (Regan & Ireland, 2009).

2.3.5.2.4 Poor knowledge of each other's roles

Misunderstanding of role function has been suggested to negatively affect the care process (Schmied et al., 2015). For example, not knowing the tasks each profession is accountable for (i.e. task-based), and the timeframe each profession is responsible for (i.e. time-based) (Barimani & Hylander, 2008; Psaila, Schmied, et al., 2014b; Schmied et al., 2015) can lead to a woman being given conflicting advice, receiving limited support, or being advised of a service that a midwife or child and family health nurse may not necessarily be able to provide (Penny, 2015; Penny & Windsor, 2017). Moreover, there can be confusion in terms of the professional

responsible for delivering certain aspects of care. For example, during the handover period, when midwifery and child and family health services overlap (Psaila et al., 2014), it was observed that having multiple professionals involved can be problematic, resulting in a lack of accountability amongst staff (Bar-Zeev et al., 2012). Further, a large survey of UK midwives found that they perceived certain aspects of care (e.g. well-woman clinics) as beyond their role (Bennett et al., 2001). Barimani et al. (2012) found that child health care nurses in a large Swedish city had little awareness of midwives' competences, particularly regarding breastfeeding. Another study found that both midwives and child and family health nurses "perceived themselves as the best positioned to co-ordinate care for the family" (Psaila, Schmied, et al., 2014a, p. 7). Finally, women's lack of knowledge of the health visitor role can present as a barrier, negatively affecting midwives' and health visitors' collaborative efforts (Homer et al., 2009).

2.3.5.2.5 Inadequate information transfer

Homer et al. (2009) found that child and family health nurses had experiences where important information about women was withheld by midwives, which they associated with poor communication and understanding of role boundaries. This finding was referred to as 'selective sharing' in another study, whereby information (e.g. a diagnosis) can be withheld by health professionals to avoid misinterpretation of women's notes (Penny, 2015; Penny & Windsor, 2017). This was also found in one large Australian study, where psychological assessments were undertaken by 86.9% (n= 291/335) of public sector midwives, yet only 38.9% (n= 130/334) of them included assessment information in women's discharge summaries. Inadequate information transfer also negatively affected relationships between midwives and child and family health nurses: nurses reported concerns over giving advice to other professionals (including midwives), regarding women these nurses were not linked with (Schmied et al., 2015). Australian child and family health nurses reported that limited and sometimes inaccurate information provided by midwives affected their ability to attend adequately to women's needs (Homer et al., 2009; Psaila et al., 2014; Schmied et al., 2015). In rural Australia, discharge was reported to be difficult, owing to poor coordination of information transfer (Bar-Zeev et al., 2012). Child health care nurses in a large Swedish city reported that midwives provided them with

inadequate summaries and records (Barimani & Hylander, 2008). Similar findings were made in other metropolitan areas in Sweden and Australia where workloads were heavy (Edvardsson et al., 2012; Schmied et al., 2015). This reportedly resulted in restricted opportunities for women to connect with health visitors after birth.

2.3.5.2.6 Divergent philosophies of care

Divergent philosophies of care was cited as a barrier to collaboration in six studies (Bar-Zeev et al., 2012; Barimani & Hylander, 2008; Homer et al., 2009; Munro et al., 2013; Penny, 2015; Penny & Windsor, 2017; Psaila, Schmied, et al., 2014a; Schmied et al., 2015). One study found that because these health professionals practised independently of each other, service delivery tended to be fragmented (Homer et al., 2009). It was found that 53% of UK health visitors (n= 9/17) felt they had a shared philosophy of care with midwives, whilst fewer midwives (41%; n= 7/17) felt the same (Wiles & Robison, 1994). This reportedly affected midwives' and health visitors' level of accountability for their clientele, and risked women and their families being given inadequate information and interventions, if any at all (Penny, 2015). Finally, Canadian midwives reported interprofessional work to be challenging, as other professions can have negative views of their practice (Munro et al., 2013).

2.3.6 Research question 4: Do the identified examples of communication and collaboration between midwives and health visitors adhere to policy recommendations and guidelines?

Most of the studies included in this review (n= 11) considered the relevant policies and recommendations in light of their research. A central finding across the studies was that although government initiatives and policies argue for increased collaborative working in maternal and child health services, there was mixed evidence for collaboration in practice. For instance, findings from Bennett et al. (2001) who investigated the views of midwives about the public health strategy *Making a Difference* (Department of Health, 1999), observed the majority of midwives (85%, n= 325/381) to report working collaboratively with health visitors. At the same time, fewer midwives saw partnership with health visitors as part of their remit (52%, n= 243/381). Further, participant midwives from this study (85%,

n= 325/381) recognised that their relationship with health visitors could be improved. In relation to the same public health strategy, sharing patient-held records between midwives and health visitors is a recommended vehicle for working collaboratively. It was unclear in Bennett et al.'s (2001) work whether this was one of the ways through which midwives collaborated with their health visitor colleagues.

Taking Australian government policy (Australian Government National Health and Medical Research Council, 2010) as an example, the drive for interprofessional collaboration in maternity care did not translate fully, as a national survey revealed that levels of collaboration were low in practice (Psaila et al., 2014). Yet, Psaila et al. (2014) found in their feasibility study of a national approach to Child and Family Health Services that there were variations identified across different geographical locations, and numerous innovations implemented. For instance, existing state-wide initiatives such as *Safe Start* (New South Wales Department of Health, 2009) were further supported by having additional liaison staff to manage the organisation of multidisciplinary team meetings. Similarly midwives and health visitors in the UK are expected to work in partnership (Department of Health, 2009; National Institute for Health and Care Excellence, 2014; Public Health England and Department of Health, 2015), yet there is evidence to suggest that this is not completely fulfilled (Bennett et al., 2001; Farquhar et al., 1998; Regan & Ireland, 2009).

Findings from these studies demonstrate a real effort to pursue collaborative working either through intervention development (Edvardsson et al., 2012), or service design (Regan & Ireland, 2009). Notably, exemplar practices were identified, such as utilising structured frameworks for assessing women's/families' needs (Penny, 2015; Penny & Windsor, 2017). However, there is also evidence to suggest that unclear policies and service restructures play a role in making collaborative working between midwives and health visitors difficult to achieve (Farquhar et al., 1998; Munro et al., 2013; Psaila et al., 2014). Negative implications of such service restructures identified include health visitors feeling excluded, and undervalued (Wiles & Robison, 1994), varying organisational models or care pathways (Psaila et al., 2014), increased demands on professionals (Psaila, Schmied, et al., 2014a;

Schmied et al., 2015), and midwives' efforts to collaborate with public health nurses being met with resistance (Munro et al., 2013).

2.4 Discussion

The current review synthesised the evidence concerning interprofessional collaboration between midwives and health visitors. Overall, the studies reviewed showed that midwives and health visitors valued interprofessional collaboration, and shared the goal of delivering high-quality care to women, their children and families. Despite acknowledgement of the increasing importance of integration in healthcare services in the last two decades (Rodríguez & Rivières-Pigeon, 2007), the current review showed that in practice collaboration between midwives and health visitors can be challenging. Further, findings that these challenges are due to interrelated factors such as limited resources and poor knowledge of each other's role, amongst others. Moreover, although these healthcare professionals reported positive views of interprofessional collaboration (e.g. Barimani & Hylander, 2012), evidence of interprofessional collaborative practice in maternal and child health services was rare (Bar-Zeev et al., 2012; Homer et al., 2009), and at best, of modest success according to self-report measures (Edvardsson et al., 2012; Regan & Ireland, 2009).

Variables influencing the effectiveness of collaboration between midwives and health visitors in practice include the barriers and enablers identified in this review, most notably, communication. This is in line with existing theories of collaboration which feature communication as a team process (Reeves, Lewin, Espin, & Zwarenstein, 2010). Indeed, the wider interprofessional collaboration research suggests that multiple factors influence the performance of interprofessional behaviour, and these can be behavioural, organisational or contextual (Reeves et al., 2010; see also section 2.3.5) . For instance, Norwegian data suggest that those working in small communities have a greater ability to collaborate than those in large communities (Clancy et al., 2013). However, Australian data suggest that those in small remote communities tend to be isolated (Bar-Zeev et al., 2012). This echoes the literature suggesting that variations in interprofessional collaborative practice could be influenced by the contextual domain or broader issues (i.e. country, culture) in which the health professionals are nested (Reeves et al., 2010). Relatedly, UK data

showed a negative relationship between the number of midwives with whom health visitors worked and health visitors' levels of satisfaction with their interprofessional relationships (Draper et al., 1984). This indicates that relational and processual factors influence interprofessional collaboration between midwives and health visitors, in line with previous research (D'Amour et al., 2008; Reeves et al., 2010). Finally, successful collaborative efforts identified in this review were characterised by good communication, opportunities to work together, availability of resources, and a clear understanding of professional roles (Psaila et al., 2014, 2014; Psaila, Schmied, et al., 2014a; Regan & Ireland, 2009; Schmied et al., 2015). However, it is concerning that issues related to poor coordination, which had already been identified in a 1959 review of maternity services in England and Wales (Hunter, 2012), still exist. In conclusion, organisations, in addition to other factors, are influential, both positively and negatively, on the implementation of interprofessional collaboration.

2.4.1 Methodological limitations of included studies

This section considers the implications of the methodological limitations of the included studies in the context of the quality assessment given in this synthesis. Each of these limitations will be discussed in turn.

Data heterogeneity presented certain limitations on the interpretation of the weight of the findings. First, no studies containing quantitative data based their sample size on statistical power, increasing the risk for both Type I and Type II errors. In addition, quantitative studies included in this review reported sampling methods that could have introduced selection bias. Second, there were no controlled studies found for inclusion in this review. Furthermore, the lack of intervention and pre-post studies limited the opportunity to aggregate findings concerning the effectiveness and impact of collaboration on health outcomes (e.g. quality of life, patient-assessed quality of care) and collaborative behaviour. The limited empirical evidence assessing the impact of interprofessional collaboration on health outcomes is also reflected in a recent systematic review which investigated the impact of interventions geared at improving interprofessional collaboration on health outcomes and collaborative behaviour. Reeves and colleagues (2017) identified only nine

practice-based interventions (e.g. interprofessional activities, interprofessional meetings), none of which concerned interprofessional collaboration between midwives and health visitors in maternity care. They found that these interventions can improve patient outcomes and adherence to recommended practices, however the strength of this evidence remains mixed (Reeves et al., 2017). Moreover, a systematic review that explored evidence of interprofessional education in maternity services found limited literature (n= 8) specific to the topic (N. Davies, Fletcher, & Reeves, 2016), and none of the studies identified were conducted in the UK. They concluded that interprofessional education in maternity care shows potential, however, initiatives need to be evaluated and further investigated in light of policy directives which promote interprofessional education in maternity services (N. Davies et al., 2016). Given that midwives and health visitors, along with many other health professionals, are encouraged to work together (Department of Health, 2009), the scant evidence for interprofessional education indicates that interprofessional education in maternity is lacking, or understudied (N. Davies et al., 2016). Similarly, the mixed evidence concerning effectiveness of collaboration identified in the present review was reliant on self-reports of effectiveness, so the findings need to be interpreted with caution.

With regard to the qualitative studies included in this review, all of the studies were deemed to have clearly presented aims and findings. Studies were also judged to make use of appropriate methodology. However, most did not consider the relationship between the researcher and participants, with a number of authors also not reporting on how ethical issues were addressed.

It is also worth mentioning here the observed differences in the application of theoretical frameworks in the studies included in this systematic review (e.g. using theory to inform study design vs. using theory to inform data analysis), which may have contributed to the difficulty in aggregating the evidence in relation to interprofessional collaboration. Theories that were reportedly applied included grounded theory (Barimani & Hylander, 2008, 2012), and constructionist theory (Penny, 2015; Penny & Windsor, 2017), for example. Frameworks such as Reid et al.'s (Reid, Haggerty, & McKendry, 2002) framework of continuity and D'Amour et al.'s (2008) structuration model were also applied (Psaila et al., 2014; Psaila,

Schmied, et al., 2014a). In particular, the variability in use of theory and theories used makes it difficult to ascertain which theories or frameworks could consistently produce results (i.e. what works). This has been acknowledged in the wider interprofessional collaboration literature (e.g. Barrow, McKimm, Gasquoine, & Rowe, 2015), and warrants further exploration. The use of theory is important in developing clear knowledge of the processes which underlie behaviours (Ayers & Olander, 2013), and has implications on research and intervention design.

Despite these identified variations in study quality, the studies synthesised here still presented congruent findings across different settings, geographical locations, and policy contexts, which indicates that the results are transferrable. For instance, common themes on the ways through which collaboration is or could be achieved were found, including the desire for good communication. Other examples include being co-located (Clancy et al., 2013), increasing opportunities for contact (Bennett et al., 2001; Penny, 2015), not limiting contact to when there is a problem (Farquhar et al., 1998), and sharing a common philosophical model of practice (Penny, 2015; Psaila et al., 2014). This suggests that strategies to improve methods of communication and collaboration between health professionals need to be further developed and evaluated for effectiveness. Taken together, this evidence synthesis provides a comprehensive and global perspective on the collaborative relationships between midwives and health visitors.

2.4.2 Strengths and limitations of the review

A strength of this review was the use of a comprehensive and robust systematic search strategy. Additionally, the inclusion of published and unpublished research with no time filter restriction imposed allowed for an inclusive synthesis. Whilst the use of decades-old studies can be seen as a limitation in light of ever-changing maternal and child health services, a prescribed time period for this review would have resulted in a smaller number of studies for review (Meline, 2006). Further, papers for inclusion were determined by study design and relevance to the purpose of the review (The Cochrane Collaboration, 2011). Indeed, the current review specifically concerns the nature and conduct of interprofessional collaborative working between midwives and health visitors. As such, the behaviour

or phenomenon of interest transcends the time in which the studies were conducted, their settings, and the international service models reviewed. Finally, study quality was assessed by two independent researchers, and was considered in the discussion of the results.

Despite its methodological strengths, the current review has limitations that should be considered. Although it focussed on midwives and health visitors, a few studies included health professionals other than the two groups specified. It was not possible to analyse some data separately between these groups, thus a decision was made to focus on findings relating to midwives and health visitors only (i.e. the focus of this thesis). Data heterogeneity is a commonplace scenario in reviews of health services and policy research studies (Rodríguez & Rivières-Pigeon, 2007). A narrative approach was utilised to address this.

2.4.3 Clinical practice and research implications

The review findings illustrate the enablers of collaboration between midwives and health visitors in maternal and child health services, such as good communication and co-location. Policy makers should consider the identified barriers (e.g. information transfer) as well as enablers (e.g. working in an environment with appropriate communication tools) to interprofessional collaboration when planning and commissioning services. The utility of interprofessional collaboration should also be taken into account. In terms of achieving optimal levels of collaboration, the evidence remains equivocal. As government initiatives call for increased collaboration despite inadequate robust and theoretically-informed evidence, this warrants further study. Whilst some of the research identified in the current review referred to relevant theory, it remains unclear what the most influential factors are regarding interprofessional collaboration between these two groups, partly because collaboration is vaguely defined (Xyrichis & Lowton, 2008). Indeed, interventions to increase interprofessional collaborative practice between midwives and health visitors need to be tested against available theories of interprofessional practice (D'Amour et al., 2008; Reeves et al., 2010), and evaluated for efficacy and cost-effectiveness.

As previously discussed, the studies reviewed attempted to apply theory; however, there were a range of frameworks used and none of the studies set out to test these theories. It is important to place research in the context of theory for several reasons. First, it is argued that the role of applying theory in research allows understanding and explanation of the causes of particular outcomes or effects (Clark, Briffa, Thirsk, Neubeck, & Redfern, 2012). Second, the application of theory allows for the identification of methods that lead to successful integration, and those that hinder it from happening (Nieuwenhuijze et al., 2015). Third, individual behaviours that might not be accommodated by organisational theories of collaboration which are usually focussed on informing interprofessional education (Suter et al., 2013), may benefit from the application of psychological theories. For instance, the use of psychological theory can help to specify relationships between variables that influence behaviour(s), which can thereby inform interventions aiming to improve or change the behaviour(s) of interest (Michie et al., 2007). Moreover, the application of theory allows for comparisons to be made between groups or between studies, which can in turn facilitate generalisation (Ayers & Olander, 2013). Finally, the explicit use of a theoretical framework allows us to demonstrate how the research questions asked and the data collected are influenced by our worldviews or beliefs about knowledge and reality (Alderson, 1998). Thus, drawing on this observation, in the context of the present study of interprofessional collaboration between two groups of health practitioners, there is a need to integrate the use of theory across all elements of the research process.

In addition, the present review identified areas in which collaboration worked well (e.g. working in an environment with appropriate communication tools), and areas in which the collaboration between health professionals could be improved. Whilst policy recommendations continue to promote interprofessional partnerships, the evidence synthesised in the present review gives an indication regarding the areas of interprofessional collaboration that warrant further exploration (e.g. needs assessments, methods of information sharing). As illustrated in the challenges encountered by midwives and health visitors, the tools used for assessment as well as the information shared between professionals need to be revisited.

2.5 Conclusion

This review revealed the challenges to collaborative practice as well as midwives' and health visitors' perceptions of what makes effective interprofessional collaboration. Whilst some studies discussed enablers to collaboration, others explored difficulties in implementing collaboration in practice. There were also varied innovations offered to achieve collaboration. Studies highlighted the importance of increased support through the provision of opportunities to collaborate, the need to clearly communicate one's role function to relevant professionals, and the effectiveness of increasing shared resources. However, implementing these may be challenging due to structural or organisational barriers, which need to be considered when attempting to understand interprofessional collaborative behaviours. The findings presented here depict maternal and child health as a complex system, in accordance with previous research (Nieuwenhuijze et al., 2015). Successful interprofessional collaboration can be characterised by being able to connect with each other early, being flexible and having a team approach. Ultimately, midwife-health visitor collaboration is valuable, and its effective implementation can be beneficial for all parties involved.

3 Understanding the enablers and barriers to interprofessional collaboration between midwives and health visitors using the Theoretical Domains Framework: Introduction and methods

3.1 Overview

The preceding chapter systematically reviewed the international literature on midwife-health visitor collaboration, and concluded that interprofessional collaboration between these groups shows promise. However, the limited current UK evidence indicates that there is a need for greater clarity regarding the nature of interprofessional collaboration between these two groups and the existing barriers and enablers to successful collaborative working. Drawing from the systematic review findings, there was only one study conducted on the topic, which reflected on a midwife and a health visitor's experience of interprofessional collaboration in one borough in England (Regan & Ireland, 2009). Importantly, the investigation of barriers and enablers to interprofessional collaboration needs to be extensively guided by theory, in order to develop interventions that appropriately target areas requiring change at an individual, interpersonal, and organisational level. Therefore, this chapter presents the rationale and methods for a study using the Theoretical Domains Framework to explore what hinders and helps midwives and health visitors to work collaboratively with each other. The methods detailed here form the basis of the findings discussed in the subsequent three chapters. This chapter is organised into four sections, the first of which elaborates the rationale for the study design and methods chosen. The participant sample drawn for this study is then discussed. This is followed by a discussion of the materials utilised to undertake data collection and the data analysis methods. Following this is a discussion of other considerations associated with this research method. Finally, a summary of the chapter is provided.

3.2 Study rationale

Previous research suggests a positive influence of interprofessional collaboration on patient health outcomes such as motor function in stroke patients, and clinical/process outcomes such as healthcare professionals' adherence to recommended practices (Reeves et al., 2017). However, the certainty or strength of this evidence remains mixed particularly for outcomes relating to collaborative

behaviour (Reeves et al., 2017; Suter et al., 2013). Considering midwives and health visitors in particular, the systematic review (Chapter 2) which investigated interprofessional collaboration between midwives and health visitors found that whilst such work is valued by midwives and health visitors, implementation of interprofessional collaboration practice is rare and varied extensively. Furthermore, the concept of interprofessional collaboration is poorly defined (Reeves et al., 2011); thus, its nature as an enacted behaviour (including the processes requisite to successful implementation) requires illumination. Evidence drawn from the wider interprofessional field indicates that the implementation of interprofessional collaboration strategies can be difficult to maintain (Suter et al., 2013). Such variations in implementation may be associated with the limited theoretical basis of interventions designed to encourage evidence-based practice (P. Davies, Walker, & Grimshaw, 2010; Michie et al., 2005). Indeed, a key criticism of research investigating interprofessional collaboration is the limited application of theory which contributes to the difficulties in explaining how processes worked, influenced or interacted with each other to produce the related outcomes (Reeves & Hean, 2013). In addition, Presseau and colleagues (2017) have argued that successfully implementing evidence-based recommendations remains difficult owing to the challenge of altering health professionals' and institutions' established behaviours. Perceived barriers can hinder changes to health professionals' practices or behaviours and can therefore undermine the impact of any implemented strategies or interventions (Presseau et al., 2017). Also, in maternity services as well as in other health sectors, translating guidelines to practice is difficult when multiple professionals are responsible for different elements of care (Patey, Islam, Francis, Bryson, & Grimshaw, 2012).

The systematic review findings (see section 3, Chapter 2) showed there were limited empirical studies investigating the effectiveness of interprofessional collaboration between these two health professional groups against identified outcome measures (e.g. health service use/access) or health indicators (e.g. birth outcomes). Although it was observed that there was scant evidence concerning the impact of interprofessional collaboration on health, process or professional outcomes, a number of studies made use of self-report measures to assess interprofessional collaboration, increasingly so in the last decade (see e.g. Bar-Zeev

et al., 2012). Taken together, interprofessional collaboration, with the lack of clarity in its operationalisation, and the context in which it is expected to occur (see sections 1.3 and 1.4, Chapter 1), makes it difficult to advance the research, especially in terms of identifying outcomes for evaluating its effectiveness and the impact of interprofessional collaboration on actual health professional behaviour change (Reeves et al., 2011).

There is a relationship between the effectiveness of evidence-based practice and the context in which it is delivered (Michie et al., 2005). Grol and Wensing (2004) argue that achieving evidence-based practice relies on a sound understanding of the factors which produce outcomes for any specified target group and setting, and have proposed six areas of investigation: "the innovation itself, the individual professional, the patient, the social context, the organisational context, and the economic and political context (Grol & Wensing, 2004, p. S58)". Thus, there is a need to identify the specific processes which explain the observable effects in a given setting. Explaining the mechanisms or drivers of change is arguably more informative than simply being able to identify these changes (Michie et al., 2005). Facilitating this requires the application of theory, particularly as it is agreed that there has been limited use of theory in the interprofessional field thus far (Reeves et al., 2011; Suter et al., 2013). As described in section 1.4, Chapter 1, using theory can enable the understanding of barriers and enablers to the enactment of behaviour(s), identify its moderators, and can be useful for intervention design (P. Davies et al., 2010). The following section discusses the Theoretical Domains Framework as a useful tool for understanding barriers and enablers to healthcare professional behaviour.

3.2.1 The Theoretical Domains Framework

The Theoretical Domains Framework (TDF, Michie et al., 2005) was developed to overcome the challenges of having a breadth of theoretical perspectives to test and/or use in implementation research, particularly in understanding individual behaviours. This framework serves the purpose of aiding the selection of techniques or strategies for behaviour change interventions. It consists of 128 constructs, derived from 33 psychological theories, examples of which are social

cognitive theory, learning theory, and diffusion theory (Michie et al., 2005). Some of the theories encompassed by the TDF include those that have been applied in the wider interprofessional collaboration literature such as learning theory (Barr, 2013), as well as those suggested to be potentially useful in this area of research such as diffusion theory (Suter et al., 2013).

The constructs drawn from these 33 theories have been classified into 12 domains. Michie and colleagues (2005) have defined a theoretical domain as consisting of interrelated theoretical constructs, which are component parts of a given theory. These 12 theoretical domains are summarised in Table 3.1. Since its inception, other researchers endeavoured to apply more thorough methods to substantiate the content validity of the TDF (Cane et al., 2012). Whilst Michie et al. (2005) verified the TDF using a consensus approach, Cane et al. (2012) assessed the TDF's content validity by having eligible participants – those who were unfamiliar with the original version of the TDF but had an understanding of behaviour change theory – undertake sorting tasks. Data was analysed using Discriminant Content Validity and Fuzzy Cluster Analysis. This validation exercise resulted in 14 theoretical domains (Cane et al., 2012), which are summarised and defined in Table 3.1. The main differences between the validated version (Cane et al., 2012) and the original version (Michie et al., 2005) are: the omission of the domain 'Nature of the behaviours', the separation of the domains 'Motivation and goals', and the identification of 'Optimism' as well as 'Reinforcement' as new domains.

Table 3.1. Theoretical domains v1 and v2 with definitions.

Theoretical domains, version 1 (Michie et al., 2005)	**Theoretical domains, version 2 (Cane et al., 2012)**
Knowledge	Knowledge (An awareness of the existence of something[3])
Skills	Skills (An ability or proficiency acquired through practice)
Social/professional role and identity	Social/Professional Role and Identity (A coherent set of behaviours and displayed personal qualities of an individual in a social or work setting)
Beliefs about capabilities	Beliefs about Capabilities (Acceptance of the truth, reality, or validity about an ability, talent, or facility that a person can put to constructive use) Optimism - *new in this version* (The confidence that things will happen for the best or that desired goals will be attained)
Beliefs about consequences	Beliefs about Consequences (Acceptance of the truth, reality, or validity about outcomes of a behaviour in a given situation) Reinforcement - *new in this version* (Increasing the probability of a response by arranging a dependent relationship, or contingency, between the response and a given stimulus)

[3] Definitions given here are directly quoted from Cane et al., 2012, pp. 13–14.

Theoretical domains, version 1 (Michie et al., 2005)	**Theoretical domains, version 2 (Cane et al., 2012)**
Motivation and goals	*Separated into two domains in this version, listed below* Intentions - *new in this version* (A conscious decision to perform a behaviour or a resolve to act in a certain way) Goals - *new in this version* (Mental representations of outcomes or end states that an individual wants to achieve)
Memory, attention, and decision processes	Memory, Attention and Decision Processes (The ability to retain information, focus selectively on aspects of the environment and choose between two or more alternatives)
Environmental context and resources	Environmental Context and Resources (Any circumstance of a person's situation or environment that discourages or encourages the development of skills and abilities, independence, social competence, and adaptive behaviour)
Social influences	Social Influences (Those interpersonal processes that can cause individuals to change their thoughts, feelings, or behaviours)
Emotion	Emotions (A complex reaction pattern, involving experiential, behavioural, and physiological elements, by which the

Theoretical domains, version 1 (Michie et al., 2005)	**Theoretical domains, version 2 (Cane et al., 2012)**
	individual attempts to deal with a personally significant matter or event)
Behavioural regulation	Behavioural Regulation (Anything aimed at managing or changing objectively observed or measured actions)
Nature of the behaviours	*Omitted from this version*

The TDF has been applied to investigate a broad range of health professional behaviours in relation to patient care. For example, physicians and nurses were interviewed concerning haemodialysis treatment (Presseau et al., 2017), focus group discussions were held with occupational physicians concerning temporary work modifications in occupational health (Horppu, Martimo, MacEachen, Lallukka, & Viikari-Juntura, 2017), and anaesthesiologists were interviewed concerning perioperative temperature management (Boet et al., 2017). The TDF has also been utilised increasingly to understand patients' or service users' health behaviours. Mulligan and colleagues (2017) explored the barriers and enablers to self-management of type 2 diabetes in those with severe mental illness using interview methods. Other researchers have also used this framework to interview both health professionals including GPs and pharmacists, as well as patients concerning antibiotic prescribing (Sargent, McCullough, Del Mar, & Lowe, 2017), for example.

Moreover, the framework has been applied in maternity research, including exploring perinatal mental health screening with midwives and other professionals, as well as women currently or previously pregnant, using interview methods (Nithianandan et al., 2016). Similarly, the barriers and enablers to the delivery of antenatal magnesium sulphate for foetal neuroprotection was explored using the TDF with numerous health professionals including midwives and obstetric and neonatal consultants (Bain et al., 2015). Other researchers have used survey methods to explore the barriers and enablers to midwives' implementation of physical activity guidelines for obese pregnant women (McParlin et al., 2017), as well as midwives' perceived barriers and enablers to implementing clinical guidelines concerning smoking cessation for pregnant women (Beenstock et al., 2012).

In addition, some studies that applied TDF methods have identified barriers and enablers which relate to collaborative working. For example, in a qualitative interview study with urologists and oncologists on their perceived barriers and enablers to using bladder-sparing radiotherapy, Walker and colleagues (2017) found that a lack of interprofessional collaboration influenced the use of the abovementioned treatment. Equally, institutions which were supportive of collaborative working were perceived as enablers to utilising bladder-sparing radiotherapy. Another study which explored GPs' prescribing behaviours for older adults using interview methods revealed that GPs experienced positive collaborations with pharmacists, and at the same time, welcomed efforts to sustain this collaborative relationship (Riordan et al., 2017).

Whilst increasing interprofessional collaboration has been identified as a potential solution to address some of the difficulties in implementing other health professional behaviours, no TDF-based study focussing on understanding the barriers and enablers to **interprofessional collaboration** as a **health professional behaviour** has been identified. Therefore, this study sought to explore interprofessional collaboration, specifically between midwives and health visitors for the reasons described. Although it is known that midwives and health visitors may also encounter each other in the antenatal period, particular attention is given in the present study to the postnatal period, specifically the handover of care from midwifery to health visiting as this was identified in the literature as an area that requires improvement (Farquhar et al., 1998; Homer et al., 2009; National Maternity Review, 2016). Additionally, postnatal care has been highlighted in UK policy such as the *Health and Social Care Act* (United Kingdom, 2012) as a key area for midwives and health visitors to work collaboratively (Department of Health, 1999, 2010b; Public Health England, 2016a).

As discussed in section 1.4, Chapter 1, there are a number of models for understanding interprofessional collaboration. These models focus heavily on interpersonal and organisational processes (Suter et al., 2013) and provide extensive explanations for the factors influential to interprofessional collaborative behaviour at levels beyond the individual. Based on the systematic review findings (Chapter 2), which demonstrated scant recent evidence concerning the individual barriers and

enablers to midwife-health visitor collaboration and the wider body of literature (Grol & Wensing, 2004; Reeves et al., 2017), understanding the individual processes relating to working collaboratively with other healthcare professionals, including the barriers and enablers to this is crucial to the advancement of interprofessional collaboration research.

For this study, it was decided that the original version of the TDF (Michie et al., 2005) was more relevant than the validated version (Cane et al., 2012) for a number of reasons. First, it was clear from the systematic review that there is still a lack of consensus regarding the operationalised definition of 'interprofessional collaboration' amongst midwives and health visitors. Therefore, the need to include the domain 'Nature of the behaviours' which relates to one's representations of given tasks, past experiences, routine, and habit was identified. Whilst there has been some indication that this domain overlaps with the domain 'Behavioural regulation', which concerns changing actions or problem solving (Dyson, Lawton, Jackson, & Cheater, 2011), in the context of this study, understanding the proposed behaviour (i.e. interprofessional collaboration) is paramount for reasons already described. Moreover, no decision has been made amongst the research community regarding which of the two versions of the TDF is superior to the other, but both are currently in use and "can be used depending on users' familiarity and preference" (Atkins et al., 2017, p. 3). In addition to the literature discussed above, advice was sought from a health psychologist experienced in using the TDF (FL) who also affirmed the decision to use the original version of the framework. Finally, a discriminant content validity study of a general, 32-item TDF questionnaire revealed that of the 14 domains, only 11 were discriminately measurable, which suggests that the original domains may be more appropriate for questionnaire development (Huijg, Gebhardt, Crone, Dusseldorp, & Presseau, 2014). Although a questionnaire development study is beyond the scope of this thesis, utilising the original version (Michie et al., 2005) instead of the validated version of the TDF (Cane et al., 2012) allows future researchers an opportunity to use the data gathered from the present study to inform questionnaire development.

Various study designs are compatible with the TDF, including qualitative interviews and surveys. Although documentary analyses and structured observations

are less explored in the current TDF literature these designs have been noted to show potential (Atkins et al., 2017). Qualitative interviews offer an opportunity to explore the topic of interest with participants in greater detail (Atkins et al., 2017), to develop thick descriptions – theoretical and analytical narratives – of participants' perceptions and experiences (Holloway, 1997). As discussed previously, numerous published TDF studies have utilised qualitative interview methods, particularly when investigating perceived barriers and enablers to health professional behaviours (Atkins et al., 2017). A qualitative interview design is well suited to this study given that there is limited research concerning interprofessional collaboration between midwives and health visitors and the utility of this exploratory method when used in combination with the TDF, as seen in previous research.

3.3 Study aim and objectives

This study aimed to utilise the Theoretical Domains Framework to explore the barriers and enablers to midwife-health visitor collaboration during transition of care from midwifery to health visiting services.

3.3.1 Objectives.

In keeping with the aim of this study the following objective is detailed as a research question below:

1. What are midwives' and health visitors' experiences of working collaboratively with each other?
2. What are salient TDF domains relating to midwives and health visitors working in partnership regarding women's care during transition of care (handover)?

3.4 Method

3.4.1 Design.

Cross-sectional, semi-structured, qualitative interview studies were conducted amongst currently practising midwives and health visitors in England and Wales.

3.4.2 Definition of target behaviour.

The following factors were considered, in line with known TDF methods, to define the target behaviour: 1) specificity, 2) the actor, including when where and how, and 3) qualities that are characteristic of the behaviour such as "complexity, action sequences and interdependence of team-level behaviours" (Atkins et al., 2017, p. 6). In this study interprofessional collaboration has been defined as midwives and health visitors working in partnership, that is, being in contact with each other either face-to-face, by telephone, or via access to women's records/notes regarding women's care during transition of care (handover).

3.4.3 Participants.

A combination of purposeful (maximum variation) and convenience (snowball technique) sampling methods was used (Patton, 2015). In line with previous TDF studies with healthcare professionals (e.g. Horppu et al., 2017; Patey et al., 2012), a purposeful maximum variation sampling technique was applied (Patton, 2015). Such sampling methods have been identified as a criterion for achieving reliable data saturation (Francis et al., 2009) and importantly, allows for data to be collected from a diverse group of participants. Additionally, snowballing enabled the identification of key informants, as well as other eligible participants who could provide rich information on the topic of interest (Patton, 2015).

In line with maximum variation purposeful sampling methods, the inclusion criteria were the following:

- Full-time practising midwives or health visitors (as registered with the NMC) in England and Wales, and
- Able and willing to provide informed consent, including the audio-recording of interviews.

To ensure that individuals who expressed interest in the study were still registered midwives and/or health visitors, their details were checked on the NMC Register (https://www.nmc.org.uk/registration/search-the-register/).

3.4.4 Materials.

3.4.4.1 Theoretical Domains Interview Topic Guide.

An adaptation of the Theoretical Domains Interview (TDI, Francis et al., 2009) was developed specifically for midwives and health visitors in a maternal and child health service setting. This semi-structured interview topic guide was based on the constructs and domains of the TDF (Michie et al., 2005), geared at eliciting information on views and experiences of midwives' and health visitors' working in collaboration in maternity services. The original topic guide is provided in Appendix H. Specifically, the behaviour of interest is 'interprofessional collaboration', defined as midwives and health visitors working in partnership – *being in contact with each other using one or a combination of the following modes of communication: face-to-face, telephone, or women's records/notes* – regarding women's care during transition of care (handover). As discussed in section 3.2.1, particular focus on the handover period was set because it is known that this is the time point at which these health professionals are most likely to be in contact. However, in consideration of the current context of UK maternity services which encourage contact between these health professionals throughout the pregnancy care continuum (see sections 1.3 and 2.3.6, Chapters 1 and 2, respectively), questions about interprofessional collaboration outside the handover period were also formulated. The interview questions were validated by an experienced health psychologist (FL), by means of coding the interview questions onto the TDF domains. Inter-rater reliability for the questions developed was calculated using Cohen's Kappa, which resulted in substantial agreement (κ= 62.4%). Following pilot testing of the interview topic guide with one midwife and one health visitor, the sequence of questions was finalised and used for data collection. The full topic guide is provided in Appendix I.

3.4.4.2 Audio-recording device.

An Olympus VN-8500 digital voice recorder was used to audio-record participant interviews.

3.4.4.3 Demographic information sheet.

A specifically-designed demographic sheet was developed for this study (Appendix J). Data collected were current role, ethnicity, and gender. Other

demographic information including years of experience, were collected as part of the interview process and do not appear in the demographic information sheet.

3.4.5 Procedure.

Following ethical approval (see section 3.4.7 below), participants were recruited through several channels namely (1) social media (e.g. Facebook, Twitter), (2) professional organisations (Royal College of Midwives, Institute of Health Visiting, Community Practitioners and Health Visitors Association), and (3) word of mouth. More specifically study advertisements were posted on Twitter and Facebook throughout the recruitment period (July 2016-February 2017). Facebook posts were circulated through personal pages and private midwife/health visitor groups. The Royal College of Midwives also posted Tweets regarding the study, as well as posted advertisements on their Facebook Page. The Institute of Health Visiting assisted recruitment through similar methods, with the addition of advertising the study through their Associates' Newsletter. The Community Practitioners and Health Visitors Association also assisted recruitment through social media postings via Twitter and Facebook; in addition, they published the advertisement in print in their publication *Community Practitioner* in September 2016.

Using multiple recruitment methods facilitated the wide dissemination of study information and allowed for a diverse group of health professionals to be recruited into the study. Recruiting participants to represent different geographical areas, practices, and populations presented some advantages such as allowing for the identification of common patterns and central issues drawn from varying experiences at the same time highlighting individual differences (Patton, 2015).

Data collection was conducted between July 2016 and February 2017 either face-to-face or over the phone. Data saturation, that is, when no new information is being reported or drawn from the interviews, was taken into consideration (Guest, Bunce, & Johnson, 2006). It is known that the definition of data saturation varies widely in the literature (Guest et al., 2006; O'Reilly & Parker, 2013). Two studies which explored the minimum optimal sample size for reaching data saturation accounting for factors such as analytical methods and research objectives suggest

that a minimum of 10-12 participants is a sufficient initial sample for studies applying purposive sampling techniques and theory-based analyses (Francis et al., 2010; Guest et al., 2006). Previous TDF-based research was thus used as a guide for data collection and sample size; these studies typically have at least 10 participants (e.g. Boet et al., 2017; Roberts et al., 2016). Therefore, a stopping criterion of an additional three interviews was applied to each of the participant samples (i.e. midwives and health visitors), in accordance with recommendations in the literature (Francis et al., 2010). Specifically, a further three interviews were conducted in succession following the initial 10 interviews to assess whether any new themes were emergent. At the 13th interview for each participant sample, following discussion amongst the research team, the decision was made to proceed to conduct further interviews due to new information arising. Given that there were two groups included in this study, data collection continued until data saturation was reached which was at 32 interviews, 17 interviews for the health visitor sample and 15 for the midwife sample, respectively.

Recruitment materials included participant information sheets and contact details of the research student and Principal Investigator (EO) to allow eligible participants to express interest as well as ask questions about the study (Appendix K). Following expressions of interest, potential participants were contacted to assess eligibility and organise a suitable date, time and location (within Greater London and Manchester) for the interview. This was followed by a one-off semi-structured interview conducted either face-to-face (within Greater London and Manchester) or by telephone. No participants from Wales were recruited. Prior to the interview, informed consent was collected – this was done through audio-recorded verbal consent for telephone interviews (separate to the main interview to maintain anonymity), and through signing consent forms for face-to-face interviews. A demographic information sheet was first completed by the participant, after which the interview took place. Then, the participant was debriefed and thanked for their participation. Participants were also asked whether they would be interested in receiving a summary of the findings.

3.4.6 Analysis.

The data was analysed using content analysis, with a framework approach (Roberts et al., 2016). This approach has been applied in a number of TDF-based studies (e.g. Presseau et al., 2017) and involves four steps, as outlined below.

3.4.6.1 Step 1. Pilot stage.

The pilot stage of analysis involved jointly coding a randomly selected (RANDOM.ORG, 2016) interview transcript with a member of the research team (FL), a health psychologist with experience of using the TDF as an analytical framework. A coding manual was developed which informed the rest of data coding and analysis. Any disagreements were resolved by consensus discussion.

3.4.6.2 Step 2. Coding participant utterances into TDF domains.

Following Step 1, transcripts were independently coded through splitting participant responses into utterances (i.e. chunks of meaningful text) and then allocating these to the relevant TDF domains. For example, the quote

> *"Well I know, there's the Department of Health one about pregnancy and early weeks, I've forgotten what it's called but I know it's sort of basic like that but other than that it's the, the UNICEF Baby Friendly guidelines and all that sort of thing that I know it discusses you know maintaining contact and things like that" –HV43*

was coded into the domain 'Knowledge', which relates to an individual's awareness of something such as guidelines or procedures (Michie et al., 2005). Where quotes related to multiple domains, these were coded into each relevant domain. For example, the quote

> *"if it is something where we've got concerns um about mum or baby during that transition then we would very openly and honestly with our our families if there's a concern because mum has got a wound issue then that's not usually a problem and people immediately agree to um share information" –HV43*

was coded into the domains, 'Memory, attention, and decision processes' as well as 'Behavioural regulation'. Transcripts were analysed in a random order, by group (i.e. midwives and health visitors). Randomisation was applied to eliminate biases such

as order effects. Analysis commenced following the final interview for each group. The randomisation of transcripts was achieved using a random number generator (RANDOM.ORG, 2016).

3.4.6.3 Step 3. Theming of utterances.

Following coding the transcripts into TDF domains, the author organised the coded data thematically, in line with a framework analysis approach. Similar utterances coded into each domain were grouped together, to identify important factors/variables, issues, enablers and barriers to working collaboratively. After grouping utterances, summary belief statements were written, which synthesise and represent similar utterances across participants (Roberts et al., 2016). A consensus approach was used to resolve any disagreements and discuss discrepancies, with regular meetings amongst the team (RA, EO, and RB, with advice as needed from FL). Of the 12 domains, six random domains' summary belief statements were generated as a team. Following this phase, the author led the synthesis of the remaining six domains into belief statements, bringing this back to the team for consensus discussion.

3.4.6.4 Step 4. Identifying key beliefs.

To identify the key beliefs, the generated summary belief statements were assessed against the following criteria: frequency, discord, and relevance to the external evidence base (Roberts et al., 2016). Each of these criteria will be discussed in turn. First, a frequency count was conducted for each belief statement across all interviews, with key beliefs of high frequency (i.e. most commonly expressed by the most number of participants) being classified as important. This is line with previous TDF-based research using interviews (Roberts et al., 2016).

Second, any conflicting or discordant belief statements were identified. Discordant beliefs show how participants' perceived barriers may act as enablers and vice versa. For example, participants may express a lack of knowledge of their midwifery or health visiting colleagues which is therefore identified as a barrier, as described in the following midwife quote: *"I don't know who the health visitors are. I don't know who they are" (MW67)*. Meanwhile, others may express an awareness

of who their midwifery or health visiting colleagues are which is therefore considered an enabler, as illustrated in the following quote: "*we don't know all of them [health visitors] but we know the team leader and we know who to call if we need to get in touch with them" (MW12)*. Therefore, identifying discordant beliefs is important for tailoring any interventions developed and highlights nuances in individual experiences.

Finally, where a belief statement was judged to relate to the external evidence base, this was also considered important. An example of this relating to interprofessional collaboration between midwives and health visitors would be the following participant quote: *"We need to find good communication that is also time you know; will work within the time we have" (MW67)*. Good communication has previously been identified as an enabler to successful interprofessional collaboration (section 2.3.5.1.1, Chapter 2). For this study, the external evidence base used to inform analysis was the findings drawn from the systematic review (Chapter 2). Again, regular meetings were held with the team to decide on key beliefs, and determine whether the beliefs presenting to be either barriers or enablers, or both. A belief statement was considered important if it met at least one of the three criteria, frequency, discord or relevance, discussed above, in line with previous work (Roberts et al., 2016).

3.4.7 Ethical considerations.

Ethical approval was obtained from the School of Health Sciences, Centre for Maternal and Child Health Research Proportionate Review Committee at City, University of London (Ref.: PR/MCH/PhD/16-17/01,

Appendix L). The key ethical issues that needed to be considered were anonymity, confidentiality, informed consent (including audio recording), and disclosure of unsafe practice. To uphold anonymity and confidentiality, no identifying data was kept and all interview transcripts were anonymised. In addition,

participant numbers were generated via a random number generator (RANDOM.ORG, 2016), and only descriptors (e.g. participant number, specific role, years of experience) have been used in direct quotations.

Regarding informed consent, it was emphasised to the participants both verbally and in the information sheet that participation in this study was completely voluntary. Eligible participants were provided with participant information sheets, given an opportunity to ask questions, and at least 24 hours to consider participation in the study. Those who expressed interest were reminded of their role in the study; their right to withdraw at any point up to the point before data is anonymised without repercussions; the use of a recording device, and the use of anonymised direct quotations in any publications arising from this work. If the eligible participant was still willing to participate, then the points within the consent form were either read to the participant, enabling the participant to verbally consent to each point and this was audio-recorded separate to the interview (if the interview was via telephone), or the participant was asked to complete a consent form (if the interview was face-to-face).

Finally, in the event that a participant(s) disclosed information relating to unsafe practice, they were made aware that the privacy and confidentially would not be absolute. The protocol put in place was as follows: discuss the adverse event with the supervisory team (RB, EO) and university safeguarding lead Chris Barnes (Ext 5998, M.C.Barnes@city.ac.uk), at the earliest opportunity (within 72 hours to account for interviews held on a Friday), and decide whether action needed to be taken.

3.5 Other considerations

Other study considerations included minimising potential harm, and the safety of the researcher. To ensure that participants' wellbeing was kept at the forefront of this study, all eligible participants were given considerable time to decide whether to participate in the study (at least 24 hours), an opportunity to ask questions, the freedom to withdraw from the study at any point up to the point before data is anonymised without repercussions. If participants decided to withdraw from participating, all interview data would have been destroyed and not used for the

study. No adverse effects on individuals were expected, however, a support plan was put in place in case of an adverse event. For example, should a participant experience distress, the participant would have been provided the option to either continue with the interview if they wished to do so, or to terminate the interview entirely. A list of support contacts, including the supervisory team's contacts, would have been made available to the participant if participants required further information and/or support following the interview. Furthermore, the participant would have been signposted to the participant's Trust counselling service. There were no adverse events that took place, and none of the participants who consented to the study withdrew their participation.

Given that it was expected that the data was to be collected by the author independently, with the potential to travel to different sites, it was ensured that the study complied with City, University of London's (2015) lone working policy (Section 3.6 of the Health and Policy document). A risk assessment form was completed, with planned safety measures identified and persons responsible named. For instance, the date/time and locations of all booked interviews were documented in the researcher's (RA) City, University of London Outlook account, which is visible to the supervisory team. To add to this, a member of the supervisory team was informed whenever RA was travelling to sites, and again contacted once the interview was completed. In the event that no contact had been made with the team, a member of the research team was responsible for contacting the researcher by telephone.

3.6 Summary

This chapter presented the method concerning the findings that are reported in the succeeding three chapters. Specifically, this chapter provided the context and rationale for using the TDF, placing emphasis on the utility of this theoretically-grounded approach in understanding health professional behaviours. It also highlighted the novel application of the TDF to understanding the barriers and enablers to midwife-health visitor interprofessional collaboration, which, to our knowledge has not been previously investigated using this approach. Moreover, the processes undertaken to complete this study using interview methods were given in

this chapter. Finally, within this chapter, a discussion of the ethical issues and other considerations associated with conducting this research was given. The following chapter reports on the findings drawn from the interview study with midwives in England.

4 Understanding the enablers and barriers to interprofessional collaboration between midwives and health visitors using the Theoretical Domains Framework: Midwives' perspectives

4.1 Summary

This chapter presents the findings from the interviews with midwives. A summary of the sample characteristics is first outlined, providing context to the findings detailed in section 4.2.3. The relevant domains and belief statements will then be reported sequentially by function (i.e. barrier, enabler, or both). Belief statements, also known as themes, are sets of participant responses which are considered influential to the target behaviour (Atkins et al., 2017; Francis et al., 2009). Findings will be discussed, also considering the potential areas for intervention to improve collaboration with health visitors. Implications for research and practice will also be outlined.

4.2 Results

4.2.1 Sample characteristics.

In all, 58 eligible participants expressed interest in participating in this study, however, the split between midwives and health visitors is not known. Fifteen midwives (100% female) from across England participated in this study, with over half of the participants coming from London (53.33%). This participant sample includes one pilot interview participant. Eighty per cent (n= 12) of participants were trained in the UK. The rest were trained in Spain, Germany, and Italy. Together, the study participants have a broad range of experiences (*M* = 13 years' experience; range = 3 years – 33 years, *SD* = 12.22 years). Interviews took between 21 minutes and 1 hour and 11 minutes (Mean interview length = 49 min). Six of 15 interviews were conducted face-to-face, and nine by telephone between July 2016 and February 2017. As explained in section 3.4.7, Chapter 3, study participants were allocated random participant numbers (Range = 0-100) in order to ensure anonymity. A summary of the sample characteristics is provided in Table 4.1.

Table 4.1. *Summary of sample characteristics.*

Characteristic	Midwives (n= 15)
Gender	
Female	15
Location of practice	
East of England	3
London	8
South East Coast	2
South West	1
North West	1
Prior role/qualifications	
Previously a nurse	2
Direct entry midwife	13
Training	
UK-trained	12
Trained outside the UK	3
Current role(s)	
Community midwife	5
Specialist community midwife	6
Rotational midwife (antenatal clinic, labour, community)	1
Delivery suite	1
Independent	1
Independent/midwifery lecturer	1
Ethnicity	
White British	6
White English	2
Any other White	7

4.2.2 Coding participant utterances into TDF domains.

In all, 1,265 utterances from 15 participants were coded into the 12 TDF domains. These were synthesised into 89 belief statements (Appendix M), and finalised into 42 belief statements. Of these, six were barriers, 12 were enablers, and 24 were barriers/enablers. The final set of belief statements was derived through consensus discussion with the research team and applying the criteria: Frequency, discord, and external evidence, in line with previous research (Roberts et al., 2016). In addition, in this study, belief statements are reported that were expressed by at least four participants as observed in previous TDF-based research (Francis et al., 2009; Roberts et al., 2016). Further detail regarding this process is given in section 3.4.6, Chapter 3. Of the 1,265 utterances, the most highly cited domains were 'Social influences' (23%), 'Environmental context and resources' (17%), and lastly 'Behavioural regulation' and 'Nature of the behaviours' both comprising 10% of the

utterances. Percentages of utterances across domains are reported in Figure 4.1. This is not reflective of the number of belief statements identified for each domain, rather, this figure illustrates the number of participant quotations coded into each domain.

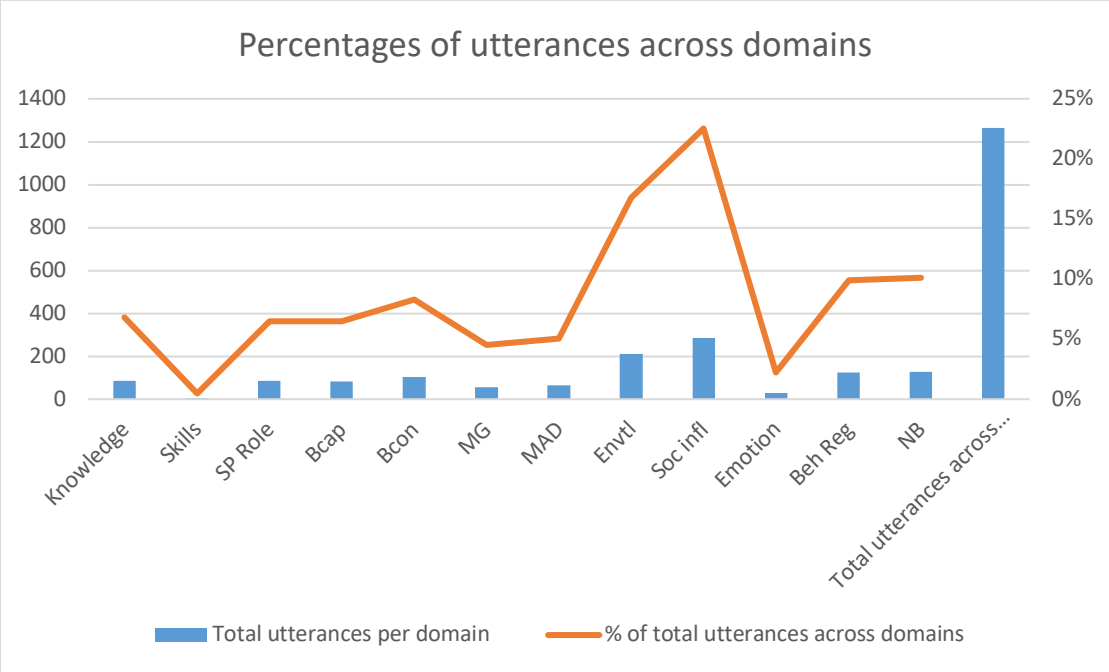

Figure 4.1. Percentages of utterances across 12 TDF domains

SP Role = Social professional role and identity; BCap = Beliefs about capabilities; BCon = Beliefs about consequences; MG = Motivation and goals; MAD = Memory, attention, and decision processes; Envtl = Environmental context and resources; Beh Reg = Behavioural regulation; NB = Nature of the behaviours.

4.2.3 Relevant domains and key belief statements (i.e. themes).

This section outlines the relevant domains and key belief statements drawn from the participant interviews. The data analysis revealed that the domain 'Skills' was deemed not relevant as no more than two participants contributed to any one belief statement, and in all, utterances coded for this domain comprised less than 1% of the data set. Over half of the identified key belief statements across all 12 TDF domains were mixed in nature, i.e. these functioned both as enabler or barrier. The main barriers will be discussed first, followed by enablers, and finally by enablers or barriers. These are organised by domain, then rank order within each domain. A summary of the most frequently cited belief statements across all 12 TDF domains, is provided in Table 4.2.

Table 4.2. Summary of most frequently cited belief statements, reported by at least four participants, across all 12 TDF domains.

Domain	Belief statements	Subthemes	Barrier (B), Enabler (E), or Both enabler and barrier (M)	Participant contribution (Max n= 15)
Knowledge	Knowledge of protocol/practice guidelines	I know protocols/guidelines regarding working in collaboration/being in contact	M	14
		I don't know protocols/guidelines regarding working in collaboration/being in contact		8
	Knowledge of relative roles	Lack of knowledge of relative roles	M	6
	Opinions on guidelines	Guidelines are not as useful and can foster inflexibility	M	6
		Guidelines can be useful and inform practice		4
Skills	*N/A (domain not reported relevant)*	*N/A*	*N/A*	*N/A*
Social/professional role and identity	Collaboration with health visitors is part of my role	Yes	M	13
	Professional differences	None	B	7
	Known role/responsibilities	Contacting health visitors at handover/discharge	E	5
Beliefs about capabilities	Perceived ease of contacting health visitors	Easy	M	12
		Can be a challenge		10

Domain	Belief statements	Subthemes	Barrier (B), Enabler (E), or Both enabler and barrier (M)	Participant contribution (Max n= 15)
	Work structure as a constraint (decreased perceived behavioural control)	None	B	10
	I am capable of collaborating with health visitors	None	E	5
Beliefs about consequences	Benefits of collaboration outweigh costs of doing so	None	E	14
	Perception of contact with health visitors	Contact with health visitors is beneficial	M	12
	Benefits to women/families	Continuity of care	E	10
Motivation and goals	Need for contact with health visitors	Very important to have contact with health visitors	M	9
	Perceived value of collaboration at handover	It is very important at handover	M	8
Memory, attention, and decision processes	Contacting health visitors based on women's/families' identified needs	Contact/handover when there is a concern	M	13
	Perceived difficulty of deciding to collaborate/get in contact with health visitors	Easy, straightforward decision	M	12
		Not something that comes to mind (as contact is limited)		4
	Tools to communicate/collaborate	Having health visitors' contact details	M	14

Domain	Belief statements	Subthemes	Barrier (B), Enabler (E), or Both enabler and barrier (M)	Participant contribution (Max n= 15)
Environmental context and resources	Time	Midwives' and health visitors' lack of time	M	9
	Recordkeeping	Can be useful (e.g. Red Book, referral forms)	M	8
Social influences	Quality of contact with health visitors	Good	M	10
		Poor		6
	Having communication with health visitors	None	E	10
	Influence of women/families on relationship between midwives and health visitors	Can positively influence	M	10
		Can negatively influence		7
	Building capacity for contact/teamwork	None	E	9
	Influence of other midwives on contact with health visitors	Midwife colleagues who are encouraging and supportive	M	9
		Some are reluctant to collaborate		8
	Organisational influence on collaboration/contact	Actively encouraging contact/collaboration with midwives	M	9
		No active encouragement to work with health visitors		5
	Silo culture	None	B	9
	Personal characteristics	None	B	7
Emotion	Emotions can impede collaboration	None	B	4

Domain	Belief statements	Subthemes	Barrier (B), Enabler (E), or Both enabler and barrier (M)	Participant contribution (Max n= 15)
	Positive feelings from experiences of collaboration	None	E	4
	Stress	Stress impedes collaboration	M	4
Behavioural regulation	Markers of collaboration	Women getting support from MWs and HVs	E	10
		Records/documentation		9
	Teambuilding exercises	Introducing joint training	E	8
	Developing programmes delivered collaboratively	Face-to-face meetings	E	7
	Action planning with health visitors (incl. shared care)	None	E	7
Nature of the behaviours	Nature of contact with health visitors in the antenatal period	Past antenatal contacts	M	10
	Extent of collaboration	Regular face-to-face	M	9
		Speaking directly to health visitors during the postnatal period to prevent missing families		9
		Limited contact		7
		Passive/indirect contact through handover/referral		5
	Applying collaboration-related guidelines	No, I don't apply them	M	8
		Yes, I apply them		4

4.2.3.1 Key barriers.

Six belief statements were identified as barriers, in line with the three criteria for identifying relevant belief statements (i.e. frequency, discord, and external evidence). These related to five theoretical domains. Each of these will be discussed in detail in the following section, by domain.

4.2.3.1.1 Social/professional role and identity.

One belief statement was identified relevant to the domain 'Social/professional role and identity', which was 'Professional differences'. This belief statement concerned midwives' experiences of differences in professional identity, described by some as an 'us vs. them' culture. Midwives reported that this could be related to differences in education or training: *"Something else I would say with regards to the health visiting teams, because, because our midwives are all trained at the same hospital we all have quite um, set ways of working" (MW4)*. This belief statement is summarised in Table 4.3.

Table 4.3. Key barriers, Social/professional role and identity.

Belief statement	**Illustrative quotes**	**Participant contribution (Max n= 15)**
Professional differences	it was more like we do our work, they do theirs and we never felt like we are actually working towards the same purpose which I know we are but it doesn't feel like -MW12	7

4.2.3.1.2 Beliefs about capabilities.

In relation to the domain 'Beliefs about capabilities', the belief statement 'Work structure as a constraint (decreased perceived behavioural control)' was identified as a barrier. Many participants (n= 10, 67%) reported themselves and the health visitors working in *"such fragmented ways" (MW24)*, for example, working in the community, having different employers, as well as covering various geographical areas, as illustrated in the following quote:

> *"I think that's the main issues right now why we sometimes we have those issues. Like, I need to hand, I need to handover to the, to the health visitor, I need to send the mother's baby and now it's gonna take me another hour to phone in three different surgeries and know which one is covering. -MW37"*

Such constraints beyond midwives' control were seen to reduce the ability to work collaboratively with health visitors. This belief statement is summarised in Table 4.4.

Table 4.4. Key barriers, Beliefs about capabilities.

Belief statement	**Illustrative quotes**	**Participant contribution (Max n= 15)**
Work structure as a constraint (decreased perceived behavioural control)	there is always a bit of difficulty when the health visitors are um, though we work with them interprofessionally, they're not employed by the same trust, we wouldn't be working under the same guidelines, so I feel like it might be a little bit more difficult to get that collaboration through -MW4	10

4.2.3.1.3 Social influences.

For the domain 'Social influences', two belief statements were identified. These are 'Silo culture', and 'Health visitors' personalities'. There were no sub-themes identified for this domain. 'Silo culture' concerns the tendency to be constrained within one's team, which was discussed by nine of 15 midwives (60%). Moreover, midwives reported having different perspectives on care. These reported interpersonal conflicts that challenged interprofessional collaboration with health visitors were associated with differences in training as reported in 4.2.3.1.1, a reluctance to change, as well as the pervasiveness of social norms: *"Same old, same old! Lack of team working, people that don't really want to work with other teams. Handover of care being now it's your problem, um... not wanting to change the way you work" (MW87).*

The belief statement, 'Health visitors' personalities' concerns how midwives interpret their encounters with health visitors. Within this, midwives have identified health visitors' personality characteristics including sociability and ways of interacting with colleagues as a potential barrier to working collaboratively:

> *"I would think it's probably, I would think personality goes a lot towards it. If you've got a health visitor who wants to work with you then it'll work, but if you've got someone who doesn't want to work with you then it's going to be very difficult." –MW32*

'Health visitors' personalities' was reported by just under half of the participant sample. Both of the belief statements outlined here are summarised in Table 4.5.

Table 4.5. Key barriers, Social influences.

Belief statement	**Illustrative quotes**	**Participant contribution (Max n= 15)**
Silo culture	MW88: Um... yeah I think some health visitors just don't get it about communicating. But I mean that's... RA: So as in sort of unwilling to communicate or? MW88: Yeah, yeah. Really like, they're getting on with their sort of silo bit and not... you know, a minority really.	9
Health visitors' personalities	And then, and other times, and this is completely total personal feeling - I guess it's also dependent on the personal feeling you have with the health visitors? -MW37	7

4.2.3.1.4 Emotion.

One belief statement was identified as a barrier in relation to the domain 'Emotion'. 'Emotions can impede collaboration', reported by a number of midwives (n= 4, 26.66%), was about the perceived negative impact of emotions on working collaboratively with health visitors – this includes reinforcing working in silos and conflict between the groups: *"Huge. Hugely affects it [interprofessional collaboration]. We're always short, long shifts, shifts that don't work together, I mean we, we're often fighting over rooms in GP surgeries as well so that's a huge factor yeah" (MW87)*. This belief statement is summarised in Table 4.6.

Table 4.6. Key barriers, Emotion.

Belief statement	**Illustrative quotes**	**Participant contribution (Max n= 15)**
Emotions can impede collaboration	You tend not to ask them because at the end I'm like, I'm not gonna ask, I don't wanna get a bad answer, I don't wanna get somebody that is having a bad day so you just stop asking them. So with the health visitors it would be exactly the same. It's not the case that they were not nice so that's why I guess she was just, she just had a bad day -MW37	4

4.2.3.1.5 Nature of the behaviours.

One belief statement emerged as a barrier to working collaboratively with health visitors in relation to the domain 'Nature of the behaviours', namely, 'Method of discharge' which concerns the information relating to a woman's pregnancy and birth. Some midwives (n= 4, 25.66%) reported these notes had to be completed and returned by them to hospital after a woman is discharged from midwifery care. In addition, one participant highlighted that after this process is completed, it is not possible to know for certain whether a health visitor has made contact with a woman:

> *"We hardly do that, actually. To be honest, it's just uh, if we go to do the day 10 visit and they are just there, we might see them, and it's like, do you agree to see them but if not, we... we hardly can relay verbally handover. If they have the notes, some women just leave a little note please weigh the baby and on day something like that, but it's not like a formal handover that you say, I've seen this lady, everything is fine, blah blah blah. It just, they just see the women as soon as we discharge them, knowing that the health visitor is coming that week but we discharge them without definitely knowing the health visitor has seen them." -MW37*

A summary of this theme, with illustrative quote, is provided in Table 4.7.

Table 4.7. Key barriers, Nature of the behaviours.

Belief statement	Illustrative quotes	Participant contribution (Max n= 15)
Method of discharge	After we discharge the women it goes back to the hospital and they are putting stuff, enter the discharge date on a system, but it's only for the admin so we don't have access to it. It's all on paper, actual paper. -MW12	4

4.2.3.1.6 Domains not reported relevant.

No belief statements were identified for the theoretical domains 'Knowledge', 'Beliefs about consequences', 'Motivation and goals', 'Memory, attention, and decision processes', 'Environmental context and resources', and 'Behavioural regulation'.

4.2.3.2 Key enablers.

This section outlines the relevant domains and key belief statements which function as enablers according to the aforementioned criteria of frequency, discord, and external evidence. In all, there were 12 belief statements within six domains considered relevant and functioned as enablers. Each of these, per domain, will be discussed with quotes to supplement thematic descriptions.

