1 **TITLE**

2

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

5

6 **ABSTRACT – 318 words**

7 **Objective**

8 Traditionally two midwives attend home births in the UK. This paper explores the
9 implementation of a new home birth care model where births to low risk women are
10 attended by one midwife and one midwifery support worker (MSW).

11

12 **Design and setting**

13 The study setting was a dedicated home birth service provided by a large UK urban hospital.

14

15 **Participants**

16 73 individuals over three years: 13 home birth midwives, 7 MSWs, 7 commissioners (plan
17 and purchase healthcare), 9 managers, 23 community midwives, 14 hospital midwives.

18

19 **Method**

20 Qualitative data was gathered from 56 semi-structured interviews (36 participants), 5 semi-
21 structured focus groups (37 participants) and 38 service documents over a three year study
22 period. A Rapid Analysis approach was taken: data were reduced using structured summary
23 templates, which were entered into a matrix, allowing comparison between participants.
24 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.

KEYWORDS

Home Childbirth

Allied Health Personnel

Midwifery/organization and administration

Qualitative method

49 *Interprofessional practice*

50 *Midwifery Support Worker*

51

52

53 **MAIN BODY OF TEXT**

54

55 **INTRODUCTION**

56 The National Institute for Health and Care Excellence in the United Kingdom (UK)
57 recommends that for low risk women having their second or subsequent baby at home is a
58 suitable option "*because the rate of interventions is lower and the outcome for the baby is*
59 *no different compared with an obstetric unit*"(National Institute of Health and Care
60 Excellence, 2014, P5). However, home birth is rare in the UK, accounting for only 2.3% of
61 births in 2014 (McLaren, 2015). A UK hospital implemented two service innovations with
62 the aim of increasing home birth: a dedicated home birth team and a new model of home
63 birth care, involving Midwifery Support Workers (MSWs) and midwives. This paper reports
64 findings of a three year qualitative study of the Service, focusing on the evaluation of the
65 implementation of the MSW model.

66

67 In the UK, low risk births are routinely attended by midwives, rather than obstetricians.
68 Although not mandated in policy, standard UK practice dictates that for home births, care is
69 provided by two midwives. MSWs, on the other hand, are utilised to "*provide information,*
70 *guidance, reassurance, assistance and support, for example… recording vital signs, that*
71 *improve the quality of care that midwives are able to provide*" (Royal College of Midwives,
72 2014, P4). MSWs are not permitted to make clinical assessments or decisions, or initiate

73 treatment(Royal College of Midwives, 2014), and they are not usually second attendants at

74 home births. However, The UK Royal College of Midwives states "The RCM's view is that the

75 pressure on NHS finances could make a home birth service unsustainable if it requires two midwives

76 to be in attendance and that safety will not be compromised as long as the person in the support

77 role has the appropriate competencies." (Royal College of Midwives, 2014, P7). In 2014 the

78 hospital set up a dedicated home birth team to provide reliable round the clock cover and

79 improve the quality and uptake of care. This service was designed with MSWs as the

80 second health worker at low risk home births. Clinical leaders at the hospital determined

81 that with appropriate training, MSWs could be safely deployed as second attendants,

82 freeing up midwife capacity.

83

84 Workforce redesign is a solution to delivering sustainable care in health services, and in

85 terms of the wider literature in this area, the deployment of MSWs as second birth

86 attendant constitutes a 'substitution'(Bach, Kessler, & Heron, 2008) for the registered

87 professional, a second midwife. This can also be described as a 'redistribution'(Bohmer &

88 Imison, 2013), where tasks are handed to another worker, or a 'deepening'(Hyde, McBride,

89 Young, & Walshe, 2005) of the MSW role, in that MSWs are given additional responsibilities.

90

91

92 **METHODS**

93

94 **Methodology/Research Design**

95 A three year longitudinal service review of the Home Birth Service was conducted in the

96 autumn of 2014, 2015 and 2016. A qualitative approach to data collection was taken, to

