



City Research Online

City St George's, University of London

Citation: McCourt, C., Rance, S., Rayment, J. & Sandall, J. (2018). Organising safe and sustainable care in alongside midwifery units: Findings from an organisational ethnographic study. *Midwifery*, 65, pp. 26-34. doi: 10.1016/j.midw.2018.06.023

This is the accepted version of the paper.

This version of the publication may differ from the final published version. To cite this item please consult the publisher's version.

Permanent repository link: <https://city-ref-test.eprints-hosting.org/id/eprint/20282/>

Link to published version: <https://doi.org/10.1016/j.midw.2018.06.023>

Copyright and Reuse: Copyright and Moral Rights remain with the author(s) and/or copyright holders. Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge, unless otherwise indicated, provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way. For full details of reuse please refer to [City Research Online policy](#).

Organising safe and sustainable care in hospital birth centres: findings from an ethnographic study of Alongside Midwifery Units

Christine McCourt, Susanna Rance, Juliet Rayment & Jane Sandall

Accepted for publication in Midwifery June 2018

Abstract

Aims and Background: Alongside midwifery units (AMUs, also known as hospital or co-located birth centres) were identified as a novel hybrid organisational form in the Birthplace in England Research Programme. This follow-on study aimed to investigate how AMUs are organised, staffed and managed, the experiences of women, and maternity staff including those who work in AMUs and in adjacent obstetric units. This article focuses on study findings relating to the organisation and management of AMUs.

Methods: An organisational ethnography approach was used, incorporating case studies of four AMUs, selected for maximum variation on the basis of geographical context, length of establishment, size of unit, leadership and physical design. Interviews were conducted between December 2011 and October 2012 with service managers and key stakeholders (n=35), with professionals working within and in relation to AMUs (n=54) and with postnatal women and birth partners (n=47). Observations were conducted of key decision-making points in the service (n=20).

Findings: Managers saw four key areas as vital to developing and sustaining good quality midwifery unit care: finance and service management support, staffing, training, and appropriate guidelines. Development of AMUs was often opportunistic, with service leaders making use of service reconfigurations to achieve change, including development of MUs and new care pathways. Midwives working in AMUs valued the environment, approach and the opportunity to exercise greater clinical judgement but relations between groups of midwives in different units could be

experienced as problematic. Key potential challenges for the quality, safety and sustainability of AMU care included: boundary work and management; professional issues; developing appropriate staffing models and relationships; midwives' skills and confidence; and information and access for women. Responses to such challenges included greater focus on interdisciplinary skills training, and integrated models of midwifery and care pathways. Positive leadership and appropriate development and use of guidelines were important to underpin the development and sustainability of midwifery units.

Conclusions: The units studied had been developed to form a key part of the maternity service, and their role was increasingly being recognised as valid and as maintaining the quality and safety of care in the maternity service as a whole. However, each was providing birth care for only about a third of women who had been classified as eligible to plan birth outside an obstetric unit at the end of pregnancy. Developing midwifery units involves aligning physical, professional and philosophical boundaries. However, this poses challenges when managing the service, to ensure it is sustainable, of high quality and safe. In order to fulfil evidence-based guidelines on providing midwifery unit care, further attention is needed to staff training and support; the development of integrated, continuity-based staffing models; and ensuring AMUs are positioned as a core service rather than a marginal one.

Key words

Alongside Midwifery Unit, Birth Centre, birthplace, management, midwifery unit, organisational ethnography.

Introduction

This article reports on an organisational ethnographic study that was conducted as a follow-up to the Birthplace in England Research Programme. Organisational case studies conducted within the Birthplace programme raised a number of questions about the organisation and function of Alongside Midwifery Units (AMUs) (McCourt, Rayment et al. 2012, McCourt, Rance et al. 2011, Rance, McCourt et al. 2013). AMUs, also known as hospital birth centres, are midwife-led units providing labour and birth care situated on the same site as, but distinct from, an obstetric unit. They aim to provide a more 'homelike' birth environment, with a focus on supporting normal birth for lower-risk women, but close to an obstetric unit to ensure ease of transfer when needed. Typically, in England and Wales the focus on normal birth denotes an approach that supports physiological labour and low-risk is defined by providers in relation to NICE definitions, focusing mainly on absence of a range of obstetric or medical complications (NICE 2014).

Midwifery units are being introduced in a range of countries e.g. South Africa (Hofmeyr, Mancotywa et al. 2014); Brazil (Nunes, Reberte Gouveia et al. 2016) and The Netherlands (Hermus, Boesveld et al. 2017), and two thirds of British obstetric units are now co-located with an alongside midwife-led unit (NMPA 2017). In particular, our earlier study indicated that while proximity was commonly assumed to confer greater safety, to minimise transfer time and stress and to provide a 'best of both worlds' option for women (Newburn 2009, McCourt, Rayment et al. 2014, McCourt et al. 2011), it also presented a number of challenges for the organisation, clinical staff and managers (McCourt et al. 2011). This study sought to explore these questions in greater depth, in the context of the rapid rise in numbers of such units in the UK, and a lack of prior research on the topic.

Background

Since 1993, there has been a clear policy direction in the UK towards offering women choice in childbearing, including giving healthy women choice in where they give

birth. The Maternity Standard of the National Service Framework for Children, Young People and Maternity Services specified that service providers and Trusts should ensure that 'options for midwife-led care will include midwife-led units in the community or on a hospital site' (Department of Health 2004). Its related guidance, *Maternity Matters*, identified that all women should have a choice of place of birth by 2009, including birth in a local facility, including a hospital, under the care of a midwife (Department of Health Partnerships for Children Families and Maternity. 2007). A large-scale study of quality and safety of different birth settings (Birthplace in England cohort study) found that midwifery units – both AMUs and freestanding units (FMUs) - provide safe care for babies while also achieving a reduction in birth intervention rates and some benefits in terms of maternal outcomes (Birthplace in England Collaborative Group 2011). Midwifery unit care is also more cost effective for low-risk women than care in an obstetric unit (Schroeder, Petrou et al. 2012). The Birthplace study found greater reductions in intervention rates and higher cost effectiveness for FMUs, while these continued to provide safe care (Birthplace in England Collaborative Group 2011).

The policies of choice and of extending provision of midwifery units were reiterated in the NHS Commissioning Board's guidance on commissioning of maternity services (Tyler 2012) and in the 2014 NHS five-year forward view for England (NHS 2014). However, there is considerable variation within and between regions and countries in the UK regarding what services are provided, and inequalities in provision. The Birthplace Mapping Study estimated the number of AMUs in England at 26 in 2007 (Redshaw, Birthplace in England research programme and mapping group 2011). Options for place of birth have improved since 2007 (NCT 2009) but almost half of women did not have a full range of choice in 2010 (Redshaw, Birthplace in England research programme and mapping group 2011). By 2016, and after publication of updated NICE guidelines (NICE 2014), which recommended that women with healthy pregnancies be encouraged to plan birth in midwifery units, two thirds of British obstetric units were co-located with an alongside midwife-led unit (68% in England, 38% in Scotland and 100% in Wales) (NMPA 2017). In addition to AMUs, in some areas women are able to access an FMU. However, the proportion of births in

freestanding units has remained limited in recent years, at only 2% compared with 14% in AMUs (Walsh, Spiby et al. 2018).

