Final report

Independent evaluation of the implementation of Midwifery Continuity of Carer

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Visual summary

Factors supporting or inhibiting implementation of Midwifery Continuity of Carer: a visual summary

Works against | **Works towards**

STANDARD CARE

Individual Midwives

Works against:
- Fear of autonomy in a blame culture
- Limited understanding of mechanism & outcomes
- Low morale
- Working patterns (personal preference)
- Yet more change
- Childcare challenges
- Low confidence in different settings
- Poor previous experience

Works towards:
- Relational care
- Enjoyment
- Autonomy
- Student/preceptor experience
- Ongoing learning
- Sharing positive feedback

Continuity of Carer for women & birthing people

Continuity Teams

Works against:
- Shift-based systems
- High or inconsistent caseloads
- Risk-based model, e.g. homebirth CoC team
- Inclusion in escalation policies
- No protected time

Works towards:
- Support for leaders
- Team cohesion
- Planning
- Inclusion of NQMs
- Good quality data
- Providing quality care
- Relationships with women
- Co-design

MDT

Works against:
- Resentment
- Presumed impact on staffing
- Lack of link obstetricians
- Lack of understanding and support
- Service not integrated

Works towards:
- Engaged link obstetricians
- Stakeholder engagement
- MDT buy-in
- A physical base

Trust

Works against:
- Adaptations that reduce continuity & flexibility
- Limited training or support for change management
- Lack of understanding of model and evidence

Works towards:
- Appropriate data systems
- Prioritisation of continuity of carer
- Funding for implementation and sustainability
- Communication of the evidence
- Clear vision
- Adequate staffing & skill mix

Local Systems

Works against:
- Limited role of LMNS/ICS
- Lack of integration with other services and workstreams

Works towards:
- Support and coordination by LMNS/ICS
- Networking

National Systems & Policy

Works against:
- Lack of integration with other policies e.g. personalisaton, safety
- Contradictory messaging from professional and public bodies
- National staffing crisis
- Unrealistic targets

Works towards:
- NHSE 'Building blocks' and workforce modelling tools
- Commitment to funding
- Clear policy vision and realistic targets

Executive summary

NHS England funded researchers from City, University of London's Centre for Maternal and Child Health Research in October 2022 to conduct a rapid independent evaluation of the implementation of Midwifery Continuity of Carer (MCoC) in England. The evaluation took place in January to March 2023 and used a mixed methods approach including a national online survey of service and implementation leads with follow-up interviews and case studies in three Trusts to identify the barriers and enablers to implementing MCoC with the aim of informing future implementation plans.

The survey received 88 responses (60 full responses) and 16 follow-up interviews (with 17 interviewees) were conducted, covering a range of implementation experiences and geographical regions. Three rapid-appraisal case studies were conducted of services with varying levels of implementation of MCoC, across different regions of England. Data collection included observation of meetings (n=11), formal and informal interviews (N=51), examination of local documents, and shadowing MCoC teams. In April 2023, a stakeholder event involving representatives of maternity services at different levels and regions, user organisations and members of the NHSE MCoC evaluation advisory group (total n=21) along with evaluation team members was held to discuss the emerging findings and contribute to final analysis.

Key findings

Factors enabling implementation of MCoC:

- Strong Trust support and senior leadership understanding and fully supporting the model.
- Extensive engagement with midwifery workforce and stakeholders to achieve understanding and buy-in.
- Training, resources, and support for MCoC implementation lead.
- Detailed planning ahead of implementation, with protected time, support, and resources.
- Transitional funding to support the additional costs of the change process.
- Preparatory and ongoing personalised training and support for midwives joining MCoC teams.
- Midwives wanting to work in this model - more likely with engagement, training, and co-design of a flexible and sustainable MCoC model.
- Sufficient midwife staffing levels.

Barriers to successful implementation of MCoC:

- Lack of senior leadership understanding of model affecting level of buy-in and support.
- Insufficient planning time and funding to undertake a major service change.
- Service context factors including not having safe or sufficient staffing levels, existing stress, and poor morale among midwives.
- A section of the workforce not wanting to work in an on-call model, for personal reasons (e.g. childcare) or professional reasons such as lack of familiarity and comfort with other areas of midwifery work or fears about managing a caseload.
- Misinformation about MCoC, influenced by lack of or poor-quality data and lack of in-depth understanding of how MCoC works to achieve its benefits.
- Pre-existing concerns and negative experiences from prior implementation of models that were not well supported or functioning.

A number of factors were also identified that influenced the **sustainability of MCoC teams**.

Key factors supporting sustainability were:

- Effective support from organisation and senior leadership.
- Sufficient time, authority, and funding for leads to continue to manage the change process.
- Continuous and wide stakeholder engagement, including communication of vision – sharing positive feedback and boosting morale.
- Having adequate data systems, team capacity and expertise to collect and analyse the outcomes associated with local MCoC teams
- A working base for MCoC teams, ideally in a primary-care or health and social care setting such as family centres or family/community hubs or community maternity units
- Facilitative management support for MCoC teams enabling a balance of guidance and autonomy to manage their work.
- Appropriate ongoing training for midwives including space for reflection and learning and regular meetings for team building, peer review and information sharing.
- Pathways for inclusion of newly qualified midwives
- Appropriate caseload levels, which were geographically based and with a mixed risk or more targeted caseload.
- Correct skill mix and mix of full/part-time staff within teams.
- Effective linked obstetrician arrangements.
- The professional satisfaction associated with relational working.
- Communication of positive service user feedback – regularly capturing and sharing impact of MCoC. In many Trusts this included working with the MNVP to collect feedback from women and illustrate with stories of individual pregnancy journeys.
- Recognition of openness to changing the model, voices of all staff and service users.

Key barriers to sustainability were:

- Limited organisational support for or understanding of the model leading to implementation of adaptations which reduced the functionality of the model (including the level of continuity per se, and the autonomy and flexibility of working which this model requires).
- The inclusion of MCoC midwives in escalation policies and MCoC caseloads above 36WTE/annum.
- Lack of good quality and reliable data to monitor and demonstrate the impact of change, including for staffing levels, user satisfaction and clinical outcomes.
- Midwifery staff not working in MCoC teams not understanding the model and suspicious of associated way of working or lacking in confidence to adapt to different roles and ways of working.
- Stresses related to midwifery staffing shortage leading to competition or resentment in relation to workloads.
- Wider contextual factors influencing staff numbers, morale, and capacity to manage change, including an atmosphere of service defensiveness and professional fear and blame.
- Mixed or equivocal messages from central policy leading to a perception of uncertainty or even discontinuation of existing work.
- Lack of integration with other key Maternity and Neonatal Programme workstreams and priorities (such as community hubs, personalised care, cross-boundary and inter-professional working).

Factors were also identified which adversely affected the ability of MCoC teams to deliver genuine relational continuity from known midwives to women across the maternity pathway. These included: working 3 long shifts/on calls per week; not having weekly meetings to discuss the caseload; higher than recommended caseloads; being called in regularly for escalation; risk-based models such as

homebirth teams where midwives do not provide intrapartum care for women who become high risk.

Factors which supported relational and informational continuity included: buddy systems, MCoC midwives working 4-5 days a week; Meet the Midwife sessions; using social media to share stories and information about the team; weekly meetings.

Discussion

There is gold-standard evidence that MCoC has significant clinical benefits, improves women's experiences of care and is professionally satisfying for midwives. Despite national policy drivers since 2016, implementation has been variable nationally and often limited. A range of contextual, organisational, and professional factors have influenced this. The climate for healthcare in England since 2016 has been challenging. Better Births recommended a range of changes to achieve more person-centred high-quality care, with continuity at the core of a range of improvements but the organisation of maternity care remains institution-centred, and provision of primary midwifery services has declined. MCoC implementation leads faced challenges in securing the level of support needed for a complex organisational change and understanding of, and confidence in, the evidence was often low.

Midwives who worked in MCoC teams loved their work, observed the benefits for women and families and most did not wish to return to previous ways of working. However, in many services caseloads were higher than recommended and they were regularly called on for 'escalation' of care. Some services adapted the model in ways which reduced fidelity without necessarily improving sustainability for midwives and sometimes with unintended consequences. A proportion of midwives did not wish to work in this model, for a range of personal and professional reasons, which included lack of recent experience in working across different areas and concerns about more autonomous roles in a climate of anxiety about safety and professional blame. More newly qualified and student midwives were reported as keen to work in MCoC and some services had developed pathways to facilitate this. Services which had achieved and sustained higher levels of implementation were characterised by detailed planning and preparation and wide and ongoing engagement, securing transitional funding and institution-level support and a dedicated lead midwife with understanding of the model and sufficient authority within the service. Accessible and reliable data to support workforce modelling, monitor and demonstrate impact was important to support their work.

Conclusions and implications

We identified a range of challenges for implementation at system, organisational and professional level. Examples of implementation success and solutions were also observed. These included: adequate planning; work to ensure that decision-makers fully understand and support the model; change and data management support for implementation leads; preparatory and ongoing training for midwives in relation to skills for working in this model; pathways for inclusion of midwifery students and preceptees. While sufficient midwifery staffing is essential, workforce modelling can demonstrate the actual rather than perceived impact on staffing. Further work is needed to engage and support midwives in the transition to MCoC working. This needs to be considered in the context of wider work to support professional wellbeing and psychological safety. Greater integration with other Maternity and Neonatal Programme workstreams (e.g., community hubs, cross-boundary working) may enhance all aspects of implementation. Finally, implementing MCoC needs to be understood and managed as a priority for the whole maternity service.

1. Introduction

Providing Midwifery Continuity of Carer (MCoC) is associated with numerous health benefits for both mother and baby (Sandall et al, 2016) as well as improved experiences of midwifery care (Fernandez-Turienzo et al, 2021; Perriman et al, 2018). Clinical and psychosocial benefits have also been identified for those who are typically underserved in maternity care (Beake et al, 2013; Cibralic et al, 2023; Fox et al, 2022; Hadebe et al, 2021; McCourt & Pearce, 2000; McAree et al, 2010). The underpinning evidence of the implementation of MCoC falls into four key areas: clinical benefits; maternal psychological wellbeing and satisfaction with care, professional development and satisfaction and cost-effectiveness of care. This model has been a key component of the Maternity Transformation Programme (now the Maternity and Neonatal Programme). A letter to Trusts in September 2022 stated that the timescales for achieving MCoC by default are paused until further notice.

To date, the implementation of MCoC has been varied (Byrom et al, 2021) with some Trusts having a high level of implementation, some very little or none and some having disbanded their implemented continuity teams. The research on implementation of this model is more limited than the literature on outcomes (Dawson et al, 2018; Taylor et al, 2022). The current evaluation is therefore of importance to further our understanding of how Trusts have implemented the model, the factors that have made this easier or more difficult and local solutions.

1.1 Evaluation context:
The context of implementation is important for understanding both experience and effectiveness. The national maternity review, Better Births (2016) recommended a range of developments including improved inter-professional and cross-boundary working, provision of services in community hubs and improvements in postnatal and perinatal mental health care and personalised care (including information provision), as well as improved continuity of midwifery care. A Maternity Transformation Board was created with separate workstreams for each of the key recommendations. Funding was provided for Early Adopter sites (Taylor et al, 2022), to focus on one or more of the recommendations.

All systems were asked to develop plans to roll out MCoC to a majority of women by March 2021. Trusts were given overarching principles for what constitutes MCoC but relative flexibility in terms of the local model. To get the system started, successive deliverables were set in NHS planning guidance for the proportion of women placed on MCoC pathways, beginning with 20% by March 2019, on a trajectory to achieve a majority by March 2021. In 2021, following extensive feedback from trusts and learning from variable local implementation, *Delivering MCoC at full scale* was published (NHS, 2021). It set out the ambition for MCoC to be the default model of maternity care. It was more specific about the model and how to implement it (including provision of a set of building blocks), but in view of staffing concerns and local arrangements, invited systems to determine locally how many women were able to receive MCoC and the timescale for rolling out MCoC to these women, linked to local recruitment.

A range of events are considered to have had an impact on maternity services during the implementation period. In 2016, the UK government removed the bursary for student midwives, and a national referendum led to eventual withdrawal from the European Union, with specific impacts on midwifery workforce. From 2020 to 2022, the Covid-19 pandemic had a major impact on NHS staffing levels (due to COVID-19 infection and self-isolation), staff experience, including work-related stress and changes in delivering care intended to reduced infection risks, such as reduction in or use of remote antenatal visits. In addition, media responses to maternity inquiries focused on midwifery practice in often negative ways. In 2016 and again in 2021 the Royal College of Midwives reported

concerns about midwifery staffing levels, stress and morale relating to a range of factors including pay, conditions and pre-existing staffing shortfall (RCM 2016; 2021). The initial Ockenden Report (2020) highlighted concerns about maternity staffing levels and guidance was amended to clarify that implementation should be linked to adequate staffing levels (NHS, 2021). The final Ockenden report in 2022 again highlighted concerns about maternity staffing and recommended that MCoC implementation should be paused in settings where adequate midwifery staffing could not be assured (Ockenden, 2022). In October 2022 the All-Party Parliamentary Group (APPG) on maternity and neonatal care reported on concerns about the impact of staffing shortages on safety, and further impact on staff morale and wellbeing (APPG, 2022) and recommended increases in training places and work to improve staff retention, establishment of a national minimally agreed staffing standard and funding to support this as well as improvements in continuity of carer. In September 2022 NHSE circulated a letter in view of significant and worsening staffing situation which paused specific target setting. Since the fieldwork of this evaluation was completed, the Maternity and Neonatal Programme published their *Three year delivery plan for maternity and neonatal services (2023)*, which is the primary strategy for what needs to be achieved in maternity services in England.

1.2 Evaluation aims and objectives:

The aims of this rapid evaluation are guided by the objectives and deliverables set by NHS England for this evaluation, but broadly seek to understand the process of implementation of MCoC in England in response to the Better Births targets, including challenges, facilitators or barriers to implementation and any unintended consequences. This includes the period from when Better Births was published in 2016 to March, 2023.

NHS England has outlined evaluation objectives as follows:

- A robust but pragmatic sampling strategy to ensure regional representation of Trusts currently delivering MCoC.
- Identification of a theory of change from system leaders including mitigating health inequalities.
- Identification of the feasibility and acceptability to organisations and staff (staff sickness, recruitment, retention).
- Identification of any factors that contribute success in adoption, adaptation, scale up and sustainability of the intervention.
- Identification of objective and perceived benefits as well as any unintended consequences and ongoing challenges.

The objectives were focused on relation to services and staff since there is clear evidence of objective and perceived benefits for service users and key challenges have been identified in relation to implementation rather than service user responses.