97 *"discover and understand a phenomenon, a process, or the perspectives and worldviews of*
98 *the people involved*" (Merriam, 1988, P11). The researchers took a theoretically
99 interpretive, generic qualitative approach (Kahlke, 2014).
100
101 **Data collection**
102 The work was undertaken in an urban maternity unit providing community and hospital care
103 for approximately eight thousand births each year. All members of the Home Birth Team
104 (HBT) were invited to be interviewed. These individuals were dedicated home birth
105 midwives, distinct from 'community midwives', as they provided care only for women
106 requesting home birth. Sampling was determined by the total participants available, rather
107 than saturation. All local strategic and commissioning staff involved with the Service were
108 also invited for interview. This included clinical and professional managers responsible for
109 the HBT at the provider hospital trust, and individuals in the 'Clinical Commissioning Group'
110 who were responsible for funding and monitoring performance of the HBT. Focus groups
111 were conducted with midwives from the community, obstetric-led delivery suite and
112 midwife-led birth centre, using a convenience sampling approach. Community midwives
113 provided antenatal and postnatal care to women in the community, and were not
114 responsible for first attendant home birth care at the time of the evaluation (distinct from
115 the dedicated HBT midwives). A pragmatic approach was taken to sampling, with the
116 service able to accommodate one focus group in each setting, each year of study. Midwives
117 and MSWs were recruited by managers, and other participants were approached by email.
118 Participation was voluntary and confidential, and data were collected at participants'
119 workplaces, using structured topic guides. All focus groups and interviews (conducted by
120 [author 1] and [author 2]) were digitally recorded and transcribed. [author 1], [author 2],

121 and [author 4] are clinical researchers experienced in qualitative methods, [author 3] is an
122 experienced qualitative researcher. All authors are female. [Author 4] is a registered
123 midwife, and [author 1] has experienced giving birth at home. The research team works
124 closely with the participating hospital and undertakes a range of research (this study
125 included) funded by the Collaborations for Leadership and Applied Health Research and
126 Care (CLAHRC) Programme.
127

128 **Data analysis**

129 To provide timely findings to an evolving Service, a rapid analysis approach developed by
130 Hamilton(2013) was used. Documents and transcripts were reviewed, with researchers
131 spending approximately one hour with each data item. Key issues were entered into 'summary
132 templates' that were structured according to the original study objectives. The templates included
133 additional space for inductive themes and key quotations. Data were then entered into a matrix
134 for comparison across sources. Initial transcripts and documents were dual reviewed and
135 template structure refined by [author 1] and [author 2] in year 1 and 2, and [author 1] and
136 [author 3] in year 3. Findings were interpreted directly from the matrix, organised according
137 to the review objectives, and then organised into subthemes by [authors 1-4]. Participants
138 were invited to comment on findings.
139
140
141

142 **Ethical considerations**

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

145

146 **RESULTS**

147

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

151

152 **Participants**

153 Seventy three individuals participated across the three years (see Table 1). 21 documents
154 were reviewed, including business plan, reports and policies.

155

156 **Table 1: Study participants**

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

158 **Many participants took part more than once

159

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

160

161

162 **Service context and MSW role**

163

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

169

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

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

186

187 **Figure 1: MSW tasks and responsibilities in intrapartum home care, as described by participants**

188

189

Figure 1: 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

190
191
192
193
194

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

198

199 **Creating and implementing a new role for MSWs**

200

201 This theme concerns the 'work' that was undertaken to put the role into place, and the
202 challenges and successes reported by participants in doing so. This includes issues around
203 defining the role of the MSW second attendant, training MSWs to work as second

204 attendants, and the process of embedding and integrating the MSW second attendants into

205 the maternity workforce, alongside midwives.

206

207 ***Defining the role***

208 Initially, participants reported uncertainty about the new role of MSWs, although this

209 improved over time. Participants expressed uncertainty regarding the responsibilities,

210 boundaries and delegation of work to MSWs, and voiced concerns regarding variable MSW

211 confidence and competence, and gaps in communication.

212

213 *"I think in the first year midwives were unclear, but now actually there is more clarity to*

214 *what we can and can't do and what we will take on."*

215 *MSW 1 (Y2)*

216

217

218

219 ***Training***

220

221 Participants reported how, in response to the 2013 Cavendish Review into Support Workers

222 in the NHS and Social Care (Cavendish, 2013), it was decided that a Foundation Degree

223 course should be developed with a local University to provide training. MSWs undertook

224 this formal Foundation Degree course alongside workplace experience.

225

226 Participants recalled how the two year Foundation Degree delayed implementation,

227 meaning that midwives had to be called in to cover as second attendants. In response to