These rises in the number of AMUs in the UK have occurred in response to government policy to offer women choices in where they give birth (Department of Health 2004), and also to professional and consumer concerns about rising birth interventions, their costs and consequences (NCT 2009). In the current political and financial climate more emphasis is being placed on reconfiguring existing environments rather than new builds. Additionally, following an era of professional advice to women against giving birth outwith hospital settings, many women want a choice of birth setting but express worries about transfer distances from home or a freestanding unit (Pitchforth, van Teijlingen et al. 2009, Coxon, Sandall et al. 2014, McCourt et al. 2011). Policy directives for England since the Birthplace study was conducted focus on choice and women-centred care and emphasise the value of midwifery-led care in both AMUs and FMUs but do not specify a need for increases in provision of midwifery units – freestanding or alongside – as settings for birth, or identify strategies to underpin women’s choices of birth setting (National Maternity Review 2016). These issues raise important questions about the management and sustainability of such services, the potential to scale up provision for a greater proportion of women with healthy pregnancies, and their impact on those providing and using maternity services.

Aims and objectives

The study aimed to investigate the ways in which AMUs are organised, staffed and managed. It also aimed to look at the experiences of women receiving maternity care in an AMU and the views and experiences of maternity staff, including those who work in AMUs and adjacent obstetric units. Study objectives included the exploration and analysis of unanticipated as well as intended consequences of AMU development, including system effects; analysis of models of organisation and staffing that address such aims and challenges and that contribute to staff satisfaction and retention; and analysis of how AMU developments can respond to current policy by providing choice for service users, and safe, effective and equitable

care. This article focuses on lessons that could be drawn in relation to managing and staffing services effectively. Since publication of the overall study report (McCourt et al. 2014) service managers and commissioners have raised concerns in personal communications and public forums about sustaining provision, and around optimum staffing models. Issues relating to women's experiences in relation to information and access will be published elsewhere, while women's and midwives' experiences of MU care have been reported in earlier publications (McCourt et al. 2016).

Methods

The study used an ethnographic approach incorporating observation, semi-structured interviews and documentary review to produce case studies of four AMUs. The case study sites were selected considering variation in geographical context, length of AMU establishment, size of units, their management and leadership, and physical design. The number of case study sites was pragmatic considering the time and resources available for the study. Workshops conducted with a much wider range of services towards the end of the study period provided further validation and confirmation that sufficient data saturation had been achieved. An ethnographic approach was chosen since it allows the researchers to gather data from a range of perspectives and in different forms, within naturalistic settings that provide insight into everyday practices and how these relate to their wider social context (Garsten, Nyqvist 2013).

The data presented in this paper comes from interviews with a purposive sample of service managers and staff. Our conclusions are also informed by analysis of the entire dataset. Women and partners who were interviewed did not seek to address staffing or management issues directly, although their accounts provided confirmatory insight into the impact of the key challenges discussed here. Interviews and observations were conducted by non-health professionals with a social science background who had experience of ethnographic research. Observation of selected aspects of the service was conducted at key locations and times, including staff

handover meetings, audit and risk meetings and everyday life in the AMU. The observations were mainly conducted before interviews with staff and service users took place, and were used to inform the interview questions. Interviews were conducted by the same researchers at a time and place of each respondent's choosing. Interviews were audiotaped and transcribed in full, while observations were recorded through unstructured note-taking informed by the study objectives. All interview transcripts and observation notes were entered into a single NVivo database for coding and analysis.

Managers and staff at all levels of seniority across the service were interviewed about the day-to-day work of the services; staff working relationships; their perceptions of the strengths and weaknesses of the unit's systems; and any lessons learned since the unit was established. Points where clinical and organisational decision-making and women's transfer occurred were observed to develop an understanding of interaction, processes, and flows of information and people. We reviewed relevant documents such as guidelines and protocols to enhance our background understanding of the cases. We interviewed a maximum variation purposive sample of service users who had used AMU care (n=47), to map pathways through care and understand their perceptions of AMU care.

Data were analysed using a Framework approach, using a coding frame based on findings of the Birthplace Organisational Case Studies, and amended in the light of initial readings and discussion of the data collected and potentially emerging themes. The initial analysis was also used to guide further sampling and data collection decisions. Key themes in this coding frame in relation to management and staffing were: staff relationships and teamwork ; leadership; staff deployment; training; guidelines; audit, review and organisational learning; organisational strategies for listening to women; management of transfer. A more detailed coding frame can be found in McCourt et al. 2011, Appendix 4.

Qualitative data analysis software (NVivo10) was used to facilitate systematic and rigorous analysis. Two researchers independently coded all transcripts. Emerging

themes were discussed by the core research team, and further discussed and interpreted in meetings with all co-investigators and a multi-disciplinary steering group including service users and professionals. Additionally, key findings were shared with professionals and managers in a series of regional feedback workshops across England, and the discussions provided additional validation of the analysis.

Structural approaches were also used to help explore the data. Process maps were used to focus particularly on mapping care pathways, transfer processes, staffing configuration and interprofessional teamworking and communication. Individual site descriptions were drawn up but subsequent analysis was conducted largely on a cross-site basis. In addition, strengths, weaknesses, opportunities and threats (SWOT)-type summaries for which respondents' perceptions of advantages or drawbacks, opportunities or threats relating to AMUs were mapped onto tables, in an exercise conducted with advisory group members.

Ethical issues

Ethical permission to conduct the study was obtained from the NRES Proportionate Review Committee (ref 11/LO/1028). Researchers were especially mindful of the need for continually negotiated consent when observing service areas, to ensure that staff and patients could exercise their right not to be included; and of the need to guard anonymity when conducting research with small samples. Pseudonyms have been used for all people and places, and some site details that might identify precise location have been excluded. Professional and stakeholder respondents were categorised very broadly to avoid identifying individuals with less common positions or roles.

Findings

Table 1 provides a general summary of the features of the case study sites, with use of pseudonyms and data rounding to avoid disclosure.

Table 1: Characteristics of field sites

	Westhaven*	Northdale	Midburn	Southcity
Geography	Urban	Urban/Rural	Inner city	Inner city
# Births 2011/12 (% of total)	600 (10%)	825 (14%)	808 (14%)	700 (13%)
Proximity to obstetric unit	Adjacent	Other floor	Other floor	Other floor
Date established	2005	Reconfigured 2008	2010	2001
Deprivation (IMD/PCT)	Moderate (27.75)	Moderate (23.01)	Very high (48.31)	Moderate (28.08)

One hundred and thirty six interviews were conducted, including 47 with postnatal women and partners, 54 with clinical staff (midwives, obstetricians and support workers), and 35 with managers and other stakeholders (including midwifery and obstetric consultants with management roles, commissioners and user representatives), with a reasonably even spread across all sites (see table 2.).