2. Methods

A mixed methods approach was used involving two key components:

1) A national online survey of service and MCoC implementation leads with follow-up interviews. This survey was completed by 60 respondents, with an additional 28 partial responses. Sixteen follow-up interviews (with 17 interviewees) with a diversity of respondents (including Better Birth midwives, implementation leads, Heads of Midwifery, Directors of Midwifery, consultant midwives) were conducted. The 88 survey respondents represent 33 Trusts, 1 Integrated Care Board, 1 Local Maternity and Neonatal System (no information on Trust provided by 51 respondents, and two Trusts have two respondents each). All areas of England were represented by at least one respondent. 60% out of 60 respondents had worked as a midwife in a continuity team.

2) Rapid-appraisal case studies of three Trusts delivering MCoC with varying levels of implementation. These case studies included shadowing of MCoC teams, observing meetings and in total 51 interviews with midwives, midwifery management, obstetricians and other stakeholders.

Additionally, a stakeholder event involving representatives of maternity services at different levels and regions, user organisations and members of the NHSE MCoC evaluation advisory group (total N=21) was held to discuss the emerging findings and contribute to final analysis. A more detailed account of methods is provided in Appendix 1.

Quotes from survey participants or follow-up interviews are coded with P and survey response number, while quotes from case studies are coded with S for stakeholders and managers or M for midwives.

3. Findings
Summary overviews of the findings of the survey and case studies are provided first. The evaluation findings are then presented in an integrated way, drawing on survey, follow-up interviews and case studies, in relation to the evaluation objectives.

3.1 Current MCoC provision:
Current MCoC provision was very varied. This included size of team, size of caseload (often higher than the 36 women/year recommended by NHS England) and how and where the teams worked. There was a variety of models including both on calls and shifts, and not very many teams had a base where they could meet for meetings, training, and reflection. Examples of this is provided below and in table 1.

3.1.1 Summary overview of survey findings on MCoC provision:
Sixty percent of 88 respondents reported that their area was currently providing full MCoC (i.e. in accordance with the NHSE definition, which was provided for clarity[1], with the remaining participants having stopped their continuity teams (36%) or only providing antenatal and postnatal continuity currently (4%). Most respondents (93%) reported between one and five CoC teams currently running, which had been available between one and five years and some reported having six or more teams running. Most respondents (55.7%) had more teams in the past and thus had experience of teams being disbanded. Only 40% of participants responded that the implementation of MCoC had been done quite or very well in their area (see figure 1).

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[1] NHS England defines Midwifery Continuity of Carer as
- provided by midwives organised into teams of eight or fewer(headcount)
- each midwife aims to provide antenatal, intrapartum and postnatal midwifery care to approximately 36 women per year (prorata), with support from the wider team for out-of-hours care.
Within this model each team has a linked obstetrician. These key aspects of the model; size of team, caseload size and linked obstetrician are discussed below.
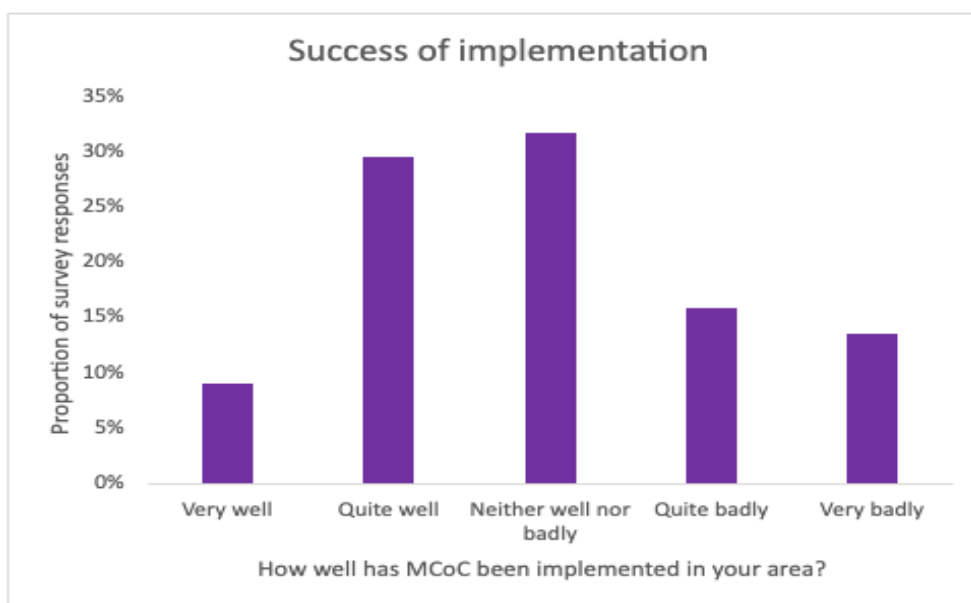
Figure 1. Answer to the survey question – How well has MCoC been implemented in your area? (N=88)

Most teams were described as geographical (75%, based on areas of high proportion of black Asian mixed ethnicity women or the 10% most deprived communities), for women planning a homebirth[2] (31.8%) and for women with specific conditions (29.5%).

In a little over half of services (55.7%) each midwife cared for approximately 36 completed cases/year; however, a third of participants (35.2%) reported that midwives cared for more than 36 completed cases (higher than NHSE caseload recommendations). Almost all teams (93.2%) had up to eight midwives (headcount), with remaining participants more than eight. Almost two thirds (63.6%) of teams were part of the Trust's escalation policy[3] and were called in either often (38.6%) or sometimes (37.5%).

Almost half of teams' rotas for intrapartum availability (47.7%) were reported as made up of both shifts (working 12-hours in hospital, prioritising care for team women present) and on calls (undertaking team work or resting but available to attend if a team woman goes into labour), with 29.5% on-calls only, 12.5% shifts only, with remaining participants reporting a variety of models including 24hr service with nights covered by offsetting contracted hours, different teams in the same Trust working differently, combination of visit days and intrapartum availability. Around half (52.3%) were reported to have a considerable amount of autonomy/flexibility over their own diaries, with 39.8% of respondents reporting that MCoC midwives had moderate or little autonomy or flexibility. Care for births 'out of hours' was organised in different ways, including in partnership within the teams, on call shifts, rostered by manager and night-time shifts. Most midwives working in MCoC teams were reported as managing their day-to-day rotas themselves either fully (51.1%) or to some extent (35.2%).

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[2] The survey was not able to determine whether homebirth MCoC teams followed women through if there was a change from planned home to hospital or MU birth. However, interviews and case study data indicate that this is varied in practice, with not all homebirth teams providing full continuity in such cases.

[3] Here escalation policy refers to professionals who are called on to cover other service areas or duty when there are gaps or shortfalls.

3.1.2 Summary overview of case study sites' MCoC provision:

At the time of the case studies, the sites had between two and five active MCoC teams (total N=10 teams), covering under 10% to over 80% of the women booked in their services. Most of the teams were launched as a result of the Better Births initiative but also included one long-established MCoC team. All three case study sites implemented different models of MCoC, mostly developed in consultation with midwives. All teams offered continuity of carer to women across the antenatal, intrapartum, and postnatal period in small teams of 6-8 midwives, but there were significant differences in how intrapartum care was covered, the number and type of on-calls or shifts worked, caseload size and renumeration for midwives. All the MCoC teams in the case study sites had shared, non-clinical Band 7 team leaders, so the teams themselves were comprised of Band 5 and 6 midwives and Band 3-4 MSWs and were to a greater or lesser extent self-managing. None of the sites included 24-hour on-calls. The different models of MCoC observed across the sites is summarised in table 1.

Site 1: Secondary unit in a coastal area with a large geographical area and high levels of socio-economic deprivation: 25% living in the lowest Index of Multiple Deprivation decile with low educational attainment and high levels of safeguarding, unemployment, smoking, high BMI and teenage pregnancy. Majority of population (90%) is of White ethnicity, with a significant number of European migrants of working age. The unit had good staffing levels and low staff turnover, but many midwives lived up to an hour's drive away from the unit.

Site 2: Secondary unit in a mixed rural-urban area, with pockets of socio-economic deprivation (top 10 most deprived areas in the country). The population was mainly White (92.6%) with a very small proportion of women from a BAME background (0.7%) but had high levels of safeguarding, teenage pregnancy, high BMI and smoking. The unit had traditionally had good staffing levels with almost all staff at all levels coming from the local area. Recently they had experienced a slightly higher vacancy rate than usual due to early retirement and the appointment of several specialist midwives.

Site 3: A tertiary unit in an inner-City Trust with a high number of births and a socioeconomically deprived and ethnically diverse population (42.5% White). There were high levels of women with limited English proficiency, low educational attainment, high smoking and safeguarding. The unit had significant vacancy levels and high staff turnover.

Table 1. Overview of observed models of MCoC. Abbreviations; HB – home birth, OC – On Call, MW – midwife, MSW – midwifery support worker, AN – antenatal, IP – intrapartum, PN – postnatal, WTE – whole time equivalents, MLU – midwifery led unit, OU – obstetric unit, CS – caesarean section

Model	Responsibilities	Working pattern	Renumeration	Size of team	Antenatal care	Postnatal care	Intrapartum care	Flexibility	Perceived benefits	Challenges	Unintended consequences
Homebirth team (not full MCoC in line with national model in observed site as only some women received IP CoC)	Caseload 36/pa/WTE. Provide homebirth cover for the whole service plus some domino care to MLU, including out of guidelines care. If women become high risk they stay with the team for AN/PN care but the unit provide IP care. Part of escalation.	Rostered to work 5-days (one 'late' to cover intrapartum day care) plus 5 12-hour night OC per month, rostered onto a working day (so could be a 'sleep day' if called out the night before, not impacting on midwife's time off). Have weekly meetings to discuss women due, safeguarding, reflection. Active Instagram page. Monthly Meet the Midwife.	4.5% uplift to cover time spent on-call. No OC payment, but 1 hour of each OC paid for handover/ paperwork. Paid for hours worked (not paid for sleep hours).	6 x Band6 MW plus 6 x Band4 MSW. Non-clinical B7 joint CoC Team leader for all MCoC teams in service. No linked obstetrician. Difficulty accessing doctors to consult on low-risk women who develop complications.	Mostly home visits, some clinics.	Home visits, many done by MSW who also provide continuity.	5 night on-calls per month to cover intrapartum care. Team share daytime intrapartum care. MSW second homebirths. Out of guidelines homebirths seconded by MW from other CoC team. HB women call the MW in labour for home assessment. Perceived very good CoC for HB women.	Sometimes do additional OC to cover colleagues' AL. Team member writes off-duty, taking into account requests.	Working 5 days allows for high levels of AN CoC from named MW and better IP CoC. Instagram page supports team identity and helps women get to know team midwives.	Limited intrapartum CoC from named midwife as only 1 OC MW most weeks (although better than other models as available for birth care most days). Used to do one OC for every 3 shifts, but this was cut to 5/month, halving the uplift paid and causing resentment. Perceived to have been put in place to reduce cost of new CoC teams. Second at HB replaced by well-trained MSWs.	Clarity of roles and responsibilities with MW/MSW model perceived as a benefit by MWs, MSWs and managers. Because of MSWs, MW do less PN CoC. Escalation means that they find it difficult to fill OC bank shifts.
3 Long Day model	Caseload 36/pa/WTE drawn from local GP practices (slightly lower for team with large geographical area to account for driving time). If too many women at one GP they move them to another team. Teams second each other for HB. Not part of escalation but will help out in the unit if they are able to when asked (not pressurised).	The 3 days involve: x1 12-hour day OC per week (OC for team women only: will help with visits/paperwork if not called out); x1 12-hour night (alternate OC/shift to help staff the ward - rostered onto a day off); x1 12-hour community day (to cover the MW's clinic and PN visits for the team). Some teams only have monthly meetings, scheduled after 'Meet the Midwife' when most midwives come in. Weekly meetings can be challenging as most days there are only 1-2 midwives working. Not all teams have an office base.	Paid for the hours they work so if on-call during the day they do other work if not called; for night on-calls if not called they make up hours on another day. Paid a set rate of £19.50 for OC periods plus the hours worked. Not paid for sleep hours.	8 B6 MW; Shared MSW. Non-clinical B7 joint team CoC leader. Most teams have linked obstetrician for consults, but some are specialists (e.g. diabetes) so won't see all team women.	Mostly antenatal clinics, some home visits	Home visits, named MW tries to see her women for discharge.	1 day OC and 1 night - 2 teams alternate weeks doing on-calls (OC) or shifts to provide 'part of the unit numbers' each night. Other teams more flexible. Teams second each other for HB. Women call the unit when in labour. Labour Ward coordinator allocates work considering skill mix. Midwives mentioned that they are called out 'more often than not' on OC days.	Midwives who live far away can choose to do all their nights as shifts. MW can choose to work more days and are paid for the hours they work. MW can come in on OC days or do some work from home. Team writes their own off-duty.	Many midwives find that limiting their work week to 3 long days is good for their work-life balance - high take-up of CoC models in this service and most teams fully staffed. Labour ward coordinators like maintaining control of skill mix for labour care across the service.	As only rostered to work one 12-hour community day a week to cover their own clinics and all the team visits, it can be hard to cover the work and some midwives work on additional days. It also leads to poorer PN CoC. Not having a dedicated MSW for each team reduces CoC and makes it hard to cover work. (A dedicated MSW also provides an element of continuity for women, helping with antenatal bloods, taking part in 'Meet the Midwife' sessions and covering some postnatal visits).	High levels of team CoC but perception of low named midwife IP & PN CoC due to 3 long day model. Informational continuity limited by some teams not being able to hold weekly meetings so not aware of wider caseload. If not called out at night may struggle to work their allocated hours (hence some choose to work shifts instead). Some MW would like to do all OC but can't change this as needed in the unit numbers.
Self-rostered model	Caseload 36-40 at any one time (not including postnatal women: higher than recommended). GP-	MW have 5-day OC & 5 night OC rostered every month. Otherwise decide themselves when to work & share	4.5% uplift on salary rather than OC payment, but paid 1/2 hour of each OC for	Aiming for 7.6 WTE MW. No MSW or admin support. Non-clinical joint CoC	Mostly clinics, some home visits (i.e.,	On weekends only OC midwife is working so if they are called in essential visits are handed to	Provide IP care in MLU, OU and planned CS & act as second MW for homebirth team births (joint care with HB team). Planned CS	MW have a lot of flexibility to move any of their schedule other than the OC. Team member	Midwives very committed to the model, the women and the team. Sharing an office with another CoC team means that they work closely together.	Caseload feels high to midwives and escalation is a significant burden. Midwives working way over hours due to work/life balance issued.	Escalation uses their work time to look after non-team women and makes it harder for them to cover their own work. The team have been working way over