4.2.3.2.1 Social/professional role and identity.

With regards to the domain 'Social/professional role and identity', one belief statement was identified to be salient to members of the participant sample. This was 'Known role or responsibilities', in particular, its subtheme 'Contacting health visitors at handover or discharge'. This subtheme concerns midwives' recognition of their role as the instigators of contact at the handover or discharge period, as exemplified by one participant: *"I think a big part of what we need to be doing is um you know trying to make contact and chase up our contacts so not just sort of leaving messages and assuming that's the end of it" (MW4)*. This is summarised in Table 4.8.

Table 4.8. Key enablers, Social/professional role and identity.

Belief statement	Subtheme	Illustrative quotes	Participant contribution (Max n= 15)
Known role or responsibilities	Contacting health visitors at handover or discharge	we have certain time points, so for example it's at the handover point of care, then I don't really have a choice, I have to contact the health visitor 'cause um I'm discharging them -MW91	5

4.2.3.2.2 Beliefs about capabilities.

One belief statement was identified as a relevant enabler concerning the domain 'Beliefs about capabilities', specifically, 'I am capable of collaborating with health visitors'. This belief statement concerns midwives' belief in their ability to establish contact with health visitors, or organise for joint activity to take place, where necessary (e.g. to address complex needs): *"I've never particularly done a joint visit postnatally, but I... I could if I needed to" (MW55)*. This belief statement is summarised in Table 4.9.

Table 4.9. Key enablers, Beliefs about capabilities.

Belief statement	Illustrative quotes	Participant contribution (Max n= 15)
I am capable of collaborating with health visitors	I'm not afraid of it *[phoning the health visitor]* because I've been doing, I've been worked in all roles over a number of years -MW24	5

4.2.3.2.3 Beliefs about consequences.

With regard to the domain 'Beliefs about consequences', three belief statements emerged as salient in enabling collaboration with health visitors. The majority of the midwives (n= 14; 93%) acknowledged that collaborating with health visitors is a worthwhile endeavour in the belief statement 'Benefits of collaboration outweigh costs of doing so'. One participant discussed feeling unclear about whether the benefits of collaboration with health visitors outweighed its costs, but recognised that it could potentially be due to the nature of her role as an independent midwife. On the whole, midwives recognised the importance of handing over information to

health visitors (which can take various forms) as well as working with them and being supportive of each other as illustrated below:

> *"...using the paperwork is massively important! It certainly outweighs the costs. It's very easy, most of it's printed out you have wr- you know the writing is gonna take you about two min- a minute or something, that absolutely is massively worthwhile."*
> *–MW67*

> *"Absolutely. I think, I just see it [collaboration] as a natural thing that is part of the process, that it should happen. And things are changing and we have to do that, again... there is a crossover." –MW44*

The second most highly cited belief statement that was reported as an enabler for this domain was 'Benefits to women/families' (two subthemes). The first subtheme, 'Continuity of care' relates to midwives' perceptions of the potential impact of working collaboratively with health visitors on continuity of care:

> *"But if they see if we were working in partnership, it would be, they'd feel like OK fine I'm just moving from one part of the team to another part of the team but I'm with somebody, somebody else taking care of me" (MW37).*

The second subtheme 'Improved health outcomes' is associated with the specific health outcomes that could be impacted on when midwives work in collaboration with health visitors, as described by one midwife: *"I mean certainly benefits for the women, I think it does, I think makes her utilise um the health visitors more in a way that say for example if a woman's got some breastfeeding concerns" (MW4)*. Finally, 'Efficient professional practice', specifically 'Effective way of working' relates to midwives' recognition of the impact of collaborating with health visitors on their professional practice. For instance, midwives can share information, care, and expertise about women and families with health visitors as exemplified below:

> *RA: "So the benefit is to yourself as well as a professional that you, you're assured"*
> *MW12: "Yeah, it's more effective."*
> *RA: "The job is done the right way."*
> *MW12: "The care that we provide, yeah, because like if you have a plan, like a feeding plan, it's much easier if someone is following up rather than*

explaining everything to the family and then just leave it to the fate because you don't really know what's happening"

Each of these belief statements and their respective subthemes is summarised in with illustrative quotes in Table 4.10.

Table 4.10. Key enablers, Beliefs about consequences.

Belief statement	Subtheme	Illustrative quotes	Participant contribution (Max n= 15)
Benefits of collaboration outweigh costs of doing so	None	Oh most definitely yes. We only meet for half an hour once a month so it doesn't really cost anything and so it's fine. It doesn't really take up much time really. Because once you've already talked about most of your ladies and she, I give her a printout of all my, what we call DNA sheets, they're like, we put all our woman's details on there, address, phone number, when the baby's due, how often we've seen them, any particular problems and I give her a copy of that so she knows everybody on my case load, she's got details about them -MW32	14
Benefits to women/families	Continuity of care	Um well they, they're going to the battle forward 'til the child goes to school and um to be effective and make good relationships, um, I think it gives the woman confidence to see there's an overlap between maternity and health visiting. Um so I think it gives a better, you know, more robust service and a more coordinated view to the lady and her family. Um and... I think there's a lot of other work that can develop - health visitors, um around mental health, perinatal mental health. Um, more creative responses to some of the situations that they see, the health visitors, they've got the long haul. -MW88	10
	Improved health outcomes	I think it's just, other benefits would be, I think mental health definitely, I think also as to her transition into becoming a mother, we'd be supporting her, helping her with that transition. I think the advice and support with regards to looking after her baby and looking after herself, also something else that used to come up quite a lot, […] So often that was something that would come up for women, they'd end up developing mastitis and I'd work with the health visitor and the GP to help resolve her mastitis as well. So that's something,	9

Belief statement	Subtheme	Illustrative quotes	Participant contribution (Max n= 15)
		things like that which would be really useful to still have the skills of a midwife. -MW6	
Efficient professional practice	Effective way of working	I would say that there's efficient handover of care because they actually handover officially. You may not handover absolutely everything. You know, you can handover the tick box stuff, how much the baby weighs and all that kind of thing. But just a general sort of feel for how things are in that house, isn't always easy to put into one sentence […] sort of say this person is regular visiting but if you kept regular contact you'd have a much better idea, the health visitors have a much better idea what the midwives would mean by that. -MW24	9

4.2.3.2.4 Memory, attention, and decision processes.

One belief statement was identified as an enabler in relation to the theoretical domain 'Memory, attention, and decision processes'. 'Contact/handover when there is a concern'. By and large, midwives reported contacting health visitors when they had concerns regarding women or families under their care:

> *"...sometimes over concerns over child, families that we've, we've, didn't wanna sign off at day 28 saying look we're still worried about them um or babies that haven't really thrived so you kind of want them to follow up, that kind of thing yeah" -MW87*

Table 4.11 Key enablers, Memory, attention, and decision processes.

Belief statement	Illustrative quotes	Participant contribution (Max n= 15)
Contact/handover when there is a concern	Or if there's a social history, certainly if any social service involvement, things like FGM, we've got sort of a criteria, one we always refer on. Eating disorders, I'm trying to think of some other ones. Um young mums that are under the age of 20. And things like that, domestic abuse -MW4	13

4.2.3.2.5 Social influences.

Two belief statements were determined to be salient to enabling interprofessional collaboration with health visitors with regards to the domain 'Social influences', namely, 'Having communication with health visitors', and 'Building capacity for contact/teamwork'. Two thirds of the midwives (n= 10; 67%) reported valuing having communication with health visitors, as this is considered an opportunity to share any concerns about women under their care. Some also reported observing improvements in communication in recent years, with many reporting that their experiences of working with health visitors were generally good. Another key enabler was 'Building capacity for contact/teamwork', which relates to joint activities, specifically in the antenatal period. Many of the midwives suggested that health visitor involvement in the antenatal period meant that they are able to invite health visitors to do joint classes, and also share information at a much earlier stage thus allowing for early intervention where needed. These belief statements are summarised with illustrative quotes in Table 4.12.

Table 4.12. Key enablers, Social influences.

Belief statement	Illustrative quotes	Participant contribution (Max n= 15)
Having communication with health visitors	…if you've got good communication then you know, you don't need to, you can actually support one another. –MW44	10
Building capacity for contact/teamwork	I'm going on something next week and so perhaps people have more of an understanding of each other's roles because you do some training together. And then you understand how you can help each other and so I think that people are more willing to work together because they have more of an understanding of each other's jobs and also we do some training so we understand about what each other does. -MW32	9

4.2.3.2.6 Emotion.

Concerning the domain 'Emotion', one belief statement was deemed relevant. 'Positive feelings from experiences of collaboration' relates to midwives' experiences of working with health visitors, which had been positive for some. In particular, these midwives were able to hand over the care to another professional, and midwives report feeling reassured that another professional is there to address the family's needs: *"my personal experience is it, it works well. And helps me to, helps me to enjoy and my work more and helps me to... give more to the women" (MW55)*. This belief statement is summarised in Table 4.13.

Table 4.13. Key enablers, Emotion.

Belief statement	Illustrative quotes	Participant contribution (Max n= 15)
Positive feelings from experiences of collaboration	So with that team in particular it's really nice actually. The emotion of happiness is helping us to kind of like, because we feel that if I knock on the door they're gonna work with me -MW37	4

4.2.3.2.7 Behavioural regulation.

With regard to 'Behavioural regulation', there were four belief statements considered relevant: 'Markers of collaboration', 'Teambuilding exercises', 'Developing programmes delivered collaboratively' and 'Action planning with health visitors (including shared care)'. Each of these will be discussed in turn.

Within 'Markers of collaboration' are three subthemes: 'Women getting support from midwives and health visitors', 'Records/documentation', and 'Feedback from families'. Overall, this belief statement pertains to the various outcomes midwives expect as a result of collaborating with health visitors. For example, the majority of the midwives reported that successful collaboration entails timely and smooth transition from midwifery to health visiting:

> *"I think obviously successful partnership is where a smooth easy transition, so the health visitor's aware of that family, and the circumstances around that family and they don't have to ask them all again, they know if there's, if social services have been done, they know who the social worker is and they can literally just step in the midwife's shoes when she leaves and takes over that. I think probably an unsuccessful one would be the health visitor not really having any idea, having to go through all that process of finding out again. Then they were doing a social services referral to find out about but actually they've already got the case taken on, um and just seems like a duplication of work" –MW94*

Additionally, some of the outcomes midwives mentioned to be positively impacted on by successful collaborative working were: Safeguarding issues being met, improved mental wellbeing, and positive attachment. To determine whether these outcomes have been produced, midwives suggested gaining feedback on the services provided from families and at the same time auditing records or documentation concerning any contacts with health visitors:

> *"Um... I think I would ask the family, the woman. I would ask them um, put something in place uh if from her perspective you know the care of the midwife has ended and that the um the care of the health visitor has started, I think that adding another form or another tick box will not add anything. Will not add anything if they think it's uh either directly that they bring up the health visitor or the midwife brings up the um, um the other around that you speak, say OK, handover to you now, everything's great here or and nothing is great, lots of problems, this is what's going on." -MW90*

The belief statements, 'Teambuilding exercises: introducing joint training', and 'Developing programmes delivered collaboratively: face-to-face meetings', were considered ways to encourage collaboration between midwives and health visitors. Regarding joint training, midwives welcomed the idea of learning with health visitors, as illustrated here:

> *"we try when possible to in- invite them to come to our training but it's not all gonna be completely relevant um, yeah, and and I think it's difficult in any situation certainly for us as much as for them to get study leave and things to be able to go to attend these. But I do think it would be a useful thing" -MW4*

Face-to-face meetings were also considered a potential solution to address the problems relating to working collaboratively with health visitors, as suggested by one participant: *"I suppose that could be a solution, it could be um a... I don't know, weekly meetings or and even a monthly meeting really" (MW24)*. Lastly, 'Action planning with health visitors (including shared care)' was suggested by some midwives as another strategy for increasing collaboration with health visitors. A

specific example regarding actions which can be planned together was provided by one of the participants:

> *"But I think it would be a really good idea. There's some women that I'm seeing them at 16 weeks and saying OK you're gonna see the GP at 22 weeks, instead of that, saying OK you're gonna see your health visitor at 24 weeks and then after that they will give you an appointment to see me again. So it's kind of that like shared care during pregnancy" -MW37*

These belief statements and their respective subthemes are summarised in Table 4.14.

Table 4.14. Key enablers, Behavioural regulation.

Belief statement	Subtheme	Illustrative quotes	Participant contribution (Max n= 15)
Markers of collaboration	Women getting support from midwives and health visitors/women's outcomes	But um successful is if the actual, how do you say, if my contact has actually been effective. Has produced something -MW90	10
	Records/documentation	viewing notes, records, that kind of thing, documentation... -MW94	9
	Feedback from families	Um... it's all about women. It's whether they feel... happy, engaged, that they, that they are, we're making confident um parents out of them. That we, that... it's it's all about them, [inaudible 0:31:05.4] I don't know how you would measure that I have no idea. But it doesn't matter. If people work together, we could have the best most resourced handover on the planet but if the women aren't doing well, I mean the statistics I think about postnatal depression are shocking. And that's only the women that come forward. -MW46	6
Teambuilding exercises: Introducing joint training	None	I think, I think some joint training would break down the barriers. Um joint targeted training you know, so um... uh I think that would, that would be a good, good strategy. -MW88	8

Belief statement	Subtheme	Illustrative quotes	Participant contribution (Max n= 15)
Developing programmes delivered collaboratively: Face-to-face meetings	None	Yeah. They didn't start off; I mean the idea was that we would meet monthly. They have evolved in that time and, and become useful meetings -MW55	7
Action planning with health visitors (including shared care)	None	I do feel like when we speak to the health visitors they potentially have probably different expectations so I think it would be good for us to kind of collaboratively decide what, what's sort of the best um best plan for contact and handover and things like that would be... rather than kinda winging it which is what we're doing at the moment. -MW4	7

4.2.3.2.8 Domains not reported relevant.

No belief statements were identified as relevant for the theoretical domains 'Knowledge', 'Motivation and goals', 'Memory, attention, and decision processes', 'Environmental context and resources', and 'Nature of the behaviours'.

4.2.3.3 Key enablers or barriers.

This section presents the belief statements that have emerged from the analysis that functioned both as an enabler or a barrier. Such belief statements demonstrate participants' discordant views. In all, 24 belief statements were identified as salient enablers or barriers relating to 10 domains. Each of the salient belief statements, per domain (where identified) will be discussed in turn.

4.2.3.3.1 Knowledge.

Within the domain 'Knowledge', three belief statements were identified as salient enablers or barriers. The most highly cited of these is 'Knowledge of protocol/practice guidelines' (two subthemes), where midwives reported some knowledge of recommended practice in relation to working in collaboration or being in contact with health visitors. For example, some midwives reported having set monthly meetings: *"Um, our local guidance is that we um have a meeting once a month" (MW55)*; whereas others discussed how to trigger the process of transition from midwifery to health visiting services:

> *MW24: The transfer of care guideline, it states, that it should be written down if there's any problems, um... document it, identify your role*
> *RA: Yeah OK so it does quite clearly state that there um should be sort of a good record*
> *MW24: yeah so under the SBAR um sort of [inaudible: 0:16:47.2] make as mention several times*
> *RA: What is that sorry?*
> *MW24: The situation, background, recommendation, uh situation background, uh assessment, recommendation. SBAR.*

Meanwhile, other midwives reported limited knowledge of specific protocols or guidelines, or acknowledging the existence of guidelines, but not having an awareness of these guidelines' particulars: *"yeah there's not really anything that's um sort of specific guidelines" (MW4)*.

The second most commonly recurring belief statement for this domain was 'Knowledge of relative roles'. The barrier side of this belief statement emerged from the analysis as relevant, specifically, midwives' reports of a lack of knowledge of how health visitors work, and limited knowledge of health visitors' areas of expertise and training:

> *"Hmm I mean to be honest with you I don't even know what the training looks like for a health visitor. I don't know what uh their CPD profile is like, I don't know whether, I, I really don't know what they're supposed to know." – MW90*

Three midwives reported having good knowledge of relative roles, which was identified as an enabler to collaborative working. As one participant described:

> *"I do know that they were doing the ante- you know, sort of the, about the antenatal visits. And I also, I'm aware that obviously the transition from midwifery to health visiting you know […] and I think like I say, for me... I can't do it in isolation." –MW44*

Finally, the belief statement 'Opinions on guidelines' refers to midwives' contrasting views on guidelines, as outlined in the two subthemes 'Guidelines are not as useful and can foster inflexibility' and 'Guidelines can be useful and inform practice'. There was a discussion around guidelines being restrictive in terms of implementing professional autonomy, and being poorly disseminated thus acting as a barrier to collaboration as illustrated below:

> *"I think if there was a good guideline available, um, or there might be one that I'm not aware of, then I would, would read it. Um but I think a lot of my knowledge in terms of um interactions with health visitors would come from like experiential learning, rather than guidelines." –MW91*

On the other hand, four midwives reported that 'Guidelines can be useful and inform practice', as explained by one of the participants:

> *"…a guideline would be useful so it would be sort of maybe you know like a pathway document saying that you know you will make this referral, you know, that, you know, you will um, um, you know, you can offer a joint visit, you know you could see the, you know like the health visitor, maybe doing joint antenatal whatever." -MW44*

Each of these belief statements, including respective subthemes, is presented with illustrative quotes in Table 4.15.

Table 4.15. Key enablers/barriers, Knowledge.

Belief statement	Subtheme	Illustrative quotes	Participant contribution (Max n= 15)
Knowledge of protocol/practice guidelines	I know protocols/guidelines regarding working in collaboration/being in contact	I know we have local guidelines it's like, it's not really guidelines it's more like a referral system less protocol I'd say so we, I think we should, from the protocol, we only get in touch with them if there is a delay in the referral so they haven't seen the postnatal women within the 10/12 days then we get in touch with them to make sure they have the referral and everything is sorted in terms of paperwork. And I also, we do handover to them when babies are jaundiced like day 21, so in our protocol we do a referral to the health visitor. -MW12	14
	I don't know protocols/guidelines regarding working in collaboration/being in contact	But I don't know about any guidelines about it but I'm sure we must have guidelines but I don't know of any but. We will have guidelines but I can't quote them. -MW32	8
Knowledge of relative roles	Lack of knowledge of relative roles	I don't have a huge knowledge of what health visitors do because some of them are also for older people as well as young people, I think it depends on the area they live in. And as far as I know my health visitor I work with is only responsible for young people but, I don't really, at one point they had to do visits on them in their, in the pregnancy but I know that mine doesn't usually unless there are concerns. If there are concerns, then she'll go and make contact with her and get to know them beforehand so. -MW32	6

Belief statement	Subtheme	Illustrative quotes	Participant contribution (Max n= 15)
	Good knowledge of relative roles	I understand much better what they're trying to do and where we are working together with the woman and her baby. -MW55	3
Opinions on guidelines	Guidelines are not as useful and can foster inflexibility	As opposed to be working, because you talked about guidelines, you talked about procedures protocols, you know um, and for me they're fine. I'm not saying that you should break rules, but, we've got to continually evolve and if things you know, it's just 'cause things have been done that way doesn't mean that it's the right way, so -MW44	6
	Guidelines can be useful and inform practice	I think guidelines are really important because they are evidence based and they give us, they set, they steer the way we should work so I think guidelines are important. -MW12	4

4.2.3.3.2 Social/professional role and identity.

Two belief statements were identified to be salient enablers or barriers for the domain 'Social/professional role and identity': 'Collaboration with health visitors is part of my role', and 'Views of the health visitor role'. Considering the first theme, the majority of the midwives acknowledged collaboration with health visitors as part of their role (n= 13, 87%) particularly in ensuring women's needs are met following discharge from midwifery services:

> *"It's very much part of the role I see, yeah. Very important because you've got to handover care and it depends on... um it depends on the um... uh what was I gonna say, um... it depends on the situation of the woman and um how important it is that they get care" –MW24*

However, one of the participants who works as an independent midwife, expressed contrasting views, indicating that working collaboratively with health visitors is potentially unnecessary given the extended role of independent midwives in a woman's postnatal care. In addition, the second subtheme, 'Views of the health visitor role' represents midwives' discussion of the importance of health visitors. Midwives described health visitors as particularly important as they are involved in the care of women, children and families for an extended period of time: *"she's there for longer periods of time than we are, so I think it's really important" (MW6)*. A minority (n= 2) shared contrasting views, where they perceived the role of the health visitor as more about information giving. Each of these belief statements is detailed in Table 4.16.

Table 4.16. Key enablers/barriers, Social/professional role and identity.

Belief statement	Subtheme	Illustrative quotes	Participant contribution (Max n= 15)
Collaboration with health visitors is part of my role	Yes	It shouldn't, it shouldn't be that, it shouldn't be that we're being forced to do it, it should just be happening. Because we're coming from the perspective of health. We're all working from the health [RA: The same goal], yeah yeah. -MW44	13
	No	Um... so... I feel that maybe in some ways I feel the visit is unnecessary because I'm there, I'm coming every day for the first week. I come twice the second week and once a week, 3 and 4. So I'm around a lot. -MW90	1
Views of the health visitor role	Valuing the health visitors' 0-5 care for women/families	I think there's just especially because health visitors um look after um the women for so much longer than we do so look after them for a few years after birth rather than just a few weeks. -MW91	4
	Health visitor role is largely about information giving	But, um and that's fine to drop off the, their information flyers but uh I think there's a, a level of respect and dignity that they should explore more so I think they are probably the, the main issues. I think so something, a theme that comes up over and over again, is that, is the breastfeeding. So I think that health visitors are not very well-informed -MW90	2

4.2.3.3.3 Beliefs about capabilities.

One belief statement (two subthemes) was identified as an enabler or barrier for the domain 'Beliefs about capabilities'. The belief statement 'Perceived ease of contacting health visitors' pertains to midwives' views of how easy or difficult it can be to work collaboratively with health visitors. Midwives reported diverse experiences, with some midwives experiencing relative ease when it comes to contacting health visitors: *"...generally, I find them really helpful and really useful" (MW91)*. Equally, some reported experiencing challenges when contacting health visitors: *"It's difficult to contact them" (MW37)*. Some midwives also shared experiences of both finding it easy and difficult to contact health visitors, which depended on various factors including changes to team structure:

> *"Yeah I think I would say that it varies, as I've said we work with four different health visiting teams and until recently we were only working with the 2 and then our, our um catchment area expanded in November. So since November we've been having the additional two. So the two that we've been working with previously I think we probably have an easier time communicating with. One of them has an office in the same building so that's very easy. And the other ones are very nearby but because we've been, knowing them for years, we have a bit of an easier sort of communication pathway with them." –MW4*

The belief statement 'Perceived ease of contacting health visitors' pertains to midwives' confidence in themselves to link up with health visitors. Many midwives considered contacting health visitors easy (n= 12, 80%), but at the same time, challenging (n= 10, 66.67%), as illustrated in this participant quote:

> *"I'd say email usually works fine. Getting them on the phone can be a trouble because they only have a landline so usually it goes to voicemail and then you just have to wait for them to call you back so it can be quite frustrating actually" –MW12*

This belief statement is summarised with its respective subthemes in Table 4.17.

Table 4.17. Key enablers/barriers, Beliefs about capabilities.

Belief statement	Subtheme	Illustrative quotes	Participant contribution (Max n= 15)
Perceived ease of contacting health visitors	Easy	I've always found it really easy actually, I think again they're both, I think we're fairly similar professions in that respect, and there tends to be quite a lot of mutual respect, so I've never found it particularly difficult, there's never been any issues with health visitors, I've always found them very easy to work with and with no particular problems at all, so yeah, they've been quite easy really -MW6	12
	Can be a challenge	You know, that communication's really more uphill and we really have to make the extra effort to make sure that goes forward, that communication -MW88	10

4.2.3.3.4 Beliefs about consequences.

With regard to 'Beliefs about consequences', one belief statement was identified to be relevant as an enabler or barrier, specifically, 'Perception of contact with health visitors' (two subthemes). The majority of midwives reported that 'Contact with health visitors is beneficial', especially given their common goal of caring for women:

> *"I couldn't provide the level of care that I do, and to make, ensure that we get the best outcomes for the women in relation to you know like say for example mental health, if I didn't liaise with the health visitors" -MW44*

'Contact with health visitors have no clear advantages or disadvantages' represents contrasting views, as expressed by two midwives who reported finding it difficult to see the advantages of working with health visitors, whilst being clear that there are no disadvantages. This belief statement is summarised in Table 4.18.

Table 4.18. Key enablers/barriers, Beliefs about consequences.

Belief statement	**Subtheme**	**Illustrative quotes**	**Participant contribution (Max n= 15)**
Perception of contact with health visitors	Contact with health visitors is beneficial	I don't think there's any disadvantages no, I think, I mean we're both trying to achieve the same thing –MW32	12
	Contact with health visitors have no clear advantages or disadvantages	Um but for us I think there is no disadvantage but I feel in some ways it's a little bit of a waste. –MW90	

4.2.3.3.5 Motivation and goals.

Two belief statements were deemed relevant to the domain 'Motivation and goals', namely, 'Need for contact with health visitors' (two subthemes), and 'Perceived value of collaboration at handover' (two subthemes). These belief statements demonstrate the extent to which midwives perceive collaborating with health visitors as necessary and valuable. By and large, midwives reported that there

is a 'Need for contact with health visitors': *"I think it's really important because I would feel more reassured that when I'm discharging someone it's been taken care of and I had the chance to say and handover properly" (MW12)*. A small number of midwives (n= 3) expressed divergent views regarding the need to be in contact with health visitors: *"So I think the need for them is just very low" (MW90)*.

In addition, the belief statement 'Perceived value of collaboration at handover' illustrates the views of many midwives (n= 8) concerning valuing collaboration with health visitors during the handover period and their expressed desire to increase this:

> *"Very important. If I have got a concern about a woman about you know, or if, if the woman for example she has some bad news on her scan report. Her baby has a cardiac anomaly. I want the health visitor to know as soon as possible so that she can prepare the right information to give to the woman at the right time." -MW55*

> *"I'd like to work together more with our colleagues, especially thinking about having the woman as the centre of the care that we're giving, it would be nice to have more partnership working rather than less." -MW6*

Meanwhile, a number (n= 3) of midwives expressed that collaborating with health visitors during handover is important when there are concerns about a woman or family. Each of these belief statements accompanied by illustrative quotes is summarised in Table 4.19.

Table 4.19. Key enablers/barriers, Motivation and goals.

Belief statement	Subtheme	Illustrative quotes	Participant contribution (Max n= 15)
Need for contact with health visitors	Very important to have contact with health visitors	Um... yeah obviously it's, it's very important. You have to let, you have to be in contact, otherwise you won't get any information. -MW46	9
	Not that important at handover	At this stage, just because I'm used to it I guess it's not that important? -MW37	3
Perceived value of collaboration at handover	It is very important at handover	Oh! Massive, massively important! […] So that's being able to have somebody that will still go in and see them that will be their point of contact, can give them more information, that that's invaluable […] There's not a lot you can do for women in 9 days […], you have to support them the best way you can. So that handing over to somebody else, it's, they become an extension of the midwife... -MW46	8
	Important if I have any concerns	Well only if there's a problem. If there isn't a problem then I'm not worried about, I don't need to speak to her because the women are fine, I think they're OK. But if there is a problem then yes of course I need to speak to her about it. -MW32	3

4.2.3.3.6 Memory, attention, and decision processes.

One belief statement was identified relevant in relation to the domain 'Memory, attention, and decision processes', specifically: 'Perceived difficulty of deciding to collaborate or get in contact with health visitors' (two subthemes). Most midwives (n= 13, 87%) reported that deciding to contact health visitors is a simple process, as reflected in the subtheme 'Easy, straightforward decision'. However, some midwives also discussed that due to their lack of contact with health visitors, choosing to establish contact with health visitors is a decision that they rarely make: *"So I guess it doesn't really cross my mind to pick the phone and call them because I've never done it" (MW12)*. These belief statements and their respective subthemes, with illustrative quotes are presented in Table 4.20.

Table 4.20. Key enablers/barriers, Memory, attention, and decision processes.

Belief statement	**Subtheme**	**Illustrative quotes**	**Participant contribution (Max n= 15)**
Perceived difficulty of deciding to collaborate or get in contact with health visitors	Easy, straightforward decision	Um... no it's a difficult decision. It's um... Because it's, it's I dunno, we're bread and butter. It's what we do every day. - MW46	12
	Not something that comes to mind (as contact is limited)	No because as I say, the contact is almost nothing! It is, that, that's the problem. - MW37	4

4.2.3.3.7 Environmental context and resources.

Three belief statements were identified as enablers or barriers for the domain 'Environmental context and resources', namely, 'Tools to communicate/collaborate', 'Time', and 'Recordkeeping'. The most highly discussed belief statement 'Tools to communicate/collaborate' refers to the physical resources that midwives have identified in relation to facilitating or hindering collaboration with health visitors. For example, many of the midwives reported that having accurate and up-to-date health visitor contact details helped with being able to communicate with them. In addition, having tools such as mobiles can facilitate this communication, as

exemplified here: *"I've got her mobile number so I can just phone her up and then if I can't get her I just leave a message and then she'll call me back so no that's fine" (MW32)*. On the other hand, a number of midwives (n= 8) also reported a lack of appropriate communication tools as an issue, with some midwives also reporting concerns regarding the security of some telephones or mobile phones that are currently in use:

> *"And that to me is, extremely, is um, absolutely that that is the thing. So we, we need to have access to better... technology and these resources to put us to be able to do our job properly" -MW44*

Another hindrance to collaborative working, from midwives' perspectives, is the lack of time to do so particularly when conducting home visits:

> *"But the way we work we do only home visits, say seven or, seven to ten in a day, so it's just you're running around like crazy really so you don't have much time and I guess that's the main issue really." -MW12*

Finally, within the belief statement 'Recordkeeping' (two subthemes), midwives shared how written records can be useful as a means of relaying information to health visitors. At the same time, other midwives suggested shared electronic recordkeeping systems as a potential solution to challenges met when trying to share information with health visitors, the benefits of which were clear to one midwife who already has this in place in her practice:

> *"it's OK actually 'cause we all have access to [Recordkeeping System] which is a GP um computer information site, that we use in the clinic. So we use that and we can see history of when they've seen the health visitor, we can leave messages for them through that computer system; email them." -MW87*

All belief statements and subthemes discussed here are summarised in Table 4.21.

Table 4.21. Key enablers/barriers, Environmental context and resources.

Belief statement	Subtheme	Illustrative quotes	Participant contribution (Max n= 15)
Tools to communicate/collaborate	Having tools to communicate	I think a good, clear contact details, so a lot of them use NHS emails but we don't have their email addresses, so that's sometimes an easier way if you're in and out of the office. That you can confidentially share information um and we all have NHS.net accounts which are confidential, I mean you can use confidential information on those accounts that we haven't shared with them so I think something like that would be quite helpful -MW4	14
	Lack of tools to communicate	I guess the main issue we have is that we don't have a good communication... tool or something that we could use, like we don't have... if had like kind of like, if I knew which team is covering this area, we could just email the team and say, the same when I'm emailing social services when I want to know what's happening with the family and they call me back. But with health visitors... unless we know the name of that health visitor […] we don't know, the family, who's involved with that family. So I guess that's the main issue we have - we need communication. And once we've done it, surely it will. If it wouldn't take me two hours to get to the health visitors every time I'm trying, I'm pretty sure we would more often. -MW37	8
Time	Midwives' and health visitors' lack of time	The main issue is that it's time and space together -MW37	9

Belief statement	Subtheme	Illustrative quotes	Participant contribution (Max n= 15)
	Allocated time to speak with health visitors	I think having an allocated time slot that's just designed for that and people actually stick to it and keep to it. And apologies sent, and if they just can't come, so something's cropped up, they actually try and speak on the phone at least or at least -MW24	1
Recordkeeping	Can be useful (e.g. Red Book, referral forms)	our notes that we have that we write in when we go to women's homes, when we're documenting our visits, our care, what you know, what we've talked about. At the end, at the back of those books, we have a, a triplicate form, a carbon copy form that we fill out for, just for transfer of care from midwife. -MW46	8
	Having a shared electronic database	I think like I said before like maybe if we can have access to their computer system to obviously see who the named health visitor is, their contact details, maybe leave messages, or put updates on it; maybe for other midwives and health visitors to have more admin time built in, um to their work that would help them to communicate as well. -MW94	5

4.2.3.3.8 Social influences.

The domain 'Social influences' contained six salient belief statements functioning as both enablers and barriers. Within the belief statement 'Quality of contact with health visitors', midwives reported having more good quality contact with health visitors (n= 10, 66.67%) than not (n= 6, 40%). Examples of good communication with health visitors appeared to be reliant on contextual factors, including team sizes and level of service provided (e.g. universal vs. specialist), as one midwife narrated:

> *"Um well we're quite a small team. I mean there are, uh, well 8 of us in community and we all do exactly the same things with the health visitors so. It's not like, I don't know, compared to, compared to where I trained, it was, it was a very different relationship with health visitors. Maybe because there were 20 odd midwives in a team and the health visitors were in a different geographic location. Um... but, but it's not... there's, it's like there doesn't need to be any encourage, you know, have you notified the health visitor? Everyone just does it anyway because we're quite a, close-knit community kind of hospital cottagey relationship going on." -MW46*

However, there were also midwives who expressed concerns about the poor quality of contact they had with health visitors, which again midwives thought to be influenced by contextual factors, as explained by one participant:

> *"And, and there could be a lot of work done about how communication is improved but, I think the communication is poor just where I am just because it's a bit old fashioned. That, that might not be the same elsewhere" -MW55*

The second belief statement 'Influence of women/families on relationship between midwives and health visitors' relates to midwives' reports that women or families under their care were influential to collaborative working with health visitors. In particular, women and their families were perceived to either support or hinder that relationship, for example:

> *MW32: I should think most of them think it's good, I think probably one or two of them perhaps don't like us, maybe if we're sharing information that*
> *RA: Can you just tell me a bit more about that?*
> *MW32: Well things like if they've been drinking or not.*

The third belief statement 'Influence of other midwives on contact with health visitors' (two subthemes), concerns the influences beyond the woman and/or family. Midwives reported that a source of support for interprofessional collaboration with health visitors is fellow midwives, as illustrated by one midwife:

> *"Um I mean all of our midwives on our team and in fact the next, the other geographic teams that border our geography um they're all from our Trust so we're all working the same, roughly, the same way. -MW46"*

However, there were also discordant views on midwife colleagues as enablers to collaboration: *"I've never seen my colleagues do it so it's not part of what we routinely do to get in touch with the health visitor which probably is not the right way of going but still" (MW12)*. Moreover, the belief statement 'Organisational influence on collaboration/contact' (three subthemes), relates to their experiences of their workplace being influential to enabling or hindering collaborative working with health visitors. The experiences of midwives were clearly varied, where some reported that there was active encouragement to work with health visitors, others, the opposite, and some, experiencing neither encouragement nor discouragement:

> *"Not much, I would say, no, not much just because probably they are GP based and we are Trust based, I don't know. Where I work and then the health visitor are GP based and probably that makes the difference, I don't know, but from my organisation like when we do a study day, community study day, there is never any input from the health visitor which probably*

would be important for community midwives because we have an update every year, maybe having a health visitor there would be really nice but we don't really have any sort of input from the Trust." -MW12

Within the belief statement 'Familiarity', midwives shared that having interface with health visitor colleagues meant that they knew who to contact when necessary; thus, future contacts were convenient to facilitate: *"you might not have many cases where you need to be able to work together but if you haven't got a good relationship in the first place, you're not gonna be able to work together appropriately" (MW55).* A minority of midwives (n= 2, 13.33%) reported that a lack of familiarity with health visitors acted as a barrier to working with them. Finally, midwives reported their 'Work structure' as a hindrance to working collaboratively, including some of those working in the community, those who work within caseload midwifery models, as well as those working as independent midwives as illustrated here:

"I know for other midwives who aren't caseload midwives who don't have, I know that they really do struggle 'cause they are you know, they're, all the admin is within their own time. They are doing clinics 9-5 every day or visits 9-5 every day, so they, they just don't have that space to do anything else." -MW94

However, a small number of midwives (n= 2, 13.33%) reported their work structure as an enabler of collaboration. Each of these belief statements, along with their subthemes is summarised in Table 4.22.

Table 4.22. Key enablers/barriers, Social influences.

Belief statement	Subtheme	Illustrative quotes	Participant contribution (Max n= 15)
Quality of contact with health visitors	Good	…we usually have better contact with them. If we have somebody who has just got some minor concerns about their mental health or something that, they're not necessarily being seen by loads of people antenatally sometimes you are trying to make contact and struggling to make contact. Whereas in this case, because we all knew that she was sort of higher risk and needed closer involvement we had better contact throughout the whole process. I think it was probably a bit better than usual -MW4	10
	Poor	MW37: If we know for example that they're short of staff, [inaudible] or the clinics we might pick that woman. But because we don't know that, we just discharge and think that they will have the resources to see this woman in 10 days instead of 1 month. So it's that's kind of thing that there's hardly any communication between us. RA: Yeah so it sounds like it's quite disconnected. MW37: Yeah, it's completely disconnected like OK, like I'm just telling you, you can now stay with your GP. That's actually what we say.	6
Influence of women/families on relationship between midwives and health visitors	Can positively influence	OK yeah I think they do, possibly more with like mental health needs, um like knowing that they've got all the support around them that they might need. They're not having to repeat their stories, um whereas um the women that I've looked after that have um […] that you know, safeguard like social services and safeguarding concerns, um I think tend to look less favourably on our partnership working because they tend to not want any involvement um on the social -MW91	10

Belief statement	Subtheme	Illustrative quotes	Participant contribution (Max n= 15)
	Can negatively influence	if somebody um got complex problems they could be negative or... uh to, towards the health visitor who may have got safeguarding issues so it's if you've got safeguarding it might be negative –MW24	7
Influence of other midwives on contact with health visitors	Midwife colleagues who are encouraging and supportive	I mean, with the midwives in my caseload team are really good at communicating with health visitors and other multidisciplinary um members of the team. -MW94	9
	Some are reluctant to collaborate	sometimes it's our midwives, our midwifery service that blocks that. Like I said to you earlier, I've, I have a good relationship with my health visitors but I know in other areas they don't. -MW55	8
Organisational influence on collaboration/contact	Actively encouraging contact/collaboration with midwives	I think it's encouraged. Yeah it's, I think it's really, really encouraged in, in this, when you work in such a small unit [RA: Yeah], I think it, you know, working closely in partnership with the GPs and the GPs' surgery, that I think we have good connectivity really -MW87	9
	No active encouragement to work with health visitors	I don't think we are actually, I don't think we're really encouraged to, I think it's neither one nor the other, I think it's very much people do their own jobs and there's not a lot of multidisciplinary working going on, not as much as there should be in my opinion. There should be more multidisciplinary working, but I don't think it's really encouraged, -MW6	5
	Organisation impedes working together	Even if we use the computers, like no, that should be provided by your trust. No, it has to be provided by the community, right? With the health	4

Belief statement	Subtheme	Illustrative quotes	Participant contribution (Max n= 15)
		visitors it's exactly the same. Like we are the hospital, they are community. -MW37	
Familiarity	Being familiar with health visitors	I just feel like maybe we might... I don't know. I feel like they Yeah well because I've got a good health visitor, if I didn't get on with her and she was like, she didn't want to communicate with me and it was difficult and I was having to chase her then that would make life very difficult and I wouldn't want to. But because she's very nice and we get on very well and she's more than happy to phone up and chat to me anytime. So if she's worried about something she'll phone me or if I'm worried about something I'll phone her so because we've got a good working relationship then it's, it's easy. -MW32	6
	Lack of familiarity	I do think we don't know each other as well, so it's a little bit more difficult sometimes to get in touch with each other. -MW4	2
Work structure	Work structure as a barrier	I think the problem that we... have found... I think it's probably across the board, a lot of health visitors, they might be [inaudible 0:21:35.6] for us midwives but a lot of the health visitors do work with, work part-time. If in terms when you want to speak to a specific health visitor, to handover information, you seem to be calling them quite often because they're not in the office and again they'd be out doing the visits just like us we do a bit a phone tag back and forth from time to time just because we are often out of the office and not in the office. -MW4	6

Belief statement	Subtheme	Illustrative quotes	Participant contribution (Max n= 15)
	Work structure as an enabler	I think working at [Birth Centre], the way we work here I think we've had better connectedness than I have seen in other trusts but that's because when, when things end here we don't have a fall back of a big hospital. We, we are uh we are what we are and once that finishes, you've got to make sure that the woman knows exactly where to go afterwards. So I think it works better with us, I think so. -MW87	2

4.2.3.3.9 Emotion.

'Stress' was identified as an enabler or barrier to collaboration by some midwives (n= 4, 27%), with work being characterised as *"busy and stressful" (MW6)* which can potentially impact on the likelihood of midwives contacting health visitors: *"I think it could have an impact for if I'm feeling particularly kind of anxious or stressed then I may um be less likely to contact the kind of health visitors to discuss the client's needs" (MW91)*. However, one midwife also noted that collaborating with health visitors may help to reduce stress. This belief statement is summarised in Table 4.23.

Table 4.23. Key enablers/barriers, Emotion.

Belief statement	**Subtheme**	**Illustrative quotes**	**Participant contribution (Max n= 15)**
Stress	Stress impedes collaboration	Yeah that can have an impact. So um... It probably doesn't have as much of an impact as my time but I think it could have an impact for if I'm feeling particularly kind of anxious or stressed then I may um be less likely to contact the kind of health visitors to discuss the client's needs -MW91	4
	Collaboration reduces stress	I think it would probably be, I think you'd have reduced stress if you worked more in partnership because you'd share the load a little bit more I think, definite, yeah, that's what, yes. -MW6	1

4.2.3.3.10 Nature of the behaviours.

In relation to the domain 'Nature of the behaviours', three belief statements emerged as relevant enablers or barriers. These are: 'Nature of contact with health visitors in the antenatal period', 'Extent of collaboration', and 'Applying collaboration-related guidelines'. The most highly referenced belief statement 'Nature of contact with health visitors in the antenatal period' concerns midwives' previous antenatal contacts with health visitors, which were described by many as an

opportunity to refer women who have vulnerabilities and can benefit from extra support:

> *"Yeah I guess apart from when it's the standard thing, let's say so you have to refer someone or, so when you have to refer someone or you have to do the verbal handover all that kind of thing. Sometimes for example you have somebody that is not coming to the appointments, you have concerns about her, all that kind of thing... if we know that they're in the area that our team covers we just come in their office and ask them, have you heard about them, do you have a different address, so we can kind of like tell them ok she's not coming to the appointments so they will also be aware. But as I say, it's only with that team, because it's so easy to access them." -MW37*

However, a small number of midwives (n= 2, 13.33%) reported having no contact with health visitors in the antenatal period.

'Extent of collaboration' pertains to the level of contact experienced by midwives. In the main, midwives shared experiences of working closely with health visitors, as evidenced by reports of face-to-face contact; at the same time, they expressed the wish to have more opportunities to work together: *"in fairness we, we don't talk to each other much about our sort of general care. It's more about specific concerns with specific patients" (MW4)*. Finally, concerning the belief statement 'Applying collaboration-related guidelines', over half of the participant sample reported not applying guidelines in practice, with only four of 15 (27%) participants reporting applying guidelines without recalling these in detail:

> *"Yeah I, I suppose that's handing over care in the time, timely, there's something about timely when you'd handover care to the health visitor. I couldn't quote on what that is though" -MW87*

The belief statements discussed here are summarised with illustrative quotes in Table 4.24.

Table 4.24. Key enablers/barriers, Nature of the behaviours.

Belief statement	Subtheme	Illustrative quotes	Participant contribution (Max n= 15)
Nature of contact with health visitors in the antenatal period	Past antenatal contacts enabling collaboration	Um, so we start that process very much before the baby's born. So those women who need the extra targeted help, we might do joint visits antenatally -MW55	10
	No contact antenatally	Usually it was postnatally, it didn't tend to be antenatally at all. -MW6	1
Extent of collaboration	Regular face-to-face contact	No no no, that probably happens every day! Uh they come in to see who, who's... given birth, who's um... who's left hospital, who we have a problem with, or... uh our health visitors see our women in um, they meet antenatally -MW46	9
	Speaking directly to health visitors during the postnatal period to prevent missing families	Um, it was someone that she had seen, it was a missed discharge. That's most of the sort of information we get is health visitors picking up missed discharges from other hospitals. -MW87	9
	Limited contact	RA: Is this the typical type of contact [MW24: Yes] that you, you know it's what you'd expect. MW24: It's yeah… And you would hardly see the health visitors to be fair. Even in the community. To be fair you don't really. It's all paperwork. -MW24	7

Belief statement	Subtheme	Illustrative quotes	Participant contribution (Max n= 15)
	Passive/indirect contact through handover/referral	I think it tends to be just a cross over, it doesn't tend, we don't tend to meet, if you know what I mean, it tends to be you might, you'll know the health visitor by name, but you won't necessarily have met her. So it's, it, it's, there tends to be, it's a little bit like a relay where you're not going to actually necessarily meet the health visitor, you've handed over via telephone or paper and then she takes over. You've discharged the woman, she's taken over the care and that tends to be it, so we don't really have much else to do with health visitors actually. -MW6	5
Applying collaboration-related guidelines	No	But we, I mean we don't work, I'm not aware that we work to a particular guideline. In some ways it's habit more than anything -MW55	8
	Yes	[…] we follow our own you know, our own internal guidelines for which tell us you know, you fill in your form in at the booking; you um send it off at 16 weeks, you know the health visitor gets in touch with them at some point about 36 weeks and then we hand over to the health visitor and what we should include in the handover to the health visitor, that's in our guidelines. -MW46	4

4.2.3.3.11 Domains not reported relevant.

No belief statements that were reported as both barriers and enablers to collaboration were identified as relevant for the theoretical domain 'Behavioural regulation'.

4.3 Discussion

This study systematically identified midwives' perceived barriers and/or enablers to collaborating with health visitors. In this study, interprofessional collaboration was defined as midwives and health visitors working in partnership, that is, *being in contact with each other using one or a combination of the following modes of communication: face-to-face, telephone, or women's records/notes* regarding women's care during transition of care (handover) (section 2.3.4, Chapter 2). Specifically, six barriers, 13 enablers, and 23 barriers/enablers were identified from the data analysis. These tapped into 11 of the 12 domains of the TDF, where the theoretical domain identified as not relevant was 'Skills'. Five main findings arise from this study, each of which will be discussed in turn.

First, study findings suggest that midwives do not consider skills as influential to their collaborative work with health visitors. In the context of the TDF, the domain 'Skills' relates to one's competencies (Cane et al., 2012). The emergent belief statement 'Collaborating with health visitors is part of my role' (Social/professional role and identity) may partially explain the absence of 'Skills' in this study. Working collaboratively with other health professionals is a specific competency expected of registered midwives in the UK (Nursing and Midwifery Council, 2010), which may in part explain the focus on professional identity instead of specific skills related to collaborative working. Although other TDF-based studies have identified the domain 'Skills' as influential to healthcare professional behaviours such as delayed prescribing (Sargent et al., 2017) and transformation of tertiary hospitals to major trauma centres (Roberts et al., 2016), within the context of the target behaviour (i.e. interprofessional collaboration) explored in this study, participants may have seen this as a complex behaviour which involves numerous behaviours which may have made it challenging to explore specific skills or sub-behaviours (e.g. making referrals) using the TDF. Equally, interprofessional

collaboration may have been perceived as an easy-to-perform behaviour that does not require any specific skill(s). Neither barriers nor enablers to interprofessional collaboration identified in the systematic review pertained to skills (section 2.3.5, Chapter 2). In addition, midwives reported interprofessional collaboration with health visitors as influenced by various social influences such as 'Health visitors' personalities', 'Silo culture', and 'Quality of contact: Poor'. Given that interprofessional collaboration entails interpersonal interactions, it is unsurprising that the domain 'Social influences' emerged as relevant, and was focussed on by the midwives more than 'Skills'.

Second, it was interesting to find that the barriers/enablers made up more than half (n= 24, 57.14%) of the belief statements that emerged from the data analysis, which suggests considerable variation in the views expressed within the sample. One possible reason for this is the assortment of participants' specific practice areas. Many of the midwives (n= 6, 40%) performed specialist roles and provided care to women with vulnerabilities or extra support needs, which may have contributed to increased reports of encounters with health visitors. For example, some midwives reported liaising with health visitors in the antenatal period when women had to be referred to specialist services (Nature of the behaviours, section 4.2.3.3.10). This is in line with the midwifery and health visiting partnership pathway set out for England (Public Health England and Department of Health, 2015). Hence, midwives who provide services at community and universal levels – services that are offered to all families – may have limited contact with health visitors across the maternity care pathway as no extra needs are identified. Previous literature indicates that direct contact between midwives and health visitors tends to deteriorate in the postnatal period (Farquhar et al., 1998; see Table 2.2, Chapter 2). The findings from this study are in line with this, where participants reported having more indirect contacts with health visitors, such as through discharge notes or referral forms (Nature of the behaviours, section 4.2.3.3.10). Yet, there were also enablers and barriers that were consistently reported across the sample, including the importance of having communication with health visitors (Social influences, section 4.2.3.3.8), as well as the value and benefits of collaboration with health visitors (Beliefs about consequences, section 4.2.3.3.4). These are discussed in the following section.

Study participants clearly valued collaborating with health visitors, as demonstrated the emergent belief statements 'Benefits of collaboration outweigh costs of doing so' and 'Contact with health visitors is beneficial' (Beliefs about consequences, sections 4.2.3.2.3 and 4.2.3.3.4, respectively). This is an important finding given that midwives in this study also reported that professional differences and silo working negatively impacted on their relationship with health visitors (Social/professional role and Social influences, respectively; see sections 4.2.3.1.1 and 4.2.3.1.3). Taken together, the evidence suggests that midwives as individuals have a strong awareness of the value of collaborating with health visitors when providing maternity care, but this is apparently hampered by social influences. Indeed, from the systematic review (section 2.3.5.2.6, Chapter 2), divergent philosophies of care between midwifery and health visiting presented as one of the barriers to collaborative working. Drawing from previous research, successful collaboration between those who belong to different professions require time to establish relationships grounded in trust, resolve conflicts, and identify shared goals (Axelsson & Axelsson, 2006). Interprofessional education has been argued to have the potential to mitigate the issues raised here regarding professional differences through shared learning (Angelini, 2011). However, there is limited evidence for this in maternity services particularly for midwives and health visitors (N. Davies et al., 2016) and should be explored in future research.

Throughout this discussion, a running thread across these findings is the role of communication as a key enabler to midwife-health visitor collaboration. Many of the participant midwives reported having generally good communication with their health visitor colleagues (n= 10, 66.67%). Whereas, limited high-quality communication is a commonly reported issue in the interprofessional collaboration literature (Bar-Zeev et al., 2012; Reeves et al., 2017) as discussed in section 2.3.5.2.1, Chapter 2, as well as TDF-based studies involving various healthcare professionals working together (Riordan et al., 2017; Roberts et al., 2016). For instance, there were midwives in this study who reported experiencing challenges when trying to establish contact with their health visitor colleagues. Possible reasons as to why there is this divergence in views are midwives' different practice areas or specialities as discussed previously, as well as differences in midwives' geographical locations. For instance, there is some evidence to suggest that being co-located

enables midwife-health visitor collaboration (see Chapter 5). Given the mixed views reported here, it is worth exploring the characteristics of the practices or areas where collaborative working between midwives and health visitors works well, to inform service development. In line with the principles of critical realism, the findings discussed thus far demonstrate that midwives' individual experiences are influenced and shaped by various contextual factors such as differences in professional education and training, as well as limitations on interprofessional communication that are linked to midwives' physical working environment.

Finally, a number of belief statements were identified relating to areas for potential intervention from a behaviour change perspective as these appeared to influence collaborative behaviour at an individual level. Examples of this include 'Knowledge of protocol/practice guidelines' (Knowledge), and 'Perceived ease of contacting health visitors' (Beliefs about capabilities). These belief statements and their corresponding theoretical domains are in line with previous TDF-based studies exploring other healthcare professional behaviours. For example, Roberts and colleagues (2016) who explored the barriers and enablers to the transitioning of a tertiary hospital to a major trauma centre found that knowledge of guidelines and/or protocols was influential. Given the complex nature of the target behaviour under investigation in the present study, the findings suggest that clear guidelines and protocols need to be not only put in place but adopted by midwives and health visitors in order to aid collaborative working. Present guidance achieves this to an extent, by providing specific time points when midwives and health visitors should make contact with each other (Public Health England and Department of Health, 2015); however, these may vary locally by Trust for example. Therefore, from a behaviour change perspective, one might propose interventions which are education-based to increase midwives' knowledge as well as address the mixed beliefs regarding midwives' perceptions of how easy or difficult it is to collaborate with health visitors (section 4.2.3.3.6). Similar intervention components have been proposed in TDF-based studies as applied to other contexts (e.g. Alexander, Brijnath, & Mazza, 2014).

4.3.1 Strengths and limitations of the study.

This study allowed for an in-depth, theoretically grounded exploration of midwives' barriers and enablers to working collaboratively with health visitors. Whilst sharing parallels with previous research (see Chapter 2 for a systematic review of the literature), a distinctive feature of the present study is that it lends an in-depth insight into factors impacting midwives' collaborative behaviour with health visitors at an individual level. Thus, the evidence presented here can guide intervention development in terms of behaviour change initiation and maintenance. At the same time, the present study offers supporting evidence for factors impacting midwife-health visitor collaboration at levels beyond the individual, including the apparent lack of professional and organisational support for interprofessional collaboration, despite policy directives which encourage this. The ability to capture a range of barriers and enablers when using the TDF has previously been identified as an advantage of the approach (Wilkinson et al., 2015).

As discussed in the previous section, the presence of conflicting views is clear from the findings. A potential explanation for this is the broad definition of 'midwife' for the study. It was decided that any midwife was eligible for the study; however, midwifery care models can vary and midwives can offer a range of services (e.g. universal vs. specialist/tiered services). For example, there were some midwives offering specialist services and work with more vulnerable groups such as young mothers and it is known that these midwives will have closer links with health visitors (Public Health England and Department of Health, 2015). In addition, the sample was self-selected. As such, reports of positive experiences in relation to collaborating with health visitors might be amplified by this group of midwives who are already interested in the topic area. To overcome this, several avenues for recruitment were pursued, specifically, a combination of maximum variation and snowball strategies to accommodate a broad spectrum of views.

Moreover, the present study also applied robust analytical methods for deriving and finalising the belief statements reported here, in line with TDF methods (Roberts et al., 2016). In particular, a consensus approach was used for identifying the key belief statements which allowed for the data set to be assessed by the whole research team. One disadvantage of using such an approach is that it is time-

consuming as has been reported previously (Wilkinson et al., 2015). A number of potential solutions can be offered: first, to use qualitative data analysis software; second, to use questionnaire methods. There is a growing body of evidence for questionnaire-based TDF research including in the area of maternal health (Beenstock et al., 2012).

4.3.2 Implications for practice and research.

On the basis of the findings presented in this chapter, it is clear that midwives' experiences of collaboration are positive to some extent. Although these findings are encouraging, the extensive mixed views reported here also demonstrate that there are further challenges that lie ahead. For example, communication was identified as central to the findings of this study. Opportunities for communication need to be provided, given the problems recognised by the midwives in this study in relation to the ways through which information could be shared and passed on to health visitors.

Moreover, future research should seek to understand how best to maintain midwives' engagement with the idea of collaborating with health visitors. The role of individual-level strategies has been discussed, however, there is also a need to explore the possibility of developing organisational or policy level interventions (e.g. exploring the utility of interprofessional education) to maintain and enhance collaboration between midwives and health visitors. Research should also ensure the uptake of any strategies put in place and assess the efficacy of these against identified clinical and professional outcomes.

4.4 Conclusion

In conclusion, the findings demonstrated midwives' perceptions of the value and benefits of working collaboratively with health visitors, as well as the challenges to this, both at an individual and organisational level. In addition, variation in views across the sample was identified, which could be partially explained by differences in midwives' specific areas of practice, and their geographical locations. Various opportunities for intervention were identified – of particular interest from a behaviour change perspective is the areas for intervention at an individual level. Importantly, the findings reported here emphasise the role of communication in

enabling or impeding collaboration, in line with previous research, and the systematic review (Chapter 2). Therefore, communication needs to be integrated into interventions that are aimed at increasing interprofessional collaboration between midwives and health visitors.

5 Understanding the enablers and barriers to interprofessional collaboration between midwives and health visitors using the Theoretical Domains Framework: Health visitors' perspectives

5.1 Summary

This chapter concerns the findings derived from the methods detailed in Chapter 3, with a focus on the health visitor sample. It opens with a summary of the sample characteristics, providing context to the findings detailed in section 5.2.3. The relevant domains and belief statements will then be discussed, and grouped by their function (i.e. barrier, enabler, or both). This chapter closes with a discussion of the findings, and the implications for research and practice.

5.2 Results

5.2.1 Sample characteristics.

As detailed in section 4.2.1 of Chapter 0, 58 midwives and health visitors expressed interest in participating in this study; however, the specific number of health visitors who expressed interest is not known. Seventeen health visitors (88.2% female) from across England participated in this study, including one pilot interview participant. The majority of the participants worked as health visitors in London (64.7%). All participants were trained in the UK, and together, have a broad range of experiences (Mean years of experience= 7.83 years; range= 1 month – 42 years). Interviews took between 36 minutes and 1 hour and 34 minutes (Mean interview length= 53 min). Nine of 17 interviews were conducted face-to-face, and eight by telephone between July 2016 and November 2016. As stated in section 3.4.7, chapter 3, study participants were allocated random participant numbers (Range= 0-100) in order to ensure anonymity. A summary of the sample characteristics is provided in Table 5.1.

Table 5.1. Summary of sample characteristics (N=17).

Characteristic	Health visitors (n= 17)
Gender	
Female	15
Male	2
Location of practice	
Dorset and Somerset	1
Essex	1
London (Location not known)	2
London (North Central)	1
London (North East)	6
London (South East)	1
London (South West)	1
South East Coast	1
South West	1
Trent	1
Yorkshire South	1
Prior experience/role	
Previously a midwife	4
Never been a midwife	12
Current role	
Health visitor	14
Currently both midwife and health visitor	1
Specialist safeguarding health visitor	1
Health visitor and researcher	1
Ethnicity	
Black Caribbean/British	1
Black African	1
White British	9
White English	1
White Irish	1
Any other White	2

5.2.2 Coding participant utterances into TDF domains

Utterances (i.e. segments of transcripts) from the 17 participants were coded into the 12 TDF domains (see Table 3.1., Chapter 3). In all, 2,254 utterances were coded into TDF domains which resulted in 107 belief statements. As explained in section 3.4.6 (Chapter 3), the emergent belief statements were then synthesised into 63 belief statements, of which 13 were barriers, 25 were enablers, and 25 were barriers/enablers, through consensus discussion. Of the 2,254 health visitor utterances, the domains with the highest number of utterances (i.e. considered most salient by participants) were 'social influences' (18%), 'environmental context and resources' (15%), and 'behavioural regulation' (13%). Percentages of utterances across domains, which depict the volume of quotes coded into the 12 TDF domains, are reported in Figure 5.1. These do not reflect the number of belief statements derived from each theoretical domain.

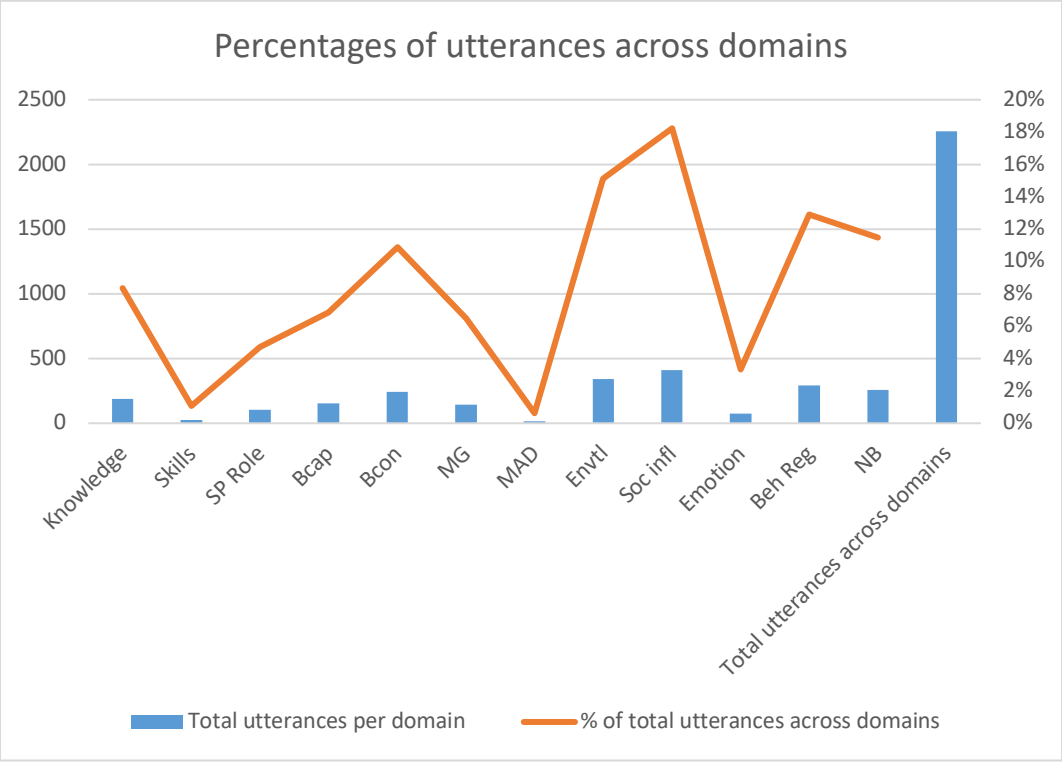

Figure 5.1. Percentages of utterances coded across 12 TDF domains

SP Role = Social professional role and identity; BCap = Beliefs about capabilities; BCon = Beliefs about consequences; MG = Motivation and goals; MAD = Memory, attention, and decision processes; Envtl = Environmental context and resources; Beh Reg = Behavioural regulation; NB = Nature of the behaviours.

5.2.3 Relevant domains and key belief statements (i.e. themes)

This section outlines the relevant domains and key belief statements according to the criteria: frequency, discord, and external evidence (see section 3.4.6, Chapter 3), in line with previous research (Roberts et al., 2016). In addition to the three criteria to assess the importance of belief statements, belief statements were deemed salient when represented by at least four participants as observed in existing TDF-based research (Francis et al., 2009; Roberts et al., 2016). All belief statements coded to the 12 TDF domains are provided in Appendix N. On the whole, the most frequently cited belief statements were those that functioned as both barrier and enabler, demonstrating mixed views. More enablers (n= 23) were identified as compared to barriers (n= 13). A summary of the most frequently cited belief statements and their respective subthemes across the 12 TDF domains (N.B. organised by domain, then rank order) is provided in Table 5.2. In addition, the most salient barriers, by domain, will be discussed first. This will be followed by a discussion of enablers, by domain; finally, enablers or barriers by domain.

Table 5.2. Summary of most frequently cited belief statements as cited by at least four participants across all 12 TDF domains.

