

Better Start Bradford Innovation Hub

Midwife-led continuity of carer

Phase 3

End of Contract Report

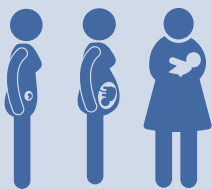
November 2023

This is a report provided by the Better Start Bradford Innovation Hub (BSBIH) for Better Start Bradford and the Continuity of Carer project. The document provides an overview of the Midwife-led continuity of carer (MCC) performance and findings from the implementation and enhanced evaluation including an interpretation of these findings by BSBIH. The design of this evaluation is described in more detail in the Evaluation Plan Summary, which was approved by key stakeholders from the BSBIH and BSB.

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Produced for Better Start Bradford

Executive Summary

Project Overview

Women living in social disadvantage (including some ethnic minorities, and low socioeconomic status) are at greater risk of poor birth outcomes and poor perinatal mental health. The midwife-led continuity of carer (MCC) project provides women with continuity of care from a named midwife or small MCC team during the antenatal, intrapartum and postnatal periods. They have greater flexibility of care, and reduced caseloads. Evidence for this model shows it has a significant impact on birth outcomes. However, there is no evidence of the impact on women from social disadvantage, or on the impact beyond birth, including mental health.

The Bradford MCC model is now in the third phase of delivery. It is commissioned jointly by Bradford Teaching Hospitals NHS Trust (BTHFT), Better Start Bradford and Reducing Inequalities in Communities. Phase 3 started delivery on 1st April 2021 and is planned to run until 31st March 2024.

The aim of the MCC project was to provide two teams of 7 WTE midwives and provide care to 1,260 women over 36 months. However, due to the impact of COVID-19 and national staffing issues, only one MCC team - Clover, was implemented. To avoid unsafe staffing levels on the labour ward, MCC intrapartum care was paused in August 2022 and re-started in October 2023. This evaluation focuses on the implementation of the Clover MCC team.



Evaluation Aims

MCC has received:

- A standard implementation evaluation to understand how the project was implemented and whether implementation was in line with project design.
- An in-depth qualitative evaluation using: a) interviews with women who received MCC care to better understand their experiences of receiving this type of care, and b) reflective diaries completed by team leaders and MCC midwives to highlight the facilitators and barriers to achieving delivery of this model.
- A randomised controlled trial (RCT) is underway which will evaluate the impact of MCC, compared to standard care, on birth outcomes and perinatal mental health.



This report shares findings from the implementation evaluation and early findings from the qualitative evaluation.

Key Findings

Recruitment

89%

To date, the MCC team have supported 438 women, this is 89% of the planned target. The majority of these women lived in a Better Start Bradford (BSB) area (N=397, 91%).

Implementation

7
midwives

Staffing levels varied over the delivery period, but for the majority of time 7 midwives were in post. The average caseload remained below the target of 35 women throughout delivery.

Executive Summary

Key Findings

Continuity

100%

100% of all antenatal appointments were provided by the MCC team, with the majority (72%) being delivered by the named midwife.

13%

Only 59 (13%) of births were attended by the MCC team.

79%

79% of all postnatal appointments were provided by the MCC team, with 47% provided by the named midwife.

Reach

The majority of women receiving MCC care were of Pakistani heritage (57%). Most (67%) were aged between 25 and 34 years of age and for 30% of women this was their first baby.

Qualitative findings

Women acknowledged that their care had given them the ability to trust and build a strong relationship with their midwife and women also spoke of the convenience (and adaptability) of the model, acknowledging the value of the model. Women also stated that MCC care during the intrapartum period would have been a good addition but that it was not necessary.

Midwives and team leaders spoke about the negative impact staff shortages were having on their ability to adhere to the MCC model and to try and avoid burnout amongst the team. Staff reported feeling a lack of support from managers around the MCC model. However, despite staff shortages, many acknowledged the high quality care that the team were delivering.

Satisfaction

12 women responded to the satisfaction questionnaire (2.5% of participants): 92% were extremely satisfied with their antenatal care, 73% women were extremely satisfied with the care they received during their labour and birth and 75% were extremely satisfied with the care they received postnatally (after birth).



Recommendations

Continuity of care in the antenatal period is embedded into the MCC team at BTHFT. Postnatal continuity is also achieved for 79% of appointments despite staffing issues.

