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Barriers to women's access to alongside midwifery units in England

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Abstract

Background: Alongside midwifery units (AMUs) are managed by midwives and proximate to obstetric units (OUs), offering a home-like birth environment for women with straightforward pregnancies. They support physiological birth, with fast access to medical care if needed. AMUs have good perinatal outcomes and lower rates of interventions than OUs. In England, uptake remains lower than potential use, despite recent changes in policy to support their use. This article reports on experiences of access from a broader study that investigated AMU organisation and care.

Methods: Organisational case studies in four National Health Service (NHS) Trusts in England, selected for variation geographically and in features of their midwifery units. Fieldwork (December 2011 to October 2012) included observations (>100 h); semi-structured interviews with staff, managers and stakeholders (n=89) and with postnatal women and partners (n=47), on which this paper reports. Data were analysed thematically using NVivo10 software.

Results: Women, partners and families felt welcome and valued in the AMU. They were drawn to the AMUs' environment, philosophy and approach to technology, including pain management. Access for some was hindered by inconsistent information about the existence, environment and safety of AMUs, and barriers to admission in early labour.

Conclusions: Key barriers to AMUs arise through inequitable information and challenges with admission in early labour. Most women still give birth in obstetric units and despite

increases in the numbers of women birthing on AMUs since 2010, addressing these barriers will be essential to future scale-up.

Background

In a number of countries, midwives have established settings within which they manage as well as provide labour and birth care for women. These spaces, often called midwifery units or birth centres, are designed to support women with straightforward pregnancies and provide a home-like environment that aims to optimise physiological birth (see Figs. 1 and 2) (Birthplace Collaborative Group 2011; Overgaard et al., 2011; Stone 2012). They also provide a space within which midwives can practise with more professional autonomy than they would usually find in an obstetric setting (Hofmeyr et al., 2014; Hermus et al., 2015; McCourt et al., 2016; Monk et al., 2013). In England, women who plan birth in midwifery units are known to have good perinatal outcomes and lower rates of interventions as compared with planned Obstetric Unit (OU) birth (Birthplace Collaborative Group 2011; Scarf et al., 2018).

Over the last twenty years, there has been a clear policy direction in the UK towards offering women choice in childbearing and more recently, giving healthy women choice in where they give birth (Department of Health 2007; National Maternity Review 2016). In 2014, the UK National Institute for Health and Care Excellence guidelines were revised to recommend that women with straightforward healthy pregnancies should not only be offered a choice of birth settings, but positively encouraged to consider the option of a midwifery unit birth (National Institute for Health and Care Excellence 2014).

The number of Alongside Midwifery Units (those situated in the same building or on the same site as an obstetric unit) is increasing in England, as in other countries: from 53 to 97 AMUs between 2010 and 2016 (the most recent census) (Redshaw, 2011; Walsh et al., 2018) and the percentage of women giving birth in AMUs has also increased (Walsh et al., 2018). They are widely seen as the 'best of both worlds' offering a non-technical birth with easy access to specialist care if needed (Newburn 2012).



Figs. 1 and 2. Birthing rooms in an Alongside Midwifery Unit (The Meadow Birth Centre, Worcestershire Acute Trust. Reproduced with permission. This was not a case study site).

Following an era of professional advice to women against giving birth outwith hospital settings, obstetric unit birth remains the cultural norm in England (Coxon et al., 2017; Naylor-Smith et al., 2018; Rayment et al., 2019). Many women want to have choice of birth setting but remain concerned about the safety of midwifery units or their access to pain relief, the birth environment and distance to travel from home, or in the event of a transfer to obstetric care (Hollowell et al., 2016). Bearing in mind the policy direction towards promoting choice of birth setting for women with straightforward pregnancies (National Maternity Review, 2016), increasing access to midwifery units will require addressing these concerns.

Aims and objectives

The analyses reported in this paper draw on data collected in a follow-on project to the Birthplace in England Research Programme (Birthplace Collaborative Group 2011; McCourt et al., 2014). The main study aimed to explore how Alongside Midwifery Units (AMUs) are organised, staffed and managed in order to seek to provide safe, high-quality and sustainable care.

Existing reviews have identified a lack of good quality evidence on women's access to care in midwifery units (Coxon et al., 2014; Hollowell et al., 2016) and further barriers to access may also occur amongst women who have already chosen to plan a birth in the AMU.

Through analysing the experiences of women who had successfully accessed these units, we aimed to identify any stumbling blocks to access that may prove to be insurmountable barriers for other potential service users. We have published our analysis of staff, managers and commissioners' perspectives elsewhere (Mccourt et al., 2018).