	based, don't take referrals for women from other areas who need continuity (i.e vulnerable). Weekly meetings held to discuss women >36/40, safeguarding, reflections. Monthly MtM.	their schedule with the team the week before. Two CoC teams share an office (not near clinics).	handover/ paperwork plus hours worked (not paid for sleep hours). They log hours worked and have 'time off in lieu' (TOIL) if over their hours. Paid 'bank' for escalation as MWs were called for escalation often leading to excess hours.	team leader. No linked obstetrician - difficulty accessing doctors to consult about low-risk women.	at 36/40). Clinic appointments are 45 minutes (compared to 15 minutes for traditional).	other teams. Otherwise good PN CoC.	easiest for named MW to provide IP CoC as can move their schedule, so better continuity for these women. Women call unit rather than named or team midwife when they go into labour.	assigns OC, taking into account requests, but otherwise completely self-rostered.		Decision to pay bank for escalation as reduced resentment but not addressed long hours worked. Perception that midwives are burning out.	their hours & not able to get time back. GP-based caseloads makes it difficult to manage the size of the caseload. Traditional midwives also have higher caseloads than they should - recognised problem due to staffing issues at site.
GP-based teams & caseload	Caseload of 30-40/WTE at any one time (higher than recommended). MW with high safeguarding has a caseload of 25. Meet as a team monthly and most do monthly Meet the Midwife. 1st for escalation during the day and regularly called in to cover planned CS list. Sometimes asked to cover Traditional clinics. At night Traditional team midwife OC is 1st for escalation.	One team does: 12-hour night OC onto work day plus 4 short days (one of them 13.00-21.00 to cover IP). Another does one 12-hour night OC, 3 short days and one 12-hour day shift (to cover IP for the team). They were working an extra shift a month to make up hours, now have agreed to work an extra half-hour every day instead. Have a buddy system (one midwife from the community and one from the unit) who share their caseload. Most teams have access to clinical rooms in GP surgery or family hub but not to an office base.	Midwives receive an on-call payment plus paid for hours worked. Also paid for rest time during day before OC, and for sleep hours after an on-call.	8 WTE B6 Midwives & an MSW - some teams currently under-staffed. Share non-clinical B7 CoC team leader. Two B7 ward coordinators seconded into CoC teams for six months to familiarise them with model. Some teams have linked obstetricians, but due to specialisations they do not see all team women, and were frustrated that MW would not see all their women.	Buddy midwives provide most AN care for their combined caseloads, although other members of team may cover their clinics.	Perceive that they give good PN care. Named MW, MW who gave IP care and MSW who saw woman at booking will all try to see her PN.	Prioritise IP care for their women (other team members may cover their clinic). Achieve close to 100% team IP CoC. Named Midwife CoC much lower but do not keep these numbers. Women call the unit when they go into labour, which means that some initial labour care may be provided by hospital-based midwives.	Like working as buddies - good for skill mix. They can choose their own model of working; team member writes off-duty. Have flexibility about how they spend their time (i.e., prioritising IP care), can accept returners.	Midwives like working in this way (i.e., in MCoC model), they feel it is good for the women and is very good for their own skill-mix.	Being part of escalation is challenging for midwives and makes it difficult to manage their workloads. Caseloads based on GP practices challenging for managing caseload mix and numbers and also created additional work caring for women from GP practice postnatally who had given birth at other hospitals.	Midwives like working as buddies, but it also increases the caseload - one said she would rather work on her own with a smaller caseload. This may be a function of the fact that teams are running above recommended caseload numbers. Labour ward coordinators feels that doing triage and starting off labour care before midwife can attend adds significantly to their workload.

3.2 Acceptability of the model to organisations and staff

3.2.1 Perceived and objective benefits:

The benefits associated with MCoC were clear to the individuals completing the survey (mainly system or implementation leaders) including clinical outcomes, satisfaction with care and psychosocial benefits. However, while 90% reported awareness of the evidence on a range of clinical and other benefits, the level of awareness they reported amongst midwives generally was somewhat lower at 71% (see figure 2). One follow-up interview respondent highlighted that although implementation in a large inner-city service may be more challenging, they felt it was more important because 'BAME women would benefit from the more relational care'.
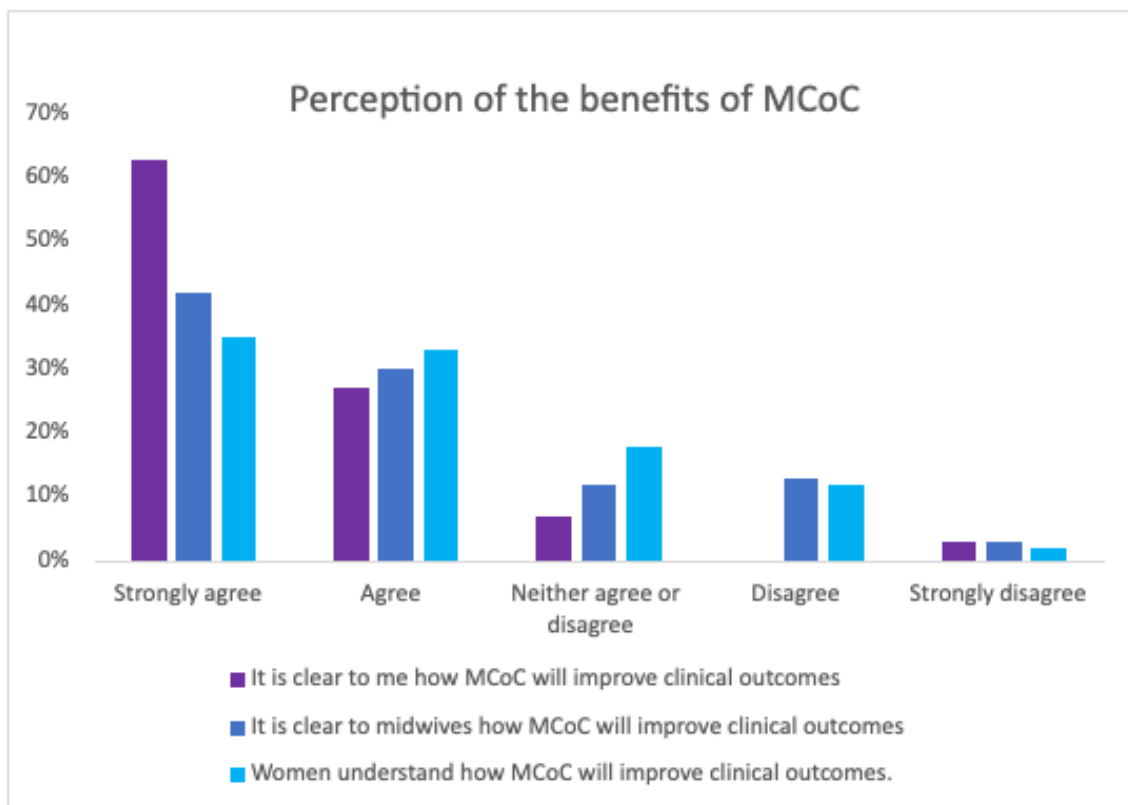

Figure 2. Perception of benefits associated with MCoC (Survey responses N=60).

In the case study sites, there were variation in understanding among both senior staff and midwives. In one Trust, with a high level of implementation, regular outcome audits were shared in accessible formats enabling midwives and local stakeholders to see the benefits identified in research working in their own service. Midwives highlighted the value of continuity of carer in their area, with high levels of socioeconomic deprivation. One midwife commented on the time it had taken for a woman with mental health problems to 'open up to me' enabling a referral for support to be made. Midwives talked about the positive outcomes they were observing, and managers commented that this translated into professional satisfaction and was attracting newly qualified midwives to the service.

<u>Midwives' perceptions</u>
In contrast, at another Trust, difficulty in accessing and sharing useable data due to problems with IT and staffing was reflected in widely differing views among midwives. MCoC midwives felt clear about the benefits, '*they seem to open up to you more...you seem to have more in depth conversations' (MW4.T1)* and the local MVP, who were supportive of the plans for implementation and MCoC, also reported very positive views, '*women and families love it, midwives love it' (MVP lead).* Despite this, some midwives in the units expressed concerns that MCoC would lead to safety problems and was not valued by women:

"Continuity is not something I want to be part of as I feel it does not better the women in any way. Nor the staff' (anon) and '*The fact that this does not benefit the women and we keep saying it does really concern me. It's emperor's new clothes' (anon)* "

This was reflected by an interview with another service lead, who reported that while midwives working in the teams had very positive views of the care outcomes and did not want to change their way of working, some midwives in the service believed that the model was not safe. In this site, a lack of awareness of potential benefits appeared linked to a view among a small number of midwives that implementation was being done to further the career ambitions of managers rather than to improve care. Case study observations suggested this was a regional issue as implementation of MCoC was lower across the region than in this service, and a local LMNS (Local Maternity and Neonatal System) meeting focused on improving personalised care did not appear to identify or discuss any connections with continuity of carer.

Midwives working in MCoC teams in this site also reported that GP attachment (caseload based on a GP surgery's patients) for their caseloads limited the benefits for women, as these were not always in the most deprived areas. Instead, they argued that a geographically-based approach would be more effective as well as more manageable for caseload, allowing vulnerable women to have continuity of carer. In addition, these teams also needed to provide antenatal care for women attached to the practice but planning birth in other hospitals, adding to caseload, and reducing overall continuity capacity. Some MCoC midwives commented that having a team midwife (rather than the named midwife) conducting bookings, as happened in this service, enabled women to meet more midwives, indicating that some may not appreciate the potential health promotion benefits (as reflected in lower rates of fetal loss and preterm birth in MCoC), as well as management advantages of conducting their own caseload booking visits.

<u>Importance of good data for local perceptions</u>
In another service, where several MCoC teams had been disbanded, an interviewee suggested that there was a need to have capacity to provide data that might show that the benefits found in research were occurring locally. She highlighted that reliability of data was important since unreliable data, not cleaned or controlled for confounders, could also have a negative impact. A lack of local expertise and capacity for quantitative data analysis was a challenge identified by several participants. Similarly, an interview from a manager in a service with several MCoC teams emphasised the importance of good quality information to ensure that all maternity professionals understood the effects, not just for clinical outcomes but also workforce impact. Several staff had seen MCoC implementation as a cause of staffing problems in the service and considered that disbanding them would resolve this. She explained how detailed workforce modelling successfully challenged this perception:

'the in-patient service were kind of like oh great, here comes the cavalry, we'll get them all back in [if MCoC teams were disbanded] and you know, and when we actually did the piece of work to say how, how that would improve the rosters or not in the in-patient area, people were quite surprised

because what they'd forgotten was the vast majority of the staff actually came from the community'
(P76).

Thirty-four survey respondents (57%) suggested benefits for professionals of improved work-life balance and satisfaction in MCoC working. Several reported liking the '*flexible working'(P7);* '*autonomy of practice and running my own diary around my family needs'(P54)* and that the role as a midwife felt fulfilling and joyful again. Respondents also reported improved staff morale and wellbeing, midwives wanting to stay in the workforce, and reduction in sickness and turnover. Another two common themes (n=16, 27%) included improved autonomy and professional identity and increased personal and professional development. Implementing MCoC in their service meant greater competencies; wider skill sets and knowledge; and being able to maintain a wide range of clinical skills. Specifically, respondents reported that it worked well in '*times of acuity, being able to utilise staff' (P29)* and *'I could plan my week the way I want to...' (P4).* Less common themes included improved team-working (n=5), improved relationships with women (n=6), allowed a different way of working (n=3), recognition of gold standard care (n=3) and improved evidence-based outcomes (n=3).

A service lead interview from a service with no MCoC teams currently running explained that the service had sufficient midwives keen to work in the model to staff 2-3 teams and those who worked in the team that had been implemented '*absolutely loved it*' (P34). She further commented that some midwives had left the service when this team was disbanded because of the impact of midwifery staffing pressures.

This awareness of benefits among midwives who had experience of MCoC was echoed by MCoC midwives in the case study sites, who reported a similar range of benefits and satisfaction with their work. In site 3, managers reported that a key reason for not disbanding a MCoC team had been that the midwives had pleaded with managers to retain it, leading to a concern midwives would leave if no longer able to work this way. However, this finding was not consistent across all midwives.

Conversely, another interviewee, in a service with a mix of MCoC and traditional community teams, explained that some midwives in the service – typically those that had worked in a single area for a long time - believed that intrapartum continuity did not matter to women who just wanted their midwives to be competent, and that working across areas would make them less competent. This was despite being a service where several midwives had worked across hospital and community practice for some years before introduction of formal MCoC teams.

Perceptions of senior staff and obstetricians
Another interviewee, in a service that had implemented several MCoC teams later reduced to one and now set to be paused and absorbed into traditional community teams, stated that senior leadership in the service did not value the model:

'there wasn't the drive to do this from the senior, senior leadership, there wasn't the belief that that was the way that we should be doing things.' (P32)

When asked what their views were, the interviewee explained:

'a lot of consultants have said "well, you know, that group of women in the, in [author's name] systematic review, you know, it was a different group of women and we don't really believe it, so" … and I think that kind of filters it out when you've not got senior obstetricians and very senior midwives believing in it, and their attitudes that filters down to everybody else' (P32)

As a result, the implementation had been 'organic' rather than formally planned, with interested midwives setting up the teams. However, the service did not conduct any modelling and did not have sufficient midwives employed to support the model.

An interviewee in another service which had disbanded teams explained that senior managers had no experience or understanding of the model and lacked community experience and so did not have an appreciation of what was needed – for example, a base such as a community hub, which was not facilitated even though the interviewee had identified an unused NHS building that could be adopted. Similarly, the interviewee felt obstetricians were not engaged, only discussing MCoC when they were concerned that women with a named midwife would jump the induction queue. This same view was echoed by an obstetrician interviewed from a different service, who felt that the introduction of MCoC teams with intrapartum continuity had taken midwives away from the labour ward.

As a community matron given responsibility for implementation, this interviewee felt that they had also needed more guidance in how to manage such a change, and that they had struggled to work out how to balance this role without appearing controlling to the MCoC team midwives. The interviewee described how they had become demoralised by lack of understanding and support from senior leaders in midwifery or obstetrics. Another survey interviewee explained that the teams in their service having linked obstetricians worked very well yet some obstetricians without these links had negative views, indicating that their engagement work should have focused more fully on all maternity professionals and on intrapartum core staff as well as those who were being invited to join MCoC teams: '*This is not a midwifery thing, this is a maternity thing*' (P76).

