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Task shifting Midwifery Support Workers as the second health worker at a home birth in the UK: A qualitative study

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ABSTRACT

Objective: Traditionally two midwives attend home births in the UK. This paper explores the implementation of a new home birth care model where births to low risk women are attended by one midwife and one Midwifery Support Worker (MSW).**Design and setting:** The study setting was a dedicated home birth service provided by a large UK urban hospital. **Participants:** Seventy-three individuals over 3 years: 13 home birth midwives, 7 MSWs, 7 commissioners (plan and purchase healthcare), 9 managers, 23 community midwives, 14 hospital midwives.**Method:** Qualitative data were gathered from 56 semi-structured interviews (36 participants), 5 semi-structured focus groups (37 participants) and 38 service documents over a 3 year study period. A rapid analysis approach was taken: data were reduced using structured summary templates, which were entered into a matrix, allowing comparison between participants. Findings were written up directly from the matrix (Hamilton, 2013).**Findings:** The midwife-MSW model for home births was reported to have been implemented successfully in practice, with MSWs working well, and emergencies well-managed. There were challenges in implementation, including: defining the role of MSWs; content and timing of training; providing MSWs with pre-deployment exposure to home birth; sustainability (recruiting and retaining MSWs, and a continuing need to provide two midwife cover for high risk births). The Service had responded to challenges and modified the approach to recruitment, training and deployment.**Conclusions:** The midwife-MSW model for home birth shows potential for task shifting to release midwife capacity and provide reliable home birth care to low risk women. Some of the challenges tally with observations made in the literature regarding role redesign. Others wishing to introduce a similar model would be advised to explicitly define and communicate the role of MSWs, and to ensure staff and women support it, consider carefully recruitment, content and delivery of training and retention of MSWs and confirm the model is cost-effective. They would also need to continue to provide care by two midwives at high risk births.

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Introduction

The National Institute for Health and Care Excellence in the United Kingdom (UK) recommends that for low risk women having their sec-

ond or subsequent baby at home is a suitable option “because the rate of interventions is lower and the outcome for the baby is no different compared with an obstetric unit” (National Institute of Health and Care Excellence, 2014, P5). However, home birth is rare in the UK, accounting for only 2.3% of births in 2014 (McLaren, 2015). A UK hospital implemented two service innovations with the aim of increasing home birth: a dedi-

Abbreviations: FD, Foundation Degree; HBT, Home Birth Team; MA, Midwifery Assistant; MSW, Midwifery Support Worker; MW, Midwife; RCM, Royal College of Midwives; UK, United Kingdom.

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cated Home Birth Team and a new model of home birth care, involving Midwifery Support Workers (MSWs) and midwives. This paper reports findings of a 3 year qualitative study of the Service, focusing on the evaluation of the implementation of the MSW model.

In the UK, low risk births are routinely attended by midwives, rather than obstetricians. Although not mandated in policy, standard UK practice dictates that for home births, care is provided by two midwives. MSWs, on the other hand, are utilised to “provide information, guidance, reassurance, assistance and support, for example... recording vital signs, that improve the quality of care that midwives are able to provide” (Royal College of Midwives, 2014, P4). MSWs are not permitted to make clinical assessments or decisions, or initiate treatment (Royal College of Midwives, 2014), and they are not usually second attendants at home births. However, The UK Royal College of Midwives states “The RCM’s view is that the pressure on NHS finances could make a home birth service unsustainable if it requires two midwives to be in attendance and that safety will not be compromised as long as the person in the support role has the appropriate competencies.” (Royal College of Midwives, 2014, P7). In 2014 the hospital set up a dedicated Home Birth Team to provide reliable round the clock cover and improve the quality and uptake of care. This service was designed with MSWs as the second health worker at low risk home births. Clinical leaders at the hospital determined that with appropriate training, MSWs could be safely deployed as second attendants, freeing up midwife capacity.