Methods

The main study, from which these findings are drawn, used an ethnographic approach, which allowed for an understanding of the context in which the complexity of the day-to-day experiences of staff and birthing women occurred. We selected four case study sites with contrasting features¹ of geographical context, time established, size, physical design and location in relation to the Delivery Suite, and whether the AMU had an 'opt-in' or 'opt-out'² booking model (see Table 1). Fieldwork for the main study included >100 h of observations; semi-structured interviews with staff working on the AMUs and in the neighbouring Delivery Suite (n = 54), managers and stakeholders (n = 35) and postnatal women and birth partners who had given birth in the previous six months (n = 47). This paper reports on the findings from the interviews with women and partners, which highlighted for us the issue of barriers to access.

¹ For the purpose of this study 'a service' is an entire NHS Trust. Pseudonyms have been used for the names of the services.

² If an AMU was 'opt-in', women were required to proactively book their birth there during pregnancy. If a unit was 'opt-out', all clinically eligible women in the Trust were automatically booked to birth in the AMU, unless they developed risks during pregnancy that made them ineligible, or unless they specifically chose to birth on the obstetric unit or elsewhere.

Site pseudonym	Westhaven	Northdale	Midburn	Southcity
Geography	Urban	Urban/Rural	Inner City	Inner City
% of Trust births	10%	14%	14%	13%
Location in relation to OU	Adjacent	Other floor	Other floor	Other floor
Years established	6 years	3 years post reconfiguration	1 year	10 years
Deprivation (IMD/PCT^a area)	Moderate (27.75)	Moderate (23.01)	V. High (48.31)	Moderate (28.08)
Booking	Opt-in	Opt-out	Opt-out	Opt-in & early labour triage

^a IMD: Index of Multiple Deprivation, the official measure of relative deprivation for areas in England. These are 2010 figures, available from www.gov.uk/government/statistics/english-indices-of-deprivation-2010 as from the original research report (McCourt et al. 2014). They refer to the PCT area (Primary Care Trust) in which the AMU was located.

Table 1. Summary of key characteristics of the selected AMUs

Analysis

This article draws on the analysis of interviews with 35 postnatal women and 12 of their partners, although our thinking in this process was informed by the wider study analysis (McCourt et al., 2014). Transcripts from interviews were analysed thematically by the team using a coding framework developed from the findings of the Birthplace in England Case Studies (McCourt et al., 2011) and adapted in the light of ongoing discussion and analysis of initial findings between the co-investigators and project advisory group. Interviews were coded using NVivo10 software by two members of the core research team and code reports were further checked by co-investigators.

Interviews with women and partners aimed to explore the role of organisational function on their access to services. The stories described in the interviews were used to create a 'Snakes and Ladders' table that collated the steps involved in accessing the AMU (the steps of the 'ladder') and any barrier to access mentioned by any participant at each step (the 'snakes'). These steps and the barrier 'snakes' were then illustrated using a flow chart showing their collective journeys (Fig. 3). 'Work in progress' workshops, conducted with staff in a wider range of services, provided opportunities for 'member checking' and further

validation and confirmation that sufficient data saturation had been achieved. Further details of the method are published in the project report (McCourt et al., 2014).

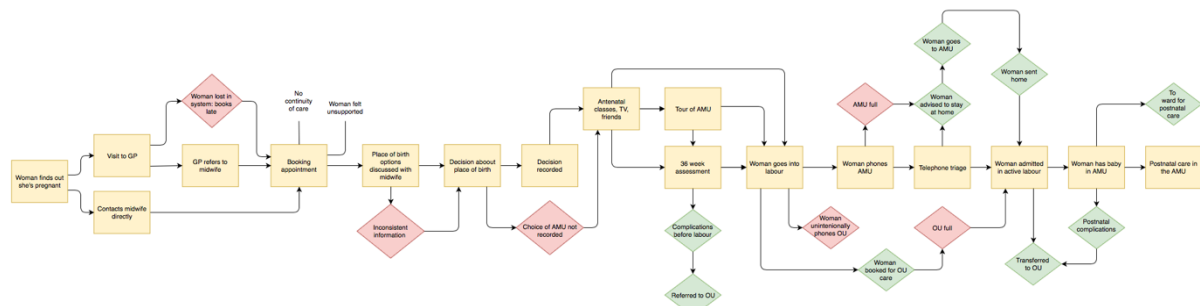


Fig. 3. Flowchart showing participants' collective journeys.