Domain	Belief statements	Subthemes	Barrier (B), Enabler (E), or Both enabler and barrier (M)	Participant contribution (Max n= 17)
Knowledge	Establishing contact with midwives	I don't know the process(es) involved in establishing contact with midwives	M	15
		I know the process(es) involved in establishing contact with midwives		15
	Opinions on guidelines	Guidelines are important, good and helpful for health visitors and women	M	14
		Guidelines have potential but need to be clear, widely disseminated, and implemented		4
Skills	Communication skills	None	E	4
Social/professional role and identity	Expectations about collaboration as a health visitor	Collaboration is fundamental to my role	M	10
		Midwives as instigators of contact		8
		It is not a large part of my role during transition of care		6
		Will make contact happen if needed		5
	Professional differences	None	B	7
	Uncertainties regarding roles	None	B	4
	Nature of the community-based role	None	B	4
Beliefs about capabilities	Perceived ease of contacting midwives	Communication/contact is difficult	M	14
		Communication/contact is easy		14
		Lack of information about the family		6

Domain	Belief statements	Subthemes	Barrier (B), Enabler (E), or Both enabler and barrier (M)	Participant contribution (Max n= 17)
		Lack of experience		5
	Factors influencing self-efficacy	NHS set-up (including: number of women, midwives' ways of working, organisational structure/set-up)	M	7
		Co-location, flexibility, seeing midwives' notes		6
	Collaboration self-efficacy	Difficulties experienced	M	7
		Finding ways to collaborate		6
Beliefs about consequences	Gaining information to inform care	None	E	14
	Benefits outweigh the costs of contact/collaboration	Yes	M	13
		Uncertain		4
	Benefits of contact to mothers/families	Continuity	E	11
		Improved health outcomes		7
		Increased support		5
		Delivering high-quality care		4
Motivation and goals	Perceived importance of collaboration	Important	M	10
		Issues with mother/baby needing to be addressed through contact with midwives		9
		Not needed		6
	Intrinsic motivation	None	E	7
	Intention to collaborate	Intend	M	9
		Don't intend		4

Domain	Belief statements	Subthemes	Barrier (B), Enabler (E), or Both enabler and barrier (M)	Participant contribution (Max n= 17)
Memory, attention, and decision processes	Contacting midwives based on women's/families' identified needs	Contact/handover when there is a concern	E	17
	Perceived difficulty of decision to contact/collaborate with midwives	Not difficult	M	9
	Reasons for contacting midwives	Gather information about family	E	6
		Give midwives information		5
Environmental context and resources	Health visitors' and midwives' lack of time	None	B	14
	Staffing levels (midwives and health visitors)	Lack of staff/staff turnover	M	13
	Health visitors' and midwives' workload	None	B	13
	Written information	Birth notification/discharge sheet	E	12
		Antenatal booking forms		4
Social influences	Communication with midwives (antenatal, postnatal/handover)	None	E	17
	Quality of contact with midwives	Contact with midwives not forthcoming; involve limited/inaccurate information	M	15
		Contact with midwives can be useful, supportive, helpful		9
	Familiarity with midwives	None	E	12
Emotion	Burnout	Reduced connection/contact	M	6

Domain	Belief statements	Subthemes	Barrier (B), Enabler (E), or Both enabler and barrier (M)	Participant contribution (Max n= 17)
	Impact of emotions on work	None	M	6
	Enthusiasm	None	E	5
	Feelings derived from past experiences influencing likelihood of future behaviour	Negative feelings	M	5
Behavioural regulation	Increasing contacts with midwives	Increasing interprofessional working (e.g. joint teaching/visits, face-to-face meetings)	E	13
		Increasing communication	E	8
	Markers of contact/collaboration	Aim of communication is met	E	12
		Client satisfaction and knowledge		11
		Records/documented evidence of contacts		9
	Changes to overall health visiting practice (organisational)	Introduction of antenatal contacts	M	9
Nature of the behaviours	No established relationship/partnership with midwives	None	B	15
	Experiences of antenatal contacts	None	E	13
	Current practices	Reading midwifery notes/birth notifications	E	12
		Regular contacts with midwives		6
		Ad hoc/flexible communication		4

5.2.3.1 Key barriers.

This section concerns the relevant domains and key themes that functioned as barriers, according to the aforementioned criteria of frequency, discord, and external evidence. Fourteen belief statements were identified as barriers, with two subthemes. Each of these will be discussed in detail (per domain and rank order, where identified) in the succeeding sections.

5.2.3.1.1 Social/professional role and identity.

Three belief statements related to the domain 'Social/professional role and identity' presented as barriers, namely, 'Professional differences', 'Uncertainties regarding roles', and 'Nature of the community-based role'. No subthemes were identified within these belief statements. 'Professional differences' was the main barrier identified where seven of 17 (41.17%) participants reflected upon professional conflict as a barrier to interprofessional collaboration with midwives. Specifically, in terms of differences in midwifery and health visiting practice, one participant reported that they have *"got a bit of different practice, different bits of ways of... and then the mothers get really confused if you go in and say don't do this or don't do that or whatever" (HV72)*. The other barriers identified for this domain are summarised in Table 5.3.

Table 5.3. Key barriers, social/professional role and identity.

Belief statement	Illustrative quotes	Participant contribution (Max n= 17)
Professional differences	we're not quite sharing the same... approach sometimes we're a bit questioning of the sort of uh... the evidence or lack of, that they might be basing their practice on. Um... so there's that the sense that we're a bit more up-to-date than them, I'm sure midwives see it the other way as well -HV6	7
Uncertainties regarding roles	And I often think that that's us as well, we don't really know what we do sometimes. We hold on to these people because we think we should, but actually our roles need to be defined [RA: More clearly] more clearly. -HV44	4
Nature of the community-based role	again thinking about mainstream [universal midwives], you know some of the difficulties are practical difficulties in terms of trying to speak to a midwife who knows the woman on the phone you know because the midwives are out and about aren't they? -HV19	4

5.2.3.1.2 Beliefs about consequences.

Three belief statements were identified as barriers for the domain 'Beliefs about consequences', namely 'Conflicting advice', 'Duplication of work due to lack of contact', and 'Disadvantages of collaboration'. The belief statement 'Conflicting advice' concerns health visitors' reports of the differences in the advice given to women by midwives and health visitors, which is a barrier to working collaboratively. One health visitor cites an example of a situation where the advice they provided was mismatched with the midwives':

> *"So oftentimes... it gets to day 14, day 10 to day 14 and mum and baby maybe is not drinking milk or gone off of the milk or losing weight, and we explore with mum what's happening and mum might say well, um... the midwife told me to give baby boiled water. You know so and for various reasons the midwife might've said that. And we're taught, what we know is that, babies don't need water because milk is made of water and water can take the appetite of the baby away. So we advise against it." –HV44*

'Duplication of work due to lack of contact', on the other hand, concerns health visitors' reports of work being duplicated due to scarce contact with midwives, which can result in having to repeat whole health history assessments for example. Both of these belief statements had equal numbers of participant contributions (n= 6, 35.3%). The last barrier identified, 'Disadvantages of collaboration' is related to health visitors' perceived disadvantages of collaborating with midwives including having an increased workload, or health visiting care being influenced by the information that they receive from colleagues in midwifery. These belief statements, along with their illustrative quotes are presented in Table 5.4.

Table 5.4. Key barriers, Beliefs about consequences.

Belief statement	Subthemes	Illustrative quotes	Participant contribution (Max n= 17)
Conflicting advice	None	I think it can be unsuccessful if you aren't doing the same things to the families, so it can, it could, I guess potentially you can confuse the parents. -HV73	6
Duplication of work due to lack of contact	None	what I do feel is probably very annoying for clients is that I go in and I have to ask the whole health history again which is already been given to the midwife -HV72	6
Disadvantages of collaboration	Increased workload	…so with the birth rate, I would be, it would be impossible to talk to the midwife if it's about every baby you're going to see. And I think they wouldn't be very happy with me (chuckles) -HV72	4
	Being influenced by information from midwives	HV47: But it may also prejudice... you know our you know we might not go in there with a clean mind and thought we you know, going in and you know looking at things with, [inaudible 0:16:43.4] without any prior knowledge of anything going and just make your assertions, rather than kind of, oh! RA: Be influenced by HV47: Yeah, be influenced by what they've said. And so I don't know if it's necessary, but it may be helpful. -HV47	2

5.2.3.1.3 Environmental context and resources.

Belief statements within the domain 'Environmental context and resources' pertain to the physical and contextual factors which health visitors perceived as hindrances to working collaboratively with health visitors. Three key barriers were identified: 'Health visitors' and midwives' lack of time', 'Health visitors' and midwives' workload', and 'Funding cuts'. Chief of these environmental context and resource barriers was 'Health visitors' and midwives' lack of time', as reported by an overwhelming majority of participants (n= 14, 82.35%). A lack of time was seen to play a "*massive, massive part*" *(HV68)* in constraining collaboration with midwives. The majority of the participants (n=13, 76.5%) also reported 'Health visitors' and midwives' workload' as a barrier to collaborating with midwives. As one participant stated, "*a large caseload, I think that, that works on both sides surely from the midwifery and the health visitors' point of view*" *(HV78)*. Finally, 'Funding cuts' were identified by many health visitors in this study as a structural barrier to working collaboratively with midwives. No subthemes were identified for this domain. These themes, along with their illustrative quotes are presented in Table 5.5.

Table 5.5. Key barriers, Environmental context and resources.

Belief statement	Illustrative quotes	Participant contribution (Max n= 17)
Health visitors' and midwives' lack of time	Yeah well I guess you know, both of those things are quite relevant like not not having the time, being very pushed for time, -HV78	14
Health visitors' and midwives' workload	a large caseload, I think that, that works on both sides surely from the midwifery and the health visitors' point of view -HV78	13
Funding cuts	after the sort of investment by the government in health visiting, it's all rapidly falling away and that's a very demoralising process -HV6	6

5.2.3.1.4 Social influences

For the domain 'Social influences', two barriers were identified. These are 'Silo culture' and 'Gaining information from women/families'. No subthemes were identified in this set of belief statements. Many health visitors (n= 10, 58.82%) reported that at a professional and organisational level, the presence of silo culture impeded collaborative working with midwives. One health visitor stated, "*I would say, we're fairly conventional, we're fairly role bound, um so we could be a lot more dynamic I guess and do some more joint working or sort of antenatal work together*" *(HV6)*. In addition, health visitors reported gaining information directly from the families under their care, which reduces opportunities to work collaboratively with midwives. As described by one participant, "*I do, I think today's mums are just so good at giving their history about themselves [sic], why do I need a midwife*" *(HV72)*. These themes are presented in Table 5.6 with corresponding illustrative quotes.

Table 5.6. Key barriers, Social influences.

Belief statement	Illustrative quotes	Participant contribution (Max n= 17)
Silo culture	You're also working in a culture and, and... the culture that I've come across within my organisation and, and health um, midwifery, is, it's a bit like oil and water. They should, they should mix, but they just don't. -HV44	10
Gaining information from women/families	We just go straight to the family because I think a lot of the time as well [...] she's [midwife] just gonna be like no there's no concerns and then it's kind of a waste of her time and you're making that phone call it's a waste of your time just to find out that there's no problem -HV78	5

5.2.3.1.5 Nature of the behaviours.

Two belief statements related to the domain 'Nature of the behaviours' were identified. The belief statement 'No established relationship/partnership with midwives' emerged as the most frequent belief statement, and relates to health visitors' reports of having no working relationship with midwives. Health visitors described the extent of contact with midwives as *"bare minimal to non-existent" (HV44)*. Fifteen of 17 (88.23%) participants contributed to this belief statement. Regarding the belief statement 'Delayed or inaccurate written information', a number of participants reported receiving information in an untimely fashion, or inaccurate written information from midwives which presented as a barrier to collaborative working. For instance, whilst health visitors may receive birth notifications, however, these notifications may contain inaccuracies:

> *...we were getting quite a lot of information from the maternity hospital that was incorrect. And we were sending letters out to pregnant, well, women we thought were pregnant saying, you know, we hear you're having a baby, congratulations we'll come and see you, and they'd actually miscarried. –HV31*

In addition, written information from midwives may lack the level of detail that health visitors expect. As one health visitor described: "…*midwives will just kind of discharge a baby and sometimes by the time we go around at 10 days there's no midwifery notes there" (HV78)*. These belief statements are summarised in Table 5.7 below.

Table 5.7. Key barriers, Nature of the behaviours.

Belief statement	**Illustrative quotes**	**Participant contribution (Max n= 17)**
No established relationship/partnership with midwives	It would be nice to talk to midwives, I mean I don't know, I don't, d'you know it's awful but I don't even know where they're based, they've got different teams –HV96	15
Delayed or inaccurate written information	although there is a lot of information on the discharge notification, the birth notifications there's a lot really that isn't there. I mean we only see the child's birth notification, we don't see any great details about the mum's how mum's health was until we get there and do the visit. -HV95	7

5.2.3.1.6 Domains not reported relevant.

No belief statements were identified as relevant barriers for collaboration with midwives for the following theoretical domains: 'Knowledge', 'Skills', 'Beliefs about capabilities', 'Beliefs about consequences', 'Motivation and goals', 'Memory, attention, and decision processes', 'Emotion', and 'Behavioural regulation'.

5.2.3.2 Key enablers.

This section outlines the relevant domains and key belief statements or themes that functioned as enablers, according to the aforementioned criteria of frequency, discord, and external evidence. Twenty-three belief statements were identified as enablers. Each of these will be discussed in detail (per domain, where identified) in the following section sequentially, by domain, then rank order within each domain.

5.2.3.2.1 Skills.

One belief statement was identified as an enabler, which concerns communication skills. Four of 17 participants identified good communication skills as essential to being able to work collaboratively with midwives. As stated by one health visitor, "*one of the main key aspects delivering this service is having a really good, open line of communication with the midwives*" *(HV68)*, and this was supported by another participant who stated, "*I think you've got to be good at communicating, haven't you?*" *(HV31)*. This is summarised in Table 5.8.

Table 5.8. Key enablers, Skills.

Belief statement	**Illustrative quotes**	**Participant contribution (Max n= 17)**
Communication skills	the majority of our job is good communication skills. So I would hope that all health visitors have got those skills already. -HV31	4

5.2.3.2.2 Social/professional role and identity.

One belief statement was identified to be relevant, namely, 'Expectations of professional self: To be open and flexible'. This belief statement relates to health visitors' expectations that as professionals they act with openness and flexibility which was seen to enable collaboration. For example, one health visitor shared: *"we're all sort of senior nurses um, we sort of work independently so we would make that decision ourselves as to whether we would [work with midwives]" (HV31)*. This belief statement is summarised in Table 5.9 below.

Table 5.9. Key enablers, Social/professional role and identity.

Belief statement	**Illustrative quotes**	**Participant contribution (Max n= 17)**
Expectations of professional self: To be open and flexible	it is that sort of wanting to show, we can be flexible, we can come and meet up you know, sort of make you know, make something work -HV95	4

5.2.3.2.3 Beliefs about consequences.

Three key belief statements were identified by health visitors in this study as enabling working collaboratively with midwives. The most frequently reported of the three belief statements (n= 14, 82.35%) was 'Gaining information to inform care', which is about health visitors' appreciation of the information that midwives share with them, consequently informing the care they provide to women and their families. One health visitor stated: *"if there's issues, it's massively important, of course we should be communicating with each, each other. We need to know what's going on." (HV31).*

The second most frequently cited belief statement 'Benefits of contact to mothers/families' concerns the various perceived benefits of working collaboratively with midwives, which were discussed by more than half (n= 11, 65%) of the participants. This belief statement has three subthemes, namely 'Continuity', 'Improved health outcomes', and 'Increased support'. Continuity was of particular importance, as it ensured that health visitors knew about the women's/families' needs, as one health visitor describes: *"so it can add to the continuity that they get in their care. Um because they're, because we're more informed that way" (HV94).* Finally, the belief statement 'Contact with midwives as beneficial' concerns health visitors' perception that collaborative working with midwives is a worthwhile activity. Each of these is summarised in Table 5.10 below.

Table 5.10. Key enablers, Beliefs about consequences.

Belief statement	Subthemes	Illustrative quotes	Participant contribution (Max n= 17)
Gaining information to inform care	None	So as I said sometimes things may be disclosed or another person might notice something, or you might not have noticed. So I think having that joint working in partnership you know would be good um to have. -HV20	14
Benefits of contact to mothers/families	Continuity	And also for the client, it's nicer as well if they don't have to disclose things more than once, that impression of the communicating so that it's like we're giving them like a joined-up service -HV78	11
	Improved health outcomes	Yes! So many [health outcomes]! I mean yeah I think from the point of view of early intervention, perinatal mental health, breastfeeding, transition into parenthood for parents and things. And just general you know maternal and child health would all be improved by better collaboration. -HV95	7
	Increased support	it's very hard as a new parent to feel confident to say anything other, you might say you're tired and you might say to feel overwhelmed at times but it's very difficult to talk realistically about how it feels. But actually if we could put those two bits of the package together, it makes that discussion more meaningful and more... you know I think if, if we're able to resource ourselves as parents we're able to provide better for our children aren't we? So I think that's what I would like to see actually that if we come together, in a sense one person opens the conversation and carried over and continued -HV19	5
Contact with midwives as beneficial	None	I don't think it could hurt that we share information and have greater communications between health visitors and midwives. We're both dealing with families and mums and parents and new children um so it's a very related area of course so I, I can't think of anything... anything but the benefit for more integrated working if it was possible to do so –HV47	10

5.2.3.2.4 Motivation and goals.

Two belief statements were identified for the domain 'Motivation and goals', namely, 'Intrinsic motivation' and 'Need for contact in the antenatal period' (subtheme: Partnership working/dependence). 'Intrinsic motivation' related to health visitors' personal drive to work collaboratively with midwives as exemplified in the following quote: *"So this is my belief: you don't have time but you make time [to collaborate]" (HV75)*. Meanwhile, 'Need for contact in the antenatal period' related to health visitors' goal of establishing partnership working with midwives. These are summarised with illustrative quotes in Table 5.11.

Table 5.11. Key enablers, Motivation and goals.

Belief statement	**Subthemes**	**Illustrative quotes**	**Participant contribution (Max n= 17)**
Intrinsic motivation	None	So I think, I see it as a big part of my role. Um... but that's more of um something that I aspire to. It's an aspiration -HV44	7
Need for contact in the antenatal period	Partnership working/dependence	we are striving to do more antenatal work with women as health visitors and obviously that also brings us into close contact as well because we are entirely dependent on the midwives to talk to us about who they think should be our priority for antenatal visiting. Um, so yes, no it's absolutely central. -HV6	4

5.2.3.2.5 Memory, attention, and decision processes.

Two belief statements were identified as enablers for the domain 'Memory, attention, and decision processes'. The first belief statement 'Contacting midwives based on women's/families' identified needs', concerns the factors health visitors have reported prompt them to contact the midwife.

The second belief statement, 'Reasons for contacting midwives' (two subthemes), concerns the factors that facilitated health visitors' decision to contact their midwifery colleagues, including wanting further information about a family, or conversely, to give midwifery colleagues information about the family under their care. For example, when there are vulnerabilities or extra support needs identified other than safeguarding, as described by one participant:

> *HV19: that might be a family where the baby's been born with special needs. Um... it might be say you know it could be something, if perhaps a bereavement in pregnancy or something you know, where there's not safeguarding vulnerability […] But actually you know it's really, a real challenge isn't it? Yeah so that would be, it's really good doing this actually because I'm thinking this really clarifies how you, that you know again, it's about thinking, it's about thinking of purpose and impact isn't it. And that, that's where... that's where a good meshed partnership would really I think improve the impact of the service on the families and outcomes for those families.*

A summary of the belief statements related to this domain, with participant quotes, is presented in Table 5.12.

Table 5.12. Key enablers, Memory, attention, and decision processes.

Belief statement	Subthemes	Illustrative quotes	Participant contribution (Max n= 17)
Contacting midwives based on women's/families' identified needs	Contact/handover when there is a concern	I suppose it depends on vulnerability so if these are women that you are aware have got, are homeless or there's a significant health or social needs, then you would hope you'd be notified that they have had their baby in terms of the risk you might face when you go there or, in terms of weighing the baby, postnatal care traditionally, over the recent years has really diminished. -HV50	17
Reasons for contacting midwives	Gather information about family	Um... I think it might be if we, if a concern is raised then we might want to phone them up and ask what kind of, what, what their take on it is, and if they've got any information on it. -HV94	6
	Give midwives information	with the, the antenatal case it was I wanted to make contact with the midwives because I obviously didn't know, who knew about her having lost the baby. -HV95	5

5.2.3.2.6 Environmental context and resources.

Concerning the domain 'Environmental context and resources', the key belief statements that were perceived as enablers were: 'Written information', 'Being co-located', and 'Having the resources to collaborate'. 'Written information' (two subthemes) concerns any documentation related to mother and baby such as birth notifications. Many health visitors (n= 12, 70.6%) reported that the communication they have with midwives is frequently in the form of this written information rather than having direct contact with them. For example, as one health visitor explained: *"they [Trust] have a form which the midwives fill in and then gets faxed over to us so if there's um anything they think should be raised with us" (HV77)*.

In addition, 'Being co-located' was identified as an enabler of collaborative working. Co-location was perceived as a factor for increasing accessibility to midwives as well as other healthcare professionals. One health visitor shared her experience of the impact of being co-located with midwives on working collaboratively: *"So the communication with the midwives is good by chance, because we happen to have been put in the same building but I wouldn't say there's been any planning around that whatsoever" (HV6).* Finally, a number of health visitors (n= 6, 35.29%) also reported that generally, being adequately resourced could be helpful with being able to contact midwives. Each of these are presented with illustrative quotes on Table 5.13.

Table 5.13. Key enablers, Environmental context and resources.

Belief statement	Subthemes	Illustrative quotes	Participant contribution (Max n= 17)
Written information	Birth notification/discharge sheet	Yeah an A4 discharge sheet, you know when you go and see the woman mostly when we go and visit the woman most women will have been discharged and babies will be discharged by the midwifery service. And the midwives leave us an A4 sheet which is divided in two and the top part is the mum's details, and it will literally give, it'd give the information that we generally already have. It'll give what type of birth she had, um if there are any medical, postnatal problems that might be written on by hand. If for example, her blood pressure's being monitored by the GP that sort of thing. That's written down. It will usually say if they've discussed contraception, and it will usually say that's she's generally well. It's quite unusual to get more than that information -HV19	12
	Antenatal booking forms	when women are booked or if we get the booking forms and they haven't got a risk form we're still doing our own checks on our own system to see if this family are known to us. And then if it highlights any risks that we're aware of from previous involvement with because our service is open in terms of we can see mental health notes and things like that. So there may be issues that are, that are, have um are open to us that the midwife doesn't know -HV68	4
Being co-located	None	maybe have, in an ideal world, community midwives... GPs and health visitors in one location with family support workers as well. -HV47	10
Having the resources to collaborate	None	So the resources, I think the resources are there um to be able to link in with midwifery team –HV20	6

5.2.3.2.7 Social influences.

Concerning the domain 'Social influences', three key enablers were identified. 'Communication with midwives (antenatal, postnatal/handover)' was the most widely cited belief statement across all domains, with all 17 participants contributing to this theme. Health visitors reported that having communication with midwives is *"absolutely fundamental" (HV6)* and valued. In addition, communication with midwives was seen as a means to resolve issues and raise concerns, as one health visitor explained:

> *"I think a lot of things can be solved sometimes by just communicating with other professionals you know, as long as you don't keep silent about it and you raise it somewhere, the appropriate steps should be put into place." –HV47*

The belief statement 'Familiarity with midwives' conveyed health visitors' confidence in working collaboratively with midwives once they have established contact or made appropriate links to foster a collaborative relationship. Indeed, health visitors associated being familiar with midwives with "*more open communication" (HV68),* and being supported: *"the midwives are seen as a source of emotional support for the health visiting team and vice versa. So everyone knows each other well, everyone knows each other's personal issues well" (HV6)*. Finally, 'Face-to-face contact/interaction' concerns health visitors' perception that having regular physical interaction with midwifery colleagues can enable collaborative working between the two groups. The themes discussed here are presented with illustrative quotes in Table 5.14.

Table 5.14. Key enablers, Social influences.

Belief statement	Illustrative quotes	Participant contribution (Max n= 17)
Communication with midwives (antenatal, postnatal/handover)	in that first month period you know when they're still under the care of the midwife, um, there's a lot of... uh there's a lot of communication about women even if they've been discharged by the midwife, if for any reason something crops up, we you know we'd still go back to the midwife for a conversation about what might be going on and whether they might still have a role and so, yep. -HV6	17
Familiarity with midwives	it's that thing of once you've made a link with someone, and similarly for them having a link with us to be able to actually kind of say, well we've got this going on do you know what, you know did you know what we might be able to do to help that and similarly for them, us to say to them oh you know we've got this going on, do you know what we might be able to do about that and it's something I think often when you've put, you know, when you've got, it's that thing where if you've got a person to speak to rather that it be 'the midwives', if it's like oh yeah I can speak to Joanne Bloggs the midwife there it really makes it feel a bit easier to kind of be able to make that contact and things -HV95	12
Face-to-face contact/interaction	I think having regular meetings so that you just you know, you kind of break down those professional barriers if you like [RA: Yeah] and you're able to treat each other as equal I think that's really helpful -HV77	9

5.2.3.2.8 Emotion

One belief statement, 'Enthusiasm', was identified as an enabler by the participant sample for the domain 'Emotion'. Health visitors reported that feelings of enthusiasm are positive influences to working collaboratively with midwives:

"...when you're enthusiastic about what you're doing, you're kind of more inclined to, to go and communicate and I think that, in my practice I've seen

that like if the midwives are, if I see them like walking around the building then I'll just be like oh, I could just have like a quick chat with them like, anything that you want to like, anything that's concerning, any mums that are like, any problems with or anything like that" –HV78

This belief statement is summarised in Table 5.15 below.

Table 5.15. Key enablers, Emotion.

Belief statement	**Illustrative quotes**	**Participant contribution (Max n= 17)**
Enthusiasm	I think everyone's very enthusiastic and tries and my impression when I do have contact with the midwives is that they are the same. -HV72	5

5.2.3.2.9 Behavioural regulation.

Regarding 'Behavioural regulation', the key belief statements or themes identified were 'Markers of contact/collaboration' (three subthemes), 'Increasing contacts with midwives', 'Action planning with midwives', 'Flexibility in individual practice', 'Changing guidelines', and 'Changing ways of thinking/working (innovation)'. A summary of these themes, respective subthemes, and quotes to describe each of these is detailed in Table 5.16.

Of these belief statements, 'Markers of contact/collaboration' was the most frequently cited (n= 12, 70.6%). This belief statement concerns the various indicators of collaboration with midwives that the health visitors in this study have described. For example, health visitors stated that collaborative working can be considered successful if the aim of communication is met, as illustrated here:

"Well it's successful when they've got something to tell us if they ring us or if we've got something to tell them and we tell them. But if we find out later down the line about something the midwives knew and they haven't passed that information on then that's not very good" –HV31

Second, the belief statement 'Increasing contacts with midwives' (two subthemes), concerns health visitors' desire to have further opportunities to work

collaboratively with midwives, either through joint meetings and visits, or increased communication more generally. Such opportunities were considered by health visitors as enablers to collaboration with midwives:

> *"I think having some sort of regular liaison even if it is a case of just being able to say oh yeah all's OK this end, how's things your end kind of thing" –HV95*

> *"Um... links or even seeing maybe joint visits between or a joint visit or initial visit then between um the health visitor and the midwifery team um as well." –HV20*

The other belief statements within this domain reflect the health visitors' ideas for overcoming the challenges to collaborative working with midwives which includes changes in guidelines, ways of working, and action planning with midwifery colleagues.

Table 5.16. Key enablers, Behavioural regulation.

Belief statement	Subthemes	Illustrative quotes	Participant contribution (Max n= 17)
Markers of contact/collaboration	Aim of communication is met	I suppose it's the quality of the contact isn't it, maybe? So handing over care you can give minimal information or you can give far more than is necessary. I suppose it's about being clear and concise about what information should be shared and the purpose for the sharing. -HV50	12
	Client satisfaction and knowledge	Um... probably since I saw [inaudible 0:32:32.2] that the it's been a smooth transition of the family that um... that they've had an understanding of why it moved from one team to another and, and that they've understood who everybody is. Um... and that they're, they're happy with the care that they've received and that everything is going well (laughs) going well with the baby you know, that, that there hasn't been no mishaps or anything -HV94	11
	Records or documented evidence of contacts	It's often recorded on the notes all communications are recorded so our conversations are recorded on the women's records. So there's, there is that evidence, uh we have paper evidence you know of of... um notes that they have made to communicate where they think women you know where there're issues. Um so I would say yeah there's certainly evidence, there's a trail -HV6	9
Increasing contacts with midwives	Increasing interprofessional working (e.g. joint teaching/visits, face-to-face meetings)	I think it will be nice if obviously the midwife for that family we could either you know, meet up and do a joint visit -HV20	13

Belief statement	Subthemes	Illustrative quotes	Participant contribution (Max n= 17)
	Increasing communication	But maybe if there was something like when the midwife discharged, discharges a family if there was some sort of correspondence like involving this is what I've done for the family, this is what hasn't been normal. Yeah then maybe that would, maybe that would like help our working relationship as it were -HV78	8
Flexibility in individual practice	None	Yeah but I think again you've got to think imaginatively along those lines and I think you know people will say OK let's book a room in the children's centre. But actually if we're both short on time... just thinking like me I'm on my bike, I just, why don't I just cycle to where she's got a clinic [RA: Sure, OK. Having that flexibility as well] and simplifying things yeah, yeah. You know that's what you don't want to do, you don't want to make a great big deal of something do you […] You don't want to make it more complicated than it has to be -HV19	7
Action planning with midwives	None	I think it's something that needs to be built upon actually, definitely, and I think a starting point is that we now meet them monthly in terms of looking at pregnancy care planning and information sharing. I think that's definitely a good starting point and I think the purpose of that really was to discuss the cases that perhaps were concerning them, concerning us, so it's a group supervision in some ways because midwives don't have that health and social care training that health visitors have, they're more medical model, aren't they? -HV50	7
Changing guidelines	None	But even, even just asking... just just [inaudible 0:55:12.8] you know? And then having that in a care plan and following it through. I'm gonna phone up the, the midwife you know from day, week 36. You know once every 2 weeks and make contact, and check progress, you know? Um that could be a part of the Health	6

Belief statement	Subthemes	Illustrative quotes	Participant contribution (Max n= 17)
		Visitor Specification and likewise vice versa, should be part of their specification -HV44	
Changing ways of thinking/working (innovation)	Having a handover from midwives	I think in an ideal world it would be nice to have a some sort of handover -HV94	6
	Overcoming barriers to collaboration through creative thinking	as health visitors now, I'm really seeing that actually we've just, we've completely... entrenched ourselves in that uh, we don't think outside of the box. I suppose by the time we pick the families up, 90% of families have been discharged by the midwifery service and again we're not gonna pick up and say, why didn't you tell us about this? But actually maybe we do need to start doing that, so that you know, the only way the midwives are going to know that we want to be called is if we start to say actually, if this happens again, it'd be really good for you to call us -HV19	6
	Consulting colleagues about changing ways of working	I mean I guess if I went back and looked how could we communicate more, I wou- I could talk to other colleagues and say well how can we and is it cost-effective or not cost-effective, or would it be a good idea -HV96	4

5.2.3.2.10 Nature of the behaviours.

Considering the domain 'Nature of the behaviours', three key enablers were identified. These are 'Experiences of antenatal contacts', 'Current practices' (three subthemes), and 'Experiences with specialist midwives'. Each of these is summarised along with illustrative quotes in Table 5.17. A large number of health visitors (n= 13, 76.5%) contributed to the belief statement 'Experiences of antenatal contacts', which concerns having links with midwives in the antenatal period as an enabler to working collaboratively, particularly in cases involving those with increased need or other vulnerabilities, as described here:

> *"Yes, but the primary focus of that really is the handover for the antenatal contacts between, so we have a meeting around, when the women are around 20, 24 weeks usually, so we can plan our contact. So, the midwives will know some of them really well and perhaps others not so well, depending if it's their first baby or not, but that generally is the meeting, yeah, that's' it." – HV50*

'Current practices' refers to behaviours or actions which many health visitors (n= 12, 70.6%) considered to enable collaborative working with midwives such as reading women's notes or birth notifications, and communicating with midwives on an *ad hoc* basis. Finally, 'Experiences with specialist midwives' concerns health visitors' relationships or communications with midwives who provide specialist care. This typically occurs during the antenatal period where health visitors receive referrals from midwifery services regarding women with vulnerabilities as described by one participant:

> *"There is some contact so for instance, when a mum, when a mum is assessed as being vulnerable by the midwifery team, we often get um a referral in, a [Specialist Service Name] midwifery referral, which, it asks them to um... offer them support antenatally and so we do get those" –HV44*.

Table 5.17. Key enablers, Nature of the behaviours.

Belief statement	Subthemes	Illustrative quotes	Participant contribution (Max n= 17)
Experiences of antenatal contacts	None	I think it's probably the same as I would do that they phone if they need more information, um down to basic contact information or if there's something about the birth or the family health or something that's come up, yeah [...]. Um yeah I mean I have, with a high-risk um antenatal I've phoned them up and followed that up with an email to so that we can communicate more information that way rather than over the phone. -HV94	13
Current practices	Reading midwifery notes/birth notifications	Um, and they have a form which the midwives fill in and then gets faxed? over to us so if there's um anything they think should be raised with us. -HV77	12
	Regular contacts with midwives	It is the best way, and we have regular email contact, face-to-face, and telephone contact -HV68	6
	Ad hoc/flexible communication	But it's ad hoc. We don't have formal meetings particularly, um... we have systems but they're pretty uh... it's nothing very sophisticated but I think the systems, on the whole they work –HV6	4
Experiences with specialist midwives	None	because obviously we get the [Specialist Midwifery Service Name], the health referrals come through from the midwives um when we get the notifications of pregnancy -HV47	7

5.2.3.2.11 Domains not reported relevant

No belief statements were identified as relevant for the following theoretical domains: 'Knowledge', and 'Beliefs about capabilities'.

5.2.3.3 Key enablers or barriers.

This section outlines the relevant domains and key themes that functioned in a bidirectional manner (i.e. both barrier and enabler) according to the aforementioned criteria of frequency, discord, and external evidence (see section 3.4.6, Chapter 3). A total of 26 belief statements were identified to be salient to interprofessional collaboration. Each of these, per domain, will be discussed in turn.

5.2.3.3.1 Knowledge.

Enablers or barriers associated with the domain 'Knowledge' were as follows: 'Establishing contact with midwives', and 'Opinions on guidelines'. A summary of these belief statements is provided in Table 5.18. The most frequently reported belief statement 'Establishing contact with midwives' (n= 15; 88.24%) pertains to health visitors' knowledge (or lack thereof) of how to make contact with midwives. The majority of the health visitors reported that processes for establishing contact with midwives are not known to them (Belief statement: 'I do not know the process(es) involved in establishing contact with midwives'), thereby hindering collaboration, as described by one of the participants: "*Well, do you know to be completely honest, I wasn't really aware there was any guidelines at all which is shocking isn't it?*" *(HV50)*. In addition, participants suggested that if processes were known then this could foster collaborative working, as evidenced by those who have an awareness of these.

The belief statement 'Opinions on guidelines' (two subthemes) represents health visitors' perceptions of the utility of guidelines on working collaboratively with midwives. Although most health visitors (n= 14, 82.4%) acknowledged that guidelines serve the purpose of aiding the implementation of best practice, however, a number of health visitors (n= 4, 23.5%) commented that for guidelines to be useful in practice, they need to be better disseminated as described by one of the participants:

> *"Yeah, I think they can be, if they're well written, and they're easy to find, they can be really useful because they can […] how often you should be having contact, when you should be having contact, why you should be having contact" -HV73*

Table 5.18. Key enablers/barriers, Knowledge.

Belief statement	Subthemes	Illustrative quotes	Participant contribution (Max n= 17)
Establishing contact with midwives	I do not know the process(es) involved in establishing contact with midwives	No… I don't… No. Not really as in working in partnership, no… not that I'm fully aware of, to be quite honest -HV20	15
	I know the process(es) involved in establishing contact with midwives	knowing who, who to go to for just simple questions about midwifery and um whether there's been any concerns that have come up. -HV94	15
Opinions on guidelines	Guidelines are important, good and helpful for health visitors and women	That'd be good knowledge to have at the end of the day. Anything more in-depth then yeah there should be more set guidelines about what you need to do and how it needs to go about.-HV20	14
	Guidelines have potential but need to be clear, widely disseminated, and implemented	I think often they're written and they're not really disseminated properly are they? -HV50	4

5.2.3.3.2 Social/professional role and identity.

One belief statement was identified to be relevant to the domain 'Social/professional role and identity', namely 'Expectations about collaboration as a health visitor' (five subthemes). This belief statement depicts health visitors' expectations of collaboration with midwives, including the extent to which it is part of the health visiting role, as well as when contact is needed and who this will be initiated by. Over half of the participants (n= 10; 59%) recognised that working with midwives is part of their role as health visitors, with a number of participants expressing discordant views particularly during the postnatal period or transition of care from midwifery to health visiting*: "I think it is part of our role... but I think it's a neglected part of our role such that you know, I've never really have thought of it as being part of my role" (HV75)*.

Moreover, a number of health visitors (n= 4, 23.5%) commented that midwifery and health visiting are discrete professions. However, health visitors expressed an awareness of making contact with midwives when the need to do so arises as described by one health visitor:

> *"…if needs be, if there's anything […] that you need following up then obviously you do chase 'em up [RA: Escalate it] and yeah there's still a way of know, you know, if you know which hospital they've given birth in or you know where they're, what their postcode is, I think you can work out who's doing the antenatal or postnatal care" –HV95*

In addition, participants acknowledged midwives' role as instigators of contact during this period: *"if they need to handover like a depressed mum they will do that." (HV72)*. This belief statement, with its respective subthemes, is summarised in Table 5.19.

Table 5.19. Key enablers/barriers, Social/professional role and identity.

Belief statement	Subthemes	Illustrative quotes	Participant contribution (Max n= 17)
Expectations about collaboration as a health visitor	Collaboration is fundamental to my role (enabler)	I mean it's, you know it's considered it's good practice um it's seen as fundamental, um and... so... I would just, I would say, yeah it's just seen as fundamental good practice - how could you not, if you see what I mean? -HV6	10
	It is not a large part of my role during transition of care (barrier)	In transition of care... I don't think it is a massive part of our role, because like I said, if it it, if any of us sees a problem then we would need to contact them. -HV31	6
	Midwives as instigators of contact (barrier)	You see the midwives would contact us if there was any concerns. -HV31	8
	Will make contact happen if needed (enabler)	Again it'll be um... something flagged up on our end and maybe trying to contact the hospital midwife or somebody to find out what's happened but not a partnership working in that sense -HV20	5
	Midwives and health visitors are discrete professions (barrier)	they do their job and bow out and you come in when they've finished -HV72	4

5.2.3.3.3 Beliefs about capabilities

With regards to the domain 'Beliefs about capabilities', three key enablers/barriers were reported relevant. These were 'Perceived ease of contacting midwives' (four subthemes), 'Collaboration self-efficacy' (two subthemes), and 'Factors influencing self-efficacy' (two subthemes). Each of these will be discussed in turn.

The belief statement 'Perceived ease of contacting midwives' (four subthemes) concerns health visitors' views regarding how easy or how difficult communication with midwives is. The majority of the health visitors (n= 14, 82.4%) reported experiencing difficulties when trying to contact midwives, negatively influencing collaboration. Equally, the same number of participants described situations wherein contact with midwives was easily achieved, which enabled collaborative working. This finding also reflects the variation in the participants' experiences. Furthermore, health visitors reported that a lack of information about women/families (n= 6, 35.3%), and the lack of experience of collaborative working (n= 5, 29.4%) negatively impacted their perceived ability to work with midwives.

Second, 'Collaboration self-efficacy' (two subthemes) relates to health visitors' reports of how difficulties encountered influenced their collaboration self-efficacy. However, a number of health visitors (n= 6, 35.3%) also indicated high self-efficacy as evidenced by reports of persistent efforts to make links with midwives in the face of the difficulties they encountered.

Finally, 'Factors influencing self-efficacy' concerns the structures which health visitors perceived to either facilitate or hinder collaborative working. Specifically, the way the NHS is set up was reported by a number of health visitors (n= 7, 41.2%) as an impediment to interprofessional collaboration with midwives. In terms of the factors which influenced health visitors' self-efficacy to collaborate with midwives, health visitors reported being co-located, having flexibility, and having access to midwives' notes as positive influences. Each of the belief statements, and its respective subthemes are provided in Table 5.20.

Table 5.20. Key enablers/barriers, Beliefs about capabilities.

Belief statement	Subthemes	Illustrative quotes	Participant contribution (Max n= 17)
Perceived ease of contacting midwives	Communication /contact is difficult	I don't usually have their contact details and it can be quite difficult to work out which midwife a family are seeing -HV73	14
	Communication /contact is easy	Um... no I don't think so. I think the majority of the time when I've needed contact them, I've been able to get a hold of someone in a timely manner and be able to follow up whatever it is that I need to find out but yeah, it's good! -HV94	14
	Lack of information about the family	The health needs assessment that we have, you're aware of the women, aren't you, they're names and what have you? So it would ring a bell if they're vulnerable but it's quite a short turnaround and I suppose the babies are being born all the time, not all of them are vulnerable but it does make it quite tricky to pin down and have that conversation, yeah. -HV5	6
	Lack of experience	How hard um well I don't find it hard because there's no working in partnership (chuckles). So at the moment it's quite easy! There is none unfortunately, from my point there is none. -HV20	5
Collaboration self-efficacy	Difficulties experienced	So I imagine the difficulties in achieving it, if you can't even get one meeting a month right, the chance of you getting a handover within a ten-day period before the health visitor goes is quite remote I would say, yeah. -HV50	7

Belief statement	Subthemes	Illustrative quotes	Participant contribution (Max n= 17)
	Finding ways to collaborate	maybe I'm giving you... a bit of a wrong idea in that if I want a midwife I will get them (chuckles) one way or another -HV72	6
Factors influencing self-efficacy	NHS set-up (including: number of women, midwives' ways of working, organisational structure/set-up)	But with staffing and time pressures and all the rest of it, and the NHS it's difficult to achieve. -HV77	7
	Co-location, flexibility, seeing midwives' notes	you know it is that sort of wanting to show, we can be flexible, we can come and meet up you know, sort of make you know, make something work -HV95	6

5.2.3.3.4 Beliefs about consequences.

One belief statement (two subthemes) was identified as an enabler/barrier within the domain 'Beliefs about consequences', which was 'Benefits outweigh the costs of contact/collaboration'. This belief statement is concerned with health visitors' beliefs regarding the value of being in contact or working collaboratively with midwives. Many of the participants (n= 13; 76.5%) were receptive to working collaboratively with midwives: *"yeah, 'cause if it's done correctly, definitely. If it's actually done you know in the way it's supposed to be done, then yeah and it will be beneficial for the family" (HV20)*. However, some health visitors (n= 4, 23.5%) expressed uncertainty as to whether the benefits of working collaboratively with midwives outweighed the costs of doing so as depicted in the following quote: *"I think they do, or they will do, they potentially can but at the moment the costs outweigh the benefits at the moment" (HV44)*. This belief statement is summarised in Table 5.21.

Table 5.21. Key enablers/barriers, Beliefs about consequences.

Belief statement	**Subtheme**	**Illustrative quote**	**Participant contribution (Max n= 17)**
Benefits outweigh the costs of contact/collaboration	Yes	No, I mean I don't think there can be any disadvantages at all, I think it's uh there's only room for advantage -HV78	13
	Uncertain	I think if it's not well managed, it can, it can cause problems -HV75	4

5.2.3.3.5 Motivation and goals.

Three key belief statements were identified to be relevant to the domain 'Motivation and goals'. These are 'Perceived importance of collaboration', which is about health visitors' perceptions of the extent to which collaborative working with midwives is important, 'Intention to collaborate', which is about participants' reports of their intentions to collaborate with midwives, and 'Goals', which is about health visitors' goals in terms of caring for women and their families as well as organisational goals (which may challenge the former). Each of these is described with illustrative quotes in Table 5.22.

Table 5.22. Key enablers/barriers, Motivation and goals.

Belief statement	Subtheme	Illustrative quote	Participant contribution (Max n= 17)
Perceived importance of collaboration	Important	I am almost sitting on the fence in terms of that I feel like it's important because if it's well-managed you can get really really useful information that will help you -HV75	10
	Issues with mother/baby needing to be addressed through contact with midwives	So the more vulnerable they are the more important it is that I'm in touch with them. -HV73	9
	Not needed	I think like some sort of handover, like if, I mean if everything is going swimmingly and there's nothing to report then that's fine -HV78	6
Intention to collaborate	Intend	I try my hardest to um... go to team meetings, um of... of professionals so I go to Relieve and Care meetings, I go to some midwives, I go to um housing, I go to varying agencies to talk about the health visitors' role. So, who we are, what we do, as a generic view. Just to raise our profile a bit? -HV68	9
	Do not intend	And some more resource and some the energy that I don't think we've got currently. The inspiration that I don't think people have got currently and you know I'd like to think that I, I would have that if I was doing more hours but I'm not sure in reality if I'm really honest I would do that -HV6	4

Belief statement	Subtheme	Illustrative quote	Participant contribution (Max n= 17)
Goals	Family/client-focussed goals	[…] if it's not gonna benefit the families that we're working with then, there's no point but I want to think that working in partnership is always gonna be beneficial if you're, if you're working with families and they're working with families or anyone who's working with families -HV20	4
	Commissioning/service goals	Everyone's got priorities and ways they'd like to work but the bottom line is sometimes we've all got to work in a certain way, and if that's not happening, that top down approach then becomes very important to address that, yeah -HV19	4

5.2.3.3.6 Memory, attention, and decision processes.

One belief statement was coded to the domain 'Memory, attention, and decision processes'. Specifically, 'Perceived difficulty of decision to contact/collaborate with midwives' relates to the health visitors' reported difficulties around when to contact midwives. In particular, the subtheme that was considered salient was 'Not difficult' where health visitors reported an awareness of specific situations or cases that would prompt them to contact midwives. One participant reported for example, "*Um it's, it's not a difficult decision to decide whether or not I need to talk with them*" *(HV77)*. On the other hand, a small number of participants (n= 2, 12%) reported experiencing either difficulties or uncertainty when deciding when to contact midwives. This belief statement is summarised in Table 5.23.

Table 5.23. Key enablers/barriers, Memory, attention, and decision processes.

Belief statement	**Subtheme**	**Illustrative quote**	**Participant contribution (Max n= 17)**
Perceived difficulty of decision to contact/collaborate with midwives	Not difficult	So I suppose if they're universal and you've seen them, you've made your own assessments so you kind of know what you're going into but I suppose for some women the risks can change rapidly and I think, but for me it, depending on the situation I suppose, it wouldn't be a difficult decision to make. -HV50	9
	Difficult	Um... I guess it's, it's quite difficult because routinely we wouldn't. -HV78	2

5.2.3.3.7 Environmental context and resources.

Four belief statements were identified as salient enablers/barriers in relation to the domain 'Environmental context and resources': 'Staffing levels (midwives and health visitors)', 'Midwives' contact details', 'Training', and 'Different electronic recordkeeping systems'. With regards to 'Staffing levels', a large number of participants (n= 13, 76.5%) expressed concern about the lack of staff both in midwifery and health visiting. 'Different electronic recordkeeping systems' were reported by health visitors to impede collaborative working with midwives as they were unable to access midwives' notes. Health visitors describe that a shared electronic database or being able to access midwifery notes could be useful. Indeed, one of the participants shared the value of having this resource: "*I think still it's much better now because we can, I can see their notes*" *(HV73)*. 'Midwives' contact details' were also considered by a number of health visitors as important. Some participants (n=7) reported not knowing midwives' contact details, which makes establishing contact more challenging. In the same vein, a number of health visitors reported that having midwives' contact details would encourage establishing contact with them. Finally, 'Training' depicts some health visitors' concerns around the scarce opportunities for shared training, as explained by one participant: *"there is very little chance to collaborate, there isn't really any shared training" (HV50)*. Each of the themes within this domain is summarised in Table 5.24.

Table 5.24. Key enablers/barriers, Environmental context and resources.

Belief statement	Subtheme	Illustrative quote	Participant contribution (Max n= 17)
Staffing levels (midwives and health visitors)	Lack of staff/staff turnover	If there were more of both of us, I would say that would probably change things quite dramatically. -HV72	13
	Appointment of new staff	health visiting has gone from a period of not having enough staff which has meant antenatal care we've not been able to offer to having more staff and the expectation is that we will be working with mums antenatally so there will be a crossover period. -HV31	2
Electronic recordkeeping systems	Different systems	we don't use the same computer system. We're on a, we're on a different computer system so we're all electronic. -HV31	9
	Shared systems	I think it's still much better now because we can, I can see their notes -HV73	1
Midwives' contact details	Midwives' details not known	No one gives you any email addresses, no one gives you mobile numbers, no one gives you a, a, you know a desk space that they sit on or whatever. -HV44	7
	Having midwives' details	But you don't wanna make, you don't wanna be chasing or finding somebody to chase. So if you know directly again who to contact, when to contact, you know when they're in the office, their mobile numbers or things like that, or email addresses. It's cool. You know, it just makes it a lot easier to, yeah. It makes it just a lot easier to be quite honest -HV20	5
Training	Limited opportunities for shared training	You know we do a lot of training with family support workers, a lot of training with nursery nurses and stuff like this but you know we never really do training with midwives -HV44	4

Belief statement	Subtheme	Illustrative quote	Participant contribution (Max n= 17)
	Multi-disciplinary training	Um, what they've started doing where I am, because I only qualified this year as a health visitor in September, [I: Sure] so I'm doing preceptorship now. But they do a multi-disciplinary preceptorship. So we have I dunno like one day, one day a month for 6 months where we have 1 study day with the newly qualified health visitors, newly qualified midwives, and newly qualified social workers. -HV77	2

5.2.3.3.8 Social influences.

Considering the domain 'Social influences', there were three belief statements identified. 'Quality of contact with midwives' (two subthemes) concerns health visitors' experience of being in contact with midwives, which has been reported by the majority (n= 16, 94.11%) as challenging:

> *"As ever, in teams there's quite a lot of grumbling in and amongst health visitors about the quality of the communication um... but I don't it's not, they're not serious issues, it's just a product of two very busy busy teams - the midwifery team and our team, and inevitably that leads to some tensions about you know the communication could have been better." –HV6*

> *"...with the mainstream midwives, what we don't get is the sort of social and emotional context of the woman and the family. But we get um I don't know if you've seen the discharge sheet we get." –HV19*

Equally, over half of the participant sample described contact with midwives as potentially useful and supportive such as the scenario described below where the midwives and health visitors negotiate home visits:

> *"if a midwife like comes into the office to say 'oh we've got a baby that, I'm about to discharge, she's 10 days old, she's not been seen by a midwife yet', but it works in that respect, just like helping each other out" -HV78*

'Organisational influence on collaboration' (six subthemes) illustrates the influences of health visitors' employers, which can be both positive and negative. Four of the six subthemes were perceived barriers; each of these will be discussed in turn. For example, just under half of the health visitors (n= 8, 47%) reported not feeling encouraged to work with midwives, with an even smaller number of health visitors (n= 4, 23.53%) reporting being actively encouraged to collaborate with midwives.

Finally, 'Influence of other health visitors on contact with midwives' is about health visitors' reflections on the influence of their health visiting colleagues on their

interactions with midwives. For instance, a number of health visitors reported observing colleagues who have established relationship with midwives, as well as colleagues who were previously midwives helping them to gain an insight into the midwifery role; thus encouraging collaborative working. Meanwhile, some health visitors also reported espousing their colleagues' behaviours, which meant not working with midwifery colleagues. Each of these, and their respective subthemes, are summarised in Table 5.25.

Table 5.25. Key enablers/barriers, Social influences.

Belief statement	Subtheme	Illustrative quote	Participant contribution (Max n= 17)
Quality of contact with midwives	Contact with midwives not forthcoming; involve limited/inaccurate information (barrier)	I saw a concern and I decided that you know there was need to get in touch with the midwives. Would I call them again? I mean, based on the reception that I got, it was a bit difficult - HV75	15
	Contact with midwives can be useful, supportive, helpful (enabler)	But I think once you have midwives, they're always really, I've never had any problems having a chat, once I've got hold of them I've never had any problems having a chat with them, learning things from them and finding out why things are done in a certain way. -HV73	9
Organisational influence on collaboration	Poor organisational structure/management (barrier)	barriers come up all the time because there'll always be people who put barriers and blockers who say well I can't do that because... I can't do that because... But actually they're not really, you have to think outside of the box. And that's just part of working for the NHS, I think -HV68	10
	No active encouragement to work with midwives (barrier)	I wouldn't say I'm discouraged but I'm not encouraged either - HV73	8
	Employers impeding free exchange of information (barrier)	I think that they make it a bit more difficult than it needs to be, of information sharing and things. But that's probably policy related rather than them trying to make it difficult -HV73	6

Belief statement	Subtheme	Illustrative quote	Participant contribution (Max n= 17)
	Pressure to meet commissioned services (e.g. New Birth Visit) (barrier)	we're really strictly limited to the time that we can go and see mums to begin with. It just doesn't quite work with the midwives but that's national that's nothing to do with the trusts -HV73	5
	Move to do antenatal contacts with families (enabler)	I mean that's in the pipeline but you know hopefully that the antenatal contacts will start you know, I expect by the end of the year and that so you know, what would help you know thinking about this it's really important we start our communication with the midwives early so that's in place before the antenatals, yeah -HV19	4
	Employer actively encouraging contact/collaboration with midwives (enabler)	Yeah, we're, we are really encouraged to work with midwives, we're really encouraged to have those links with them and make sure that we see them regularly and uh we are really encouraged to do that. -HV31	4
Influence of other health visitors on contact with midwives	Colleagues' past experiences/roles	So, some of my colleagues have much better relationships with midwives than I did because they've been midwives at our trust, so one of them in particular was still friends with all of the midwives and so she found it much easier, not with the community midwives actually but with the hospital midwives, she had just come from the ward, the maternity ward, and so she had quite a good relationship with them, and she had a lot more contact with them. -HV73	8

Belief statement	Subtheme	Illustrative quote	Participant contribution (Max n= 17)
	Following colleagues' ways of working	well, if someone with the team has had a bad experience with you know, one of the midwives it kinda, it's like... you know, they're not really helpful what's the point in contacting them? - HV75	6
	Uncertain about extent to which colleagues influence contact with midwives	Uh... I don't know! I don't really know other health visitors' experience. I mean all I've heard is that um... again, it's a lack of communication. Whether they're welcoming on the idea of working more in contact with midwives, um I can't say 100% to be quite honest –HV20	4

5.2.3.3.9 Emotion.

Regarding the domain 'Emotion', two belief statements were identified as relevant, namely, 'Burnout' (two subthemes), and 'Impact of emotions on work'. The first belief statement concerns the negative impact of burnout on collaboration with midwives. Participants reported that experiencing stress resulted in having reduced contact with midwife colleagues. The second belief statement describes the impact of one's emotions on collaboration with midwives, which can be positive, negative, or neutral. These themes are summarised in Table 5.26.

Table 5.26. Key enablers/barriers, Emotion.

Belief statement	Subthemes	Illustrative quotes	Participant contribution (Max n= 17)
Burnout	Reduced contact	You know there's only so many coins in the bank and if we're a bit spent then um we're also gonna be prioritising our needs, our own personal needs against our professional needs –HV44	6
	Sympathy	there's a lot of sympathy for stress and strain -HV6	1
Impact of emotions on work	None	…the thing is if you're a professional it doesn't matter how you're feeling does it? –HV96 *(neutral/no impact)* …they definitely affect but I would say because the relationship's so good and they are long-standing, within many ways, the midwives are seen as a source of emotional support [RA: Yeah] for the health visiting team and vice versa. So everyone knows each other well, everyone knows each other's personal issues well. And there's a lot of sympathy for stress and strain –HV6 *(positive impact)* Those emotions play into it, you're tired, you're worn out… I think emotions play a huge part in it –HV19 *(negative impact)*	6

5.2.3.3.10 Behavioural regulation.

In terms of the domain 'Behavioural regulation', there were two belief statements identified as relevant. First, the belief statement 'Changes to overall health visiting practice (organisational)' is related to recent changes to health visiting practice whereby health visitors are expected to make contact with women and families during the antenatal period. Health visitors expressed support for this, as it was seen as encouraging collaboration:

> *"So actually that then means that your contact with the midwife becomes less one-way because it's less about the midwives saying we know these families, you know here's some, you know here's some information. It's about us saying, OK you know... I think you know what I'd like to do is talk to your midwife and let her know our conversation was had so we can start to work together" –HV19*

However, one health visitor noted that changes to the service structure, specifically the introduction of mobile working can impede collaborative working with midwives. Second, the belief statement 'Current methods of record keeping and information sharing' is about health visitors' desire to receive more information from their midwifery colleagues, either face-to-face, or over the phone, alongside women's notes, as described here: *"perhaps a little bit of information that the midwife has I would like to know before I actually talk to the mother about it" (HV72)*. Relatedly, a number of health visitors (n= 5) reported receiving limited information from midwifery colleagues. Each of these are presented with their subthemes and illustrative quotes in Table 5.27.

Table 5.27. Key enablers/barriers, Behavioural regulation.

Belief statement	Subtheme	Illustrative quote	Participant contribution (Max n= 17)
Changes to overall health visiting practice (organisational)	Introduction of antenatal contacts	I think that will change because we've just started, we haven't just started but we've just been told to properly start antenatal context with women. -HV73	9
	Introduction of mobile working/hot desking	you know this hot desking and that's you know, so people'll be here there and everywhere. It doesn't work -HV96	1
Current methods of record keeping and information sharing	Midwives providing detailed information about women or families (via notes/telephone/meetings)	Hmm... I think if there are concerns, it will be good if the midwife phones with additional information -HV75	5
	Sparse information from midwives	we're getting the birth notifications. We used to get 5 or 6 pages, birth notification which was quite detailed now we just literally get the name the date of, of, the date of birth, the mum's NHS number. We really get a skeletal information of that birth now -HV44	5

5.2.3.3.11 Nature of the behaviours.

Three belief statements were deemed salient to the domain 'Nature of the behaviours', which are 'Applying collaboration-related guidelines in practice', 'Colleagues working in partnership/in contact with each other', and 'Experiences of contact with universal midwives'. First, 'Applying collaboration-related guidelines in practice' is related to health visitors' reports of applying guidelines specifically around collaborative working. Of the 17 midwives, 10 participants (58.8%) reported not applying these, whilst five reported using guidelines to inform their care (e.g. workplace-specific protocol):

> *"I think the only guideline we follow is that we would share a health needs assessment, so we're auditing whether we've received them or not, because some women will deliver and you've not received a health needs assessment, although that's happening far fewer times now than it has been" –HV50*

Second, 'Colleagues working in partnership/in contact with each other' pertains to health visitors' observations of their colleagues working with midwives. More health visitors reported observing their colleagues to be working with midwives (n= 10) than not (n= 4, 23.5%); however, it was noted that these contacts were associated with specialist services:

> *"I think in some in some parts of the borough I think there is, like especially with the [Specialist midwifery team name]. I think it's mostly with the [Specialist midwifery team name] team. Because I mean the [Specialist midwifery team name] are the ones who look after families who need additional support" –HV75*

Finally, the belief statement 'Experiences of contact with universal midwives' depicts health visitors' various interactions with midwives, which include not having a routine handover, having contact in order to gather knowledge, as well as positive and negative contacts. Each of these and their respective subthemes are presented in Table 5.28.

Table 5.28. Key enablers/barriers, Nature of the behaviours.

Belief statement	Subtheme	Illustrative quote	Participant contribution (Max n= 17)
Applying collaboration-related guidelines in practice	No I don't apply them	No! Because I don't know any [guidelines]! –HV20	10
	Yes I apply them	we have our own, um like I say we have our own monthly meetings where risk, at risk families are discussed. Um, and that's a trust-wide thing -HV68	5
Colleagues working in partnership/in contact with each other	In contact	I have observed, I have observed it, but it's not standard practice. It's possibly because she used to be a midwife... possibly. -HV44	10
	Not in contact	at the moment, there's just not even with our team leaders and our managers, it's all very separated out. There's not that kind of real collaboration from high up either. -HV95	4
Experiences of contact with universal midwives	No routine handover	It would be nice to have like a communication with the midwives like around the transition of care, but, it doesn't happen -HV78	8
	Liaising with midwives to address concerns/knowledge gaps	Um, no. I phoned up a few times to find, double check addresses and phone numbers, and or double check that whether things have been done, um... so that we can document them. So if the baby, how the baby had Vitamin K for example, whether it was an injection or drops because obviously if they're drops we have to follow it up, if they'll need more. Whereas the injection is just a once off -HV94	8

Belief statement	Subtheme	Illustrative quote	Participant contribution (Max n= 17)
	Past experiences of contact (positive)	But that wasn't the experience I had. I don't know if I had a different number (laughs) 'cause the phone was always answered straight away when I phoned -HV94	6
	Receiving routine handover	We get quite a good handover from the midwives in terms of a discharge summary, it's very extensive so it gives you the basic details within, but it's extensive so you know the Apgar scores, you know any complications during the labour and that sort of thing, as well as what life was like on the day of discharge which is helpful and they come through reasonably timely. -HV50	5
	Past experiences of contact (negative)	HV44: I ended up spending about 3 or 4 days constantly phoning, phoning, phoning midwives. Eventually she was there when I phoned again, but she never actually got back to me. So it was me, on my part, having to reach out and that's yeah. RA: Mhmm, OK. And is that sort of the typical type of contact um that you would have or is that, what you'd expect or? HV44: Um... it's kind of what I've quickly come to expect. -HV44	4

5.2.3.3.12 Domains not reported relevant.

No belief statements were identified both acting as a barrier and enabler for collaboration with midwives for the theoretical domain 'Skills'.

5.3 Discussion

This study aimed to explore health visitors' perceived barriers and enablers to working collaboratively with midwives. As in the midwife arm of this study, interprofessional collaboration was defined as midwives and health visitors working in partnership. Specifically, being in contact with each other either face-to-face, by telephone, or via access to women's records/notes regarding women's care during transition of care (handover) (section 2.3.4, Chapter 2). In all, a broad range of barriers and enablers to collaborative working with midwives was systematically identified in this study. Specifically, data analysis resulted in 63 belief statements comprising of 13 barriers, 25 enablers, and 25 barriers/enablers. These belief statements tapped into all 12 of the TDF domains. Four main findings arise from this study, each of which will be discussed in the following sections.

First, all 12 of the TDF domains emerged as relevant in this study, which is indicative of the breadth of the issues that health visitors perceived to be influential to working collaboratively with midwives. Although a broad range of issues concerning collaborative working was identified, it emerged from the analysis that the domain 'Social influences' appeared most relevant, making up 18% of the belief statements. This suggests that health visitors perceive interpersonal processes as key to interprofessional collaboration with midwives. In addition, over a third of the important belief statements functioned as both barriers and enablers (n= 27; 41.3%). Participants' contrasting views were expressed through positive and negative statements, such as being knowledgeable (or not) of midwives' contact details, and being knowledgeable (or not) of the processes involved in establishing contact with midwives (see section 4.2.3.3 for additional examples). Contrasting views are not uncommon and have been reported in previous TDF-based studies (Islam et al., 2012; Roberts et al., 2016). The presence of such discordant statements may, in part, be explained by the variations in health visitors' experiences of collaboration (see

sections 5.2.3.2.10 and 5.2.3.3.11), and may be a reflection of the participant sample's lack of experience of working collaboratively with midwives.

Additionally, the mixed views found in this study suggest that health visitors respond to situations they encountered as deemed appropriate. Indeed, this was represented by the belief statement 'Contact/handover when there is a concern' (Memory, attention, and decision processes). This demonstrates that health visitors exercise their professional autonomy when deciding whether or not collaboration with midwives is needed and base this decision on the needs of women/families. Exercising such skills is in line with the proficiencies set out for Specialist Community Public Health Nurses (Health Visitor) as set out by the Nursing and Midwifery Council (Nursing and Midwifery Council, 2004). This finding suggests that midwife-health visitor collaboration may be useful in some situations more than others and this needs to be further investigated.

Second, this study found that health visitors reported multiple barriers (n= 13, 76.5%) to working collaboratively with midwives, chief of which was the lack of a relationship with midwives, as well as barriers relating to health visitors' work context (e.g., limited time and/or workload resources and work structure influencing self-efficacy; see sections 5.2.3.1.3 and 5.2.3.3.3 in Chapter 5, respectively). Indeed, almost 100% of health visitors in this study reported having no established relationships with midwives (see section 5.2.3.1.5, Chapter 5). Influential factors to these limited interactions with midwives include limited time resources, high workloads, changes to staffing levels, and financial restrictions. This is in line with findings drawn from the systematic review (see section 2.3.5.2.3, Chapter 2). Recent NHS Workforce Statistics show an 8.7% reduction in full time health visiting staff in England for the period October 2015-October 2016 (NHS Digital, 2017). Relatedly, the number of antenatal contacts health visitors were able to provide in England reduced from 72,521 in Quarter 1 of 2017 to 68,814 in Quarter 4 of 2017 (Public Health England, 2017). Taken together, these extraneous factors continue to impede collaborative working, as has been found previously (e.g. Munro et al., 2013, see Chapter 2).