Table 2. Interviewee numbers by group and site

	Total interviewees	Clinical staff	Managers and stakeholders	Postnatal women and partners	Fieldnote transcripts
Westhaven	27	11	7	9	4
Northdale	33	10	12	11	7
Midburn	37	16	7	14	6
Southcity	39	17	9	13	3
Total	136	54	35	47	20

In this article, we draw particularly on findings from interviews with managers in the case study sites to show the needs they perceived for their alongside units to operate effectively, and some of the main challenges they faced in implementing these measures. This analysis was also informed by the wider range of observations and interviews in the AMU study. Some units were newly established and had been

focusing on these issues in recent months or years. Others that were longer-established faced similar and new challenges as they responded to macro-level changes in NHS structure, financing and policy, as well as meso-level changes in local care guidelines and staff relationships. Although there were many differences of detail owing to the variations in unit context and history, the main themes identified in the analysis were highly consistent across all sites. In addition, the perspectives of service managers and stakeholders, midwifery staff and women and partners were mainly mutually complementary rather than contradictory. Further detail of the findings can be found in detailed study report (McCourt et al. 2014).

The managers and clinicians who initiated the development of these AMUs all expressed a need to have four key elements in place: finance and service management support, staffing, training, and guidelines, which included eligibility criteria and procedures for managing escalation and transfer. This article focuses on these four elements, while other aspects of the study will be discussed elsewhere.

Setting up the AMU

Those who instigated the development of AMUs often did so by taking advantage of planned service reconfigurations, mergers, the closure of other units or a drive to provide sufficient service capacity. Whilst the development of AMUs could present an opportunity to ‘think differently’ about service models and provide sustainable model of care with choice of birth setting for women, it was often pragmatic rather than innovation driven circumstances that enabled such units to be developed.

In England, several obstetric units may be managed together within a single ‘NHS Trust’. In two services, Southcity and Northdale, creating the AMU had been part of a reconfiguration strategy to close a neighbouring obstetric unit and centralise services on one hospital site, with the aim of increasing service efficiency. Concentrating obstetric services while still ensuring capacity was also seen as a service quality development. In another service, Midburn, opening the AMU was a key element of a strategy to turn around a ‘failing service’, which also involved closure of one obstetric unit. Westhaven MU was created as a less distinct unit by

refurbishing rooms on an existing delivery suite, achieved through taking up the opportunity of a government fund for improving hospital environments.

While the development of AMUs was generally achieved as part of wider service redesign, midwifery managers on all sites had a clear view of the proposed philosophy of the unit and its aims to provide a more homely birth environment that would be woman- and family-centred and facilitate normal physiological birth practices, and midwife-led care for low-risk women. In effect, the managers and consultant midwives developing these units were engaged in materialising a philosophy of birth as a biopsychosocial event (Jordan 1992, McCourt et al. 2016), The failure to adequately provide this model of midwife-led care in the labour ward was, in many cases, a key motivator for creating a separate unit:

One of our consultant midwives had been slaving away here for a few years and had tried to make inroads into providing low risk/midwifery-led care (...); but despite her best intentions it hadn't really got anywhere because of the culture of the practice both by obstetricians and midwives, aligned to (the) performance issues. (Midburn manager 3)

While managers saw it as desirable to ensure that midwife-led care, supportive care for physiological birth and a more social model of care was available on obstetric units, challenges in achieving such aims in practice had motivated key innovators to develop a separate space to facilitate such care. This view of AMU development was echoed in interviews with midwives and consultant obstetricians.

Finance

An impending shift in payment schemes for Trusts was seen as an opportunity to consolidate recent developments in midwife-led service provision. At the time of fieldwork, maternity services were making early changes from 'payment by results' (Appleby, Harrison et al. 2012) (i.e. payment according to treatment) to a pathway payment system based on an evaluation of the woman's level of 'risk' determined at the time of booking for care (Tyler 2012). However, pending implementation of this

change, the funding system presented a paradox to managers. Although they recognised that high intervention rates were expensive, and midwife units were more cost effective than obstetric units (Schroeder et al. 2012), 'payment by results' meant that services in constrained financial situations received higher income for more interventionist approaches to care, resulting in normal birth often being seen within their NHS Trusts as a 'loss-making activity':

We are looking at, um, the bottom line, service line reporting of all of our services and looking at what makes a loss, what breaks even and what we can do at profit, and maternity, because of CNST [Clinical Negligence Scheme for Trusts], because of the costs of obstetricians and the costs of midwives against the current tariff, is unquestionably loss-making. So it's really difficult. With midwifery-led births, because the tariff is lower, you've got more costs to cover within a lower amount of income.. (Southcity manager 6)

Despite the introduction of specific local targets to increase normal birth rates and reduce caesarean section rates, managers and commissioners argued that the payment systems did not facilitate these goals and that funding systems needed to be aligned to facilitate good quality, evidence-based models of care.

Staffing

Once AMUs were established, adequate and appropriate staffing was seen as key for the unit's success. The number of core staff in the units studied ranged between 8 and 18 whole-time equivalent (WTE), typically with two midwives per shift (range 1-4); and in three of the units, these were supported by a maternity support worker (MSW)¹ on each shift. All services reported experiencing shortages of staff and the regular 'pulling away' of staff to cover other areas, in particular the obstetric unit. This was a particular problem for smaller units such as Westhaven, which had only one midwife on shift at night, and two during the day. Staffing was mostly by band 6 midwives with a band 7 midwife² for day-to-day management, and two units also had a consultant midwife overseeing the unit. A number of midwives and midwifery

managers felt that the leadership of a consultant midwife was important for maintaining the profile and role of the alongside midwifery unit within the context of a hierarchical health service in which the authority of senior midwives is not always recognised. Consultant midwives who were interviewed confirmed the importance of their strategic clinical role, but also emphasised that support from senior obstetricians and other service managers was vital for this to be effective.

All four AMUs were staffed by core midwives who were recruited to the unit and did not move to work in other clinical areas, except when asked to cover for short staffing elsewhere. This model had been chosen by all the units, reflecting a view that midwives staffing AMUs needed to be experienced, skilled and confident in providing midwifery-led care; and that AMUs needed to offer a consistent philosophy of care, not only for clinical reasons but to establish a new model for service delivery:

We are aware that you can't just suddenly rotate too many people, so you need to rotate on a slower pace so that you build their skill to be able to function to that area as the culture or environment ... the guidelines and the principles should be for that place to function (Southcity manager 3).