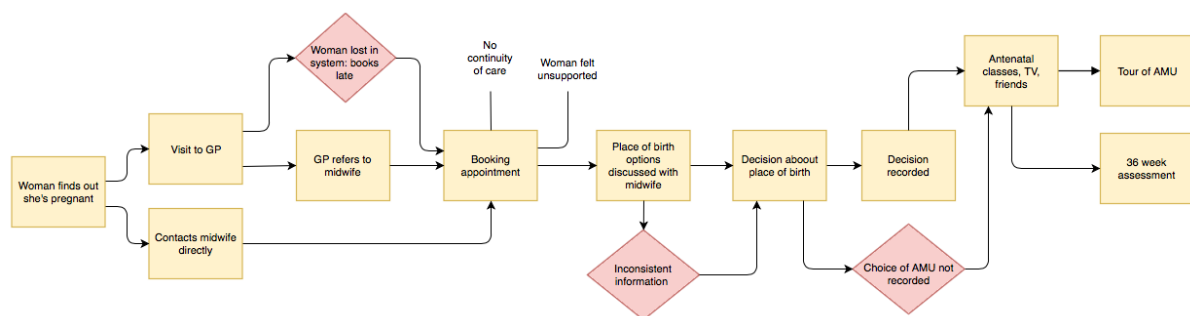


Fig. 4. Women's pathways in the antenatal period.

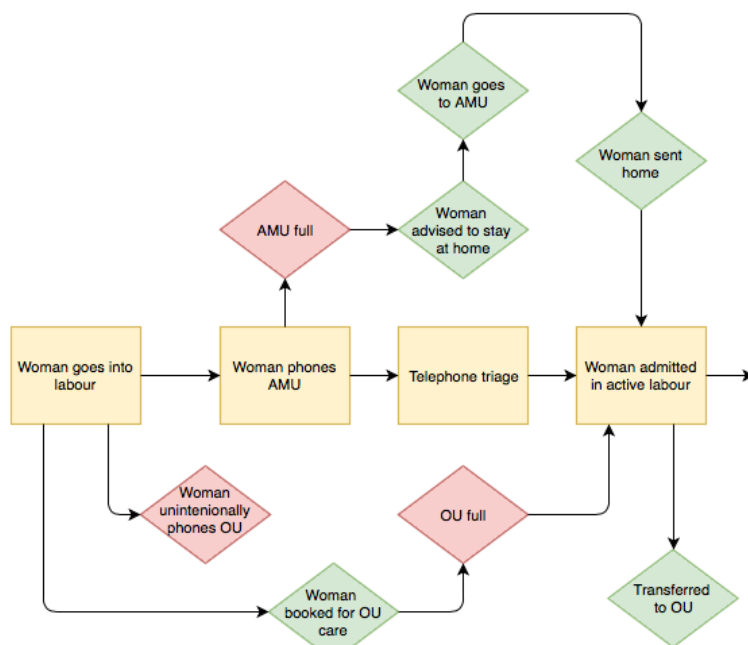


Fig. 5. Women's access to AMUs in early labour.

Participants

The women interviewed ranged in age from 19 to 38 years, 23 were White (British and Irish), and 12 were of Black and Minority Ethnicity (British, European, Asian, African, Caribbean and Latin American). All partners interviewed were male. See Table 2 for all details. Participants were mainly recruited from local Children's Centre drop-in groups, with additional recruitment through local community midwives and as AMU in-patients.

		Westhaven	Northdale	Midburn	Southcity	Total
Participants	Women	8	10	9	8	35
	Partners	1	2	5	4	12
Age range	Women	24-32	22-37	19-35	26-38	19-38
Parity	Primip	4	5	6	3	18
	Multip	4	5	3	5	17
Ethnicity	White	8	10	6	8	32
	BME	1	1	7	3	12
	Unknown	0	1	1	1	3
Planned AMU	No	4	0	2	1	7
	Yes	4	10	7	7	28
Transfer	No	8	9	9	6	32
	Yes	0	1	0	2	3

Table 2: Characteristics of women and partners interviewed

Participants were interviewed in their own homes, local Children's Centres or the AMU, as they preferred. In three interviews it transpired that the women had used the AMU or intended to do so, and so their stories (all involving caesarean sections) were kept in the dataset for their potential wider relevance but not included in this analysis. As so few of the women we interviewed had transferred to OUs (n = 3), transfer did not form a focus of our analysis. Women's experience of transfer has been addressed in other studies (de Jonge et al. 2014; Longworth et al., 2001; McCourt et al., 2011; Rowe et al., 2012). There were no instrumental deliveries in our sample, and five babies were born by caesarean section (two

who transferred from an AMU and the three women excluded from the analysis). Most women who had a vaginal birth used water to help them manage labour pain and a third used Entonox. Three of the women we interviewed had used Pethidine, all on one site.