The case studies illuminated contrasts in views between midwives who were working in MCoC teams and those who had not experienced this. Most MCoC midwives, across all three case study sites, talked about love of their work and an enhanced ability to provide good care, for example:

*Everybody in hospital hated their jobs, everybody here loved their jobs (*M5)

*Being a traditional midwife felt like feeding women into the system. (*M2)

But not all felt it fitted their lives, especially if they had young children and this was a common view amongst midwives not working in this way, for example:

I didn't want to work at night. I wanted the stability of a 9-5 and for my body clock to be the same as my husband and children ... It's hard to teach old dogs new tricks - you need to focus on students. (M6)

3.2.2 Local understandings of the mechanisms of effect of MCOC:

Relatively few interview participants talked about mechanisms by which benefits of MCoC are achieved, suggesting a gap in understanding of why this model of care might be important to services among some professionals. In case study site 1, however, the Trust-wide safety champion was supportive of implementation because they clearly saw the link between continuity of care and safety both in maternity and in other healthcare specialities. Midwives practising in MCoC teams described a range of ways in which they felt the care enhanced safety, such as having a greater awareness of issues affecting their women's health and being able to focus time on listening to them and addressing these. Mechanisms for safety were highlighted where midwives knowing women's history and circumstances were able to pick up on problems more quickly or felt that women opened up to them more, ensuring appropriate referrals were made. Similarly, MCoC midwives in site 3, who are working in urban socially deprived areas, described options such as being able to tailor level and timing of support to different needs, develop personalised care plans, plan continuity of interpreters, and provide additional support to those with complications. In some teams, additional forms of communication such as WhatsApp or text messaging could be used to keep in touch with women who had concerns. Midwives were observed to plan their work flexibly to accommodate specific needs, for example popping into the hospital to check up on a woman admitted with bleeding.

Several respondents commented on the value of working across areas and with mixed-risk caseloads. A preceptee in one site said that working in an MCoC team meant that she got experience caring for high-risk women on labour ward sooner because they were on her caseload: if she had been working in the ward she would have been 'protected' as a Band 5 and it would have taken her longer to build these skills. The breadth of skills needed by MCoC midwives also posed an implementation challenge, since many midwives had worked in a single area for a long time and felt, or were perceived to be, deskilled in other areas of practice. Midwives felt that individual skills assessment and support plans were essential.

A further feature highlighted by professionals in site 1 was the level of professional trust the model had engendered. Midwives were afforded flexibility and took responsibility for their caseloads individually and within their teams; they were trusted to work flexibly, including working from home, and not required to have their working hours and patterns monitored. This understanding of the approach was not universal, however, and in some interviews, managers reported tensions created by their own need to have oversight of the midwives' work and midwives' feelings of not being given the flexibility to manage their caseloads. A manager interviewed in another service with several current MCoC teams explained that while their midwives had a high degree of autonomy, they had also needed good hands-on management support, especially in the settling in period of adjustment. Having team managers at band 7 was important to ensure balanced caseloads, support the midwives in working out time management and in setting boundaries and appropriate expectations. One limitation of having a shared band 7 team leader, as observed in the case study sites, was that they could lose respect if they were not doing clinical work.

Another perceived mechanism of benefit reported by midwives was the capacity to support informed choice discussions. Nevertheless, high and increasing overall rates of inductions and caesarean births were limiting the impact they felt they could make in terms of intervention rates. Midwives in another site reported that although '*out of guidelines*' choices reducing medicalisation (such as a vaginal birth after caesarean section at home), had to be discussed in a multi-disciplinary meeting, '*out of guidelines*' choices which increased medicalisation (such as planned caesarean at

maternal request), were agreed automatically. This site's caesarean rate had risen to 40% since the Ockenden report and both midwives and obstetricians expressed concern about the implications for future safety of women but felt powerless not to offer this.

3.2.3 Perceived feasibility:

Although most survey participants reported that it was somewhat feasible (43.3%) or very feasible (16.7%) to implement MCoC in their area, a third reported that it was not very feasible. Out of 62 respondents, 54% said they do not feel able to deliver the continuity that women want from maternity services, with 40% responding that they do feel able to deliver this and a minority of 6% saying they do not know if they feel able to deliver the continuity that women want from maternity services. Reasons given for lack of feasibility included lack of commitment and understanding from senior staff, lack of midwives, not enough midwives keen to work in this model and the considerable changes needed to the maternity service to implement MCoC. Reasons given for feasibility were good leadership and strong teams with few staff changes.

In a follow-up interview from one site where the single MCoC team had been disbanded, acute staffing shortage was cited as the key reason. Escalation to cover shortages on both labour ward and in traditional community teams was so common that the respondent explained, the team effectively ended up being pulled back into a traditional community team pattern of work. A range of other factors were highlighted in this case, such as instability in midwifery leadership and lack of Trust board support, but the current supportive head of midwifery considered that re-establishment would not be feasible unless vacancy rates fell to 5%.

The site with highest implementation of MCoC teams already covering over 70% of their women and a low vacancy rate, planned to roll the model out to all women but were struggling to see how this could be done with the existing staffing establishment, especially with limitations placed on including preceptors in MCoC teams. Other challenges were how to arrange the care for out of area women delivering at their service and in-area women delivering elsewhere, and how to transform a very well-functioning specialist 'vulnerable team' which offered high AN/PN continuity of named midwife but whose staff were very reluctant to lose some of their caseload and move to a model which included intrapartum care.

3.3 Factors contributing to implementation success:

Almost all survey respondents reported receiving support from leaders within the Trust, LMNS, regional and national NHS England teams. Where leaders such as Head of Midwifery, Deputy Head, board, LMNS or chief nurse showed commitment and support, this was reported as having an important influence on successful adoption. However, barriers cited by some also related to lack of support for or understanding of the model by senior leaders within their service. Table 2 shows that support experienced was partial or limited in many cases:

Table 2. Summary of survey findings on leadership support

Received support from…	Yes	To some extent	No, not really
Senior leaders in your service (n=57)	52.6%	35.1%	12.3%
Local Maternity and Neonatal System (n=57)	59.6%	24.6%	15.8%
Regional NHS England team (n=56)	50%	26.8%	23.2%
National NHS England team (n=56)	35.7%	39.3%	25%

An interviewee from a Trust with several MCoC teams emphasised the importance of having worked with their Trust board and local MVP in the planning stage, as well as the LMNS. LMNS links were useful as a source of funding and for engaging and informing GPs and health visitors. However, the lack of a consistent regional approach, which might have been supported by LMNS engagement was cited as a barrier to scaling-up since none of the surrounding services had implemented MCoC. LMNS formation was proposed alongside the Better Births report and seen as part of the implementation strategy but the development of MCoC teams in some areas may have preceded their full establishment.

Strategies proposed for embedding MCoC including myth-busting about how MCoC models work and promoting knowledge of the benefits better, such as by sharing stories of women to help staff to understand the value, safety and positive impact of MCoC; focusing on continuity and spreading positivity. Other strategies proposed were whole-scale implementation, rolling out more teams to provide continuity to all women; campaigning nationally and making it the default model of care. Other themes included training and education in the model (n=3); focusing on antenatal continuity (n=1) and ensuring a sustainable model for staffing and services (n=1). Funding also appeared to be a factor which supported successful implementation. In the case study sites it appeared that more time spent planning and specific transformation funding supported preparation of MCoC teams and had a positive impact on their sustainability. Funding was used to enable supernumerary time for staff training and team building (covered with bank and agency staff) and ongoing costs such as increased renumeration for teams and paying for venues and pool cars (in one site with a big geographical area and poor public transport this was a major concern for midwives who did not want the wear-and-tear on their own cars). Six-month secondments to MCoC teams both for band 7 in-patient coordinators were put in place in one site to break down barriers and allowing midwives to take a 'try it out' approach without a long-term commitment initially was also seen as helpful.

3.3.1 Adoption:

The main factors that influenced survey respondents' Trusts to offer the MCoC model included increased interest from midwives (n=14) and to address staffing shortages and ensure safe staffing levels (n=13). Other factors included improved clinical outcomes, improved patient experience; midwife put into place to coordinate model; allowed greater focus on social deprivation and inequality groups such as black and minority ethnic women; significant commitment, influence and support from Head of Midwifery, Deputy Head, board, LMNS or chief nurse; the provision of community clinics; Better Births and NHS 5-year plan recommendation or it was 'required to do so'; funding was provided for implementation; allowed shift working rather on-calls; staff pay and Covid-19 pandemic.

Planning, preparation, and staff engagement were highlighted as key for adoption. Almost all survey participants reported that maternity professionals (midwives, maternity support workers, other healthcare professionals) had been involved in developing their MCoC (88.5% of 61 participants). This involvement included consultation events and workshops, developing team, policies, and documents as well as newsletters and training. Nonetheless, interviewees illustrated variations in the level and approach of this work. For example, one survey interviewee reflected that their engagement and preparation mainly focused on the midwives going into MCoC teams, which was valuable, but more work with labour ward core staff and obstetricians would have been valuable. See box 1 for suggestions of stakeholder groups important to engage with ahead of implementing a MCoC team and appendix 2 for examples of engagement activities.

Box 1. Stakeholder groups identified as important to engage with when implementing and sustaining MCoC teams. (These are not listed in order of importance as local context will influence who the main stakeholders are.)

Stakeholder groups

Within Trust
- Midwives (including in-patient groups and those who are sceptical)
- Midwifery Support Workers
- Obstetricians
- Neonatologists
- Safeguarding team
- Perinatal mental health team
- Professional Development Midwives, Clinical Practice Facilitators, Retention Midwives and Trust-wide professional development teams
- Professional Midwifery Advocates
- Digital midwife and IT services
- Occupational health and health and safety
- Union representatives
- Trust estates team, but also Integrative Care Board estates team
- Trust finance team
- Trust Board, Chief Nurse, Safety leads etc.
- Communications Team
- Organisational development
- Human Resources

Outside Trust
- Maternity and Neonatal Voices Partnership and other service user organisations
- Local Maternity and Neonatal System
- Regional NHS England team
- GPs
- Health visiting
- Midwifery students and local universities

There was also variation in leadership roles and level of authority to drive change, with some services having a Head of Midwifery or consultant midwife leading, and others without a clearly nominated person or a midwife on a less senior grade. Training and support for this role was varied.

In the case study with the highest level of implementation, a full year had been allowed for planning and preparation, with actions including discussion with the Trust board and trade unions, human resources, estates and finance, as well as extensive engagement with midwives. A training needs analysis was conducted for midwives and bank or agency staff were used to cover for midwives' training time. Team building days were included as the teams were created. Each was planned with a geographical patch, focused on socially deprived areas and a community hub base. In addition, management put together a business case which secured an additional £600,000 from the Trust board, which was achieved by focusing on the potential for MCoC to improve the quality of care, lower the cost of litigation and reduce the admissions to the neonatal unit. This level of local investment indicated high-level commitment and may have contributed to the high level of sustainability of MCoC teams in this area. The main weakness identified in reflection was more limited engagement with obstetricians. An interviewee in a site with a similar number of teams running described a similar approach, including training for midwives in professional and

organisational aspects, as well as clinical skills. Those who had been based in community had a period of experience on the labour ward to increase their birth attendance skills and confidence while the small number transferred from labour ward had a period of placement with existing community teams. In addition, the interviewee highlighted the importance of having set up a buddy system, pairing up midwives with a background in labour ward and community, and appointed band 7 MCoC team leads, to ensure sufficient experienced support:

'*they're supposed to be self-functioning and self-managing teams but what you need is a period of transition because most of our staff as you'll know have worked within a specific framework for a very long time and don't know how to work, some of them have evolved incredibly well. So, one particular team has always been very high functioning and self-managing, the rest found it incredibly difficult not to be worried that they weren't going to do all their hours in one week and then do more hours another week.' (P76)*

Conversely, in a site where four MCoC teams had been initiated, with intent to gradually scale-up further, but only one team was running, the process was described as rapid, with a 3 to 4-month period for engagement and training of midwives: *they hit the ground running (S1)*. Engagement events took place, and some training but with gaps in relation to autonomy and self-management and how to work in a continuity model. There was also no specific training on homebirth for midwives who had worked on labour ward, which one midwife said made her feel anxious. The speed of implementation meant it was challenging to arrange protected time for training due to existing off-duties. Several midwives commented that they had some challenges in adjusting to maintaining boundaries and would have welcomed some preparation for this. In addition, a team manager commented that they would have benefited from training in change, finance or operations management and that more engagement with obstetricians was needed. In this site the timing of implementation was rapidly affected by the Covid-19 pandemic, and two of the MCoC teams were closed down within the first few months.

'*Without Covid we might have just about got away with it... Covid helped us to pull it in before it caused harm, it was the safest thing to do. We had no way of knowing we were doing too much too soon.' (S6)*

'*Looking back in hindsight, was it all a bit rushed? I think so'. (S1)*

The need for midwives to adapt to the different way of working was often mentioned. One midwife in site 1, for example, explained that although WhatsApp messaging with women was valuable, she had to learn to mute it when off-duty and to leave the group when she was on holiday. A head of midwifery interviewed from another service, with a high level of MCoC teams sustained, highlighted the importance of facilitative but sufficiently supportive management support, including guidance on maintaining appropriate boundaries, ensuring rest when not working and planning balanced caseloads at the advised level. She felt that having Band 7 MCoC team managers had been important to support the midwives in maintaining both continuity and a sustainable approach to their work. Developing appropriate skills and approaches for managers was equally important, to ensure they could adapt their approach to management in this way. The converse problem of micro-management rather than a facilitative style that fosters autonomy was mentioned by some interviewees and illustrated by quotes from some managers for example:

'You need a manager to make sure people are pulling their weight and turning up to work on time and to check in with them.' (S8)

Although staff training was raised by survey respondents as key to adoption and sustainability, the rates of training reported indicate that around half of services did not provide a range of training support to midwives (see table 3).

Table 3. Summary of training provided to midwives offering CoC.

Training	Number of participants
On how to plan and manage work in a MCOC team	39
On managing time, workload and boundaries	38
On facilitating births in home/midwifery-led units	27
On facilitating births in obstetric units	33
Inter-professional working (working with groups/teams)	26
Working across boundaries (working with external groups)	14
Developing de-briefing, appraisal or peer support	14

While some follow-up interviewees described good plans for engagement and training of staff in preparation, this was not consistent. One, who had also described senior leaders as lacking understanding of the model, explained that the approach taken had been counter-productive as midwives were assessed and scored on clinical skills (such as suturing or new born and infant physical examination training); those scored highest were kept on the labour ward with others then assigned to community for the continuity teams, leading them to feel they demoralised and not valued. The interviewee suggested that better planning and engagement was needed, with teams set up on a more voluntary basis, with a band 7 midwife with own caseload to cover day-to-day management (such as allocation of caseloads, and checking cover) and manageable caseloads, with an on-call rather than a shift system. The frequency of training given for facilitating births in obstetric units, or conversely at home or in a midwifery unit is illustrative of established ways of working, with many midwives having worked in a community setting for many years, attending very few births (McCourt et al. 2012).   See appendix 2 for more examples of staff training.