Core staff were expected to be skilled in working in a midwife-led setting, including working with physiological birth, assessing when escalation or transfer of care were necessary, and responding to obstetric emergencies. However, all Trusts were considering introducing rotation of staff between areas to address midwives' skills and confidence with midwifery-led care across the whole service, and as a strategy to preserve good inter-professional relationships and ability to work across boundaries. However, only occasional rotation was considered appropriate, as midwives needed time to develop their skills and working relationships, and continuity was also an important consideration. Managers, midwives and also women and partners had alluded or directly spoken about tensions and lack of mutual understanding between midwives:

Rotation is the only way I can do it, but then there are service implications, they have a service to deliver, they have pressures, they have caseloads. It is easier said than done. Um, but unless we integrate them, unless they feel part and parcel of the same team ... (Midburn manager 3)

Midwives interviewed spoke at length about intra-professional tensions. They attributed these particularly to lack of confidence of many midwives about working in a midwife-led environment, as well as midwives' and obstetricians' lack of understanding and appreciation of the work demands experienced by colleagues working in other areas. In the latter case, this contributed to stereotyping of 'other' groups of midwives as not taking a fair share of the workload. Midwives working in midwifery units were sometimes described by those working in OUs as less hard-working, owing to smaller numbers in the unit, but also as subject to more difficult demands owing to a higher level of responsibility.

Despite some efforts to integrate staff training and experience across units, midwifery managers' plans for rotation were being approached cautiously. This was explained in terms of the need to balance several priorities: to enable midwives to maintain all-round skills, while also ensuring sufficient consolidation of physiological birth skills; to facilitate better mutual understanding and team-working between midwives; and to protect or enhance continuity of care. Managers recognised that rotation of staff, unless supported appropriately, might not resolve staff tensions or ensure good teamworking and quality of care. When establishing a new unit, in addition to addressing clinical skills, they highlighted the value of training in interpersonal skills, building good working relationships and dealing with professionals' anxieties and the challenges of working within a midwife-led setting and across boundaries, in order to mitigate such potential problems.

Skills and training

A range of respondents emphasised that many midwives lacked appropriate skills, confidence and training to work in a midwifery unit, owing to lack of prior

opportunity to consolidate these in an obstetric setting. Midwifery managers and consultants connected this difficulty to the rationale for developing a distinct midwifery unit, but they were then faced with the challenge of managing boundaries and continuity effectively across different elements of the service. In the views of the AMU midwives interviewed, and some OU midwives, this situation was complicated by what we as researchers observed to be a 'skills hierarchy' operating in all the services, even where clear inter-professional support for midwifery units was apparent. Put simply, high-risk and high-technology skills were typically rated by managers responsible for in-service training, and many midwives, as more 'skilful' than the 'traditional' midwifery skills – such as intermittent auscultation, skills in supporting women to cope with pain, and wider skills to observe labour progress – that are drawn on to support normal, physiological birth care. Although a number of managers and midwives highlighted these issues to us, and made it clear that they felt that midwifery skills to support physiological birth were undervalued, the problem appeared to be a structural one where such skills were seen as less fundamental to safety. Therefore, although inter-disciplinary training was utilised as a way of bringing different staff groups together to develop shared skills, this tended to be focused on high-risk skills and active management rather than active, physiological labour skills; and training for dealing with emergencies was not necessarily located on the AMU. Midwives commented on these issues more often than service managers:

Every year at our mandatory training, for three days (...) we have skills drills of obstetric emergencies and haemorrhage and eclamptic fits and stuck babies and breech babies and all of that, and I always, and in the feedback I always write, 'Where's our midwifery skills training? You assume everybody is up to speed with physiological third stage and augmenting labour naturally and advice on post-dates pregnancy etcetera ... and it's not given much value by the midwives themselves or by the people who train us or by the obstetricians. (Southcity midwife 2)

This reference to mandatory training reflects that managers and midwives saw the Clinical Negligence Scheme for Trusts (CNST) as driving a primary emphasis on emergency skills for high-risk medical conditions and for care in an obstetric setting. However, some also argued that training priorities reflected a general medicalised outlook on birth that regarded high-risk skills as primary, and physiological or 'normal birth' skills as optional or something to be taken for granted. In effect, emergency skills training was valued and considered essential, but our respondents felt that the lack of similar attention to physiological birth skills training reflected a fundamental structural bias in the maternity service towards medicalised care and birth settings as the norm. In this context, the midwifery unit environment was retained as an alternative option rather than as a normative pathway for women with healthy pregnancies.

This hierarchy was not uniform, however, and was counteracted where midwifery professionals worked across units and with clear midwifery leadership. This model was perceived as having benefits for the obstetric unit too:

Every morning I attend the daily review, which is our clinical review of activity over the last 24 hours, that includes the birth centre. (...) and I bring midwifery into it, so I would challenge, um ... dialogue around the medical model, and [the Clinical Director] would always ask for a midwifery opinion from me if, for instance, we have a breech ... So I'm influencing medical care down on delivery suite. (Midburn manager 4)

Two services had chosen to integrate their community midwives into the staff cohort for the AMU. Managers anticipated that integration with the AMU would facilitate the rebuilding of the community midwives' birth skills and confidence in an area with a very low home birth rate, as well as providing a more flexible staffing model where midwife numbers could match numbers of birthing women on the unit more closely:

They need some intra-partum experience. And the intra-partum experience that we're giving them is that we're expecting all of the community midwives

to rotate on a regular basis into our co-located birth unit, for probably a maximum of three weeks in a year, to update their skills. So from an intra-partum perspective they need to ... to develop ... That's probably our biggest challenge. (Midburn manager 1)

In Midburn, community midwives were required to work one shift per month on the alongside midwifery unit to develop and maintain their birth skills. Managers hoped this could be extended in future to the new freestanding midwifery unit, but they did not allow community midwives to work on the freestanding unit until their confidence and experience in birth skills reached a certain level:

I think that nationally there is a problem. The model's fine, but we haven't found a way of integrating community midwives appropriately by way of development, professional development and training to satisfy ourselves that actually they ... that we've given them the tools to do a good enough job. I'm not talking about numbers and I'm not talking about how many caseloads and all of that. (...) I'm talking about having a professional midwife continue to practise safely, continue to be developed, continue to have access to education, to change, to updates, all of that.. (Midburn manager 3)

Lack of confidence in working with physiological birth was also reported by some hospital-based midwives, and the alongside midwifery unit was seen as a stepping-stone to all midwives developing their skills and confidence in midwife-led care, as well as specifically for developing community midwives' skills in intra-partum care.

Some AMU midwives worried about their confidence and competence on the delivery suite, feeling 'deskilled' in a setting where they were unfamiliar with the lay-out, facilities or colleagues. Transferring with women helped to ensure continuity, which women who had transferred said they would prefer, and midwives also perceived this as potentially helpful to bridge some of the barriers they experienced between the two units. However, in practice this rarely happened, precisely because of those perceived barriers, as well as concerns about leaving the

midwifery unit under-staffed, given the small numbers of midwives on each shift in the AMU, even though they described this as the ideal. Similar issues applied for midwives based in the OU, who reported reluctance to transfer to the AMU to facilitate such integration.

