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Reflections on an educational intervention to encourage midwives to work in a continuity of care model – exploration and potential solutions

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ABSTRACT

Objective: To explore barriers and facilitators for midwives working in a midwifery continuity of carer model, and to assess if an educational intervention could help address some of these barriers, designed to help achieve NHS England's target of majority of women receiving midwifery continuity of carer by March 2021.

Design: Two-day workshops were co-designed by experienced continuity midwives, service managers and midwifery educators using implementation theory delivered to maternity staff, with barriers assessed prior to training and re-assessed at the end.

Setting and participants: 1407 maternity healthcare professionals from 62 different National Health Service trusts across England attended 56 different workshops.

Findings: Perceived barriers to working in this model were reported more frequently than facilitators. Reported facilitators prior to training included perceived benefits to the midwife and to women. Reported barriers included personal and professional concerns, fear, issues with the national agenda and institutional and/or organisational issues. The educational intervention was able to address the majority of barriers raised. The training was well evaluated, with an average rating of 4.2 on a five-point Likert scale.

Key conclusions: While this specific educational intervention appears to have been useful in addressing concerns with working in a continuity model, further work is needed to identify barriers to change. This will aid more local designed interventions.

Implications for practice: If policy targets related to continuity of carer are to be achieved then working in this way needs to be sustainable and appeal to the current midwifery workforce.

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Introduction

Due to the growing wealth of information demonstrating its benefits (Sandall et al., 2016) English maternity policy has directed healthcare providers to scale-up (or in many cases, introduce) midwifery continuity of carer (MCoC) within its National Health Service (NHS) services. An initial target was set by commissioners of healthcare to book 20% of women onto MCoC by March 2019, 35%

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to have gone through a midwifery continuity pathway by March 2020 and for the 'majority' (>50%) of women to have received MCoC by March 2021. In addition, due to the findings of the 2018 (Knight et al., 2018) and 2019 MBRACE report (Knight et al., 2019), organisations must ensure that 75% of black and minority ethnic women and women from the most socially deprived areas are to receive MCoC by March 2024. These targets are specifically for England, as healthcare policy is devolved between the four countries of the United Kingdom (Bevan et al., 2014).

These targets require a major workforce redesign within English NHS maternity services. Changes to organisational structures, management of staff and daily work patterns are required to facilitate

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such large-scale change. To aid this process Health Education England (HEE) commissioned education providers to deliver training across the country. This was funded from central funds and potential providers outlined programmes that were circulated to NHS Trusts to select from.

The authors of this paper led one such training initiative that delivered 54 workshops to around 1,277 healthcare workers, from 60 different NHS trusts. Attendees were predominantly midwives including Heads of Service and senior managers, but also included obstetricians, support workers, maternity voice partnership representatives and project managers from the local commissioning groups. This paper aims to explore the experiences in delivering these workshops in the hope of helping others develop interventions to encourage the current workforce to change their model of working. Alongside exploring the design and delivery of these workshops, the paper explores the following research questions:

- 1 What were the barriers and facilitators identified by midwives in working in these models?
- 2 Was an educational intervention useful in addressing these barriers?
- 3 What potential future interventions could help health care organisations to change their model of working?

Methods

Development of training materials and delivery of the training

The training package was co-designed by a panel of 27 staff with experience in providing or managing midwifery continuity models of care (MCoC) and/or education. The development team spent a day workshopping their own fears prior to working in a continuity of carer model, considering how to best address potential concerns and designing activities to help get key messages across. The findings of the panel were shaped into the workshops by JH and KW and sent for approval to the co-design group prior to the first workshop.

The training consisted of a two-day workshop: day one focusing on working as a MCoC midwife, and day two focusing on managing MCoC models of care. Each workshop was delivered by teams of three (an educator, a manager and a MCoC midwife) all with experience of continuity models. The training team was drawn from the development panel and others who attended sessions to ensure consistency of delivery. Each workshop was attended by at least one of five educators that also participated in the co-design event and was delivered locally to the trust at a venue of their choosing (and expense) to ensure the maximum number of staff could attend. Most trusts used their own hospital training rooms for the training, with some opting to book outside venues.

