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# Three perspectives on the co-location of maternity services: Qualitative interviews with mothers, midwives and health visitors

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## **Three perspectives on the co-location of maternity services and interprofessional working: Qualitative interviews with mothers, midwives and health visitors**

### **Abstract**

Current maternity policy in England is recommending the establishment of Community Hubs, where healthcare professionals who care for women during and after pregnancy are co-located and can provide care collaboratively. The aim this paper was to explore midwives', health visitors' and postnatal women's experiences and views of co-location of midwifery and health visiting services and collaborative practice. In total 15 midwives, 17 health visitors, and 29 mothers participated in a semi-structured interview, either via phone or face-to-face. Transcripts were analysed thematically.

Participants reported how care is currently provided in numerous settings, with home visits especially well-liked. Co-location was perceived to be of benefit, however some mothers were not convinced of its necessity, suggesting that integrated services are more important than co-located services. Healthcare professionals recognised that co-location aids but does not automatically improve interprofessional collaboration.

These findings highlight the need for careful consideration before implementing co-located maternity services. Community Hubs may be a promising strategy to improve care for women and their families but to provide interprofessional care and collaboration appropriate managerial and organisational support is needed. With this support, midwives and health visitors have the potential to deliver the best care possible for women and their families.

### **Keywords**

Health visiting, implementation, interviews, midwifery, policy, postnatal women

## Introduction

Co-located maternity services exist worldwide (Barimani & Hylander, 2012; Busch, Van Stel, De Leeuw, Melhuish, & Schrijvers, 2013; Kellom et al., 2018; Kurth et al., 2016; Schmied et al., 2010). In England, current maternity policy recommends the establishment of Community Hubs, where maternity services as provided by midwives, should be provided collaboratively with other family-orientated health services such as immunisation clinics, mental health services and health visiting (National Maternity Review, 2016). Midwives are healthcare professionals who have completed a programme of education to prepare them to care for women during pregnancy and immediately following birth (International Confederation of Midwives, 2017). Health visitors are registered midwives or nurses with additional educational training to enable them to provide expert guidance, assessment and interventions to pregnant women and families with children 0–5 years of age (NHS England, 2014). As such, midwives and health visitors may need to provide joint care both during and after pregnancy, as well as collaborate when midwives transfer the care of the woman over to the health visitor. The aim of the current paper was to explore midwives', health visitors' and postnatal women's experiences and views of co-location of midwifery and health visiting services and collaborative practice.

Currently, English pregnant and postnatal women receive care in a number of locations, including hospital, community settings and their own home. Co-location of services is considered beneficial to integrate antenatal and postnatal services, facilitate interprofessional collaboration between midwives and health visitors (Schmied et al., 2015), and offer care centred around women and their families (National Maternity Review, 2016). The main purpose of Community Hubs is to provide opportunities to make it easier for women to access a range of services and support in one place, and have swift, onward referral where specialist input is required (National Maternity Review, 2016). Community Hubs are thus similar to Parent and Child Centres in other countries such as the Netherlands (Busch et al., 2013).

A second benefit of service co-location is that it can aid interprofessional care and collaboration (Kellom et al., 2018; Szafran, Torti, Kennett, & Bell, 2018). This care and collaboration is supported through immediate communication of client support needs (Aquino, Olander, Needle, & Bryar, 2016; Busch et al., 2013), joint appointments with different healthcare professionals and women (Barimani & Hylander, 2012) and increased referrals to other healthcare professionals (Barimani & Hylander, 2012; Schmied et al., 2010). Other benefits include shared training, efficient care administration (Kellom et al., 2018) and opportunities for joint policy and care pathways (Barimani & Hylander, 2012; Schmied et al., 2010). Co-location also enables healthcare professionals who care for women antenatally to provide handover to the healthcare professional who will provide postnatal care thus facilitating appropriate transfer of care (Barimani & Hylander, 2008; Busch et al., 2013; Schmied et al., 2010). Appropriate transfer of care is reported by women to include sharing relevant information about women and their babies to ensure family-centred postnatal care (Olander et al., 2019b). There are however potential problems associated with co-location of services such as lack of physical space including offices and clinical rooms, and teamwork cannot be assumed solely based on healthcare professionals being in the same place (Szafran et al., 2018).