Building blocks
Sixty percent of survey respondents agreed that the Building Blocks provided by NHS England were somewhat or very helpful, with standard operating policy to outline roles and responsibilities (74.6%), safe staffing agreement (70.2%) and review of staff skill mix (66.7%) reported to be the most useful components. Of the 47 participants who said they had used the workforce planning tool, 55% said this had been helpful to plan roll-out of MCoC teams. In some services, interviewees explained that their main implementation work had taken place before the building blocks were available but that they would use these for any future scaling up.

The three building blocks that were reported as most difficult to implement, reflecting the implementation challenges experienced in practice, were: safe staffing agreement, time allocated for team building and development, and linked obstetrician. Reasons cited included no engagement from obstetricians or senior leaders, little enthusiasm from staff and staff shortages. The lack of any estate for a base for teams was also mentioned by several respondents as a factor. One participant

suggested that team building would be better to be renamed as team safety briefs, to get the buy-in needed. The below quote captures the feedback from many:

'Safe staffing is a massive issue for the whole service - MCoC has been seen as an added headache to mangers and workforce leads. Staffing is so fragile and transient it's a constant moving narrative. The pressures on the current workforce to achieve minimal clinical commitment, mandatory training, personal development, restorative supervision and manage work life balance is immense. Adding an additional element of meaningful team building is impossible. Any team building has been utilised to maintain general morale. Securing appropriate environments for MCoC to work from has been a massive challenge along with all community midwifery services following the pandemic when community service had to be completely re-thought. Community and MCoC teams are still working out of areas that were identified at pace due to needing to be relocated out of GP space. The logistics of finding and funding appropriate accommodation suitable for service users and staff is almost impossible, extremely lengthy and compounded by other initiatives like the Family Hub pilots'. (P19).

Lack of senior commitment was often cited as a reason for lack of or difficulty in use, as illustrated by this survey respondent:

'Lack of understanding. NHS is run as a business and maternity does not come across as an area requiring investment.' (P44)

Maternity Voices Partnerships (MVP)
More than half of survey respondents (63.9% of 61 respondents) reported that their Maternity Voices Partnership (now called Maternity and Neonatal Voices Partnership) had been involved in developing their MCoC. This involvement included being part of service set-up and development, attending team launch and forums, developing promotional material and providing feedback from women. Reasons given for limited involvement included availability and understanding of MVP representatives and/or change in MVP leadership. Involvement of other local or national user organisations was less common (30.8% of 39 respondents), with LMS/LMNS and health visitors being mentioned most often.
In survey follow-up interviews, the local MVP was identified as an important stakeholder in the implementation and sustainability of MCoC. Examples given included helping develop surveys to collect feedback from women, which was important for both continuity teams to receive but also could be used to share with other stakeholders, including Trust boards. One interviewee suggested that women's requests for continuity of carer could be an important driver to support implementation. They noted that this was important in the past year when following the Ockenden recommendations the board had considered disbanding their well-functioning teams. These findings were not fully reflected in the case study sites. However, in site 1 some Whose Shoes events provided evidence that continuity would improve experience of care, helping to support the implementation case. The MVP had not been actively involved during the implementation process itself but was now involved in supporting the sustainability and roll-out of the model, for example by feeding back patient experiences and by observing and highlighting gaps in provision. In site 2, the local MVP was not active at the time of roll-out and so was not involved – in common with other services, their MVP was re-invigorated during the Covid-19 pandemic which post-dated much MCoC implementation. However, site 2's MVP now supported further implementation and had carried out a survey of local users, which showed high levels of appreciation of the MCoC teams' care when compared to those receiving traditional care at the site. In site 3, the local MVP covered several hospital Trusts in the area and was not involved in the planning or sustainability of the model in individual services, with a greater focus on area-wide issues such as access to care and parent education.

Local and national support

In terms of support from their Local Maternity and Neonatal Systems, examples included equipment funding, project support, input into building blocks, monthly meetings and moral support, shared goals and workforce planning and linking with other relevant professional groups. Two respondents mentioned that practical support was limited, but the LMNS was supportive of the concept of MCoC. In some areas, more active support was provided, including funding of LMNS-wide Better Births implementation leads.

Support from the regional NHS England implementation team included regular meetings, forums, shared learning and resources and opportunities for MCoC midwives to present their work at forums outside of their service. Negatives mentioned included having met with team leads but not teams themselves. Survey and interview respondents also described limitations in that the advice was generic and so less helpful in terms of overcoming local challenges. Support from the NHS England national implementation team included external review and help with staffing planning, team and model building through visits.

Midwifery pay

Midwifery pay was mentioned by several participants who wanted a national approach, not just a recommendation. In the case study sites a range of different payment arrangements were in place. In one, historic MCoC teams had an uplift of 9% to cover one on-call for every three shifts but this was reduced to a 4.5% uplift to covering one on-call for every four shifts. This was perceived as a way for management to reduce costs before the roll-out of further MCoC teams, rather than a reflection of work done, and several years later still caused resentment, especially as teams regularly covered colleagues' on-calls when they were on annual leave. This team did not receive any on-call payments but could claim one on-call hour as time spent on handover/paperwork. One disadvantage of this model was that midwives were only paid for contracted hours – if they worked overtime, they were encouraged to claim this back as time off in lieu, but because of escalation midwives were regularly clocking up significant unpaid overtime (in one case, 60 hours) which affected their work-life balance. Management partly addressed this by allowing midwives to be paid as a bank shift if they were escalated.

Another model used in two sites did not include an uplift but did include a £19.50 payment for on-calls. However, while in one site midwives were paid for rest hours before an on-call, and for sleep hours the following day if they had been called out, another site only paid for hours worked, leading to inequity between services. There was also variability between sites in terms of having night on-calls leading on to work-days or days off, with the latter cutting into midwives' own time. Across all the sites midwives had to keep track of their hours, which most adapted to quickly. MCoC midwives in all the case study sites felt that their work deserved additional pay because of the higher level of responsibility, safeguarding and skills that were required.

3.3.2 Adaptation and fidelity of MCoC model:

A small majority of survey respondents reported that they did not make any adaptations from the nationally recommended model to team size (54%), caseload size (58%), on-calls (60%) or having linked obstetricians (58%). When changes were made, they were mostly (63%) described as reactive due to outside circumstances rather than proactive planned changes (37%). However, there was quite wide variation in how the teams were organised and deployed in terms of cover for births 'out of hours', how caseloads were allocated, whether the teams had a working base, team leadership, level of autonomy in organising their work and whether regular team meetings or peer review sessions were used.

Survey respondents reported that most were geographical teams (75%), for women planning a homebirth (31.8%) and for women with specific conditions (29.5%). MCoC was also offered in some services to women with previous pregnancy loss, teenagers, previous caesarean births, vulnerable women including those who did not speak English, certain medical conditions, living in deprived communities or expecting twins. Some teams, conversely, were linked to GP surgeries (i.e., caring for all the women who booked with that GP), which as noted in one case study can generate challenges in managing the size and balance of caseloads.

Based on survey findings, most teams' rotas for availability (47.7%) were made up of both shifts and on calls, with 29.5% on-calls only, 12.5% shifts only, with remaining participants reporting a variety of models including 24hr service with nights covered by offsetting contracted hours, different teams in the same Trust working differently, combination of visit days and intrapartum availability. Around half of teams (52.3%) were reported to have a considerable amount of autonomy/flexibility over their own diaries, with 39.8% reporting a moderate or little amount of autonomy/flexibility. Births that were 'out of hours' were reported as organised in different ways, including in partnership within the teams, on-call shifts, rostered by manager and night-time shifts. Most midwives working in MCoC teams were reported as managing their day-to-day rotas themselves either fully (51.1%) or to some extent (35.2%).

Almost two thirds (63.6%) of teams were part of the Trust's escalation policy and were called in either often (38.6%) or sometimes (37.5%). This refers to a team or individual professional being called on at short notice in addition to their usual duties and caseload responsibilities to cover staff shortage in another area, most typically the labour ward. Similarly, MCoC midwives in site 3 described how frequent use of escalation because of staff shortages affected their experience, making it harder to persuade team members to cover on-call bank shifts, and making stress and burnout more likely; for example:

I have to be honest, I think it [escalation] was the most hideous time I'd ever had. I went off sick (S1)

I still hate being on call but at least you know the woman or about her. But now it's harder because it could be escalation. It made me so depressed, it's the lack of control, I feel like a sitting target. (M2, T1)

Another explained:

*There was a moment during Covid when the 'hero NHS' thing kicked in and everybody turned up to work so there was no escalation - we really flourished. Now we are really pushed and pulled and it is hard to have autonomy over our workload. It is like our work does not matter. (*M5.T1)

One survey follow-up interviewee (P31) explained that their service, had two teams that she described as non-compliant (with the national MCoC model), where the midwives rotated at

intervals between community and labour ward. She noted this did not meet intrapartum continuity but enabled them to provide some antenatal and postnatal continuity with midwives who were not willing to work across areas. This respondent also described the challenges of a very rural service with very large community area to cover, high house prices fuelled by tourism and many midwives who had moved into the area without family support. Nonetheless, the service had implemented four full MCoC teams.

Case study findings suggested that an initial lack of guidance nationally, as well as guidance intended to enable adaptation to local context meant that local services implemented a range of adaptations, even when their teams met the core requirements of including intrapartum care, numbers of midwives and planned caseload size. While these may have intended to address contextual factors, they also had the potential to undermine both fidelity and the experience of providing MCoC in practice. All models observed limiting the number of on-calls/shifts covered by individual midwives by having only one midwife available for intrapartum care at any time. If seconds were needed (i.e. for homebirths) they were either called from other MCoC teams or from on-calls provided by traditional teams - in one site midwives would typically do one on-call a month for escalation or to second homebirths.

In one case study site, the MCoC teams worked 3 long shifts each week: 1 day on-call, 1 night on-call/shift (most midwives alternated to support staffing in the unit) and 1 rostered 'community' long day, which facilitated good antenatal continuity by the named midwife but was reported as less effective for named midwife intrapartum and postnatal continuity, since each midwife worked on fewer days in each week. Several midwives also commented that they struggled to fit in their clinic and all the team visits in one long day. Although a few of the continuity team midwives chose to work more days each week, the 3-day week was a particular attraction of the model for some midwives, resulting in good recruitment to MCoC teams. Midwives in this service also had the autonomy to design rostering in relation to their own lives and needs, and various options for weekend and night cover were tried. An obstetrician in this site had shadowed the MCoC work and commented on the flexibility, including although most worked on-calls, one midwife had been able to opt for shifts as she lived a long distance from the hospital. One unintended consequence of this model was that there was never more than one or two midwives working each day, so they were not able to have weekly team meetings. This resulted in the midwives not being aware of all the women due to give birth, reducing informational continuity.

In two sites, the team caseloads were based on GP practices rather than geographical, leading to uneven caseload sizes which had increased to 30-40 women at any one time rather than the recommended 36 per year (27 women at any one time). While midwives in one site were aware that these caseloads were too high, at another site when the midwives '*challenged management*' they reported having been told that this was not correct and that caseloads should be 36 at any one time, excluding postnatal cover. One midwife reported that the high caseloads combined with escalation meant she now could not see herself in continuity long-term even though she loved the model. At the sites where MCoC caseload sizes were high, traditional community midwives were also dealing with much higher caseloads than recommended (in one case 250 women WTE/year) and there was a perception that there just was not enough staff to do the work and that a 'real world' analysis is needed to support further roll-out of the model:

'Continuity does demand more staff than the traditional model'. (S6)

'Continuity is labour-intensive and needs more staffing than a crude ward-based model… Nationally we need a proper review of staffing needs for continuity. We need evidence that we can deliver 100% at the same cost… The staffing model has never been robustly tested'. (S6)

'It just needs some meaningful investment to make it work'. (S1)

These quotes also reflect a widespread belief that MCoC requires a higher level of staffing, an issue that could potentially be resolved by workforce modelling.

Variation in how teams provided antenatal care was also noted, not only between teams but between midwives working within the teams. Some provided almost all their care in the form of home visits, while others only used clinics, with the majority of those in the case study sites basing their work in clinics with home visits where they were considered necessary, for example due to individual circumstances or to do the 36-week birth talk. Clinic appointments with MCoC teams were typically longer than those offered by local traditional teams, but it was noted that MCoC teams with high caseloads worked more like traditional task-orientated traditional teams with less flexibility to offer personalised care, fewer if any home visits and fewer team meetings so less aware of other women on the team's caseload.

An adaptation reported as beneficial was inclusion of a maternity support worker with MCoC teams, contributing to administrative support, parent education, blood tests and some postnatal care, and seen as an integral part of the team, also able to build relationships with women. One service's homebirth team employed six especially trained Band 4 MSWs who also seconded homebirths, rather than a second midwife. Although unconventional, this arrangement had been in place for several years and was regarded as working very well by midwives, MSWs and managers locally. The MSWs were seen as highly skilled and managers felt the roles and responsibilities of each professional at homebirths were clear, improving clarity in the decision-making process. This arrangement also addressed the fact that only one MCoC midwife was on call each night, something seen at all study sites. When a second midwife was needed (for example to second an 'out of guidelines' homebirth) a midwife from another MCoC team would be called.

An interviewee from a service with several teams which functioned in line with the advised model described an innovation linking MCoC care with a preterm birth pathway including a prevention clinic and link with a specialist obstetrician. She commented that they had seen a highly significant drop in preterm birth rates locally, although it was not possible to extrapolate the roles played by continuity per-se from other elements of the pathway. Another service had piloted integrating a group care approach with their '*caseloading*' teams, where a group of women in their catchment area would have antenatal care in a group. With an on-call team rota for births out-of-hours, the midwives felt this increased the likelihood of women knowing the midwife who attended them in labour and was a source of peer support for the women they cared for.

3.3.3 Scaling-up and sustainability:

Strategies cited by survey respondents included work to increase staff awareness of the benefits of MCoC, to improve communication from management to staff and to develop support strategies for all staff such as team building and listening events. A focus on staff and staffing levels such as providing allocated admin time and time to work on caseloads were also recommended.
A range of factors were cited as influencing sustainability at local level. The following quotes from survey respondents are illustrative:

'The need to have caseloads and stick to them if you go over for any reason the model is unsustainable and fragile'. (P36).

'Having a minimum safe staffing to work - individualised for each area plus more guidance on sustaining the model'. (P72).

'There is not enough information about how you maintain your core staff within the unit whilst implementing MCoC and how this can be safely provided/funded and staffed' (P64).