From a management perspective, barriers between the AMU and obstetric unit reflected intra-professional tensions and lack of mutual trust, communication and understanding between midwives. These threatened to undermine the potential role of the AMU as a stepping-stone to developing midwife-led care for low-risk women giving birth in the OU setting and for supporting normal birth throughout the service. It was therefore in the managers' interests to develop more integrated staffing models. However, the midwife consultants and managers interviewed also recognised the possible limitations of such measures, which do not address underlying structural issues in relation to gendered power or hierarchy in the health service. A normatively medical outlook persisted, that located midwifery units as marginal rather than as a core maternity service.

Guidelines

Clinical and midwife-led care guidelines and admission and transfer criteria, both national clinical guidelines such as NICE and local guidelines developed and agreed on an inter-professional and whole service basis, were regarded as being of key importance for the safety of the alongside midwifery unit and of practitioners, as well as for women's safety. Managers and midwives saw the local guidelines for admissions to and transfers from the midwifery unit as protecting a space for physiological birth, as well as a guide and framework for safe practice. In Westhaven, for example, managers emphasised the need for obstetric support for normal birth and midwife-led care and saw guidelines as helping to sustain obstetricians' confidence in the alongside unit. It was apparent that obstetricians were more comfortable with midwife-led care away from the obstetric unit if they felt that there was a comprehensive set of guidelines supporting that care that had been agreed across the service. This gave them more confidence that women would be

appropriately referred to them for review if medical attention were necessary. Most managers and midwives stated that guidelines needed to be strictly adhered to for such reasons, but that in practice there were many grey areas and discussions around individual cases.

In all case study sites, midwives working in AMUs expressed concern about pressure that they experienced to admit women to the AMU 'out of guidelines', often due to a lack of space on the obstetric unit. In addition, they reported that women who may otherwise have chosen out-of-hospital care 'against professional advice' were sometimes encouraged by obstetricians and consultant midwives to attend the AMU as a strategy of compromise, on the argument that this could be safer than other options the woman may have chosen, such as a home birth or unattended birth. Consultant midwives argued that AMU care might be safer for women with some obstetric risk factors, as it facilitates continuous care and close observation with support and a trusting relationship with the woman. They emphasised that they collaborated closely with consultant obstetricians in such instances. Many AMU midwives, however, did not support such management viewpoints, fearing that 'bending guidelines' left them vulnerable as individual practitioners, and made the midwifery unit vulnerable. Some also felt it threatened to introduce more high-risk care approaches:

We've sometimes had women who want to have a home birth and they're really not suitable for a home birth, (...) they've got, you know, had three previous caesarean sections or ... and then the consultant [obstetrician] might say, 'Oh look, she really doesn't want to, I don't want her to deliver at home but could you let her deliver in the birth centre?' Um, and we've been quite, we've said, 'No, we can't, we can't let her deliver in the birth centre because it's not ... it's not what she needs, and those midwives are not ... the whole ethos there is non-intervention. (Westhaven manager 6)

Some AMU midwives argued that guidelines for women with some medical or obstetric risks – such as slightly raised BMI, some mental health problems or in

relation to maternal age - should be reviewed formally. However, at the time of data collection, no good quality clinical evidence on caring for women with some obstetric risk in AMUs was available, and the lack of national guidelines led to great caution amongst midwives for these reasons. The cautions expressed by midwives arose from concern about their own professional wellbeing as well as the clinical wellbeing of the women, reflecting a wider atmosphere in which they did not feel that midwifery units were fully accepted.

It was clear from our data, therefore, that guidelines performed multiple roles in protecting professional, as well as patient, safety and in supporting inter-professional trust and communication. The process of agreeing and updating guidelines involving obstetric support was considered important for the integration and support of the unit, even though it was midwifery-led. This was a matter of good practice in terms of collegial working within an integrated service, an issue which has been identified as important to safety and quality in care (West 2000). However, our wider analysis indicated that such feelings of vulnerability were also a reflection of cultural as well as structural pressures experienced by midwives working in an environment still widely considered as alternative to, and potentially more 'risky' than obstetric unit care (McCourt et al. 2016).

Transfer

Good management of transfers across unit boundaries is widely acknowledged to be important for safety and for the quality of women's care. The midwifery managers and senior obstetricians interviewed in all sites argued that transfer should be simply a matter of tailoring and shifting care with women's changing needs, including the women's own wishes and feelings about safety. For midwifery managers, this argument also reflected a concern to avoid issues such as territorialism or conflict over workloads that might undermine quality and safety of transfer decisions. In practice, however, our observations as well as interviews with managers, professionals and service users indicated that this remained difficult, with differences of views and experiences between senior professionals in strategic

positions and those working with day-to-day practice and decision-making around transfers.

Given that many professionals and service users see the proximity of alongside midwifery units to obstetric units as making them safer, what was most striking in our analysis was the degree to which some alongside midwifery units appeared to be under pressure from the obstetric units to *avoid* transferring women. In some instances, obstetric unit staff – both obstetricians and midwives, but particularly obstetricians working at more junior levels - saw some transfers as unnecessary, and was seen as reflecting AMU midwives' lack of skills or lack of willingness to use interventions to speed up labour:

One of the main reasons they get transferred round is because [of] prolonged second stage, you know, they're pushing for too long. But once they get transferred round here obviously we actually do get them pushing, because round there they kind of use this, what is it, surge, or ... they don't actually use the word ... They just let the body and nature take its course. Well sometimes that's not enough and you need to really encourage the women and get them to actively push. (Midburn obstetric unit midwife)

Conflict around transfer between obstetric unit and alongside midwifery unit staff appeared to be complicated by a lack of trust between staff groups, and tension over resources and burden of workload. Obstetric unit staff most commonly saw AMU midwives as transferring excessively, rather than not being willing to transfer women:

..what they'll say is, 'Oh, why are you transferring this woman?' They start questioning why you're transferring her. Um, you know, 'Have you done a VE [vaginal examination]?' Oh, you know, 'oh leave her another hour,' or you know, 'Have you emptied her bladder? Have you done this, have you done that?' And that's very demeaning to the midwives. Um, lots and lots of little comments. And then when you do bring the woman over you get cold-

shouldered a lot of the time, as though you've made a terrible mistake.

(Northdale manager 4)

Whilst such tensions were common, they were not universal. Some obstetric unit staff demonstrated an understanding and trust in the skills and judgement of their alongside midwifery unit colleagues. Interviews with a range of staff indicated that such trust and mutuality was more likely in settings where obstetric unit and alongside midwifery unit staff had worked together and knew each other well. The problems were identified in all cases but were more prominent in two of our case study services. In one site, consultants had organised a cross-unit meeting with a facilitator in order to resolve tensions. Their reflections were that this had not been successful, perhaps because the underlying structural influences had not been addressed through such a meeting. Managers also argued that facilitating movement of midwives between areas, such as transferring with the women, would not only benefit the women's experiences of transfer but would also support greater mutual understanding and collegial relationships between professionals.