Workforce redesign is a solution to delivering sustainable care in health services, and in terms of the wider literature in this area, the deployment of MSWs as second birth attendant constitutes a ‘substitution’ (Bach et al., 2008) for the registered professional, a second midwife. This can also be described as a ‘redistribution’ (Bohmer and Imison, 2013), where tasks are handed to another worker, or a ‘deepening’ (Hyde et al., 2005) of the MSW role, in that MSWs are given additional responsibilities.

Methods

Methodology/research design

A 3 year longitudinal service review of the Home Birth Service was conducted in the autumn of 2014, 2015 and 2016. A qualitative approach to data collection was taken, to “discover and understand a phenomenon, a process, or the perspectives and worldviews of the people involved” (Merriam, 1988, P11). The researchers took a theoretically interpretive, generic qualitative approach (Kahlke, 2014).

Data collection

The work was undertaken in an urban maternity unit providing community and hospital care for approximately 8000 births each year. All members of the Home Birth Team (HBT) were invited to be interviewed. These individuals were dedicated home birth midwives, distinct from ‘community midwives’, as they provided care only for women requesting home birth. Sampling was determined by the total participants available, rather than saturation. All local strategic and commissioning staff involved with the Service were also invited for interview. This included clinical and professional managers responsible for the HBT at the provider hospital trust, and individuals in the ‘Clinical Commissioning Group’ who were responsible for funding and monitoring performance of the HBT. Focus groups were conducted with midwives from the community, obstetric-led delivery suite and midwife-led birth centre, using a convenience sampling approach. Community midwives provided antenatal and postnatal care to women in the community, and were not responsible for first attendant home birth care at the time of the evaluation (distinct from the dedicated HBT midwives). A pragmatic approach was taken to sampling, with the service able to accommodate one focus group in each setting, each year of study. Midwives and MSWs were recruited by managers, and other participants were approached by email.

Participation was voluntary and confidential, and data were collected at participants’ workplaces, using structured topic guides. All focus groups and interviews (conducted by [author 1] and [author 2]) were digitally recorded and transcribed. [author 1], [author 2], and [author 4] are clinical researchers experienced in qualitative methods, [author 3] is an experienced qualitative researcher. All authors are female. [Author 4] is a registered midwife, and [author 1] has experienced giving birth at home. The research team works closely with the participating hospital and undertakes a range of research (this study included) funded by the Collaborations for Leadership and Applied Health Research and Care (CLAHRC) Programme.

Data analysis

To provide timely findings to an evolving Service, a rapid analysis approach developed by Hamilton (2013) was used. Documents and transcripts were reviewed, with researchers spending approximately 1 h with each data item. Key issues were entered into ‘summary templates’ that were structured according to the original study objectives. The templates included additional space for inductive themes and key quotations. Data were then entered into a matrix for comparison across sources. Initial transcripts and documents were dual reviewed and template structure refined by [author 1] and [author 2] in year 1 and 2, and [author 1] and [author 3] in year 3. Findings were interpreted directly from the matrix, organised according to the review objectives, and then organised into subthemes by [authors 1–4]. Participants were invited to comment on findings.

Ethical considerations

Ethical approval for this study was obtained from the University of Birmingham Research Ethics Committee, reference ERN_15-0906S.

Results

The participants across the 3 years of the study are described, followed by a description of the Service context and MSW role, and finally themes relating to implementing the MSW role.

Participants

Seventy three individuals participated across the 3 years (see Table 1). Twenty-one documents were reviewed, including business plan, reports and policies.

Service context and MSW role

This Home Birth Service was a new service innovation, with the model and staff put into place in 2014. The MSW second attendant role was also new in the UK context, and the MSWs were recruited specifically to train and work in the new Service. Most MSWs had little or no prior experience in normal birth before recruitment, but often had clinic or theatre experience.

The Service was designed as a team midwifery model, where women were cared for by a small team of midwives and MSWs throughout their maternity care (antenatal, birth, and postnatal care). Women could book with the team at any stage in pregnancy. Women were allocated to their own named midwife who coordinated care and provided as much of the direct care as possible, with other members of the HBT providing care when she was not available. The midwife and MSW team covered a 24 h rota, with the intention that MSWs would be the second attendant at all low risk births. The Service was designed to have full time equivalents of 5.8 MSWs and 6.2 midwives to cover antenatal, intrapartum and postnatal duties. The MSW intrapartum role was under the direction of the midwife at all times. MSWs performed some tasks autonomously in the antenatal and postnatal period (e.g. breastfeeding support, blood tests)

Table 1
Study participants.