228 this issue, during the first year of the project, the curriculum was reorganised to 'front-load'
229 the intrapartum care training, so that MSWs could be deployed as second attendants before
230 completing the full degree. In year three, participants reported that new recruits now
231 complete the first year of the Foundation Degree prior to deployment as second attendants.
232 At both strategic and frontline levels, differences in opinion remained regarding whether
233 MSWs required the full Foundation Degree before working as a second birth attendant.
234
235 *"I've been second attendant at a couple of births now but I personally feel that they should*
236 *have stuck with the two year programme…I don't think there's enough background*
237 *knowledge especially if you're brand new into the Trust, brand new into maternity."*
238
239 *MSW 1 (Y2)*
240
241 MSWs gained workplace experience by attending home births, working in the Birth Centre
242 and Delivery Suite, and attending clinics and home visits. MSWs had a competency
243 framework, assessed by midwifery colleagues. One HBT midwife took the lead for
244 supporting the MSWs, and each MSW was assigned a midwife buddy. Multidisciplinary
245 training sessions took place, including emergency training in the home. MSWs spent shifts
246 in the hospital to gain exposure to birth, but experienced challenges in terms of competing
247 duties, competition with student midwives for birth experience, and poor understanding of
248 the MSW role and skills from hospital staff. Some MSWs also found time commitments for
249 the training challenging, and in year three it was decided to recruit only full time MSWs to
250 follow the training programme, as the process was deemed to be incompatible with part

time hours. Managers communicated 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)

274 Some midwives did not perceive any major difference between working with an MSW at a
275 home birth and working with a second midwife. Others suggested that leadership and
276 decision making were clearer when working with an MSW, as seniority was clearly
277 established and acknowledged.
278
279 *"Everybody's got their own sort of style and sometimes it cannot be helpful when you've got*
280 *another colleague who's maybe a bit more anxious about something than you are. Whereas*
281 *an MSW wouldn't comment, she would wait for your lead."*
282 *Manager 1 (Y2)*
283
284 However, some midwives suggested that the MSW-midwife model increased workload as
285 the MSWs were restricted in the tasks they could perform. The midwife was clinically
286 responsible, and therefore had to perform certain tasks, limiting rest breaks.
287
288 *"They can't even go and get a break as such. If you're listening in every 15 minutes you've*
289 *literally got about 15 minutes if you need to go and have a 10 minutes away."*
290 *Midwife, Hospital Focus Group (Y2)*
291
292 Over the three year project, there was a change in HBT midwife willingness to work with
293 MSWs: early on, many of the HBT midwives had a preference for a midwife as a second birth
294 attendant. By year three most home birth midwives expressed a preference for an MSW as
295 a second birth attendant.
296

297 *"I think before, because we were new they didn't know what we could do and I think now*
298 *they do. Working alongside us so closely, they know that we are good at our job and we've*
299 *learned a lot."*

300 *MSW 4 (Y2)*

301

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

308 *HBT MW1 (Y3)*

309

310 *"With straightforward birth even if there's an emergency they're brilliant."*

311

312 *HBT MW2 (Y3)*

313

314

315

316 **Quality of care**

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

321

322

323

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

330

331

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

336

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

340 *Midwives, Hospital Focus Group (Y2)*

341

342 Strategic staff and HBT midwives suggested that MSWs do not require the same level of
343 experience as a midwife, as they perform a task-based intrapartum role under the direction
344 of the midwife. However, it was deemed appropriate to set minimum prior birth exposure

345 for working as a second attendant, and a policy was introduced to ensure that all MSWs had
346 been present at a minimum of three home births before deployment on call. MSWs did not
347 receive full neonatal life support training in the form of the Resuscitation Council (UK)
348 Newborn Life Support course. In the event of both mother and baby being compromised, it
349 was intended that the MSW would provide life support under the direction of the midwife
350 until further support from paramedic colleagues arrived, though this scenario had not
351 arisen. Some MSWs and midwives supported the approach to life support training, while
352 others did not.

353

354

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

357 *MSW 4 (Y2)*

358

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

365 *"I did feel like it actually went a lot smoother, and the support was there with the support*
366 *workers who are very competent at helping…The baby was still attached [to the mother by*
367 *the umbilical cord], so she put the baby in the neutral position, held the head while I fitted*

368 *the mask, listened to the heart rate, got the bag and I did the inflation breaths and asked her*

369 *to rub it up a bit so that I could assess. It just worked. "*

370 *HBT MW6 (Y3)*

371 There were no reported instances where both mother and baby were compromised, and

372 this scenario had yet to be tested.