Furthermore, professional issues also arose as barriers to midwife-health visitor collaboration from this data analysis, specifically, professional differences and uncertainties regarding relative roles. For example, a number of health visitors perceived not sharing the same approaches to care as midwives (see section 5.2.3.1.1), which were reported to result in conflicting advice to women. Divergences in professional philosophies were therefore perceived as hindrances to collaborative working, which aligns with previous research on midwife-health visitor collaboration in other countries with similar provisions as the UK, as well as the wider interprofessional collaboration literature (e.g. Oishi & Murtagh, 2014; Psaila, Schmied, et al., 2014b, see also Chapter 2). It is possible that these professional differences are related to the way that health visitors are trained. Prior learning and experiences are considered as part of obtaining a Specialist Community Public Health Nursing (Health Visitor) qualification (Nursing and Midwifery Council, 2004). At degree level, it is possible that trainees' experiences of this specialist programme of study will differ due to variations in pre-registration qualifications. Similarly, for those reading for postgraduate level Specialist Community Public Health Nursing qualifications (e.g. postgraduate diploma, masters), their first degree may have an impact on how they collaborate with midwifery colleagues as their knowledge of their relative roles will vary (as was discussed in section 5.2.3.1.1, Chapter 5). This prior knowledge could impact their expectations regarding collaborative working as discussed in section 5.2.3.3.2, Chapter 5; and their approaches to care will differ based on the training they received prior to specialisation (e.g. adult nurses vs midwives).

A further striking finding relating to the barriers health visitors identified to interprofessional collaboration is the apparent impact of these external factors on health visitors' collaboration self-efficacy. This is reflected in the following relevant belief statements: 'Perceived ease of contacting midwives' (four subthemes), 'Collaboration self-efficacy', and 'Factors influencing self-efficacy' (Beliefs about capabilities). Self-efficacy concerns a person's belief that they are able to perform specific actions that relate to a desired outcome (Bandura, 1977). Reports of experiencing challenges when trying to collaborate or communicate with midwives may not only be influenced by structural issues (e.g. not being co-located, not having midwives' contact details) but also confounded by limited experiences of contact

with midwifery colleagues. Therefore, it is perhaps no surprise that the participant sample suggested increasing contacts with midwives as a means to address this issue as reflected in the belief statements within the domain 'Behavioural regulation' such as 'Increasing contacts with midwives'. Therefore, means to boost health visitors' collaboration self-efficacy require further exploration.

Third, it was clear throughout the findings presented in this study that communication was perceived by health visitors as heavily influential to working collaboratively with midwives, as evidenced in the belief statements tapping into the domain Social influences: 'Communication with midwives' and 'Quality of contact with midwives'. This finding is in accordance with the systematic review (see sections 2.3.5.1.1 and 2.3.5.2.1, Chapter 2). Further belief statements reinforcing the importance of communication include 'Perceived ease of contacting midwives' (Beliefs about capabilities) and 'Increasing contacts with midwives' (Behavioural regulation). Communication is a commonly identified issue in TDF studies involving multiprofessional environments (Patey et al., 2012; Roberts et al., 2016). Although in this study communication was identified by the participants specifically as an enabler to working collaboratively with midwives, it is clear from other salient belief statements presented here that there are challenges to achieving good communication both at an individual level (e.g. having different approaches to care, negative experiences of contact with midwives, difficulties establishing contact), and an organisational/structural level (not being able to share women's medical histories or notes, unsupportive management, pressures experienced from a heavy workload). Taking into consideration previous studies specific to interprofessional care in maternity services and the wider interprofessional literature, and reflecting upon the systematic review (Chapter 2), the known barriers and/or enablers identified in this study share parallels with these. Examples of enablers identified in this study supported by previous research include having joint meetings (Psaila, Schmied, et al., 2014b) and handovers or transfer of information (Barimani & Hylander, 2008).

Finally, a distinct finding drawn from this research is the identification of individual barriers to collaboration which can potentially be addressed through behaviour change interventions. It is suggested that these individual-level barriers to collaborative behaviour have not been previously identified. These include

'Establishing contact with midwives' (Knowledge), 'Perceived ease of contacting midwives' (Beliefs about capabilities), and 'Increasing contacts with midwives' (Behavioural regulation). Where health visitors report lacking knowledge regarding the processes of establishing contact with midwives, steps to clarify these communication processes need to be considered by service commissioners. Health visitors require such knowledge in order to obtain confidence in their ability to liaise with midwifery colleagues. The belief statements identified here suggest that both education and practice based interventions may be beneficial as the belief statements concern not only knowledge and decision-making processes, but also experience-related needs. Similar intervention components have been proposed in TDF-based studies as applied to other contexts (e.g. Alexander et al., 2014).

The present discussion demonstrates health visitors' experiences of working collaboratively with midwives, which, at an individual level, are considered as barriers/enablers. Analysis of this data reveal that these individual-level barriers/enablers are linked with social domains. Accordingly, as indicated by a critical realist underpinning, health visitors' experiences should be explored in conjunction with the contextual factors (e.g. lack of encouragement to work with midwives, organisational structure) that impact on these experiences.

5.3.1 Strengths and limitations of the study

A number of strengths and limitations have been identified in this study. The main strength of this study, similar to the midwives' interview study, is the in-depth exploration of barriers and enablers to interprofessional collaboration using a theoretical framework. Besides identifying barriers and enablers that are already known in the literature as reviewed in Chapter 2, this study offered novel insight into individual aspects influencing collaborative behaviours that can then inform intervention development at a later stage.

Although the sample was self-selected, a broad range of views from a diverse group of health visitors were captured from across England, which is reflected in the findings of this study. The sample size is comparable to other TDF-based studies which explore barriers and enablers to healthcare professional behaviours (Boet et

al., 2017; Patey et al., 2012; Roberts et al., 2016). This was facilitated by capitalising on various recruitment channels, including social media (see section 3.4.5, Chapter 3). Furthermore, the geographical location of the health visitors may have contributed to the differences in experiences shared. In particular, over half (n= 11, 65%) of the participant sample was drawn from various areas of London. The demography of London may play a role in service demand, for example, and could place greater pressure on an already struggling workforce. Still, there were belief statements that were consistently reported across the sample, which suggests that the issues reported here are transferrable across locations. As discussed, every effort was made to recruit as diverse a sample as possible, using various recruitment methods and routes.

5.3.2 Implications for practice and research

The findings reported and discussed here indicate the need for changes to practice in order to support midwife-health visitor collaboration. First, health visitors need to be provided opportunities to engage and communicate with midwives. Second, organisations need to clarify processes relating to establishing contact with midwives, particularly because the majority of services they provide are not offered (or needed) simultaneously (Barrow et al., 2015), given that their roles span the perinatal period. In addition, clarity regarding midwives' and health visitors' roles is required. Interprofessional education may have the potential to help establish relationships between midwives and health visitors, and address issues concerning professional differences and conflicting advice given its ethos of shared learning (Angelini, 2011).

On the basis of the findings discussed within this chapter, there are a number of areas which could benefit from further exploration. For example, the perceived barriers and enablers reported by the participant sample may not necessarily objectively influence practice. Future research should investigate this set of barriers and enablers to midwife-health visitor interprofessional collaboration using questionnaire methods to determine whether these barriers and enablers are representative of the population, as well as to build predictive models of

collaborative behaviour. In addition, instances where collaboration is most useful requires further study.

5.4 Conclusion

This chapter presented findings from a TDF-based interview study with health visitors, which sought to explore the barriers and enablers to midwife-health visitor collaboration. This study has demonstrated that health visitors value opportunities to work with midwives in order to provide high-quality care for women and families, however this can be challenging owing to a variety of factors. The barriers and enablers identified by the health visitors to improve interprofessional collaboration in this study were related to both individual behaviours as well as the current organisational structure. Whilst the focus of this chapter was on identifying key individual behavioural barriers and enablers and offering suggestions to address these, large scale interventions may be necessary in order to overcome the organisational barriers identified. Hence, approaches to intervention development aimed at improving interprofessional collaboration should be focussed, and target factors that are of significance to the recipients of the intervention.

6 Comparing the barriers and enablers to collaboration identified by midwives and health visitors using the Theoretical Domains Framework

6.1 Introduction

The preceding two chapters presented the perceived barriers and enablers to collaboration as reported by midwives and health visitors individually. The aim of this current chapter is to critically compare these findings in the context of current UK policy and relevant interprofessional collaboration research and offer recommendations on how these barriers and enablers can be addressed in relation to existing interventions. Subsequently, the findings are discussed in the context of existing theories of interprofessional collaboration, with a view to proposing new models of understanding midwife-health visitor collaboration. The strengths and limitations of the study in general, and using the TDF in particular, are discussed.

6.2 Rationale for comparative analysis

Comparing the perceived barriers and enablers of each professional group is a valuable exercise, providing an insight into whether midwives' perceived barriers and enablers overlap with health visitors' and vice versa; thus identifying areas where interventions to promote collaboration may be the same or different. Drawing comparisons between the two groups is important because evidence suggests that the adoption of clinical guidelines and/or strategies can involve changing several behaviours, which are context-dependent (Grimshaw et al., 2004). Midwives and health visitors care for women and families in different care environments (e.g. GP surgery, community centres, hospital), at different (but at times overlapping) time points, and under different organisational management. For example, during the antenatal period, midwives and health visitors are expected to be in contact with each other regarding any support needs or changes in a woman's pregnancy (Public Health England and Department of Health, 2015). Therefore, valuing individual perspectives is important but consideration of such perspectives in relation to other factors such as infrastructure, professional bodies, and policy is critical (Rutter et al., 2017), as the behaviour of interest (i.e. interprofessional collaboration) involves actions from different health professional groups (Eccles et al., 2012). As such, knowledge of the barriers and enablers that are unique to each of the groups can

facilitate tailoring aspects of any interventions to each group, and identifying those that need to be jointly delivered.

6.3 Method

The general method for this study is provided in Chapter 3. Specifically, the findings presented in this chapter were derived by comparing and contrasting the reported belief statements against the following criteria : the frequencies of belief statements reported by midwives and health visitors within the 12 domains; the identified belief statements, both unique and overlapping, within 12 domains, and the unique and overlapping domains identified as influential to interprofessional collaboration (Islam et al., 2012; Roberts et al., 2016).

The criteria applied to facilitate comparison of midwives' and health visitors' perceived barriers and/or enablers to collaboration have been used to explore physicians' blood transfusion behaviour (Islam et al., 2012) and health professionals' use of patient decision aids for Down syndrome prenatal screening (Lépine et al., 2016). In the following, the most frequently cited belief statements for both midwives and health visitors (as detailed in Table 4.2 and Table 5.2 in Chapters 0 and 5, respectively) were compared against each other, highlighting the shared belief statements. Belief statements unique to each group that was identified as relevant in line with the specified criteria were also considered in this analysis. The frequencies of participant contributions were also compared to each other, per shared belief statement. These comparisons were then summarised, as provided in Table 6.1 and Table 6.2.

6.4 Comparison of findings

6.4.1 Frequencies of belief statements within domains.

For the midwives, a total of 42 belief statements were identified as salient. Of these, six were barriers, 13 were enablers, and 23 were enablers/barriers (see section 4.2, Chapter 0). For the health visitors, a total of 63 belief statements were identified as relevant. Of these, 13 were barriers, 25 were enablers, and 25 were enablers/barriers (see section 5.2, Chapter 5). The frequencies of belief statements within domains is summarised in Table 6.1.

Table 6.1 Comparison of frequencies of belief statements within domains.

	Sample	
	Midwives	Health visitors
Barriers	6	13
Enablers	13	25
Barriers/enablers	23	25
Total	42	63

Comparison of the most relevant belief statements for each professional group resulted in the identification of 15 overlapping belief statements, relating to 11 of the 12 TDF domains. Seven of these shared belief statements were enablers relating to seven domains, four were barriers relating to four domains, and four were both barriers and enablers relating to four domains. These overlapping belief statements are summarised in Table 6.2.

Table 6.2 Frequency of most prevalent, overlapping belief statements reported by midwives and health visitors and overall.

TDF domain	Belief statement	Discordant belief statements	Barrier (B), Enabler (E), or Mixed (M)	Midwives (n= 15)	Health visitors (n= 17)	Total N= 32
Knowledge	Knowledge of the protocol/processes involving getting in contact with each other	I know	M	14	15	29
		I don't know		8	15	23
Social/professional role and identity	Collaboration is fundamental to my role	N/A	E	13	10	23
Beliefs about capabilities	Perceived ease of contacting each other	Easy	M	12	14	26
		Difficult		10	14	24
Beliefs about consequences	Benefits of collaboration outweigh the costs of doing so	Yes	E	14	13	27
Motivation and goals	Perceived importance of collaboration	Important	E	9	10	19
Memory, attention, and decision processes	Contact/handover when there is a concern	N/A	E	13	17	30
	Perceived difficulty of deciding to collaborate with/contact each other	Easy	M	12	9	21
		Difficult		4	2	6
Environmental context and resources	Lack of time	N/A	B	9	14	23
	Recordkeeping/written information	N/A	B	8	12	20
Social influences	Having communication with each other	N/A	E	10	17	27
	Quality of contact with each other	Good	M	10	9	19
		Poor		6	15	21

TDF domain	Belief statement	Discordant belief statements	Barrier (B), Enabler (E), or Mixed (M)	Midwives (n= 15)	Health visitors (n= 17)	Total N= 32
Emotion	Emotions can impede collaboration	N/A	B	4	5	9
Behavioural regulation	Markers of contact/collaboration: Records/documentation	N/A	E	9	9	18
Nature of the behaviours	Extent of collaboration: Limited contact	N/A	B	7	15	22
	Antenatal contacts	N/A	E	10	13	23

In addition, a diagrammatic representation of participant contributions to each of the identified overlapping belief statements, per domain is presented in Figure 6.1, Figure 6.2, and Figure 6.3. The TDF domain 'Skills' did not emerge in this analysis as influential to interprofessional collaboration for **both** midwives and health visitors. Individually however, a number of health visitors (n= 4, 23.5%) identified 'Communication skills' as a relevant belief statement within the domain 'Skills' (see section 5.2.3.2.1, Chapter 5). The domain 'Skills' was not identified as relevant in the midwife sample.

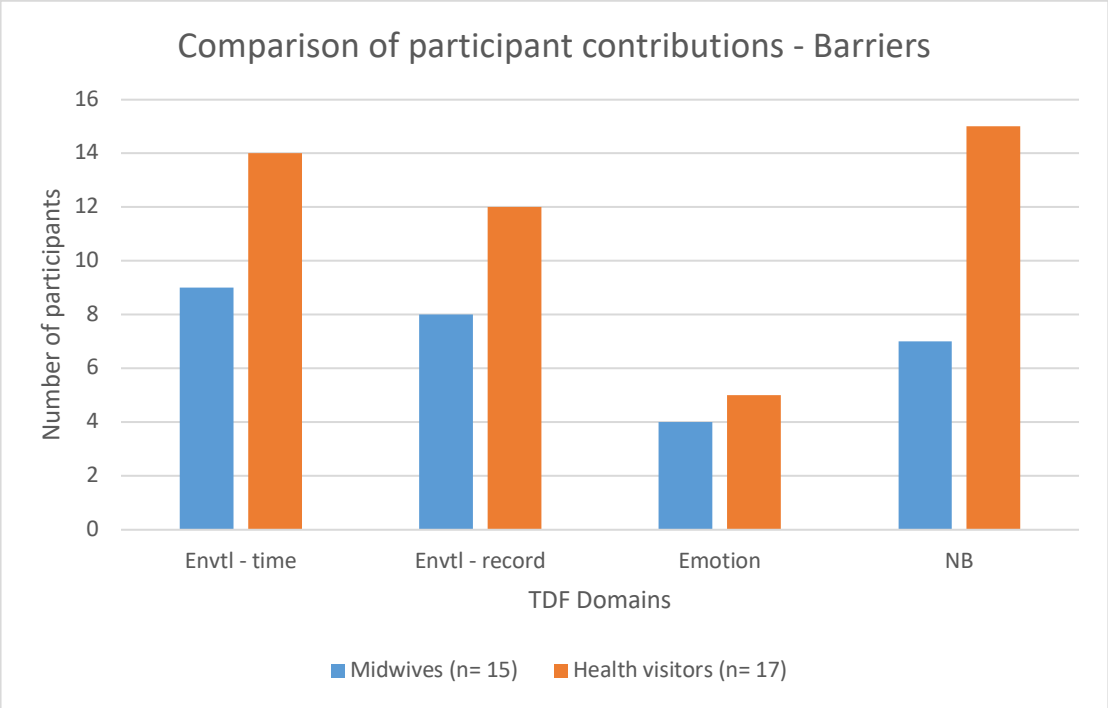

Figure 6.1. Comparison of participant contributions – Barriers (per domain)
Envtl – time = Environmental context and resources: Lack of time; Envtl – record = Environmental context and resources: Recordkeeping/written information; Emotion = Emotions can impede collaboration; NB = Nature of the behaviours, Extent of collaboration: Limited contact

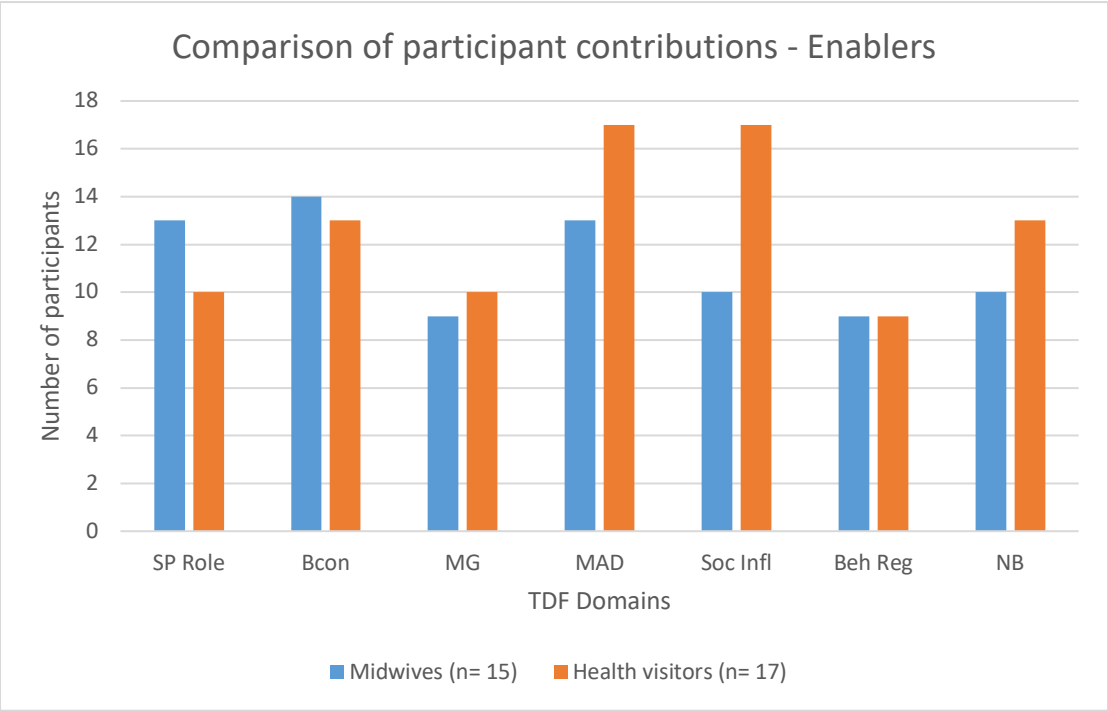

Figure 6.2. Comparison of participant contributions – Enablers (per domain)

SP Role = Social/professional role and identity; BCon = Beliefs about consequences; MG = Motivation and goals; MAD = Memory, attention, and decision processes; Soc Infl = Social influences; Beh Reg = Behavioural Regulation; NB = Nature of the behaviours

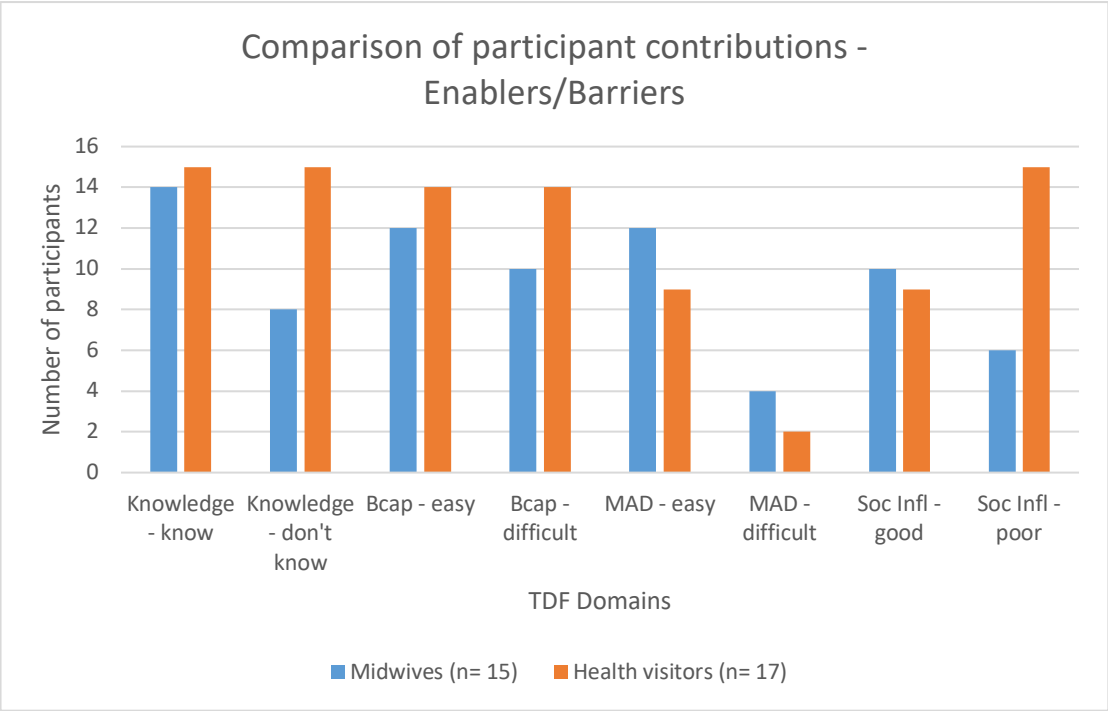

Figure 6.3. Comparison of participant contributions per salient belief statement – Enablers/barriers (per domain)

Knowledge – know = Knowledge of the protocol/processes involving getting in contact with each other: I know; Knowledge – don't know = Knowledge of the protocol/processes involving getting in contact with each other: I don't know; BCap – Easy = Perceived ease of contacting each other: Easy; BCap – Difficult = Perceived ease of contacting each other: Difficult; MAD – easy = Memory, attention, and decision processes, Perceived difficulty of deciding to collaborate with/contact each other: Easy; MAD – difficult = Memory, attention, and decision processes, Perceived difficulty of deciding to collaborate with/contact each other: Difficult; Soc Infl – good = Social influences, Quality of contact with each other: Good; Soc Infl – poor = Social influences, Quality of contact with each other: Poor

6.4.2 Overlapping belief statements within domains.

6.4.2.1 Barriers.

There were four overlapping belief statements that functioned as barriers, namely, 'Lack of time' (Domain: Environmental context and resources), 'Recordkeeping/written information' (Environmental context and resources), 'Emotions can impede collaboration' (Emotion), and 'Extent of collaboration: Limited contact' (Nature of the behaviours). These tapped into three of the 12 TDF domains. The key shared barrier identified concerned limited time and recordkeeping resources which hinder collaborative working, as described by participants here:

> *...there's not enough time sometimes in the day to facilitate this [communication with health visitors] –MW24.*

> *Yeah, it [working collaboratively] is time-consuming so I think as I said, you want relevant information handed over to you, um at a relevant time –HV20*

> On the lack of a shared recordkeeping system:
> *We could really do with an information system where we could share information. Um... you know, to email is very difficult. We haven't got a secure email so we can't discuss women on email 'cause it can be intercepted. So modern technologies could be improved. –MW66*

> *If there was an electronic version of the midwifery notes that then gets passed to us, that may be useful, getting this information –HV47*

In addition, the belief statement 'Extent of collaboration: Limited contact' concerns the lack of a working relationship between the two groups, as described by one participant: *"so we don't really work together as much as we could." (MW12)*. Midwives and health visitors identified that this current lack of interface was an impediment to working collaboratively as described by one participant: *"In 18 years of visiting, we don't have regular midwife meetings. And I used to be a midwife. So I can see that it would be beneficial" (HV19)*. More health visitors (n= 15, 88.2%) highlighted this as an issue as compared to their midwife counterparts (n= 7, 46.67%), and one of the suggestions that the health visitors made to address this

barrier was to increase opportunities for interface with midwifery colleagues, such as through doing joint activities (Behavioural regulation). This is discussed in detail in section 5.2.3.3.10 of Chapter 5, and later in section 6.4.5.2 within this Chapter.

Finally, a number of midwives (n= 4) and health visitors (n= 5) reported that emotions can impact on efforts to work collaboratively, as reported by some participants:

> *I think, I think that that [emotions] can be quite a big factor sometimes. Um, again going back to the them and us scenario, um... I think it can be. -MW55*

> *I think emotions play a huge part in it [interprofessional collaboration]. -HV19*

6.4.2.2 Enablers.

Concerning factors which enable collaborative working, seven belief statements were identified as shared between the two participant groups. These were: 'Collaboration is fundamental to my role' (Social/professional role and identity), 'Benefits of collaboration outweigh the costs of doing so' (Beliefs about consequences), 'Perceived importance of collaboration' (Motivation and goals), 'Contact/handover when there is a concern' (Memory, attention, and decision processes), 'Having communication with each other' (Social influences), 'Markers of contact/collaboration: Records/documentation' (Behavioural regulation), and 'Antenatal contacts' (Nature of the behaviours). These belief statements tapped into seven of the 12 TDF domains.

Both health professional groups acknowledged collaborative working as part of their role. Midwives in particular recognised the value of collaborative working in the postnatal period especially for universal services: *"Oh yeah I think it's an important part of my role because I'm only going to visit them for up to ten days afterwards" (MW32).* Similarly, health visitors recognise that working with midwives is part of their role, however, they also acknowledged that in the postnatal period this is something that is still developing: *"I think it is part of our role... but I think it's a neglected part of our role such that you know" (HV75)*. Relatedly, midwives and health visitors also recognised the benefits of working collaboratively

with each other. Midwives in particular were cognizant of the merits of working with health visitors: *"Yes definitely. Definitely. I think it's much better for the women and much better for the children" (MW55).* All but one midwife contributed to this belief statement.

Another shared belief statement identified as an enabler was 'Contact/handover when there is a concern', (Memory, attention, and decision processes) which concerns women's and their families' situations and needs. This was also the most commonly cited belief statement in this analysis, suggesting its potential key role in an intervention aiming to improve collaborative working between midwives and health visitors. The participants reported that specific concerns about women were useful prompts to get in contact with each other, as one midwife stated: *"we tend to think about the vulnerable one as the ones that we need to speak to health visitors (MW4)"*. This belief statement is discussed in greater depth per group in sections 4.2.3.2.4 and 5.2.3.2.5 in Chapters 4 and 5, respectively.

The belief statement 'Having communication with each other' (Social influences) represents the extent to which midwives and health visitors reportedly value communication. More health visitors (n= 17, 100%) than midwives (n= 10, 66.67%) reported communication as an influential factor. For example, one midwife stated: *"I say that but again if you've got good communication then you know, you don't need to, you can actually support one another (MW44)"*. Similarly, one of the health visitors stated: *"I think it would probably just be opening up the channels of communication and starting a dialogue with them and being able to then know who, who you're dealing with (HV94)"*. 'Markers of contact/collaboration: Records/documentation' (Behavioural regulation) were reported by both groups as a tool for sharing and obtaining information. In addition, midwives deemed such records particularly useful for demonstrating whether contact has taken place and what information has been shared:

> *"...there's the documentation of the call, what's been handed over, and... um... I think it's mainly in the records really. Diary entries, and um... recorded in a uh, patient record" (MW24).* Similarly, health visitors reported that: *"I would document it if I'd had a contact with the midwife" (HV73).*

Finally, the belief statement 'Antenatal contacts' (Nature of the behaviours) was identified by both groups as an enabler to interprofessional collaboration. Midwives described contact with health visitors during pregnancy as a favourable time to discuss women's needs:

> *So what we do is we email them with a referral form, they give us a call, we discuss why we think the woman needs to see them and then they take them on but we don't really have any face to face interaction with them. -MW12*

Similarly, health visitors cited antenatal contacts with midwives as an opportunity to assess their level of involvement with the family:

> *So most of the contact that I have with midwives is either antenatal contact, generally it's antenatal contact so it's contact when they are worried about a family, when they think a family is vulnerable so that we can become quite involved early on. -HV73*

6.4.2.3 Enablers/barriers.

There were four belief statements that were found to be shared across the participant samples, specifically, 'Knowledge of the protocol/processes involving getting in contact with each other' (Knowledge), 'Perceived ease of contacting each other' (Beliefs about capabilities), 'Perceived difficulty of deciding to collaborate with/contact each other' (Memory, attention, and decision processes), and 'Quality of contact with each other' (Social influences). These were related to four of the 12 TDF domains. Each of these will be discussed in turn.

The belief statement concerning the domain 'Knowledge' was the second most frequently cited in this analysis. These statements were also discordant, which means that contrasting views (from both midwives' and health visitors' perspectives) were shared. In particular, knowledge of processes relating to communicating or collaboration with each other, could act either as an enabler or a barrier. To illustrate, a quote expressing knowledge of communication processes/protocols as an enabler is presented, followed by a quote expressing the difficulties associated with a lack of knowledge:

there is um, a policy on that. Um, so we have got a policy on that. And there is a community policy as well, transferring care to the health visitor. So we do have, one policy on comm- on communication transfer of care, and we have another community guideline -MW24

I don't even know where they're [midwives] based. I have to be honest with you – I have no idea [about protocols on making contact]. –HV96

6.4.3 Prevalent belief statements within domains unique to each group

Considering the findings associated with midwives individually, their most frequently reported belief statements related to the domains: 'Beliefs about consequences', 'Knowledge', 'Environmental context and resources', 'Social/professional role and identity', 'Memory, attention and decision processes', 'Beliefs about capabilities', and 'Beliefs about consequences'. Whereas, for the health visitors, the most frequently reported belief statements concerned the following theoretical domains: 'Social influences', 'Memory, attention, and decision processes', 'Knowledge', 'Nature of the behaviours', 'Beliefs about capabilities', and 'Environmental context and resources'. These relevant theoretical domains are summarised along with their respective specific belief statements in Table 6.3.

When exploring the differences between the groups, it was evident that the health visitors encountered more challenges to working with midwives than their counterparts. Midwives' most salient belief statements highlight an ability to communicate or collaborate with health visitors, as well as a firm awareness of the need for collaboration with them.

Table 6.3 Prevalent belief statements unique to each health professional group.

Midwives		Rank order	Health visitors		Rank order
Theoretical domain	Belief statement		Theoretical domain	Belief statement	
Knowledge	Knowledge of the protocol/processes involving getting in contact with each other	1	Social influences	Having communication with each other	1
Beliefs about consequences	Benefits of collaboration outweigh costs of doing so	1	Memory, attention, and decision processes	Contact/handover when there is a concern	1
Environmental context and resources	Tools to communicate/collaborate	1	Knowledge	Knowledge of the protocol/processes involving getting in contact with each other	2
Social/professional role and identity	Collaboration with health visitors is part of my role	2	Nature of the behaviours	Extent of collaboration: Limited contact	2
Memory, attention, and decision processes	Contact/handover when there is a concern	2	Social influences	Quality of contact with each other: Poor	2
Beliefs about capabilities	Perceived ease of contacting health visitors: Easy	3	Beliefs about capabilities	Perceived ease of contacting each other: Easy/difficult	3
Beliefs about consequences	Contact with health visitors is beneficial	3	Environmental context and resources	Lack of time	3
Memory, attention, and decision processes	Perceived difficulty of deciding to collaborate/get in contact with health visitors: Easy, straightforward decision	3			

Moreover, on occasion, health visitors' reported belief statements were either different or in opposition to midwives'. For example, midwives and health visitors differed in what they considered to be the main barrier to working collaboratively with each other. Midwives reported that it is their 'Work structure' (Beliefs about capabilities) which acts as the main barrier to working with health visitors (see section 4.2.3.1.2 of Chapter 0), whereas health visitors identified 'No established relationship with midwives' (Nature of the behaviours, section 5.2.3.1.5, Chapter 5) as the key barrier to working with midwives. This suggests that health visitors' limited experiences of being in contact with midwives may be related to midwives' work structure whereby opportunities to connect are scarce. In addition, regarding the belief statement 'Quality of communication' (Social influences), which emerged as a shared belief statement in this analysis (see Table 6.2), it was found that health visitors reported experiencing poorer quality of contact than midwives. In fact, an overwhelming majority (88%) of health visitors reported poor communication with midwives as compared to only 40% of the midwife participants. This may be, in part, due to midwives' and health visitors' positions in the maternity care pathway. Researchers in Sweden have found that health professionals' position in maternity care pathways can either facilitate or hinder collaborative working (Barimani & Hylander, 2008). Specifically, midwives providing antenatal care may see little need to communicate with child health care nurses, which may then result in child healthcare nurses' perception that communication from midwives is lacking (Barimani & Hylander, 2008).

In the UK, midwives are involved with women throughout pregnancy and are thus expected to inform health visitors of any changes to a woman's pregnancy status or care (Public Health England and Department of Health, 2015). Thus, it may be that health visitors' reports of poor communication are related to the communication received from midwives as the health professionals in first position in the chain of care (i.e. providing information to health visitors). Nonetheless, the introduction of the antenatal contacts with women could enable working collaboratively with midwives (see section 5.2.3.3.10). However, the health visitor antenatal contacts may not always be achieved for reasons including limited staffing (NHS Digital, 2017), as detailed in section 5.2.3.3.7.

With regard to the enablers central to interprofessional collaboration, participant midwives and health visitors also differed in their views; for midwives, the belief statement 'Benefits of collaboration outweigh the costs of doing so' (Beliefs about consequences) emerged as most important, whilst for visitors, the belief statement 'Having communication with each other' (Social influences) was of prime importance. At domain level, based on the emergent belief statements, it appears that midwives have identified a salient belief that is related to their individual outcome expectancies or attitudes, whilst health visitors have identified a salient belief that is linked to interpersonal processes.

6.4.4 Building alternative models of collaboration

Based on the findings presented in this chapter thus far, it is evident that there are factors midwives and health visitors viewed as influential that are beyond the individual context. Wider contextual factors such as managerial authorities and common protocols from organisations which could facilitate or hinder collaborative working have previously been identified in the literature (Axelsson & Axelsson, 2006; D'Amour et al., 2008). In addition, these findings share commonalities with the barriers and enablers to interprofessional collaboration identified from the systematic review (Chapter 2). These common barriers and enablers are summarised in Table 6.4.

Table 6.4. Common barriers and enablers to interprofessional collaboration across TDF study and systematic review findings.

Systematic review barriers/enablers	TDF barriers/enablers
Good/poor communication	Good/poor quality of contact, having communication
Distance/Co-location	Being co-located
Limited resources and support	Lack of time, funding cuts, staffing levels
Poor role knowledge	Knowledge of relative roles
Inadequate information transfer	Recordkeeping/written information
Divergent philosophies of care	Professional differences, silo culture
Mutual respect and support	Collaboration as part of role, familiarity, organisational influences
Joint working	Building capacity for teamwork, increasing contact

The findings of this thesis address a current gap in existing models of interprofessional collaboration, through systematic identification of the individual barriers and enablers to interprofessional collaboration that appear to be important to midwives and health visitors. These individual factors that are perceived either as enablers or barriers or both interact with contextual factors. Using D'Amour et al.'s (2008) structuration model of collaboration as an example (see section 1.4, Chapter 1), the following sections will outline how the identified barriers and enablers relate to existing models.

The findings from the midwives' arm of the TDF study (Chapter 0) suggest midwives are largely influenced by individual and social or interpersonal factors. For example, whilst the midwife participant sample demonstrated heightened awareness of the utility of working collaboratively (Beliefs about consequences) and collaboration as an element of their professional role (Social/professional role and identity), their ability to work collaboratively with health visitors is hampered by the pervasiveness of working in silos, as well as perceived professional differences from their health visitor counterparts. Such influences are considered relational in nature according to D'Amour et al. (2008) and include divergent goals as well as other

social circumstances. In addition, midwives' experiences of their contact with health visitors also play a role in facilitating or hindering collaboration. Key factors to enabling collaborative working are knowledge of protocols for establishing contact with health visitors, and an awareness of women's or families' needs. These factors need to be integrated into interventions developed for improving interprofessional collaboration. The factors described here are summarised in

Figure 6.4.

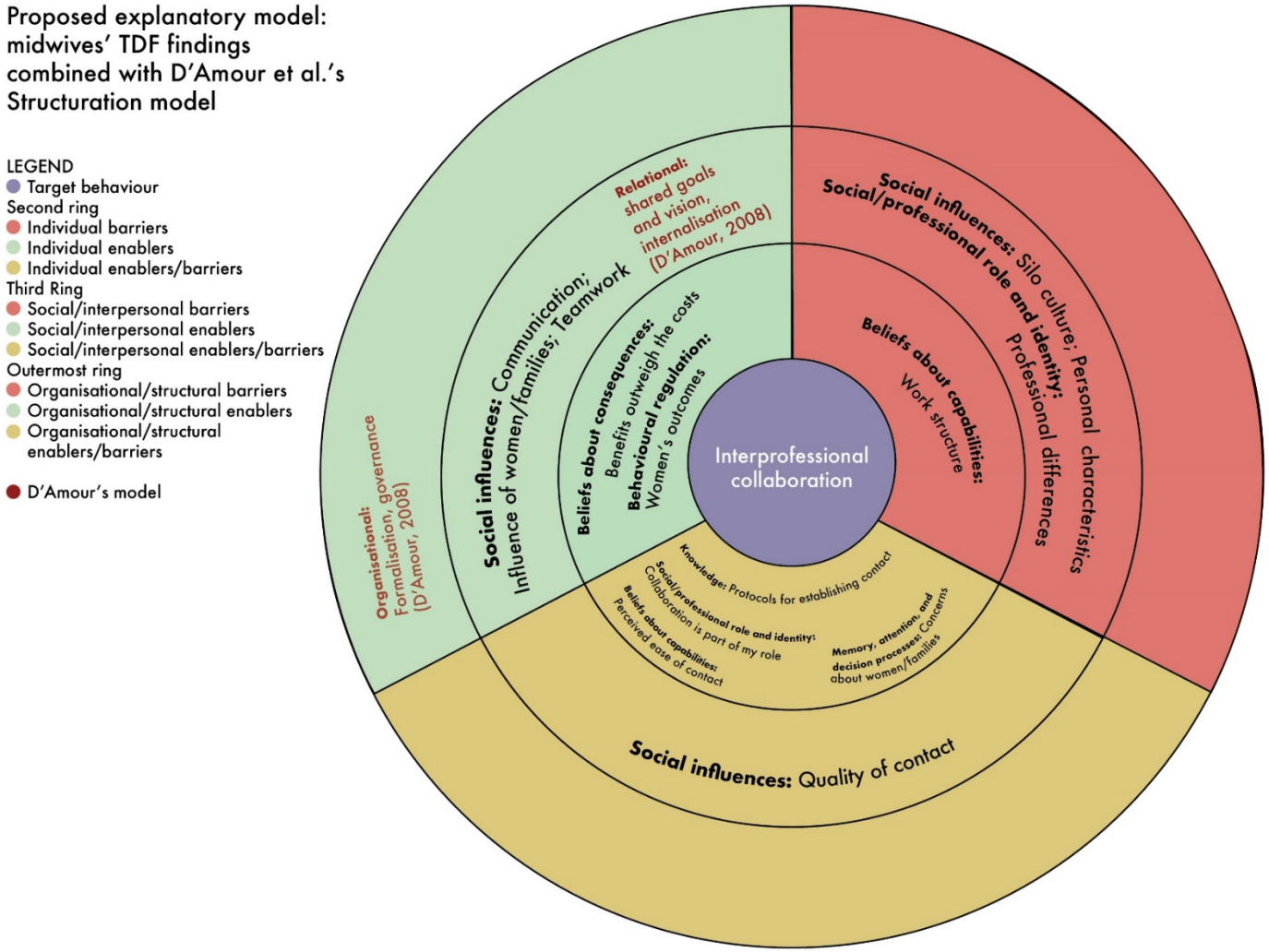

Figure 6.4. *Proposed explanatory model of interprofessional collaboration from midwives' perspectives*

Similar to the midwives' data, findings concerning the health visitor interview study (Chapter 5) point in the direction of numerous interpersonal influences to interprofessional collaboration. In particular, a number of organisational or structural factors were identified as pertinent to interprofessional collaboration which did not emerge in the midwives' explanatory model. These factors concern environmental context and resources, specifically, written information which is a positive influence on collaborative behaviour, and lack of time resources and level of workload as negative influences on collaborative behaviour. These are in line with D'Amour and colleagues' (2008) structuration model of collaboration, which has specified organisational indicators of collaboration such as having suitable opportunities to establish and maintain connections, and clarity regarding role expectations. These identified structural barriers are unsurprising given the current challenges to the health visiting profession which includes a reduction in health visitors in full-time employment (NHS Digital, 2017).

In addition, individual factors influencing health visitors' collaborative behaviours were also identified. Specifically, knowledge of processes on initiating contact with midwives was a key issue for the health visitor sample. Furthermore, health visitors' work context appears to impinge on their perceived ability to be able to contact midwives. That said, health visitors identified a number of enabling factors such as utilising midwifery notes to gain information about women's care. These factors are diagrammatically presented in Figure 6.5.

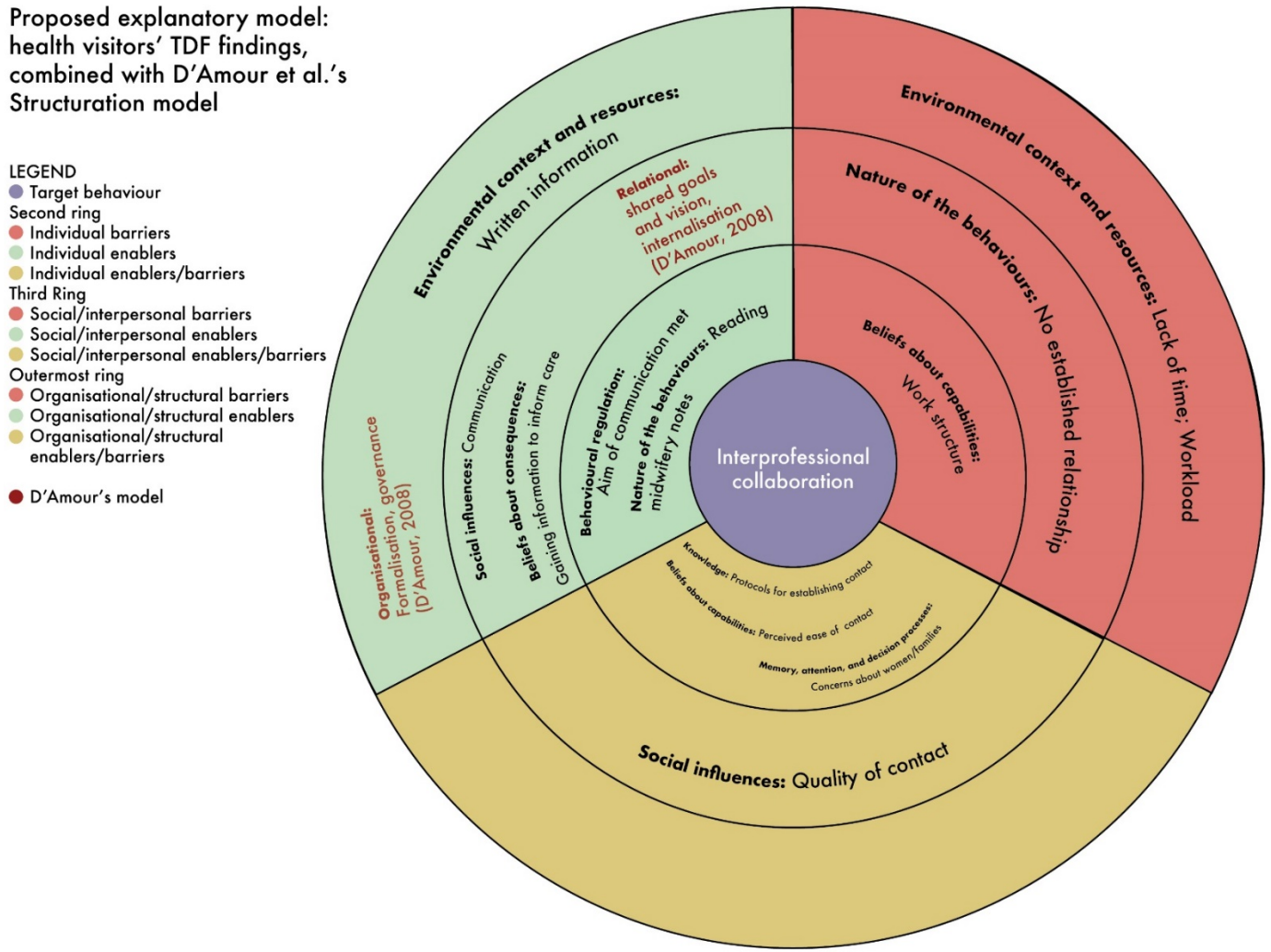

Figure 6.5. Proposed explanatory model of interprofessional collaboration from health visitors' perspectives

Considering both groups together, the following proposed explanatory model illustrates the variety of factors influencing collaborative behaviour at the individual level. Whilst no individual factor was identified functioning as a barrier alone, there were six individual factors that functioned bi-directionally (i.e. as both barrier and enabler). These are knowledge of protocols for initiating contact, health professionals' self-efficacy or perceived ability to contact each other, concerns about women or families, records, beliefs about the benefits of working collaboratively, and emotions. In addition, there was a social or interpersonal barrier, as well as an organisational or structural barrier identified as influential to interprofessional collaboration.

There were numerous enablers identified in this combined model of midwife-health visitor collaboration, which are influential at individual, social, and structural levels. For example, in the combined model, recognising the importance of collaboration was highlighted through the domains Social/professional role and identity, and Motivation and goals. In terms of social influences, communication was a key factor along with contacts during the antenatal period. Women's records were recognised by both groups as the key enabler at a structural level. Given the findings that illustrate there are limited facilities for information sharing (see sections 4.2.3.3.7 and 5.2.3.3.7, Chapters 0 and 5, respectively), a possible solution would be to consider new data management and sharing systems. These factors are diagrammatically summarised in Figure 6.6.

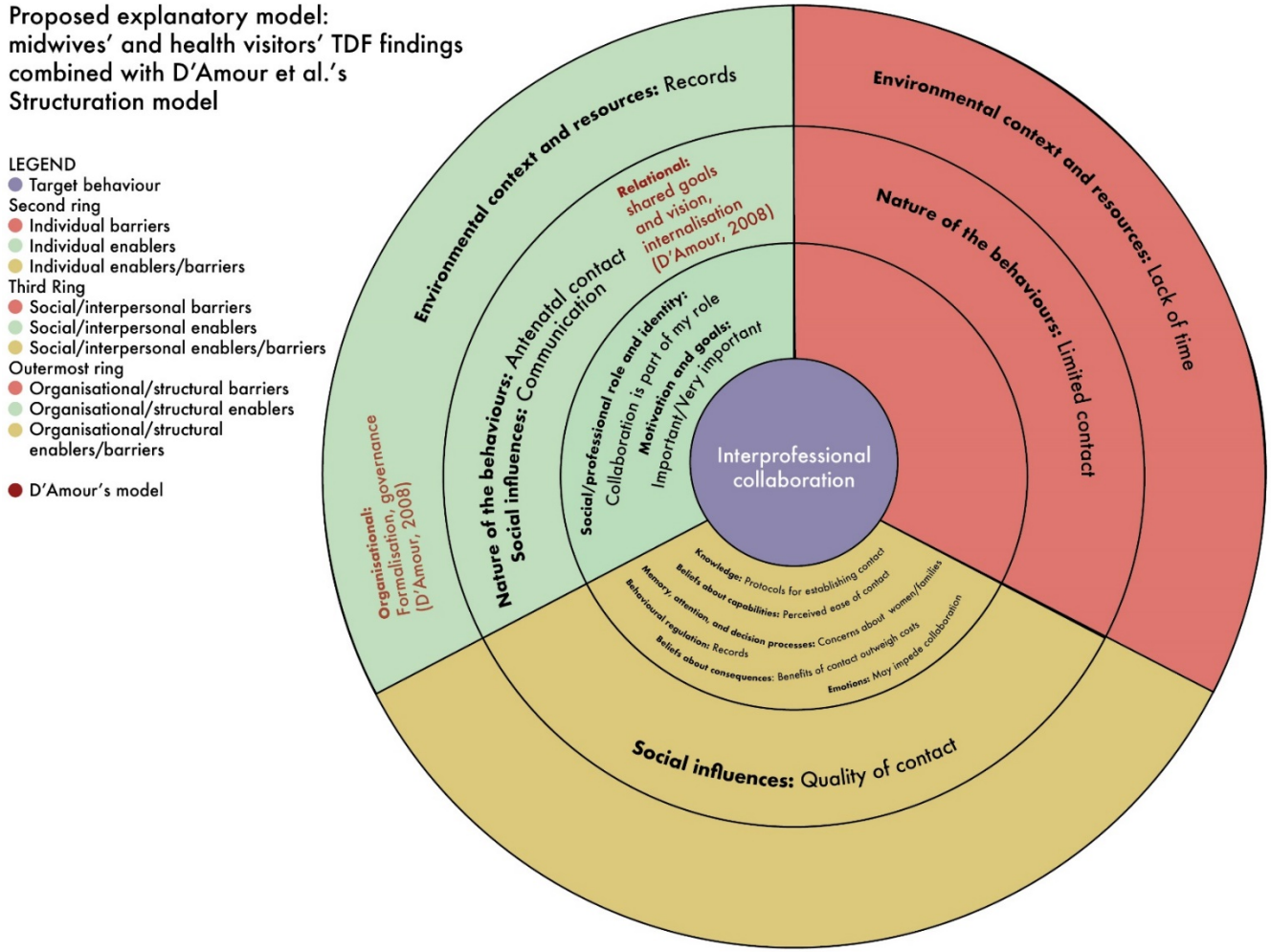

Figure 6.6. Proposed explanatory model of midwife-health visitor collaboration, combining findings drawn from midwife and health visitor samples

6.4.5 Intervention planning recommendations

6.4.5.1 Intervention strategies relevant to midwives.

The results presented in the midwives' interview study (Chapter 0) as well as the comparative analysis within this chapter offer an opportunity to explore areas for intervention development. The particular focus of suggestions made here will be on individual-level behaviour change, to demonstrate the unique contribution of health psychology to addressing the gaps in the understanding of interprofessional collaboration as a complex behaviour. Interestingly, whilst the majority of the midwives' belief statements functioned both as enabler or barrier, the most frequently cited aspects of these mixed belief statements were the enablers. For example, the majority of the midwives in this study claim to see collaboration with health visitors as part of their role, and perceive working collaboratively with health visitors as beneficial. However, evidence concerning the enactment of interprofessional collaboration in practice is either limited or indirect, through women's records or notes for example (Section 4.3, Chapter 4). Although it is important to maintain midwives' beliefs and perceptions concerning the value of working collaboratively with health visitors, it is crucial to address the identified factors presenting as barriers to collaboration.

As well as identifying appropriate theories for intervention development (Dombrowski et al., 2016), behaviour change techniques – observable components of an intervention used to effect behavioural change, or 'active ingredients' – are elements to be considered for intervention development (Dombrowski et al., 2016; Michie et al., 2013). The Behaviour Change Taxonomy (Michie et al., 2013) serves as a useful tool for identifying the appropriate strategies for achieving behavioural change. The taxonomy offers a comprehensive, standardised classification of behaviour change techniques which can aid intervention development (Michie et al., 2013). The taxonomy is comprised of 93 behaviour change techniques organised into 16 groups, and is applicable to a range of behaviours (Michie et al., 2013). An example of a behaviour change grouping would be 'Shaping knowledge' which concerns techniques that are geared towards altering knowledge about the target behaviour, such as providing instructions on how a behaviour could be achieved.

Finally, suggested forms of delivery (i.e. intervention contents), which are also active ingredients to any intervention (Dombrowski et al., 2016) need to be considered. Form of delivery is said to be comprised of the following elements: delivery provider, format, materials, intensity, tailoring, and style (Dombrowski et al., 2016). Therefore, beyond the selection of behaviour change techniques for modifying behaviour, it is also important to consider who will implement the intervention, how it will be delivered (e.g. individual, group), the vessel through which the intervention is provided (e.g. online, face-to-face), amongst others. Taking into account such features is important as these may positively or negatively affect intervention effectiveness, and influence the uptake and fidelity of the intervention (Dombrowski et al., 2016).

Considering these intervention development elements, one behaviour change technique to establish collaborative behaviours is 'Identification of self as role model'. This would entail telling midwives that engaging with health visitors can serve as a model to follow for other midwives (Michie et al., 2013). This aligns with their beliefs that collaboration is part of their role, and at the same time, capitalises on the self as a positive example for other colleagues. Similarly, other examples of enablers that can be supported by behaviour change strategies to support establishment of behaviour include 'Knowledge of protocol/practice guidelines' and 'Perceived ease of contacting health visitors'. Research suggests that psychological and physical resources need to be available to adequately enact the behaviour (Kwasnicka, Dombrowski, White, & Sniehotta, 2016). As such, in order to support maintenance of midwives' knowledge of practice guidelines, one might use the technique 'Shaping knowledge' to provide information on the contexts in which collaboration with health visitors is critical and/or beneficial, and how this is best achieved (Michie et al., 2013). For example, it would be useful to demonstrate the similarities and differences between midwives' and health visitors' professional activities in the context of the maternity care pathway and the midwifery-health visiting partnership pathway (Figure 1.1). This would highlight the benefits of proactively collaborating with health visitors, such as health visitors' potential reliance on midwives for accurate and timely information concerning women, their babies and families due to midwives' position in the care pathway, as also seen in previous research (Barimani & Hylander, 2012).

In addition, one might consider implementing the technique 'Demonstration of the behaviour' within prequalification education programmes to show midwives how such interactions between them and health visiting colleagues might take place. This technique could be delivered through presenting videos to midwifery students or engaging them in role-play exercises. There is equivocal evidence regarding the effectiveness of interprofessional education interventions (Reeves, Perrier, Goldman, Freeth, & Zwarenstein, 2013), however there is some evidence to suggest that interprofessional education approaches can improve attitudes to and preparedness for interprofessional collaboration (Lapkin, Levett-Jones, & Gilligan, 2013). Finally, in support of maintaining midwives' beliefs in their ability to liaise successfully with health visitors, a number of techniques can be applied, including 'Behavioural practice/rehearsal' and/or 'Habit formation', both of which involve practising behaviours either in a mock situation or real-life contexts, and 'Prompts/cues', which involves providing cues to trigger the behaviour (i.e. interprofessional collaboration) typically in the same scenario where the behaviour happens such as the workplace (Michie et al., 2013). Other suggestions for intervention development are provided in Table 6.5.

Table 6.5. Suggested intervention strategies for midwives using the TDF and Behaviour Change Techniques Taxonomy V1 (Michie et al., 2013).

TDF Domain	Belief statement/theme	Behaviour change techniques taxonomy grouping	Behaviour change technique label	Strategy examples
Knowledge	Knowledge of protocol/practice guidelines	Shaping knowledge	Information about antecedents	Remind midwives of contexts wherein contact with health visitors is of importance (including social and environmental situations and events), for example verbally in team meetings, or through written information such as Trust newsletters
Social/professional role and identity	Collaboration with health visitors is part of my role	Identity	Identification of self as role model	Regularly inform midwives that demonstrating collaboration with health visitors can be a model for others.
		Feedback and monitoring	Self-monitoring of behaviour	On any recordkeeping device (e.g. Red Book, or electronic records), provide a space for midwives to monitor their behaviour (i.e. collaborating with health visitors), including space for evaluating this.
Beliefs about capabilities	Perceived ease of contacting health visitors	Repetition and substitution	Behavioural practice/rehearsal and Habit formation	Prompt midwives to practise liaising with health visitors through face-to-face meetings, telephone/video conferences (whatever is feasible) on a weekly basis
		Associations	Prompts/cues	On any recordkeeping device (e.g. Red Book, or electronic records), put a prompt to stating, 'Have you contacted your health visitor today?'

6.4.5.2 Intervention strategies relevant to health visitors.

The findings presented in the health visitor's interview study (Chapter 5) as well as the data derived from the comparative analysis within this chapter offer an insight into how interprofessional collaboration can be developed, specifically through intervention development. Many of the barriers and enablers discussed in this study have previously been identified by other researchers, particularly organisational or health system issues. However, as in the midwives' interview study (see section 6.4.5.1), unique to this study is the identification of individual barriers and enablers that can be addressed through behaviour change interventions. In saying that, interprofessional collaboration is a complex process and involves numerous behaviours, such as interpreting medical histories/notes received from midwifery colleagues (individual), deciding on the level of collaboration with midwives required based on women's and/or families' needs (individual/interpersonal), and meeting key performance indicators (organisational). In particular, the findings show that there are barriers and enablers salient to health visitors existing beyond the target behaviour specified, including barriers and enablers related to antenatal contacts with midwives. This may be an impact of policy changes (i.e. National Health Visiting Programme, Healthy Child Programme) which were introduced to improve services for children aged 0 to 5 as led by health visiting, and includes five mandated health visitor antenatal contacts with all women (Department of Health, 2009, 2014). Therefore, this suggests that whilst modifiable barriers and enablers exist, there could also be several areas for targeted intervention. Some suggestions as regards behaviour change techniques in relation to the main barriers and/or enablers identified are outlined in the following section.

Given that participant health visitors unanimously agreed that communication is the most important enabler to working collaboratively with midwives, belief statements that were associated with communication were explored in order to identify areas for intervention. For example, health visitors reported low knowledge of processes involved in contacting midwives (Knowledge). This is a modifiable barrier that may help to improve communication with midwives; to do so, three aspects must be considered: *technique*, such as the Behaviour Change Techniques Taxonomy V1 (Michie et al., 2013); *theory*, for example the Normalisation Process

Theory which asserts that routine practices are a result of people working together to implement change (May & Finch, 2009), as well as the TDF as a determinant framework for identifying barriers and enablers to practice as demonstrated in this thesis, or processes explaining how a developed intervention influences behaviour; and *form of delivery* which includes all the features relating to the way in which an intervention is delivered (Dombrowski et al., 2016) as discussed in section 6.4.5.1, Chapter 6. Taking these into account, strategies that could be utilised to increase knowledge are 'Instruction on how to perform the behaviour' which involves providing directions or guidance on how to enact a behaviour, 'Adding objects to the environment', which is about introducing objects to the environment that will enable the enactment of the behaviour and 'Credible source', which is about involving a person deemed credible to the target population to present information to either encourage or discourage a behaviour (Michie et al., 2013). How these techniques could be applied in practice is given in Table 6.6.

Another barrier relating to communication is health visitors' perception that this is difficult (Beliefs about capabilities). To improve this, one might consider behaviour change techniques such as 'Social support (practical)', which is about the provision of practical help to encourage enactment of the behaviour, and 'Demonstration of the behaviour' which is about the provision of an observable example of how a behaviour should be performed, i.e., modelling the behaviour (Michie et al., 2013).

Finally, with regards to increasing contacts with midwives (Behavioural regulation), several strategies can be considered such as 'Behavioural practice/rehearsal' which involves practising the behaviour in situations where the behaviour is not necessarily required, and/or 'Habit formation' which entails practising the behaviour numerous times within the same context (Michie et al., 2013). The suggested forms of delivery for all barriers discussed above are reported in Table 6.6. It is important to also note that there are barriers and enablers that cannot be intervened with solely using behaviour change interventions, such as workload, and a lack of time. These are health policy related issues that will require structural change.

Table 6.6. Suggested intervention strategies for health visitors using the TDF and Behaviour Change Techniques Taxonomy V1 (Michie et al., 2013).

TDF Domain	Belief statement/theme	Behaviour change techniques taxonomy grouping	Behaviour change technique label	Strategy examples
Knowledge	I don't know the process(es) involved in establishing contact with midwives	Shaping knowledge	Instruction on how to perform the behaviour	Team leaders to provide instructions on how to liaise with relevant midwives (including when best to do so, typical situations which warrant the behaviour); include instructions in education programmes
		Antecedents	Adding objects to the environment	Add visual aids in health visitors' office outlining the instructions/process of contacting midwives, as well as a list of midwifery contacts and best times to get in touch
		Comparison of outcomes	Credible source	Involve managers/supervisors in presenting the above
Beliefs about capabilities	Perceived ease of contacting midwives: Communication/contact is difficult	Social support	Social support (practical)	Supervisors to help health visitors to establish contact with midwives by providing midwives' contact details (also 'Adding objects to the environment')
		Comparison of behaviour	Demonstration of the behaviour	Show (through observing role play, or videos) health visitors ways of contacting midwives
Behavioural regulation	Increasing contacts with midwives: Increasing interprofessional working; increasing communication	Repetition and substitution	Behavioural practice/rehearsal	Prompt health visitors to practice liaising with midwives through mock telephone/video conferences
			Habit formation	Prompt health visitors to practice liaising with midwives through face-to-face meetings, telephone/video conferences

6.4.5.3 Intervention strategies relevant to both groups.

Beyond the identified areas for intervention tailored to each of the professional groups, the shared belief statements identified within this chapter concerning the barriers and/or enablers to midwife-health visitor collaboration offer an opportunity to identify intervention strategies to enhance collaborative working. These recommendations will be outlined in detail, in relation to the criteria considered in the preceding sections, as well as the existing evidence base and the situational context in which midwives and health visitors work.

Salient belief statements identified by both groups centred on communication. Based on this, strategies to improve communication between midwives and health visitors should be included in interventions targeting collaboration. These could include practice-, education- and/or organisation-based interventions or strategies; however, the focus of this section is to provide strategies for changing individual behaviour. Therefore, suggestions detailed below will draw evidence from practice- and education-based interventions that explicitly aim to change individual behaviour to improve interprofessional collaboration through interventions with individuals, as well as making use of the Behaviour Change Techniques Taxonomy V1 to identify other potentially relevant behaviour change techniques (Michie et al., 2013).

With regard to the belief statement 'Contacting each other when there is a concern' (Memory, attention, and decision processes), a number of behaviour change techniques could be considered, including introducing prompts or cues, such as discharge forms/notifications, or verbal prompts from peers, to encourage midwives and health visitors to make contact with each other. The decision to make contact with each other needs to be informed by relevant guidance to address women's needs (e.g. identified vulnerabilities) as appropriate (Public Health England and Department of Health, 2015). For example, sticker prompts on women's handheld records have been used to alert health professionals regarding experiences of stillbirth (O'Connell, Meaney, & O'Donoghue, 2016). Regarding action planning in particular, implementation intentions (Gollwitzer, 1999) might be considered. Implementation intentions involve developing plans that explicitly link specified

situations with a goal-directed behavioural response. For example, if I identify any concern relating to mother/baby/family (i.e. situation), then I will contact midwife/health visitor by telephone/face-to-face meeting/videoconference at the earliest possible opportunity (i.e. behavioural response). As midwives and health visitors discussed using situational cues to help them decide whether or not to contact each other, implementation intentions may be a useful tool for improving communication between these two groups. Implementation intentions are a widely used strategy that has demonstrable effectiveness (medium to large, according to a meta-analysis conducted by Gollwitzer and Sheeran (2006)) across a range of behaviours including physical activity and healthy eating. This strategy has also been applied in an interprofessional education setting (Vachon et al., 2013), which suggests its applicability to the present study. More recently, an investigation of factors that may increase the impact of implementation intentions, identified collaboration as a mediator whereby collaboration increased motivation, anticipated enjoyment, and decreased risk of forgetting to implement plans (Prestwich & Kellar, 2014). Therefore, besides including implementation intentions alone in interventions to improve interprofessional collaboration, it might be worthwhile exploring the role of implementation intentions in helping to successfully attain the goal of increasing collaborative working between midwives and health visitors.

Concerning the belief statement ‘Knowledge of the protocol/processes involving getting in contact with each other’ (Knowledge), which was perceived by participants in both studies as both enabler and barrier, one might consider existing strategies applied in education-based interventions aimed at increasing interprofessional collaboration. These could include any learning or training activities that are jointly delivered such as communication skills training and discussion or exercises concerning teamwork, however, the evidence for these education-based interventions remains weak (Reeves et al., 2013). To mitigate this, the following set of behaviour change techniques could be explored: instructions on how to perform the behaviour, adding objects to the environment, and credible source (see Table 6.7). For example, team leaders are in a position to guide members of staff as they provide a credible source of information and knowledge (National Maternity Review, 2016; Psaila et al., 2014). Thus, they can disseminate information regarding midwifery or health visiting contact details, advise or instruct team

members how this can best be achieved, as well as explain local protocols concerning collaboration between midwives and health visitors.