Collaboration between midwives and health visitors is highlighted as important by healthcare professionals (Aquino et al., 2016) and women alike (Aquino, Olander, & Bryar, 2018; Kurth et al., 2016). The benefits for women and their families associated with service co-location include improved access to healthcare professionals (Barimani & Hylander, 2012; Busch et al., 2013; Schmied et al., 2010). Co-location can also help parents know where to go for care, which can sometimes be confusing for new parents (Barimani & Hylander, 2008). Parents who have had experience of co-location of services have found this helpful (Bulling, 2017).

Furthermore, little is known about healthcare professionals and women's experiences and views of receiving and providing care in a co-located setting in England. This is especially important considering the current national changes to maternity care in

England, with current policy in Scotland also recommending co-located maternity services (Scottish Government, 2017) and the current policy focus on collaborative practice (National Maternity Review, 2016). The aim of the present paper was to explore midwives', health visitors' and postnatal women's experiences and views of co-location of midwifery and health visiting services and collaborative practice. These findings also add to the international evidence concerning co-located maternity services worldwide (Barimani & Hylander, 2012; Busch et al., 2013; Kellom et al., 2018; Kurth et al., 2016; Schmied et al., 2010).

## **Materials and Methods**

This paper is part of a large programme of work examining the collaboration between healthcare professionals caring for women during and after pregnancy (project website blinded). The data for this paper comes from two qualitative studies – an interview study with midwives and health visitors, and an interview study with postnatal women (findings from the study with postnatal women have previously been published; Olander et al., 2019a; Olander et al., 2019b). The aim of the healthcare professional study was to compare midwives and health visitors' perceived barriers and enablers for working collaboratively during transition of care from midwifery to health visiting services. The aim of the women's study was to explore recent mothers' experiences and views of the continuity of the care provided by midwives and health visitors during and after pregnancy.

### ***Participants and recruitment***

Midwives and health visitors were recruited through purposeful (maximum variation) and convenience (snowball technique) sampling methods (Patton, 2015). Full-time practicing midwives or health visitors (registered with the British Nursing and Midwifery Council) in England, were qualified to participate. Participants were recruited through social media (e.g.

Facebook, Twitter), professional organisations (Community Practitioners and Health Visitors Association, Institute of Health Visiting, Royal College of Midwives), and word of mouth.

The postnatal women were recruited in a similar fashion: word-of-mouth (by the research team and others affiliated to the authors' research centre) and social media. Recruitment on social media (Twitter and Facebook groups relevant to the participant population) was done both by the researchers and a large UK charity, the National Childbirth Trust. To be eligible for the study, women had to have had a baby within 12 months prior to the interview. Participants also needed to be able to read and speak English, be over 18 years old, and have had antenatal and postnatal care anywhere in England.

### ***Data collection***

Healthcare professionals interested in participating in the study were asked to contact the researchers. They were then provided with an information sheet, and an interview was organised. The healthcare professionals were interviewed by the second author between July 2016 and February 2017 either face-to-face or over the phone. The interviewer was a PhD student, educated to MSc level in psychology and had previous experience of conducting interviews. The topic guide elicited information on midwives' and health visitors' experiences of working collaboratively in maternity services, informed by a systematic review (Aquino et al., 2016) and the Theoretical Domains Framework (Michie et al., 2005). The topic guide was piloted with two participants after which the phrasing of some questions were tweaked. There were no specific questions concerning locations where midwives and health visitors provide care for women or co-location of services. The following demographic data were also collected: current role, years' experience and gender.

All postnatal women interested in participating in the study were asked to email the researchers. The women were then sent a participant information sheet and an interview was organised. The participants were offered a telephone or a face-to-face interview in London or the West Midlands (where the research assistants conducting the interviews were



based). Interviews were conducted by the second author and a research assistant (both women, educated to MSc level in psychology and had previous experience of conducting interviews). Consistency between interviewers was assessed by comparing their first interview transcript which showed good consistency regarding questions asked and prompts used. Four women chose face-to-face interviews in their home and the remainder were interviewed by telephone. The interviews were conducted between June and October 2016.