Role	Method	Year 1		Year 2		Year 3		Total individual participants**
		Invited	Participants	Invited	Participants	Invited	Participants	
Home birth midwife	Interview	7	6	10	8	9	8	13
MSW	Interview	5	4	6	5	1	1	7
Commissioner	Interview	5	4	4	4	0	0	7
Hospital manager	Interview	6	6	7	7	3	3	9
Community midwife	Focus group	13	13	16	4	16	11	23
Hospital midwife	Focus group	0*	0*	N/A	6	N/A	8	14
Total		36	33	43	34	29	31	73

* No focus group was held with hospital midwives in year 1.

** Many participants took part more than once.

MSW tasks and responsibilities in intrapartum home care, as described by participants:

- Attending women in labour alongside a midwife (never alone)
- Setting up the clinical area and equipment, e.g. resuscitation area
- Taking observations blood pressure, urinalysis, weighing baby, pulse oximetry
- Administrative activities, e.g. finding and recording information
- Supporting the midwife e.g. fetching equipment, taking or making a telephone call
- Emergency care and resuscitation under the direction of the midwife
- Supporting women and their family with advice, reassurance, mobilisation, self-care, breastfeeding
- Cleaning and tidying the birth room

Fig. 1. MSW tasks and responsibilities in intrapartum home care, as described by participants.

though this paper focuses on the intrapartum role and this aspect is not considered in detail here. Most MSWs worked part time, and all were women from the local community. MSWs also supported ante- and post-natal care, with tasks including taking routine observations, blood and urine tests, and breastfeeding support. This paper focuses on the novel intrapartum role, and Fig. 1 lists intrapartum tasks for MSWs reported by participants.

Themes developed from the data

Four main themes were identified from data relating to the effective implementation and quality of care in the MSW-midwife model: (1) creating and implementing a new role for MSWs, (2) quality of care, (3) sustainability, and (4) scaling up.

Creating and implementing a new role for MSWs

This theme concerns the ‘work’ that was undertaken to put the role into place, and the challenges and successes reported by participants in doing so. This includes issues around defining the role of the MSW second attendant, training MSWs to work as second attendants, and the process of embedding and integrating the MSW second attendants into the maternity workforce, alongside midwives.

Defining the role

Initially, participants reported uncertainty about the new role of MSWs, although this improved over time. Participants expressed uncertainty regarding the responsibilities, boundaries and delegation of work to MSWs, and voiced concerns regarding variable MSW confidence and competence, and gaps in communication.

“I think in the first year midwives were unclear, but now actually there is more clarity to what we can and can’t do and what we will take on.”

MSW 1 (Y2)

Training

Participants reported how, in response to the 2013 Cavendish Review into Support Workers in the NHS and Social Care (Cavendish, 2013), it was decided that a Foundation Degree course should be developed with a local University to provide training. MSWs undertook this formal Foundation Degree course alongside workplace experience.

Participants recalled how the 2 year Foundation Degree delayed implementation, meaning that midwives had to be called in to cover as second attendants. In response to this issue, during the first year of the project, the curriculum was reorganised to ‘front-load’ the intrapartum care training, so that MSWs could be deployed as second attendants before completing the full degree. In year 3, participants reported that new recruits now complete the first year of the Foundation Degree prior to deployment as second attendants. At both strategic and frontline levels, differences in opinion remained regarding whether MSWs required the full Foundation Degree before working as a second birth attendant.

“I’ve been second attendant at a couple of births now but I personally feel that they should have stuck with the two year programme... I don’t think there’s enough background knowledge especially if you’re brand new into the Trust, brand new into maternity.”