Prior to the training NHS Trusts were asked to complete a pre-assessment organisational readiness questionnaire either in writing or via a telephone call with one of the project leads (JH, KM or JS). This facilitated identification of plans and potential barriers to implementation. A personalised slide set using this information and data from the national NHS Digital Maternity dashboard were created prior to each workshop. These publicly available datasets (https://digital.nhs.uk/ data-and-information/data-collections-and-data-sets/data-sets/

maternity-services-data-set/maternity-services-dashboard) outlined pertinent issues related to local health need informing strategic plans for continuity of carer models, including pre-term birth rates, areas of multiple deprivation, mode of birth rates and highlighted social needs, alongside service satisfaction scores for both women (via the CQC survey results) and staff (via the NHS survey results).

The outline plans of day one and day two workshops can be seen in Table 1. The order was deliberately sequential in design as directed by Dixon-Woods et al (2012) demonstrating (i) that there is a current problem (using the data from the dashboards discussed above) and that (ii) the proposed intervention could provide a solution to that problem (using the evidence base from MCoC showing how it could address the highlighted issues) and (iii) that it was possible to successfully implement the intervention locally (using various examples of working within MCoC including diary extracts and current live duty rosters). While most of the content material was covered in each workshop, training teams adapted delivery to ensure it met the needs of the individual group in question and on occasion sections 9 and 10 for day one was shortened. Attendees were asked to complete an evaluation form at the end of each workshop asking them to rate 13 positively phrased questions on a 5-point Likert scale ranging from strongly disagree (1) to strongly agree (5).

Analysis of potential facilitators and barriers

At the start of each day one workshop attendees were asked to record their 'aspirations and apprehensions' of working as a MCoC midwife onto post-it notes - a piece of paper with an adhesive strip on one side. Attendees were encouraged to place one aspiration or apprehension per post-it, but were not limited to the number they could provide. They were then encouraged to place each of their thoughts onto one of two posters labelled 'Aspirations' and 'Apprehensions'. These were discussed with the attendees throughout the day and used by the trainers to ensure specific areas of the workshops addressed the areas of concern. By the end of the training we had collated over 1000 post-it notes identifying apprehensions of working in this model, and these were collated and their contents analysed for commonalities. Apprehensions were grouped together and developed into themes using mind mapping software (MindNode Pro Version 1.11.5).

Rigour in analysis

Each author helped with the design and delivery of the workshops, alongside the analysis of the post-its. The vast majority (85.7%) of the workshops were facilitated by one of the authors to ensure rigour in both the delivery and analysis. To ensure sensitivity to context each author had previously (KW, LP and JS) or are currently (JH) working as caseload midwives, and three were responsible for creating and managing services (LP, JS, JH). All authors are experienced qualitative and quantitative researchers. The first level analysis of the post-its was conducted by JH, who facilitated 28 workshops (50%). Following this analysis detailed discussions were held with the other authors to ensure all relevant facilitators and apprehensions had been captured and discussed. While these discussions did not highlight new themes, greater importance was placed on some as they occurred more frequently in the workshops.

The results described below summarise the quantitative data from the evaluations and present themes from the open responses to identify the barriers and facilitators identified during the training.

Results

Fifty-six workshops were delivered to attendees of 62 different NHS trusts, equating to 40.8% of maternity services in England. All but six of these workshops were facilitated by one of the authors of this paper. When organisations secured funding for multiple sessions they were encouraged to arrange more day ones than day

Table 1			
outlines	of the	training	day.

2

	Day 1	Day 2	
1	Introductions and ground rules.		

Aspirations and Apprehensions - an opportunity for attendees to anonymously discuss any hopes and fears for changing their working pattern