Findings

The four sites differed in the process by which women booked for their services (opt-in vs. opt out) and their location in relation to the Delivery Suite. However, they shared similar models of care and clinical pathways. The visual mapping of women's journeys using flowcharts made visible these pathways, as well as disruptions and difficulties in the system. The rectangles seen in Fig. 3 represent the intended pathway. For women experiencing straightforward pregnancies, labours and birth, the services aimed to admit these women into the AMU after a period of early labour spent at home and, following a straightforward birth, to discharge them directly from the unit in some cases after a very few hours. Women who required or requested obstetric care were transferred to the Delivery Suite. The diamonds show deviations from that pathway, as experienced by any of the participants. Green diamonds show where the system functioned as intended (for example, referring women to obstetric care in cases of complications or to postnatal wards for longer periods of postnatal support). In some cases, women's journeys through the service were disrupted not by clinical need, but by irregularly functioning systems and organisational contingencies – including short staffing, communication errors or temporary closure of the midwifery-led unit. As we will illustrate, they were also influenced by organisational norms and a prevailing medical model of care and time management in labour. These are illustrated by the red diamonds.

The flowchart highlights two areas of particular complexity, and these 'knots' in the flow highlight the most challenging parts of the systems. These are both centred around women's access to care: 1. how and when women chose the AMU and 2. when they accessed the unit in early labour. This paper therefore focuses on women's and partners' experiences of these two moments, in order to better understand the barriers for women in accessing AMUs and how these may be addressed.

How and when women choose the AMU

The decisions women make about where to plan to birth their baby are the result of a complex interplay of the influences of culture, conceptions of risk, professional advice and personal intuition (Coxon et al., 2014).

Getting information about the AMU

Many of the women we interviewed had purposefully opted for the AMU and these women knew what to expect in terms of the kind of physiological birth the unit would support. However, it appeared that community midwives at all sites gave inconsistent information to women about the AMU as these women's contrasting experiences illustrate:

[The midwife] did go through the choices. I had a clear vision: I didn't want any drugs, but I tried to make it clear that if on the day I changed my mind that was OK. She said that was fine. (Northdale Woman 10)

She just basically said, '[Westhaven] has these options: a birth centre, a birthing pool, a delivery unit,'. She never gave us an opportunity to ask questions as to what they might entail, she didn't really elaborate. I think she just said, 'The birth centre's a more natural setting,' and that was pretty much about it. (Westhaven, woman 1)

Midwives at Westhaven and Southcity were less likely to be the first source of information about the AMU and this unequal access to information could make it more difficult for women to have an AMU birth in an opt-in system. Instead, women found out about it through chance encounters with friends, paid-for antenatal classes or their own research. Whilst all women saw midwives for their antenatal appointments, not all had access to antenatal classes such as through NCT³ or to friends who had knowledge of local maternity services.

One service manager commented that community midwives in her service tended to tailor the information they gave to their assumptions about different women and the choices they expected them to make. This was reflected in some women's lack of awareness about the options antenatally:

I didn't know [AMU] was there. I just thought I would go the Labour Ward bit. But when I found out I could go to [AMU] I was like, oh great [laughter], that's much better. (Midburn woman 1)

Making the choice

Once women knew about the AMU, they needed to make a decision whether or not to plan a birth there. The available options for managing pain and the birthing environment in the AMU were key aspects of participants' decision-making and formed an important part of what was distinctive to them about AMU care.

Managing pain

For most of the women we spoke to, the availability of epidural was seen as a core, defining difference between the AMU and an obstetric unit. Some women described the decision to birth in an AMU in terms of a 'trade off' between access to an epidural or a nice environment:

Drugs that were available at the birthing centre is different (...). If you did want the epidural, anything stronger, you would have to be referred on to the women's unit,

³ NCT is a national UK charity that offers popular antenatal education classes for a fee.

so that was different, whereas on One Born Every Minute⁴ they were able to have the epidural in the room if they wanted. (Midburn Woman 2)

If you decide you want the pain relief, then you have to lose that relaxed atmosphere downstairs. So it's almost like you put yourself through more pain because you want that. (Northdale Woman 3).

There was some evidence that women, particularly in 'opt-out' services, may not have been offered sufficient information and preparation around coping with pain within a midwifery-led setting. The women made little explicit reference to knowing how the AMU environment might help them manage pain. Instead, the differences were understood in terms of what the AMU lacked in terms of pain relief rather than what it could offer over and above a standard obstetric setting in relation to coping with pain:

Now I can't remember all of them, but I just remember you couldn't have an epidural and I can't remember about Pethidine, I don't think you could have Pethidine downstairs either (Northdale Woman 3).