Continuity in the intrapartum period is much harder to achieve, and is dependent upon a stable system which includes secure staffing levels across midwifery and system-wide support for this model of care. In this model, overall continuity was just 13%. Low staffing levels within the MCC team risks midwives burning out, and may reduce the impact of this model of care on women's outcomes.

Nevertheless, women highly valued MCC care, particularly the flexibility and convenience of appointments, and the ability to build trusting relationships with a known midwife. Whilst women did say that they would have preferred to have had a known midwife at birth, most were positive about the care they received from labour midwives.

The implementation evaluation finding needs to be re-visited once the full MCC model has been delivered. Research findings should also be reviewed once the qualitative study has completed (April 24) and the RCT results have been analysed (March 25).

Project background

What is the need?

Women living in social disadvantage (including some ethnic minorities, and low socioeconomic status) are at greater risk of poor birth outcomes. There is also evidence of substantial inequality in the disclosure and identification of perinatal mental health problems in parents living in socially disadvantaged circumstances [1]. Common mental health problems (such as depression and anxiety) are also more likely to be experienced by those who are socially and financially disadvantaged because they are likely to be experiencing more stress and discrimination [1].

In 2017, the UK National Health Service (NHS) produced the 'Better Births' plan [2] to improve midwifery led care in England. Within this plan, the Maternity Transformation Programme aimed to implement the midwife-led 'continuity of carer' (MCC) model to support safer, more streamlined maternity care, while fostering positive relationships between women and their midwives, to ensure better outcomes for women and their babies [3].

What is the project?

MCC is a relationships-based model of care within which a named midwife, supported by a small MCC team, co-ordinates and personally delivers the majority of care to a woman and her baby during pregnancy, labour and birth, and the early weeks as a new parent.

MCC personalisation includes flexibility in the frequency, duration and location of appointments and in the timing of discharge postnatally. MCC midwives have reduced caseloads (~25-35 women per year) to enable this personalised and flexible care, and also offer tailored public health messages.

In contrast, women receiving standard care will see midwives who have a caseload of approximately 100 women per year, with a mandated number, duration and location of appointments, and discharge 2 weeks after birth. Women will likely see two or more community midwives throughout their care, and intrapartum care is provided separately by hospital midwives.

In 2021, Bradford Teaching Hospitals NHS Foundation Trust (BTHFT) aimed to implement two MCC teams, each with 7 whole-time-equivalent (WTE) midwives and one WTE midwife support worker. The MCC caseload target is 30 women at any one time, with a maximum of 35, women per WTE midwife per year. The MCC models are co-funded by BTHFT, Better Start Bradford (BSB) and Reducing Inequalities in Communities (RIC), between 1st April 2021 and 31st March 2024.

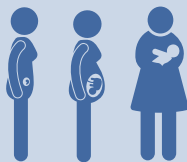


Project background

What is the existing evidence?



A Cochrane review of the MCC model provided evidence of effectiveness for the model in improving a range of birth-related outcomes: women who receive MCC are more likely to have a spontaneous vaginal birth, and are less likely to have a preterm birth (<37 weeks), or to have an epidural and are at a lower risk of losing their baby during pregnancy or birth [4]. However, there is limited evidence as to whether this model reduces inequalities in birth outcomes for women from ethnic minority backgrounds and those living in deprived areas. There is also no evidence of what impact the model has beyond discharge from the service.



In-depth qualitative evaluations of MCC models of care in Bradford and other socially disadvantaged communities have demonstrated the potential benefit that this model of care may have on reducing the inequalities in perinatal mental health for socially disadvantaged women and their babies. In these studies, midwives and women both reported the value of MCC in building trusting relationships which in turn increased the likelihood of women disclosing mental health and other concerns [4, 5] (see Table 1).



Two previous models of MCC have been delivered and evaluated in Better Start Bradford: Phase one included continuity antenatally and postnatally, but not in the intrapartum period from a named midwife or buddy. Phase two included full continuity antenatally, intrapartum and postnatally from a named midwife or the small team of MCC midwives. Table 2 shows the level of continuity achieved in each phase.