Discussion

The key drivers for development of alongside midwifery units in all the services studied had been a combination of pragmatic, even opportunistic, decisions. Lead midwives had often seized an incidental chance to develop the service, rather than this being part of a clear, strategic and fully co-ordinated response to policy directives. Managers were making decisions in a constrained environment with midwifery staffing challenges, while also being subject to targets and financial drivers (including 'cost improvement' measures) that in their experience mitigated against implementing policy innovations in relation to midwife-led care. The ability to develop a midwifery unit had usually come about through a service re-configuration initiated for other reasons, such as centralisation or service improvement plans, but managers still sought to make use of reconfiguration to improve quality of care and experiences for service users and professionals.

Ineffective past attempts to establish midwife-led care and to fully support physiological birth in the obstetric unit environment had led to a view that there is a need for distinct midwifery units to support midwife-led care.

Most managers and senior professionals, including senior obstetricians, saw AMUs as cost effective and positively contributing to service improvement. There were some exceptions, with some senior obstetricians expressing a contrary view that midwifery units were a drain on the resources of the obstetric unit. Three of the four services studied were also developing new freestanding units, building on the experience of establishing the alongside midwifery unit, in one case on the site of a recently closed obstetric unit following service centralisation. However, there was little evidence of plans to scale up provision of midwife-led care across the system and to cater for a larger proportion of women who are considered low-risk. Sandall et al.'s study of maternity workforce indicated that around 45% of women would be eligible to plan labour in a midwife-led setting (Sandall, Murrells et al. 2014), yet in the services we studied, only 10-14% of women were accessing midwifery unit care and nationally, the proportion remains similar (Walsh et al. 2018). This may be a reflection of the perceptions expressed by many of our respondents, across all four sites, that despite expressions of support and national policy directives, the AMU continued to be regarded as marginal and additional to the OU, rather than as a core service.

Our prior case studies that formed part of the Birthplace in England Programme identified that positive and respectful relationships between senior managers, and attention to audit and review as means of learning and service improvement, in an ethos of accountability rather than blame, are features of high-performing services (McCourt et al. 2011). This is also supported by the wider patient safety literature, and indeed by enquiry reports that identify poor inter- and intra-professional relationships and communication as undermining safety and quality of care, including patient-centred care (West 2000, Dixon-Woods 2010, Francis 2013). The importance of clear, collegial and appropriate leadership and management was also observed in this study.

Staffing for all four alongside midwifery units was by core staff at the time of the study, although all were considering introducing some degree of rotation of staff along with a core model, in order to maintain sufficient consolidation of midwife experience of physiological birth skills and approaches and continuity of care, while also facilitating better mutual understanding and team-working between midwives. Concerns expressed by managers and midwives, and the observations of some women and their partners about intra-professional tensions around service boundaries, also played a role in these considerations, which could have implications for quality and safety as well as staff wellbeing. Previous studies have identified that intra-professional tensions and ideological differences can be a major contributor to midwives' emotional labour (Hunter 2004) and conflict in the workplace was a critical factor in reducing midwives' confidence (Bedwell, McGowan et al. 2015). An in-depth ethnographic study by Rayment (2011) identified that tensions between different groups of midwives and the resulting boundary work were a key source of stress for midwives. Our analysis of women's and midwives' experiences of MU care also indicated the potential for negative impact on women's experiences of care (McCourt et al. 2016). In our study, while midwives and women and families were generally very satisfied with the midwifery unit care (McCourt et al. 2014), and experienced it as a 'therapeutic environment' (McCourt et al. 2016), development of distributed settings for birth created multi-layered boundaries which needed to be negotiated effectively. The ability of professionals to transfer across such boundaries, and their appreciation of the roles of different areas within the service, are likely to be important for maintaining the quality and safety of midwife unit care identified in the Birthplace cohort study (Birthplace in England Collaborative Group 2011).

Guidelines and admission and transfer criteria were regarded as having key importance for the safety of the AMU and of practitioners, as well as for the safety of women in a distributed system of care. Given the findings of this study on the importance of managing boundaries effectively, the shared development and use of

such guidelines may also be important to support an integrated system of care and to reduce professional tensions around boundaries.

In addition, managers viewed the processes for service audit and review as important for learning and communication and a tool for service improvement, as well as a basic safety feature. They emphasised the need for participation in such processes of staff from *all* areas. Concerns were identified around pressures to include women 'out of guidelines', often for reasons of service pressures, and also because the alongside midwifery unit represented (to many) a compromise between obstetric unit and out-of-hospital care, which some women might otherwise have chosen. Organisational case studies conducted as part of the Birthplace in England Programme indicated that such pressures to 'bend' guidelines may be greater in Alongside than in Freestanding midwifery units, while attention to training for midwives working in FMUs was also greater (McCourt et al. 2011). This tendency may relate to the common association among professionals and the public that proximity to the obstetric unit confers greater safety (McCourt et al. 2011, RCOG 2011, Coxon et al. 2014) despite the clinical evidence supporting the safety of FMUs (Hollowell, Li et al. 2017, Birthplace in England Collaborative Group 2011).

There was a tendency, in busy and hard-pressed services, for each group of midwives to typify the other as working less hard, as being less skilled; or as either 'hanging onto' women for ideological reasons, or transferring women too quickly, for practical or resource reasons. Across all sites, alongside unit midwives were often criticised by obstetric unit midwives, for example, for failing to use certain interventions – such as augmentation of labour by rupturing membranes or directed pushing in second stage – to avoid transfers of women for slow progress in labour. In turn, alongside unit midwives tended to criticise obstetric unit midwives for over-medicalising care, and for attempting to pass women over to the alongside midwifery units for organisational rather than woman-centred reasons. Managers' plans in relation to staffing models sought to address such tensions as much as skills and staff deployment issues.

A metasynthesis of qualitative studies of midwife-led care by Walsh and Devane (2012) identified similar concerns, summarised as a 'problematic interface of midwife-led units with host maternity units, stemming from a clash of models and culture' (2012: abstract). In an older study, in the setting of a very different maternity system in the US, Annandale (1988) described the use of 'ironic intervention' by midwives in their attempts to negotiate difficult transfer relationships. In the more current UK setting of our study, we identified pressures from the obstetric unit for midwives to use comparable interventions, while midwives working in AMUs resisted medicalisation of care in this 'low-risk' environment designed to support physiological birth. Despite the integration of the AMUs we studied as a core part of their NHS Trust maternity services, relational tensions appeared to contribute to an 'us and them' atmosphere between midwives. In an earlier article, we discussed how the sense of wellbeing expressed by women and partners birthing in midwifery units and by midwives who worked within them was constrained by the underlying structural paradoxes and conflicts which underlie many of the tensions experienced and expressed by our respondents (McCourt et al. 2016). These paradoxes included concepts and perceptions of risk, which are often left tacit and unexamined. Douglas, in her theories of risk perception, describes how understandings of risk – what is viewed as risky and why - are located in their cultural context. This wider context shapes and in turn is shaped by the everyday experiences of maternity care (Douglas 1992, McCourt et al. 2016).