MSW 1 (Y2)

MSWs gained workplace experience by attending home births, working in the Birth Centre and Delivery Suite, and attending clinics and home visits. MSWs had a competency framework, assessed by midwifery colleagues. One HBT midwife took the lead for supporting the MSWs, and each MSW was assigned a midwife buddy. Multidisciplinary training sessions took place, including emergency training in the home. MSWs spent shifts in the hospital to gain exposure to birth, but experienced challenges in terms of competing duties, competition with student midwives for birth experience, and poor understanding of the MSW role and skills from hospital staff. Some MSWs also found time commitments for the training challenging, and in year 3 it was decided to recruit only full time MSWs to follow the training programme, as the process was deemed to be incompatible with part time hours. Managers communi-

cated that a formal rotation programme would provide new recruits with exposure to different maternity settings and clinical scenarios.

Embedding the role in the workforce

A number of the HBT midwives reported having had little or no home birth experience when they joined the team, and at first found it challenging to support MSWs.

“We knew that they were going to be our second person and we wanted to support them but the team had to develop their experience themselves. So starting at the same time probably wasn’t the best.”

HBT MW5 (Y2)

HBT midwives reported how multidisciplinary meetings facilitated their confidence in the MSWs. MSWs enjoyed working with midwives, and felt confident to ask for advice, but some suggested that this took time to achieve.

“It took a long time for them to accept that we can do it, we are capable of doing it, which was quite draining, because it’s like this is what I applied for, especially with all the hard training.”

MSW 5 (Y2)

Some midwives did not perceive any major difference between working with an MSW at a home birth and working with a second midwife. Others suggested that leadership and decision making were clearer when working with an MSW, as seniority was clearly established and acknowledged.

“Everybody’s got their own sort of style and sometimes it cannot be helpful when you’ve got another colleague who’s maybe a bit more anxious about something than you are. Whereas an MSW wouldn’t comment, she would wait for your lead.”

Manager 1 (Y2)

However, some midwives suggested that the MSW-midwife model increased workload as the MSWs were restricted in the tasks they could perform. The midwife was clinically responsible, and therefore had to perform certain tasks, limiting rest breaks.

“They can’t even go and get a break as such. If you’re listening in every 15 minutes you’ve literally got about 15 minutes if you need to go and have a 10 minutes away.”

Midwife, Hospital Focus Group (Y2)

Over the 3 year project, there was a change in HBT midwife willingness to work with MSWs: early on, many of the HBT midwives had a preference for a midwife as a second birth attendant. By year three most home birth midwives expressed a preference for an MSW as a second birth attendant.

“I think before, because we were new they didn’t know what we could do and I think now they do. Working alongside us so closely, they know that we are good at our job and we’ve learned a lot.”

MSW 4 (Y2)

“MSWs I had a huge resistance to that, and I said that in my [job] interview. They said ‘how do you feel about the support worker being a second?’ and I said ‘I don’t like that idea.’ I think... you know, it’s kind of a feel of the midwifery profession being eroded or degenerated or whatever. Yes, and thinking in the end is someone else going to be doing everything else... So I said ‘well, you know, I’m not that keen’ and in fact I’ve had no issues with it really... once they were doing it it’s been fine. It’s been fantastic.”

HBT MW1 (Y3)

“With straightforward birth even if there’s an emergency they’re brilliant.”

HBT MW2 (Y3)

Quality of care

This theme describes aspects of care quality reported by participants, including the reliability of home birth provision under the model, the perceived preparation and competence of MSWs to undertake the role (including emergencies), and the need for clear indicators of MSW competence to enable appropriate delegation of care.

Participants related how the HBT had provided a reliable round the clock service, which had not been possible before. However, the proportion of eligible births attended by MSWs was not routinely recorded by the Service, and over the 3 years participants reported how the rota was often not covered by an MSW second attendant, but by a midwife instead, so it is unlikely that the reliability of the service can be attributed to an MSW model rather than a dedicated home birth service.

MSWs and midwives emphasised the importance of exposure to birth, and MSWs in years 1 and 2 expressed a desire to attend more births. However, shift patterns, part time working, and the rarity of home birth were reported to reduce MSW exposure to home births during training.