The topic guide for the women's interviews was informed by previous research (Aquino et al., 2016; Jenkins et al., 2015) and current policy (National Maternity Review, 2016; Public Health England, 2013). Specifically, women were asked where they met their midwife and health visitor, perceived benefits or disadvantages associated with those locations and whether they would like to meet both healthcare professionals in the same place and/or at the same time. Co-location in this case was understood as meeting a midwife and a health visitor at the same location (this could be a general practitioner clinic, Children Centre or other venue). The topic guide was not pilot tested, instead it was discussed by the authors after the first few interviews to see if it needed to be revised. It was decided that no revision was necessary. All women were offered a £5 Amazon voucher as a token of appreciation for taking part in the interview. None of the participants knew the interviewers in either study and no field notes were made.

### ***Data analysis***

All interviews were semi-structured, audio-recorded, transcribed verbatim and anonymised by a professional transcription agency or the second author. After reading each transcript and identifying all data related to places of providing/receiving care, co-location and joint visits, data were analysed thematically (Braun & Clarke, 2006). Analysis was done by the first author and discussed with the second and third authors. This involved the following

steps: reading all the transcripts to become familiar with the data and focussing on findings relevant to co-location; subsequently, similarities and differences in participants' accounts were identified, before codes and themes were derived. Finally, the data was mapped and interpreted. The women's transcripts were analysed first, then midwives' and finally health visitors'. No a priori theoretical framework was used to analyse the data. All participants have been given pseudonyms to protect their anonymity, the midwives and health visitors pseudonyms start with M and H respectively.

### ***Ethical considerations***

To be eligible for either study, healthcare professionals and women had to consent to the interview being recorded. Informed consent was either audio-recorded separate to the interview (if the interview was via telephone), or completed in print (if the interview was face-to-face) for both studies. Both studies were approved by the first author's school ethics committee (Reference PR/MCH/PhD/16-17/01 for healthcare professionals and reference PR/MCH/Staff/16-17/02 for women).

## **Results**

### ***Participants***

Fifty-eight healthcare professionals expressed interest in taking part in an interview, of which 32 took part (the other 26 did not contact the researchers after having received the participant information sheet, reasons for this are unknown). Of the 32 interviewed healthcare professionals, 23 healthcare professionals (seven midwives) discussed co-location and collaboration in their interview and thus contributed data to this paper. The seven midwives were all female, and had, on average, 11 years' midwifery experience (range: 3-22 years) across a range of settings (community, specialist community, rotational).

Interviews were 47 minutes on average (range 30-65 minutes). The sixteen health visitors (14 women, 2 men) had, on average, 8 years' health visiting experience (range 1 month-42 years). Interviews were 57 minutes on average (range: 36-94 minutes).

A total of 40 women contacted the research team, of which 29 were interviewed (the other 11 women did not contact the researchers after having received the study information, reasons for this are unknown). The interviewed women were on average aged 33 years (range 28-38 years). Most women (N=26) lived in urban areas (i.e. cities) and 27 women described themselves as White British or White other. At the time of the interview, the women's youngest child was on average 5 months old (range 1-11 months), and 19 women were first time mothers. The women's experiences during pregnancy and labour differed widely and included different modes and places of birth. Most women reported low risk pregnancies; however, complications such as postpartum haemorrhage, gestational diabetes, hypertension and depression and anxiety were reported. The majority of babies were born well but three experienced conditions including pneumonia, resuscitation and a brain cyst. In other words, the women had experiences where numerous healthcare professionals had provided care to them and/or their baby. Interviews took on average 28 minutes (range 16-49 minutes), 25 women were interviewed by phone and four women were interviewed in their home. No-one else was present during the interviews.

### ***Themes***

Three main themes were identified from this combined data set from the two studies: 'Different locations have different benefits' with the sub-themes 'Many different places' and 'Home visits'; the second theme was 'Service integration', and third theme 'Joint appointments are not for everyone'.

### *Different locations have different benefits*

This theme summarises the participants' views and experiences of the places they provided or received care. Numerous locations were discussed in the first sub-theme both for antenatal and postnatal care, with the focus on Children's Centres in particular relevant to the planned Community Hubs in England. In the second sub-theme, participants discussed the advantage of convenience of home visits with few disadvantages mentioned. Overall, the views from women and the healthcare professionals were consistent in this theme.