Whilst women in 'opt-in' units may have struggled to find out about the unit in the first instance, once they had 'opted-in' to the AMU a move that made them an exception to the norm they were provided with tailored antenatal education:

We're starting to take ownership of these women. (...) We do a little bit of teaching at 36 weeks, tell them about what to expect on the Birth Centre, how to give birth actively, when to call, when to come in... (Southcity Midwife 1).

Environment as an enabler or barrier. Women and partners from diverse social and cultural backgrounds all made it clear that the environment mattered to them, even though some may not usually have felt entitled to such choices. Their comments even suggested that the environment made them feel they were 'special', in a way that they did not normally experience in their everyday lives:

Partner: *It felt lush...*

Woman: *Yeah, it felt lush. That's what it is.*

Partner: *I took a picture of it actually afterwards: I could show it to you.*

Woman: *(...) that's available on the NHS. That's an NHS service.*

[Southcity Woman 9 Partner 4]

In contrast, some of the medical professionals we interviewed viewed such aspects of the environment as trivial, or saw them as geared to "white, middle class women". Health professionals' assumptions about the environment and how it mattered and to whom (McCourt et al., 2014) may have contributed to an indirect barrier to care, explaining why

⁴ 'One Born Every Minute' is a popular 'fly on the wall' reality TV show produced by Channel 4, depicting life and birth on a number of maternity units in the UK.

some women did not receive information about the existence of the unit, or what they might expect when they arrived there:

Interviewer: *And what did you think about that, having a room without a bed?*

I thought it was a bit weird, I've got to admit, it's comfy a bed, you know what I mean? Why do you need somebody to get on the floor? But then I thought when it comes [to] the time, actually that's quite practical because you can be on all fours then, or you can be squatting against the wall and it would be more comfortable (Westhaven Woman 2).

Coming to the unit in early labour

Following the antenatal period, the flowchart (Fig. 3) becomes particularly complex around admission to the unit in early labour (Fig. 5), which suggests that this was another 'knot' in the women's pathway.

Most women were aware that coming into the hospital in early labour needed to be carefully timed. They described trying to manage at home for as long as they could, to avoid being asked to return home from hospital, although this could lead to anxiety:

One of our concerns as well about you know the birth centre or any labour was arriving too early and being sent away then arriving and being sent away. (Southcity woman 2)

Some women who were asked to return home felt unsafe as a result, even if their birth experiences were positive after admission to the AMU:

I really thought that he was coming on the way, and at this point I was quite frightened, it was just that the ... the not knowing as to what's happening and your body's doing something and you can't control it and it was just all those feelings of thinking, oh my God we could have this baby in the car or on the way. (Midburn Woman 6)

On arrival at the AMU, women reported feeling calmed and encouraged if staff listened, admitted them to the unit in a timely way, and showed the woman that she was expected and there was a room awaiting her. Women were often aware of the pressure on rooms, beds and staff and tolerated this busyness, as long as they felt valued as individuals:

[Midburn AMU] were absolutely fantastic over the phone and in person. Really made you feel like they wanted you to have your baby there rather than just you were a statistic or a number that comes through, which I imagine hospitals do become. (Midburn Woman 4)

Half of the women we interviewed came to the unit and were admitted, in many cases after midwives had spoken to them on the phone and encouraged them to stay home for as long as possible. The other half were sent home from the AMU in early labour. Sometimes these

women were given the choice to stay or leave, but mostly they were not given an option to stay. Some women were advised by midwives that home was 'the best place' for them in early labour.

Units appeared to differ in their early labour policies. Whilst women at Northdale and Southcity reported being given the option to stay in early labour, Midburn midwives encouraged all the women we interviewed who arrived in early labour, to go home. Some Midburn women were happy to leave but three women were asked to go home when they did not want to:

Horrible time for me was when they sent me back home. First pregnancy. According to me – home is not best place for me. Midwife advice, best position, they examine you again and again. Energy drinks. When they sent me home, confusing time for me. Go out, go in – painful time for your body, innit. They should keep the woman in [AMU] for the labour.