MW 1: “To become a midwife we have to have looked after so many women in labour and do our 40 births and all of that. The support workers are nowhere near any of that stats-wise...”

Midwives, Hospital Focus Group (Y2)

Strategic staff and HBT midwives suggested that MSWs do not require the same level of experience as a midwife, as they perform a task-based intrapartum role under the direction of the midwife. However, it was deemed appropriate to set minimum prior birth exposure for working as a second attendant, and a policy was introduced to ensure that all MSWs had been present at a minimum of three home births before deployment on call. MSWs did not receive full neonatal life support training in the form of the Resuscitation Council (UK) Newborn Life Support course. In the event of both mother and baby being compromised, it was intended that the MSW would provide life support under the direction of the midwife until further support from paramedic colleagues arrived, though this scenario had not arisen. Some MSWs and midwives supported the approach to life support training, while others did not.

“Resuscitation and things like that, everybody should know that, not just a quick demo of it in neonatal life support, the small one that we get.”

MSW 4 (Y2)

MSWs were keen to maximise opportunities to practice for emergencies. Midwife-MSW pairs had put emergency training into practice (e.g. an undiagnosed breech birth), and the team collectively reported and reflected on this. Rare obstetric emergencies in the home were reported to be minimal, and strategic participants suggested that the focus was on providing training and regular practice. HBT midwives consistently reported that emergencies were dealt with effectively, sometimes better than with a second midwife.

“I did feel like it actually went a lot smoother, and the support was there with the support workers who are very competent at helping... The baby was still attached [to the mother by the umbilical cord], so she put the baby in the neutral position, held the head while I fitted the mask, listened to the heart rate, got the bag and I did the inflation breaths and asked her to rub it up a bit so that I could assess. It just worked.”

HBT MW6 (Y3)

There were no reported instances where both mother and baby were compromised, and this scenario had yet to be tested.

“Touch wood, we haven’t had any proper emergency situations so in that sense I don’t think many of us have really been tested in that way.”

HBT MW7 (Y3)

One midwife suggested an additional benefit of the MSW-midwife model was increased support during emergencies, describing a tendency

to call MSW second attendants earlier in labour, while she would worry about disturbing a midwife colleague:

“[When my second attendant is a midwife], I have been on my own with women when things have happened, more than I was when it was MSWs as Second. So maybe the birth wasn’t imminent but something happened that I actually had to transfer in labour and I might have had an MSW with me who could have helped me and I hadn’t called the Second [midwife].”

HBT MW4 (Y3)

Midwives reported how the MSWs had a high level of competence, and that they welcomed their support in the hospital as well as at home births. However, both midwives and MSWs suggested that a distinctive uniform for MSWs would enable effective and safe delegation when working alongside less-qualified Midwifery Assistants.

“Maybe have a slight change in uniform just so that midwives from the hospital would know that I could be a second at a birth.”

MSW 3 (Y2)

Sustainability

This theme explores the participants’ accounts of whether the midwife-MSW model of home birth care can be sustained in the longer term. There were two important challenges to sustainability: recruitment and retention of MSWs, and provision of a second midwife (not MSW) to women at high clinical or social risk.

Recruitment and retention of MSWs

Attrition was challenging, as there was no available pool of trained MSWs to fill gaps. By year 3 only one of the MSWs was left in the Service. Reasons for leaving were varied. For example, two of the recruits used the role as a route to training in midwifery.

“I would definitely consider going into midwifery so having the foundation degree would give me an academic way to get into it, but yeah other than that I wouldn’t be able to get into midwifery.”

MSW 3 (Y2)

For some MSWs in the first cohort, unexpectedly having to study for a Foundation Degree, and/or failing to reach the minimum literacy and numeracy standard for the course led to them leaving.

“I think there’s been quite a few people that have come and gone because it wasn’t what they expected... they didn’t expect to have to go and do a Foundation Degree.”

MSW 1 (Y2)

The evolving role was reported to be challenging: MSWs were a small group of new workers with a role that was not well-known or understood. It was also reported that some MSWs left as they felt underutilised and insufficiently busy (as home births bookings were not at the level expected), or struggled with the shift patterns.