*Many different places.* Women mentioned a number of different locations where they had received antenatal and/or postnatal care. Antenatally, women reported meeting their midwife in hospitals, freestanding midwifery units, GP (general practitioner) surgeries, Children's Centres and in their own home. These locations varied partly due to where women chose to give birth, and their health during pregnancy. For example, Joanna chose to have a homebirth and met with midwives in her home, hospital and freestanding midwifery unit, concluding that she received antenatal care '*in lots of different places*'. This was not an uncommon experience, with Sarah explaining that numerous locations: '*just made it more complicated, you're constantly trying to figure out where you're supposed to go, or where they're, if they were coming to you*'. In contrast, Rachel told us '*[different locations] worked fine*' adding that antenatally the hospital was close to her work and postnatally she could go to her local GP clinic which was close to her home.

Regarding postnatal care, the women reported meeting their health visitors at GP surgeries, Children's Centres and their own home. The GP surgeries or Children's Centres were not always the same as those where they met their midwife. The inconsistency in locations for appointments was echoed by the healthcare professionals, with one health visitor stating:

*...we don't overlap with the GPs and the midwives you know where they do their clinics. They do their clinics in the Children's Centres, but actually not in the Children's Centre that we're now based. (Helen).*

This meant that new mothers had to navigate new locations with their young babies.

Women mentioned numerous advantages and disadvantages to the locations where they had received antenatal and postnatal care. Benefits to receiving care in the community-based Children's Centres were their convenient location, which was particularly important postnatally. Other benefits included learning about other available services and meeting other parents. A disadvantage of community-based services was having less personal interactions with the healthcare professional (as opposed to home visits) and difficulty in asking questions. This was related to experiences of stress from being in close proximity to other parents or healthcare professionals and long waiting times.

*Home visits:* Women reported meeting both midwives and health visitors in their home, both antenatally and postnatally, which they found very convenient. Donna for example appreciated her midwife visiting her at home before her home birth as she: *'could have my daughter here and she can just play with her toys and I don't need to wait around for hours in a doctor's surgery'*. Additionally, women mentioned how helpful home visits were postnatally as leaving the house with a new baby could be *'a mammoth task'* (Emma). Additional benefits included having more time to build rapport with the healthcare professional and an opportunity for partners to be present. The home was identified as providing a personal and relaxed environment, where women felt comfortable as it was a familiar non-clinical setting. These benefits were echoed by the healthcare professionals who found the home setting helped them build rapport with women and gain a better understanding of their family situation. They also perceived that women told them more when in their home, compared to a clinic setting, as one health visitor explained: *'...you get to know people more /.../ You get to to understand the family situation and then they'll be telling you more things, things will come out.'* (Heather).

Whilst the positives outweighed the negatives, two disadvantages regarding home visits were mentioned: women felt they had to present a clean and tidy home for the visits and, for some women, having strangers in their home could be uncomfortable.

### *Service integration*

This second theme summarises the participants' views on co-location of maternity services. A key finding from the interview data was that aspects of service integration i.e., collaborative working, easy communication and relationship building were important to participants – not service co-location per se. Whilst the women were not all convinced of the importance of service co-location, the healthcare professionals reported numerous perceived benefits with being co-located as it can aid interprofessional collaboration and service integration. This was reported by both healthcare professionals who had experience of co-location and those who had not. One caveat mentioned was the need for organisational support and resources to facilitate collaborative working; co-location in itself is not enough.