Interviewer: *Why do you think they don't keep you in?*

I don't know why. Because pain was stronger. They don't tell me why. (Midburn Woman 7)

Women were sometimes also aware that capacity and staff shortages were blocking their admission, and the way in which professionals dealt with a difficult situation could make a considerable difference for the women's experience:

Someone came and I explained who I was and they said, 'Oh the birth centre's full at the moment, but if you come up here we've got a room for you.' (...) And then about 20 minutes later the midwife who actually ended up being with me the whole way through appeared and said, 'I understand you want to give birth in the birth centre in a pool. It's available now, would you like to come down?' At which point I said, 'Yes please. Definitely.' And that was brilliant. [Westhaven Woman 5]

Some women's accounts indicated that this may be related more to midwives' concerns about how time is managed in the service, creating feelings of pressure to keep women away from the unit in early labour:

[The midwife] said, 'Because you're only two centimetres I can't actually keep you, I'm going to have to send you home.' And I was like, 'Please can't you keep me there?' and I was like, 'Can you not examine me?'. She's like, 'Unfortunately I won't be able to examine you because if I examine you again and you haven't progressed any further then I'm going to have to write off a report and then you're going to have to get transferred onto the ward and you're not going to be able to stay at [Midburn Birth Centre].' [Midburn Woman 2]

Whilst few women were sent home against their will, some women were encouraged to stay at home for longer than they wished, and feelings of uncertainty and worry around early labour care were evident across many of the women's stories.

Discussion

Maternity professionals and women and their partners appear to see AMUs as a 'best of both worlds' (Newburn 2012), offering a compromise between a dichotomy of 'natural' vs. 'medical' birth or home vs. hospital to many who lack confidence in giving birth outside a hospital setting. The AMU environment, care and family- friendly nature were valued highly by the women who experienced it.

The women in our sample were socially and ethnically diverse, and the women's and partners' comments indicate that some were surprised to be in an environment that they associated with 'luxury', such as a hotel or spa. Access to this 'luxury' option was predicated on women knowing about it and having enough information to form the basis for a decision on place of birth. We identified that women were most likely to hear about the AMU incidentally, through a hospital tour, an antenatal class or through friends, than through their community midwife. For women in an 'opt-in' services, this has significant implications for equity of access. Henshall's systematic review (2016) of the evidence around midwives' discussions with women about place of birth describes wide variation in midwives' information sharing with women on midwifery unit and home birth. Midwives' discussions with women were influenced by organisational norms, relationships with colleagues, their knowledge and confidence in relation to evidence and practice, and a belief that women were unlikely to change their minds about their choices (Henshall et al., 2016).

In 2014, the NICE intrapartum guidelines were updated to reflect the evidence from the Birthplace Programme (National Institute for Health and Care Excellence 2014) and this might have been expected to alter this situation. Whilst our fieldwork was carried out before this change in guidance, more recent studies report that many women are still not offered information about the range of options (Hinton et al., 2018; Coxon et al., 2017; Plotkin 2017). This suggests that, despite the length of time since these interviews, returning to the stories to analyse how these 'knots' or barriers in the system are experienced by women and families is still pertinent.

Professionals' unease with the safety of midwifery units leads them to introduce inequalities in access by not providing women with evidence-based, equitable information. They are unable to work to challenge the dominant cultural norm that babies should be born in hospital (Coxon et al., 2014; Rayment et al., 2019). The quality of information given about birthplace options was also variable. Most women choose midwifery unit care because of the environment and a desire to have a straightforward birth in a calm and comfortable, family-friendly setting. However, some saw this choice as a trade-off with access to pain relief and were seemingly not given information from midwives about the positive impact that a midwifery unit environment (McCourt et al., 2016; Whitburn et al., 2017) and midwives' comfort (Leap 2000) might have on their experience of labour pain.

Further barriers to access were an unintended consequence of the often difficult relationship between midwives working on the Obstetric Unit and the AMU, which we have described previously (McCourt et al., 2018). Midwives working in AMUs were concerned about accusations from Obstetric Unit colleagues that they were both transferring women too soon (for example in the case of 'delays' in the first stage of labour), and too late (McCourt et al., 2011; 2018). These concerns led them to prefer to admit women in

established labour, even though women themselves would have preferred to remain in the AMU during early or latent phase labour. Women's experiences suggest that the policy to encourage women to spend their early labour at home to avoid unnecessary medical intervention in hospital (Beake et al., 2018; Cheyne et al., 2007) was being continued in AMUs, even though these units were presented as a 'home-like' rather than a medical space. Women's experiences suggest services should reflect on whether an AMU represents a social model of birth or one that remains primarily medical. Units' close proximity to the Obstetric Unit may have a greater impact on AMU staff decisions to (not) admit women to the unit, for fear of judgement from Obstetric Unit colleagues, than concerns about capacity. Some women who had been advised to return home in early labour in our study were admitted late in the first stage. The women's accounts indicate that such transitions can be very distressing if they are not well supported and that women may feel unsafe if they do not have a secure and undisturbed space with enough support in which to labour and give birth. (SkirisdottirVik et al. 2016). The discrepancy between midwives' and women's preferences around early labour is possibly compounded by the lack of clear national guidance on this issue, which also deserves specific attention in relation to midwifery units.