373

374 *"Touch wood, we haven't had any proper emergency situations so in that sense I don't think*

375 *many of us have really been tested in that way. "*

376 *HBT MW7 (Y3)*

377

378 One midwife suggested an additional benefit of the MSW-midwife model was increased

379 support during emergencies, describing a tendency to call MSW second attendants earlier in

380 labour, while she would worry about disturbing a midwife colleague:

381

382 *"[When my second attendant is a midwife], I have been on my own with women when things*

383 *have happened, more than I was when it was MSWs as Second. So maybe the birth wasn't*

384 *imminent but something happened that I actually had to transfer in labour and I might have*

385 *had an MSW with me who could have helped me and I hadn't called the Second [midwife]."*

386 *HBT MW4 (Y3)*

387

388 Midwives reported how the MSWs had a high level of competence, and that they welcomed

389 their support in the hospital as well as at home births. However, both midwives and MSWs

390 suggested that a distinctive uniform for MSWs would enable effective and safe delegation
391 when working alongside less-qualified Midwifery Assistants.
392
393 *"Maybe have a slight change in uniform just so that midwives from the hospital would know*
394 *that I could be a second at a birth."*
395 *MSW 3 (Y2)*
396
397
398 **Sustainability**
399
400
401 This theme explores the participants' accounts of whether the midwife-MSW model of
402 home birth care can be sustained in the longer term. There were two important challenges
403 to sustainability: recruitment and retention of MSWs, and provision of a second midwife
404 (not MSW) to women at high clinical or social risk.
405
406 ***Recruitment and retention of MSWs***
407
408 Attrition was challenging, as there was no available pool of trained MSWs to fill gaps. By
409 year three only one of the MSWs was left in the Service. Reasons for leaving were varied.
410 For example, two of the recruits used the role as a route to training in midwifery.
411

412 *"I would definitely consider going into midwifery so having the foundation degree would give*
413 *me an academic way to get into it, but yeah other than that I wouldn't be able to get into*
414 *midwifery."*

415 *MSW 3 (Y2)*

416

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

420

421 *"I think there's been quite a few people that have come and gone because it wasn't what*
422 *they expected… they didn't expect to have to go and do a Foundation Degree."*

423

424 *MSW 1 (Y2)*

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

429

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

433

434

435 *“There’s a few of us that feel this degree is really hard, … we’re a band 3…yet what we do is*
436 *above and beyond, so there is a higher banding that some [hospital] Trusts in the UK get*
437 *because they’re doing this degree.”*
438 *MSW 3 (Y2)*
439
440 In year three the strategic stakeholders described plans to widen recruitment and train
441 additional staff. They described how they had developed strategies to improve MSW
442 suitability, satisfaction and retention. The plans included: informing potential MSWs prior
443 to recruitment regarding the Foundation Degree path and deployment as second attendants
444 after one year; numeracy and literacy screening for all applicants; all new posts to be full
445 time. Year three managers also described how practice had changed to allow MSWs to work
446 fixed resident on call shifts in the Birth Centre overnight, to provide more predictable hours
447 of work and clinical exposure.
448
449 Strategic participants stated that there were no plans to change the pay banding or uniform
450 of the workers. Some participants suggested that a further approach to increase retention
451 would be to require MSWs to stay with the Service for a defined period, or have to pay back
452 their Foundation Degree course fees, though this was not implemented during the three
453 year study.
454
455 ***Provision of a second midwife for women at higher risk***
456
457 The final sustainability issue described by participants was the unexpected number of births
458 with clinical or social risk, where policy states that two midwives are required. This reduced

459 the anticipated efficiencies of MSW second attendants, as two midwives had to be on call
460 when high risk births were due.

461 *"And at the moment, for example, we've got a very complex case, and it really, you know,*
462 *that really does need two midwives."*

463 *Manager 2 (Y2)*

464

465 **Scaling up**

466

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

475

476 *"If you know that they know what they're doing I would be comfortable but if it was*
477 *somebody I'd never met before and I wasn't sure what her skills her I wouldn't be happy."*
478 *Community Midwife Focus Group (Y3)*

479

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

482 *F:* *"I just think because you think, 'I've worked hard for my PIN* and the risk of it being*
483 *taken away because somebody's done something or ..."*

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

485 *F:* *"When will the point come where you're…where they say, 'Actually we're going to*
486 *drop you two [pay] bands because that MSW can do exactly the same thing as*
487 *you'?"*

488 *Community Midwife Focus Group (Y3)*

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

490

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

494

495 *"Knowing that if anything goes wrong I've got a shift leader here who will support me…I just*
496 *feel more comfortable in the hospital."*

497 *Birth Centre Midwife, Hospital Focus Group, Y3*

498 *"I suppose I'm not a normality [midwife]…I like the style of work on [the obstetric-led]*
499 *Delivery Suite. Even working on the [midwife-led] birth centre, I just don't think I'd find it as*
500 *interesting."*