The last salient belief statement, 'Having communication with each other' (Social influences), could potentially be addressed by using one or a combination of strategies applied in existing practice-based interventions. To date, known practice-based interventions (Reeves et al., 2017) which aim to improve interprofessional collaboration between health professionals have included communication-based strategies such as structured appointments, recall and reminders, and meetings (Black et al., 2013; Taggart et al., 2009); face-to-face communication supported by a facilitator (Schmidt et al., 1998); and tele- and videoconferencing (Wilson, Marks, Collins, Warner, & Frick, 2004). Indeed, as detailed in the systematic review (Chapter 2), similar strategies have been applied in practice by midwives and health visitors to facilitate communication, including face-to-face contact at joint meetings or joint visits, written communication, and telephone contact. Intervention components such as the introduction of structured meetings and/or videoconferencing can also be considered an antecedent of behaviour, as it is introducing a change in one's social environment, and this is a known behaviour change technique (Michie et al., 2013). The intervention components presented here vary in the way in which they are delivered which needs to be explored in greater depth as modes of delivery are also considered active ingredients of a complex intervention as discussed in section 6.4.5.1 (Dombrowski et al., 2016). These behaviour change strategies are summarised in Table 6.7.

Table 6.7. Suggested intervention strategies for both groups using the TDF and Behaviour Change Techniques Taxonomy V1 (Michie et al., 2013).

TDF Domain	Belief statement/theme	Behaviour change techniques taxonomy grouping	Behaviour change technique label	Strategy examples
Memory, attention, and decision processes	Contacting each other when there is a concern	Associations	Prompts/cues	On any recordkeeping device (e.g. Red Book, or electronic records), put a prompt to stating, 'Have you contacted your midwife/health visitor today?'
		Goals and planning	Action planning	Implementation intentions (Gollwitzer, 1999), for example, in training, get midwives and health visitors to work in a group and select a specified shared goal which outlines when, where and how the contact will be made (e.g. Vachon et al., 2013)
Knowledge	Knowledge the protocol/processes involving getting in contact with each other	Shaping knowledge	Instruction on how to perform the behaviour	Team leaders to provide instructions on how to liaise with relevant midwives (including when best to do so, typical situations which warrant the behaviour)
		Antecedents	Adding objects to the environment	Add print version of guidelines or relevant protocols in office environment and make these easily accessible on any devices used; add a list of midwifery/health visiting contacts and best times to get in touch
		Comparison of outcomes	Credible source	Involve supervisors in delivering instruction on how to perform the behaviour and explain the contents of the objects added to the environment

TDF Domain	Belief statement/theme	Behaviour change techniques taxonomy grouping	Behaviour change technique label	Strategy examples
Social influences	Having communication with each other	Social support	Social support (practical)	Supervisors to remind midwives/health visitors to liaise with each other, and provide detailed information or examples of when it is most important to do so
		Antecedents	Restructuring the social environment	Introduce structured midwife-health visitor meetings (either via videoconferencing or face-to-face) to establish links between the groups
		Goals and planning	Action planning	As above

6.5 Discussion

The present study identified the various challenges and opportunities concerning midwife-health visitor collaboration using the TDF. Specifically, it provided a comparative analysis of data derived from interviews with midwives and health visitors in order to present a comprehensive set of common barriers and enablers influencing interprofessional collaboration. All the theoretical domains were identified to be relevant, with the exception of the domain 'Skills'. Of these 12 domains, 'Memory, attention, and decision processes', 'Knowledge', and 'Social influences' were reported by midwives and health visitors as the most salient. Moreover, central to the findings described here is the importance of communication for both groups. It is unsurprising that communication was identified as a main influence to working collaboratively, as it has been identified in previous research (Clancy et al., 2013), and is central to theories of interprofessional collaboration (Axelsson & Axelsson, 2006). When communication fails or deteriorates, continuity of care is negatively impacted (Farquhar et al., 1998), and errors and negative health outcomes arise (Brock et al., 2013). Similarly, poor communication has been identified in this study as a barrier to midwife-health visitor collaboration, and was associated with delays in care for example (see sections 2.3.5.2.1, 4.2.3.3.8, and 5.2.3.3.3, Chapters 2, 0 and 5, respectively). The role of good communication between healthcare professionals is well-documented in various policies in the UK (Department of Health, 2009, 2010b), and was again recently highlighted in the National Maternity Review (2016). Yet, in the present study many midwives and the majority of health visitors reported experiencing limited contact with each other and thus having infrequent communication.

Close examination of the most salient belief statements for midwives and health visitors in this study suggests that these communication-related barriers and enablers have an influence on individual factors (e.g. decision-making, knowledge) as well as interpersonal factors (e.g. professional role, social influences). Interesting, novel aspects of the present study are the individual factors influencing midwife-health visitor collaboration. To date, theories of interprofessional collaboration have focussed on social psychology and learning theories (Suter et al., 2013). Yet, knowledge is a known antecedent of behaviour, and has previously been identified as

influential to health professional behaviours (Brock et al., 2013; Cane et al., 2012). Thus, the potential contribution of health psychology through behaviour change interventions to address the issues identified was explored in section 6.4.5. Whilst efforts have been made to address barriers and enablers at the interpersonal level using behaviour change techniques, it is also important to acknowledge that interprofessional collaboration is multifaceted and situated within a complex context. These influential contextual factors include professional cultures (Axelsson & Axelsson, 2006), current provisions (see sections 4.2.3.1.1 and 5.2.3.1.1, Chapters 0 and 5, respectively), and differences in funding or employment (Department of Health, 2011a). The *Healthy Child Programme* recommends that services are jointly commissioned where possible (Department of Health, 2009). Thus, any interventions developed to improve interprofessional collaboration could benefit from drawing from both health psychology theories as well as organisation and systems theories as specific intervention components will need to be adapted to the context in which they will be applied or implemented. Importantly, any interventions developed and implemented will require commitment and adoption of change from these wider spheres of influence such as professional organisations, policy-makers and commissioners (Grimshaw et al., 2004).

Furthermore, the findings from this comparative analysis share parallels with previous research based on the TDF (Islam et al., 2012; Mc Goldrick, Crawford, Brown, Groom, & Crowther, 2016) which compared the barriers and enablers for various health professionals. For example, the domains identified to be relevant in this study were also present in previous work. These domains include ‘Knowledge’, ‘Social/professional role and identity’, and ‘Social influences’, amongst others.

Besides the midwives’ and health visitors’ shared barriers and enablers, this study also presented the differences between the two groups (individually reported in detail in Chapters 0 and 5). Notable differences presented within this chapter were in relation to the key barrier, which for midwives was their work structure, and for health visitors, not having an established relationship with midwifery colleagues. In accordance with critical realism, individuals construct meanings around their experiences, and should be examined together with other dimensions which shape these experiences. Such differences imply that an intervention to enhance

interprofessional collaboration between midwives and health visitors will require tailoring, to address behaviour change needs unique to each profession beyond their shared needs, in line with recommended practice (Dombrowski et al., 2016; Hoffmann et al., 2014). A potential explanation for this difference is that midwives who participated in this study varied in their areas of practice, with some midwives providing universal services, and others specialist services (see section 4.2.1 Chapter 0), as well as service models (e.g. team midwifery, rotational midwifery). Whereas, all health visitors offer four levels of services which include universally provided services, plus programmes/services that are risk and need-based (Department of Health, 2009). With regard to health visitors' experiences of having no established relationship with midwives, possible reasons underlying this could be related to midwives' work structure, a lack of physical space to physically encounter each other (see section 5.2.3.3.7, Chapter 5), as well as the pervasiveness of silo culture as reported by both groups (sections 4.2.3.1.1 and 5.2.3.1.1, Chapters 0 and 5, respectively). Thus, these findings demonstrate that these organisational/structural variables and individual psychological variables are overlapping and interacting, thereby impacting on the experience of midwife-health visitor collaboration.

6.5.1 Strengths and limitations of the study

This study has a number of strengths. It is the first study to explore the barriers and/or enablers to interprofessional collaboration between midwives and health visitors using a psychologically grounded theoretical framework. The current evidence base has been identified as scarcely using theory to determine factors influential to interprofessional collaboration (see Chapter 2). The present study findings therefore supplement the wider interprofessional collaboration literature such that a comprehensive list of factors which influence midwives' and health visitors' ability to work together have been identified. This knowledge, therefore, can help to inform the selection of relevant theories for addressing areas that are deemed problematic, requiring change, and/or further support.

In addition, this study demonstrated the utility of the TDF in exploring in detail a complex behaviour enacted by various individuals, which is comparatively different to behaviours performed by health professionals in silo (Eccles et al., 2012).

Moreover, applying identical methods across study arms allowed for comparisons to be drawn, and similarities examined in detail in a systematic way (Islam et al., 2012). In addition, verification strategies, including applying a consensus approach to all of the belief statements identified resulted in in-depth assessment of the summarised data through constant dialogue. Importantly, using the TDF was a useful first step to intervention development, having allowed for the systematic identification of barriers and enablers to interprofessional collaboration using replicable methods (Atkins et al., 2017), as guided by a theoretical framework (Michie et al., 2005). In addition, this is one of the first studies that has applied a theoretical framework at all stages of the research process in order to elicit barriers and enablers to interprofessional collaboration between midwives and health visitors. However, there is a need to use the TDF in conjunction with known theories of interprofessional collaboration in order to better understand the influence of the wider environmental/organisational context on individual behaviours (Axelsson & Axelsson, 2006; D'Amour et al., 2005; Leutz, 1999).

The present study also has several limitations. First, the belief statements presented here may not represent other midwives' and/or health visitors' views, given that the sample was largely from London. Midwives and health visitors whose practices are based outside of London may have needs that are different to those who are based in London, and may encounter more or less barriers to collaborative working. This was apparent in some of the interviews that were conducted, where some midwives and health visitors reported having positive and strong collaborative relationships with their colleagues. As such, the present findings need to be explored in greater detail, particularly through larger-scale survey research, in order to determine the generalisability of the findings. However, given the qualitative nature of this study, the findings presented here are not intended to be representative of the population; rather, the study aimed to capture the diversity in midwives' and health visitors' experiences of working collaboratively. Further, using the TDF to guide the identification of barriers and enablers to interprofessional collaboration can be considered prescriptive (Horppu et al., 2017); however, despite using the TDF to guide topic guide development, there were still unanticipated findings that emerged from the analysis outside the target behaviour being explored. This indicates that using the TDF to shape the interview topic guide is not necessarily restrictive.

Furthermore, the sample was self-selecting; thereby introducing some bias to the data. The participants were engaged and insightful, and clearly interested in the topic area. It would be of interest to explore the reasons behind non-participation in future research. An additional strength of this study is the analytical method applied for deriving the themes. Belief statements (inclusive of subthemes) were discussed iteratively as a team, and this process was informed by expertise in health psychology as well as midwifery and health visiting. External evidence, specifically the systematic review (Chapter 2) also informed this analysis and revealed that barriers and enablers identified in past research such as the influence of organisations on the ability to collaborate with health visitors still perpetuate current midwife-health visitor collaborative relationships. Thus, the research team's combined knowledge of the research area as applied to the analysis of the data enhances the credibility of the findings.

The current findings suggest the successful enactment of interprofessional collaboration is influenced by individual, interpersonal, as well as organisational factors. In acknowledgement of this, a combination of documentary analysis using the systematic review findings (section 2.3, Chapter 2), and discussion with the research team (EO, FL, RB) informed the selection and specification of the target behaviour 'interprofessional collaboration'. Yet, barriers and enablers beyond the scope of the target behaviour still emerged (unexpectedly) in the data analysis, confirming that interprofessonal collaboration is complex.

The findings were derived from self-reports, and need to be explored on a larger scale to determine the representativeness and transferability of the findings. However, an additional strength of this study is the openness of the participants to share their perceptions and experiences of what might influence interprofessional collaboration with midwives. One study feature that might have encouraged this was that the interviewer (RA) was neither a midwife nor a health visitor, and this may have been seen as an opportunity to disclose personal experiences without prejudice; thereby reducing risk of social desirability bias.

Given the limited research on practice- and education-based interventions for improving interprofessional collaboration (Reeves et al., 2017, 2013), future research should investigate the content of currently available interventions including form of delivery (Dombrowski et al., 2016), and from this revise and retest interventions across different care contexts to determine the most effective ways of improving interprofessional collaboration.

6.6 Conclusion

This chapter compared and contrasted midwives' and health visitors' perceived barriers and enablers to interprofessional collaboration using the TDF. It found that the main barriers/enablers were related to communication; thus, potential solutions to address this issue were offered. In particular, solutions focussed on the targetable individual barriers and/or enablers using techniques drawn from the behaviour change taxonomy (Michie et al., 2013). Whilst the evidence presented here illustrates a range of barriers and/or enablers to midwife-health visitor collaboration, the relationships between these cannot be determined, and it is not known whether these perceived barriers and/or enablers do in fact influence behaviour. With this evidence, however, alternative models for understanding interprofessional collaboration were given. These are particularly useful as they expand understanding of individual behavioural influences on successful practice of interprofessional collaboration. Future research therefore, should focus on exploring these barriers and/or enablers on a larger scale, to understand the predictors of interprofessional collaboration as a complex behaviour, the relationships between the existing barriers and enablers, and to explore whether the barriers and/or enablers identified here are representative of the population.

7 Women's views and experiences of maternity care as delivered collaboratively by midwives and health visitors

7.1 Summary

"Being unable to tell your story is a living death, and sometimes a literal one. […] Stories save your life. And stories are your life. We are our stories; stories that can be both prison and the crowbar to break open the door of that prison." – Rebecca Solnit ("Silence and Powerlessness Go Hand in Hand", 2017)

The preceding three chapters concerned the barriers and enablers to midwife-health visitor collaboration, from both professionals' perspective. These chapters concluded that communication is central to collaborative working, and requires changes at both the individual and organisational level. To supplement these findings, the current chapter presents findings relating to a focus group study involving women who have had children in England in the last 18 months. It begins by detailing the rationale behind the study design and its objectives. Then, particulars of the study method are outlined. Findings from this study are then presented, and critically discussed in the context of this thesis. This chapter aims to offer an insight into service users' perspectives regarding interprofessional collaboration between midwives and health visitors, and how these views influence their maternity care experience.

7.2 Why women's views matter

Women are central to maternity services, yet, many of the choices surrounding their care have historically been directed by external factors including performance indicators, patient safety issues, and professionals' fear of litigation (Chalmers, 1991); thus, women's position in their care has been argued to be paradoxical in nature given the limitations of their capabilities to make choices or decisions about their care (see e.g. Green, 2012; Jomeen, 2012). Although much progress has been made in improving care during pregnancy and childbirth, maternal health remains a key issue associated with women's health (Bustreo, 2015). Women's voices have been a key influence in the pursuit of improving maternity services, as demonstrated in the National Maternity Review (2016), for example.

There is some evidence to suggest that collaborative maternity care models can have positive implications on care and health outcomes, particularly for women with vulnerabilities including mental health, smoking cessation needs (Schmied et al., 2010) and breastfeeding (Hoddinott et al., 2007). Conversely, poor interprofessional collaboration has been found to negatively affect women's maternity care experience and result in failures in care (Sandall et al., 2016). Yet, the involvement of women in the development of interprofessional collaboration models in maternity services has been scarce (e.g. Munro et al., 2013), despite their participation in their care.

Moreover, a project which involved groups of mothers to develop a research agenda for UK maternity care revealed that research concerning communication and information-giving in maternity remains a priority. For example, a suggested research question was "How can professionals' communication and information giving be improved?" (Cheyne, McCourt, & Semple, 2013, p. 708). Similarly, researchers have called for models of collaboration which involve women's input with a view of providing community-based maternity care that is appropriate and responsive to their needs (Phillippi, Holley, Schorn, Lauderdale, Roumie, & Bennett, 2016). Still, the problem of the limited inclusion of women's perspectives concerning interprofessional collaboration remains (Penny & Windsor, 2017). Sandall and colleagues (2016) have suggested that further research on women's experiences of care provision, particularly continuity of care models which include various health professionals working together, is needed. In addition, within this thesis it has been found that midwives and health visitors acknowledge women's knowledge and opinions of service delivery as essential to investigating the impact collaborative working (see sections 4.2.3.2.7 and 5.2.3.2.9, Chapters 0 and 5, respectively). It is, therefore, critical to consider women's experiences of collaborative care as provided by midwives and health visitors if we are to better understand their care needs and service delivery. Consequently, the aim of this study was to explore women's experiences of midwife-health visitor collaboration.

7.3 Design rationale

Focus groups are an accessible, flexible method for generating data on a selected topic (Barbour, 2008). A unique feature of focus groups includes the elicitation of views through group interaction (Morgan, 1997). Similar to other qualitative research methods, focus groups can be useful for understanding people's beliefs and experiences which are influential to their attitudes and behaviours (Rabiee, 2004). Also known as a group interview (Patton, 2015), a focus group typically involves a homogeneous group of people that can offer insight into a given topic (Morgan, 1997).

One of the key strengths of focus group interviews is the volume of data generated through group discussion and interactions. For example, views that might be more challenging to elicit in one-to-one interviews (e.g. a limited experience of collaborative care), can be further explored through sharing views and experiences, as well as asking questions and seeking clarification (Barbour, 2008; Morgan, 1997). Thus, there is an immediate opportunity to compare and contrast experiences (Morgan, 1997). In addition, focus groups allow for the involvement of service users in unravelling complex issues such as that of maternity care, where women's needs, expectations, and experiences may vary (Green, 2012; Soltani & Sandall, 2012). Such a method of exploration can therefore facilitate service user involvement in care planning, as has been done in other areas of health research (Rabiee, 2004).

7.3.1 Study aim and objectives

In keeping with the aim of this study, which is to explore women's experiences of midwife-health visitor collaboration, the following specific objectives are detailed as research questions below:

1. What are women's experiences of maternity care that is collaboratively delivered by midwives and health visitors?
2. How do women want information about them and their care to be acquired, communicated and shared?
3. How do women think their care can be best co-ordinated by these two groups?

7.4 Methods

7.4.1 Design.

This study employed a qualitative design. Specifically, focus group methods were applied to elicit women's views and experiences and midwife-health visitor collaboration. Focus groups encourage participants to articulate their views and clarify them in a less challenging setting than, for example, one-to-one interviews (Patton, 2015). In addition to the semi-structured focus group discussion, the study involved an exercise where women outlined, as a group, their ideal maternity care pathway. To facilitate discussion and idea generation, flipchart paper and markers were provided.

7.4.2 Setting.

7.4.2.1 Participants and eligibility criteria.

Study participants were women who have given birth in the last 18 months in England. Whilst engaging partners is also important to the development of maternity services, the study aim concerned collaborative maternity care as provided by midwives and health visitors and particularly women's experiences of this; hence, it was appropriate to focus on women only, being the direct recipients of this care. To be eligible to participate in this study, mothers needed to meet the following criteria:

- Be at least 18 years of age,
- Had a child in England in the last 18 months,
- Read and speak English, and
- Able and willing to provide informed consent, including the audio-recording of focus groups interviews.

7.4.2.2 Sampling.

Sample size was guided by known focus group recommendations. Three focus groups of up to six participants per group (minimum of 3-4; Barbour, 2008), were planned. Following the first two focus groups, observed patterns were used to provide an indication of the similarities and differences between the groups (that are of similar characteristics). It was planned that further groups would be conducted accordingly until data saturation was reached, taking into consideration the study

aims and any logistical restrictions. In all, three focus groups were conducted, with 12 participants overall.

A combination of purposive (maximum variation) and convenience (snowball technique) sampling methods was used (Patton, 2015). Purposive sampling is a valuable technique in focus groups to ensure that those involved have some shared characteristics (e.g. given birth in England) and at the same time, reflect diversity in opinions (Barbour, 2008). Equally, snowballing is useful for accessing hard-to-reach groups (e.g. Black and Minority Ethnic women, socially excluded groups).

7.4.2.3 Recruitment and data collection.

To ensure inclusivity and reflect diversity (Barbour, 2008), participant recruitment was approached in a number of ways: through face-to-face contact with women in Children's Centres, word of mouth, as well as social media (i.e. Twitter). Access to Children's Centres was achieved through directly liaising with Children's Centres managers, as detailed in 7.4.3 below. Using a range of recruitment methods allowed for wide dissemination of study information, and for a diverse group of women to be invited to the study. In line with previous recommendations, participants were over-recruited by 50%, to account for those who may not be available on the day of the focus group (Wilkinson, 2004). Recruitment materials included participant information sheets (Appendix O) and contact details of the research student and Principal Investigator (EO) to allow eligible participants to express interest and give them an opportunity to ask questions about the study.

The focus group interviews were guided by a specifically developed topic guide (Appendix P), which was informed by the studies involving midwives and health visitors (Chapters 0, 5, and 6). Broad topics that were explored in the focus groups included experiences of women's maternity care as provided by midwives and health visitors, opinions of the health visitor antenatal contact, and women's envisaged ideal maternity care pathway as collaboratively provided by midwives and health visitors. In addition, a specifically-designed demographic sheet was developed for this study (Appendix Q). Data collected included age, gender, number of

children, children's country/countries of birth, description of place of residence, and ethnicity.

7.4.3 Procedure

In all, 74 Children's Centres and other community-based groups in London and Essex, where the author is based, were approached by email with one follow up one week after the initial contact, in order to capture as wide a geographical area as reasonably possible, ensuring inclusivity. Of these, 10 centres responded (13.5%) to the email contact, with three agreeing to participate. Due to logistical constraints (e.g. Children's Centre closures, lack of availability of co-moderator), face-to-face recruitment was focussed on two Children's Centres in Hackney, London. Data collection took place in one of the two participating Children's Centres. These Children's Centres, despite being proximal and belonging to the same borough, had a diverse group of women attending. The London Borough of Hackney has an estimated population of 269,009 as of June 2017. The population of the borough is diverse. Over a third of the population identifies as White: English/Welsh/Scottish/Northern Irish/British; 16.2% as White: Other, and 11.4% as Black/African/Caribbean/Black British: African (London Borough of Hackney, 2017).

Following ethical approval from the Centre for Maternal and Child Health Research, School of Health Sciences (ref.: MCH/PR/PhD/17-18/01) in June 2017 (see Appendix R), recruitment commenced. Time was spent in baby groups in the two Children's Centres, where the study was informally introduced to mothers. Women who expressed interest in the focus group study were then provided with participant information sheets, and were later contacted to provide further details on the time, date, and location of the focus group interview. Those who were unable to attend on the suggested dates were later invited to another session to allow for as many of the women interested in the topic area to participate. Written informed consent was collected on the day of the focus group discussion. A demographic questionnaire outlined above (Appendix Q) was completed by the participants before the focus group discussion took place.

The author and a member of the research team (RB) who is an experienced qualitative researcher were present at the focus group discussions, with one acting as moderator (RA), and the other as assistant moderator (RB) responsible for note-taking and logistical organisation. Assistant moderators are valuable in conducting successful focus groups, observing the group dynamics and the discussion in the context of non-verbal behaviours (Rabiee, 2004). A neutral, quiet meeting room was used for the focus groups in a local Children's Centre in Hackney, London, England. To accommodate women's babies, baby bouncers and a soft play area was also set up. All focus groups were audio-recorded following written consent of all participants.

The focus group discussions started with introductions, and sharing of experiences of meeting midwives and health visitors. This was followed by a discussion of the broad topics outlined in section 7.4.2.3 (see Appendix P). Participants were asked to comment on the care that they received from midwives and health visitors, as well as share their opinions on these two health professionals working collaboratively. After this, participants undertook a group exercise where they drew out their ideal collaborative care model. The aim was not to reach consensus, rather, visualise the most important aspects of maternity care that needed to be done collaboratively by midwives and health visitors. This exercise also aimed to gather practical ideas for improving maternity care more broadly from women as the recipients of this care. This activity was followed by an opportunity to share any other related concerns, experiences, or opinions regarding midwife-health visitor collaboration, and to ask the members of the research team any questions. Finally, participants were thanked for their participation in the research study. Each participant was offered a £10 voucher as a token of appreciation.

7.4.4 Analysis

All focus group interviews were audio-recorded. These were transcribed by an external agency, and checked by the author for accuracy. Thematic analysis was applied to the data corpus in order to identify repeated patterns (i.e. themes) within the data, following several phases of analysis (Braun & Clarke, 2006; Fereday & Muir-Cochrane, 2006). In particular, a combination of inductive and deductive

thematic analysis was used (Fereday & Muir-Cochrane, 2006), in order to allow for themes to be guided by the data as well as informed by critical realism, the theory underpinning this thesis (see section 1.2.3, Chapter 1).

First, data analysis involved the familiarisation phase which included reading and rereading of transcripts. This was followed by the generation of initial codes, using the software QSR NVivo 11.4.1 (QSR International, 2016), allowing for the identification of noteworthy topics. Third, the author organised the codes into themes and subthemes. This phase of the analysis was an iterative process and involved exploring the relationships between the themes and subthemes. The themes derived from the analysis were verified by a member of the research team (RB) through assessing the codes within the themes. Finally, a member of the research team (EO) read through the themes agreed upon by the two coders (RA, RB) and made recommendations regarding the final set of themes.

With regard to the data obtained from the group exercise, women's descriptions of their ideal maternity care pathway were summarised from i.e. notes on flipcharts (see Figure 7.1, Figure 7.2, and Figure 7.3) and were compared and contrasted.

7.5 Results

This section outlines the themes and subthemes drawn from three focus groups conducted between July and August 2017. First, the sample characteristics are detailed in order to contextualise the findings provided here. Then, each of the themes and their respective subthemes are explained narratively, accompanied by quotations from the focus group discussions. Finally, the data gathered from the group exercise which outlines women's suggestions for improving their maternity care will be presented.

7.5.1 Sample characteristics.

Of the 22 women who expressed interest in the study by providing their contact details, 12 women participated (54.5%) across three focus groups. One woman who expressed interested dropped out of the study due to ill health; one

preferred to take her baby to the baby group which took place at the same time as the focus group; and the rest of those who expressed interest in the study did not provide reasons for non-participation. Participants were on average 35 years (range 30-44 years). At the time of participation, all the mothers had had their babies in London, and were also residents in the borough in which the study was conducted. Nine of the 12 mothers were first time mothers, with their youngest children being of varying ages. Only one participant had given birth in both the UK and another country outside of the UK. A summary of participant characteristics is provided in Table 7.1.

Table 7.1. Participant characteristics.

Age range (mean)	30-44 years (34.67 years)
Ethnicity	
White English/British	3
White Other (German, Swedish, Spanish, South African)	5
Asian/Asian Other	2
Mixed (White and Black African/French; White and Black Caribbean)	2
Range of number of children (mean)	1-2 children (1.25 children)
Age range of youngest child (mean)	1.75-8 months (5.06 months)

7.5.2 Themes and sub-themes.

Five themes were derived from the data analysis phase, which related to the research questions set out in this study. Each of these, and their respective subthemes will be discussed in succession. A summary of these themes and subthemes is presented in Table 7.2.

Table 7.2. Summary of themes and subthemes.

Research question	Theme	Subtheme
What are women's experiences of maternity care that is collaboratively delivered by midwives and health visitors? How do women want information about them and their care to be acquired, communicated and shared?	Care coordination	Joint midwife-health visitor activity
		Having one point of contact
		Co-location
		Communication amongst healthcare professionals
	Continuity	Lack of continuity of carer
		Need for continuity of information
	Consistency	Professional differences resulting in inconsistent/limited information
		Getting information online
		Information to be shared
		Need for clarity and consistency in services provided
How do women think their care can be best co-ordinated by these two groups?	How to tailor the service or care Women's ideal maternity care pathway	Conception/pregnancy
		Labour/birth
		Postpartum care

7.5.2.1 Theme 1: Care coordination.

This theme summarises participants' views of how care should be co-ordinated, and their experiences of how health professionals (including midwives and health visitors) communicated about their pregnancy or care. This theme is comprised of four subthemes, namely, 'Joint midwife-health visitor activity', 'Having one point of contact', 'Co-location', and 'Communication amongst healthcare professionals', each of which will be discussed sequentially.

The first subtheme 'Joint midwife-health visitor activity' summarises women's recommendations regarding joint midwife-health visitor activities, which could include joint appointments/visits, antenatal group classes and joint training. Women outlined how joint appointments/visits could be an opportunity to do a handover of care: *"So maybe it would be helpful if they have a last midwife appointment, the health visitor would be there then to do a handover." (Focus group 2, P7)*. In addition, women suggested antenatal group classes as a fitting activity for learning about pregnancy and parenting with other parents-to-be from midwives and health visitors:

> *Focus group 1, P2: Even if they [midwives and health visitors] did a group session within the area, so you, it's a chance to meet other mums going through the same thing before giving birth.*
> *[…]*
> *P4: Yeah, that's true because things like what immunisations they need could be said.*
> *P2: Yeah. And that gives a chance for mums to share any concerns and stuff at the same time and they're all at the same stage of their pregnancy, so that's nice.*

Furthermore, women considered the frequency of joint activities, as well as the appropriate time to be offering such jointly delivered care, as described by one participant:

> *Focus group 3, P11: So I think beforehand, especially if we have to go to those midwife appointments anyway, it would be great to see a health visitor as well at the same time or maybe afterwards or so, but I don't know how your midwife visits were but I think in mine, with my midwife there would have been plenty of time to talk to a health visitor.*

The second subtheme 'Having one point of contact' relates to the women's recommendation of having a specific person to attend to their (at times immediate) concerns: *"But you're more talking about how they could better communicate. I guess having one point of contact, because even with midwives, I don't know if with you guys I don't think I ever saw the same midwife twice" (Focus group 1, P1).*

The third subtheme 'Co-location' summarises women's reflections on the importance of health professionals being co-located. Women reported that co-location can be beneficial, but at the same time, recognised that co-location does not automatically lead to collaborative working amongst health professionals, as outlined by one participant:

> *Focus group 2, P5: I think it's hard to work together unless you're in the same location I think, because I think about my work in the hospital and there's other nurses in other fields and if we have a mutual patient, because we're in the same open plan office we can discuss, we can discuss you know, mutual patients. I think if, I don't know, I just think if they wanted to work together more I suppose they would be in quite a, maybe the same offices or they could be a bit more, I don't know, that's what I think.*

Finally, the subtheme 'Communication amongst healthcare professionals', relates to women's perceptions of communication between health care professionals, specifically their observations of communication amongst hospital midwives, between health visitors and GPs, and between midwives and health visitors. One

woman shared her experience of getting a sense that midwives in hospital were communicating: *"So, I think midwives between midwives I get the feeling that they did talk" (Focus group 2, P7)*; however, another woman shared that the communication between these midwives appeared to be poor: *"Are you talking about the midwives because it's the midwives at the hospital and the other one that visits you at home, talking about? […] Because that's, not good at the hospital" (Focus group 2, P6)*.

A number of women in one focus group also reported experiences of health visitors communicating with GPs, as described here:

> *Focus group 2, P10: […] my GP phoned me up, my doctor phoned me to see how I was after coming out of hospital, because we were both in there. So, I was also a patient and so I explained to her and then I got the feeling that she had also spoken to the health visitor, who then when she phoned to book an appointment with us or ask which day would be good for us for her to come we spoke a bit on the phone. So, when she came to the house I got the feeling that she had already, you know, we had already discussed some, I had already told her I spoke to the doctor about it.*

With regard to midwife-health visitor communication, women reported that the communication between these health professionals appeared to take place largely via their Red Book[4] or notes, and described the evident fragmentation between them:

> *Focus group 1, P3: Mine were definitely completely fragmented, because on the days that one of the, but perhaps that was to do with the miscommunication initially with the addresses, but I would get a call from the health visitor on the day the midwife was coming, saying she was coming and I'd have to say no, I've already seen the midwife today, so there was definitely no communication between the teams in my experience.*

[4] Red books, or Personal Child Health Records are standardised records of a child's development provided to parents (Royal College of Paediatrics and Child Health, 2017).

In addition, participants reported that their midwives relayed information regarding health visitors and health visitor visits. Women reported that although they did not feel midwives and health visitors communicated, they had experience of midwives being aware that health visitors were responsible for seeing the women at home after the birth, as explained here: *"No, no, but the midwives did check if the health visitor was coming, so yeah, so I think there was some connection, but yeah that's it really" (Focus group 1, P1).*

7.5.2.2 Theme 2: Continuity.

Women in this study reported valuing continuity of care and of carer. This theme is organised into two subthemes. The first subtheme 'Lack of continuity of carer' describes women's experiences of seeing various health professionals throughout their pregnancy and after the birth. Women acknowledged that although it would be ideal to have a single health professional providing care (i.e. one named midwife and one named health visitor), it might not be feasible to be seen by the same health professional throughout their maternity care experience:

> *Focus group 2, P7: I think that the ideal scenario would be to have one assigned midwife and one assigned health visitor and I think then it would be a possible for them to maybe talk.*
> *P5: Yeah, because then you know who you're talking, you've got one that, you know you can talk to.*

Moreover, some women also reported that the lack of continuity of carer can result in variations in the level and quality of care that women receive: *"Of course, you get all these different opinions, if it's coming from a person you know that has a face, that has a name that you trust" (Focus group 3, P9).*

The second subtheme 'Need for continuity of information', therefore, summarises women's views about the importance of continuity of information as a means of providing continuity of care. Across all groups, women agreed it was important that midwives and health visitors were aware of their health status and medical information, as this would prevent unnecessarily repeating their

issues/needs. For example, women shared their experiences of how current records are handled and kept:

> *Focus group 1, P1: It's that point you made about the information, I don't know if this is just [Hospital] but I did find it really bizarre that you were carrying your file around, did you have to?*
> *P2: Yeah, the big blue.*
> *P3: Yeah, yeah.*
> *P1: Yeah, and I, it's just, the, it, I wasn't quite sure what happens if you lost it or, and I suspect --*
> *P3: Or god forbid, you forget it.*
> *P1: Yeah. And I just, and I suspect in terms of the health visitors and midwives working together there might be a privacy issue, but if, I guess if was electronic and kept centrally then health visitors would know your history before getting there, and similarly the midwives would have access to it. I mean it work, it did, it clearly works but I did find, I did find it slightly stressful*

As such, women suggested a centralised file that health professionals could access in order to provide adequate, individualised support and advice:

> *Focus group 3, P9: […] if there could be something, like I said tongue tie it is in their system, I know it's categorising and listing again, but if we make it a bit more focussed and individualised rather than give you general knowledge, then perhaps that is something that midwives and health visitors could easily share.*

One participant shared her positive experience of maternity care where she met with various health professionals who had shared access to her information:

> *Focus group 1, P4: OK. Yeah, I don't know, I think I, I don't think that [continuity of carer] was that important to me, I just felt like everyone who I was in contact with, especially because this is my second child and the first one was with [Borough] and there were lots and lots of problems, whereas when we moved up the road and our postcode was [Borough] and we moved*

to the [GP practice], I found actually everyone was really, just really professional and helpful and nice and I didn't mind that there were different people a lot of the time, if you see what I mean. Because I felt like they all had read my notes and were quite, knew what they were doing and, yeah, I didn't really find that, and that they were different, it being a problem.

7.5.2.3 Theme 3: Consistency.

This theme relates to women's experiences of consistency (or lack thereof) in the maternity care that they received, with particular reference to variations in the advice and services that were given. The participant sample also offered their recommendations to improve consistency in care. There are four subthemes in this theme. First, 'Professional differences resulting in inconsistent/limited information' relates to women's reports that midwives and health visitors have apparent differences in terms of the advice that they provide. One of the participants shared how advice differed:

"they [midwives and health visitors] all came to my house on the same day, after they got back they must have talked and I asked them one question about what kind of, if, what oil to put on the baby because she was quite bad and they couldn't agree. So they then had a disagreement about what the midwife was recommend this and the health visitor would recommend this, and they kind of knew that they would give different recommendations but, so they were talking amongst themselves and then I was like, oh I'll just ask someone else" (Focus group 3, P10).

In addition, women reported receiving inconsistent information from midwives and health visitors, and expressed concerns regarding this. For instance, one mother shared the challenges of getting appropriate support regarding tongue tie:

Focus group 3, P12: […] I feel like they might have more information about tongue-ties, or they have to spot them, because we were told he didn't have a tongue tied and he'd had a really bad one. So, and then it took us ages to get a referral to [Hospital] to have that sorted out. So, it delayed everything, like,

it was hit and miss. So, I just think that they should […] possibly, have more valid information for actual problems.

As a result of the inconsistencies in information and advice that women reported receiving, several of them resorted to 'Getting information online' (second subtheme), which they explained can be a minefield and problematic:

Focus group 3, P9: For sure. I had this experience that during the first couple of weeks there were two evenings that my daughter cried like crazy, like crazy, so then I thought that it was one of these colicky situations and I was like my first problem, question that you are not going to call the doctor, because your baby's crying for the whole, well you start researching and googling –

P12: Yeah.

P9: Which it is quite problematic I find, but I do it all the time

The third subtheme 'Information to be shared' pertains to women's views of the information that is appropriate to share between midwives and health visitors. Women who participated in this study were confident that health professionals involved in their care would have the professionalism to share information about women/families that was appropriate and/or relevant to their welfare. At the same time, some acknowledged that this could be more challenging for women who may present vulnerabilities. Reflecting on personal experiences, however, the majority were comfortable with the idea of their information being shared between midwives and health visitors: *"I would have no problem with them knowing the full facts both the midwives and the health visitor. There's nothing I can think of that I wouldn't want the health visitor to know that" (Focus group 1, P3)*.

Finally, the subtheme 'Need for clarity and consistency in services provided' summarises women's views regarding their experiences of inconsistency in service delivery. For example, two women in one of the three focus groups – Focus group 3 – who did not know each other prior to participating in the study and attended the

same GP surgery found out through their discussion that one of them received a universally-provided service that the other did not:

RA: So only [P10] has met her health visitor during pregnancy, and what do you think about that, do you think it would have been helpful to meet them?
P12: Yeah, definitely. Because I actually think we go to the same doctors' surgery because I've seen you there before, but I don't know why that you would've met them and I haven't met them.

P10: Yeah

P12: I don't know what is that, that's not very consistent.

The study participants highlighted the importance of services that are consistently delivered, regardless of where women are based, where women are offered the care they are entitled to, individualised to their specific needs, by professionals who are competent and confident in their knowledge of the service as exemplified below:

Focus group 2, P8: Yeah. I also experienced a sort of bureaucratic muddle, with which midwife I should have and what zone I was in, and I had this consistent midwife, prenatally, and I really liked her for lots of reasons, it was going really well. And then postnatally they looked at my postcode and my postcode's [Postcode], which is a [Borough] postcode but actually I'm a [Borough] resident but I'm on the border. And the nurse in the hospital looked at that and didn't know what zone to put me in, but basically she put me in a different zone, which meant that I got all these different midwives postnatally. And my midwife that I had when I was pregnant came into special care to visit somebody else and she asked me why she wasn't my midwife anymore.

7.5.2.4 Theme 4: How to tailor the service or care.

This theme includes all of participants' various suggestions regarding specific care areas needing attention. As detailed in the previous themes, women expressed concerns regarding the inconsistent information they received and suggested that centralised records accessible to midwives and health visitors could be useful. All participants agreed it was important for midwives and health visitors to be aware of the women's health status and relevant medical information, to counter unnecessarily narrating their issues/needs repeatedly. This aligns with women's suggestions on how maternity care should be co-ordinated; in particular, through midwife-health visitor led antenatal group classes, and joint midwife-health visitor appointments. They considered group classes apt for learning about pregnancy and parenting from midwives and health visitors, along with other parents-to-be:

> *Focus group 1, P2: Even if they [midwives and health visitors] did a group session within the area, so you, it's a chance to meet other mums going through the same thing before giving birth.*
> *[…]*
> *P4: Yeah, that's true because things like what immunisations they need could be said.*
> *P2: Yeah. And that gives a chance for mums to share any concerns and stuff at the same time and they're all at the same stage of their pregnancy, so that's nice.*

Participants acknowledged that there could be greater clarity around the health visitor's role in order to maximise women's engagement with them. This was especially important for women who were immigrants to the UK and had not had children previously in the UK. Women expressed interest in learning about what health visitors can offer, and midwives could help to facilitate this: *"[…] for me it would have been nice to meet them during their [midwives'] session, and have them deliver something for 20 minutes or maybe on their role, what they do, da, da, da, da, that might be quite nice (Focus group 2, P5)"*. Relatedly, joint appointments/visits could enable handover of care particularly in the postnatal period: *"So maybe it would be helpful if they have a last midwife appointment, the health visitor would be there then to do a handover." (Focus group 2, P7)*.

In addition, women described Children's Centres as potentially useful venues for meeting midwives and health visitors, along with other parents and/or parents-to-be, to do group activities and seek support and/or expert advice (Focus group 1):

RA: Just thinking about that [midwife-health visitor antenatal groups] a little bit more, where might be a good place to do that?

P4: Maybe somewhere like this because then people get used to coming before.

P1: Yes, actually being introduced to the children's centre, I think lots of mums don't actually get automatically told about children's centres and playgroups and things like that, and actually it can be a real life saver in those first few weeks.

P4: They don't know how nice it's going to be and what it's going to be like. […] They just think it's something you might go to, if you're really struggling or something, whereas actually there's so much that everyone can use.

Children's centres were also seen as a place where women could have group activities with midwives and health visitors to seek support and expert advice.

7.5.2.5 Theme 5: Women's ideal maternity care pathway.

The final theme 'Women's ideal maternity care pathway' outlines the participant sample's suggestions for improving their care from conception until the postpartum period. This theme is comprised of three subthemes: 'Conception/pregnancy', 'Labour/birth', and finally, 'Postpartum care', each of which will be summarised sequentially. This data is drawn from the group exercise as outlined in section 7.4.1 and is pictorially represented in Figure 7.1, Figure 7.2, and Figure 7.3 below.

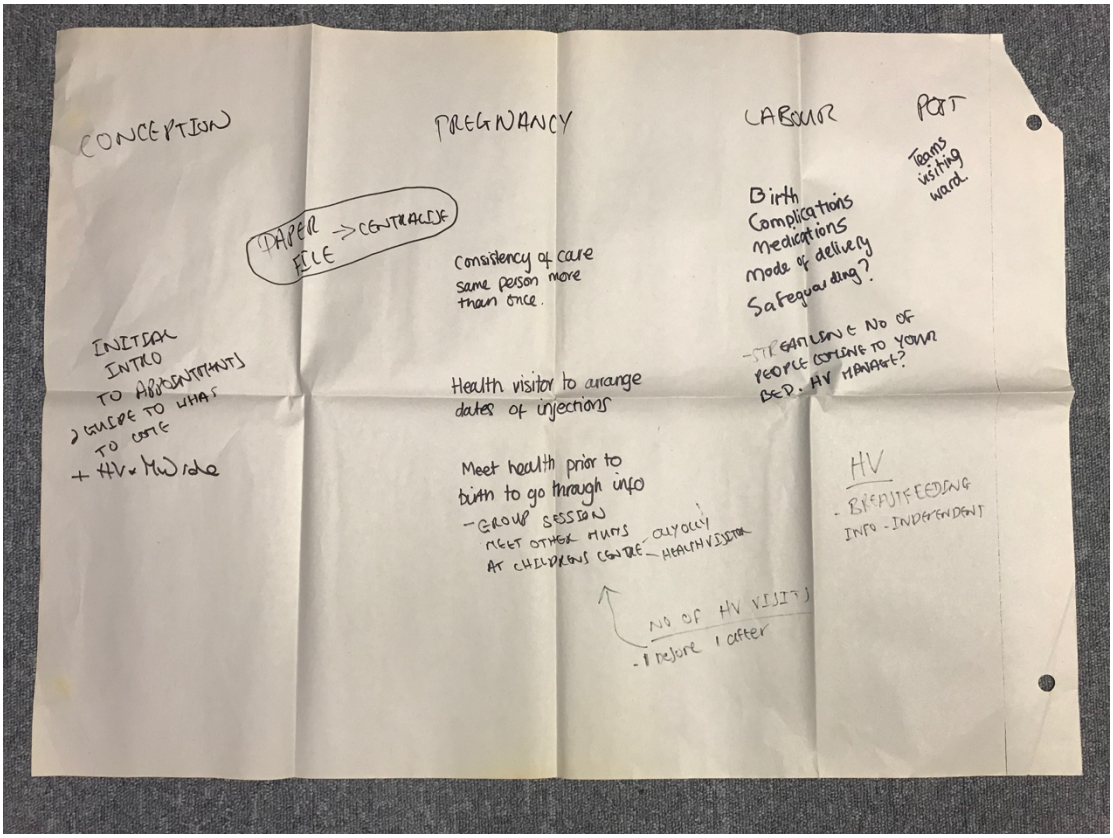

Figure 7.1. Focus group 1's group exercise notes outlining their ideal maternity care pathway

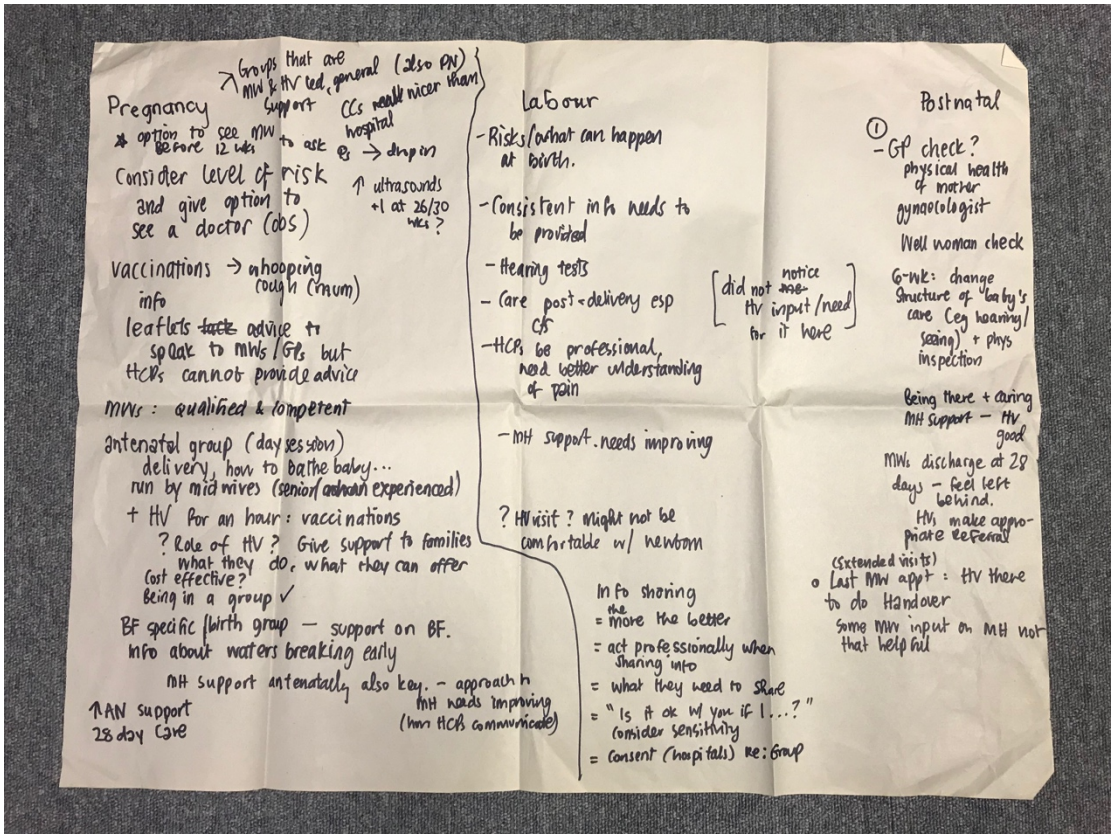

Figure 7.2. Focus group 2 group exercise notes outlining ideal maternity care pathway

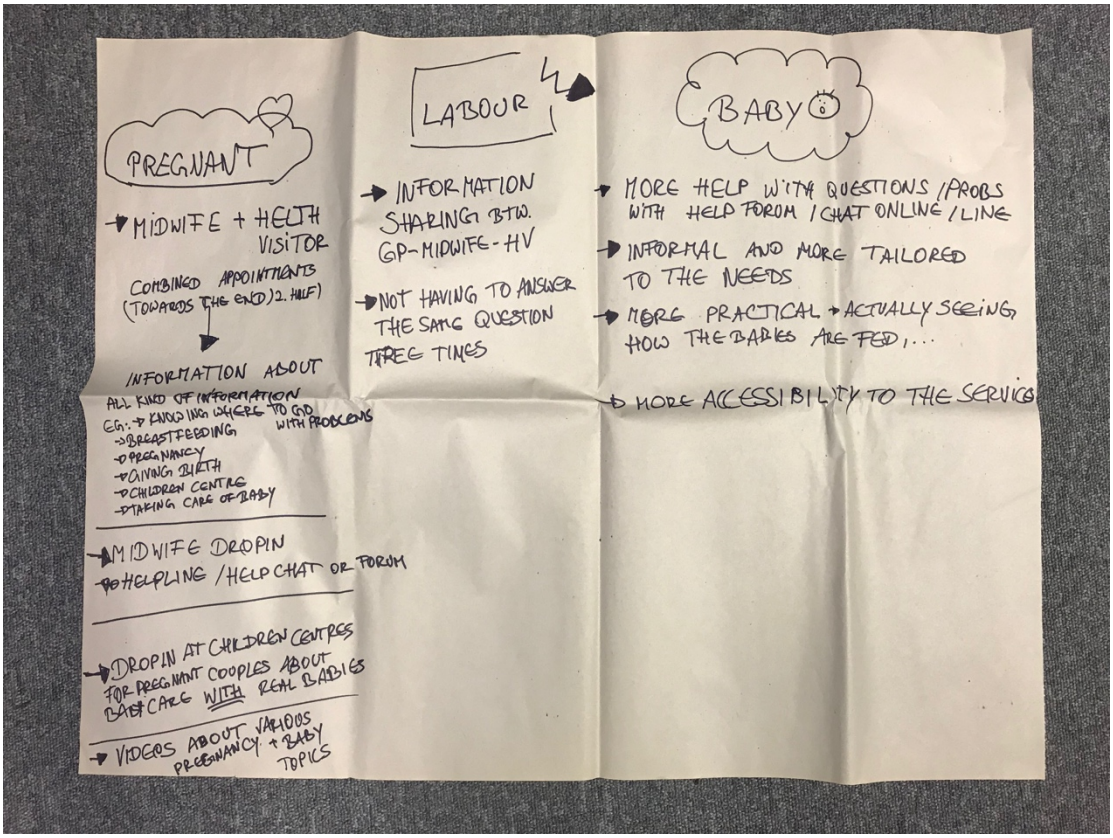

Figure 7.3. Focus group 3 exercise notes outlining ideal maternity care pathway

In addition, Table 7.3 summarises the common suggestions made by women across the three focus groups.

Table 7.3. Aggregated suggestions for improving the maternity care pathway focussing on collaboration between midwife and health visitor.

Conception/pregnancy	**Labour/birth**	**Postnatal**

• Midwife-health visitor combined session/appointment
  o Content: Introduction session, guidance regarding what is to come, opportunity to ask questions
  o Format: Group or combined midwife-health visitor appointment
  o Where: Group sessions can be at Children's Centres
  o When: Towards end/second half of pregnancy
	• Information sharing between health professionals (e.g. GPs, midwives and health visitors)
	  o Ensure that information shared is consistent or accurate
	  o Obtain consent in a respectful way
		• Increased postnatal support
		  o Make appropriate referrals
		  o Increase mental health, and breastfeeding support

7.5.2.6 Conception/pregnancy.

In the antenatal period, there was consensus across the groups that a midwife- and health visitor-led group introduction session would be beneficial. Some women also suggested that other health professionals could lead this session, provided that they are knowledgeable about maternity care. Regarding this session's content, women wanted to gain clarity on their maternity care pathway including the appointments they would be invited to, the health professionals leading each of these, and these professionals' respective remits as discussed here:

> *Focus group 1, P3: I think what would have, because you're kind of, you just get, oh your next appointment's in here, go and book it at the desk. It would be nice if initially you could sit down with somebody and they would talk you through perhaps the appointments, what you was going to have, the role of the midwife, the role of the health visitor, rather than you're seeing this person, you don't, you're not very clear, there's not much clarity in terms of the care you're going to get; the appointments you're going to.*
>
> *Focus group 2, P5: Yeah, I didn't really know what they do really.*
>
> *P7: I thought this was a general check that they do and I could imagine that for, they're also maybe checking for everyone so that they can catch on families where things are difficult, but they are there to help, maybe. I thought that was part of their role, just to make, inform a little bit about, there's a pathway of vaccinations to some general bits, but also to check if the baby is fine, where maybe families are difficult, that's what I sort of thought was their role as well, just to check on everyone but if there's some trouble that they could pick it up and help.*
>
> *P5: So, it would have been nice to have, I, for me it would have been nice to meet them during their session, and have them deliver something for 20 minutes or maybe on their role, what they do, da, da, da, da, that might be quite nice. And probably more cost effective than having them, an individual session like in your antenatal clinic, you don't need an individual, unless you*

request that. They could say if you'd like to see us one to one, like an open door thing you might be somebody who might want to see them.

Women were particularly keen on a group setting, as many saw the benefits of being able to meet other parents-to-be, and hearing about questions or concerns other than their own. It was suggested that these sessions be run towards the end of pregnancy or at some point in the second half of the pregnancy, to give women a chance to reflect on the information imparted on them, as explained here:

Focus group 1, P4: I think so, but maybe not too early on, because, I don't know about everyone else but when I was first pregnant especially I was just so wrapped up in the pregnancy I found it really hard to imagine actually having a baby and it felt faraway still, so maybe towards the end of the pregnancy when you're like, OK, I do actually have to look beyond.

P1: And also I think towards the end of your pregnancy, you, like you were saying, you had a bit more time, some, not everyone, but some people have, will have a bit of, will stop work a bit before the baby's due, and actually I think it would be quite nice if they did do a session in the children's centre.

An introductory session, therefore, can guide parents-to-be about what is to come and can be less labour intensive for midwives and health visitors. Furthermore, many women in this study expressed their desire for drop-in sessions with midwives, to give further opportunities to ask questions and seek clarification about the information they had received. Finally, some women also suggested that centralised medical records, accessible to all relevant healthcare professionals, increased doctor or specialist input, as well as increased ultrasounds might help to reassure women about their pregnancy (see section 7.5.2.2).

7.5.2.7 Labour/birth.

There was consensus across the groups that information regarding their birth, and other relevant information (e.g. safeguarding issues) needed to be shared by health professionals. Women reported that it was important to share such information

but, when shared, it must be done accurately and in a professional manner as discussed by two groups:

> *Focus group 1, P1: I'm the same, I don't, I can't, I'm not particularly sensitive about the information, but I guess actually, partly, um, I think it's safe to assume none of us had safeguarding issues, I wonder if I was a mum who was a bit more in the system, whether I'd feel a bit more guarded about everything being shared.*
>
> *P4: Yeah.*
>
> *P3: That's true.*
>
> *P1: Because I know, and you do hear, yeah, anyway, I won't go into tabloid stories now, but yeah, just I think, but I do, personally, I'm happy with that information being shared between health visitor and midwife, I think it's quite helpful and I think it's, if the health visitor knows that you've had a C section, you've had a particularly traumatic birth, then they can be a bit more sensitive, I think that's quite useful.*
>
> *Focus group 2, P6: That's the professional, because this is where you don't know where is gossiping, where is the information sharing --*
>
> *P7: Yeah, professional.*
>
> *P6: Yeah, yeah.*
>
> *P7: Yeah, that's true. But I think if they're professional, they should be professional and so they shouldn't be gossiping about people right?*

Besides midwives and health visitors sharing information, women also identified GPs as needing to be informed about women's birth (e.g. complications, changes to birth plan). Importantly, in one group, it was raised that health

professionals need to obtain women's consent to share information in a respectful way as explained by one participant:

> *Focus group 2, P5: I think they should be free to share what they need to share, that's what they need to share. I think any good practitioner would actually say to you, is it OK if I, I need to talk about the depression or whatever with so and so, is that OK with you? Although they kind of need to, it's polite to kind of just talk to you about it as well, if it's something very sensitive.*

7.5.2.8 Postpartum care.

Regarding the postnatal period, women's suggestions included having informal discussions with healthcare professionals (see section 7.5.2.4) and having adequate breastfeeding and mental health support, as described by one group of women:

> *Focus group 2, P7: I think what could be quite useful is if there was groups in general, maybe led by midwives or health visitors, during pregnancy, and afterwards for mums to just go to, so not just for breastfeeding, but say, you know you're not feeling well afterwards.*
>
> *P6: Yeah*
>
> *P7: I mean, you meet here for example, which is really nice.*
>
> *P5: Like a support group almost.*

7.6 Discussion

This study explored, using focus group methods, women's experiences of midwife-health visitor collaboration, as well as their ideal maternity care pathway, with a particular focus on care coordination and information sharing between midwives and health visitors. The study has three key findings in relation to the three research questions outlined in section 7.3.1, each of which will be discussed sequentially.

First, with regard to women's experiences of collaborative working between midwives and health visitors, the findings showed that women valued their relationships with their midwives, health visitors, and other healthcare professionals involved in their care. The women who participated in this study reported positive experiences such as meeting midwives and health visitors who were supportive and actively listened to their needs. These positive relationships were associated with midwives' and health visitors' manner of providing care (e.g. having confidence, showing interest in mother and baby), as well as their level of experience. These findings reflect previous research (e.g. Care Quality Commission, 2013; Raine, Cartwright, Richens, Mahamed, & Smith, 2010). For example, a national survey of women's maternity care in the UK (N= >4,500) found that over 75% of the respondents had positive care experiences (Redshaw & Henderson, 2014).

Although women shared experiences of positive aspects of maternity care, they also conveyed a desire for relationships between them and their health professionals to improve as they reflected on their negative experiences. Women noted that service fragmentation was apparent, as evidenced by limited communication between midwives, health visitors, and GPs, lack of tailored or individualised care, and lack of continuity, as well as inconsistencies in the routine care that women received. However, they also acknowledged that their needs differed from each other, which could partially explain these variations in care. Still, the participant sample emphasised the importance of continuity of information – where accurate information is shared between professionals to guide care provision (Sandall et al., 2016) – in providing high-quality care, as has been stressed by other women in prior research (Jenkins et al., 2015). Furthermore, in line with the systematic review (see section 2.3.5.2, Chapter 2), this key finding affirms the identified factors which negatively influence midwife-health visitor collaboration, specifically poor communication, and inadequacies in information shared between professionals. Finally, these communication challenges have also been identified in the TDF-based studies presented in Chapters 0, 5, and 6.

Concerning the second research question on how information about women and their care should be acquired, communicated and shared by health professionals, it was found that women were confident in health professionals' ability to share

information in an appropriate manner. More importantly, women stressed that obtaining their consent for health professionals to share information with each other needs to be done in a respectful way. This finding reflects one of the recommendations in Sandall and colleagues' (2016) report which aimed to extend understanding of how best to apply continuity models of care, whereby the process of obtaining informed consent for information sharing should be rooted in dialogue with women.

Finally, it was found in this study that women had numerous suggestions on how to improve current maternity care provisions, with a particular focus on interprofessional collaboration. These included service changes, most notably an increased offering of group-based antenatal care collaboratively delivered by midwives and health visitors within community-based services. Existing maternity care pathways set out in line with policy such as the *Healthy Child Programme* (Department of Health, 2009) recommend group-based antenatal classes in order to increase social support. Accordingly, women in this study considered such classes as a valuable resource, and a channel through which they could obtain social support. However, there is evidence to show that although antenatal education classes are currently on offer to all pregnant women, these classes are more commonly offered to first-time mothers (Redshaw & Henderson, 2014). It is recommended that these antenatal classes are delivered in community or healthcare settings (Department of Health, 2009). There is evidence to suggest that health visitor involvement in antenatal classes is lacking (Donetto et al., 2013). Thus, the classes that are available do not meet these women's suggestion of classes jointly provided by midwives and health visitors and needs to be considered. Given that majority of the participant sample are first-time mothers, their recommendation that group-based antenatal classes need to be increased indicates limited provisions in a populated area of London, and needs to be revisited by service commissioners in the context of the wider community. Successful collaborative working in maternal health have been characterised by the provision of opportunities for health professionals to interact with each other and have shared activities (D'Amour et al., 2004), which was also reported to be influential by midwives and health visitors as seen in sections 4.2.3.2.5 and 5.2.3.2.7, of Chapters 0 and 5, respectively. Taken together, the

evidence highlights the potential value of group antenatal classes for women, midwives, and health visitors alike.

Other areas which the participant sample reported to be needing improvement were mental health and breastfeeding support. Mental health and breastfeeding are both identified as part of the core requirements of the *Healthy Child Programme* (Department of Health, 2009). Evidence drawn from Redshaw and Henderson's (2014) research showed that the majority of the women they surveyed (N= >4,500, 82%) reported having been asked about their mental health, mostly by midwives, in pregnancy. Similarly, 90% of those surveyed were asked about their mental health postnatally, with 63% of these women reported having received support (Redshaw & Henderson, 2014). It was not clear, however, which health professionals were involved in offering postnatal mental health support. With regard to breastfeeding, although at least 40% of the participant sample reported having received consistent advice as well as practical support, a significant number of women (17.9%) still reported receiving conflicting advice from health professionals (Redshaw & Henderson, 2014). It has been shown that group-based breastfeeding support interventions provided jointly by midwives and health visitors can improve breastfeeding, particularly when relationships between these healthcare professionals are strong (Hoddinott et al., 2007). In addition, a potential explanation for the study participants' desire for increased breastfeeding and mental health support is the nature of their personal circumstances; for example, a number of women have limited proximal familial/social support. Thus, this finding needs to be interpreted with caution, but may also suggest a need to explore service provision in the study area.

Finally, women suggested that their care pathway could be made clearer to them. This is in line with previous research, where women have stressed the value of being better informed about what they could expect from perinatal care; for instance, the number of appointments and the purpose of each of these has been found, in a study exploring women's experiences of communication in antenatal care, to be unclear to women, the recipients of that care (Raine et al., 2010). Generally, it is known that communication is paramount to high-quality maternity care, both from women's/families' and health professionals' perspectives (National Maternity

Review, 2016). Communication was also reported as playing a pivotal role in enabling midwife-health visitor interprofessional collaboration (see sections 2.3.5.1.1, 4.2.3.2.5, and 5.2.3.2.7, Chapters 2, 0, and 5), and identified by women as a key issue in maternal and child health (Cheyne et al., 2013).

7.6.1 Strengths and limitations of the study.

A number of strengths and limitations are associated with this study. Its key strength lies in the way in which women's views on interprofessional collaboration were elicited – through semi-structured interview questions but also women-led, open discussion around the group task to develop their ideal maternity care pathway. The focus group format allowed women to explore their experiences together, and comment on other women's views and experiences (which may share parallels or differ entirely to theirs). The diversity of the views obtained from women of varying experiences is a further strength of this study. In addition, as is recommended in focus group interview guidance literature (Morgan, 1997), the groups maintained a level of homogeneity in that they were all based in the same geographical area, with some women attending the same GP surgery. Furthermore, the participants were similar in terms of the number of children they had, and also gave birth in similar locations.

In addition to the many strengths, a few limitations need to be considered. The participants were a self-selected sample, and were evidently proactive about their maternity care. In addition, there were pre-existing relationships between a few of the participants (i.e. some were known to each other) which could have impacted the way women responded to the questions. However, all the women appeared comfortable in the group setting, and still openly discussed their experiences with the rest of the group, regardless of whether they were known to each other or not. Relatedly, the emergent theme concerning the value of Children's Centres is perhaps a predictable finding, given that the participant sample was drawn from Children's Centres and they are active users of these facilities. This needs to be taken into consideration when evaluating the study findings. For example, London has a large number of potential Children's Centres users, which sum to almost 25% of all 128 Children's Centres in England (Goff et al., 2013).

Another limitation of this study is the low participation rate relative to the interest in the study and the applied methods of recruitment. For example, a number of mothers dropped out of participating due to their baby's health, or other personal reasons. However, the recruitment and data collection period only spanned two months (i.e. June-August), which was during the summer period and could have impacted on participation. Finally, as with other research methods, focus groups have drawbacks. For example, the researcher shapes the focus of the discussion, which may be seen as a weakness of the method as it can encourage unnatural interactions (Morgan, 1997). This is a common issue in qualitative research, which was addressed by providing participants opportunities to ask questions, and explicitly stating the focus of the discussion which they could opt out of, contribute to, or query further. Women were also aware that the researcher was neither a midwife nor a health visitor, thus potentially encouraging the participants to disclose honest accounts of their experiences of maternity care as provided by midwives and health visitors. In addition, the use of focus group methods offered a unique lens to exploring women's views of collaborative care as delivered by midwives and health visitors. Specifically, focus groups allowed for the observation of similarities and differences between women's views, and women's reflections on aspects of care that they have experienced, and those they have not.