Conclusions and implications

With current maternity policy in the UK supporting the use of AMUs for women with straightforward pregnancies (National Maternity Review 2016), this research contributes to the debate on how best policy makers and healthcare managers can support the scale up of alongside units and other out-of-OU birth places and ensure that women have full and equitable access to the different birth settings.

The biggest impact on access may come from untangling the two 'knots' we identified in women's pathways. Equitable access is supported by evidence-based information delivered by confident and well-informed midwives (or other antenatal care providers) and should include explanations of the relationship between birth environment, philosophy of birth and clinical outcomes, as well as preparing women for what a birth in birth centre is like and providing good quality information on support for coping with labour pain. Services would also benefit from reflecting on their policies on admitting women to midwifery units in early labour, aiming to strike a balance between managing service capacity and ensuring women feel safe and reassured in the early stages of labour, and considering the concept of a midwifery unit as supporting a biopsychosocial model of care. Our findings suggest that more work is needed to challenge the widespread assumption that obstetric units are the safest place of birth for low-risk women. Until cultural beliefs shift in line with clinical evidence, women and families will remain reticent about the safety of birth in midwifeled units.

Conflict of interest

None declared

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Ethics

The study received NHS Research Ethics approval (11-LO-1028).

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References

Beake, S., Chang, Y.-S., Cheyne, H., Spiby, H., Sandall, J., Bick, D., 2018. Experiences of early labour management from perspectives of women, labour companions and health professionals: A systematic review of qualitative evidence. *Midwifery* 57, 69–84. doi:10.1016/j.midw.2017.11.002.

Birthplace Collaborative Group, 2011. Perinatal and maternal outcomes by planned place of birth for healthy women with low risk pregnancies: the birthplace in England national prospective cohort study. *BMJ* 343 (d7400).

Cheyne, H., Terry, R., Niven, C., Dowding, D., Hundley, V., McNamee, P., 2007. Should I come in now?—A study of women's early labour experiences. *Br J Midwifery* 15, 604–609.

Coxon, K., Sandall, J., Fulop, N.J., 2014. To what extent are women free to choose where to give birth? How discourses of risk, blame and responsibility influence birth place decisions. *Health Risk Soc* 16 (1), 51–67. doi:10.1080/13698575.2013. 859231.

Coxon, K., Chisholm, A., Malouf, R., Rowe, R., Hollowell, J., 2017. What influences birth place preferences, choices and decision-making amongst healthy women with straightforward pregnancies in the UK? A qualitative evidence synthesis using a 'best fit' framework approach. *BMC Pregnancy Childbirth* 17 (1), 103.

de Jonge, A., Stuijt, R., Eijke, I., Westerman, M.J., 2014. Continuity of care: what matters to women when they are referred from primary to secondary care during labour? A qualitative interview study in the Netherlands. *BMC Pregnancy Childbirth* 14, 103.

Department of Health, 2007. *Maternity Matters: Choice, Access and Continuity of Care in a Safe Service*. Department of Health, London.

Henshall, C., Taylor, B., Kenyon, S., 2016. A systematic review to examine the evidence regarding discussions by midwives, with women, around their options for where to give birth. *BMC Pregnancy Childbirth* 16, 53.

Hermus, M.A., Wiegers, T.A., Hitzert, M.F., Boesveld, I.C., van den Akker-van, M.E., Akkermans, H.A., Bruijnzeels, M.A., Franx, A., de Graaf, J.P., Rijnders, M.E., Steegers, E.A., 2015. The Dutch birth centre Study: study design of a programmatic evaluation of the effect of birth centre care in the Netherlands. *BMC Pregnancy Childbirth* 15 (1), 148.

Hinton, L., Dumelow, C., Rowe, R., Hollowell, J., 2018. Birthplace choices: what are the information needs of women when choosing where to give birth in England? A qualitative study using online and face to face focus groups. *BMC Pregnancy Childbirth* 18, 12.

Hofmeyr, G.J., Mancotywa, T., Silwana-Kwadjo, N., Mgudlwa, B., Lawrie, T.A., Gülmezoglu, A.M., 2014. Audit of a new model of birth care for women with low risk pregnancies in South Africa: the primary care onsite midwife-led birth unit (OMBU). *BMC Pregnancy Childbirth* 14 (1), 417 20.