Women were asked about their views on seeing the midwife and health visitor in the same location. This was a hypothetical question as none of the participants had met their health visitor and midwife in the same location. Women reported diverse views, with no clear preference. Overall, it was service integration that was important to women, not location. For example, Peta said:

*For me the location doesn't make a difference at all. The only thing that would make a difference is if they were working as part of a unified team. But location wise, no it doesn't make a difference at all... It [co-location] doesn't bother me, no.*

Moreover, convenience was also important to women and for some this took precedence over service integration. In the words of Joanna:

*Yeah, I can definitely see that if they were, you know, having a one stop shop kind of thing for maternity, you know, pre and postnatal care would be quite useful, as long*

*as, but it more depends on the convenience of, the convenience of the location is more important than it being integrated...*

In addition, the interviewed women also discussed how midwives and health visitors have different roles, and '*seem to function fairly separately*' (Joanna). This understanding of midwifery and health visiting made women think that these healthcare professionals do not need to be located in the same place. Midwives and health visitors reiterated these views. Harriet, a health visitor explained, '*we have very distinct roles*' with Henry (health visitor) suggesting '*if we trying to duplicate or there's little differentiation between the information we're imparting from midwives /.../ then the public will get confused*'. Whilst it is important to minimise confusion regarding role responsibilities, providing similar information benefits care provision, but may not be recognised by all healthcare professionals.

Despite midwives and health visitors reporting their roles to be distinct, they do support women with similar issues such as breastfeeding. As one midwife shared, '*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.*' (Mary). Others provided examples of where health visitors took part in the midwives' antenatal education or asked midwives to help support women.

Another consistent finding from the healthcare professional interviews was the improvement in communication associated with co-location. Firstly, face-to-face contact was linked with relationship building, facilitating support and understanding of each other's roles. Hillary, a health visitor said:

*It'll be ideal if you could work from the same base um and then you just kind of build up a better knowledge of um what each other's roles entail, and how busy each other are and you know, seeing as you can see every, everybody's really busy and really flat out, then you are automatically more supportive of each other.*

Secondly, the healthcare professionals discussed how it could take hours to get hold of or travel to a midwife or health visitor. Hayley, a health visitor, told us '*it's not very clear who they [the local midwives] are or where they are.*' (Hayley). However, with co-location,

communication was perceived to be both faster and more efficient. Harriet, a health visitor, works in the same building as a midwifery team and stated *'So it's a very informal, but very effective I would say system where every- everything is. And yes so there's a bit of paperwork, but it changes hands, there's a bit of writing on whiteboards to communicate, but a lot of it is also done face-to-face just because it can be yeah.'* Other benefits included sharing service planning so that midwives knew of health visitors' clinics and health visitors knew of midwives' antenatal classes.

Several healthcare professionals discussed the precariousness of co-location, many having had the experience of it in the past, but not anymore. This was associated with costs, with one health visitor stating *'there are midwives there at the birth centre, so that's great, and the health visitors are there, or were there until it became too expensive to be there.'* (Henry). Other healthcare professionals discussed how the current organisation of services does not encourage collaboration *'So... although everyone says that it would be good to have better face, better communication, and contacts I don't really feel at this moment in time, we've got a good system in place that supports that.'* (Helen)

Further, despite the perceived benefits of co-location, several healthcare professionals discussed how co-location does not automatically lead to a change in working, with professionals often entrenched in old habits including using email despite being in the same building. Others shared similar experiences to midwife Miranda, highlighting the need for both physical and social infrastructure to promote service integration:

*So we were midwifery team, we were in one room, about four rooms away, was a group all the local health visitors were there ./../ We never once I think twice that I walked into the health visitors' room - they never once came into our room. There was never any way of us meeting, there was never any place ./../ or meeting or structure that would enable any cross-fertilisation at all.*

Resource in the form of money and time was also mentioned as important to facilitate collaborative care. A health visitor, Harriet told us *'so definitely we're encouraged [to collaborate], definitely from a you know, in terms of line management, we're very much*



*encouraged, um but above that I would say... Uh... it's... if it requires resource /.../ to make it happen, you know it wouldn't be particularly supported'* suggesting this new manner of working was only supported by managers if it was done without needing extra resource.

Other interviewees questioned the purpose of collaboration, stating that it was a buzzword, without a clear purpose: *...collaboration, joined up working is a buzzword that we've all been hearing. It's fashionable [I: Yep] and sometimes there's talk of joined up working for the sake of joined up working and it's not specific what the purpose is you know. (Hannah)*. Others argued that co-location is not important for collaboration, Holly, a health visitor stated:

*'We can do it [collaborate] from you know, um, where we're based. Obviously you know, health visitor's not gonna be there based in hospitals working along the midwifery office, the midwifery team. I don't think that's a resource we would need.'*

#### *Joint appointments are not for everyone*

One argument for co-location of services is the opportunity it provides for women to have a joint appointment with both a midwife and health visitor. There were perceived benefits associated with this joint appointment, but participants also questioned its necessity. Both women and healthcare professionals agreed that certain groups of women, for example those in difficult social circumstances, may benefit from this type of care the most.