2	and role. These were written on post-it notes and themes discussed as	nymously discuss any hopes and fears for changing their working pattern a group (day one) or written on flip chart paper and discussed as a group
3	(day two). Discussing local health need and potential for improvement – using through their own outcomes, including demographics (including pretern results and staff survey results	site specific data from the maternity dashboard the attendees were talked m birth rates, social deprivation figures, modes of delivery) CQC survey
4	Discussion of how MCoC can be a solution to these problems – the e outcomes highlighted, considering evidence of improved outcomes and	evidence base was then discussed, demonstrating how it can improve the satisfaction for women, their families and midwives. Explanations of the sose of Better Birth's policy directive was to improve safety, outcomes and
5	Discussing exemplar examples of MCoC – using the Green Templeton report (Ref), RCM resources, UK wide exemplars of a range of models for different populations were discussed.	Reflections from day one – feedback from the day ones were then presented, with any concerns that midwives had expressed on the direction of travel or perceived lack of organisational support discussed at length with potential solutions found
6	Defining the intervention – the core components of MCoC were then o 'four pillars' of MCoC were explained, consisting of:	discussed, focusing on how relational continuity could be delivered. The
	Professional Autonomy, and self-management	
	• Maximum caseload of 36-40 women per year per WTE midwife	
	• Named midwife for each woman and a named obstetrician for each	team
	 Each named midwife (supported by buddy midwife and/or team) ai intrapartum and postnatal period. 	ming to co-ordinate and deliver care for women in the antenatal,
	 Following explanation of these core components the elements that team, on-calls versus shifts, team purposes, specific care decisions. 	were adaptable to local situations were discussed including location of
7		any midwives were needed for teams of 6, 7 and 8 or buddies of 3 and 2 numbers to demonstrate that they had enough staff to do this for 100% of ded to meet the initial 20% target.
8	•	or their trust and the women they served, identifying specific teams that rate resulted in five teams of six, what should these five teams look like). en on how they could be improved.
9	Philosophy of care - using examples from existing teams, attendees were then asked to consider philosophy of care within these teams.	Implementation theory – implementation theory was then discussed, including the following topics:
10	Becoming a change champion – the purpose of change champions were then discussed.	Assessing the readiness for change
11	Managing a caseload and your life – a large portion of time was then spent looking at real-life off-duties from existing caseload midwives, initially in paper format and then talking through diary exerts to gain a greater understanding of the real work-life balance for these midwives.	• Scale up and sustainability
		Leadership and change champions
12	The Carousel – the attendees were then given an opportunity to speak up for the change via the carousel, where a negative question or statement (eg I cannot work on calls; is this really what women want?) was posed in a 60-second session, attempting to simulate corridor conversations in a fun way.	Using continuity to meet other targets – other benefits of continuity were then explored, including using MCoC teams to meet other public health targets including smoking cessation and breastfeeding rates.
13	Revisiting the aspirations and apprehensions – the group then revisited the apprehensions list from earlier in the day in an attempt to demonstrate that they had (mostly) been addressed, with the post-its removed when there was agreement that it no longer applied.	Measurement and Evaluation – the day concluded by going over specific measurement and evaluation tools alongside directing to other resources.

twos to ensure more staff could be released that would eventually be working in the teams delivering MCoC to women in the areas. This resulted in the team facilitating 38-day ones and 16 day-twos. Evaluations were overwhelmingly positive, with each of the evaluation points scoring above an average of 4.2 on the fivepoint Likert scale (see Figure 2 for a subsection (n=200) of the evaluation results). Figure 1 shows three anonymised comments received.

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"I just wanted to feedback to yourself and the team that your CoC training was magnificent and we all loved it. In addition [Trust Name] held an away day to discuss and revise our CoC plans on Monday. We accept we have a mountain to climb. However, we feel secure that your workshops have provided us with the knowledge and confidence to reach the top." (email sent after the training).

"This training was by midwives, for midwives. People who understood how we felt. The Head of Midwifery present was an inspiration. If only upper management in my trust supported/cared about the staff in the same manner." (qualitative comment from evaluation forms).

"It showed us great examples of continuity that is working at present. Enthusiastic representatives. Helped me to alleviate concerns re skill mix and burn out. Very approachable and open and honest hosts." (qualitative comment from evaluation form)

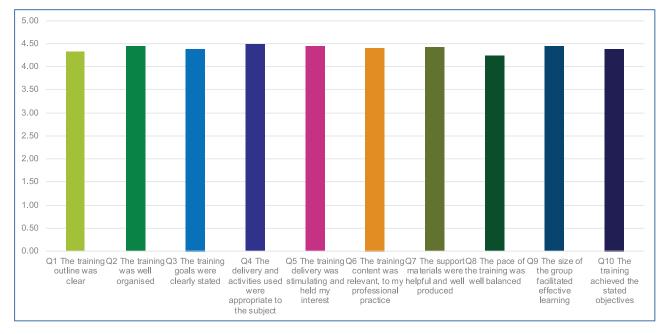


Figure 1. Qualitative comments from training process.



Exploring the barriers and facilitators for midwives working in continuity models

The contents of the first 500 post-it notes collected from the workshops were analysed. Saturation of themes were identified after the first 100, with no new barriers or facilitators identified. Verbatim quotes from the post-it notes are included in Table 2 to support the themes identified.