There was general recognition in the case study sites that scaling up and sustaining a person-centred and midwifery led model requires a full complement of midwifery staff. Teams in two of the three case study sites had caseloads larger than the recommended number and were regularly called on for 'escalation' because of staff shortages. In site 2, for example, in the last audited month MCoC teams had been called on for escalation overnight on five days, typically for a full shift of 11-12 hours. In one site, midwives explained that in addition to staffing challenges, there was a lack of understanding of how their caseloads and on-calls work:

'I don't think that people in the hospital understand how we work, they think we're free to come in because we are on call' (M3.T2)

Managers in this site explained that the approach had not been planned this way, but escalation was introduced in response to the Covid-19 pandemic, negatively affecting the midwives' morale. In this and some other services, reliance for escalation mainly fell to MCoC teams as traditional community team midwives were perceived as lacking in birth care experience. In one service, senior management reported that a major incentive for keeping MCoC teams going was the midwives' availability for escalation *'They are keeping the hospital afloat'* (S8).

A further issue identified in survey follow up interviews and in case study sites was difficulty in operating a system for MCoC team cover, especially on-calls for births, which had been designed for traditional community teams. MCoC midwives in various services faced having to conduct additional work to 'make up hours' if they had been on-call and not called out for a birth. This was illustrated by an interview respondent who explained that the electronic system for allocating rosters was designed based on an assumption of shift-systems and was ill-suited to on-calls or the pattern of work needed to support MCoC:

''Allocate Health' roster. It's not set up to ... it likes set shifts and set shift patterns. So, you need an electronic rostering system that makes it easier for a more flexible approach to working. So, yeah, so that links-in to what I was saying about actually allowing the teams to have that flexibility to, you know, change their hours and work things out' (P34)

This pattern created complexity and financial concerns for midwives and managers prompting a tendency to prefer shift approaches, where work and payment are guaranteed, even though an on-call approach was understood to be better tailored to MCoC working. Some midwives in case study sites also explained that they found adjusting to the uncertainty of on-calls (the fact you may not be called) difficult, when compared with shifts.

Survey respondents were asked to list the top three factors influencing MCoC sustainability in their area. Consistent issues reported by several participants included recruitment and retention of midwives, midwives not wanting to work in continuity teams (due to perceptions about burnout and/or family commitments), MCoC teams being part of escalation, need for facilities such as community/family hubs, salary uplift for those working in MCoC teams, Trust support and leadership, student midwives being supported to work in continuity teams and clarity that this is the model that NHS England are committed to implement in light of the Ockenden report.

Some respondents suggested that part of the key to scale-up was to implement on a larger-scale so that the overall benefits could be realised, but this poses challenges in terms of how to bring midwives, many of whom do not work in this model, with you. One interviewee, despite not feeling

clear how full scale-up could be achieved in her service, even with better staffing and midwives in MCoC teams who 'loved their work' commented:

'I was on a call recently with (neighbouring county) and they're almost, they're going to be at a hundred per cent at the end of the year, midwives want … and I think it's that critical mass you've got to get to, and we didn't ever get there, we didn't ever get to a point where there were nearly more midwives doing it than not to kind of, um, convince everybody else that it was a great way to be working' (P32).

This interviewee viewed the flexibility of MCoC team midwives working out their own working and on-call arrangements as crucial to their wish to continue working this way:

'They have a really good work life balance, they enjoy being midwives, um, they, they feel and know that they're making a difference to a woman, that that group of women has a very high level of vulnerability, there's a lot of safeguarding, there's a lot of mental health. Um, and so, they, they do talk about making a difference with those women, you know, that the women can text them, the women can get hold of them easily, the women tell them thanks that, you know, if you're seeing five or six different midwives across your pregnancy probably wouldn't have been told' (P32)

She also considered that this flexibility was only possible with an on-call rather than shift system where midwives do not need to work if there are no women in their team in labour and they don't have to make up hours as a result. More commonly, we observed arrangements (e.g., in case study sites 2 and 3) where on-call midwives were expected to do this, in addition to their caseload work, if not called out. Only one site had teams which were not part of escalation, and it was notable that when the unit asked for support, they would go in and 'help' when they had capacity – an important element in this was the feeling that they were not pressured to go in and if they did not have capacity due to their own workload, this was respected by the unit.

When asked about future plans, the majority of survey respondents reported that they would increase the number of MCoC teams in the next two years; either full scale-up (7.8%), increasing only for priority groups (29.4%) or incrementally starting with a small increase in provision (23.5%). Remaining participants said they would not increase teams (15.7%) or that it was unlikely (23.5%). For those who planned to increase MCoC teams, a few planned to change their model of provision to change who was offered MCoC, change to shifts from on calls or to include intrapartum continuity. Conversely, an interviewee from one site explained they were changing from shifts to on-calls, as they found shifts did not work for MCoC. Most were however undecided as to whether they would change their model of MCoC. In the case study sites, future implementation was going to focus on moving away from a GP model towards a geographical model to enable MCoC teams to better serve the most vulnerable populations.

Several interviewees spoke about the enthusiasm that newly qualified midwives had for continuity which was seen as encouraging and provided confidence regarding sustaining already established teams and future scale-up. The benefit of this was that if spending too long in a traditional model either in community or hospital *'you might miss the boat a bit, people get scared about coming out'* (P5). In these cases, there was a strict policy of one preceptee per team and with support from team leaders. Local variations of additional support included regular hospital shifts to get intrapartum care experience and to not attend on calls on their own. One interviewee had experience of putting newly recruited international midwives into their continuity teams with limited success due to differences in care practice.

'Well, when you've only got new midwives coming through, who are newly qualified, it's very difficult then, you know, not to, to allow them to join a team, if, especially, as that's how they're being trained as a student, to deliver best care' (P89)

Another interviewee highlighted that the main interest in joining MCoC teams at the stage of considering further scale-up was the newly qualified midwives. The service had 3 preceptorship packages: intrapartum, MCoC and traditional community team based:

'Pretty confident because our students are coming through requesting to join those teams to do their preceptorships, so that's how we will keep that pipeline going. I think moving forward any kind of scale-up now has to be based on "where are we with our workforce?", more engagement with our workforce but also thinking about the threats locally. So, our unit is not a million miles away from another six or eight units' (P31)

Similarly, in another site where implementation had been pulled back to a single MCoC team the lead commented '*I think, within an organisation, there is a saturation point of staff that want to work in this way ... you can't force staff to work in an availability kind of model* but then added...

'*the newer staff coming through, the younger staff that are coming through from the universities very much, er, you know, I'll get that asked quite a lot, "will you be doing any more teams? we're thinking of coming to work in [name of place]", so that's positive and I think moving forward, this has to be a long-term plan' (P89)*

Continuing to communicate the vision for and benefits of MCoC was also highlighted as important. Lack of full 'buy-in' from the service, or arguments that this is not important to women and families could be countered by communication with local communities and reporting back on their experiences to reinforce that the benefits found in formal evidence were relevant and realised locally. In some services, the MVP played a key role in this. In one case study site, the MCoC teams had a positive experience of using social media to share information with local communities, However, initially their service's communications department had not supported them using such forms of communication and the homebirth team reported being asked to stop using social media during the Covid-19 pandemic because it was creating feelings of unfairness among midwives in other local services who had closed their homebirth services.

3.4 Barriers to successful implementation:
A range of barriers to implementing MCoC were cited. Survey respondents highlighted a lack of knowledge and engagement from the Trust board and obstetricians. A minority of respondents also raised concerns regarding staff skill mix, lack of core staff, staff not liking the model or having concerns about on-calls. The impact of low midwifery staffing levels was further influenced by low morale amongst midwives.

Other contextual factors were highlighted by survey respondents, most specifically the impact of Covid-19 and of safety inquiries. Midwives in case study site 2 repeatedly cited the impact of the Ockenden report on midwives. While some commented that this report had implied that MCoC was not safe, others cited general impact creating a climate of anxiety and fear, and low staff morale. An interviewee from another Trust described the impact of the NHSE letter removing targets in September 2022 following the Ockenden Report as potentially destructive for the service. The Trust board had initially responded by proposing to disband their well-functioning teams, leading to general climate of uncertainty in the service and distress among midwives working in the teams
'If you're going to send such a significant letter for organisations such as ours if you think of the journey that we've been on to get to that point. We'd settled all the noise down and that just, it was

like a great big gallon of petrol that got poured all over it or all over again and inflamed the situation hugely, made a lot of our staff feel that this is it now, we tried to tell them now they're being told by somebody else erm and they're going to have to stop ... my question would be back to NHSE, why did you allow somebody to make a recommendation nationally [referring to the Ockenden report] that was not based in evidence and was not a reflection on the, and there was no continuity at the unit in which that person was investigating at the time. So, you know, we talk all the time don't we about evidence-based practice, evidence-based recommendations, there was no evidence to that recommendation' (P76)

Several participants mentioned the Ockenden report and its recommendations as negatively impacting the implementation of MCoC teams. It must be noted however that the report was commissioned by the Department of Health and Social Care as an independent report. It was not commissioned by NHS England and it would not be in NHS England's remit or be appropriate to influence the report's recommendations.

In two case-study sites, all other local services had immediately stopped their MCoC teams following receipt of the NHS England letter. It is important to note that both the Ockenden Report and the letter ([NHSE 2022](#)) respondents referred to did not advocate disbanding of MCoC teams but advised NHS Trusts to assess their staffing situation and decide on this basis whether to continue existing MCoC provision and roll-out, maintain current provision while pausing roll-out, or to suspend the provision if they cannot meet safe minimum staffing requirements. However, the local interpretation of the recommendations was what drove responses, and may have been influenced by factors discussed here, including lack of reliable data on staffing, or lack of understanding of and institutional commitment to the model as well as specific lack of midwifery staff.

In the case studies, we identified varying approaches to inclusion of newly qualified midwives. In site 1, preceptee midwives had been included in MCoC working but following the Ockenden report they had to reduce this, and now included them in a more limited way, alongside labour ward shifts. In site 2, preceptorship midwives had been included in teams, well supported by senior midwives, but were now not able to join MCoC teams at all, whereas site 3 had a specific preceptorship pathway which would allow midwives to join teams within 4-6 months of starting, although midwives who had trained in different units without experience of MCoC during their training reported missing this opportunity because of lack of awareness of it or lack of confidence in being able to work in this way. The pathway was supported by having practice development midwives with an on-call 24/7 rota to support preceptees and inexperienced community midwives.

In some services, by contrast, there was a lack of sufficient support for newly qualified midwives joining MCoC teams. For example, one survey respondent had experience of being newly qualified and working in a MCoC team almost immediately. The experience was described as difficult due to being new to the Trust, a lack of training and support and '*because of the lack of staff I was basically just thrown in the deep end'* (P11).

One interviewee saw the lack of high-level support for inclusion of more recently qualified midwives as an unnecessary barrier to implementation:

'I really disagree with Donna Ockenden saying you shouldn't put band 5s in community. …if you've got one band 5 surrounded by a team of experienced band 6s and they're a really close-knit team, and they're not having huge caseloads, there absolutely should be the place for band 5s to go. And, it's where the band 5s want to go, because they're the people that have known this and trained in this, and we should be embracing it, and allowing them to work in the way that they want to.

Otherwise, you bring them into the unit, they work in the unit for three years, and then they don't want to do it anymore' (P34)

In another site, with a relatively high current level of implementation, managers reported that their plans to scale up further would be negatively affected by the exclusion of preceptorship midwives and so managers were discussing approaches to inclusion alongside sufficient labour ward experience: each would be attached to a MCoC team but without a personal caseload initially, and with specific days on the labour ward. Plans to support scale-up included further work on obstetrician engagement, large-scale change management training and ensuring continuing leadership support.

The local MVP in this site was now engaged with the process and supported the plan for converting the existing team focused on vulnerable women to a full continuity approach. An adapted team for midwives not keen to work in full continuity (for example because of travel distance to hospital) was suggested by some midwives, such as community-hospital rotation team. Refreshing the weekly team meetings held in early phases for new teams was also cited as important for informational continuity (MCoC midwives knowing about all the midwives on the team's caseload), alongside appointment of team leaders. It was emphasised that midwives' happiness with MCoC working was reflected in a low midwifery vacancy rate. Challenges raised by midwives included uneven caseloads resulting from GP-surgery based teams; they proposed geographical teams with an office base in a community hub as alternative and having a manageable caseload enabling them to include home visits if appropriate and maintain work-life balance. The need to improve IT systems to reduce time burden and to enable better monitoring and sharing of outcomes was also proposed. This also requires training in data analysis. Inclusion of a maternity support worker in each team was also under consideration, taking account of the high levels of socioeconomic deprivation in the area.

Geographical barriers were also raised in some settings. In very rural areas, community catchment areas could be very wide, creating travel challenges for MCoC midwives to provide on-call cover. One such service had opted for shifts rather than on-calls because of this, which the respondent felt had limited the level of intrapartum continuity, while another interviewee (P32) explained that with a large city-centre tertiary referral unit, a proportion of women were from out of area, making full coverage of MCoC teams more difficult. One site had limited the caseload of a team with a large geographical area to reflect the fact that they often had to drive an hour between visits.

Barriers were also reported as a secondary effect of poor implementation efforts. Some respondents commented that in settings where implementation had not been planned and managed well, negative attitudes had arisen amongst staff. A common narrative arose that MCoC '*can't work*' increasing the level of challenge that would be involved for future workforce engagement and team implementation efforts, leading to considerable emotional work for management as well as for the MCoC teams. This participant summarised what many told us:

'Um, they've been trialling continuity models for years, there've been at least four or five different um, incarnations of them. And every single one of them has folded for the same reason, with that being unsustainable workloads, staff burnout, um, and overwork.' (P52)

3.5 Unanticipated consequences and ongoing challenges:

A question about unintended consequences was answered by 54 survey respondents of which 36 (66%) agreed there were unanticipated consequences. These included a perception of staff leaving the workforce due to stress, burnout or unwillingness to work in this model (N=10), causing capacity and workload issues (N=3). There was also concerns about poor team dynamics, staff morale and

staff not understanding the model (N=10) and creating a two tier system within maternity services where women received different levels of care (N=4). More positive comments included reduction of staff sickness within MCoC team and improved recruitment as midwives wanted to work in these teams (N=1), increased capacity for other community teams (N=1) and being very beneficial for women not speaking English (N=1). Remaining respondents did not supply a reason. Interestingly, both participants who reported that implementation had gone well and those who reported that it had gone badly reported unanticipated consequences.

As noted in the sections above, many service managers lacked access or capacity to obtain and use reliable data for workforce modelling or to assess impact on staff workloads or retention. The experience of interviewee P76, quoted above (section 3.2.1), who had eventually been able to clarify that disbanding their MCoC teams would not improve the overall staffing situation or workloads is illustrative.