501 *Delivery Suite Midwife, Hospital Focus Group, Y3*

502

503

504 **DISCUSSION**

505

506 ***Main findings***

507

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

511

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

519

520 Sustainability and upscaling of the MSW-midwife model was seen as challenging,
521 particularly in terms of training and retention of MSWs. The mismatched understandings
522 and expectations of the evolving MSW role aligns with previous literature on workforce
523 redesign (Bohmer & Imison, 2013), which indicates that role clarity is an important and
524 often overlooked aspect of service change. Where roles are changing, it has been suggested
525 that this requires constant communication, "*continually articulating and re-articulating a*
526 *shared vision*"(Macfarlane et al., 2011, P69). MSWs expressed a need for clarity, support

527 and recognition, to build their sense of identity and confidence. Such expectations regarding
528 markers of esteem and pay are considered as a key issue in role change by the existing
529 literature (Hyde et al., 2005). Services need to consider managing attrition by regular
530 training of MSWs to backfill those who leave. This is important because paraprofessional
531 career progression is not only a wider aim of the NHS, but is also a common goal for
532 paraprofessional workers in healthcare(Cavendish, 2013; Griffin; & Sines;, 2010; Hussain &
533 Marshall, 2011).
534
535 An additional barrier to sustainability of the MSW-midwife model included the need for two
536 midwives at high-risk home births. This means that the midwives covering 'second on call'
537 home birth rotas cannot be fully substituted by MSWs. Where high risk births are
538 imminent, more expensive, skilled midwife provision will also be necessary. While it is
539 unlikely that two midwives will need to be on-call at all times, high risk home births still
540 impact on the potential cost savings and midwife capacity release with an MSW model.
541
542 There was a reluctance of community midwives to work with MSW second attendants, with
543 fears about vicarious responsibility, and erosion of the midwifery profession. This aligns with
544 previous research, in which staff expressed similar concerns regarding collaborative working
545 with support workers (Hussain & Marshall, 2011; Moran, Enderby & Nancarrow, 2011). The
546 Home Birth Service midwives also described early reservations about MSWs in this role, but
547 by training and working with MSWs this diminished, with some preferring working with
548 MSWs in this context. Wide staff acceptance of changed roles is essential to the success of
549 these changes in service provision (Macfarlane et al., 2011), and trust and relationships

550 between professionals and support workers have been found to be important in effective

551 working (Moran et al., 2011).

552

553

554 ***Strengths and limitations***

555

556 A strength of this research lies in the representativeness of participants; almost all staff

557 from the Home Birth Team participated in interviews to evaluate the service. The

558 qualitative interview approach allowed participants to speak confidentially, revealing

559 perspectives that may not otherwise have been disclosed. However, the qualitative

560 approach limits the ability to demonstrate effectiveness and safety of the midwife-MSW

561 model, which would require a sufficiently powered quantitative evaluation. An additional

562 strength of the research is the reflexive approach utilised; including acknowledgement of

563 our ongoing relationship with the service and how this may have shaped our interpretation.

564 . This pragmatic evaluation focused on the perspectives of staff involved to explore the key

565 components and implementation process for the service model, and as such did not gather

566 women's experiences, though additional work with women, and observational work to see

567 the model in practice, would have strengthened this research further. Due to the rarity

568 home births, and even rarer ambulance transfers and emergencies, few ambulance staff have had

569 experience of the midwife-MSW model, and this group were not involved in the evaluation, though

570 this is an area for future exploration. It is also possible that the rapid analytical approach, which

571 did not involve line by line coding of all data, may have missed granular detail. A secondary

572 analysis of data from year one of the evaluation, involving full coding and thematic analysis

573 using the Framework Method, revealed one report of inconsistencies in induction for
574 MSWs, which was not identified by the Rapid Analysis approach.
575
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577
578 **CONCLUSION**
579
580 Service pressures in the UK necessitate new ways of thinking about the provision of
581 maternity care(Cumberlege, 2016). Deploying MSWs as second birth attendants may be a
582 solution to providing a high quality home birth service, while freeing up midwife capacity.
583 While MSWs appear to offer an alternative to a second midwife, the benefits and costs of a
584 fully operational midwife-MSW model are not yet known. The implementation process
585 raised a number of challenges, therefore recommendations are made to those wishing to
586 introduce a similar model. These include the explicit definition of the MSW role, and careful
587 consideration of recruitment, training, and retention of these staff. Continued provision of
588 care by two midwives at high risk births is also recommended. The findings from this work
589 can inform others developing paraprofessional roles and have specific relevance to those
590 looking for new ways of providing high quality, cost-effective care for low risk women giving
591 birth at home.
592
593 **LIST OF ABBREVIATIONS**
594
595 FD – Foundation Degree
596 HBT – Home Birth Team

597 MA – Midwifery assistant

598 MSW – Midwifery Support Worker

599 MW - Midwife

600 RCM – Royal College of Midwives

601 UK – United Kingdom

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