Joint appointments with a midwife and health visitor was a hypothetical scenario for the women as none of them had experience of such a scheduled appointment and views varied. For example, Lucy stated: *'I don't think it would have been useful, no. I don't think, no. If there was anything to share they probably could have just told each other I think.'*

Others thought it would have been helpful for the midwife to introduce them to their health visitors. Abigail suggested: *'...I suppose it just feels as though it's more joined up if you see them together.'* The women were consistent in stating that one joint appointment would suffice, with appointments ideally being during the transfer of care from midwife to health visitor. In addition, women reported that it could be beneficial to the healthcare professionals to have a joint appointment with women. Beatrice suggested:

*Well midwife was more focused on my care and how I was postnatally and the health visitor was primarily but not completely focused on the baby and we are kind of a package deal in a way. It might be useful for them to meet us together.*

Other benefits of a joint appointment included saving the women from repeating the same information to different healthcare professionals, and avoiding the problem of conflicting advice. There was also apprehension about the value of joint appointments, with reasons such as *'treading on each other's toes'* (Henry) and *'...it's really difficult to have two professionals in the room. You can't do very much.'* (Heidi) was mentioned by healthcare professionals. In addition, both women and healthcare professionals recognised that joint appointments may be difficult to coordinate considering how busy healthcare professionals are. One midwife reported: *'But it is so complex, it is just so difficult to arrange you know.'* (Miranda). Grace said:

*It's a difficult one, because they've both got busy schedules so to coordinate that would maybe be more difficult than the gain potentially, assuming it's a relatively straightforward post birth period that the gain got from having a joint appointment, it may be quite small.*

This was echoed by healthcare professionals who recognized the value of a joint appointment with vulnerable women, when the baby was on a child protection plan or there were other safeguarding concerns. It was also recognised by the healthcare professionals that not all women want to have two healthcare professionals in their home at the same time.

## **Discussion**

This paper compared and contrasted interview data from three participant groups – midwives, health visitors and postnatal women – to explore their experiences and views of service co-location and collaborative care. Consistent findings from the three groups included the importance of home visits, the need for service integration and the value of joint appointments with midwives and health visitors for some women. What connects these

findings is a focus on woman-centred care. There were inconsistent views on the need for service co-location. The healthcare professionals raised concerns regarding establishing service co-location without appropriate managerial and organisational support. These findings will be discussed in turn.

The postnatal women reported receiving antenatal and postnatal care in a number of locations, including Children's Centres and their home. Previous literature has identified Children's Centres as useful venues for meeting midwives and health visitors, seeking support and for meeting other parents (Aquino et al., 2018). It has been suggested that Community Hubs are located in Children's Centres (NHS England, 2017) and our findings support this idea. Importantly however, clinics in these types of community settings cannot take priority over home visits. The importance of home visits was consistently reported by women and healthcare professionals alike as a setting that facilitated rapport-building and for healthcare professionals, understanding the women's context. The convenience of meeting in the woman's home postnatally, when it may be stressful to leave the house was recognised as an additional benefit. Previous literature has found that home visits are well liked (Kurth et al., 2016), in particular if the woman has an already established relationship with the visiting healthcare professional (Dahlberg, Haugan, & Aune, 2016). Postnatal home visits have also been identified as central to delivering health promotion to families with young infants (Cowley, Caan, Dowling, & Weir, 2007).

Women reported fewer benefits associated with service co-location. This is in line with research from a primary care setting where co-location was negatively associated with patient satisfaction (Bonciani, Schäfer, Barsanti, Heinemann, & Groenewegen, 2018). Instead, factors such as location convenience, collaborative working and healthcare professionals' communicating about women's care were highlighted as important. One mother explained how her maternity appointments were close to her work and her health visiting appointments close to her home which was very convenient. More important than location was service integration and this is similar to previous findings from Australia where women reported that continuity of care regardless of location is important (Jenkins et al.,

2015). That said, parents who have had experience of co-location of services have found this helpful (Bulling, 2017) and it is possible that our findings would be different if we had interviewed women who had experienced co-located care.