Tensions identified among staff were mostly between midwives working in different areas, particularly alongside midwifery units and obstetric units, rather than between obstetricians and midwives. However, our interviews indicated a tendency within services to view skills within a hierarchy where high-risk or acute care skills were implicitly regarded more highly than skills to support normal birth, or caring skills. It was within this environment, with routinisation of medical interventions and a strong focus on risk management that characterises the NHS alongside many public institutions (MacKenzie Bryers, van Teijlingen 2010), that tensions between groups of midwives were situated. Lack of support from midwives working outwith the alongside midwifery unit appeared related to resource and professional factors: a

context of midwife shortage and work pressure interacted with differing attitudes around skills, confidence, values and professional jurisdiction.

Providing choice of care settings can create new boundaries within health services that require careful management. Previous studies of quality and safety in health systems indicate that boundaries and discontinuities between different areas and professional groups in a service can present quality and safety challenges (Jeffcott, Ibrahim et al. 2009, McCourt et al. 2011).

Managers emphasised the potential value of integration of community midwifery teams (and in one service, the continuation of caseload models of practice) in order to enhance the flexibility of midwifery staff availability, to facilitate greater integration of community and hospital-based midwifery care, and to develop the birthing skills of community midwives. As discussed in our earlier analysis of community midwives' confidence, availability and preparedness to support home births (McCourt et al. 2012), managers in this study raised similar concerns, but identified AMUs as a valuable service development through which to rebuild such skills, while also enabling management of a challenging midwifery staffing context.

This study has limitations. Only four case study sites could be included. However, regional workshops conducted with professionals and managers in the period following the study indicated a high level of resonance for service providers elsewhere. At the time of the data collection, professionals had access to the evidence from the Birthplace in England programme, but NICE guideline update was still in process. Nonetheless, recent mapping work indicates that change in practice has been limited, and confirms that managers continue to face challenges in providing, sustaining and scaling-up of midwifery units in England (Walsh et al. 2018).

Conclusions

The units studied had been developed to become a key part of the maternity service, and their role was increasingly being recognised as valid and as supporting the

quality and safety of care in the maternity service as a whole. However, each was providing birth care for only about a third of women who had been classified as eligible to plan birth outside an obstetric unit at the end of pregnancy. We did not observe any moves to scale up or plans to increase the capacity of these units to cater for a higher proportion of low-risk women. Additionally, in one service, there was evidence that despite being relatively long-established, the AMU was still relatively marginal within the service, perceived to be not fully integrated or accepted. Nevertheless, three of the services had established the AMU more firmly as part of the service, and had also developed a FMU, building on the establishment of the AMU to develop midwives' confidence and skills in providing midwife-led care and service-wide confidence in midwifery-unit care.

In 2014, revised NICE guidelines drew on the evidence of the Birthplace Programme in addition to prior studies to recommend a more proactive approach to choice on midwifery-unit care for women at lower risk of birth complications (NICE 2014); and an emphasis on development of midwifery units was highlighted in the NHS five-year forward Plan (NHS 2014). This paper identifies areas that services will need to address to support the implementation of these revised guidelines for intrapartum care, while also identifying strategies that services have used to address the challenges in developing and sustaining midwifery unit care. In addition to access and provision of care for women classified as low-risk in relation to NICE clinical criteria, the large quantity of data gathered in our interviews with managers, midwives and women and partners on dilemmas around offering care in AMUs to women with some medical or obstetric risks, indicated this is an area which would benefit from further research in future.

The development of AMUs brings together a set of key motivations and policies, which can be in tension with each other. These units aim to increase support for normal birth by providing an environment that facilitates this type of care. They seek to improve or re-establish midwives' traditional physiological birth skills, thus also improving midwife staff motivation and retention and providing a more woman- and family-centred birth environment. They also aim to improve triage, the effectiveness

of care pathways and the professional division of labour. However, managers' accounts highlighted a range of challenges and pressures that could impact on quality and safety of alongside midwifery unit care if not managed adequately. These included professional skills and confidence, learning, communication and relationships. Tensions in relationships between midwives were highlighted as a potential consequence of AMU development that needed careful management.

Measures to counter such problems included carefully planned and managed midwife staff rotation, with mentoring from core staff for midwives who were less experienced or skilled in caring for normal physiological birth; integrated models where midwives based in the community, or caseload practice midwives attended the women giving birth in the alongside midwifery unit and inter-disciplinary training within midwifery units covering both physiological birth and emergency and escalation skills. Boundaries such as those between a midwife-led unit and an obstetric unit need to be sturdy enough to hold up a stable service with distinct clinical areas, but permeable enough to ensure appropriate and smooth transfer when women or staff need to move across them. Such approaches could potentially mitigate the effects of creating new boundaries or discontinuities in the service, protect against any potentially negative implications for quality and safety of care and promote the wellbeing of professionals as well as service users.

References

- ANNANDALE, E., 1988. How Midwives Accomplish Natural Birth: Managing Risk and Balancing Expectations. *Social Problems*, **35**(2), pp. 95-110.
- APPLEBY, J., HARRISON, T., HAWKINS, L. and DIXON, A., 2012. *Payment by Results: How can payments systems help to deliver better care?* London: King's Fund.
- BALL, L., CURTIS, P. and KIRKHAM, M., 2002. *Why do Midwives Leave?: Report of the Women's Informed Childbearing and Health Research Group*. Sheffield: University of Sheffield.

BEDWELL, C., MCGOWAN, L. and LAVENDER, D.T., 2015. Factors affecting midwives' confidence in intrapartum care: A phenomenological study. *Midwifery*, **31**(1), pp. 170-176.

BIRTHPLACE IN ENGLAND 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),.

COXON, K., SANDALL, J. and 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 & Society*, **16**(1), pp. 51-67.

DEPARTMENT OF HEALTH, 2004. *National Service Framework for Children, Young People and Maternity Services: Maternity Standard 11*. London: .

DEPARTMENT OF HEALTH PARTNERSHIPS FOR CHILDREN FAMILIES AND MATERNITY., 2007. *Maternity Matters: Choice, access and continuity of care in a safe service*. Department of Health, Partnerships for Children, Families and Maternity.

DIXON-WOODS, M., 2010. Why is patient safety so hard? A selective review of ethnographic studies. *Journal of Health Services Research & Policy*, **15**, pp. 11-16.

Douglas, M. (1992) *Risk and Blame, Essays in Cultural Theory*. (London: Routledge).