The effectiveness evaluation of the Bradford MCC model is the first to focus solely on women from ethnic minorities living in areas of high deprivation. It is also the first to look at outcomes after birth with evaluation of the impact on perinatal mental health. This has created **national interest in the evaluation**, and the **latest systematic review on MCC** includes this study protocol.

Project background

What is the existing evidence?

Table 1. Summary of the qualitative research findings to date

	Model	Women	Midwives
Phase 1 (partial; midwife/buddy) Oct 15-Feb 19	Key components identified: - Reduced caseload - Appts could be made longer - Flexible working - Team cohesion & stability - Maternity Support Worker (MSW) & admin support	Greater satisfaction in MCC than SC. Qualitative evidence suggests this model improved perinatal mental health: - Women reported they had trust in the midwife to share problems. - Midwives felt they had the time to ask, and to deal with any issues identified and reported the value of being able to build trusting relationships and visit women at home which allowed them to identify mental health and domestic violence concerns.	MCC midwives: - High levels of job satisfaction - Reduced stress - Increased role fulfilment Traditional care midwives: - Feelings of stress and burnout due to time pressures - Lack of role fulfilment
Phase 2 (full; midwife/team) Mar 19-Feb 20	Key components identified: - Smaller caseloads - Upskilling the MSW (pre-booking visits, baby care, bloods etc., freed up midwives' time) - Scheduling appointments to correspond with translator availability - Clover midwives felt supported by staff on the labour wards	High levels of satisfaction in MCC. Further supportive evidence of impact postnatally: - Midwives felt the model promotes women's welfare and that the trusting relationship allowed women to disclose mental health issues earlier. - Continuity in the postnatal period promoted disclosure, identification and monitoring of women's mental health needs - Women felt well supported and felt able to talk about their mental health with their Clover midwife.	- MCC reported supporting women during the intrapartum period was the most difficult part of the model but did not feel this was detrimental to women Tensions between MCC and labour ward were due to: - MCC acknowledged a competency deficit in community midwives which put a strain on existing resources - Midwives at the birth centre do not always call the MCC, especially when women say they are happy with the core team.

Table 2. Summary of the levels of continuity achieved in the Better Start Bradford supported models of MCC, Phases 1 and 2

	Antenatal Continuity	Intrapartum Continuity	Postnatal Continuity
Phase 1 (partial; midwife/buddy) Oct 15-Feb 19	94%	N/A	70%
Phase 2 (full; midwife/team) Mar 19-Feb 20	100%	63%	92%

Note. Continuity defined as: women receiving >70% of their care antenatally/postnatally as per MCC model and had MCC team member present during labour and/or birth.

Project background

COVID-19: Impact on the project

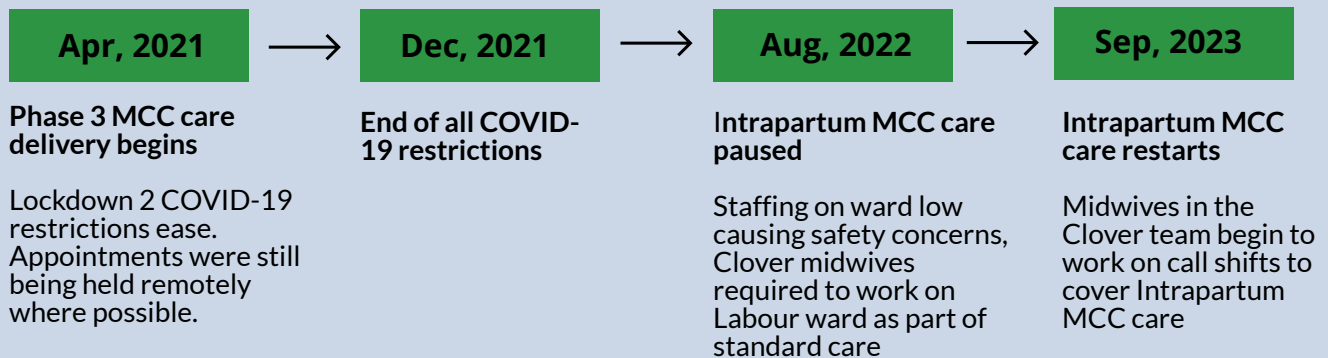
The MCC project started whilst the COVID-19 pandemic restrictions were still in place, including limited socialisation, and increased number of appointments online instead of face-to-face. We are unaware whether this had any impact on the care provided by MCC midwives.