7.6.2 Clinical practice and research implications.

The present study contributes to the body of knowledge by validating past research; in particular, similar issues continue to be raised by women regarding their maternity care (Cheyne et al., 2013; National Maternity Review, 2016). Regarding clinical practice, the findings indicate that it is paramount that women are listened to, offered consistent services, and provided unbiased information and advice by midwives and health visitors. In addition, women's care pathways need to be made clear to them at the outset, including information about the health professionals who may be involved in their care, and these professionals' roles. In terms of interprofessional collaboration between midwives and health visitors, the women in this sample showed an awareness of the issues that have been raised by these groups (Chapters 0, 5, and 6), which further strengthens the evidence for the identified

barriers and enablers to collaborative working. These findings are also in line with the existing literature as identified in the systematic review (see Chapter 2). Whilst the recommendations presented here may not necessarily apply to all women, and may not be desired by all women, the findings highlight the importance of providing individualised care delivered collaboratively by midwives and health visitors. Thus, it is crucial that women's voices are heard and considered when providing care, ultimately promoting informed choice.

Considerations for future research include exploring specific service changes for improving maternity care pathways such as the feasibility of group-based antenatal classes jointly provided by midwives and health visitors. In addition, future research should include other stakeholders such as policymakers and service commissioners to obtain a better understanding of how midwifery and health visiting services could be redesigned so that they support collaborative working.

7.7 Conclusion

This study explored women's views and experiences of maternity care as collaboratively provided by midwives and health visitors. Women's reports demonstrate collaboration between these two groups is uncommon; however, women also acknowledged the potential value of collaborative working between midwives and health visitors. Reflecting upon their experiences of care, women were able to identify the issues that they perceived could benefit from collaborative working, such as inconsistent or inaccurate advice, as well as fragmentation between services. Moreover, the participant sample provided potential solutions to these, such as the provision of joint midwife and health visitor antenatal appointments, delivered in a group setting. Women also highlighted positive experiences of the care that they received such as having helpful midwives and health visitors, which they wished to be maintained. Women's recommendations regarding how interprofessional collaboration between midwives and health visitors could be improved in practice, clearly demonstrate the necessity of their input in service development efforts.

8 Discussion

8.1 Introduction

This chapter aims to consider the research presented within this thesis as a cohesive whole, highlighting its key contributions to the literature. It begins by outlining the thesis aims, and provides a summary of each of the studies conducted. These summaries culminate in a discussion of the proposed alternative models of understanding interprofessional collaboration. This is followed by a discussion of the strengths and limitations of the studies conducted. The implications of the studies' main findings are discussed, and recommendations for future research outlined.

8.2 Aims of thesis

This thesis set out to explore the processes underlying interprofessional collaboration between midwives and health visitors in UK maternity services. In particular, the following research questions were asked:

1. How do midwives and health visitors collaborate in maternal and child health services?
2. What are midwives' and health visitors' experiences of interprofessional collaboration?
3. What are women's experiences of midwife-health visitor collaboration?
4. Does the collaborative relationship between midwives and health visitors need strengthening and if so, how?

Collaborative working has been promoted in the NHS throughout its history. However, this has always been a challenging enterprise owing to policy and structural changes, as well as interpersonal and interprofessional barriers (Ham, 2009; Webster, 2002) as discussed in sections 4.2.3.1.1 and 5.2.3.1.1, in Chapters 0, and 5, respectively. Previous research has highlighted that the provision of collaborative perinatal care has the potential to improve maternal and child health (Rodríguez & Rivières-Pigeon, 2007); it still remains unclear how effective interprofessional collaboration is in relation to patient and professional outcomes specifically in maternity given the heterogeneity in existing interventions (Reeves et al., 2017, 2013). Therefore, this body of work aimed to extend understanding of this

important area of research through a series of studies which utilised various methodological approaches.

Table 8.1 summarises the main findings from each chapter (with the exception of Chapter 3, as this chapter detailed the methods used in Chapters 4-6). The application of a mixed-methods approach generated new insights into midwife-health visitor collaboration, particularly, identifying the specific barriers and enablers to collaborative working in the UK context using psychological theory; offering strategies that can be applied to developing interventions geared towards improving interprofessional collaboration; and integrating women's views of interprofessional collaboration in maternity care, which extends understanding of the contexts where collaborative working is needed and desired.

Table 8.1. Unique contributions to the literature.

Chapter	Main findings and insights
2: Systematic literature review	- Review of issues concerning interprofessional collaboration, specifically: a synthesis of the methods of collaboration; the contexts in which it transpires; its effectiveness; the application of guidelines in practice
4: TDF study – midwives' views	- First in-depth description of the barriers and enablers to interprofessional collaboration from midwives' perspectives - Insight into modifiable behaviours
5: TDF study – health visitors' views	- First in-depth description of the barriers and enablers to interprofessional collaboration from health visitors' perspectives - Insight into modifiable behaviours
6: TDF study – comparison of midwives' and health visitors' views	- Insight into similarities and differences between midwives' and health visitors' perceived enablers and/or barriers - Novel insights into intervention development using behaviour change approaches
7: Focus group study – women's views	- Exploration of women's experiences and views on interprofessional collaboration between midwives and health visitors - Identification of specific service changes concerning interprofessional collaboration across the perinatal period

The findings drawn from each study chapter were used to inform subsequent data collection. For example, the systematic review findings (Chapter 2) highlighted a scarcity in knowledge concerning specific behavioural processes involved in interprofessional collaboration, and the barriers and enablers to this. In addition, the review findings highlighted the lack of current UK-based studies investigating midwife-health visitor collaboration. The limited application of theory was also observed in the included studies. The review findings, therefore, guided the development of the TDF studies (Chapters 0, 5, and 6). Furthermore, the review findings were used to guide the analysis for the TDF studies. Subsequently, findings from the TDF studies shaped the conceptualisation of the focus group study (Chapter 7), including the generation of the topic guide, which helped to explore issues relevant to recent mothers concerning midwife-health visitor collaboration.

The research conducted will be summarised in the following section in order to demonstrate the contribution of each study to the overarching aim of this thesis. What follows is a discussion of how the findings fit with previous research, and the implications of the work for theory, policy, and practice. Finally, the strengths and limitations of the study will be considered, and suggestions for future research will be given.

8.2.1 Systematic review

The systematic review (Chapter 2) sought to synthesise the international evidence base concerning midwife-health visitor collaboration. This led to the identification of 18 studies which investigated interprofessional collaboration between midwives and health visitors (and their international equivalents). The main findings derived related to the contexts where collaboration occurs, methods of communication and collaboration, effectiveness of collaborative behaviour, and relationship between interprofessional collaboration in practice and policy recommendations.

The evidence showed that collaboration between midwives and health visitors tended to take place across the perinatal period, however, the extent to which this took place varied. In the main, midwives and health visitors collaborated to

ensure continuity of care. To achieve this, they utilised various modes of communication, chief of which was face-to-face contact. Other modes of communication included telephone contact, and women's records which were reported to be either paper-based or electronic in format. There was scant evidence concerning the effectiveness of interprofessional collaboration between midwives and health visitors, as seen in the lack of controlled studies in this area.

However, a number of studies included in this synthesis explored the effectiveness of collaboration using self-report measures (n= 9). These studies found that collaborative working between midwives and health visitors was seen to work well to an extent. At the same time, it was found that collaboration between these two groups could be improved. These findings resulted in the identification of key barriers and enablers to working collaboratively between midwives and health visitors. Factors which enabled collaborative working included the presence of liaison staff, having opportunities for joint working or activity, being co-located, having mutual respect and support for colleagues, and good communication. On the other hand, factors which inhibited collaborative working were distance, limited resources and support, poor knowledge of each other's role, inadequate information transfer, and divergent philosophies of care.

Several methodological limitations were identified in the evidence base, viz. the lack of statistical power as well as the sampling bias in the quantitative studies, and a lack of controlled intervention studies to assess the impact of interprofessional collaboration on health outcomes and collaborative behaviour. Regarding the qualitative studies, the findings presented in these studies were clearly and explicitly presented in relation to the stated aims. However, there were studies that failed to consider the relationship between participants and researchers which may raise questions regarding the credibility of the findings. In qualitative studies, researchers and participants are central to data collection, synthesis and reporting of the findings; thus, appropriate steps must be taken to demonstrate an awareness of such influences on the research, thereby enhancing the credibility of the study (Tong, Sainsbury, & Craig, 2007). Finally, there were notable differences in the application of theory across the studies reviewed. These variations therefore presented further challenges to this narrative synthesis, specifically an inability to pinpoint processes and/or

clusters of processes that offer explanations of how interprofessional collaboration could best be achieved in the relevant context.

Taken together, these methodological limitations helped to shape the subsequent empirical studies. In particular, they formed the rationale for the TDF studies involving midwives and health visitors, which was a theoretically-grounded exploration of barriers and enablers concerning interprofessional collaboration. The TDF, a synthesis of 33 psychological theories (Michie et al., 2005), was applied to systematically explore experiences of midwife-health visitor collaboration. Further detail on the framework is provided in section 3.2.1, Chapter 3. This framework fulfilled the requirements for addressing the gap in the literature, given that it was originally purposed for understanding health professional behaviours, from a psychological perspective. The TDF offered a framework from which to select relevant constructs for either developing new or furthering existing theories of understanding. These studies are summarised in the subsequent sections.

8.2.2 TDF study – midwives' views

The midwives' TDF study aimed to expand current understanding of midwives' perceived enablers and barriers to working collaboratively with health visitors. This was achieved by conducting one-to-one interviews with midwives (n= 15) either face-to-face or over the phone. This study found that midwives' key barriers were their work structure, working in silos, and the professional differences between them and health visitors. These barriers were associated with the following TDF theoretical domains: 'Beliefs about capabilities', 'Social/professional role and identity', and 'Social influences', respectively. However, midwives also identified numerous key enablers to working in collaboration with health visitors, which were associated with three theoretical domains: 'Beliefs about consequences', 'Social influences', and 'Behavioural regulation'. In particular, these enablers were: recognising the relative advantage of collaboration with health visitors, having communication with health visitors, recognising the role of the woman/family in enabling collaborative working, being able to provide continuity of care, recognising the benefits for women/families, team working, and finally, utilising women's records or documentation. Finally, the following belief statements functioned both as

an enabler/barrier: midwives' knowledge of protocol/guidelines for working collaboratively with health visitors, recognition of interprofessional collaboration as part of the midwifery role, concerns about women/families, and midwives' perceived ease of contacting health visitors. These enablers/barriers were associated with four theoretical domains, viz. 'Knowledge', 'Social/professional role and identity', 'Memory, attention, and decision processes', and 'Beliefs about capabilities', respectively.

The findings from this study suggest that midwives' experience of collaborating with health visitors is more positive than it is challenging, given the variety of enablers identified by the participant sample. This is in line with previous literature, whereby midwives reported that working collaboratively with health visitors is useful (Harris et al., 2015; Hoddinott et al., 2007; Penny, 2015; Psaila, Schmied, et al., 2014b; Regan & Ireland, 2009). In addition, this study offers novel opportunities for increasing midwife-health visitor collaboration from a behaviour change perspective, such as making use of the belief statement relating to midwives' knowledge of protocols or guidelines for collaborating with health visitors.

8.2.3 TDF study – health visitors' views

Similar to the midwives' interview study, the health visitors study aimed to expand understanding of health visitors' perceived enablers and barriers to working collaboratively with midwives. It followed the same procedure as the midwife sample; there were 17 health visitors who participated in total. Health visitors identified a series of key barriers to working collaboratively with midwives, viz. not having established relationships with midwives, health visitors' and midwives' lack of time, and health visitors' and midwives' workload. These related to the theoretical domains: 'Nature of the behaviours' and 'Environmental context and resources'. In addition, there were also several factors which enabled health visitors to work collaboratively with midwives, viz. having communication with midwives, gaining information (from midwives) to inform care, written information about mother and baby, meeting the aims of communication with midwives, and finally reading midwives' notes. These related to the following domains: 'Social influences', 'Beliefs about consequences', 'Environmental context and resources', 'Behavioural

regulation', and 'Nature of the behaviours', respectively. Finally, there were also belief statements that functioned as both enabler and barrier, including contacting midwives when there is a concern about women/families, the quality of contact with midwives, knowledge of establishing contact with midwives, and health visitors' perceived ease of contacting midwives. These related to the following theoretical domains: 'Memory, attention, and decision processes', 'Social influences', 'Knowledge', and 'Beliefs about capabilities', respectively.

These findings led to the observation that health visitors seem to experience more barriers to collaborating with midwives than their midwife colleagues. The main difficulty related to communication, which is a known linchpin of interprofessional collaboration (Axelsson & Axelsson, 2006; D'Amour et al., 2005). Communication problems are also a commonly cited issue in TDF-based studies that are situated in environments which involve various healthcare professionals (Roberts et al., 2016). As a result of the identified issues concerning midwife-health visitor collaboration as described above, a number of new areas for intervention were identified within this thesis, such as introducing strategies to increase health visitors' self-efficacy in relation to collaborating with midwives alongside increasing communication through behavioural rehearsal and modifying the environment. This is described in further detail in section 6.4.5, Chapter 6.

8.2.4 TDF study – comparison of midwives' and health visitors' views

The comparison of the midwife and health visitor studies resulted in two key findings. First, the identification of barriers, enablers and barriers/enablers common amongst midwives and health visitors, such as when to decide to establish contact with each other (Domain: 'Memory, attention, and decision processes'). Second, it emerged from this comparative analysis that there were also belief statements unique to each group, such as midwives' low perceived capability to work in collaboration with health visitors due to midwives' work structure. Still, as in the previous sections, the findings point in the direction of areas where behaviour change interventions might play a role in increasing collaborative working between the two groups, such as decision-making and increasing knowledge. In addition, the

differences in salient belief statements identified between these groups suggest that any interventions developed will need to account for each group's respective needs.

In particular, the findings indicate that organisational factors are influential to individual as are social factors (e.g. influence of women/families, interpersonal contact) relating to interprofessional collaboration (

Figure 6.4, Figure 6.5, and Figure 6.6). In addition, the findings suggest that individual barriers/enablers (e.g. knowledge of protocols, decision-making processes) could be addressed using behaviour change techniques. However, as previously mentioned (see section 6.5, Chapter 6), these must be developed in the context of the other factors (e.g. organisational and social) within which these behaviours are carried out, such as the resources available to midwives and health visitors and their working environment.

8.2.5 Focus group study – women's views

The final empirical piece in this body of work was a focus group study involving mothers who have had a child in England in the last 18 months. This study aimed to elicit women's views of midwife-health visitor collaboration through exploring their experiences of care from these healthcare professionals. A secondary aim was to involve women in considering strategies for improving maternity care provision, in particular, care provided by midwives and health visitors. Three focus group discussions were conducted (n= 12) and five key themes (Chapter 7) which related to women's relationship with midwives and health visitors were identified as well as their suggestions for improving maternity care, with a specific focus on interprofessional collaboration. The themes identified in this study closely relate to what is already known from the literature (Forster et al., 2008; National Maternity Review, 2016; Raine et al., 2010; Redshaw & Henderson, 2014), thereby affirming previous work investigating women's experiences of maternity care. At the same time, this study extends knowledge of collaboration by exploring women's perceptions of interprofessional collaboration between midwives and health visitors more specifically. Study participants were receptive to the idea of midwives and health visitors working together, however, it was clear from the findings that this was, in practice, relatively rare. This finding complements the findings drawn from

the systematic review (Chapter 2) and TDF study (Chapters 0, 5, and 6), where the extent to which midwives and health visitors worked together appeared to be limited. Nevertheless, this study offers support for collaborative working between midwives and health visitors, and at the same time, provides novel ideas for service changes across the perinatal period from service users' perspectives.

8.3 Embracing the complexity of interprofessional collaboration

The findings presented above illustrate, from the perspectives of relevant stakeholders, that interprofessional collaboration between midwives and health visitors holds potential for improving maternity care services. From the systematic review, it was revealed that midwife-health visitor collaboration could be useful, if certain barriers were addressed such as divergent philosophies of care (Downe, Finlayson, & Fleming, 2010; Munro et al., 2013; Psaila et al., 2014). Similarly, the findings from the TDF study echoed and extended the current evidence base by providing insight into the specific areas for change at behavioural, social, and structural levels from midwives' and health visitors' perspectives. Besides the identified barriers and enablers in the TDF study that were in common with the systematic review as summarised in Table 6.4, other key barriers and enablers that emerged as important concerned individual factors, such as knowledge and decision-making processes. These theoretical domains which were found to be common to midwives and health visitors, as summarised in Table 6.2, are similar to those identified in other TDF-based studies which have offered comparisons of different health professionals' barriers and enablers to various behaviours (Horppu et al., 2017; Islam et al., 2012; Mc Goldrick et al., 2016; Roberts et al., 2016).

Moreover, the findings from the TDF study indicate that midwives do not find working collaboratively with health visitors especially difficult. Contrastingly, health visitors appeared to encounter more difficulties when attempting to work collaboratively with midwives. Similar to these findings, Psaila et al. (2014b) found that midwives considered their relationships with child and family health nurses to be more positive than child and family health nurses did. These data give new insights into the areas that require change in order to support midwives and health visitors in working collaboratively. For instance, it has been identified that

midwives' beliefs about their capability to work collaboratively with health visitors are negatively impacted by their work structure; at the same time, the current evidence indicates that midwives, as individual healthcare professionals, have a strong sense of the importance of collaborating with health visitors, as reflected in the belief statement: 'Collaboration is part of my role' which concerns the theoretical domain 'Social/professional role and identity'.

Given that midwives' work structure appears to negatively impact their collaboration self-efficacy, a problem which is compounded by health visitors' reported lack of a relationship with midwives, strategies to change the state of midwife-health visitor collaboration cannot rely on individual behaviour change alone. Current midwifery-led continuity models of care include 'caseload midwifery' and 'team midwifery'. Caseload midwifery involves a named midwife providing maternity care to a woman from the antenatal to the postnatal periods, whilst team midwifery involves a group of midwives sharing a caseload of women that they care for (Sandall, 2013). Such models often involve midwives working with different health professionals – including health visitors – to provide high-quality maternity care that meets women's expressed needs (Sandall et al., 2016). International evidence suggests that child and family health nurses see communication with midwives as serving the purpose of ensuring continuity of care (Psaila, Schmied, et al., 2014b); however, there has also been evidence in the UK indicating that health visitors' perceptions of such models is that these do not work well in practice (Farquhar et al., 1998). Little is known about the interaction of continuity models with interprofessional working (Sandall, Soltani, Gates, Shennan, & Devane, 2013). Thus, there is a need to identify how best to integrate health visitors and other healthcare professionals into such models.

Moreover, other barriers identified by midwives were directly related to interpersonal or social influences; in particular, silo culture (Social/professional role and identity) and professional differences (Social influences). These barriers concern the broader issues around midwifery as a profession, in particular, the lack of engagement with the health visiting profession. These findings featured in the systematic review (Chapter 2), and are in accordance with previous research (Hall, 2005). Similarly, midwives' and health visitors' limited knowledge of protocols on

establishing contact with each other, is key to enabling collaborative behaviour. As reported in the systematic review (Chapter 2), a lack of common protocols can impede collaborative working. It has been suggested in this thesis (see sections 4.2.3.3.1, 5.2.3.3.1, and 6.4.2.3) that to increase knowledge of protocols, training opportunities (pre- and post-qualification) could be provided to midwives and health visitors, and adjustments to their working environment made.

Midwives' and health visitors' identification of the abovementioned belief statements may be influenced by the fact that midwifery and health visiting services are commissioned differently. Health visitors are currently commissioned by local authorities (Department of Health, 2011b), whereas, midwives are currently commissioned by Clinical Commissioning Groups (National Audit Office, 2013b). Such arrangements entail differences in key performance indicators for example, as outlined in the *Healthy Child Programme* (http://www.healthychildprogramme.com/outcomes-key-performance-indicators). These differences could impact on midwifery and health visiting collaborative practice, where each professional group is working towards different (but not necessarily conflicting) sets of outcomes. Thus, the areas where midwifery and health visiting practice overlaps as outlined in various policy documents (Chief Nursing Officers of England, Northern Ireland, 2011; Department of Health, 2009, 2011a), as well as strategies and processes in place to achieve collaborative working need to be set out clearly by service commissioners (Cowley et al., 2013).

A notable finding drawn from the TDF study was midwives' strong sense of commitment to their role as collaborators of health visitors. It is argued in this thesis that this needs to be maintained. In the literature, it is widely recognised that behaviour initiation is important; however, maintenance is equally valuable for sustaining the impact of behaviour change in the long-term (Kwasnicka et al., 2016). Features of potential strategies to support behaviour maintenance such as habit formation have been discussed in detail in Chapter 6 (section 6.4.5). Exploration of strategies concerning behaviour change maintenance has the potential to contribute to understanding the long-term effects of interprofessional collaboration between midwives and health visitors on women's and health professionals' outcomes, particularly given the context of care which spans an extended period of time.

Indeed, investments in interprofessional collaboration and policies developed to encourage this should be guided by evidence (Reeves et al., 2017).

Health visitors, this study suggests, will require increased capacity if they are to collaborate successfully with midwives. Findings from the TDF study revealed that time and workload remained the main barriers to collaborating with midwives. In line with this, concerns regarding the reduction of health visitor numbers following the Health Visitor Implementation Plan (Department of Health, 2011b) have been raised (Unite the Union, 2016). The delivery of the Health Visitor Implementation Plan between 2011 and 2015 aimed to expand the health visiting workforce by 4,200 (Department of Health, 2011b), yet, recent NHS Workforce Statistics (2017) revealed an 8.7% drop in the number of health visitors in full-time posts between October 2015 (n= 10,309) and October 2016 (n= 9,410). Similarly, there is literature pointing to cuts and staff reduction i.e. organisational/policy changes being a hindrance to collaborative working (see Chapter 1, and section 5.2.3.3.12, Chapter 5).

Furthermore, these findings, considered collectively, extend knowledge of models of interprofessional collaboration by way of specifying the individual factors influencing midwives and health visitors when performing collaborative behaviours. The proposed model therefore addresses the limitations of current models of interprofessional collaboration (as detailed in section 1.4, Chapter 1) in two ways. First it introduces the role of individual barriers and enablers to collaborative practice. Second, it offers further social and organisational/external influences on interprofessional collaboration. In line with existing models (Axelsson & Axelsson, 2006; D'Amour et al., 2008), the three models proposed in this thesis illustrate how interpersonal and external influences interact and influence collaborative behaviour. Moreover, the specific nuances for how interprofessional collaboration is understood for midwives and health visitors as separate professions is offered and, at the same time, overlaps between the groups shown. Therefore, for example, as illustrated, opportunities for midwives to collaborate with health visitor colleagues will require a combination of both individual behaviour change approaches as well as changes at the professional and organisational levels (see

Figure 6.4, Figure 6.5, and Figure 6.6, Chapter 6).

The integration of women's views in the exploration of the processes underlying interprofessional collaboration between midwives and health visitors has contributed new insight into areas in which collaborative working is most relevant from service users' perspectives. Overall, women valued their relationships with midwives and health visitors, and expressed an appreciation for the care that they received, reflecting prior work (Care Quality Commission, 2013; Redshaw & Henderson, 2014). The majority of the women indicated limited observations of collaborative working between the two groups, but conveyed enthusiasm for increased collaboration particularly if this resulted in continuity of information and consistent advice, in line with previous research (National Maternity Review, 2016).

Interestingly, women raised the importance of increasing GPs' and/or other specialist doctors' involvement in their care, as part of the exploration of their experiences of midwife-health visitor collaboration. As can be seen in the systematic review (Chapter 2), previous research investigating interprofessional collaboration between midwives and health visitors has highlighted the role of the other health professionals including GPs in the provision of integrated maternity services (Psaila, Schmied, et al., 2014a; Redshaw & Henderson, 2014; Schmied et al., 2015). However, in the UK, GP involvement has reduced significantly over time due to various changes in policy and practice, notably a shift from a medical model of care to a woman-centred one. GP participation is an issue that has been raised in the recent National Maternity Review (2016), and as it stands, there are contrasting views from GPs regarding increasing their involvement in maternity care. This finding needs to be interpreted with caution, given that these views were mainly from women who are knowledgeable of maternity care models in countries other than the UK, which could influence their expectations of maternity care in the UK (Janzen et al., 2006).

Furthermore, women who participated in the focus group discussions made numerous recommendations in relation to tailoring maternity care services from the antenatal through to the postnatal period, such as having clear, detailed information about all antenatal appointments including the purpose of each of these. Information about the health professionals that they will meet in the process, and a definition of their role, would also be welcomed by women. This is in line with previous work

(Raine et al., 2010), and is supported by more recent evidence highlighting the central importance of good communication to the provision of high-quality maternity care (National Maternity Review, 2016).

These findings, taken together, offer a comprehensive picture of the state of interprofessional collaboration between midwives and health visitors. It acknowledges the interplay between individual agency as well as interpersonal and structural factors, in line with the tenets of critical realism (Bhaskar, 1997; Clark et al., 2008; Walsh & Evans, 2014). Specifically, these provided systematically identified barriers and enablers to midwife-health visitor collaboration from these professionals' perspectives (Chapters 0, 5, and 6). In addition, the data drawn from the midwife and health visitors sample was informed by the existing evidence base at the study design phase, and later triangulated through exploring women's experiences of midwife-health visitor collaboration.

Drawing on critical realism as a theoretical standpoint from which to understand the findings (see section 1.2.3), the experiences of midwives, health visitors, and women revealed that collaborative working between these two groups of healthcare professionals is rare (see sections 4.2.3.3.10, 5.2.3.1.5, and 7.5.2.1 in Chapters0, 5, and 7, respectively). This finding depicts the empirical level, giving an insight into the observable phenomenon. Delving further into the factors which moderate the empirical level, i.e. the actual level, (Bhaskar, 1997), the limited interactions between midwives and health visitors were influenced by scarce time and recordkeeping resources, emotions, as well as past experiences for example (see section 6.4.2.1, Chapter 6). Finally, within the real, where generative mechanisms are argued to influence the empirical level (Bhaskar, 1997; Walsh & Evans, 2014), there were multiple factors at play. Individual factors such as individuals' self-efficacy and decision-making processes; interpersonal factors such as the presence of communication and professional differences; and organisational or structural factors such as high workloads (see 6.4.4, Chapter 6) revealed to influence collaborative behaviour. A critical realist perspective is argued to be useful for examining clinical practice (Clark et al., 2008), and has been particularly beneficial for understanding processes underlying midwife-health visitor collaboration as a health professional behaviour. Drawing from the findings in this thesis, it is clear that future innovations

to encourage collaborative working between these two groups will require change across all levels – individual, social, and organisational.

8.4 Strengths and limitations

Considering this body of work as a whole, there are several strengths and limitations which need to be taken into account when evaluating the findings presented. With regard to the systematic review, a comprehensive review of the international evidence base was provided up to and including publications in 2017. Limitations of the studies included in this systematic review are the variability in the quality of included studies, as well as the lack of controlled studies which demonstrate the impact or effectiveness of midwife-health visitor collaboration on maternal and child, or professional outcomes. Studies were included on the basis of their relevance to the review aims and questions, and quality was accounted for in the narrative synthesis.

Taking into consideration the TDF study, a comprehensive list of factors which influence midwives' and health visitors' ability to work together was drawn from the interviews. A particular strength of applying a theoretical framework to this research is that it enabled the systematic identification of midwives' and health visitors' perceived barriers and enablers to interprofessional collaboration, thereby furthering understanding of the processes underlying this complex behaviour. However, such stringent application of a specific theoretical framework could be seen as restrictive, or hampering creativity in intervention development. Ogden (2016) argues that the application of approaches where codes are used to describe and classify behaviours may result in a reduction in the variability in practice, thereby risking healthcare professionals feeling de-professionalised. Ogden (2016) furthers her argument by suggesting that in order for science to grow, paradigm shifts are necessary. Indeed, variability is commonplace in behavioural research where behaviours are influenced by internal, social, as well as external factors (Abraham, 2016; Ogden, 2016). Hence, clarity in the description of processes, and the explanation of how these processes may relate to each other, as described in this thesis, is necessary to expand research understanding.

There are two limitations directly related to the TDF-based studies. First, the variation in midwives' and health visitors' specific roles and geographical locations, which could have impacted on the salient belief statements derived from the analysis. It is important to account for these nuances when evaluating the findings of the TDF study, as specialist roles will differ from more generalist roles, and variations in participants' geographical locations (e.g. rural vs. urban) may present different pictures of current practice owing to the characteristics of these participants' areas of practice. Every effort was made to ensure that a wide range of experiences was included rather than targeting a specific service or location where experiences might have been more similar. This was achieved through combining a maximum variation sampling technique with snowballing, as well as advertising the study through various channels. The application of such strategies, it is argued, allowed for a balanced elicitation of breadth and depth of healthcare professionals' views.

In addition, the participant samples within this body of work present certain limitations to the findings deduced. In both the TDF and focus group studies, all participants were self-selected; hence, certain biases were introduced, such as that of the participants being engaged and willing to discuss the topics in depth. It would be worth investigating reasons for non-participation in future work. Moreover, it is worth noting here the relationship of the interviewer (RA) to the participants as this could have contributed to the data gathered. In particular, participants in the TDF study were aware that the interviewer (RA) was neither a midwife nor a health visitor, which could have encouraged a more open discussion of issues encountered concerning working collaboratively with each other. Similarly, the women in the focus group study were aware of this, and further to this, they were aware that the interviewer (RA) had no prior experience of maternity care. The literature shows that demand characteristics may be present should the interviewer share certain characteristics with the interviewee or have an imbalanced relationship (Braun & Clarke, 2006; Malterud, 2001), for example, if the interviewer were either a midwife, or health visitor, or a mother. To minimise the introduction of these biases in to the studies, the author explicitly introduced relevant information about herself to the participants, as described above. Transparency with regard to researcher

characteristics in these studies appeared to have contributed to the participants' level of engagement and comfort in sharing their experiences.

8.5 Implications

From this body of work emerged a number of implications relating to interprofessional collaboration theory, policy, and practice. Each of these will be discussed sequentially. With regard to theoretical implications, individual factors influencing behaviour should be taken into account along with currently known social and organisational/external factors when evaluating interprofessional collaboration. The individual factors influencing behaviour are the nuances involved in this complex behaviour that are currently not accounted for by existing models (Axelsson & Axelsson, 2006; D'Amour et al., 2008), and including these may help lead to better understanding of interprofessional collaboration as a process.

Policies regarding collaborative working need to be informed by evidence, and clearly outline what is expected of midwives and health visitors. For example, the pathway detailing when midwives and health visitors should communicate with each other throughout the perinatal period (Public Health England and Department of Health, 2015) is helpful and is informed by other good practice guidelines (e.g. National Institute for Health and Clinical Excellence, 2006, 2007). This should be disseminated to midwives and health visitors, and be supplemented by local protocols that clearly set out how midwives and health visitors could communicate (i.e. by providing current and accurate contact details) and example scenarios in which contact with each other is demonstrated to be beneficial, as discussed in section 6.4.5, Chapter 6. Such additions to midwives' and health visitors' practice could address issues concerning poor communication which were associated with delays in care for example (see sections 2.3.5.2.1, 4.2.3.3.8, and 5.2.3.3.3, Chapters 2, 0 and 5, respectively). Related to policies regarding midwife-health visitor collaboration is the issue of the commissioning of midwifery and health visiting services. Dialogue is necessary between commissioners, policy-makers and other relevant stakeholders to ensure that a common understanding is shared regarding the definition and purpose of midwife-health visitor collaboration. Furthermore, commissioning of services should be shared where possible (Department of Health,

2009), and policies matched in order to facilitate collaborative working (Schmied et al., 2015).

Midwives, health visitors, and women value interprofessional collaboration, particularly in relation to information and advice that is exchanged and given, respectively. There is an abundance of research to support this (Barimani & Vikström, 2015; Forster et al., 2008), including the findings outlined in this thesis. Therefore, practice must change such that informational continuity is ensured amongst health professionals, as well as with service users. To achieve this, clear communication is required, which will require adequate resources most notably opportunities for midwives and health visitors to interact.

8.6 Future directions

Future research should seek to empirically test and evaluate strategies that are aimed at increasing interprofessional collaboration between midwives and health visitors, as such collaboration continues to be encouraged and invested in (National Maternity Review, 2016; Reeves et al., 2017). In addition, interventions developed for this specific context require the input of the relevant stakeholders, and importantly, need to be informed by evidence. Thus, the findings in this thesis could be applied to studies investigating midwife-health visitor collaboration at scale. For example, national survey studies could be conducted to map out the representativeness of the barriers and enablers identified here, and inform the development of predictive models of collaborative behaviour. Obtaining this evidence could consequently contribute to the development of intervention studies aimed at increasing interprofessional collaboration where effects on a range of outcomes could be assessed systematically.

8.7 Conclusions

The research presented addresses the important issue of interprofessional collaboration as applied to maternity care. It suggests that interprofessional collaboration between midwives and health visitors holds potential for improving maternal and child health outcomes, and that emphasis must be placed on improving

communication between midwives and health visitors, in order to help women to understand their care and the choices around their care that are available to them. This programme of work extends previous research by way of contributing to existing explanatory models of interprofessional collaboration through engaging relevant stakeholders (i.e. midwives, health visitors, and women) and identifying a systematically derived and theoretically-grounded set of barriers and enablers that are influential to midwife-health visitor collaboration that can be tested empirically through complex interventions. Furthermore, strategies to improve collaborative working between midwives and health visitors have been given, with a particular focus on communication which emerged as the linchpin of successful collaboration. These strategies could be applied and tested by means of complex interventions, as well as pre- and post-qualification training. The implementation of collaborative working relies heavily on context, and will require change at various levels (i.e. health professional behaviours, organisational change, policy change) as well as further evaluation to determine where it is most useful and has most impact. The main message from this body of work is that midwife-health visitor collaboration is welcomed by health professionals and women alike.

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Appendices

Appendix A. Published systematic review

International Journal of Nursing Studies 62 (2016) 193–206

Contents lists available at ScienceDirect

International Journal of Nursing Studies

journal homepage: www.elsevier.com/ijns

Review

Midwives' and health visitors' collaborative relationships: A systematic review of qualitative and quantitative studies

Maria Raisa Jessica (Ryc) V. Aquino[a,*], Ellinor K. Olander[a], Justin J. Needle[b], Rosamund M. Bryar[a]

[a] Centre for Maternal and Child Health Research, School of Health Sciences, City University London, Northampton Square, London EC1V 0HB, UK
[b] Centre for Health Services Research and Management, School of Health Sciences, City University London, Northampton Square, London EC1V 0HB, UK

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ABSTRACT

Objectives: Interprofessional collaboration between midwives and health visitors working in maternal and child health services is widely encouraged. This systematic review aimed to identify existing and potential areas for collaboration between midwives and health visitors; explore the methods through which collaboration is and can be achieved; assess the effectiveness of this relationship between these groups, and ascertain whether the identified examples of collaboration are in line with clinical guidelines and policy.

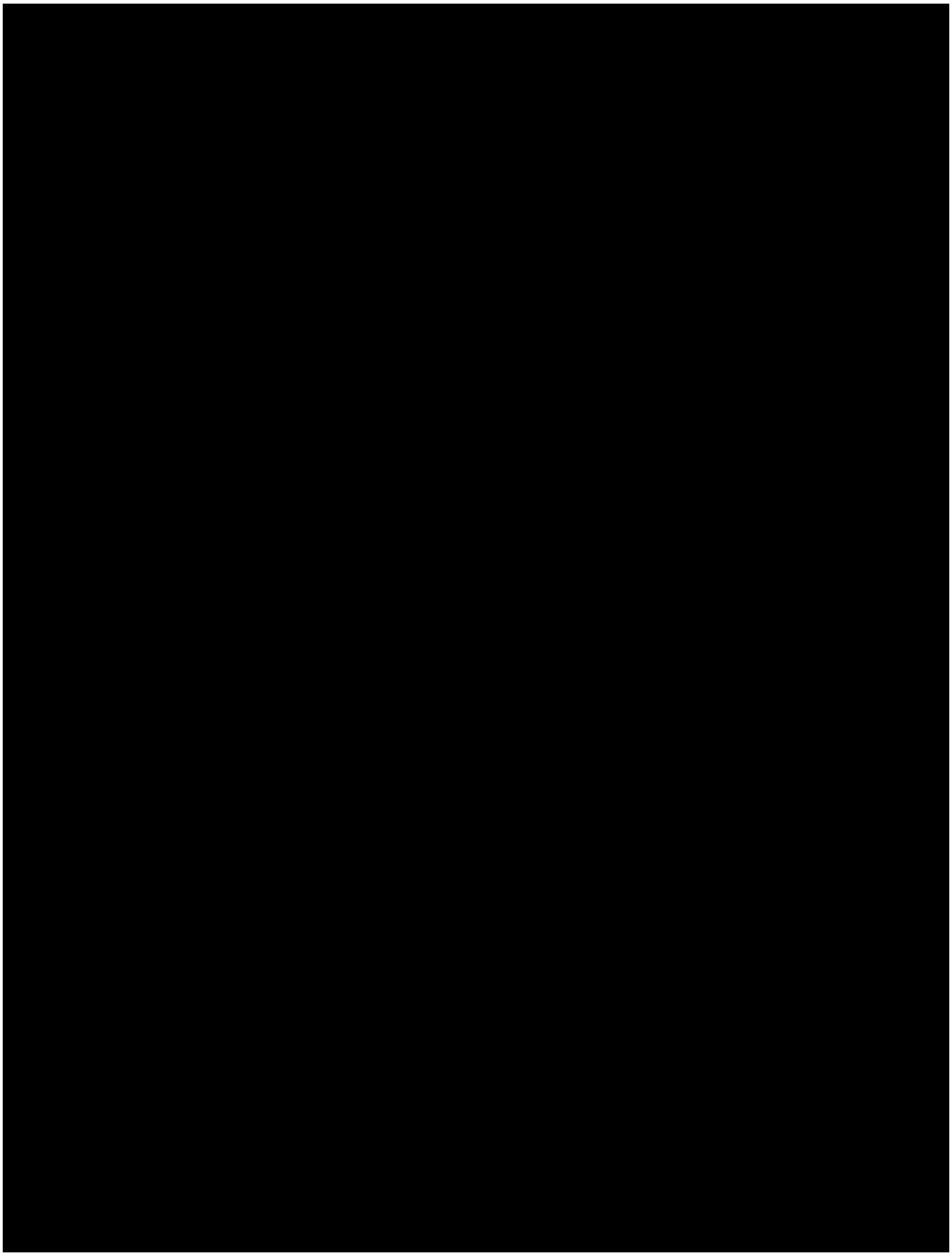
Design: A narrative synthesis of qualitative and quantitative studies.

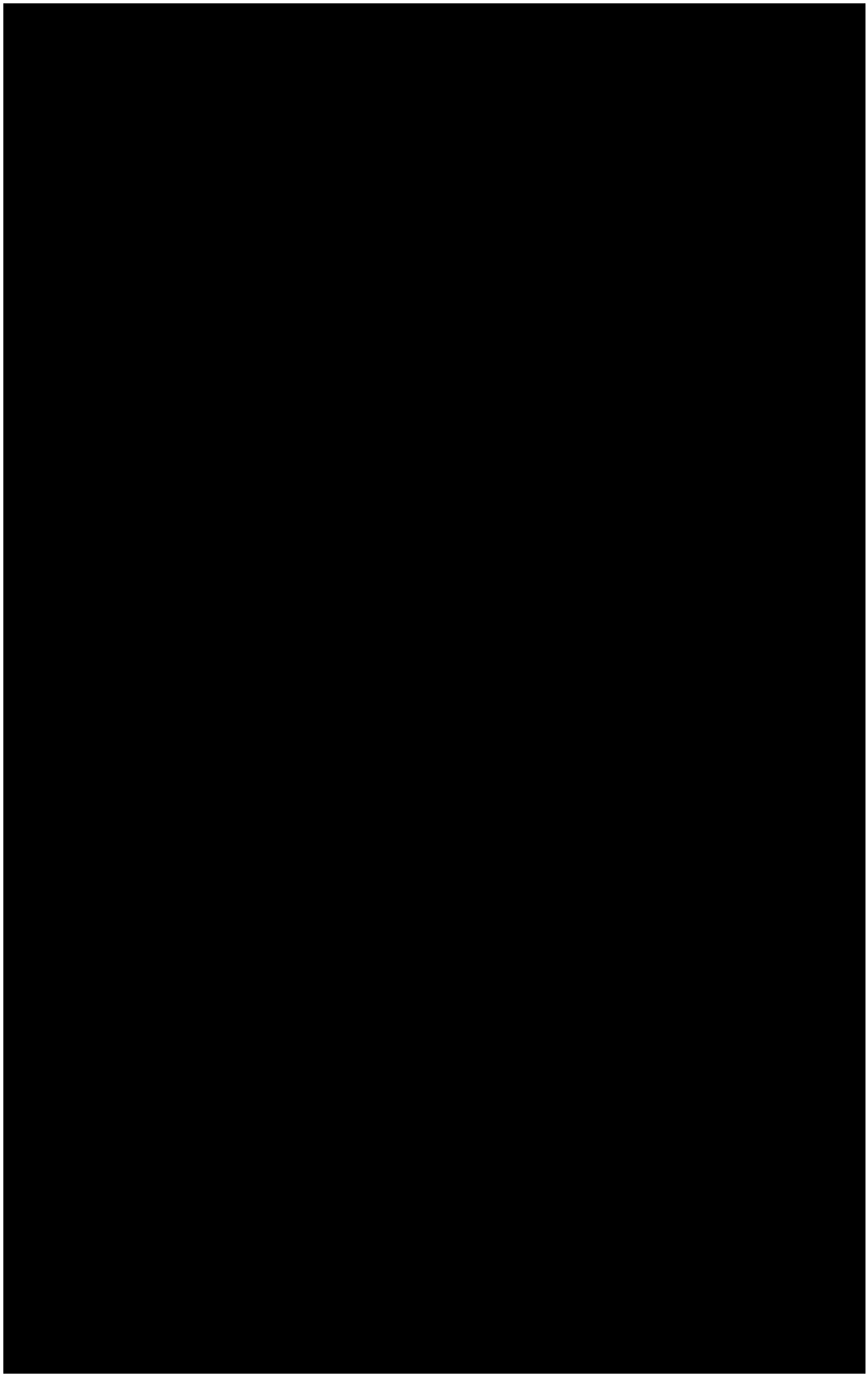
Data sources: Fourteen electronic databases, research mailing lists, recommendations from key authors and reference lists and citations of included papers.

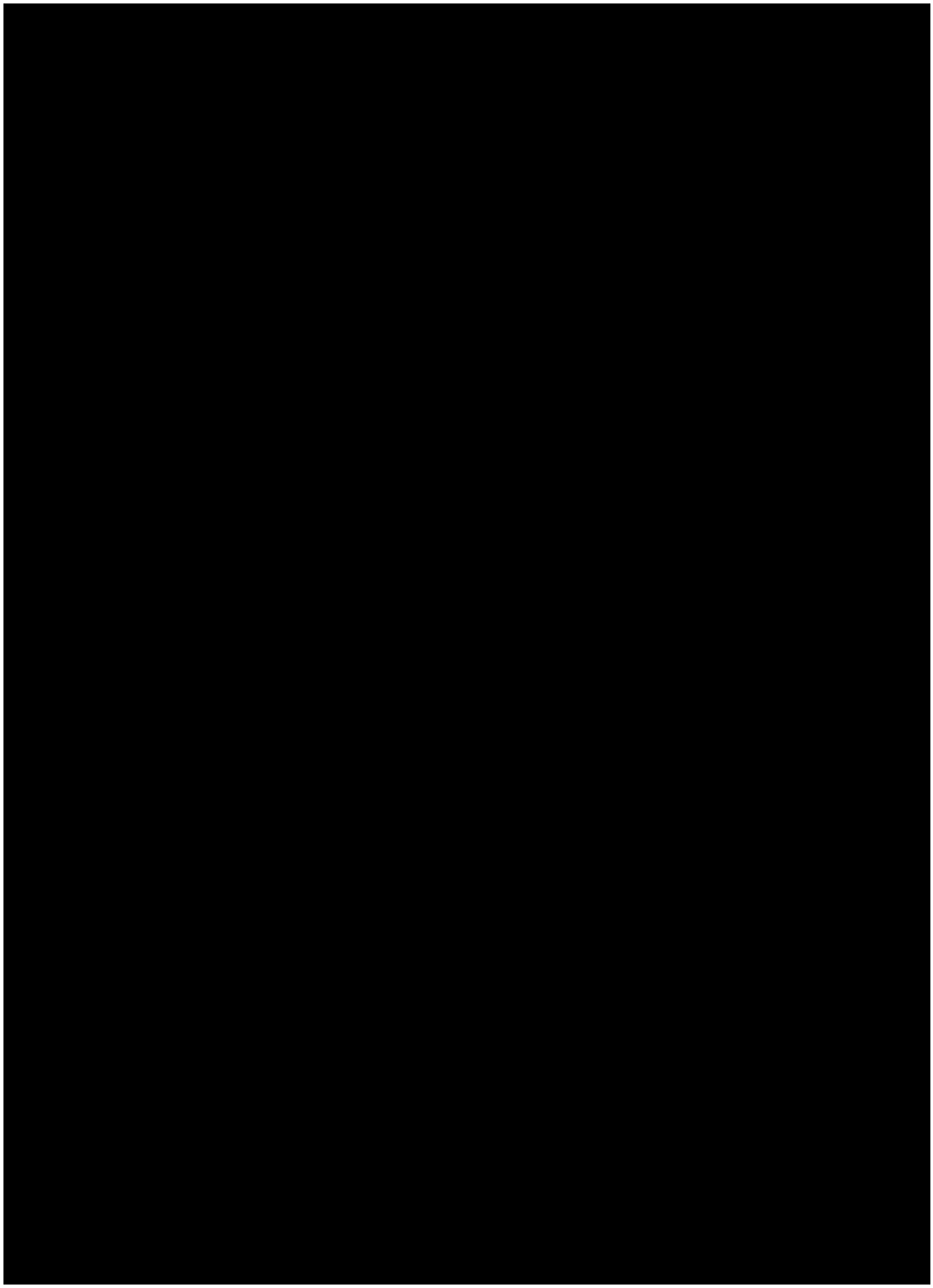
Review methods: Papers were included if they explored one or a combination of: the areas of practice in which midwives and health visitors worked collaboratively, the methods that midwives and health visitors employed when communicating and collaborating with each other, the effectiveness of collaboration between midwives and health visitors; and whether collaborative practice between midwives and health visitors meet clinical guidelines. Papers were assessed for study quality.

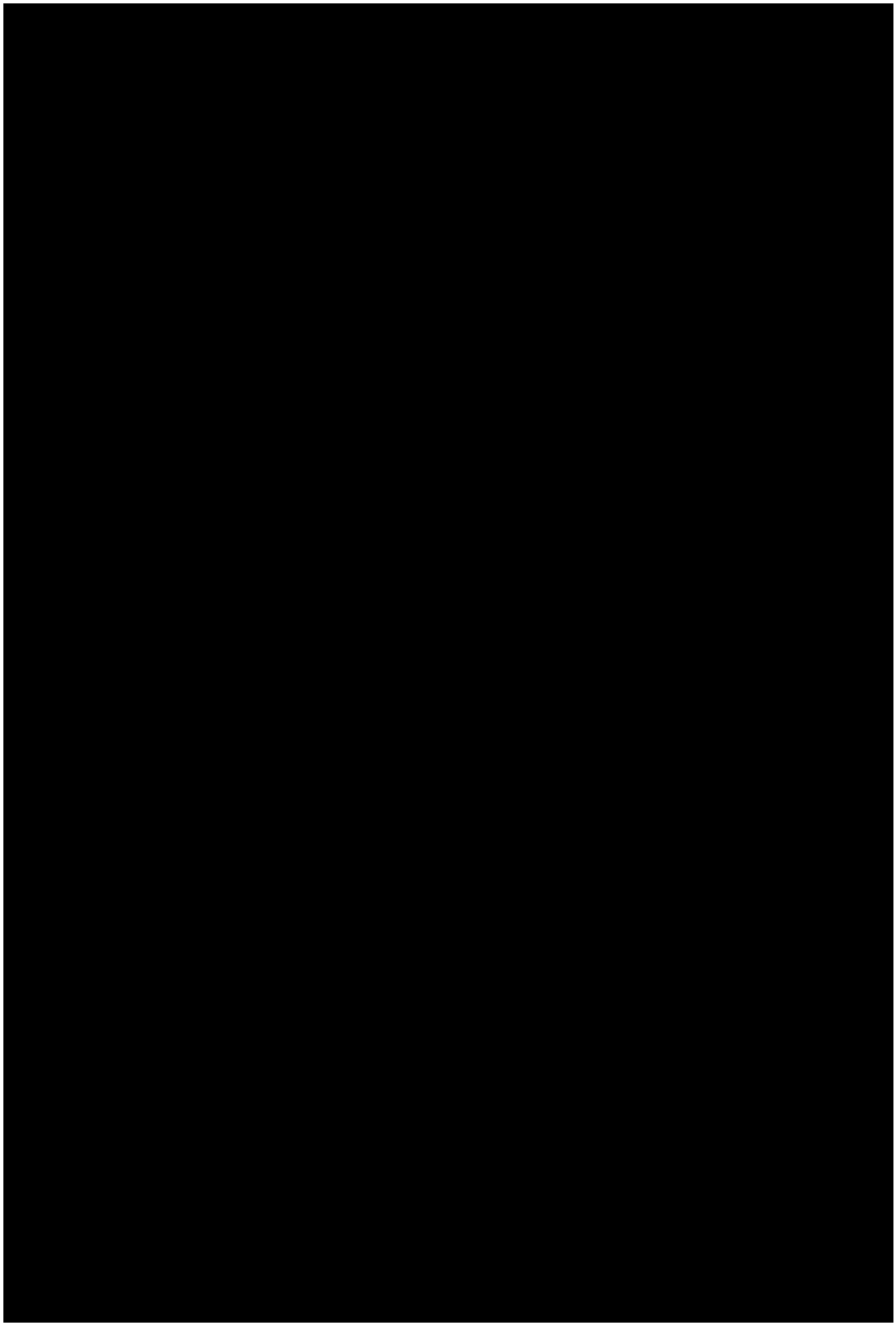
Results: Eighteen papers (sixteen studies) met the inclusion criteria. The studies found that midwives and health visitors reported valuing interprofessional collaboration, however this was rare in practice. Findings show that collaboration could be useful across the service continuum, from antenatal care, transition of care/handover, to postnatal care. Evidence for the effectiveness of collaboration between these two groups was equivocal and based on self-reported data. In relation, multiple enablers and barriers to collaboration were identified. Communication was reportedly key to interprofessional collaboration.

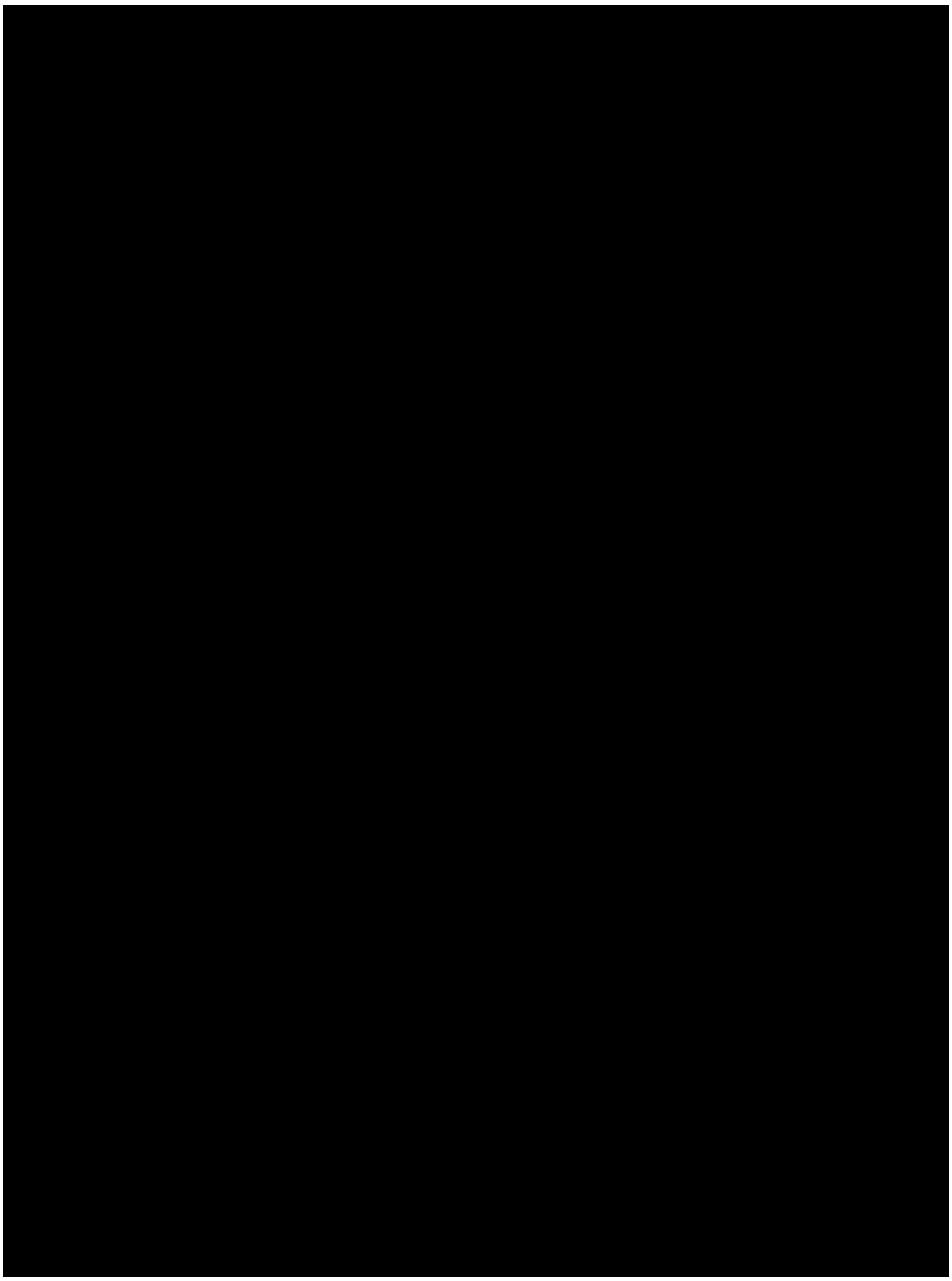
Conclusions: Interprofessional collaboration was valuable according to both midwives and health visitors, however, this was made challenging by several barriers such as poor communication, limited resources, and poor understanding of each other's role. Structural barriers such as physical distance also featured as a challenge to interprofessional collaboration. Although the findings are limited by variable methodological quality, these were consistent across time, geographical locations, and health settings, indicating transferability and reliability.