Facilitators to working in midwifery continuity of carer models

Post-it notes containing clearly perceived advantages of working in continuity models were in the minority, with only 32% of collected comments highlighting benefits of working within the model. They were split between perceived benefits to the midwife, and perceived benefits to the women they cared for.

Benefits to the midwife.

Professional values. Continuity of carer models were seen as increasing professional autonomy and having the ability to reignite passion for midwifery. Many comments highlighted previous positive experiences of working in continuity models and wanted to work within them again.

Material benefits. Tangible material benefits of working within these models were given, including lowering of current workloads, the ability to self-manage workloads and diaries, increased job satisfaction and the potential to earn more money while working oncalls.

Team benefits. Alongside the personal benefits, wider team benefits were given, including feeling part of both a small and larger team, that the model of care was aspirational for a unit, that it would increase teamwork and result in enthusiastic staff. Many midwives felt this way of working would offer a sense of support and personal autonomy.

Benefits to the women.

Improved outcomes. Many attendees suggested that continuity of carer improves outcomes. Midwives listed improved safety, adherence to public health agendas, safeguarding, reductions in inductions of labour and caesarean sections, increased homebirth rates and the ability to target care for traditionally hard to reach groups.

Improved experiences. Attendees also highlighted the potential that the model has for improving the experience of women. This focused on both the relational benefits of increasing trust and knowing someone's history alongside improving the care-journey

Table 2

Supportive examples of themes (verbatim copies of postits).

Facilitators to working in	n continuity models				
Main theme	Subtheme	Supportive quotes			
Benefits to the women	Improved outcomes	Better safeguarding	Every women to know their carers	? Reduce rates of IOL C/S	Better outcomes
	Improved experiences	Less attendances to hospital/triage for women	Provision of high quality individualised care	Women as partners in care	Better patient experience
Benefits to the midwife	Professional values	Able to manage own work load	Greater autonomy	Increased rate of homebirth	Reigniting passion for midwifery
	Material benefits	It will lower our current caseload	More money when on call	Increased job satisfaction	Aspirational
	Team benefits	Staff feel engaged	Staff feeling part of a small and bigger team	Reigniting passion for midwifery	Increased teamwork
Barriers to working in c	ontinuity models			-	
Main theme	Subtheme	Supportive quotes			
Personal and professional concerns	Work life balance	Difficulty taking annual leave	I'm anxious I won't sleep when on call	To many on calls	I can't be on-call all the time – childcare!
	Skills deficits	Skills deficit	Not all midwives are up to date in different areas	Scared of change	Fear of the new
Issues with the national agenda	How long will we need to do this for?	We have been here before! We loved it, and then it got taken away	Will it actually improve continuity	Problems meeting targets	
Fear	On my own	Feeling alone and cut off from support	Continuity of care might lead to losing the opportunity of a second opinion and looking at a problem with a fresh set of eyes	Such high expectations	Rotating from a comfortable area
	Demands of women	Unhealthy dependence on one healthcare professional	Not meeting promises to women	Getting "stuck" with a demanding "clingy" family/woman	Failure to deliver
Institutional issues	Barriers from	Lack of support from	Current proposals are not	Don't think we are going	Being pulled to work in
	management Finances	managers Cost of extra equipment	caseloading Pay structure	to be allowed to do it Staffing on labour ward	other areas when short We don't have enough staff to make it work
	Wider teams	How do I fit in? (MCA)	How does this work for obstetricians?	How will this impact on my specialist role	Impact to wider team – MCA's, obstetricians etc

Table 3

potential intervention designs.

Midwives concerns	COM-B element	Intervention type	Definition of intervention	Potential intervention
Skills deficits	Physical capability	Training Enablement	Imparting skills Increasing means/reducing barriers to increase capability or opportunity	Skills lab sessions Mentoring with experienced colleagues
Burden of on-calls	Physical opportunity	Environmental restructuring	Changing the physical or social context	Offering rostered MCoC models rather than on-call models
Pay structure	Reflective motivation	Incentivisation	Creating expectation of reward	Ensuring staff are adequately recompensed for working in this model

through less hospital visits and reducing repeat appointments, focusing on women being partners in their care rather than receiving care.

Barriers to working in continuity models

The majority of post-it notes contained perceived barriers of working in continuity models. No comments were found that identified barriers or perceived negatives for the women that received care, other than when they were framed as impacts to the midwife. Instead the perceived barriers focused on personal or professional concerns, issues with the national agenda, institutional barriers and fears.