As a consequence of the pandemic, midwifery lost a significant number of midwives, and recruitment into vacancies was slow. As a result, in order to avoid unsafe staffing levels the decision was made in August 2022 to pause the intrapartum care of the Clover team so that midwives could deliver standard care on the labour ward. The full continuity recommenced in October 23.

As a consequence, women receiving MCC care at this time were not always able to see their named/buddy midwife during the labour/birth of their child.

What was the delivery timeline of the project?



Aims of the evaluation

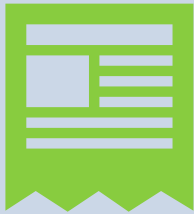
Phase 3 of the MCC model has received an in-depth evaluation including:

- An implementation evaluation to understand how well the project has been implemented, including whether it has been possible to deliver the model (including staffing levels, caseloads, and continuity) as they are designed to be, and whether women who received the model were satisfied with their care.
- An in-depth qualitative study has explored the women's perspectives of receiving MCC, and the midwives perspective of the barriers and facilitators to delivering and sustaining this model of care.
- An effectiveness evaluation is also underway using a randomised controlled trial (RCT) to evaluate whether women receiving MCC have better birth outcomes and better maternal mental health in comparison to traditional care.

This report shares findings from the implementation evaluation and emerging themes of the qualitative evaluation. Full findings from the qualitative evaluation will be available during 2024, and findings from the effectiveness evaluation will be available in early 2025.

Evaluation Findings

Data quality



The maternity team at BTHFT have been very supportive of this evaluation. They have worked closely with the data team within the BSBiH to provide us with the necessary data, access to women and midwives for the qualitative work and randomisation for the RCT.

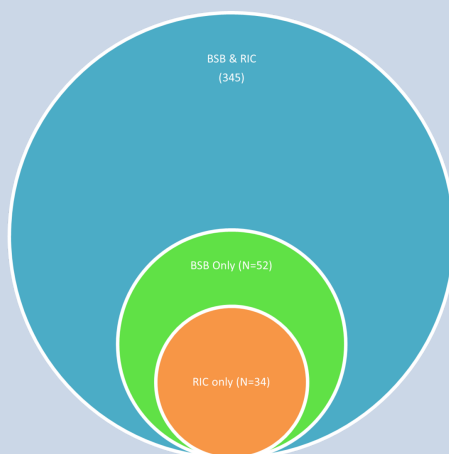
Implementation Evaluation

The aim of the MCC project was to provide two teams of 7 WTE midwives and provide care to 1,260 women over 36 months. However, due to the impact of COVID-19 and national staffing issues, only one maternity team was implemented. The remainder of this report focuses on the implementation of this single team - Clover. Targets have been reduced to those expected for a single team. Data reported are from 1st April 2021 - 31st July 2023 (28 months) and targets have been amended to this time period.



Recruitment and Reach

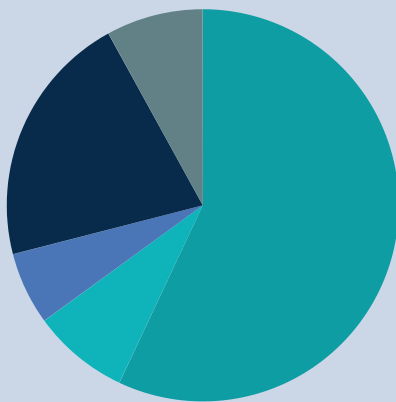
The total number of women supported by the MCC team to date is 438. This is 89% of the planned target of 490. Of these 438 women, the majority lived in a BSB area and were registered with a RIC GP (N = 345). In total, 397 (91%) lived in a BSB area.