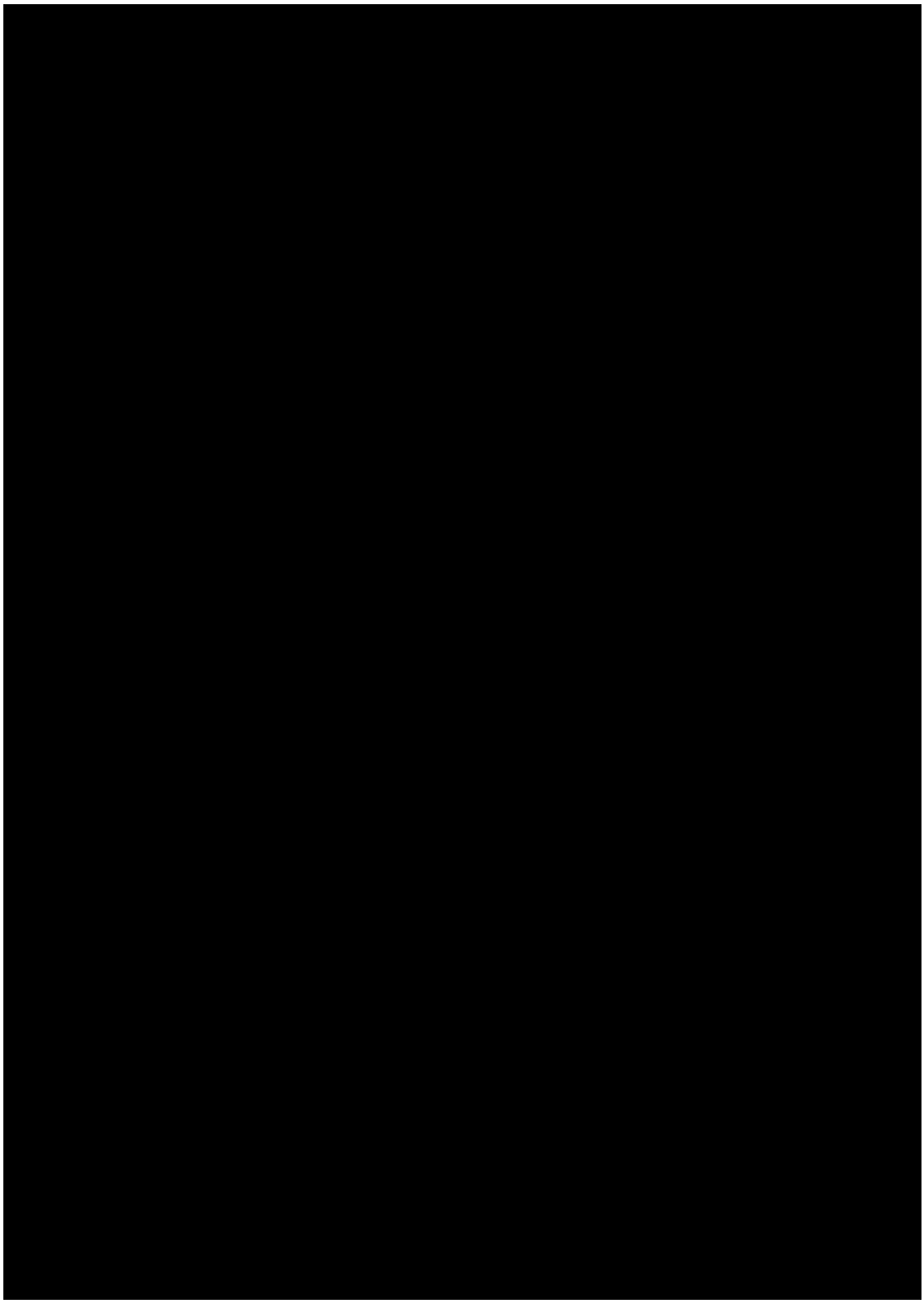


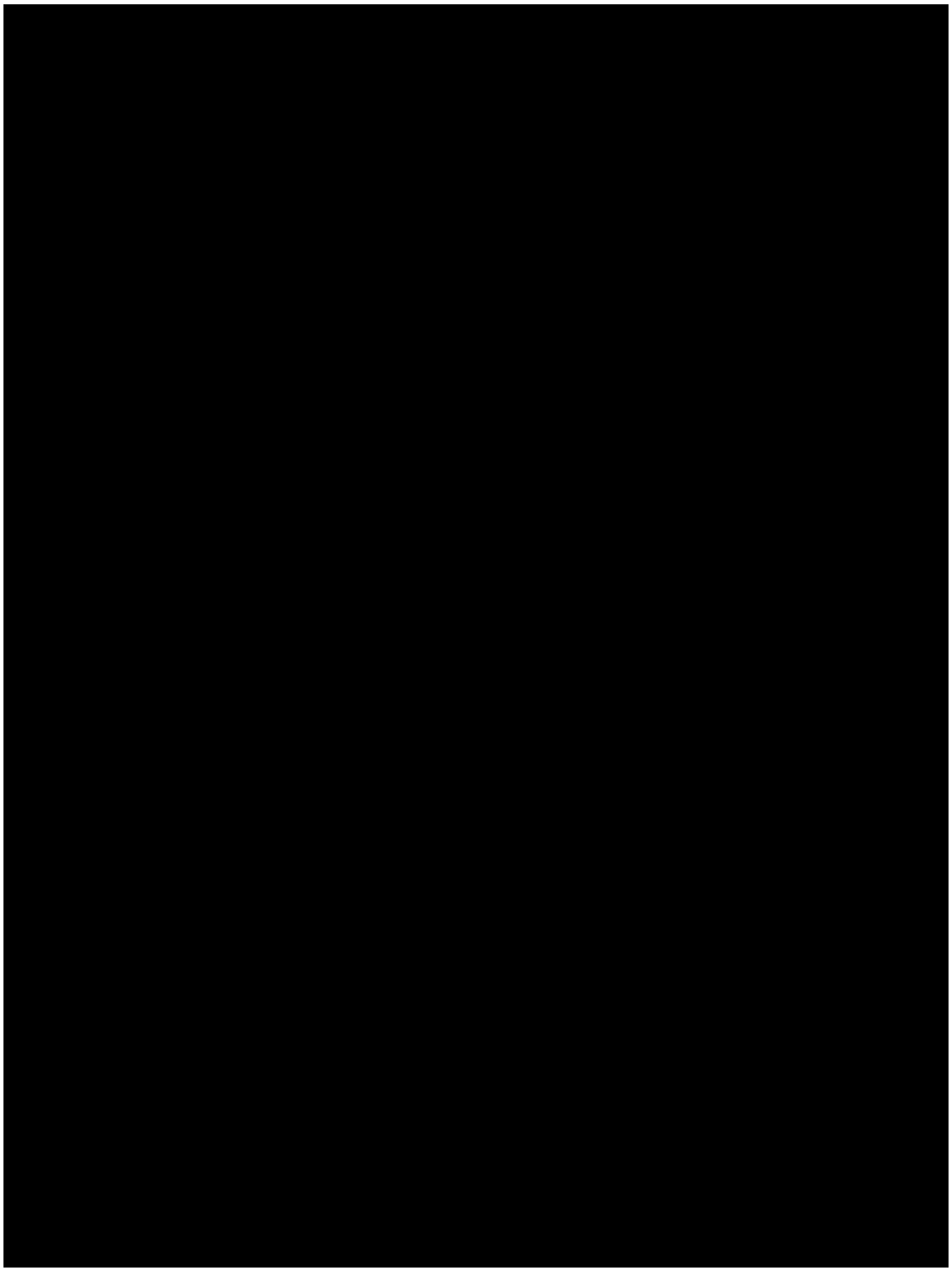


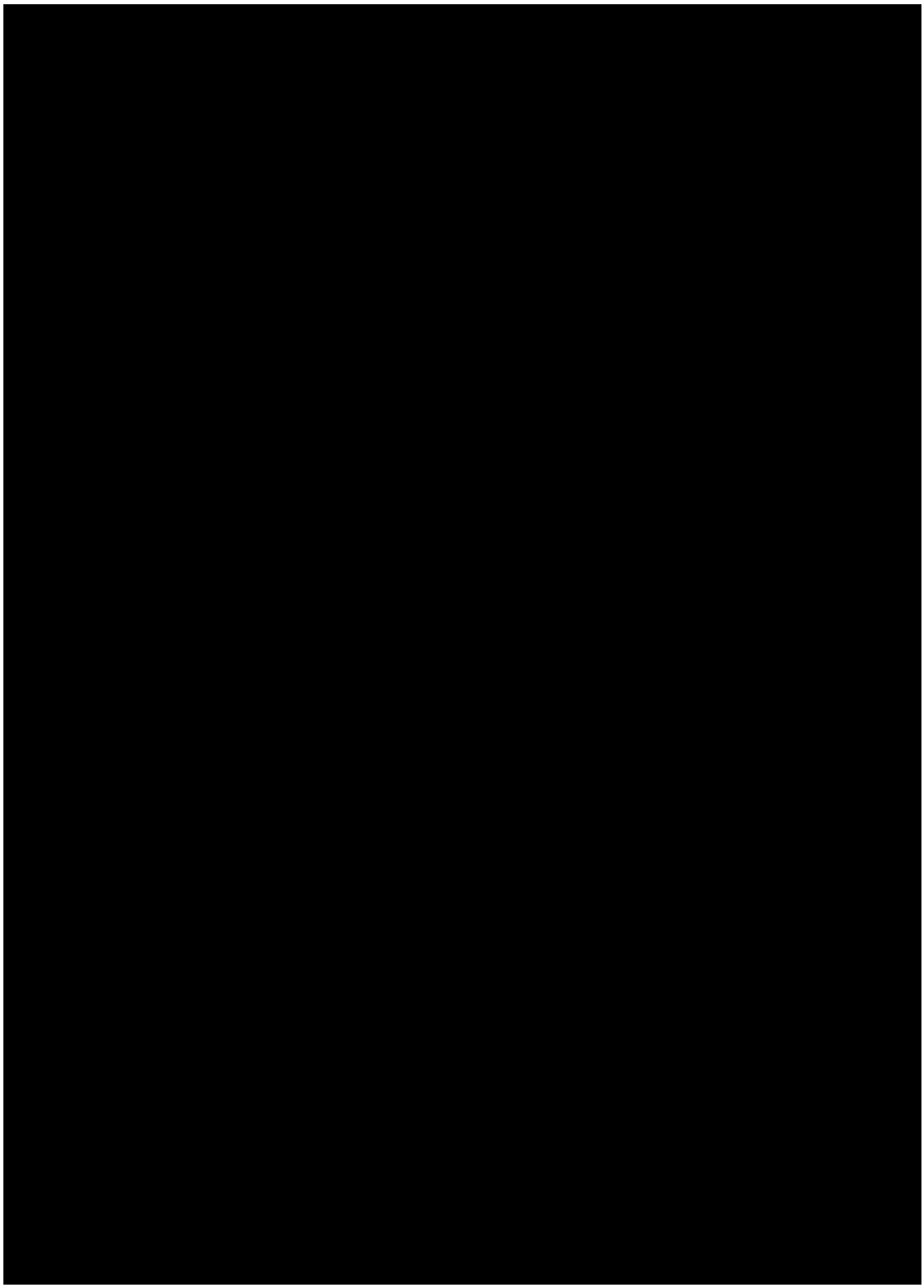


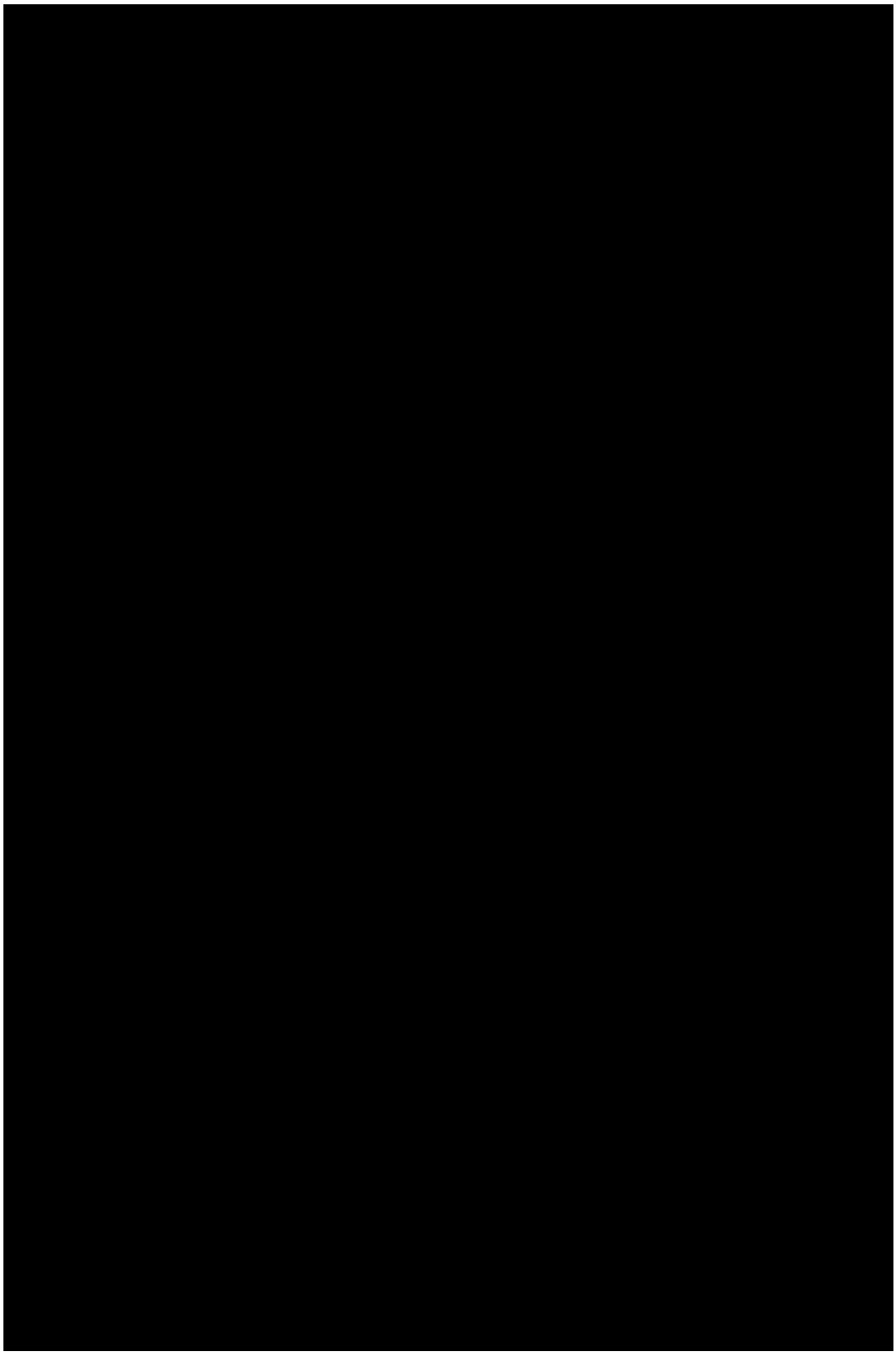


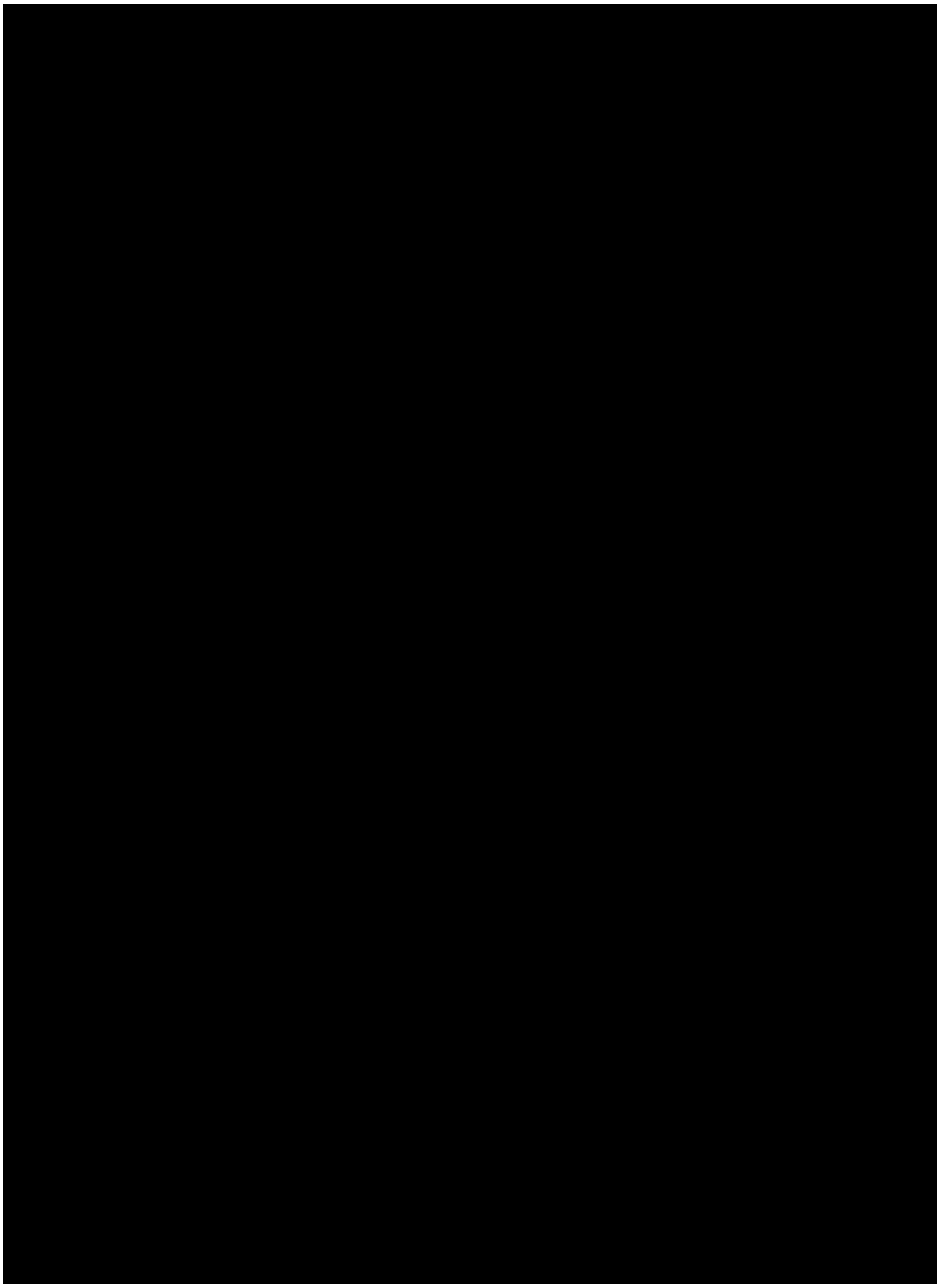


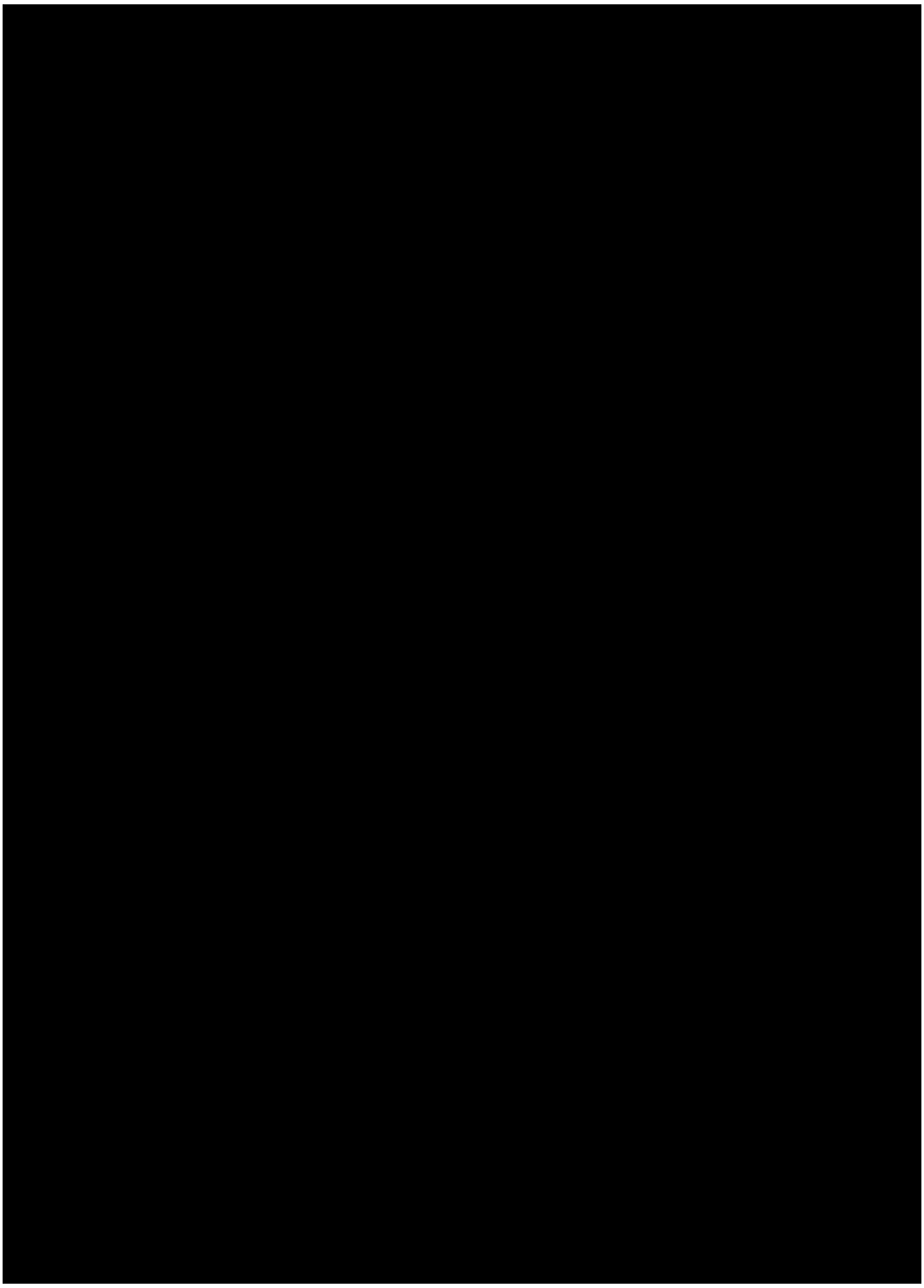


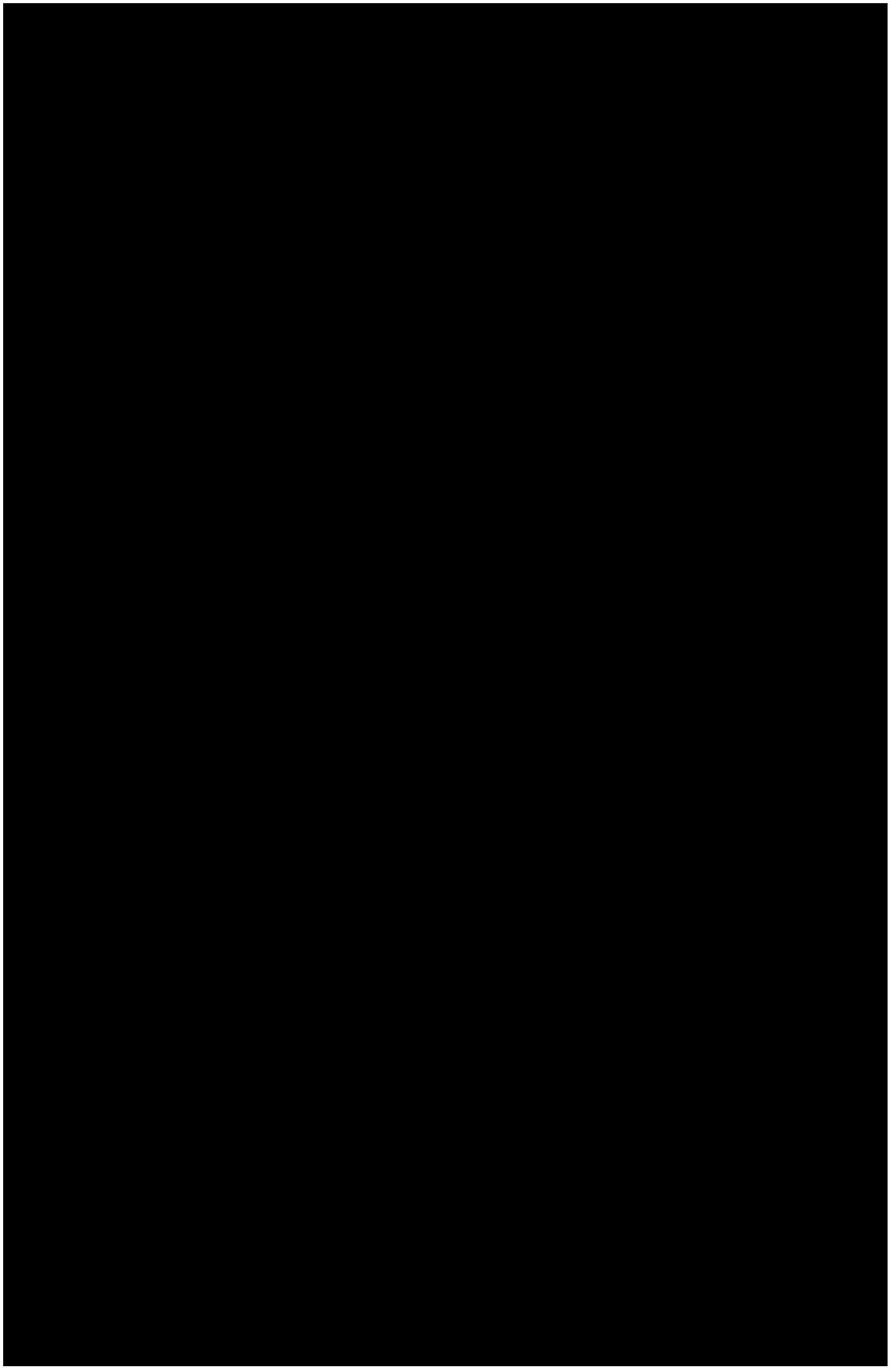












Appendix B. PROSPERO Registration

UNIVERSITY of York
Centre for Reviews and Dissemination

NHS
National Institute for Health Research

PROSPERO International prospective register of systematic reviews

Midwives' and health visitors' collaboration and communication in maternal and child health services: a systematic review

Maria Raisa Jessica Aquino, Rosamund Bryar, Justin Needle, Ellinor Olander

Citation
Maria Raisa Jessica Aquino, Rosamund Bryar, Justin Needle, Ellinor Olander. Midwives' and health visitors' collaboration and communication in maternal and child health services: a systematic review. PROSPERO 2015:CRD42015016666 Available from
http://www.crd.york.ac.uk/PROSPERO_REBRANDING/display_record.asp?ID=CRD42015016666

Review question(s)
In what ways (i.e., areas of practice/settings) do midwives and health visitors communicate and work collaboratively?

What methods of collaborative working and communication do midwives and health visitors employ?

How effective is the collaboration between midwives and health visitors?

Do the identified examples of communication and collaboration between midwives and health visitors adhere to policy recommendations and guidelines?

Searches
Databases:

EMBASE, Global Health, CINAHL, Cochrane Library, Maternity and Infant Care (Midirs), MEDLINE, PsycINFO, PsycARTICLES, Scopus, POPLINE, TRIP, Social Policy and Practice, SocINDEX, and British Library EThOS (dissertations, theses).

Citation searching:

Scopus and Cited Reference Search

Key researchers in the field of interest and key organisations will be contacted for papers that may not have been found through the electronic database searches, as well as unpublished or 'grey' literature.

No restrictions will be placed on publication period. An English-language restriction will be applied.

Types of study to be included
No restriction on study design, except for restrictions identified below in 'Context'

Condition or domain being studied
Communication and collaboration between midwives and health visitors working in maternal and child health services

Participants/ population
Midwives and health visitors [and all international equivalents, such as Child and Family Health Nurse (Australia), Plunket Nurse (New Zealand)]

Intervention(s), exposure(s)
This review will include any studies which explore the areas of practice in which midwives and health visitors work collaboratively, studies which explore the methods that midwives and health visitors employ when communicating and collaborating with each other, studies which explore the effectiveness of collaboration between midwives and

health visitors, and studies which explore whether collaborative practice between midwives and health visitors adhere to policy recommendations and guidelines.

Comparator(s)/ control
None

Context
Exclusion: study design; animal studies, study protocols, conference proceedings, editorials, opinion pieces or commentaries, reviews, news items, books, book chapters, letters, and reports.

Outcome(s)
Primary outcomes
This review aims to identify evidence of collaboration and communication between midwives and health visitors. In particular, it seeks to identify the ways through which midwives and health visitors are working collaboratively; the methods of communication and collaboration which these health professionals employ; describe the effectiveness of the collaborative relationship between these health professionals, and to determine whether current practice, based on the selected literature, adheres to current policies and practice guidelines.

Secondary outcomes
None

Data extraction, (selection and coding)
All citation records from database searching have been exported into EndNote X7. Duplicates have been removed, and the remaining records will be screened against the full eligibility criteria. The same will apply to all citation records gathered from other sources.

Data from included studies will be extracted using adapted data extraction forms, based on pre-existing data extraction tools such as the NICE Data Extraction Forms for Qualitative Studies and the Cochrane Collaboration Data Collection Forms for RCTs and non-RCTs. The data extraction form will be piloted on several studies, contingent on the number of papers identified which meet the inclusion/exclusion criteria, to ensure that all relevant information is gathered. One reviewer will extract all the relevant data from the included papers (RA), and another member of the review team will extract data from a sample of all included papers.

Data to be extracted will include, but are not limited to:

Context: setting, location

Aims/research questions

Study design

Theoretical perspective (if applicable)

Sample size and sampling type (e.g. convenience, purposive)

Participant characteristics: age, clinical experience, profession, ethnicity, other demographics and descriptive details

Data analysis methods/approach

Findings: extent and methods of collaboration, effectiveness of collaboration, adherence to policy guidelines

Risk of bias (quality) assessment
Articles retained after the screening process will be quality assessed against the appropriate Critical Appraisal Skills Programme checklists, dependent on study design (i.e. CASP for RCTs if paper being assessed is an RCT). One reviewer will conduct the quality assessment on all included papers (RA). To ensure reliability, another member of the review team will quality assess a sample of all included papers.

Strategy for data synthesis
A narrative synthesis is proposed for synthesising data for two reasons. First, this approach is able to accommodate the current review's multiple aims and research questions. Second, narrative synthesis is a recognised approach for exploring studies that have high heterogeneity. Papers included will be categorised according to study design, and an initial textual description of study results will be reported. Relationships between and within studies will be explored, and where available, statistical data (e.g. effect size, p values, confidence intervals) will be summarised and reported. If there is sufficient data to pool results across studies, then a meta-analysis will be undertaken.

Analysis of subgroups or subsets
None planned

Dissemination plans
A paper will be submitted to a journal in this field, and results will be presented at relevant conferences.

Contact details for further information
Miss Aquino

Centre for Maternal and Child Health Research, School of Health Sciences, City University London, Northampton Square, London, EC1V 0HB UK

maria.aquino@city.ac.uk

Organisational affiliation of the review
Centre for Maternal and Child Health Research, School of Health Sciences, City University London

http://www.city.ac.uk/health/research/centre-for-maternal-and-child-health-research

Review team
Miss Maria Raisa Jessica Aquino, Centre for Maternal and Child Health Research, School of Health Sciences, City University London
Professor Rosamund Bryar, Centre for Maternal and Child Health Research, School of Health Sciences, City University London
Dr Justin Needle, School of Health Sciences, City University London
Dr Ellinor Olander, Centre for Maternal and Child Health Research, School of Health Sciences, City University London

Details of any existing review of the same topic by the same authors
None

Anticipated or actual start date
01 October 2014

Anticipated completion date
31 July 2015

Funding sources/sponsors
City University London PhD Studentship

Conflicts of interest
None known

Other registration details
Not registered elsewhere

Language

English

Country
England

Subject index terms status
Subject indexing assigned by CRD

Subject index terms
Child; Child Health Services; Communication; Cooperative Behavior; Family; Humans; Maternal Health Services; Midwifery; Nurses, Community Health; Pregnancy

Stage of review
Ongoing

Date of registration in PROSPERO
18 March 2015

Date of publication of this revision
18 March 2015

Stage of review at time of this submission	Started	Completed
Preliminary searches	Yes	Yes
Piloting of the study selection process	Yes	Yes
Formal screening of search results against eligibility criteria	Yes	No
Data extraction	No	No
Risk of bias (quality) assessment	No	No
Data analysis	No	No

Appendix C. Key authors contacted

1. Crowley, S.
2. Kendall, S.
3. Whittaker, K.
4. Adams, C.
5. Downe, S.
6. Bick, D.
7. Renfrew, M.
8. Sandall, J.
9. Psaila, K.
10. Silverton, L.
11. Deave, T.
12. Appleton, J.
13. Page, L.
14. Lavender, T.
15. Schmied, V.
16. Barlow, J.

Appendix D. Research mailing lists contacted

1. midwife-research-advisory-network@jiscmail.ac.uk
2. senate-hvsn@yahoogroups.com
3. POLICY-FUTURES-FOR-UK-HEALTH@JISCMAIL.AC.UK
4. NW-MIDWIFERY-RESEARCH@JISCMAIL.AC.UK
5. IRISH-MIDWIFERY-EGROUP@JISCMAIL.AC.UK
6. HLG-WALES@JISCMAIL.AC.UK
7. EUROPEANMIDWIFERY@JISCMAIL.AC.UK
8. CASELOADMIDWIFERY@JISCMAIL.AC.UK
9. MIDWIFERY-REPROHEALTHEDUCATION@JISCMAIL.AC.UK
10. HVRESEARCH@JISCMAIL.AC.UK
11. midwifery-research@jiscmail.ac.uk

Appendix E. Search Strings for Electronic Database Searching

1. EMBASE, 1974- January 2015

#	Searches
1	(collaborat* or partnership* or inter?professional or teamwork or relationship* or cooperat* or communicat* or integrat* or interact* or "joint working").ti,sh,ab.
2	"midwi*".ti,sh,ab.
3	(health visit* or nurs* or home visit*).ti,sh,ab.
4	2 and 3
5	**1 and 4**

2. Global Health, 1973- January 2015

#	Searches
1	(collaborat* or partnership* or inter?professional or teamwork or relationship* or cooperat* or communicat* or integrat* or interact* or "joint working").ab,hw,ti.
2	"midwi*".ab,hw,ti.
3	(health visit* or nurs* or home visit*).ab,hw,ti.
4	2 and 3
5	**1 and 4**

3. MEDLINE, 1946- January 2015

#	Searches
1	(collaborat* or partnership* or inter?professional or teamwork or relationship* or cooperat* or communicat* or integrat* or interact* or "joint working").ab,sh,ti.
2	"midwi*".ab,sh,ti.
3	(health visit* or nurs* or home visit*).ab,sh,ti.

4	2 and 3
5	**1 and 4**

4. Maternity and Infant Care (MIDIRS), 1971-January 2015

#	Searches
1	(collaborat* or partnership* or inter?professional or teamwork or relationship* or cooperat* or communicat* or integrat* or interact* or "joint working").ab,de,ti.
2	"midwi*".ab,de,ti.
3	(health visit* or nurs* or home visit*).ab,de,ti.
4	2 and 3
5	**1 and 4**

5. CINAHL, all (no time limiters)

#	Searches
S1	TI ((collaborat* or partnership* or inter?professional or teamwork or relationship* or cooperat* or communicat* or integrat* or interact* or "joint working")) OR AB ((collaborat* or partnership* or inter?professional or teamwork or relationship* or cooperat* or communicat* or integrat* or interact* or "joint working")) OR MW ((collaborat* or partnership* or inter?professional or teamwork or relationship* or cooperat* or communicat* or integrat* or interact* or "joint working"))
S2	TI midwi* OR AB midwi* OR MW midwi*

S3	TI ((health visit* or nurs* or home visit*)) OR AB ((health visit* or nurs* or home visit*)) OR MW ((health visit* or nurs* or home visit*))
S4	S2 AND S3
S5	**(S2 AND S3) AND (S1 AND S4)**

6. PsycARTICLES, all (no time limiters)

#	**Searches**
S1	TI ((collaborat* or partnership* or inter?professional or teamwork or relationship* or cooperat* or communicat* or integrat* or interact* or "joint working")) OR AB ((collaborat* or partnership* or inter?professional or teamwork or relationship* or cooperat* or communicat* or integrat* or interact* or "joint working")
S2	TI midwi* OR AB midwi*
S3	TI ((health visit* or nurs* or home visit*)) OR AB ((health visit* or nurs* or home visit*))
S4	(S2 AND S3)
S5	**((S2 AND S3) AND (S1 AND S4))**

7. PsycINFO, all (no time limiters)

#	**Searches**

S1	TI ((collaborat* or partnership* or inter?professional or teamwork or relationship* or cooperat* or communicat* or integrat* or interact* or "joint working")) OR AB ((collaborat* or partnership* or inter?professional or teamwork or relationship* or cooperat* or communicat* or integrat* or interact* or "joint working"))
S2	TI midwi* OR AB midwi*
S3	TI ((health visit* or nurs* or home visit*)) OR AB ((health visit* or nurs* or home visit*))
S4	S2 AND S3
S5	**(S2 AND S3) AND (S1 AND S4)**

8. SocINDEX, all (no time limiters)

#	**Searches**
S1	TI ((collaborat* or partnership* or inter?professional or teamwork or relationship* or cooperat* or communicat* or integrat* or interact* or "joint working")) OR AB ((collaborat* or partnership* or inter?professional or teamwork or relationship* or cooperat* or communicat* or integrat* or interact* or "joint working"))
S2	TI midwi* OR AB midwi*
S3	TI ((health visit* or nurs* or home visit*)) OR AB ((health visit* or nurs* or home visit*))
S4	S2 AND S3
S5	**S1 AND S4**

9. Social Policy and Practice (1890s to present)

#	Searches
1	(collaborat* or partnership* or inter?professional or teamwork or relationship* or cooperat* or communicat* or integrat* or interact* or "joint working").ab,hw,ti.
2	"midwi*".ab,hw,ti.
3	(health visit* or nurs* or home visit*).ab,hw,ti.
4	2 and 3
5	**1 and 4**

10. POPLINE (no time limiters)

#	Searches
1	**(collaborat* OR partnership* OR interprofessional OR teamwork OR relationship* OR cooperat* OR communicat* OR integrat* OR interact* OR "joint working") AND (midwi*) AND (health visit* OR nurs* OR home visit*)**

11. TRIP (no time limiters)

#	Searches
#1	(title:(collaborat* OR partnership* OR interprofessional OR teamwork OR relationship* OR cooperat* OR communicat* OR integrat* OR interact* OR "joint working"))
#2	(title:midwi*)
#3	(title:(health visit* OR nurs* OR home visit*))
#4	#2 and #3
#5	**#1 and #4**

12. Cochrane Library (no time limiters)

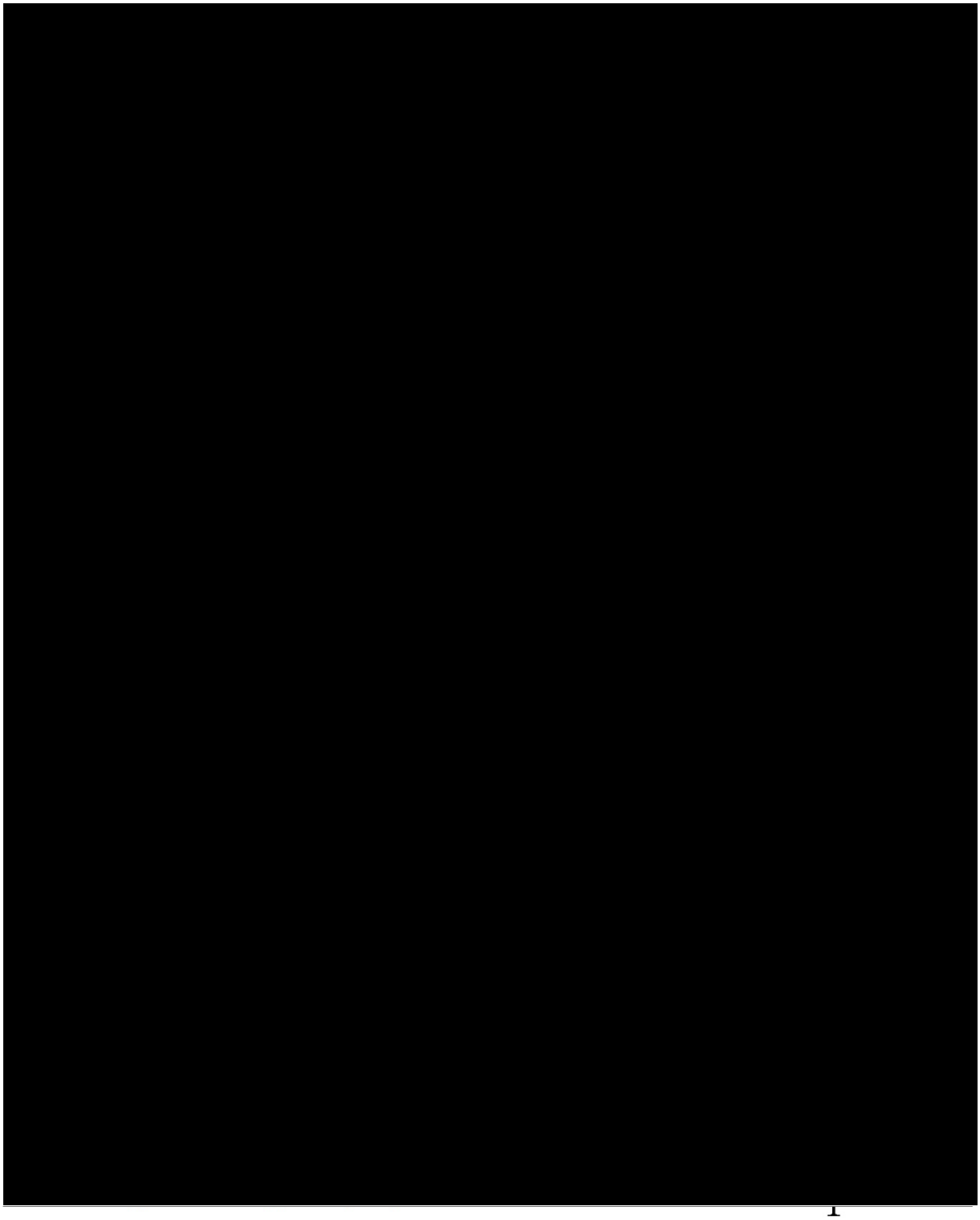
#	Searches
1	(collaborat* or partnership* or inter?professional or teamwork or relationship* or cooperat* or communicat* or integrat* or interact* or "joint working"):ti,ab,kw (Word variations have been searched)
2	midwi*:ti,ab,kw (Word variations have been searched)
3	(health visit* or nurs* or home visit*):ti,ab,kw (Word variations have been searched)
4	#2 and #3
5	**#1 and #4**

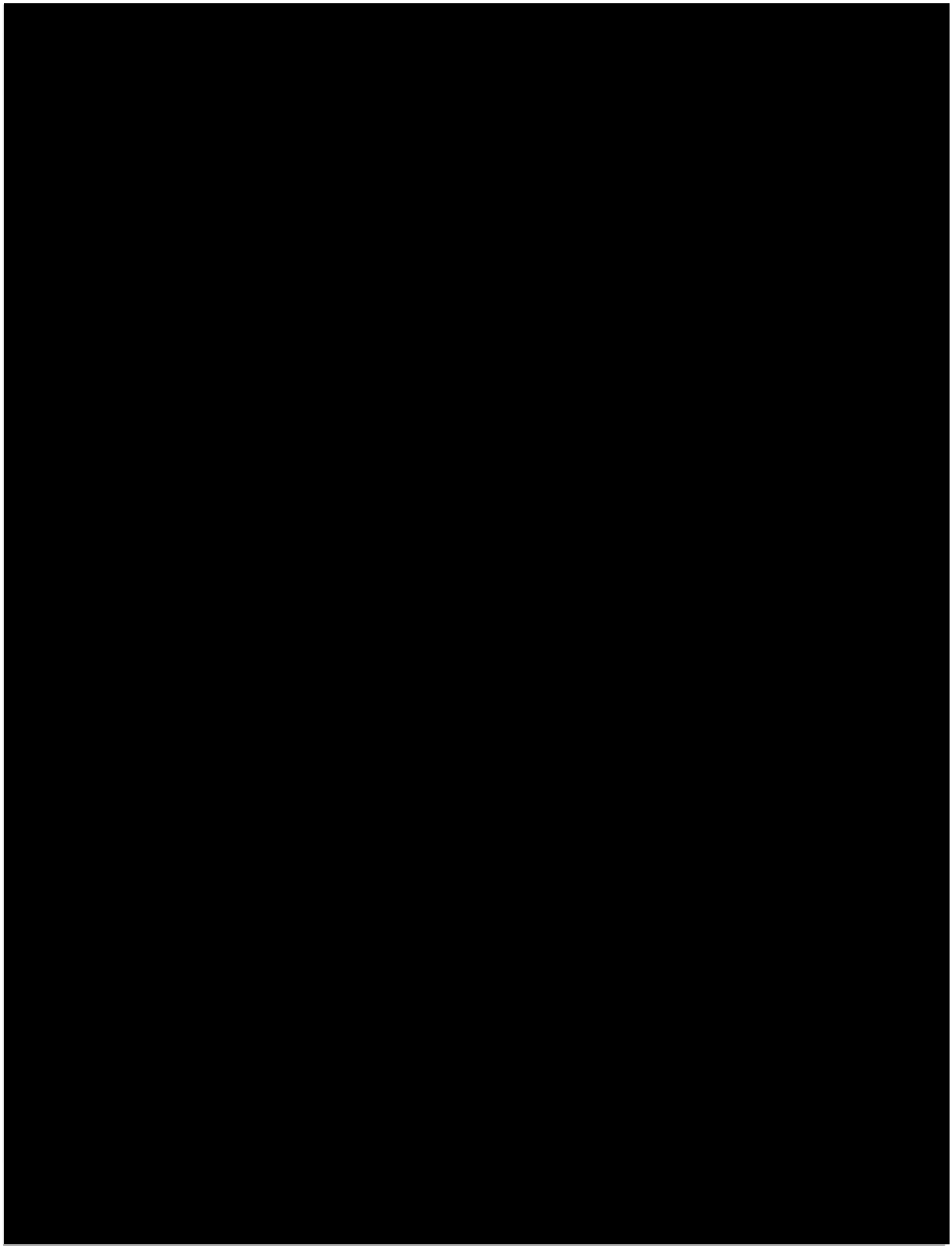
13. SCOPUS (no time limiters)

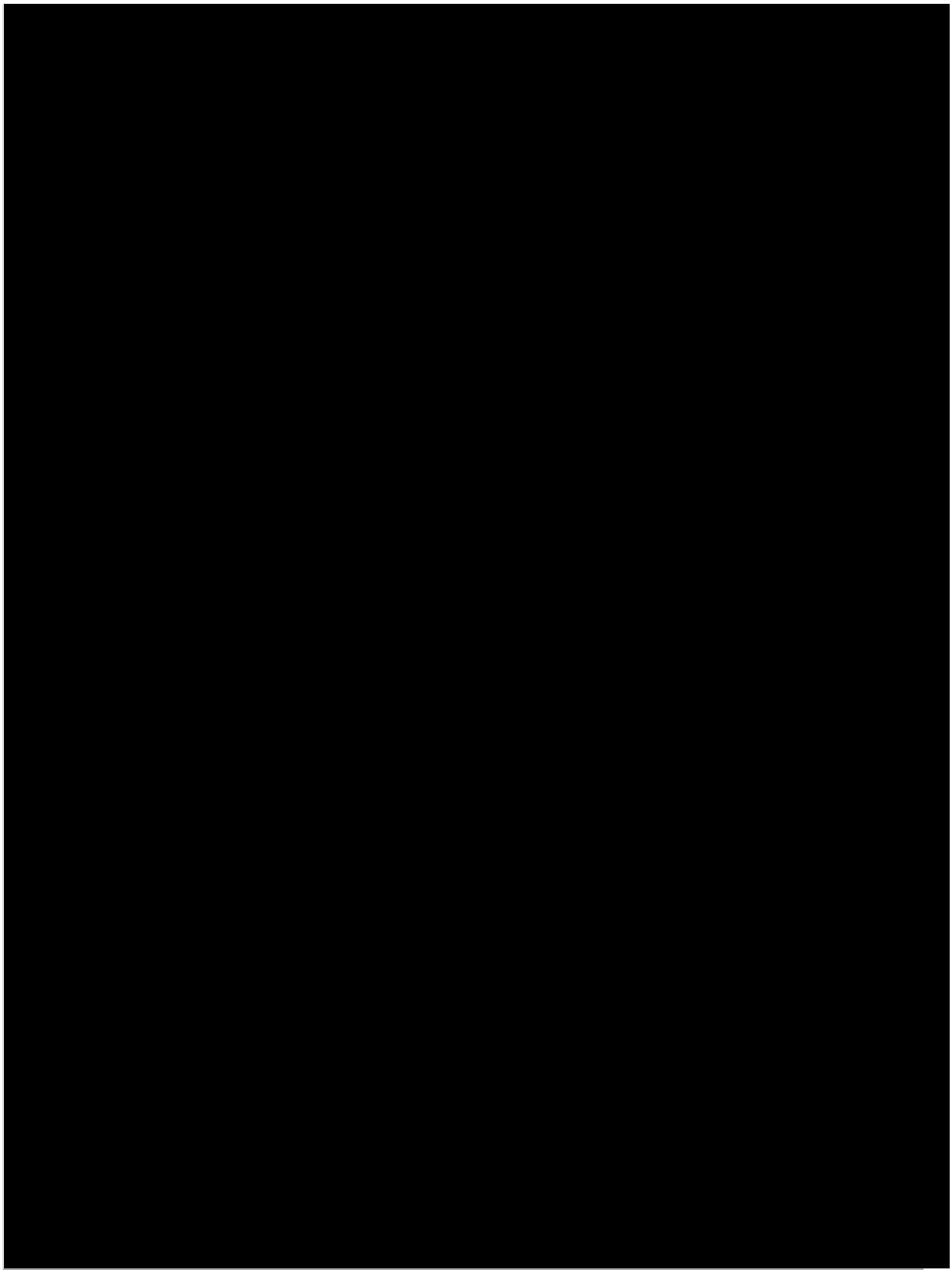
#	Searches
1	**(TITLE-ABS-KEY ((collaborat* OR partnership* OR inter?professional OR teamwork OR relationship* OR cooperat* OR communicat* OR integrat* OR interact* OR "joint working")) AND TITLE-ABS-KEY ((midwi*) AND (health visit* OR nurs* OR home visit*)))**

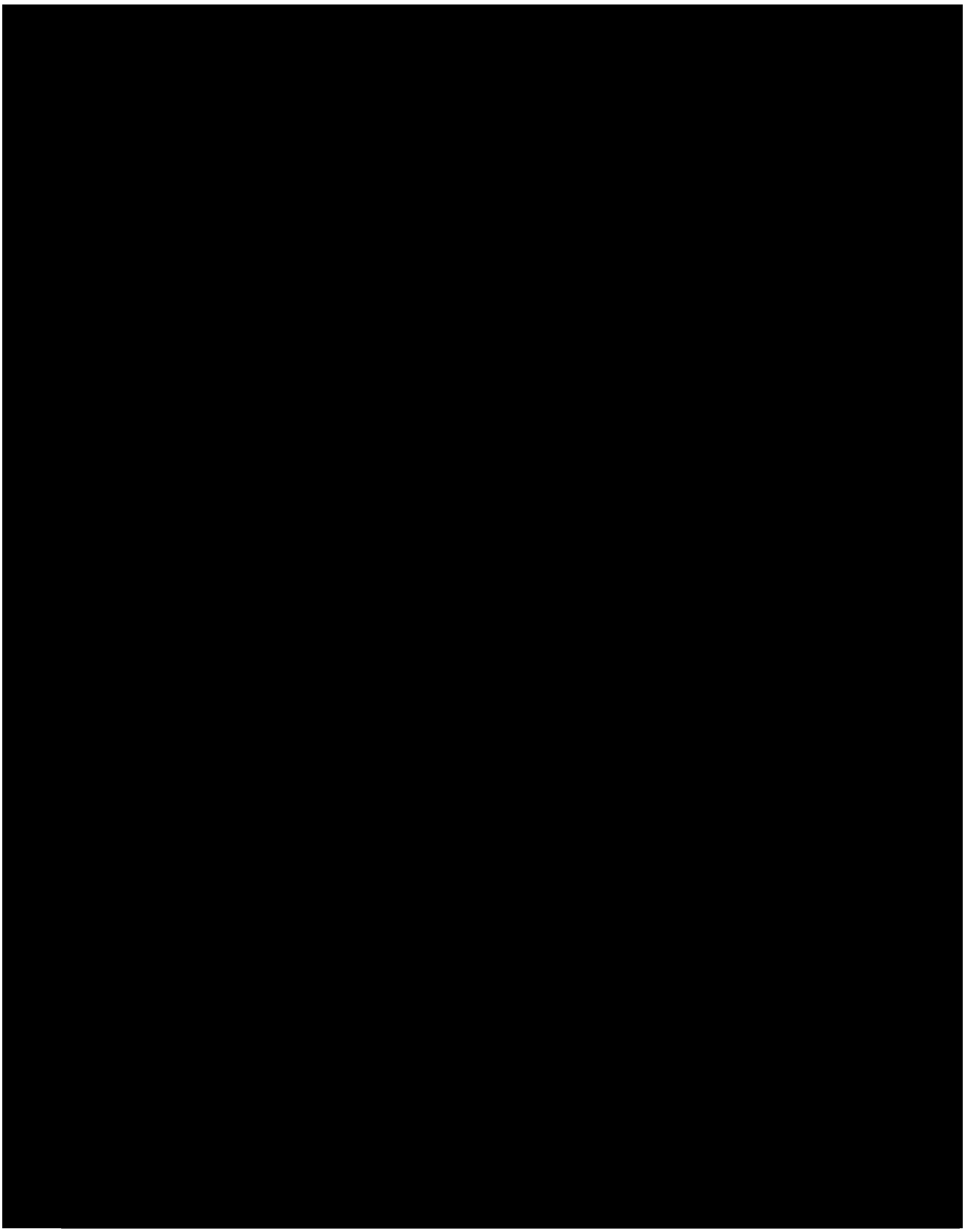
14. British Library EThOS (no time limiters)

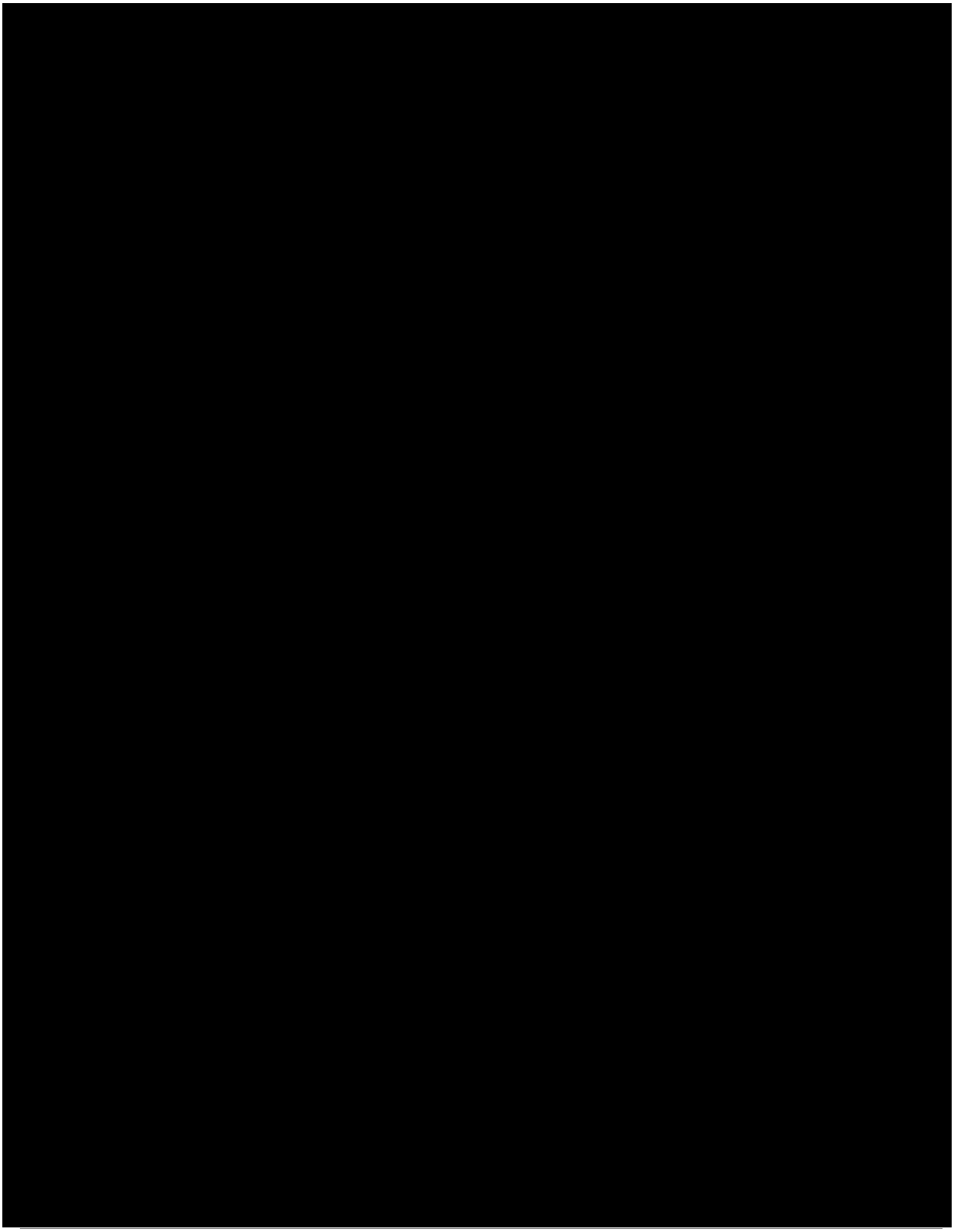
#	Searches
	Search results
1	**You searched all theses for: (collaborat* OR partnership* OR interprofessional OR teamwork OR relationship* OR cooperat* OR communicat* OR integrat* OR interact* OR "joint working") AND (midwi*) AND (health visit* OR nurs* OR home visit*) no results - 0 records were found.**

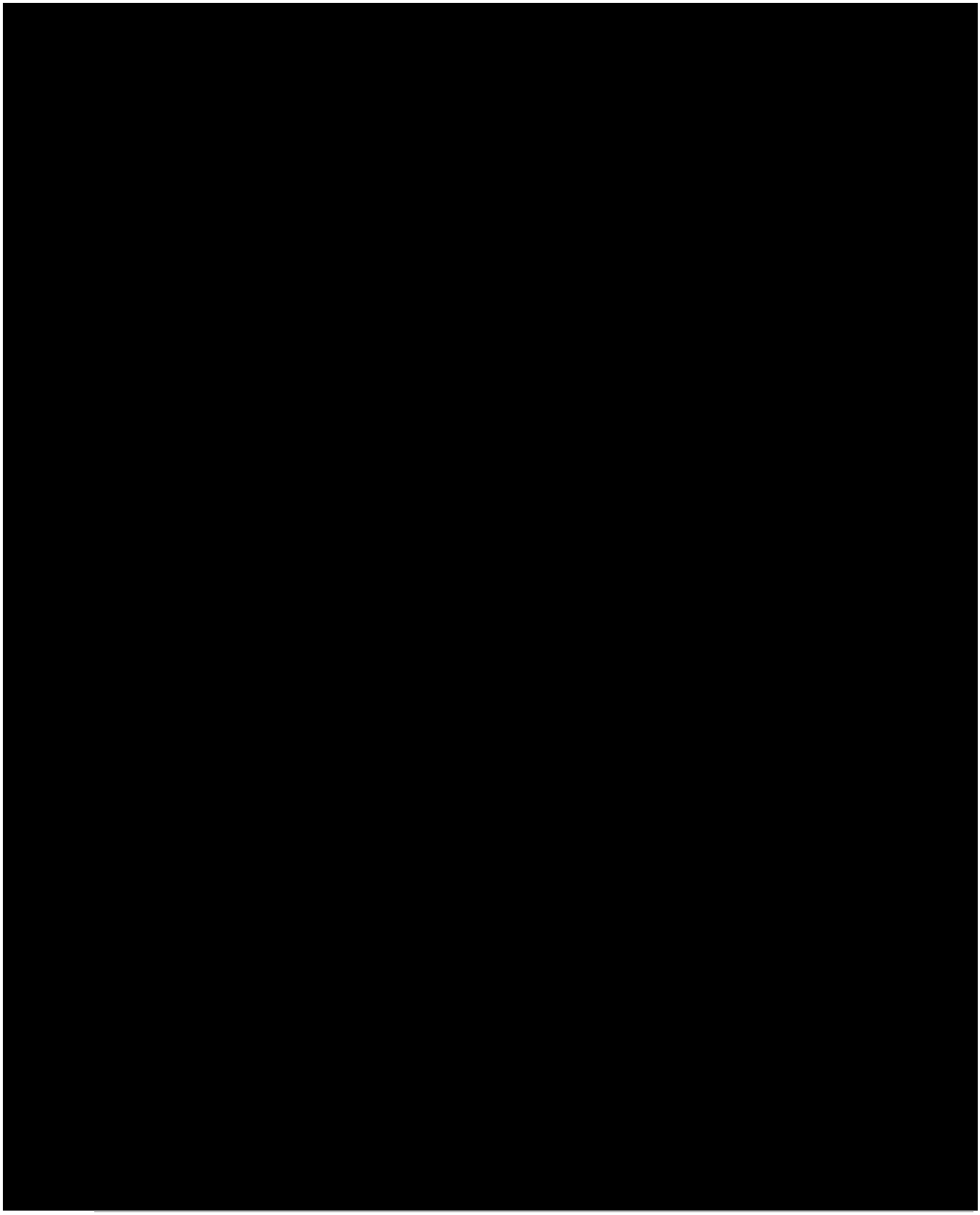












Appendix G. CEBMa Tool

CEBMa center for Evidence-Based Management

Critical Appraisal of a Survey

Appraisal questions	Yes	Can't tell	No
1. *Did the study address a clearly focused question / issue?*			
2. *Is the research method (study design) appropriate for answering the research question?*			
3. *Is the method of selection of the subjects (employees, teams, divisions, organizations) clearly described?*			
4. *Could the way the sample was obtained introduce (selection)bias?*			
5. *Was the sample of subjects representative with regard to the population to which the findings will be referred?*			
6. *Was the sample size based on pre-study considerations of statistical power?*			
7. *Was a satisfactory response rate achieved?*			
8. *Are the measurements (questionnaires) likely to be valid and reliable?*			
9. *Was the statistical significance assessed?*			
10. *Are confidence intervals given for the main results?*			
11. *Could there be confounding factors that haven't been accounted for?*			
12. *Can the results be applied to your organization?*			

Adapted from Crombie, *The Pocket Guide to Critical Appraisal*; the critical appraisal approach used by the Oxford Centre for Evidence Medicine, checklists of the Dutch Cochrane Centre, BMJ editor's checklists and the checklists of the EPPI Centre.

Appendix H. [redacted]

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Appendix I. TDF Studies Interview Topic Guide

TARGET BEHAVIOUR: Interprofessional collaboration where midwives and health visitors work in partnership – in contact with each other either face-to-face, telephone, or women's records/notes – regarding women's care during transition of care (handover).

Introduction

Introduction to the study/interview agenda
Consent (including audio recording)
Demographic questionnaire
Reminder about having no right or wrong answers – interested in what influences you as a midwife/health visitor when you are in contact with midwives/health visitors regarding care for women during transition of care

Thank you for agreeing to be interviewed today. I'd like to start off with learning a little bit about you.

Can you please briefly describe your current role (including setting currently working in, i.e., community, hospital, area – deprived/affluent or metropolitan/rural)?

How long have you been practising as a midwife/health visitor? Can you tell me a little bit more about your training as a midwife/health visitor (e.g. Have you trained as a midwife/health visitor only, or both, or have changed roles at all during your career? Or are you a nurse and a midwife, or a direct entry midwife?)?

In your practice, how often are you in contact with midwives/health visitors regarding women's care during transition of care? (Nature of the behaviour)

As I've mentioned, I'm interested in your views on working in partnership with midwives/health visitors. By this I mean being in contact with each other regarding women's care during transition of care.

What does this mean to you?

Knowledge

Now that we've discussed what working in partnership with midwives/health visitor means to you, I'd like to understand more about your knowledge and use of guidelines around being in contact with midwives/health visitors regarding women's care during transition of care.

Are you aware of any guidelines (national, institutional) about being in contact with midwives/health visitors regarding women's care during the transition of care ?

Are you aware of any other guidelines about being in contact with midwives/health visitors regarding women's care at other points during pregnancy and the early weeks? *(exploratory question)*

Nature of the behaviours

In your practice, to what extent do you come across other midwives and health visitors working in partnership regarding women's care during transition of care (i.e. how often)?

Do you use any guidelines (to work in partnership with midwives/health visitors regarding women's care during transition of care)?
If yes: Which guidelines do you use? How do these influence you and your work with midwives/health visitors?
If no: Why not?

What are your views on these guidelines in general (i.e. is it necessary/useful/not so useful – only use if prompt needed)?

Skills

How easy or difficult do you find working in partnership with midwives/health visitors regarding women's care during transition of care?
Prompt: Are there any specific skills/experience that you think are required/involved in order to be able to achieve this?

Beliefs about capabilities

Have you ever encountered any problems or difficulties when trying to work in partnership with midwives/health visitors (regarding women's care during transition of care)?

If yes: Can you tell me a bit more about these?

Any examples?

What would make it easier for you to work in partnership with midwives/health visitors during this period?

Beliefs about consequences

Are there any benefits to working in partnership with midwives/health visitors regarding women's care during transition of care?

Prompts: e.g. to themselves, patients, colleagues and the organisation; positive and negative, short term and long term consequences

What about disadvantages?

Do you think the benefits outweigh the costs?

Motivation and goals (intention)

How important is it for you to be in contact with midwives/health visitors regarding women's care during transition of care?

Are there any competing priorities that may interfere with your ability to be in contact with midwives/health visitors during this period?

Memory, attention and decision processes

How do you decide whether or not to work in partnership with midwives/health visitors during this period?

Prompt: Can you give examples or tell me about a time when you have had to make a decision on whether or not to work with midwives/health visitors?

Is working in partnership with midwives/health visitors regarding women's care during transition of care something you'd have to think a lot about (e.g. easy/difficult decision)?
Prompt: Is it something you would usually do?

Social/professional role and identity; social influences (norms)
To what extent do you see working in partnership with midwives/health visitors regarding women's care during transition of care as part of your role?
Prompts: To what extent do you feel encouraged to work in partnership with midwives/health visitors?
To what extent do other midwives/health visitors influence the extent of working in partnership or being in contact with each other during transition of care?
What about the women/families under your care?
How?

Emotion
To what extent do you think emotional factors influence whether or not you are working in partnership with midwives/health visitors regarding women's care during transition of care?
Prompts: Stress, anxiety?
How?

Research evidence suggests that levels of working in partnership between midwives and health visitors regarding women's care during transition of care are widely variable. Yet, there is evidence to suggest that contact between these two groups can be beneficial to women, babies, and health professionals. Bearing this in mind, in terms of aiming to increase working in partnership between midwives and health visitors:

Environmental context and resources
To what extent do you feel you have the necessary resources to work in partnership with midwives/health visitors regarding women's care during transition of care?
Prompts: time, resources, organisational protocols

Behavioural regulation

How can we determine whether working in partnership between these two healthcare professionals has taken place?

If you were to change your practices in terms of working in partnership with, that is, being in contact with midwives/health visitors regarding women's care during transition of care, how would you go about this?
Prompts: individual ways of working, when, where, how often, with whom?

Conclusion

We've now come to the end of my questions.

Thank you once again for taking part. The information you have shared with me today will be very useful for helping us find out ways of improving working in partnership between midwives and health visitors, where they are needed. Before we close, was there anything else that occurred to you about this topic that I haven't asked about, or anything else that you wished to share with me today? Do you have any questions for me?

What were your thoughts about this interview? If there's anything else that springs to mind later on that you wish to share, please feel free to get in contact. Thanks again

CITY UNIVERSITY LONDON
EST 1894

Participant demographic information sheet

Participant ID:

What is your current role? Please circle	Midwife Health visitor
What is your gender? Please circle or describe.	Male Female Transgender Other
What is your ethnic group? Please circle one option that best describes your ethnic group or background.	**White** 1. English / Welsh / Scottish / Northern Irish / British 2. Irish 3. Gypsy or Irish Traveller 4. Any other White background, please describe **Mixed / Multiple ethnic groups** 5. White and Black Caribbean 6. White and Black African 7. White and Asian 8. Any other Mixed / Multiple ethnic background, please describe **Asian / Asian British** 9. Indian 10. Pakistani

	11. Bangladeshi 12. Chinese 13. Any other Asian background, please describe **Black / African / Caribbean / Black British** 14. African 15. Caribbean 16. Any other Black / African / Caribbean background, please describe **Other ethnic group** 17. Arab 18. Any other ethnic group, please describe 19. Rather not say

Appendix K. TDF Studies Participant Information Sheet

CITY UNIVERSITY LONDON

Title of study Understanding the enablers and barriers to interprofessional collaboration between midwives and health visitors using the Theoretical Domains Framework

We would like to invite you to take part in a research study. Before you decide whether you would like to take part it is important that you understand why the research is being done and what it would involve for you. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information.

What is the purpose of the study?

This study aims to gather information about midwives' and health visitors' views and experiences of working collaboratively with each other regarding women's care during the postnatal (handover) period. This study is being undertaken as part of a Doctor of Philosophy degree in Health Psychology.

Why have I been invited?

You have been invited because you are a currently qualified, registered, and practising midwife or health visitor.

Do I have to take part?

You are **not** required to take part. Participation is **entirely voluntary**; it is up to you whether or not to take part. If you decide to take part, you will be asked to sign a consent form or give consent verbally. If you participate, you are also free to withdraw at any time up to the point before data is anonymised without providing a reason. Again, this will not affect your position in your place of work.

What will happen if I take part?

A one-off interview will be conducted at a time convenient to you. If you are based in Greater London the interview can be done over the phone/Skype or face-to-face at a mutually agreed venue in the public domain. If you are based outside Greater London, this interview will take place over phone/Skype.

This will run for approximately 45-60 minutes. You can refuse to answer any questions at any time during the interview. With your consent, the interviews will be audio-recorded. These recordings will be anonymised when transcribed and the recording deleted. Direct anonymous quotes from the interviews may be used to represent the themes identified by the researchers. If any quotes are used from your interview, these will be made anonymous so it will not be possible to identify you from any written reports or publications related to the study.

What do I have to do?

If you want to take part in this study, please speak to one of the researchers either in person, by calling 020 7040 5773, or by e-mailing Ryc Aquino at ryc.aquino@city.ac.uk.

What are the possible disadvantages and risks of taking part?

It is unlikely that there will be any risks to you from participating in this study.

What are the possible benefits of taking part?

You will help to increase the knowledge base about antenatal and postnatal care. Your participation in this study could help inform other geographical areas in England/Wales about interprofessional collaborative practice between midwives and health visitors.

What will happen when the research study stops?

All identifying information will be destroyed following the interview. However, if you wish to receive a copy of the publication or summary of results, your contact details will be kept until the results are sent to you. The interview data will be kept securely within City University London and will be destroyed after the minimum

archiving period (10 years). All audio recordings will be destroyed after transcription. All transcripts will be anonymized. Direct anonymous quotations may be used in the dissemination of results.

Will my taking part in the study be kept confidential?

Only the research team will have access to any information relating to this study. Information you share will be kept confidential. Should you share any information that may present harms to yourself or others, this will be disclosed by the interviewer to the supervisory team to decide an appropriate plan of action and support.

What will happen to results of the research study?

This project will partially fulfil the requirements of a Doctor of Philosophy degree in Health Psychology. The results of the study will inform a larger questionnaire study, and the understanding of midwife-health visitor collaboration. These results will be disseminated in a research article in a peer-reviewed journal, as well as the doctoral thesis. Anonymity will be maintained at all times. If you wish to receive a copy of the publication or summary of the results, please inform us so we can organise this for you.

What will happen if I don't want to carry on with the study?

You are free to withdraw from the study at any time up to the point before data is anonymised without providing a reason. This will not have any impact on your position at work.

What if there is a problem?

If you have any problems, concerns or questions about this study, you should ask to speak to a member of the research team. If you remain unhappy and wish to complain formally, you can do this through the University complaints procedure. To complain about the study, you need to phone 020 7040 3040. You can then ask to speak to the Secretary to Senate Research Ethics Committee and inform them that the name of the project is: *Understanding the enablers and barriers to interprofessional collaboration between midwives and health visitors using the Theoretical Domains Framework*

……

You could also write to the Secretary at:

[redacted]

Secretary to Senate Research Ethics Committee

Research Office, E214

City University London

Northampton Square

London

EC1V 0HB

[redacted]

City University London holds insurance policies which apply to this study. If you feel you have been harmed or injured by taking part in this study you may be eligible to claim compensation. This does not affect your legal rights to seek compensation. If you are harmed due to someone's negligence, then you may have grounds for legal action.

Who has reviewed the study?