The benefits of service co-location from the healthcare professionals' perspective were more consistently reported compared to the women's. Most of the interviewed healthcare professionals, whether they had experience of co-location or not, reported that co-location would positively influence interprofessional collaboration. For example, potential benefits such as more efficient communication, more face-to-face meetings, improved collaboration regarding care (delivering breastfeeding support for example) and joint appointments with women were reported. These benefits have been acknowledged previously (Aquino et al., 2016; Schmied et al., 2015), and further examples from our participants include co-location helped linking a face to a name, which can be a first important step in establishing a working relationship (Busch et al., 2013). Other healthcare professionals discussed how not being co-located meant they did not know who or where the other healthcare professional group was, which made collaboration difficult.

Furthermore, physical proximity can enhance healthcare professionals' view as being part of a chain of care, rather than completely separate services (Barimani & Hylander, 2008). This is a delicate balancing act because, while it is important that healthcare professionals see themselves as part of a woman's journey to parenthood, at the same time, their roles are quite distinct and it may be important to maintain professional boundaries, know what is within and outside one's remit (Aquino et al., 2016) and make it easier for women to distinguish between the two professions (Aquino et al., 2018). Different locations of care help women and healthcare professionals make this distinction. For example, some healthcare professionals claimed to be concerned that joint appointments could be awkward and confusing for women. Further, healthcare professionals have previously reported that they do not know what other healthcare professionals do and worry that their contribution is not known or valued by other healthcare professionals (Dahl & Crawford, 2018; Schmied et al., 2015). Incidentally, to promote collaboration clearly defined roles are needed (Busch et

al., 2013). Blurred roles may be particularly problematic when having joint appointments with a woman (Dahl & Crawford, 2018). Another challenge is to coordinate different healthcare professionals schedules (Schmied et al., 2010), which can make joint appointments difficult. That said, there are good examples of where midwives and health visitors provide joint appointments successfully (Barimani & Hylander, 2012; Harris, Lewis, & Taylor, 2015). The healthcare professionals in this paper were aware of the importance of joint care for women with difficult circumstances such as safeguarding issues. As professionals who meet women in their home, midwives and health visitors play an important role in safeguarding, and communicating their concerns about families to other healthcare professionals such as GPs who rarely see families in their home (Brodie & Knight, 2014). However, it must be noted that joint appointments may not be needed in most cases where women have a straight forward pregnancy and birth (Rodríguez & des Rivières-Pigeon, 2007) when interprofessional coordination rather than collaboration may be more appropriate (Reeves, Xyrichis, & Zwarenstein, 2018). More research on when joint appointments are required and who they best benefit is needed.

The underlying assumption associated with co-location of services in current policy documents (National Maternity Review, 2016) is that improved access to other healthcare professionals will lead to collaboration between said professionals and result in improved care for women and their families. This has also been found in the research literature in maternity services (Schmied et al., 2010) and family physician clinics (Szafran et al., 2018). However, for co-location to lead to collaboration, commitment from individual staff members and strong leadership and management is needed (Barimani & Hylander, 2008; Busch et al., 2013; Schmied et al., 2015). This is an important implication for interprofessional practice – co-location in itself is insufficient for collaboration to flourish. Furthermore, buy-in from staff members is not always guaranteed, for example joint team meetings are not liked by all (Barimani & Hylander, 2008).