Evaluation Findings

Recruitment and Reach continued

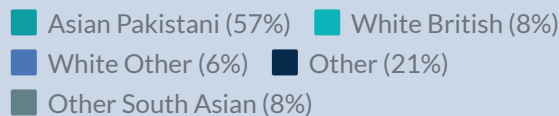
Ethnicity



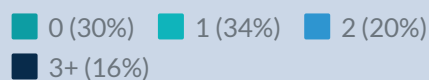
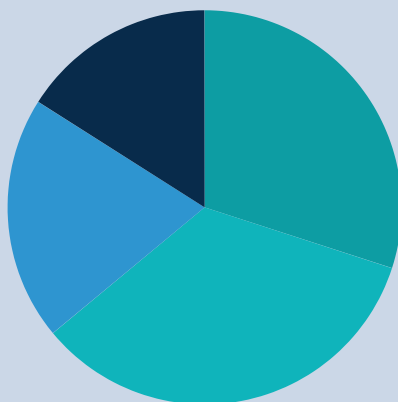
The majority of women receiving MCC were of Pakistani heritage (57%).

Most women (67%) were aged between 25 and 34 years of age.

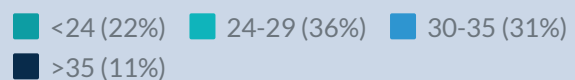
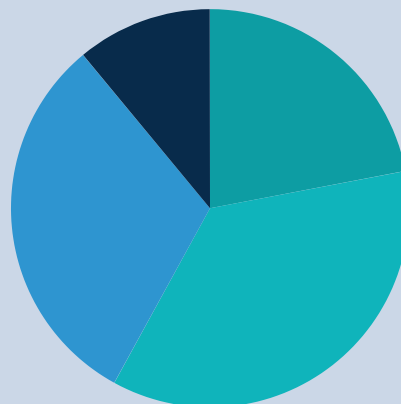
For 30% this was their first baby.



Number of previous children (parity)



Age range of women



Evaluation Findings

Implementation Evaluation

Levels of Continuity

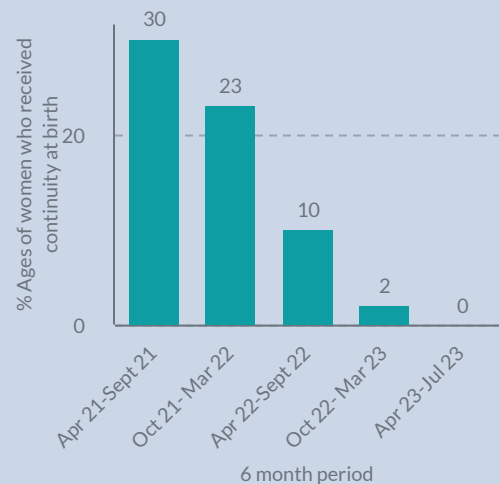
100%

ANTENATAL - 100% of all antenatal appointments were provided by the MCC team, with the majority (72%) being delivered by the named midwife. Only 59 (13%) of births were attended by the MCC team.

13%

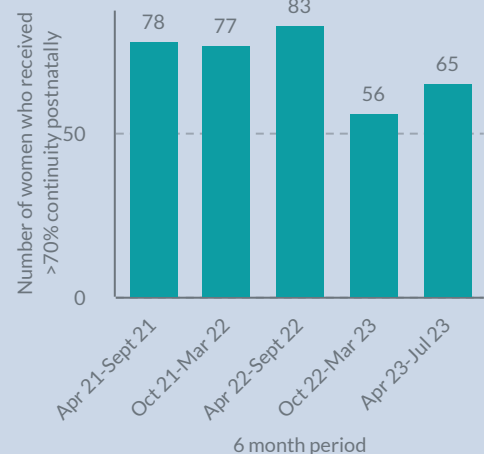
INTRAPARTUM - 13% of births were attended by the MCC team.

MCC care at labour/birth for women was paused in August 2022. When levels of intrapartum continuity are broken down into periods of six months, levels of continuity ranged from 30% in the first 6 months of delivery, to an expected 0% when birth support was paused.



72%

POSTNATAL - 79% of all postnatal appointments were provided by the MCC team, with 47% provided by the named midwife. When this was broken down into 6 month periods, the continuity was higher in the first 1.5 years (77-83%), and then dropped when staff were moved to the labour ward 56-65%).



71%

OVERALL CONTINUITY - The project aims to ensure that women receive at least 70% of their care from their named midwife or MCC team during the antenatal, intrapartum and postnatal periods. For the antenatal and postnatal periods this was achieved for 71% of women. We did not include the intrapartum continuity in this measure.

Birth Outcomes

There were 430 (98%) live births. At delivery, 276 (64%) of women were breastfeeding, at time of discharge, 156 (36%) were breastfeeding exclusively and a further 79 (18%) were combining breastfeeding and artificial feeding.