This study has been approved by City University London School of Health Sciences Research Ethics Committee

Further information and contact details

Ryc Aquino (PhD researcher) – [redacted]

Dr Ellinor Olander (Research supervisor) – [redacted]

[redacted]

Thank you for your interest in this study

Appendix L. TDF Studies Ethical Approval Letter

School of Health Sciences

Ref: PR/MCH/PhD/16-17/01

5 July 2016

Research Office
Northampton Square
London EC1V 0HB

[redacted]

www.city.ac.uk

Dear Ryc and Ellinor

Re: Enablers and barriers to midwife-health visitor interprofessional collaboration

Following on from Maternal and Child Health Proportionate Review, I am pleased to confirm that the above project now has full ethical approval. Please find attached details of the full indemnity cover for the study.

Under the School Research Governance guidelines the applicants are requested to contact myself once the projects have been completed, and they may be asked to complete a brief progress report six months after registering the project with the School.

If you have any queries please do not hesitate to contact me as below.

Yours sincerely

[redacted]

[redacted]
Research Governance Officer

[redacted]

[redacted]

Enc

Appendix M. TDF Studies – midwives' set of belief statements

Domain	**Global theme**	**Subthemes**	**Illustrative quotes**	**Utterance frequency**	**Participant contribution ratio**
Knowledge	Not knowing health visitors/health visitor teams (B)	None	So I don't know which office to call, because it's not clear which, which community office is responsible for the particular road, then I um have the right office and telephone number and I don't get through -MW90	4	3 of 15
Knowledge	Knowledge of relative roles (E, B)	Good knowledge of relative roles (E)	I understand much better what they're trying to do and where we are working together with the woman and her baby. -MW55	4	3 of 15
Skills	Decision-making skills (E,B)	None	It's, I guess if you have as a clinician, if you have lousy decision-making skills, then it would be difficult, because other than you would be turning up asking you know, telling them about all sorts or everything, but no, if you, if you, well I feel, if you know, so if I feel that I've assessed the situation, if I know my woman, if I know... what is you know, what's going on with her then no it's not a difficult decision. It's either yes she needs more support, no they don't, let's [I: Sure] talk to the health visitors, or let's not talk to the health visitors. -MW46	2	2 of 15

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio
Skills	Resourcefulness (E)	None	Um... either you just smile and nod and do it yourself. Or you work the system, you find a different way of achieving the same results. You go see another health visitor if you want them to look something up on their, I don't even know what their system's called, but their system that seems to have information about everything on it. Um... you, you work the system because some of these have got to that point where it feels that they need to be so... I don't know, you know, cold um and stonewalling and unhelpful. that, that kind of person is not, yes you could go to their manager and you could you know blah blah blah blah but all you really wanna do is you just want a piece of information that will take you 30seconds to find, you just go find somebody else. So those people never get deal with, I guess. And then they just retire I: Yeah so it sounds like being resourceful as well and um kind of yeah searching other ways to achieve	1	1 of 15

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio
			P: Yeah um I think that's, I think that's the NHS all over.		
Skills	Ability to work with others (E)	None	Yeah and I guess being able to work in partnership with um both the women and the health visitors [I: Yeah] -MW91	1	1 of 15
Social/professional role and identity	Known role/responsibilities (E)	Care for vulnerable women (E)	So we have an early intervention team so what they do is if there are vulnerable women with social needs or special needs they see the women antenatally so we usually refer women who we think can benefit of health, early health visitor contact. -MW12	3	3 of 15
Social/professional role and identity	Nature of the midwifery role (E, B)	Flexibility (E)	Well as midwives you just manage your own time so you don't, well you don't work set hours you work to your work and so I can start and finish when I want to really as long as I do the work. -MW32	5	3 of 15
Social/professional role and identity	Nature of the midwifery role (E, B)	High workloads (generalist/universal services) (B)	we're not, as midwives we're not seeing the women. If we don't see the women how can we say... how can we say what's going on with them to the health visitors. -MW55	6	3 of 15
Social/professional role and identity	Nature of the midwifery role (E, B)	Working in isolation (B)	I'm not in the office all the time so I don't have the phone where they can just call me back at	3	3 of 15

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio
			any moment - I might be out, doing visits, or that kind of thing -MW37		
Social/professional role and identity	Views of the health visitor role (E, B)	Health visitor role is largely about information giving (B)	But, um and that's fine to drop off the, their information flyers but uh I think there's a, a level of respect and dignity that they should explore more so I think they are probably the, the main issues. I think so something, a theme that comes up over and over again, is that, is the breastfeeding. So I think that health visitors are not very well-informed -MW90	4	2 of 15
Social/professional role and identity	Nature of the midwifery role (E, B)	Independent midwifery (E, B)	Well. Again I think that a lot of care that they would provide I already provide [I: Yeah] so I feel that some things are just unnecessary. -MW90	7	2 of 15
Social/professional role and identity	Known role/responsibilities (E)	Providing complete information to health visitors (E)	make sure that the red book is up-to-date so I um, I write in the weight, I put in the weights in the whole way through because otherwise they won't have access to that information –MW67	2	1 of 15
Beliefs about capabilities	Perceived ease of contacting health visitors (E, B)	Not sure, limited experience (B)	Um... I... I don't know, I don't do enough of it really I think -MW24	2	2 of 15

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio
Beliefs about consequences	Opportunity for teamwork/second opinions (E)	None	Well I think that quite often two heads are better than one so if you're trying to think of what to do for somebody it's quite good to have someone to bounce ideas off because actually as a community midwife you do work on your own rather a lot -MW32	6	5 of 15
Beliefs about consequences	Lack of contact resulting in women slipping through the net (B)	None	I guess some things can get missed and some women can get missed and because I know sometimes the referral get misplaced and they get seen really late so they don't receive as much support as they could. -MW12	7	3 of 15
Beliefs about consequences	Co-location resulting in increased contact (E)	None	if we were based in a clinic or we had postnatal clinics so definitely we would have more contact with other professionals -MW12	2	2 of 15
Beliefs about consequences	Conflicting advice (B)	None	Not... not um... well the more people you get into a person's, woman's life, the more, the more different opinions you get about some things. So if I'll say to them about breastfeeding, OK well don't you know, have you thought about doing it like this and they're like oh yeah OK I can do that! And then the next person goes in, which will be a midwife or a health visitor and says, no! You don't wanna	4	2 of 15

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio
			do it like that, you wanna do it like this. And that, just more... the more people you put into a situation, the more sometimes the more diluted the advice gets I think. -MW46		
Beliefs about consequences	Perception of contact with health visitors (E, B)	Contact with health visitors have no clear advantages/disadvantages; can be wasteful	Um but for us I think there is no disadvantage but I feel in some ways it's a little bit of a waste. -MW90	4	2 of 15
Beliefs about consequences	Contact improving/increasing midwifery skills (E)	None	people on the delivery suite for example may not be used to phoning up the health visitor but actually... um... it could be very useful [I: Yeah]. Um it would be a new skill for some of the deliver suite midwives. -MW24	1	1 of 15
Beliefs about consequences	Benefits to women/families (E)	Increased support for families (E)	I mean mainly it's a sort of good support, uh for patients -MW4	1	1 of 15
Beliefs about consequences	Efficient professional practice (E)	Job satisfaction	I think you get slightly more job satisfaction because we all work in isolation and yeah actually share... um that family and have designated time for that can enhance job satisfaction or shared ideas to improve the	2	1 of 15

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio
			situation. [I: Mhmm] um maybe the health visitor can take in more resources -MW24		
Motivation and goals	Perceived value of collaboration at handover (E, B)	Not that important at handover (B)	At this stage, just because I'm used to it I guess it's not that important? -MW37	4	3 of 15
Motivation and goals	Perceived value of collaboration at handover (E, B)	Important if I have any concerns (E)	Well only if there's a problem. If there isn't a problem then I'm not worried about, I don't need to speak to her because the women are fine, I think they're OK. But if there is a problem then yes of course I need to speak to her about it. -MW32	3	3 of 15
Motivation and goals	Antenatal contact with health visitors is important to me (E)	None	Because if I've not been in contact with them, and there's been problems antenatally and it's after the event, we've missed out that period so it must start antenatally -MW44	5	2 of 15
Motivation and goals	Goals (E)	Important to keep women/family at the centre	it's professional behaviour I guess and professional, that sort of working together type ethos, keeping the woman central to the care that we're giving. -MW6	2	2 of 15
Motivation and goals	Need for contact with health visitors (E, B)	Not really needed (B)	But most of the times everything is fine and anything that they would do, I will do. So I don't need them as such -MW90	4	2 of 15

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio
Motivation and goals	Need for face-to-face contact (E)	None	If it takes place then that's better than if it doesn't. And when it doesn't take place face-to-face it's the biggest problem I think. […] I think face-to-face meetings are, are [I: Essential] essential. Absolutely -MW55	2	1 of 15
Motivation and goals	Goals (E)	Important to give consistent advice	I think it's really important that we're giving the same message to women so from a health perspective breastfeeding, massive massive thing. -MW44	2	1 of 15
Environmental context/resources	Staffing (E, B)	Lack of staff (B)	Yes that's right, there's very low staffing -MW24	12	7 of 15
Environmental context/resources	Resources (E, B)	Lack of resources (including joint training) (B)	I mean also just as far as if we, if we were gonna be doing more things on the computer, our office has 2 computers for, I mean we will always have 12 midwives in a day but we might have 7 midwives in a day so you're struggling a bit with those kinds of resources of being able to [I: Mhmm] send emails and chase up health visitors and things like that -MW4	14	7 of 15
Environmental context/resources	Physical space to collaborate (E, B)	Being co-located (E)	So we're in a big building, so downstairs we have other rooms which they use which we don't, you know, we don't, that's part of the	14	7 of 15

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio
			health visitors' team. We're in the same building -MW87		
Environmental context/resources	Staffing (E, B)	Having adequate staffing levels/specialist staff (E)	I think uh really um just having a really good like safeguarding lead midwife that has good liaisons with the health visiting team, -MW91	8	5 of 15
Environmental context/resources	Resources (E, B)	Resources available to me are enough (E)	Yeah I do feel like I have the um appropriate resources to work in partnership with them -MW91	5	5 of 15
Environmental context/resources	Physical space to collaborate (E, B)	Lack of physical space (B)	Yeah, yeah. Um... so there isn't really a confidential uh, there's a limited confidential area to talk to health visitors on the delivery suite I: How do you mean sorry P: Uh, well the office is very open so we have minimal space to um, minimal it's an issue that's been identified and they're going to work on it you know. Um to... well I've asked for a quiet room so that you could go there and speak to people -MW24	7	4 of 15

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio
Environmental context/resources	Physical space to collaborate (E, B)	Having a physical space (E)	I usually go and see her in her office or we could meet at the Children's Centre -MW32	10	4 of 15
Environmental context/resources	Size and structure of teams (E, B)	Smaller (E)	Having said that I always haven't, haven't always had such a good relationship with health visitors because sometimes they cover a very big area and you don't get to know them so well, it's just that I think because this is a more rural area I think we can work more closely together so that's really good -MW32	3	3 of 15
Environmental context/resources	Size and structure of teams (E, B)	Bigger/more dispersed (B)	You could, I mean it's quite complicated because you could look at um health visiting and... you know midwifery. The hard bit is when people are dispersed over the, you know, centre of [City]. -MW88	3	3 of 15
Environmental context/resources	Physical space to collaborate (E, B)	Not being co-located (B)	the health visitors tend to be in the community, we're in the, if we're in the units we don't tend to have much to do with them, so it's a very, it's almost a very separate profession in a way. -MW6	2	2 of 15
Environmental context/resources	Physical space to collaborate (E, B)	Not using available spaces (B)	I'm actually thinking about children's centres. I: OK, what about children's centres?	3	2 of 15

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio
			P: I'm just thinking about when I used to work around [area], or ??? [I: mhmm], our clinics, our antenatal clinics were based on children's centres I: OK P: And also health visitor clinics were based on children's centres. I: Mhmm P: So women were coming antenatally, and they knew that they would see the midwife, and the health visitor in that place. We had breastfeeding support, we had all the stuff in the children's centres. And I'm thinking, in this area, we are not using them at all. I: But do children's centres exist here? P: Yeah -MW37		

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio
Environmental context/resources	Poor access to guidelines (B)	None	we have a guideline so there will be but I think, the trouble is that a lot of them are on the intranet, on the hospital intranet these days, they're not actually in a folder so you can look at them. -MW32	2	2 of 15
Environmental context/resources	Time (E, B)	Allocated time to speak with health visitors (E)	I think having an allocated time slot that's just designed for that and people actually stick to it and keep to it. And apologies sent, and if they just can't come, so something's cropped up, they actually try and speak on the phone at least or at least -MW24	1	1 of 15
Social influences	Familiarity (E, B)	Being familiar with health visitors (E)	I do think we don't know each other as well, so it's a little bit more difficult sometimes to get in touch with each other. -MW4	10	6 of 15
Social influences	Work structure (E, B)	Work structure (B)	I suppose working hours, I suppose as well as you know trying to get a hold of them, work out who the named, allocated health visitor is, because their working hours, I mean for me, I have quite a flexible diary. Um so I, I do, I'm able to, I do have admin time that I can build in at certain points so that I can reply to emails and certain calls but a lot of midwives and health visitors don't have that. Their, a lot of	9	6 of 15

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio
			their diaries are taken up purely with clinical work and they don't have the time to reply to emails and um, you know, do phone calls, which makes it very difficult then if I you know, yes I've found out who the named health visitor is I've got their phone number but actually calling them, they're not gonna be in the office because they're, you know, they're doing clinical stuff a lot of the time -MW94		
Social influences	Face-to-face contact/interaction (E)	None	You know, you go to, quite apart from anything else, you go to their office to handover your women, have a cup of coffee and talk, and that talking, that ability to sit down and have a chat and everybody gets half and hour up to an hour. We're not running around with the phones off so that you can talk, not just about the women but generally. [I: Mhmm] Makes for a better working environment, and better working relationships -MW55	20	5 of 15
Social influences	Role of managers/mentors in enabling collaboration (E)	None	I think, no it's what's more that I've been uh kind of what I was taught by my uh mentor than I guess um it is in terms of these referral letters that's also I should've said that's also a local guideline. -MW91	12	5 of 15

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio
Social influences	Shared goals (E)	None	the theory and philosophy between, behind the care we provide I think may be a little bit different sometimes so it may be a nice thing to have a shared vision of what, which way we are supporting women and babies and families. -MW12	6	4 of 15
Social influences	Influence of other midwives on contact with health visitors (E, B)	My colleagues don't influence my interactions with health visitors (E)	But I couldn't think in terms of my colleagues, I don't... I don't think they influence my interaction with um health visitors on like a day-to-day level. -MW91	3	2 of 15
Social influences	Valuing relative roles (E)	None	OK well valuing their role. Mutual respect, valuing their role, which I do -MW88	9	2 of 15
Social influences	Familiarity (E, B)	Lack of familiarity (B)	Yeah well because I've got a good health visitor, if I didn't get on with her and she was like, she didn't want to communicate with me and it was difficult and I was having to chase her then that would make life very difficult and I wouldn't want to. But because she's very nice and we get on very well and she's more than happy to phone up and chat to me anytime. So if she's worried about something she'll phone	2	2 of 15

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio
			me or if I'm worried about something I'll phone her so because we've got a good working relationship then it's, it's easy. -MW32		
Social influences	Job satisfaction (E)	None	we do such different jobs, yeah, such different jobs. I: Yeah P: Such different jobs... [I: Uhuh, OK...] you know I've always, I've always enjoyed working with the health visitor team that I've worked with. [I: Uhuh] one of them was a, one of them was a midwife. One of them is a, is um a friend. You know... I: Uhuh P: ? 0:28:57.5 inaudible ? personally enjoy it but I know that others don't -MW55	2	2 of 15
Social influences	Work structure (E, B)	Work structure (E)	I think working at [Birth Centre], the way we work here I think we've had better connectedness than I have seen in other trusts [I: Sure] but that's because when, when things end here we don't have a fall back of a big	2	2 of 15

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio
			hospital. We, we are uh we are what we are and once that finishes, you've got to make sure that the woman knows exactly where to go afterwards. So I think it works better with us, I think so. -MW87		
Social influences	Breakdown of respect for each other (B)	None	I think it's, quite often it's just the respect to each other's profession breaks down, so if we haven't communicated it, or somebody's, say something's gone wrong and there's a blame culture going on there and one professions blaming the other, that's where things can breakdown actually I think, that's, that could be potentially the, an issue -MW6	2	1 of 15
Social influences	Trust (E, B)	I trust health visitors (E)	With the health visitors, we just really trust that they have received it ???. And they will call the woman. We have kind of like - I wouldn't say 100% but 99.9% that they're gonna do it [I: yeah] because they are really good; they rarely miss anyone. I: Yeah P: So in a way, I don't really think it's that important [I: yeah so you're confident, yeah].	2	1 of 15

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio
			I'm confident they will do it and they will see her. -MW37		
Social influences	Trust (E, B)	Lack of trust (B)	also I find that I think the training process for health visitors is very different to midwives. I also find that sometimes they are allocated a, a student health visitor as their named health visitor and sometimes I don't know that so when I'm, and then I give them, I have a handover of care to the health visitor but actually it's a student health visitor and I feel that I should probably have known that before I did that because it will be, it shouldn't really be that I also handover you know their supervisor, because they are only a student you know I: Absolutely yeah P: And I'm not alerted to this fact that the named health visitor, and I just assume this, that they named health visitor, they are a qualified health visitor, but in a lot of cases it turns out that they're not. -MW94	1	1 of 15

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio
Social influences	Social support (E)	None	I'm 50 years of age, they still haven't knocked it out of me but I have days when things like get on top. We all do. But um, I think it's about learning to support one another as well. Um, and have ? 1:04:33.0 ? and you know sharing from experiences. Rather than it being a sort of like more you know, competitive, it's it's about you know like supporting supporting one another. -MW44	2	1 of 15
Emotion	Frustration (B)	None	then you just have to wait for them to call you back so it can be quite frustrating actually. -MW12	3	2 of 15
Emotion	Exhaustion (B)	None	um I mean, I'm 50 years of age, they still haven't knocked it out of me but I have days when things like get on top. -MW44	2	2 of 15
Emotion	Annoyance (B)	None	if they come with conflicting information or something, not against what we said but really different, it has a negative impact on what we've done to that point which I think is what sometimes makes us a little bit annoyed with the health visitor and I guess it's mainly regarding breastfeeding. -MW12	1	1 of 15

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio
Emotion	Apathy (B)	None	And again where people are apathetic then what will happen is is that they're not fulfilling their job role -MW44	1	1 of 15
Emotion	Fear (B)	None	And again people fear for their jobs, people fear that they're gonna be made to look bad, people fear that um, they're um somebody else is gonna come in and take over, over their role so that means that they could lose their job. -MW44	5	1 of 15
Emotion	Stress (E, B)	Collaboration reduces stress (E)	I think it would probably be, I think you'd have reduced stress if you worked more in partnership because you'd share the load a little bit more I think, definite, yeah, that's what, yes. -MW6	1	1 of 15
Emotion	Worry about woman (E)	None	But it's something in your gut that is telling you like, 'hmmm, there's something here', so you might need to go in so it's something, it's something that you cannot really explain especially why you have a bad feeling about that, but you just have a bad feeling saying, 'just keep an eye on her, she might need...', it's uh, I don't know how to explain it, sometimes you just have that feeling that she's not like, she's not like the features, like the criteria, she's a high-risk, postnatal depression... -MW37	1	1 of 15

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio
Behavioural regulation	Developing programmes delivered collaboratively (E)	Joint classes (E)	you could do a joint sort of early pregnancy class with the health visitor and that's one way of meeting everybody. -MW24	7	5 of 15
Behavioural regulation	Prioritising collaboration with health visitors (E)	Prioritising collaboration with health visitors (E)	You have to... find a way to make it work because you're working with, with less staff than you'd like, less money than you'd like, more women than you'd like. And that's the same for every department, every speciality everywhere. You just, you just have to make it work. -MW46	4	4 of 15
Behavioural regulation	Developing shared vision of care (E)	None	It's creating the right cultures to get good working relationships. -MW88	3	3 of 15
Behavioural regulation	Lack of feedback from health visitors (B)	None	Well we can't! Because they don't ever give us feedback that is a real issue. I mean we always have follow up on the maternal notes, that says, handed over to health visitor [I: Mhmm], phone call with health visitor, but we don't really get anything back. -MW87	4	3 of 15
Behavioural regulation	Having a handover (E)	None	there are lots of situations where we do need to and should I do think there are situations where we could do more than we do... Um so we tend to think about the vulnerable one as the ones	4	3 of 15

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio
			that we need to speak to health visitors about but I think it could also be really valuable for us to be better about say handing over if there was breastfeeding issues that the might need to continue on with [I: Mhmm] or something like that that's maybe not like a vulnerable thing but something that, it's useful for the health visitors to be aware what input we've given, what plans we've put in place [I: Uhuh] um because sometimes when we dischar- well when we discharge the patients we take our paperwork away [I: Mhmm] and the health visitors have nothing to go by -MW4		
Behavioural regulation	Sharing information (E)	None	or we are sharing some information and say, OK so we discharge these ten women and they say, OK we've seen ten of them or nine of them, who is this other one, do you have the details? And I think it's just it would be nicer for us to have a system in place where we know they actually really saw them and they are being seen and they are following up and things like that -MW12	3	3 of 15
Behavioural regulation	Changing guidelines (E)	None	To have that written into, have guidelines on communication with the health visitor on delivery suite. Even if it's just one sentence	3	3 of 15

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio
			saying um... have you informed the health visitor of delivery? Uh you know, do you need to put, talk to the health visitor at delivery you know? -MW24		
Behavioural regulation	Markers of collaboration (E)	Staff feedback (E)	Mmm... I think we already know all the ways to do it, it is just as I said if there's partnership, I feel that I can trust completely in them and just use them as another resource of caring for these women. Exactly the same as I'm doing for example with the ??? therapist, antenatally or postnatally. I feel I refer them I have feedback for what I'm doing, they see them, they make plans, they tell you the plans, we discuss the plan together. -MW37	5	3 of 15
Behavioural regulation	Prioritising collaboration with health visitors (E)	Inability to prioritise collaboration with health visitors (B)	if you don't have particular concerns about a patient then, you know making sure the health visitors make contact is certainly not the top of your priority list [I: Uhuh]. So, you might sort of wait a little bit longer before you get in touch with the um health visiting team I: Yeah	2	2 of 15

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio
			P: Um, I mean not on a daily basis it's it's always just a bit difficult to find the time to do everything -MW4		
Behavioural regulation	Collaboration in antenatal period (E)	None	Because if I've not been in contact with them, and there's been problems antenatally and it's after the event, we've missed out that period so it must start antenatally. It has to start [I: Almost like preventing] antenatally, yeah. It's more, yeah so it's rather than you know, it's like we're sort of dealing with the, with it before and um putting things in place as opposed to waiting til after, after the, after the event so. For me it starts um antenatally, it's absolutely key. Um and again as well I think it's really important as midwives, if we you know that that we have that transtion and that you know, whether it's written down on a piece of paper but maybe it's a phone call, I've discharged this woman today. [I: Yeah] Um you know, and they put, a visit in the antenatal period. It was uneventful or there was these problems or you need to know about this, this and this. -MW44	5	2 of 15
Behavioural regulation	Increasing midwives' knowledge about	None	Um more communication, um understanding about their jobs, knowing them by name, all of	2	2 of 15

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio
	health visitor role (E)		them by name, not only face, [I: Mhmm] um yeah that kind of thing -MW87		
Behavioural regulation	Teambuilding exercises (E)	Social activities (E)	I think it would be great to um... set something up to allow health visitors and independent midwives to create something like partnership. -MW90	3	2 of 15
Behavioural regulation	Health visitor visit after birth (E)	None	they probably haven't got time to do that but they, they could be in the hospital and they could be told that their, one of their women that they're going to look after the next 5 years is um having a baby and they could just pop in afterwards. -MW24	2	1 of 15
Behavioural regulation	Maintain current practice (i.e. no need to change anything) (E)	None	Not really because it's only a small part of the job talking to the health visitor so I think what we're doing at the moment works fine yeah. -MW32	1	1 of 15
Behavioural regulation	Changing team size (E)	None	I do think it would be useful to have less health visiting teams that we have to be liaising with because I do think that does make it more difficult. -MW4	2	1 of 15
Behavioural regulation	Referrals not being made (B)	None	... I think simplifying referral processes. So that um... [I: People overcome the challenges of having to do it], yeah. Yeah! So we'll you know, try to do that and that, that does, that	2	1 of 15

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio
			does frustrate me because I've put all the work in and it's like, like can you refer this and this and it's you know, and that is an issue. We've got to keep it going, we just don't sort of like, not everybody but some do. -MW44		
Behavioural regulation	Gathering evidence for collaboration (E)	None	So research you know, like obviously research, things that you're doing you know, you'll get all the evidence, look at all the best practice. -MW44	1	1 of 15
Nature of the behaviours	Applying collaboration-related guidelines (E, B)	No (B)	But we, I mean we don't work, I'm not aware that we work to a particular guidelines I: Yeah OK great P: In some ways it's habit more than anything -MW55	11	8 of 15
Nature of the behaviours	Applying collaboration-related guidelines (E, B)	Yes (E)	Um I mean, we follow our own you know, our own internal guidelines for which tell us you know, you fill in your form in at the booking; you um send it off at 16 weeks, you know the health visitor gets in touch with them at some point about 36 weeks and then we hand over to the health visitor and what we should include in	4	4 of 15

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio
			the handover to the health visitor, that's in our guidelines. -MW46		
Nature of the behaviours	Colleagues working in partnership (E, B)	Sometimes (E)	Yeah I mean I think... within our team, there is... maybe not every day but you know out of Monday to Friday, at least 3 days a week, one of the midwives will be making contact with the health visitor [I: Mhmm] just as a general, making sure that they're aware of the patient and things. As far as the more sort of detailed handovers with concerns for patients that will be maybe more like once a week or so, one of the midwives will need to speak to the health visitor about a particular patient -MW4	4	4 of 15
Nature of the behaviours	Colleagues working in partnership (E, B)	Not observed others (B)	I mean I've been here 7 years so as well as thinking back I couldn't remember either really -MW87	3	4 of 15
Nature of the behaviours	Nature of contact with health visitors (E, B)	Passive/indirect contact via antenatal referrals (E)	Well quite often as soon as I meet the woman if I know there's a problem then I will do a safeguarding form or whatever is necessary or what's called a CAF form and usually the health visitor gets a, I think I'm supposed to send her a copy of the CAF form actually, so yes she'll usually get a copy of the CAF form and I'll tell her who I'm concerned about so	4	4 of 15

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio
			quite, at the beginning she will be told that I'm concerned So it's called a CAS About people. Form? CAF, C, A, F. Common Assessment Framework it stands for. So because I work in a different area, I'm employed in one area and then I'm working in another area so I'm on the border so I have to do two lots of referral forms. -MW32		
Nature of the behaviours	Safeguarding practices (E)	None	Sometimes if a child is gonna be subject to a protection plan of some sort or child in need plan [I: Mhmm] we might meet together in, in the hospital. There might be a discharge planning meeting [I: Oh] for example where the health visitor would go and the midwife would go. -MW55	3	3 of 15
Nature of the behaviours	Colleagues working in partnership (E, B)	All the time (E)	All the time um, because look, like I said I work in a group of 6 midwives so the other 5 of them are, they are all interacting like with health	3	3 of 15

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio
			visitors all the time so, we have that position -MW94		
Nature of the behaviours	Nature of contact with health visitors (E, B)	Limited contact with health visitors (B)	Unless there is a clinical indication I wouldn't say we normally, I normally get in touch with them. -MW12	6	3 of 15
Nature of the behaviours	Nature of contact with health visitors in the antenatal period (E, B)	No contact antenatally (B)	Usually it was postnatally, it didn't tend to be antenatally at all. -MW6	2	2 of 15
Nature of the behaviours	Colleagues working in partnership (E, B)	Not an NHS midwife, does not apply (B)	I don't think I come in contact with other because I'm not working in, on a ward or anything like that [I: Yeah yeah], so. I: I can understand yeah P: I don't think it does really apply -MW90	1	1 of 15

Appendix N. TDF Studies – health visitors' set of belief statements

Domain	**Global theme**	**Subthemes**	**Illustrative quotes**	**Utterance frequency**	**Participant contribution ratio (n= 17)**
Knowledge	Knowledge about midwives (general) (E, B)	Understanding how midwives work (E)	Um no I think it's important that they know our job and we know their job which I think where I work, we're we all pretty much know each other's jobs I think -HV31	10	6 of 17
Knowledge	Knowledge about midwives (general) (E, B)	Lack of knowledge/awareness of how to contact midwives (B) Also identified in systematic review as a barrier (poor knowledge of each other's role)	I mean I don't know, I don't, d'you know it's awful but I don't even know where they're based [I: Yeah] they've got different teams -HV96	10	6 of 17
Knowledge	Knowledge about midwives (general) (E, B)	Limited understanding of how midwives work (B)	there was always that oh I've gotta phone the midwife, oh they never answer the phone um kind of thing	7	5 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
		Also identified in systematic review as a barrier (poor knowledge of each other's role)	but I think it's also knowing, 'cause you're trying to get a hold of the community midwives, and knowing that actually they won't be in the office in the middle of the day. They're most likely, you're most likely to catch them at the beginning or end of the day, when they're kind of finishing off um so -HV94		
Knowledge	Knowledge about midwives (general) (E, B)	Health visitors' professional backgrounds associated with limited knowledge about midwives' role (B) Also identified in systematic review as a	Um, but also because health visitors you know all our professional backgrounds are quite different, so there are a few midwives on our team who are now health visitors but some of them are adult nurses, or paediatric nurses [I: OK] um and they don't necessarily have a good	2	2 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
		barrier (poor knowledge of each other's role)	understanding of what the midwife's role is. -HV77		
Knowledge	Opinions on guidelines (E, B)	Guidelines are not well-known to me (B)	I mean I, heh, obviously I support the principle of having uh consistency and having um... uh... yeah of making sure that there are standards [I: Mhmm], agreed standards, evidence-based standards [I: Yeah]. Um... it's you know, the degree to which they are... well-known to me and considered and to which I would ? and that you can see it's fairly limited um that's not to say that they shouldn't exist. -HV6	2	2 of 17
Knowledge	Opinions on guidelines (E, B)	Guidelines are common sense (B)	Oooh you're talking to someone who is very bad, OK. What do I think about guidelines in general? I think	1	1 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
			most guidelines in general... really on the whole, are basically... a common sense summary of what, what most good you know, what most committed families, parents, professionals would come up with if they were to have you know the the bare bones and the basics of what they would want the services. -HV19		
Knowledge	Opinions on guidelines (E, B)	Guidelines are not helpful (B)	but there's nothing, there's nothing really very, there aren't really any really useful policies, that I can think of locally, there might be nationally that I don't know about but certainly locally I don't think there was anything that would stop you from having contact, so -HV73	1	1 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
Skills	Confidence in applying professional judgement (E)	None	if you are the conduit it doesn't mean you have to deal with everything. It just means you have to, you know, you might be, you know you just need to know how to delegate or who to delegate to and things -HV95	4	3 of 17
Skills	Creative thinking (E)	None	I guess if we were a bit more... what's the word, um... creative, radical. -HV6	4	3 of 17
Skills	Foresight (ability to plan ahead; E)	None	I think it's having that foresight to think OK there might not be any issues now but in the future, it would be really helpful to know someone here to then kind of make that link. -HV95	2	1 of 17
Skills	Health visitors already have	None	I don't think any like particular skills because I mean we're all working in partnership with other agencies as	2	2 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
	skills required for collaboration (E)		well. I don't think it's that, it's not a case of that we don't quite know how to communicate with other professionals and need any sort of support -HV78		
Skills	Interpersonal skills (E)	None	within that is you know the ability therefore to form good partnerships with colleagues like midwife key colleagues and midwives -HV6	4	3 of 17
Skills	Tenacity (E)	None	sometimes when you're at the early part of building up a good partnership, it doesn't always seem to make sense to begin with does it because you're doing something new and you think, well this is a bit weird, we managed quite well without that. So... you know so to begin with it, it doesn't really matter because we've	2	2 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
			OK doing it for this long without so it's an easier thing to drop. -HV19		
Skills	Time management skills (E)	None	That's what I feel. As in like, you know, today, the three of us with the off- well four of us, one is at a clinic, three of us here. I mean if need had been, one of us could have been doing a meeting with with the midwives for example. So just [I: Sure] those time management skills and realising what's important what will actually improve the care that we provide, yeah? -HV75	2	1 of 17
Social/professional role and identity	Expectations of professional self (E, B)	Reflective practice (E)	you know and I've actually, I've found it very good doing this. It's just sometimes it needs to, you need to move out of that comfort zone don't you, think about, we've always got to	2	2 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
			redeveloping and looking at our service so it's definitely time for us. You know, food for thought and a discussion in our team really. -HV19		
Social/professional role and identity	Expectations of professional self (E, B)	Joint responsibility to support each other (E) Also identified in systematic review as an enabler (social support)	From a personal level and a professional level, I think that um and I think that's a joint responsibility. And um you should, I feel, I've offered supervision recently to a midwife who look, said, I'm out of my depth. -HV68	3	3 of 17
Social/professional role and identity	Expectations of professional self (E, B)	Working to professional standards (E)	when women are booked or if we get the booking forms and they haven't got a risk form we're still doing our own checks on our own system to see if this family are known to us -HV68	6	2 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
Social/professional role and identity	Expectations of professional self (E, B)	Honesty (E)	then go back, and be honest! And be honest with families and other professionals or say it's actually... that's a bit out of my remit, can I come back to you on it? -HV68	1	1 of 17
Social/professional role and identity	Shaping the health visitor identity outside health visiting (E)	None	I try my hardest to um... go to team meetings, um of... of professionals so I go to Relieve and Care meetings, I go to some midwives, I go to um housing, I go to varying agencies to talk about the health visitors' role. So, who we are, what we do, as a generic view. Just to raise our profile a bit? -HV68	5	2 of 17
Beliefs about capabilities	Collaboration self-efficacy (E, B)	Self-confidence (E)	Some people don't, don't have that confidence and that inner strength to say actually yes I'm good at that and I can make that decision -HV68	5	3 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
Beliefs about capabilities	Perceived ease of contacting midwives (E, B)	Lack of experience (B)	How hard [I: Yeah] um well I don't find it hard because there's no working in partnership (chuckles). So at the moment it's quite easy! There is none unfortunately, from my point there is none. -HV20	6	5 of 17
Beliefs about capabilities	Perceived ease of contacting midwives (E, B)	Reduced workload makes contact easier (E)	The bulk of workload that needs communicating is less, so it's easier communicate critical things. -HV6	2	1 of 17
Beliefs about capabilities	Perceived ease of contacting midwives (E, B)	Mother's knowledge of the midwife (E)	if a mum particularly wants you to get in touch with them and they've got their number and stuff, it's much easier to ring them up. -HV73	1	1 of 17
Beliefs about capabilities	Practicality of implementing guidelines (E, B)	Challenges presented by guidelines (B)	it's quite interesting you sort of look through to these case reviews and you just think, my god I'm not gonna fall into that hole and then you find	3	3 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
			yourself going oh actually this would be really easy to fall into that hole doing this because there's just not that link up and things. -HV95		
Beliefs about capabilities	Practicality of implementing guidelines (E, B)	Guidelines enabling handover (E)	Um, I find it, I find it OK to get the handover of care -HV77	1	1 of 17
Beliefs about consequences	Benefits of contact to mothers/families (E)	Empowering parents to engage with services	I think parents again are given a bit more um... empowerment if they see that positive working. And they have faith in... in the system which I think is quite easy to lose. Because if you know, often you pick up maybe bad practice from and you have to repair that relationship. -HV68	5	3 of 17
Beliefs about consequences	Benefits of contact to	Delivering high-quality care	I mean the quality of care we'd be able to offer if we didn't have that	6	4 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
	mothers/families (E)		partnership uh, would be seriously diminished I would say -HV6		
Beliefs about consequences	Benefits of contact to mothers/families (E)	Safeguarding children/families	It would definitely be safer for the families if we were in better contact. -HV73	4	3 of 17
Beliefs about consequences	Consistent advice to women (E)	None	And I suppose really regardless of what the aspect is, usually it's feeding isn't it, but women just want consistency of the same message and I suppose if your information sharing is better during that transition, everyone can offer a more seamless approach. -HV50	12	6 of 17
Beliefs about consequences	Efficient professional practice (E)	Time savings	you've worked closely with someone and if you're going to a birth visit and you're taking ages to explore the problem that you could have already	7	4 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
			known about, that makes matters so much easier, it probably would cut down time in other aspects of work, so. -HV50		
Beliefs about consequences	Efficient professional practice (E)	Cost-efficiency/savings	And also having a good relationship means that you don't miss things because of a change of how information is shared it can be quite difficult especially if it's with father to find out about previous histories, but that's much easier to know you haven't missed any vulnerabilities if the midwife is saying, oh yeah everything's fine. -HV73	7	5 of 17
Beliefs about consequences	Efficient professional practice (E)	Evidence-based practice/guideline-adherent practice	I think it would definitely benefit both parties if they stuck to it -HV78	4	4 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
Beliefs about consequences	Efficient professional practice (E)	Better informed practice	You're reducing like human error in that like a a midwife could verbally handover something ?0:35:14.9? else so you're reducing that because you're, you would hope that everything, the issues, concerns about would be written on the records -HV78	8	4 of 17
Beliefs about consequences	Efficient professional practice (E)	Confidence in practice	if you do start off with a bit of a tick list [I: Yeah] then it also leads to people feeling a bit more secure about how to start it and when to start to contact the service [I: Yeah sure OK] and that then builds into a, OK this is not on tick list but obviously it's something we should contact them for. -HV19	3	2 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
Beliefs about consequences	Negative impact of poor communication (B) Also identified in systematic review as a barrier (poor communication; inadequate information transfer)	Missing information having negative impact on care	Um... uh sometimes things haven't been handed over. Um... probably things like if the babies are not back to birth weight, so we'll visit I'm sure the same in other areas someday between day 10 and 14, sometimes it's not handed over that the baby's either not feeding well, or isn't back to its birth weight um... and again that's sort of comparing the 2 trusts, because where I do my midwifery we don't, we don't hand the baby, we don't discharge the baby from midwifery care unless they're back to their birth weight, so that's quite a change between the 2 areas -HV77	10	9 of 17
Beliefs about consequences	Negative impact of poor	Problems arising	There's been some mess up, and you ring up and they, in our particular	14	8 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
	communication (B)		centre and I just don't feel confident they ever get the message. -HV96		
Motivation and goals	Goals (E, B)	Practitioner's goal(s) during visits (B)	There needs to be an outcome from the conversation I think, an expectation of somebody, so my expectation is, I'm telling you this I expect you to continue this care, it's like that handover, this is where we are now and this is where she would like to be, or the baby's not growing or whatever it might be. But sometimes you don't get told if they've lost over 10% of their bodyweight, you don't know, but actually some things are really necessary to handover that aren't being handed over. -HV50	7	3 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
Motivation and goals	Goals (E, B)	Continuity (E)	Continuity of care is so important. -HV72	1	1 of 17
Motivation and goals	Intention to collaborate (E, B)	Need commitment (E?)	I think... hmm... I think commitment from both parties... to make it work. -HV75	3	1 of 17
Motivation and goals	Intention to learn (E)	None	I think it depends on your interests and your level of motivation probably, so for example I'm keen on mental health, so for me it would be a natural thing to do because I know those inside out -HV50	2	2 of 17
Motivation and goals	Need for contact in the antenatal period (E)	Family (E)	It's just that for, for us, the before bit is much more important than the after bit because the midwives are only involved for 10-14 days. -HV31	3	3 of 17
Motivation and goals	Need for contact in the antenatal period (E)	Important (E)	I think it's very important because it's getting to know the mother [I: Mhmm], and when you go to see the	2	2 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
			baby between 10-14 days [I: Mhmm] you're um, they know you -HV96		
Motivation and goals	Perceived importance of collaboration (E, B)	Not important postnatally (B)	I don't really think it's necessary -HV72	9	3 of 17
Motivation and goals	Perceived importance of collaboration (E, B)	Dependent on women's level of risk (E, B)	How important... again, only if there is an issue. I think then there's a, it's important. -HV20	9	2 of 17
Motivation and goals	Perceived importance of collaboration (E, B)	Don't know, no experience (B)	so I guess it is important, you know, going back to the question that you asked. But because I'm not used to it, I've never had it, I don't miss it. If you see what I mean -HV75	6	2 of 17
Memory, attention, decision	Contacting midwives based on	Antenatal/postnatal period influencing contact (E, B)	um so if it's, if it's a postnatal concern then I guess a lot of the time I think there's not a lot of point um	2	2 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
	women's/families ' identified needs (E, B)		communicating that to the midwives because they only seem to see them a couple of times ? 0:09:48.6 ? the last time they see them the baby's about day 5 [I: OK] (0:09:51.1 interruption child in room 0:09:54.3) you have to if it was antenatally then um, then I definitely would -HV77		
Memory, attention, decision	Perceived difficulty of decision to contact/collaborate with midwives (E, B)	Don't know/not thought about it (B)	It doesn't exist so I don't think about it -HV96	2	2 of 17
Environmental context and resources	Administrative staff (E) Also identified in systematic review	None	so you go to their... I don't know if that's an admin or maternity care worker who sits in the office and takes the details and so you know, so	2	2 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
	as an enabler (liaison staff)		it's also a quite an administrative contact really. -HV19		
Environmental context and resources	Lack of physical space to develop links/relationships (B)	None	And a venue. We're told that we'll probably be moving to mobile working so if we're doing mobile working we don't have those offices, where are we going to meet that is safe for us to be having those discussions about clients [I: Yeah you know] so we'll need buildings to be able to do that -HV75	8	4 of 17
Environmental context and resources	Means of contact (E, B)	Ineffective telephones (B)	And the resources are becoming more sparse. So, you know, we've been told in our team is that the landlines that are in situ, the ones that are breaking won't be the replaced [I: What?], so yeah, so you know on that	12	3 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
			desk we've got a landline and that one we haven't -HV44		
Environmental context and resources	Means of contact (E, B)	Email contacts (E)	even if it was email contact, not even face-to-face contact, that'll be really useful just to be able to have a bit of a kind of a port of call for someone who can you know be a conduit to give us information but also for as to pass information back to -HV95	4	3 of 17
Environmental context and resources	Means of contact (E, B)	Telephone/mobile devices (E)	No, we've got mobile working devices and things now which'll make it much easier, and no not really. -HV73	2	2 of 17
Environmental context and resources	Midwives' schedule not known (B)	None	We've all got ability to communicate with people, it's just tricky because we work different shift patterns but that isn't necessarily a barrier, if it	6	4 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
			had to be done it had to be done. -HV50		
Environmental context and resources	Not being co-located (B) Also identified in systematic review as a barrier (distance)	None	So they have now been taken elsewhere, and the communication has suddenly become much more fractured. -HV6	20	7 of 17
Environmental context and resources	Not having resources to collaborate (B)	None	I don't feel like I do have the resources. I don't feel like I do - HV44	3	3 of 17
Environmental context and resources	Written information (E)	Consistent written records (E)	but then it's just like a list, I mean it's just like a really really simple handover sheet. It doesn't have to be long and laborious it's just, it's like a bullet point like, mum was quite tearful on day 7, that's like literally all that's needed. -HV78	9	3 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
Social influences (Norms)	Collaboration 'champions' (E)	None	Yeah, some, some health visitors that were midwives and they almost become champions of midwifery [I: Right OK yeah] and they explain what the role is and they explain you know, how we can possibly make links with them... um and, and for instance you know there might be something that you're not sure about [I: Mhmm] and these, these certain individuals will say you know, the best person to speak to would be the midwife. And you might not have realised that [I: Yeah], that the midwife is the best person to speak to. So they can really be champions. There are certain health visitors that	3	3 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
			are champions of involvement. - HV44		
Social influences (Norms)	Face-to-face contact/interaction (E)	None	I think having regular meetings so that you just you know, you kind of break down those professional barriers if you like [I: Yeah] and you're able to treat each other as equal I think that's really helpful - HV77	27	9 of 17
Social influences (Norms)	Gaining information from women/families (B)	None	We just go straight to the family because I think a lot of the time as well ?0:23:53.1? midwife she's just gonna be like no there's no concerns and then it's kind of a waste of her time and you're making that phone call it's a waste of your time just to find out that there's no problem - HV78	14	5 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
Social influences (Norms)	Individual characteristics (E, B)	Approachability and respect for colleagues (E) Also identified in systematic review as an enabler (social support)	I think, it will make a difference depending on who you catch on the phone, um and just what kind of person they are and how approachable they are -HV77	8	6 of 17
Social influences (Norms)	Individual characteristics (E, B)	Resistance/negative opinions of health visitors (B)	also, to have that ability to say, I don't know. Um and say I'll speak to somebody else, I think, that's still a, a big learning curve for people to think to go to their peers and say, actually this has happened to me today... I wasn't quite sure, what would you do -HV68	6	5 of 17
Social influences (Norms)	Influence of other health visitors on	Health visitor colleagues who are	I have a really good team around me who we all give a lot of peer support	6	3 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
	contact with midwives (E, B)	encouraging and supportive (E) Also identified in systematic review as an enabler (social support)	to and that gives you a real confidence. -HV68		
Social influences (Norms)	Influence of women/families on contact with midwives (E, B)	Collaboration/contact with midwives is expected (E)	I think they expect us to have some sort of handover [I: OK] in that time, I think they expect that we've spoken to the midwives or had contact with them in some way. Um... yeah I don't think, I don't think they necessarily influence it, but I think they expect it to be there because we're all part of ? 0:12:42.3 ? um, and there's times when they'll say oh yeah my, I did that with the GP but they'll have told you that or whatever. -HV94	8	7 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
Social influences (Norms)	Influence of women/families on contact with midwives (E, B)	Asking health visitors to liaise with midwives (E)	They might sort of pass on the information, or request extra support and so they pass that on to us. So families perhaps do that sometimes. -HV31	9	6 of 17
Social influences (Norms)	Influence of women/families on contact with midwives (E, B)	Don't expect us to know each other/collaborate (B)	P: I don't think they're aware of it or that it happens, or that it should happen. I don't think there's an expectation I: OK P: I think they see them as... either they see, either they see them as they're no different from each other, yeah? Or they're completely separate -HV44	6	4 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
Social influences (Norms)	Influence of women/families on contact with midwives (E, B)	Influencing information sharing through consent/information giving to health visitor (E, B)	But you have to get consent from the patient so, if mum decides say she doesn't want us reading what she said to the GP and that gets blocked, so we can see that there's something we're not allowed to read but we can't read it -HV73	7	5 of 17
Social influences (Norms)	Influence of women/families on contact with midwives (E, B)	Asking health visitors to reschedule visits when accidentally arriving at midwives' visit (B)	And a few times the mum has asked me to come back at a different time because she hasn't wanted us both there at the same time -HV73	2	1 of 17
Social influences (Norms)	Organisational influence on collaboration (E, B)	Some contacts mandated (E)	Um... I don't know. I don't know, we do as we're told [laughter]. You know, they tell us that we need to speak to them then we would . -HV31	3	3 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
Social influences (Norms)	Role of managers/mentors in midwife-health visitor collaboration (E, B)	Managers/mentors enabling collaboration (E) Also identified in systematic review as an enabler (liaison staff)	the team leader of the team where I am now, she knows me very well now. Because I'll turn up and I'll say I need this information... and she will get it for me or she will... get the midwife concerned -HV72	14	5 of 17
Social influences (Norms)	Role of managers/mentors in midwife-health visitor collaboration (E, B)	Managers/mentors not collaborating (B)	Because I think the trouble is at the moment, there's just not even with our team leaders and our managers, it's all very separated out. There's not that kind of real collaboration from high up either. -HV95	10	4 of 17
Emotion	Cynicism (B)	None	the few sort of collaborations that I have had with them I think I kind of always I suppose I would sort of foresee […] I always foresee you know I think I suppose it's a bit kind	1	1 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
			of possibly […] get more cynical. - HV95		
Emotion	Feelings derived from past experiences influencing likelihood of future behaviour (E, B)	Negative feelings (B)	I think they play an enormous amount and I think really you know the other emotion is, you might phone, it's really really hard to get hold of the midwifery team, you know and when you do get hold of them they're very rushed. Sometimes they're not polite on the phone and you just think. I'm not gonna call them you know -HV19	9	5 of 17
Emotion	Feelings derived from past experiences influencing likelihood of	Positive feelings (E)	I mean I think you know my experiences of collaboration generally have been very good. - HV95	3	1 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
	future behaviour (E, B)				
Emotion	Frustration and annoyance (B)	Impact of service organisation	Yeah, I was quite upset last week when this baby got discharged and the midwife I spoke to was reluctant to take her back, -HV73	7	3 of 17
Emotion	Frustration and annoyance (B)	Impact on health visitors	frustration, especially as I said um... if you're trying to or the information hasn't been communicated to you; you're trying to get a hold of somebody and you can't. -HV20	3	3 of 17
Emotion	Frustration and annoyance (B)	Generalised frustration	it would be amazing and it's just so frustrating knowing if it was enforced it would make such a big difference. -HV95	7	2 of 17
Emotion	Frustration and annoyance (B)	Impact on parents	I felt really annoyed being at a birth visit and felt disgruntled and I suppose that was part of my	4	2 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
			motivation for contacting you to participate because you do think, do you know, I really needed to know that and I feel cross and I feel annoyed that it's made me look on the back foot as a professional -HV50		
Emotion	Guilt (B)	None	you just feel a bit guilty to... take her up all that, but we had to do it because that was part of the child protection plan. -HV72	1	1 of 17
Emotion	Low morale/feeling disheartened (B*)	None	yeah you could inject a bit more dynamism into it [I: Mhmm OK]. But people, morale is not brilliantly you know, people feeling attacked on all fronts [I: Yeah] and services under huge you know, after the sort of investment by the government in the health visiting, it's all rapidly falling	3	3 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
			away and that's a very demoralising process -HV6		
Emotion	Optimism (E)	None	I'm a bit more aware, and I suppose it might be blind optimism but I always kind of presume that actually if I think it's gonna be a positive thing then everyone else will find it a positive thing as well. -HV95	1	1 of 17
Emotion	Worry (E, B)	Worry about actions causing a problem (B)	I think there's often a fear and I've heard it from others before that you know, there's a fear that oh open the floodgates, and they'd then be, you'd be awashed with issues and things -HV95	5	3 of 17
Emotion	Worry (E, B)	Worry about woman (E)	but then I was thinking actually if I was worried about something that would really encourage me to work with the midwife. -HV73	4	2 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
Emotion	Worry (E, B)	Worry about profession (B)	everyone's worried about the future of the profession I think -HV6	1	1 of 17
Behavioural regulation	Changes to overall health visiting practice (organisational) (E, B)	Increasing investment in services (E)	I think because we've got a look, good local setup, that I mean, I'm sure you know I know that it doesn't work so as well as elsewhere so if you were if I was elsewhere I'd say yes, we need changes [I: Mhmm]. And of course I would argue that both services need more, more resource nationally. -HV6	3	2 of 17
Behavioural regulation	Changing ways of thinking/working (innovation) (E)	Increasing health visitors' knowledge of midwives	they don't necessarily have a good understanding of what the midwife's role is. Um... so I think that can play a part as well, but yeah it will be good if um, if everybody's on the same page -HV77	1	1 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
Behavioural regulation	Current methods of record keeping and information sharing (E, B)	Sparse information from midwives (B) Also identified in systematic review as a barrier (inadequate information transfer)	we're getting the birth notifications. We used to get 5 or 6 pages, birth notification which was quite detailed [I: Mhmm] now we just literally get the name the date of, of, the date of birth, the mum's NHS number. We really get a skeletal information of that birth [I: Yeah] now -Hv44	5	5 of 17
Behavioural regulation	Current methods of record keeping and information sharing (E, B)	Sharing medical records (E)	But if all the information was together for every single patient from every single department, it would be much easier, but it's not -HV31	6	3 of 17
Behavioural regulation	Current methods of record keeping and information sharing (E, B)	Accurate information from other health professionals (E)	I think there's lots of information that could be shared that wouldn't necessarily need to be shared by the midwives themselves, it could be by healthcare support workers and things to enable you to provide a	3	3 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
			more seamless approach to care. -HV50		
Behavioural regulation	Finding evidence to support increasing collaboration (E)	None	But if there is a real evidence base to… this handover then, and and then we can, we can really start thinking about that make it, make it a priority. Because at the moment it's not a priority, it's hard to justify making it a priority -HV44	4	2 of 17
Behavioural regulation	Getting information from families/women (E)	None	So whether I, probably when I see the family, I will probably ask them well who's your midwife... Um now, I think I'll probably make a point to actually say who's your midwife, or who was your midwife team and take their contact detail off them just in case later on we do need to get a hold [I: You might need them] yeah to get	1	1 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
			in contact with them. So I think from my own personal experience I think that'd be a good thing to do as well - HV20		
Behavioural regulation	Goal setting: exploring establishing collaborative relationship with midwives (E)	None	It's an aspiration. In an ideal world, we would collaborate. We wouldn't need, we would have a discussion about the mum. We would have um transition of care plan [I: Yes]. We would um you know, there would be a follow up call some weeks later on. How was this mum getting on? You know? But there's none of that. - HV44	10	5 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
Behavioural regulation	Having accurate and up-to-date contact details	None	But I think it would be just good to have that midwife team details for that family because as I said sometimes you...afterwards you may need to get in contact with a midwife or a family might say um, I haven't been, I haven't seen my midwife since I've come home [I: YEah OK] or I haven't been discharged and then we're like... they're hard to get a hold of! We find it hard, oh we don't know what midwife team they're with, or they're unsure. So then at least from antenatal you've got that information, you can say OK, I can contact your midwife for you and let them know you haven't been [I: You can, you have something to refer to quickly	9	4 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
			and just go yep], yeah, or these are the details of your midwifery team, try to contact them to get a visit. So just that information alone would be handy -HV20		
Behavioural regulation	Increasing interprofessional working can add to my workload (B)	None	Um you see I'm trying to think, um you know, for instance would it be better if we did joint visits? No. I can't myself think that I would feel comfortable doing a joint visit um with the midwife. -HV47	4	1 of 17
Behavioural regulation	Joint training (E) Also identified in systematic review as an enabler (joint working, activity or action)	None	I think even some joint training on things like, things like breastfeeding and postnatal depression, perinatal mental health generally, having joint training on those things would be so useful and just from the point of view it's like you know, I know ? 0:02:51.9	7	4 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
			? has been really successful for sort of maternity care and things but if that could, if that sort of idea of that training and things could be extended out to the postnatal period as well, I think that'd be amazing to actually get the professionals in the room together talking to each other -HV95		
Behavioural regulation	Prioritising families' care based on their level of need (E?)	None	with the mainstream... it's always gonna be about sitting out isn't it, and I think you, you know you've got to have your levels of care. Like in our care we have universal which is everything's fine, here's our number call us. So I think you know if I was to be looking at this in terms of provision, where it's a universal service and there's no particular	12	4 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
			identified area of need then there's probably no need to have communication there -HV19		
Behavioural regulation	Social/emotional impact on families (E)		Success is that there's an impact in that the the the aim of the communication actually uh is so the health visitors act on what they're told by the midwives and vice versa. Um... that... yeah that breakdowns in communication are rare -HV6	9	7 of 17
Behavioural regulation	Tailoring care to family (E)	None	say if I'm working with [name], with this family, we did an early postnatal visit together, and then with the mum we worked out our pattern of who was going to visit ? 0:17:16.2 ? for the next few weeks [I: Right, oh that's lovely]. So she knew, she also knew that when [name] went she'd	10	6 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
			give me a ring, when I went, I'd give [name] a ring. So, you know, we're not wasting her time, but we're ensuring that mum and baby are seen weekly [I: Yeah] up to 6 weeks by both of us -HV19		
Behavioural regulation	Updating oneself on clinical guidelines (E)	None	like I say guidelines never come as a surprise to me [I: Yeah], because they shouldn't do, should they? I: Yeah P: You know, if they do, you've gotta address why that gap in your knowledge has come up? -HV19	3	2 of 17
Nature of the behaviours	Accidental contacts (E)	None	I've done a couple of visits where we've turned up at the same time and	5	4 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
			we've just done them together and that's been really, really nice. - HV73		
Nature of the behaviours	Current practices (E)	Trying to establish contact with midwives by phone	I rang loads and loads of people. I've actually got one person's number now -HV20	3	3 of 17
Nature of the behaviours	Current practices (E)	Midwifery referral letters shared by women	So they know they've got something to pass on. I don't think they really understand that actually it doesn't really add anything to the picture [I: Yeah]. And they do know you know most of them will say, oh yeah the health, the midwife said you were going to come. So they, they, it's not like there's, there's nothing. You know there is a sort of in a sense there's... that they're told that the health visitor will come, so they	3	1 of 17

Domain	Global theme	Subthemes	Illustrative quotes	Utterance frequency	Participant contribution ratio (n= 17)
			know we're going to come and they know there's a piece of paper for them to handover to us -HV19		
Nature of the behaviours	Current practices (E)	Regular structured meetings (E)	we will take that information back to the midwife um either at the monthly meeting that we have to discuss families that we have got concerns with, or, on a one-to-one basis we'll contact the the local midwife, that community team -HV68	4	2 of 17

Appendix O. Focus Group Study Participant Information Sheet

Title of Study: Women's views of collaborative care as delivered by midwives and health visitors

We would like to invite you to take part in a research study. Before you decide whether you would like to take part it is important that you understand why the research is being done and what it would involve for you. Please take time to read the following information carefully and discuss it with others if you wish. Ask us if there is anything that is not clear or if you would like more information.

What is the purpose of the study?

This study aims to understand how midwives and health visitors can best work together in delivering community-based maternity care. This study is being undertaken as part of a Doctor of Philosophy degree in Health Psychology.

Why have I been invited?

You have been invited because you are a woman over 18 years of age and have had a child in England in the last 12-18 months.

Do I have to take part?

You are **not** required to take part. Participation is **entirely voluntary**; it is up to you whether or not to take part. If you decide to take part, you will be asked to sign a consent form. Participation will not affect you or your care.

What will happen if I take part?

A focus group will be conducted at an agreed time and location. You are welcome to bring your child(ren) with you. If you decide to bring them with you, you will be responsible for them whilst taking part in the study. This will run for up to 2 hours, with a break in the middle. You can refuse to answer any questions at any time during the focus group. You can also use a pseudonym to increase anonymity. With your consent, the focus group discussion will be audio-recorded. These recordings will be anonymised when transcribed and the recording deleted. Direct anonymous quotes from the focus group may be used to represent the themes identified by the researchers, and may also be used in the future for other research projects. Any quotes are used will be made anonymous so it will not be possible to identify you from any written reports or publications related to the study.

What do I have to do?

If you want to take part in this study, please speak to one of the researchers either in person, by calling [redacted], or by e-mailing [redacted]

What are the possible disadvantages and risks of taking part?

It is unlikely that there will be any risks to you from participating in this study.

What are the possible benefits of taking part?

You will help to increase the knowledge base about community-based maternity care. Your participation could help inform how midwives and health visitors can best care for women during and after pregnancy.

What will happen when the research study stops?

All identifying information will be destroyed following the focus group discussion. However, if you wish to receive a copy of the publication or summary of results, your contact details will be kept until the results are sent to you. Data will be kept securely within City, University of London and will be destroyed after the minimum archiving period (10 years). All audio recordings will be destroyed after

transcription. All transcripts will be anonymised. Direct anonymous quotations may be used in the dissemination of results.

Will my taking part in the study be kept confidential?

The research team will have access to the information relating to this study. Information you share will be kept confidential. Anonymised data may be used in the future for other research projects. Should you share any information that may present harms to yourself or others, this will be disclosed by the researcher to the supervisory team to decide an appropriate plan of action and support.

What will happen to results of the research study?

This project will partially fulfil the requirements of a Doctor of Philosophy degree in Health Psychology. The results of the study will inform our understanding of midwife-health visitor collaboration. These results will be disseminated in a research article in a peer-reviewed journal, and the doctoral thesis. If you wish to receive a copy of the publication/summary of the results, please inform us so we can organise this for you.

What will happen if I don't want to carry on with the study?

You are free to withdraw from the study at any time without providing a reason. If you withdraw during the focus group session, any data recorded before you withdraw cannot be eliminated because it will be difficult to identify you in the recording. This will not have any impact on you or your care.

What if there is a problem?

If you have any problems, concerns or questions about this study, you should ask to speak to a member of the research team. If you remain unhappy and wish to complain formally, you can do this through City's complaints procedure. To complain about the study, you need to phone [redacted]. You can then ask to speak to the Secretary to Senate Research Ethics Committee and inform them that the name of the project is: Women's views of collaborative care as delivered by midwives and health visitors

You could also write to the Secretary at:

[redacted]
Research Governance & Compliance Manager
Research & Enterprise
City, University of London
Northampton Square
London
EC1V 0HB
[redacted]

City holds insurance policies which apply to this study. If you feel you have been harmed or injured by taking part in this study you may be eligible to claim compensation. This does not affect your legal rights to seek compensation. If you are harmed due to someone's negligence, then you may have grounds for legal action.

Who has reviewed the study?

This study has been reviewed by the City, University of London School of Health Sciences Research Ethics Committee

Further information and contact details

Ryc Aquino (PhD researcher) – [redacted]
Dr Ellinor Olander (Research supervisor) – [redacted]

Thank you for taking the time to read this information sheet and for your interest in this study!

Appendix P. Focus Group Discussion Topic Guide

Introduction (10 minutes)

Introduction to the study

Consent (including audio recording)

Demographic questionnaire

Reminder about having no right or wrong answers – interested in what your views are on ideal care pathway provided by midwives and health visitors based on your experiences

Ice breaker (5 minutes)

How did you hear about the focus group?

Tell us about when you met your health visitors – antenatally? If no, would you have liked to have met them?

Current evidence (approx. 20 minutes)

Summary of what we know about how midwives and health visitors work together

Your views (prompts: What are your views on this? Is there anything that midwives/health visitors haven't identified in terms of what you think might encourage them or stop them from working together? If so, what?)

Designing your ideal care pathway (approx. 25 minutes)

In small groups, write out your ideal care pathway from pregnancy until 6 weeks after the birth (prompts: Based on your previous experience, how many contacts would you like to have had from midwives and health visitors? What information should be passed on, when, and how? Why are these important to you? To what extent would you like to be involved in how your care is co-ordinated, and why? What can be improved in terms of how midwives and health visitors provide their care?)

Break (approx. 15 minutes)

Consensus discussion (30 minutes)

Discuss each group's pathway (prompts: Were there any contact points identified by the groups that were missed, or that are unnecessary? What are your views on the means of communication and information sharing between you and the midwives and health visitors involved?)
Identify common themes and those that stand out/contrasting points

Closing and thanks (15 minutes)
Hand out token of appreciation

Appendix Q. Focus Group Participant Demographic Information Sheet

Title of Study: Women's views of collaborative care as delivered by midwives and health visitors

Participant demographic information sheet

Participant ID:

Age	
Number of children	
Age of youngest child	
Child/children's country/countries of birth	
Description of where you live (e.g. urban/rural)	
What is your ethnic group? Please circle	**White** 1. English / Welsh / Scottish / Northern Irish / British 2. Irish 3. Gypsy or Irish Traveller 4. Any other White background, please describe **Mixed / Multiple ethnic groups** 5. White and Black Caribbean 6. White and Black African 7. White and Asian

	8. Any other Mixed / Multiple ethnic background, please describe **Asian / Asian British** 9. Indian 10. Pakistani 11. Bangladeshi 12. Chinese 13. Any other Asian background, please describe **Black / African / Caribbean / Black British** 14. African 15. Caribbean 16. Any other Black / African / Caribbean background, please describe **Other ethnic group** 17. Arab 18. Any other ethnic group, please describe: 19. Rather not say

Appendix R. Focus Group Study Ethical Approval Letter

Research Office
Northampton Square
London EC1V 0HB

[redacted] **s**

www.city.ac.uk

Reference Number: MCH/PR/PhD/17-18/01

Name: [redacted]

Title: Women's views on collaborative care

05 June 2017

Dear Ryc, Ellinor and Ros

Re: Full Ethical Approval

Following on from MCH proportionate review, I am pleased to confirm that your application has full ethical approval. Please also find attached details of the full indemnity cover for the studies.

Under the School Research Governance guidelines the applicants are requested to contact me once the projects have been completed, and they may be asked to complete a brief progress report six months after registering the project with the School.

If you have any queries please do not hesitate to contact me as below.

Yours sincerely

[redacted]

[redacted]

[redacted]

[redacted]

[redacted]