### ***Implications for interprofessional practice***

There are several recommendations for practice based on these findings. Firstly, co-locating midwifery and health visiting services in Children Centre's seems appropriate; it is a setting that was liked by most women and several healthcare professionals had positive experiences of working in this way. However, co-location is not a panacea that will automatically lead to service improvement and collaboration. To make sure healthcare professionals do work together, joint meetings, clear care pathways and appropriate policies need to be developed, evaluated and maintained. Moreover, financial and time resource is needed to facilitate this change to working practice. Past literature provides many examples of where co-location did not lead to joint working (Barimani & Hylander, 2008), and highlights the importance of the physical space in the building where services are co-located to be appropriate (Oandasan et al., 2009; Szafran et al., 2018). Focus on women and their needs or joint responsibility surrounding breastfeeding or safeguarding has been suggested to be important to get the buy-in from healthcare professionals (Barimani & Hylander, 2008). Alternatively, workshops which provide time for face-to-face discussions regarding care, role responsibilities and communication pathways seem to be a promising strategy for interprofessional relationship building (Olander, Coates, Brook, Ayers, & Salmon, 2018). This may be a particularly imperative proposition considering the limited evidence of interprofessional education within maternity services (Davies, Fletcher, & Reeves, 2016). A facilitative organisational structure with common policies (such as collecting, storing and sharing information) and strong managerial support is imperative to foster collaboration (Busch et al., 2013). Management support is particularly important to ensure midwives feel able to instigate and affect change (Sidebotham, Fenwick, Rath, & Gamble, 2015). Without this, healthcare professionals will still work in silos (Busch et al., 2013).

### ***Strengths and limitations***

There are several strengths associated with this paper. Co-location of maternity services is currently being implemented nationally in both England and Scotland (NHS England, 2017;

Scottish Government, 2017) and already exists in several countries (Busch et al., 2013; Kellom et al., 2018), thus these findings should be of interest to many healthcare professionals and policy makers worldwide. Comparing and contrasting the views of both healthcare professionals and women was also a considerable strength as it highlighted different perspectives on the same issue. In particular the women's views are under-researched, and as service users, their views are imperative when considering implementing new models of care. Moreover, there are other services in addition to midwifery and health visiting suggested to be introduced with Community Hubs such as pre-conception care, diagnostic testing and weight management services (NHS England, 2017). We believe the findings reported here may be relevant for those services as well as to other countries and clinical settings where care is provided in a co-located service (e.g. Busch et al., 2013; Kellom et al., 2018; Oandasan et al., 2009; Szafran et al., 2018). It also needs to be noted that Community Hubs will look different in different areas based on existing infrastructure, services and local need, and could even be multi-site (NHS England, 2017).

Some limitations of this study need to be noted. Firstly, many questions were hypothetical for the women and healthcare professionals considering they had not experienced co-location or received/provided a joint appointment. This means participants may have imagined co-located services slightly differently. Further research with women who have had attended co-located midwifery and health visiting services is needed. Similarly to another recent study (Kellom et al., 2018), co-location was not the focus of data collection in the healthcare professional interviews, but identified from the data as an important factor associated with collaborative practice. Co-location was discussed more by health visitors compared to midwives, potentially due to health visitors relying on good handover to provide high quality care. Whilst saturation was reached for the main purpose of both studies, it may not have been reached for this analysis. This exploratory and opportunistic analysis needs to be compared to findings where co-location is a primary focus.

Further, the participants interviewed in this study self-selected to take part, and it cannot be assumed that their experiences and perceptions are relevant to all women. This limitation was managed by having a considerably diverse sample with contrasting experiences and views and by comparing the perspectives of healthcare providers and recipients. Further, we believe the transferability of our findings is considerable as they may be relevant to other clinical areas where care is provided in a co-located setting. For example, most GPs are co-located with at least one other healthcare professional (Bonciani et al., 2018). Recent research has also highlighted how individuals in rural and urban areas may view healthcare differently (Lewis, Willis, & Collyer, 2018), and this needs to be taken into consideration in future research.

### ***Conclusion***

This study explored midwives', health visitors' and postnatal women's experiences and views of co-location of midwifery and health visiting services and collaborative practice. The women reported no experience of service co-location and its need was questioned by some women. Instead, service integration was identified as important by all participant groups. These findings have important implications for the provision of safe high quality woman-centred care, the organisation of midwifery and health visiting services and the implementation of Community Hubs. Whilst Community Hubs are a promising strategy to improve care for women and their families they need appropriate managerial and organisational support. With this support, midwives and health visitors have the potential to deliver the best care possible for women and their families.

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### ***Declaration of conflict of interest***



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