Although not cited as a reason for leaving, both midwives and MSWs expressed dissatisfaction with pay and recognition. Participants reported that MSWs work at a higher level than other support workers, and that job title and pay should reflect this.

“There’s a few of us that feel this degree is really hard, ... we’re a band 3... yet what we do is above and beyond, so there is a higher banding that some [hospital] Trusts in the UK get because they’re doing this degree.”

MSW 3 (Y2)

In year 3 the strategic stakeholders described plans to widen recruitment and train additional staff. They described how they had developed strategies to improve MSW suitability, satisfaction and retention. The plans included: informing potential MSWs prior to recruitment regarding the Foundation Degree path and deployment as second attendants after 1 year; numeracy and literacy screening for all applicants; all new

posts to be full time. Year 3 managers also described how practice had changed to allow MSWs to work fixed resident on call shifts in the Birth Centre overnight, to provide more predictable hours of work and clinical exposure.

Strategic participants stated that there were no plans to change the pay banding or uniform of the workers. Some participants suggested that a further approach to increase retention would be to require MSWs to stay with the Service for a defined period, or have to pay back their Foundation Degree course fees, though this was not implemented during the 3 year study.

Provision of a second midwife for women at higher risk

The final sustainability issue described by participants was the unexpected number of births with clinical or social risk, where policy states that two midwives are required. This reduced the anticipated efficiencies of MSW second attendants, as two midwives had to be on call when high risk births were due.

“And at the moment, for example, we’ve got a very complex case, and it really, you know, that really does need two midwives.”

Manager 2 (Y2)

Scaling up

The HBT was set up with a clear aim of increasing home birth rates, and in the longer term expanding home birth provision to more women. This theme explores whether the wider midwifery workforce, beyond the HBT, would support scaling up home birth services with MSWs as second attendants. Community Midwives gave accounts suggesting that they supported the MSW model following early scepticism. However, most said they would not want to work with an MSW as second attendant, though some said that they may do so if they were a home birth midwife with enhanced confidence and skills in home birth, or if they knew the MSW well and had confidence in them.

“If you know that they know what they’re doing I would be comfortable but if it was somebody I’d never met before and I wasn’t sure what her skills her I wouldn’t be happy.”

Community Midwife Focus Group (Y3)

They had further concerns about professional accountability and risk to registration, and downgrading of midwifery care.

F: *“I just think because you think, ‘I’ve worked hard for my PIN* and the risk of it being taken away because somebody’s done something or ...”*

F: *“An extra bit of training undermines us as midwives, really, I feel.”*

F: *“When will the point come where you’re... where they say, ‘Actually we’re going to drop you two [pay] bands because that MSW can do exactly the same thing as you?’”*

Community Midwife Focus Group (Y3)

*PIN is Personal Identification Number, the Nursing and Midwifery Council UK professional registration number

Conversely, hospital midwives spoke enthusiastically about working with the MSWs, but did not want to attend home births, either due to preference for clinical support close by, or finding hospital work more interesting.

“Knowing that if anything goes wrong I’ve got a shift leader here who will support me... I just feel more comfortable in the hospital.”

Birth Centre Midwife, Hospital Focus Group, Y3

“I suppose I’m not a normality [midwife]... I like the style of work on [the obstetric-led] Delivery Suite. Even working on the [midwife-led] birth centre, I just don’t think I’d find it as interesting.”

Delivery Suite Midwife, Hospital Focus Group, Y3

Discussion

Main findings

Our findings suggest that the MSW second attendant model can deliver home birth care to low risk women. Over the 3 years of the study, it was reported that emergencies were well-managed, and there were no adverse outcomes for women and babies.

By year 3 of the evaluation, most home birth midwives viewed the MSW second attendant role positively, and it was suggested that advantages existed in terms of decision making, delegation, and the presence of support; potentially improving quality of care. However, it was also acknowledged that this model may increase the workload of midwives. Whilst traditional MSW roles free up midwife time and take tasks away (Griffin et al., 2012), the substitution of MSWs at birth may add to midwives' workload for tasks which only they can perform.