Personal and professional concerns.

Work life balance. By far the most frequently stated barrier was 'work-life balance', with this concern, written in this way, being found 73 times (14.6% of post-it notes analysed) and elements of the theme recorded on 23% of the analysed post-it notes. Other

comments in this theme included concerns related to burn out, oncalls, a difficulty in switching off, childcare issues, increased workloads and working '24-7'.

Skills deficits. Midwives also highlighted concerns related to lack of skills, with concerns raised on not feeling comfortable in both high and low-risk settings, concerns over the skill mix of the unit and potential continuity teams, and general concerns over lack of certain midwifery skills.

Issues with the national agenda. Many concerns focused on the national continuity agenda, with people raising that this had been attempted before with Changing Childbirth (Department of Health, 1993), and that it was the latest 'fad' that would not be a sustainable target. In addition, comments focused on the targets set by NHSE, with people feeling they were too ambitious and did not give enough time to implement effectively. A degree of scepticism was expressed about the lack of trust in the evidence base that encouraged the system changes, with people feeling it would not improve outcomes or continuity to the degree stated.

Fear.

On my own. The issue of support was a theme that came through strongly but produced a dichotomy of responses. Some midwives saw the potential for increased support when working within a team, whilst for others it raised personal concerns that they would be alone and cut off, being forced to work in areas they lacked confidence in, and that the expectations from management were too high for them to achieve. This included those currently working in acute areas who were nervous of community working, and in reverse community midwives working in acute areas.

Demands of women. Another fearful element focused on the perceived expectations of women receiving care in this model. Some midwives felt that the care model would foster expectations that were impossible to meet, and that they would create an unhealthy dependence on one healthcare professional rather than a wider team. One post-it note stated they were concerned about 'getting stuck with a demanding clingy woman'.

Institutional issues.

Barriers from management. Many midwives highlighted concerns related to the models being proposed by their management – that they were not being 'allowed' to work in true continuity models but having models 'forced upon them' that were not actual MCoC. One post-it note stated "Don't think we are going to be allowed to do it".

Conversely managers felt a great sense of pressure related to the targets, with barriers including budget constraints, fear of the targets and getting it 'right' for all staff and all women. Some highlighted concerns related to proportionality – was it right to provide a 'gold standard' for some women, thereby providing a lesser service to others?

Finances. Money was seen as a big barrier, including issues with pay and reward for working in these models, managing the budgets, and the cost implications for both staffing and equipment required to establish the models and teams.

Wider teams. Another perceived barrier was issues with colleagues blocking change, and the impact on the wider teams, with comments related to concerns for maternity care assistants, obstetricians and midwives in specialist roles who may see their roles decrease in these models.

Impact of the workshops on the perceived barriers and facilitators

All the identified facilitators were enhanced because of the training provided. While the workshops were able to address most of the barriers identified, the trainers had no control over the theme 'barriers from management', and trainers took these messages to the management workshop day. In all workshops the attendees agreed that most of their identified barriers had been addressed.

Potentials for intervention design

Theories of behaviour change (Michie et al., 2014) have identified that to change behaviour an individual requires the capability, opportunity and motivation to enact a change. While the data presented here are not enough for a full behavioural change analysis, it does provide some insight into what an intervention may look like to encourage midwives to change their working patterns. Additional work has identified the particular interventions that can address specific barriers (Michie et al., 2011) This has been applied to some of the findings in Table 3.

Discussion

This paper highlights the potential barriers to achieving the target of 'the majority of women' receiving care within a midwifery continuity of care model by March 2021. If the majority of service users are to receive care in a certain way, then the majority of the workforce will be required to work within that model. The literature to date highlights both the positives and negatives of MCoC, from the perspective of those working in these models. This includes less burnout than those working in non-continuity models (Jepsen et al., 2017; Fenwick et al., 2018; Dawson et al., 2018) and improved autonomy and legitimacy in their practice (Newton et al., 2016);). However, a study by Stevens and McCourt (2002) that while midwives who wished to work in this way found great satisfaction in the model, there were issues with working conditions and excessive demands placed upon midwives by both employers and the women they care for. This mixture of findings suggests that it is important that adherence to guidelines on caseload/team sizes and professional autonomy are key to the success of these models.