Similar concerns were echoed in the case study sites, although wide differences in perceptions between different groups of staff were noted, with some arguing that MCoC attracts midwives and supports retention and others arguing the opposite. In addition, in two of the three sites, MCoC caseloads differed from the recommended level, being either higher, or unpredictable because of GP attachment. We also noted a tendency to conflate a range of possible factors in staff shortages – for example, in one case study site, some midwives attributed their staff shortages to MCoC rather than to a complex set of factors which are known to have influenced midwifery staffing nationally.

Managers in this service reported difficulty in obtaining data to inform understanding of intended or unintended consequences because of a data system that was difficult to access and use, combined with lack of staff time and expertise to focus on data monitoring. Higher than advised caseloads plus escalation of MCoC team midwives to cover ward staff shortages and planned caesarean lists as a regular rather than exceptional occurrence, which were also reported in this service, undermines capacity to provide continuity and may lead to work overload and stress. A reduced coverage of care for births of women in MCoC teams due to MCoC midwives having sleep days when they would normally be working, may then result, leading to perceptions among labour ward staff of having to cover work for MCoC teams. In this service, although the midwives working in the MCoC teams expressed clear satisfaction with their role, other midwives in the service held strong views that this way of working would lead to burnout.

Similarly, in another case study site, midwives felt that MCoC had caused midwifery staffing shortages on the labour ward. Caseload modelling had led to the planned move of a small number of midwives from the labour ward to MCoC teams on the basis that a proportion of births would be attended by those teams; however, excessively large caseloads plus regular use of MCoC midwives for escalation, plus lack of a system where women could call their team midwives in early labour, meant that much of the early labour care on the ward was reported as defaulting to core labour ward staff causing high levels of resentment.

Some survey respondents raised concerns about the impact of MCoC teams being disbanded or that it would lead to a two-tier service if not offered to all. The most common reason provided as to why the service disbanded MCoC teams was lack of staffing, which made many teams precarious.
'And, the reason why, erm, the reason why we had to, erm, stop the [MCoC] team in sort of [month], end of [month] last year is, erm, because one of their two members went on maternity leave … [Yeah] … and we just couldn't get anybody else to sort of come in.' (P72)

In follow-up interviews, service leads cited generally high midwife vacancy rates, which meant that MCoC teams either had unworkable and unsustainable caseloads, or if maintained led to a

perception of inequality and resentment amongst some midwives in traditional community teams or on labour wards. One respondent, for example, explained that workforce modelling had not been conducted as there was no formal plan for implementation and the service had neither planned for the midwife numbers needed, nor been able to recruit sufficient midwifery staff overall. Several interviewees reported a climate of resentment amongst midwives where MCoC midwives were perceived as having a lighter share of the work burden because of lower caseloads; nonetheless a paradox was that midwives' resentments or concerns about perceived inequity was often coupled with reports that this way of working was too hard and would lead to burnout. MCoC midwives in the case study sites complained that much of their work is not visible to others, encouraging a perception that they have a lighter workload and resulting in attempts to pull them into other areas of work.

Other reasons cited for disbanding MCoC teams included the impact of the Ockenden report; NHS England decision to remove the target date for implementation; impact on midwives and their family; becoming part of escalation policy; team not being allowed to support preceptor midwives; or poor team management or dynamics.

One interviewee described unintended consequences of the pause in roll-out and consideration of disbanding MCoC teams as extremely difficult for all the maternity professionals in their service. The uncertainty led to distress among MCoC midwives concerned about their future and feeling undermined as well as confusing messages for other professionals about the actual outcomes of the model. A great deal of detailed analysis of workforce and outcomes had been needed to provide the assurance to continue.

'they felt so distressed by it and so erm what's the word, unsettled and not knowing what was going to happen in their working life, that they just said until this is sorted and everybody's doing it and we'll come back when everyone else is doing it as well and it is the way that we run this whole service, they wanted to step out... (P76)

She further explained
an unintended consequence now, and some of my teams attended conferences where they announced that they'd removed the milestones people were on their feet clapping. I had members of my team who were absolutely devastated that the milestone had been removed because they feel so passionate about what they do, erm and it, and it has polarised views of return to service and has created a divide amongst midwives which has been incredibly unhelpful' (P76)

There was a range of views regarding to what extent midwives were involved and supported in this process. At one end, survey respondents reported no involvement:

'some providers have paused with no real explanation to staff...'(P13)

'we were told to shut down and move back to non-CoC even though we enjoyed our role...women were getting a great service' (P7).

At the other end participants reported considerable involvement:

'team discussions and support given throughout' (P25)

'meetings held...1:1 to discuss position and reasons' (P83)

'midwives and team leaders were fully involved in making the decisions...' (P72)

An unintended consequence also identified in case study sites, not of MCoC but of the context of implementation currently, was a climate of fear among midwives following safety inquiries. This was reported as reducing willingness of those not currently practising in MCoC teams to consider working with a greater level of professional autonomy. Midwives feared being exposed to blame.

Relatively few respondents raised the issue of targets specifically, although it was notable that a number reported pausing rollout or even disbanding teams around the time that targets were paused. For example, one interviewee, who had reported lack of formal planning or senior management support or understanding of the benefits explained that some support had been seen in relation to targets:

'these were targets that were set, we had to, you know, we had to be seen to be doing it and reporting on it' (P32)

However, this appeared to be superficial, and teams were then disbanded in this service when the targets were paused.

An interviewee (P26) from another service, with one MCoC team running emphasised the need for targets to be realistic, to avoid creating negative responses:

'put huge pressure on maternity services to, erm, to achieve and realistically. And, this was before the building blocks document came out... Erm, which I think was absolutely key in making sure that things are safe when you're trying to roll out continuity of carer. But before all of that I think there was very much a gung-ho kind of, you know this has to be achieved by this date, we're needing this percentage of women by March, 2019, this percentage by...'
She explained that as a result, they had decided to opt for across-the-board implementation, which had been too sudden and led to negative reactions:

'and when we approached the teams that we decided from community we were going to go with to incorporate that amount of women from a geographical area, the backlash was so significant that we decided to kind of go full system and do it for everyone, like for a full service because if we needed to get the thirty-five percent, two out of the five teams, those two teams were so unhappy and upset they were all, you know wanted to go to Occupational Health' (P26)

In one case study site, where three of the four MCoC teams had closed or been paused, there was a feeling that the midwives had been 'burned' and would not want to try the model again.

'Midwives think: we did it, it doesn't work' (S8)

The main ongoing challenge raised by survey respondents was staffing levels. Measures proposed to address this included more funding to allow staff recruitment and pay increase; a focus on retaining the workforce; a focus on staff wellbeing by providing appropriate training and support and engaging staff effectively. To address the challenge of staff burnout, it was suggested that all staff need to be educated on how the MCoC team's work; CoC midwives need to stop being used for core labour work (escalation); limiting caseload size and midwives need to be able to manage their own time and hours.

This range of responses indicates that a target-setting approach may have both negative and positive effects, depending on the context, and that removal of targets may also have unintended consequences. One interviewee explained that although it had taken pressure off their service to scale up more quickly than was manageable, it also had the unintended effect of mixed messages

increasing uncertainty for midwives and an atmosphere in the service that MCoC was no longer a policy priority.

Although concerns about overall staffing levels were cited widely, a complex change in models of care cannot simply be explained by staffing levels, highlighting that it is vital to consider factors relating to staff wellbeing and readiness for change, organisational and other factors influencing midwife capacity to adopt a new approach to care. One interview, for example, commented that their service had a full staffing complement but still had challenges in implementing MCoC beyond a small-scale because while some of their midwives were interested to work this way while others were not.

Other strategies for mitigating challenges or unintended consequences mentioned by survey respondents included changing processes and protocols on inductions and categorisation of risk; ensuring antenatal and postnatal continuity on all groups but full continuity for vulnerable groups; stopping promotion of the model and suspending; learning from other Trusts and the need for more consistency across services in a region in terms of level and approach to implementation.

4. Discussion and implications for policy, practice, and future research

Midwifery continuity of carer is known through gold-standard evidence to have benefits for safety, for service user and professional satisfaction, and to be cost effective from a service perspective. Evidence shows that midwives who experience working in this way achieve higher levels of professional satisfaction and develop a wide range of clinical and professional skills (Collins et al. 2010; McCourt & Stevens 2008; Newton et al. 2014, Fenwick et al. 2018). This was echoed in our evaluation, where midwives working in MCoC teams with few exceptions loved their work and did not wish to return to previous ways of working. However, midwives who did not have experience of working this way shared worries about the personal impact of change to ways of working and often lacked comparable understanding of how the model works to achieve benefits for midwives or women.

Our evaluation echoes the findings of a range of studies showing that implementation of such a model requires a whole-system approach including a range of organisational measures and understanding and buy-in from all professionals and decision-makers. Despite the quality of underpinning evidence, understanding of it remained partial and limited and this drove scepticism about implementing MCoC teams. There was limited evidence of understanding of the mechanisms of benefit within many services, which could in turn lead to lack of sufficient support and the implementation of adaptations to the model which may be less functional or effective in practice. Many implementation leads lacked the full support of senior decision-makers and managers, support from or links with their service's quality improvement teams or accessible and reliable information systems and capacity to use these to identify, monitor and share local impact.

While it was clear and often repeated that safe and sufficient midwifery staffing is a vital prerequisite, there was also a widespread lack of accurate understanding of the staffing requirements and impact of this model of care. This may have resulted from attempts to introduce and embed a more primary-care and relationally focused model within a system that is designed around an acute care and process-production centred model. The impact of staff shortages on midwifery stress and morale was furthered by a context of service defensiveness and professional anxiety about safety and fear of blame, which was also reflected in relationship tensions and even resentment between professionals working in different areas or models. Research on implementation of MCoC is less extensive than the underpinning evidence of its value, but several studies have been conducted, primarily in England (Byrom et al, 2021) and Australia (McInnes et al, 2018; Dawson et al, 2018; Styles et al, 2020). Taylor et al's (2022) study of implementation in Better Births Early Adopter sites used Best et al.'s Best Fit model to identify implementation facilitators and barriers. They identified as key barriers the scale and pace of change required, the complexity of the context and the lack of statutory status limiting implementation leaders' power and authority, as well as implementation alongside other multifaceted service changes. McInnes et al.'s realist evaluation of implementation highlighted the importance of positive leadership and of trusting relationships, both between frontline staff and leaders and within MCoC teams to sustain the process (McInnes et al, 2018). The experience of providing MCoC itself was found to enhance midwives' skill set and change their perspectives on how to provide care. Supportive leadership and engagement were identified as important to ensure midwives feel safe, valued and informed in the process of change. Similarly, an Australian study identified organisational culture, management support, collaborative relationships, communication and structural change as important to support implementation and scaling up (Styles et al, 2020). Another Australian study by Menke et al. (2014) identified as major challenges a lack of supportive organisational culture and a culture of blame where they experienced hostility to the model, difficulty in advocating for women and a lack of work-base or material resources. These findings echo the experiences in some of our respondents' services.

In this and wider literature on healthcare, the context and climate in which complex, person-centred models of care are implemented have been shown to have profound influence and such models need to be adaptable to context while also maintaining fidelity to the core characteristics that are associated with beneficial outcomes (Greenhalgh & Papoutsi, 2018; Lau et al, 2016). This highlights the importance of understanding implementation challenges and the factors that contribute to feasibility and acceptability, and capacity to scale-up and sustain the model from a service and professional perspective. In our evaluation, although staffing levels were repeatedly cited as barriers, and it was clear that sufficient midwifery staffing was essential to support implementation, scale-up and sustainability, it is important not to underestimate the impact of wider forces on embedding or sustaining this model of care. A range of respondents reported that their wider organisational leadership, and in some cases obstetricians, did not fully understand or support the model. In addition, while a pause in targets was perceived as needed in a context of severe staffing shortages, mixed messages conveyed about the policy direction led to uncertainty and in many cases, disbanding of MCoC teams that had been implemented effectively. In addition to a pause in targets, a range of respondents reported that implementation had been paused in response to the Ockenden report in a way that as not simply related to staffing levels, leading to further uncertainty and concerns about the future of the model, as well as additional concerns about midwifery morale and staffing levels.

The implementation of MCoC requires careful consideration of a series of key factors. Midwifery education needs to prepare midwives for working in this way during their education and preceptorship. Including newly qualified midwives is crucial and they are generally reported as more enthusiastic to go into this model of care than those with longstanding experience working in other areas. The right approach to management is crucial, as is ensuring appropriate and balanced caseloads to make the model sustainable. Sustainability also depends on an appropriate balance between fidelity to the core model and local adaptation.

It is essential that those potentially working in this way have a full understanding of the evidence, with a chance to discuss and raise doubts or concerns and clarify ways of working. Good quality, reliable, and accessible information systems enable modelling of staffing and provide assurance about the local impact on staffing and outcomes of care. The MVP is valuable in raising awareness amongst professionals and the local community of the impact of MCoC for women.

The importance of Local Maternity and Neonatal Systems to support more high-level and regional collaboration and support and consistency in implementation approaches is not yet fully realised. There is a need for a more integrated approach to the implementation of the Maternity and Neonatal Programme; understanding and acting on the relationships between personalised care and continuity, cross-boundary and inter-professional working, enhanced information, and perinatal health. Evidence shows MCoC can link all these yet was often being considered and implemented in isolation.

The impact of very mixed levels of support and understanding from those with decision-making power and influence is significant. The wider context of low midwifery staffing, morale and attrition on attitudes to MCoC implementation is mostly negative. High general levels of stress and distress in the midwifery workforce and climate of blame and fear may lead to unintended effects of causing intra-professional tensions and divisions. Effective leadership is vital, but leaders often lacked sufficient authority, support from their overall service leads, or sufficient experience in large-scale change management (including cultural change from task-orientated care to relational-based care) and the quantitative data analysis required to understand and demonstrate the impact of change. Support from leadership and financial resources is also important for teams in securing a work-base, ideally in a community hub or comparable primary health or social care setting, to enable them to

work most effectively. The gendered nature of midwifery needs to be considered in relation to working patterns and gendered power factors.

Policy implementation needs clear messaging about the way forward. Targets and milestones can have value as drivers for change, but care is needed to ensure these are realistic and fully understood to avoid unintended negative effects. More clarity on effective MCoC models (i.e. those which work for staff while providing genuine relational continuity, which was not observed in all cases) and on payment scales would support sustainable implementation. It is also essential to understand that some midwives are very worried about the impact of this way of working on their lives and wellbeing. They need to understand the implications properly, but also not feel forced to change, as this can lead to tensions and increase midwives' stress. Tensions between MCoC and non-MCoC midwives appeared rooted in a lack of a full understanding of this different way of working, in fears about the implications of change for work-life balance and in a context where a more organisationally-centred way of working had become institutionalised.