Sustainability and upscaling of the MSW-midwife model was seen as challenging, particularly in terms of training and retention of MSWs. The mismatched understandings and expectations of the evolving MSW role aligns with previous literature on workforce redesign (Bohmer and Imison, 2013), which indicates that role clarity is an important and often overlooked aspect of service change. Where roles are changing, it has been suggested that this requires constant communication, "*continually articulating and re-articulating a shared vision*" (Macfarlane et al., 2011, P69). MSWs expressed a need for clarity, support and recognition, to build their sense of identity and confidence. Such expectations regarding markers of esteem and pay are considered as a key issue in role change by the existing literature (Hyde et al., 2005). Services need to consider managing attrition by regular training of MSWs to backfill those who leave. This is important because paraprofessional career progression is not only a wider aim of the NHS, but is also a common goal for paraprofessional workers in healthcare (Cavendish, 2013; Griffin and Sines, 2010; Hussain and Marshall, 2011).

An additional barrier to sustainability of the MSW-midwife model included the need for two midwives at high-risk home births. This means that the midwives covering 'second on call' home birth rotas cannot be fully substituted by MSWs. Where high risk births are imminent, more expensive, skilled midwife provision will also be necessary. While it is unlikely that two midwives will need to be on-call at all times, high risk home births still impact on the potential cost savings and midwife capacity release with an MSW model.

There was a reluctance of community midwives to work with MSW second attendants, with fears about vicarious responsibility, and erosion of the midwifery profession. This aligns with previous research, in which staff expressed similar concerns regarding collaborative working with support workers (Hussain and Marshall, 2011; Moran et al., 2011). The Home Birth Service midwives also described early reservations about MSWs in this role, but by training and working with MSWs this diminished, with some preferring working with MSWs in this context. Wide staff acceptance of changed roles is essential to the success of these changes in service provision (Macfarlane et al., 2011), and trust and relationships between professionals and support workers have been found to be important in effective working (Moran et al., 2011).

Strengths and limitations

A strength of this research lies in the representativeness of participants; almost all staff from the Home Birth Team participated in interviews to evaluate the service. The qualitative interview approach allowed participants to speak confidentially, revealing perspectives that may not otherwise have been disclosed. However, the qualitative approach limits the ability to demonstrate effectiveness and safety of the midwife-MSW model, which would require a sufficiently powered quantitative evaluation. An additional strength of the research is the reflexive approach utilised; including acknowledgement of our ongoing relationship with the service and how this may have shaped our interpretation. This pragmatic evaluation focused on the perspectives of staff involved

to explore the key components and implementation process for the service model, and as such did not gather women's experiences, though additional work with women, and observational work to see the model in practice, would have strengthened this research further. Due to the rarity home births, and even rarer ambulance transfers and emergencies, few ambulance staff have had experience of the midwife-MSW model, and this group were not involved in the evaluation, though this is an area for future exploration. It is also possible that the rapid analytical approach, which did not involve line by line coding of all data, may have missed granular detail. A secondary analysis of data from year 1 of the evaluation, involving full coding and thematic analysis using the Framework Method, revealed one report of inconsistencies in induction for MSWs, which was not identified by the Rapid Analysis approach.

Conclusion

Service pressures in the UK necessitate new ways of thinking about the provision of maternity care (Cumberlege, 2016). Deploying MSWs as second birth attendants may be a solution to providing a high quality home birth service, while freeing up midwife capacity. While MSWs appear to offer an alternative to a second midwife, the benefits and costs of a fully operational midwife-MSW model are not yet known. The implementation process raised a number of challenges, therefore recommendations are made to those wishing to introduce a similar model. These include the explicit definition of the MSW role, and careful consideration of recruitment, training, and retention of these staff. Continued provision of care by two midwives at high risk births is also recommended. The findings from this work can inform others developing paraprofessional roles and have specific relevance to those looking for new ways of providing high quality, cost-effective care for low risk women giving birth at home.