Hollowell, J., Yangmei, L., Malouf, R., Buchanan, J., 2016. Women's birth place preferences in the United Kingdom: a systematic review and narrative synthesis of the quantitative literature. *BMC Pregnancy Childbirth* 16, 213.

Leap, N., 2000. Pain in labour: towards a midwifery perspective. *MIDIRS Midwifery Digest* 10 (1), 49–53.

Longworth, L., Ratcliffe, J., Boulton, M., 2001. Investigating women's preferences for intrapartum care: home versus hospital births. *Health Soc. Care Community* 9, 404–413.

McCourt, C., Rance, S., Rayment, J., Sandall, J., 2011. Birthplace qualitative organisational case studies: how maternity care systems may affect the provision of care in different birth settings. Birthplace in England Research Programme. Final Report Part 6. Available online: openaccess.city.ac.uk/3641.

McCourt, C., Rance, S., Rayment, J., Sandall, J., 2018. Organising safe and sustainable care in alongside midwifery units: Findings from an organisational ethnographic case study. *Midwifery* 65, 26–34.

McCourt, C., Rayment, J., Rance, S., Sandall, J., 2014. An ethnographic organisational study of alongside midwifery units: a follow-on study from the Birthplace in England programme full report. *Health Serv Deliv Res* 2 (7). doi:10.3310/hsdr02070.

McCourt, C., Rayment, J., Rance, S., Sandall, J., 2016. Place of birth and concepts of wellbeing an analysis from two ethnographic studies of midwifery units in England. *Anthropol Action* 23 (3), 17–29.

Monk, A.R., Tracy, S., Foureur, M., Barclay, L., 2013. Australian primary maternity units: past, present and future. *Women Birth* 26 (3), 213–218 30.

National Institute for Health and Care Excellence (2014) Intrapartum care for healthy women and babies (Clinical guideline CG190). Available at: www.nice.org.uk/guidance/cg190 [Accessed on 23.01.19).

National Maternity Review, 2016. Better Births: Improving Outcomes of Maternity Services in England. A Five Year Forward View for Maternity Care. NHS England, London.

Naylor Smith, J., Taylor, B., Shaw, K., Hewison, A., Kenyon, S., 2018. 'I didn't think you were allowed that, they didn't mention that.' A qualitative study exploring women's perceptions of home birth. *BMC Pregnancy Childbirth* 18, 105.

Newburn, M., 2012. The best of both worlds – Parents' motivations for using an alongside birth centre from an ethnographic study. *Midwifery* 28, 61–66.

Overgaard, C., Møller, A.M., Fenger-Grøn, M., 2011. Freestanding midwifery unit versus obstetric unit: a matched cohort study of outcomes in low-risk women. *BMJ Open* 2, e000262.

Plotkin, L., 2017. Support Overdue. Women's Experiences of Maternity Services. NCT & National Federation of Women's Institutes, London.

Rayment, J., McCourt, C., Scanlon, M., Culley, L., Spiby, H., Bishop, S., de Lima, L.A., 2019. An analysis of media reporting on the closure of freestanding midwifery units in England. *Women Birth* doi:10.1016/j.wombi.2018.12.012, In press.

Redshaw, M. Birthplace in England Research Programme and Mapping Group, 2011. Mapping maternity care facilities in England. *Evid. Based Midwifery* 9, 46–52.

Rowe, R., Fitzpatrick, R., Hollowell, J., Kurinczuk, J., 2012. Transfers of women planning birth in midwifery units: data from the Birthplace prospective cohort study. *BJOG* 119, 1081–1090.

Scarf, V., Rossiter, C., Vedam, S., Dahlen, H.G., Ellwood, D., Forster, D., Foureur, M.J., McLachlan, H., Oats, J., Sibbritt, D., Thornton, C., Homer, C.S.E., 2018. Maternal and perinatal outcomes by planned place of birth among women with low-risk pregnancies in high-income countries: a systematic review and meta-analysis. *Midwifery* 62, 240–255.

Skirisdottir Vik, E., Haukeland, G.T., Dahl, B., 2016. Women's experiences with giving birth before arrival. *Midwifery* 42, 10–15.

Stone, N.I., 2012. Making physiological birth possible: birth at a free-standing birth centre in Berlin. *Midwifery* 28, 568–575.

Walsh, D., Spiby, H., Grigg, C.P., Dodwell, M., McCourt, C., Culley, L., Byers, S., 2018. Mapping midwifery and obstetric units in England. *Midwifery* 56, 9–16.

Whitburn, L.Y., Jones, L.E., Davey, M-A, Small, R., 2017. The meaning of labour pain: how the social environment and other contextual factors shape women's experiences. *BMC Pregnancy Childbirth* 17 (1), 157.