4.1 Potential solutions identified:

We identified several solutions that could address challenges experienced by those attempting to implement MCoC. These are summarised here:

Sharing evidence: Having a real understanding of the evidence behind MCoC is crucial to dispel myths and gain the support of midwives. Local data about the impact of MCoC on experiences and outcomes is also very powerful. This requires both winning over hearts and minds and understanding the mechanisms of effect. This evidence should include evidence from real life settings and evidence of positive approaches to implementation. Sharing evidence about the safety benefits was also emphasised as provider levels of concern about safety were high, yet many professionals and managers were less aware of the safety evidence. Including questions about continuity in quality and safety reviews was identified as a possible enabling factor.

Service flexibility: MCoC relies on consistent and facilitative management support and guidance, to ensure that the model can be implemented effectively. Understanding and respecting the flexibility and autonomy of midwives working in MCoC teams contributes to sustainability. Midwifery leaders and managers need to have adequate training and support for this style of management, rather than traditional approaches to management that remain widespread in the NHS.

Adequate staffing: Adequate midwifery staffing is important to avoid the inclusion of MCoC teams in escalation and ensure appropriate caseload numbers; also to avoid concerns arising that MCoC implementation will lead to inadequate cover elsewhere in a service, which can foster intra-professional tensions. We identified that more work may be needed to understand what level of staffing would support 100% implementation of MCoC. Services' workforce planning tools need to be adapted and redesigned to ensure that they adequately reflect the needs of this model of care.

Keeping women in touch with midwives: Creative approaches, in line with Trust social media guidelines, such as the use of digital communication channels and social media, (e.g. Instagram as used in one service), can allow women to get to know the team midwives to avoid dilution of antenatal continuity of care.

Financial support: Services need to recognise that the MCoC model can save money elsewhere in the system and so is cost-effective, but it requires investment in midwives, leadership, planning and change management support, equipment, environment (including an appropriate working base), and evaluation to be successful.

Support for change: Implementation leads need further training and support in large-scale change. Trust leadership need to understand how to support maternity leads in implementing this national policy. Regional and national teams have a role in troubleshooting and holding them accountable.

Integration: The different strands of Better Births need to be viewed as a whole, rather than treating each in isolation. MCoC does not stand alone but is linked with future service improvement around personalised care and equity. This model of care supports improved inter-professional working, needs support from other professionals, and requires community hubs or community maternity units to provide a consistent and suitable space from which to provide a service.

Ensuring continuity in MCoC: Although allowing flexibility in MCoC models is important, services may need more guidance to ensure that genuine **relational continuity of care** is achieved during antenatal, intrapartum and the postnatal period. This can be done by using buddy systems and keeping local records to identify areas where continuity may be lacking (typically in the intrapartum or postnatal periods). Wider **informational continuity** (ensuring that midwives are aware of all women who are coming up to delivery or experiencing particular difficulties and that women are aware of the whole team and their ethos) can be supported through weekly team meetings and regular peer review, Meet the Midwife sessions, consideration about how women communicate with the team and the use of social media such as WhatsApp. Guidance on covering on-calls/shifts during absence/annual leave is needed (almost all the teams in our case study sites had periods without any intrapartum cover, affecting continuity of care). Continuity across the 'first 1000 days' rather than simply to postnatal discharge from maternity care could also be enhanced in this model if more integrated with community facilities and services. Integration with group ante- and postnatal care approaches such as Pregnancy Circles may also help to enhance relational continuity and social support with the MCoC model.

Students and Preceptors: Ensuring that student midwives continue to have experience of MCoC as part of their pre-registration education. Specialist MCoC preceptorship pathways and support for achieving competencies (including 24/7 support from the preceptorship support team) will allow services to benefit from newer midwives' enthusiasm for this way of working. Senior support of preceptees within MCoC teams was seen to enhance capacity to include them as well as the level of development support provided.

Student experience and preceptee inclusion emerged as important for future implementation, scale up and sustainability of MCoC. There were examples of good practice where close working relationships between the local University and Trust enabled close collaboration and **innovative preceptorship packages and pathways** for working in a MCoC team. It was also mentioned that students need to experience continuity within their education. This was however identified as a chicken and egg scenario as if the students experience continuity in their education but there are no opportunities to work in this model upon qualification, there is risk for dissatisfaction amongst the newly qualified midwives. Educating students within a continuity model also raised concerns regarding placement hours and specific skills that curriculum and placement planning need to address.

4.2 Recommendations for future research and development:

The current evaluation has identified the following areas for further exploration:

Understanding of and support for the model

Many of those able to influence change lacked full understanding of the outcomes of this model and how they are achieved. Even when appraised of the clinical safety benefits, scepticism was widely reported. This limited the level of support provided for what is a complex change requiring a whole system process. More work is needed to explore and explain the mechanisms by which the positive safety and clinical outcomes are achieved so that these can be communicated more effectively to the range of professionals and service managers or leaders.

Obstetricians' engagement

Engagement of obstetricians was also highlighted as inconsistent and often lacking. In addition to work on mechanisms of effect, work to clarify the benefits of continuity for medical staff and to identify how a linked obstetrician can work effectively within service structures is needed. There is evidence that MCoC working enhances inter-professional working and this has been identified as a key feature of safe services but a greater focus in research on the impact of MCoC and related autonomy of practice for collaborative working and continuity across the whole system (i.e. with GPs and health visitors and community services) is important.

Scaling up

Few services have scaled up their provision beyond a small number of MCoC teams and this was widely seen as a key challenge for managers. More work is needed to support this through identifying strategies that work well, including the essential elements of this (such as planning, whole system considerations, forward planning for new midwifery staff) and to enable services to learn from each other. We identified uncertainty about how '100% continuity' could be achieved.

Evidence based guidance on the model and how to organise

Many services struggled with detailed aspects of how to interpret and implement this model, including aspects such as payment and on-call arrangements for births, lines of management, how to base their caseloads, team locations/bases and arrangements for ongoing and peer support and reflection. Implementation leads also faced challenges in workforce planning and in data management to support monitoring and feedback. Many services commenced their implementation before the NHSE building blocks and support structures were developed. These were valued but the use of the building blocks and structure will benefit from ongoing evaluation. Although the LMNS played a role in supporting transition, communication between implementation and service leads across services were limited such that many services experienced similar challenges separately with limited opportunity to learn from others' experiences. Although the recognition of the need to adapt to context was considered important, services also needed more detailed levels of guidance about the model.

Information, data and safety

Awareness of the research evidence on the safety benefits of continuity within maternity services was low and in the light of a series of maternity inquiry reports, safety was a major concern for individual midwives as well as service managers and other professionals. Misinformation and rumour about safety can also develop in situations where there are gaps in information and communication. More work is needed to support service leads in accessing and sharing reliable information about the local impact of change, as well as the formal evidence. A study to identify the role of continuity in relation to professional and service communication issues, transparency and useability of data would have value – both what is needed and to explore the potential benefits. An

evidence review to identify, summarise and report the organisational safety benefits of continuity within maternity or health services overall may be beneficial. Analysis of successive safety inquiry reports may have a role in highlighting points in a system where continuity may have supported different outcomes. Work on the role of psychological safety for health professionals (as well as for patients) and on how to achieve a learning-oriented rather than blame-focused and collaborative approach to maternity care may be achieved, and the potential of MCoC to contribute to this.

Person-centred change in complex systems
A distinction was apparent between services that had been relatively successful or had struggled with implementation in relation to the overall approach to change and whether implementation was treated more as a whole-system issue or a more marginal activity only concerning midwives. There remains relatively little research to date on implementation, although the level of evidence is growing and is being more explicitly linked to system change knowledge and the guidance available to services does not extend to the wider challenges of and approaches to maternity system change. More work is needed to understand the 'macro' level of influence and to address how the more systemic changes that might support MCoC (for example, a more primary-care and community focused design of maternity services) can be achieved within the NHS.

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Appendix 1 – Detail of Methods

A mixed methods approach was used involving two key components:

3) a national online survey of service and MCoC implementation leads with follow-up interviews.
4) three rapid-appraisal case studies of services delivering MCoC with varying levels of implementation.

Analysis was guided by the NHSE objectives in relation to acceptability, feasibility, adoption, scale-up, sustainability and unintended consequences, and then further developed through abductive application of the Consolidated Framework for Implementation Research (CFIR; Keith et al, 2017). The CFIR framework was chosen since it encompasses all levels of influence from macro- (outer-context, such as health system, social or cultural influences), through meso (inner-context, such as organisational and professional factors) to micro (professional and public views and practices) as well as examining the nature of the intervention, the process of implementation and the implications for fidelity. This framework is particularly suitable for studying organisationally complex, person-centred interventions of this type. For this analysis we did not use a deductive approach but mapped findings to the main constructs, any relevant sub-constructs and also included adapted sub-constructs with good fit with our findings.

Online survey with follow-up interviews

The aim of the online survey with follow-up interviews was to elicit the views and experiences of healthcare professionals, specifically MCoC implementation leads (within Trust and Local Maternity and Neonatal Systems), consultant midwives, heads of midwifery and Maternity and Neonatal Programme champions and quadrumvirate management leads (i.e., midwifery, medical, neonatal & operational leads at trust level). The focus is on maternity transformation and integration of MCoC models within the wider organisation of maternity care. All services were eligible to take part in the survey regardless of how much (if any) MCoC has been implemented in their area. There are approximately 123 Trusts in England who offer maternity care. At the end of the survey, participants were asked to leave their preferred contact details if they were willing to take part in a follow-up online or telephone interview. The survey was open in January and February 2023, with follow-up interviews conducted in February and March 2023. NHS England advertised the survey and it was also disseminated through Twitter and the Maternity and Neonatal Programme bulletin. The survey and interviews received ethical approval from City, University of London in December 2022. Details of geographical spread of the respondents can be found in table 4.

Table 4. Geographical spread of survey responses and interviewees. Thirty survey participants did not provide information on their location. One interview was with two participants.

Area	Number of survey participants	Number of interviewees
East of England	9	2
East Midlands	5	2
Greater London	4	1
North East	1	0
North West	8	2
South East	9	2
South West	10	3
West Midlands	9	2
Yorkshire and Humber	3	2
Total	58	16

Case studies

The aim of the three case studies was to provide further insights into how different services have approached implementation of MCoC, the challenges encountered, and any solutions identified, as well as any unintended consequences. The case studies focused primarily on the perspectives and experience of service providers concerned with implementing, scaling up and sustaining MCoC, although the perspective and experiences of Maternity Voices Partnerships and other relevant local user organisations were also included. A rapid appraisal approach was used, involving an intensive week visit by two researchers including observation of meetings, job shadowing, examination of relevant documents and interviews.

Four different Trusts were approached in October and November 2022 and after discussion with NHS England, three were chosen. These Trusts provide at least two continuity teams each, caring for women antenatally, intrapartum, and postnatally and encompass geographical variation as well as variation in level of implementation. The case studies were categorised by HRA as service evaluation and   received ethical approval from City, University of London in January 2023. Details of data collection methods are summarised in Table 5.

Table 5. Details of shadowing and who was interviewed at what case study site.

Type of data collection	Site 1	Site 2	Site 3	Total
Shadowing MCoC team (Visits, Clinics, Meetings, Meet-the-Midwife) – includes informal interviews with MCoC midwives, MSWs and student MW.	5	3	3	**11**
Formal interviews with MCoC clinical staff (MW, MSW)	3	4	6	**13**
Interview with other midwives	3	2	3	**8**
Interviews with Managers (Senior leadership, Consultant Midwives, Continuity/Better Births Midwives, non-clinical Team leaders, Educators, In-patient managers)	6	6	11	**23**
Interview / focus group with MVP	2	1	0	**2**
Interviews with other stakeholders (external to midwifery service - LMNS staff, Trust management, obstetricians)	1	4	0	**5**

Appendix 2 – Suggestions from service providers regarding training, support and engagement

Training and support for midwives joining MCoC teams:

Training should be based on an individual training needs analysis and be supported by an appropriate training budget. This could include:

- 24/7 on-call support from PDM team for CoC midwives / preceptors working on labour ward.
- Admin / MSW support for each MCoC team.
- Boundaries and turning off when not working.
- Buddy and mentoring scheme.
- Building relationship with partner.
- Data entry training.
- Develop MCoC preceptorship pathway.
- Diabetes training.
- Homebirth training and skills & drills.
- Labour ward procedure and policies.
- Large scale change training includes how to collect and analyse data.
- MCoC survival guide.
- MDT good for team building.
- Name and face of leadership.
- Office base needed for each MCoC team.
- Ongoing learning, reflection space.
- Safeguarding training (especially for in-patient midwives joining CoC).
- Skills and needs assessments.
- Supernumerary time with community midwives to become familiar with bookings and other AN/PN procedures for in-patient midwives.
- Supporting choice training.
- Training and supernumerary time to upskill community midwives for intrapartum skills, in particular suturing and cannulation.
- Training embedded in core competency framework.
- Signposting and logistics resource.
- Understanding roles.
- Working autonomously/self-managing a CoC team.

Training and support for Leadership:

- Large-scale transformation training (we did not identify any examples of such support).
- Training/support to write a business case for additional funding for CoC implementation.
- Quantitative and routine data use and analysis training/support to evaluate impact.
- Operational training (dealing with finance, employment, estates).

Strategies to engage different stakeholders.

A suggestion from the stakeholder workshop was to develop a communication and engagement strategy using different mediums, to be used ahead of, during and post implementation.

Other suggestions from our findings include:

Engaging midwives and others within Trust:

- 6-month staff surveys for feedback and timeline for acting on feedback.
- Coffee mornings/tea and cake trolley to introduce, share stories or troubleshoot.
- Engage with international midwives who can provide a fresh voice/perspective.
- Ensure leadership understands vision.
- Ensure everyone understands MCoC evidence.
- Involve Professional Midwifery Advocates.
- MCoC teams using Instagram/fakebook to engage with colleagues and local communities.
- Myth busting; how MCoC impacts other roles.
- One-to-one and team meetings.
- Online events.
- Newsletter to feedback stories and evaluation data.
- 'Open mic' sessions.
- Pizza night with midwives.
- Presentations from HoMs, DoMs to enhance MCoC team visibility.
- Share stories, positive outcomes and experiences and how poor outcomes could be improved.
- NHSE to remind stakeholders of national ambition.
- Target sceptics through the experience of converts.
- Team building days (also an opportunity for peer-training/reflection).
- Teams using Instagram/facebook to engage with colleagues and local communities.
- Presentations to students and preceptors.
- Regular reports to the Board; Make MCoC a Trust Board priority.

Engaging local community:

- Heightening profile of MCoC locally: seek opportunities for MCoC staff to present. outside the Trust; apply for awards; work with communications team to get articles in local papers etc.
- Pregnancy journey posters around the hospital.
- Regular engagement with MVP.
- Regular engagement with wider family – fathers, grandparents etc.