Conflict of interest

The authors declare no competing interests relating to the study (we have uploaded a conflict of interest declaration which includes details of our funder).

Ethical approval

All participants gave written consent to participate. Ethical approval was obtained from the University of Birmingham Research Ethics Committee reference ERN_15-0906S, 16.09.15. All participants gave written consent to anonymised quotes being used in publications.

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Clinical trial registry and registration number (if applicable)

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References

- Bach, S., Kessler, I., Heron, P., 2008. Role redesign in a modernised NHS: the case of health care assistants. *Human Resource Management Journal* 18 (2), 171–187. doi:10.1111/j.1748-8583.2007.00066.x.
- Bohmer, R.M.J., Imison, C., 2013. Lessons from England's health care workforce redesign: no quick fixes. *Health Affairs* 32 (11), 2025–2031. doi:10.1377/hlthaff.2013.0553.
- Cavendish, C., 2013. Cavendish Review: An Independent Review into Healthcare Assistants and Support Workers in the NHS and Social Care Setting, England, DoH. Retrieved from London. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/236212/Cavendish_Review.pdf.
- Cumberlege, J., 2016. Better Births. Improving Outcomes of Maternity Services in England. A Five Year Forward View for Maternity Care. Retrieved from London. <https://www.england.nhs.uk/wp-content/uploads/2016/02/national-maternity-review-report.pdf>.
- Griffin, R., Richardson, M., Morris-Thompson, T., 2012. An evaluation of the impact of maternity support workers. *British Journal of Midwifery* 20 (12), 884–889. doi:10.12968/bjom.2012.20.12.884.
- Griffin, R., Sines, D., 2010. Widening Participation in Pre-registration Nursing Programmes. Retrieved from London. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/213867/dh_116655.pdf.
- Hamilton, A., 2013. Qualitative Methods in Rapid Turn-Around Health Services Research. Retrieved from. http://www.hsr.d.research.va.gov/for_researchers/cyber_seminars/archives/video_archive.cfm?SessionID=780.
- Hussain, C.J., Marshall, J.E., 2011. The effect of the developing role of the maternity support worker on the professional accountability of the midwife. *Midwifery* 27 (3), 336–341. doi:10.1016/j.midw.2011.02.010.
- Hyde, P., McBride, A., Young, R., Walshe, K., 2005. Role redesign: new ways of working in the NHS. *Personnel Review* 34 (6), 697–712. doi:10.1108/00483480510623475.
- Kahlke, R.M., 2014. Generic qualitative approaches: pitfalls and benefits of methodological mixology. *International Journal of Qualitative Methods* 13 (1), 37–52. doi:10.1177/160940691401300119.
- Macfarlane, F., Greenhalgh, T., Humphrey, C., Hughes, J., Butler, C., Pawson, R., 2011. A new workforce in the making? A case study of strategic human resource management in a whole-system change effort in healthcare. *Journal of Health Organization and Management* 25 (1), 55–72. doi:10.1108/147772611111116824.
- McLaren, E., 2015. Birth Characteristics in England and Wales: 2014. Retrieved from. <http://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/livebirths/bulletins/birthcharacteristicsinenglandandwales/2015-10-08>.
- Merriam, S.B., 1988. *Case Study Research in Education: A Qualitative Approach*. Jossey Bass, San Francisco.
- Moran, A., Enderby, P., Nancarrow, S., 2011. Defining and identifying common elements of and contextual influences on the roles of support workers in health and social care: a thematic analysis of the literature. *Journal of Evaluation in Clinical Practice* 17 (6), 1191–1199. doi:10.1111/j.1365-2753.2010.01505.x.
- National Institute of Health and Care Excellence, 2014. Intrapartum Care for Healthy Women and Babies. NICE Guidelines [CG190]. Retrieved from London. <https://www.nice.org.uk/guidance/cg190/resources/intrapartum-care-for-healthy-women-and-babies-35109866447557>.
- Royal College of Midwives, 2014. The Role and Responsibilities of Maternity Support Workers. Retrieved from London. <https://www.rcm.org.uk/sites/default/files/MSW%20Guide%20January%202015.pdf>.