The workshops were delivered nationwide, with large numbers of participants exhibiting mixed views about working in continuity models. Challenging conversations were welcomed, and frequent. Due to the size and spread of the workshops it is felt that the findings are generalisable to midwives across the country, and that an intervention such as this can be useful in engaging staff in the topic. While the vast majority of the sites set up MCoC models after our training, we have yet to evaluate these models and so the full impact of the training is still to be determined.

It is noted that the post-its were generally very similar, both within the same organisations (when multiple workshops were held on different days) and across differing organisations in different parts of the country. The post-its were anonymous to ensure freedom of expression, which prevented detailed analysis of any inter- or intra- organisational differences. Some differences occurred on the emphasis placed on perceived system or managerial barriers, but each workshop expressed some concerns in these areas. Indeed, no new apprehensions or aspirations were seen after the first five workshops were delivered and so this is not seen as a large limitation of the s findings.

An anecdotal finding was the lack of knowledge that midwives had on the health needs and clinical outcomes from their own service and how this compared to local LMS (Local Maternity Service) and national statistics. While there was a general appreciation of information such as vaginal birth versus caesarean section rates, there was less knowledge about rates of pregnancies identified as having complex social factors, skin-to-skin within one hour and the level of deprivation of women booked at their service. In addition, there seemed to be a universal lack of knowledge from shop-floor staff regarding the CQC survey results, an indication of women's satisfaction with the service being provided. As this information is publicly available and potentially a key driver for changing behaviours, we would encourage heads of service to share this information widely. Indeed, from an educational perspective it was an extremely useful tool to highlight local practice issues and help the attendees see the benefits of MCoC models.

One key strength of our training identified by most attendees was the presence of those with experience of continuity models, so both the positives and negatives of working in such a way could be explored frankly, with specific examples. We would recommend that any future educational interventions ensure at least one trainer has extensive experience of working as a MCoC midwife, and that trusts setting up models look to neighbouring organisations with well-established models to arrange mentoring services with the managers of these services.

Less research has been conducted on what would tempt midwives to change their current working practices and become MCoC midwives. A recent survey of 798 midwives showed that 35% of respondents were happy to work in care models that included providing care across all settings, while 54% would be happy to work in models that did not include intrapartum care (Taylor et al., 2019). Taylor et al's (2019) survey also suggested that midwives are less willing to work on-calls at night than to work a designated night shift. The qualitative findings are supportive of many of the themes detailed in the findings from the workshops, suggesting a large resistance to changing working practices. It is important to note that this survey and our workshops were run prior to organisational change and in general there is always much anxiety and uncertainty before change happens. These workshops aimed to address and mitigate these anxieties, but it is crucial that an evaluation addressing sustainability and impact examines these changes.

The continuity targets have been set to improve both outcomes and the experiences of women that use English maternity services. While the needs of the workforce are very important in achieving this aim, a perceived barrier to changing working practices can provide opportunities rather than being viewed as an obstacle to improving outcomes for women and their families. As described, theories of behaviour change (Michie et al., 2014) can be applied to design and evaluate interventions to reduce barriers and enhance facilitators to encourage change. While the data presented here are not enough for a full behavioural change analysis, it does provide some insight into what an intervention may look like to encourage midwives to change their working patterns. This approach has been used successfully to facilitate health professional behaviour change in their approaches to treating sepsis (Steinmo et al., 2015), prescribing practices (Duncan et al., 2012; Fleming et al., 2014) and hand hygiene practices (Fuller et al., 2014)

Conclusion

The goal of achieving large-scale continuity of carer within a structure such as the NHS is laudable, but the delivery of this training highlights that urgent work is required to develop an intervention to change the workforce's perceptions of working in this way if the targets are to be achieved and re-establish an autonomous way of working for midwives. While an educational intervention such as these workshops can go some way to address the capability, motivational and opportunity barriers that midwives may have, greater work is needed to design an appropriate intervention to encourage midwives to change their working behaviours. Studies using theoretical models of behaviour change could help support this.

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Ethical Approval

Not applicable (educational evaluation)

Declaration of Competing Interest

None

CRediT authorship contribution statement

James M. Harris: Conceptualization, Methodology, Formal analysis, Investigation, Writing - original draft. Kim Watts: Methodology, Investigation, Writing - review & editing. **Lesley Page:** Conceptualization, Writing - review & editing, Methodology, Investigation. **Jane Sandall:** Supervision, Writing - review & editing, Methodology, Investigation.

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