DUNKLEY, L. and HAIDER, S., 2011. *Nursing & Midwifery Workforce Risks and Opportunities. A report to review the key workforce risks and opportunities within the Nursing and Midwifery workforces*. London: Centre for Workforce Intelligence, for the Department of Health.

FRANCIS, R., 2013. *Report of the Mid-Staffordshire NHS Foundation Trust Public Inquiry*. London: The Stationery Office.

GARSTEN, C. and NYQVIST, A., eds, 2013. *Organisational Anthropology: Doing Ethnography in and among Complex Organisations*. London: Pluto Press.

HOLLOWELL, J., LI, Y., BUNCH, K. and BROCKLEHURST, P., 2017. A comparison of intrapartum interventions and adverse outcomes by parity in planned freestanding midwifery unit and alongside midwifery unit births: secondary analysis of 'low risk' births in the birthplace in England. *BMC pregnancy and childbirth*, **17**(1), pp. 95.

HUNTER, B. and WARREN, L., 2013. *Investigating resilience in midwifery: Final report*. Cardiff: Cardiff University.

HUNTER, B., 2004. Conflicting ideologies as a source of emotion work in midwifery. *Midwifery*, **20**, pp. 261-272.

JEFFCOTT, S.A., IBRAHIM, J.E. and CAMERON, P.A., 2009. Resilience in healthcare and clinical handover. *Qual Saf Health Care*, **18**(4), pp. 256-60.

MACKENZIE BRYERS, H. and VAN TEIJLINGEN, E., 2010. Risk, theory, social and medical models: A critical analysis of the concept of risk in maternity care. *Midwifery*, **26**, pp. 488-496.

MCCOURT, C., RANCE, S., RAYMENT, J. and 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*. London: NIHR Service Delivery and Organisation programme.

MCCOURT, C., RAYMENT, J., RANCE, S. and SANDALL, J., 2012. Organisational strategies and midwives' readiness to provide care for out of hospital births: An analysis from the Birthplace organisational case studies. *Midwifery*, **28**(5), pp. 636-645.

MCCOURT, C., RAYMENT, J., RANCE, S. and SANDALL, J., 2014. *An ethnographic organisational study of alongside midwifery units: a follow-on study from the Birthplace in England programme*. Southampton: HS&DR.

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 *Anthropology in Action* 23(3):17-29. doi:10.3167/aia.2016.230303

NATIONAL MATERNITY REVIEW, 2016. *BETTER BIRTHS: Improving outcomes of maternity services in England. A Five Year Forward View for maternity care*. London: NHS England.

NCT, 2009. *Location, Location, Location: Making choice of place of birth a reality*. London: NCT.

NEWBURN, M., 2009. *An emerging model for maternity care: an ethnographic pilot study of an inner-city birth centre*, London School of Hygiene and Tropical Medicine.

NHS, 2014. *Five year forward view*. London: NHS.

NICE, 2014. *Intrapartum care: care of healthy women and their babies during childbirth*. London: National Institute for Health and Care Excellence.

NMPA project team. *National Maternity and Perinatal Audit: organisational report 2017*. RCOG London, 2017.

PITCHFORTH, E., VAN TEIJLINGEN, E., WATSON, V., TUCKER, J., KIGER, A., IRELAND, J., FARMER, J., RENNIE, A.M., GIBB, S., THOMSON, E. and RYAN, M., 2009. "Choice" and place of delivery: a qualitative study of women in remote and rural Scotland. *Quality & Safety in Health Care*, **18**(1), pp. 42-48.

RANCE, S., MCCOURT, C., RAYMENT, Juliet, MACKINTOSH, N., CARTER, W., WATSON, K. and SANDALL, J., 2013. Women's safety alerts in maternity care: is speaking up enough? *BMJ Quality & Safety*, **22**, pp. 348-355.

RAYMENT, J., 2011. *Midwives' emotion and body work in two hospital settings: Personal strategies and professional projects*, University of Warwick.

RCOG, 2011-last update, RCOG statement on the results of the NPEU Birthplace study [Homepage of Royal College of Obstetricians and Gynaecologists], [Online]. Available: www.rcog.org.uk/en/news/rcog-statement-on-the-results-of-the-npeu-birthplace-study/.

REDSHAW, M. and BIRTHPLACE IN ENGLAND RESEARCH PROGRAMME AND MAPPING GROUP, 2011. Mapping maternity care facilities in England. *Evidence Based Midwifery*, **9**, pp. 46-52.

SANDALL, J., MURRELLS, T., DODWELL, M., GIBSON, R., BEWLEY, S., COXON, K., BICK, D., COOKSON, G., WARWICK, C. and HAMILTON-FAIRLEY, D., 2014. The efficient use of the maternity workforce and the implications for safety and quality in maternity care: a population-based, cross-sectional study. *Health Services and Delivery Research*, **2**(38),.

SCHROEDER, E., PETROU, S., PATEL, N., HOLLOWELL, J., PUDDICOMBE, D., REDSHAW, M.S.R.F., BROCKLEHURST, P. and ON BEHALF OF THE BIRTHPLACE IN ENGLAND COLLABORATIVE GROUP, 2012. Cost effectiveness of alternative planned places of birth in woman at low risk of complications: evidence from the Birthplace in England national prospective cohort study. *BMJ*, **344**, pp. e2292.

TYLER, S., 2012. *Commissioning Maternity Services: A Resource Pack to support Clinical Commissioning Groups*. NHS Commissioning Board.

WALSH, D., SPIBY, H., GRIGG, C.P., DODWELL, M., MCCOURT, C., CULLEY, L., BISHOP, S., WILKINSON, J., COLEBY, D., PACANOWSKI, L., THORNTON, J. and BYERS, S., 2018. Mapping midwifery and obstetric units in England. *Midwifery*, **56**, pp. 9-16.

WALSH, D. and DEVANE, D., 2012. A Metasynthesis of Midwife-Led Care. *Qualitative Health Research*, **22**(7), pp. 897-910.

WALSH, D. and NEWBURN, M., 2002. Towards a social model of childbirth: Part 1. *British Journal of Midwifery*, **10**(8), pp. 476-481.

WEST, E., 2000. Organisational sources of safety and danger: sociological contributions to the study of adverse events. *Quality in Health Care*, **9**, pp. 120-126.

¹ A Maternity Support Worker (MSW) (sometimes referred to as a Maternity Care Assistant) is “an employee [who is not registered as a midwife or nurse] providing support to a maternity team, mothers and their families who work specifically for a maternity service. MSWs do not assess mothers and babies or make clinical judgements or decisions or initiate interventions”. (Royal College of Midwives 2016: 5)

² The national pay bands for all NHS staff (excluding doctors and dentists) came into effect in 2004. Newly qualified midwives begin on Band 5 and progress to ‘Band 6’ (a middle grade) after around 2 years. Senior midwives who may coordinate a small team are at Band 7. Higher bands are reserved for senior managerial roles.