Evaluation Findings

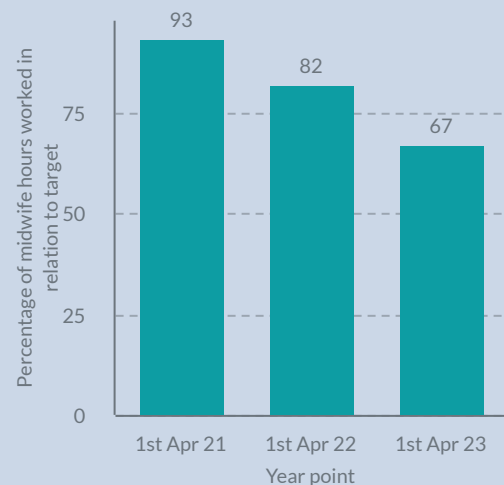
Implementation Evaluation

Fidelity to the Model

The MCC team should have 7 WTE midwives., which equals 262.5 hours of midwives. We took a snapshot of the total hours covered by the MCC team on the 1st April of each year of delivery to calculate levels of fidelity.

In year 1, 93% of expected hours were covered. In year 2, this fell to 82% and in year 3 it was 67%. This was due to MCC midwives having to support usual care on the labour ward from 1st August 2022.

In between these year points there were fluctuations in the total number of hours covered by the MCC team.

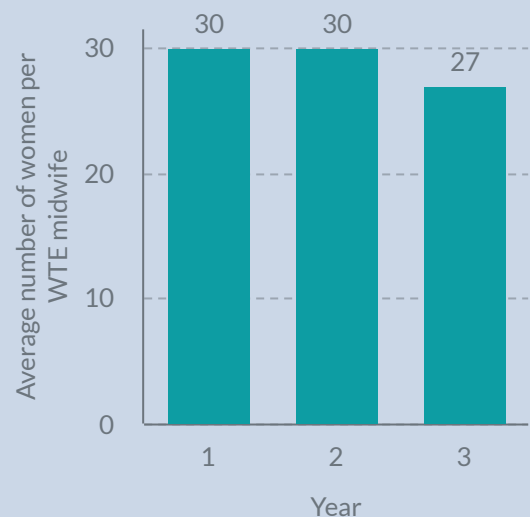


The target staffing for the MCC project also included 1 team leader, 1 maternity support worker (MSW) and an administrator (ward clerk, WC). We were unable to identify if the target was met in year 1 (lack of data), but years 2 and 3 target was achieved.

Caseloads



The graph on the right shows the average caseload for each WTE midwife each year. The maximum target caseload was 35. In year one the average was 30 (per WTE midwife), in year two the average was 30 (per WTE midwife) and in year 3 the average was 27 (per WTE midwife).



Evaluation Findings

Implementation Evaluation

Appointments

Pre-booking visits are expected to be delivered by the MSW to cover public health and relationship conversations and signposting as identified with the family, including but not limited to: bonding, infant mental health, nutrition, maternal mental health signposting, smoke free/smoking cessation, infant feeding and baby care. Pre-booking visits were completed with 377 (86%) women. On average, women were 6 and a half weeks gestation at their pre-booking visit.

86%

Booking visits are expected to be completed by the named midwife, or alongside another professional (e.g., obstetrician) where shared care is needed. 427 (97%) of booking appointments were completed by the named midwife on their own or as part of shared care. 11 women were recorded as NA for their booking appointment. The average gestation at time of booking was 10 weeks, 114 (26%) were booked before 9 weeks gestation.

97%

Women received 7 **antenatal appointments** on average.

Antenatal Plus Clinic is delivered by the MSW with a midwife to provide personalised and family relevant public health and antenatal education messaging, completing relevant proformas and providing appropriate resources. 146 (33%) of women took part in this clinic.

33%

The MSW hosts a **22-week appointment**. 318 (73%) of women attended this appointment.

73%

Glucose Tolerance Test: In the midwife database (Cerner) there was a record of a GTT appointment being made for 245 women, of these, 49 (20%) did not attend (DNA).

20%
DNA

186 (42%) of women received an **early labour assessment** by the MCC team.

42%

Women received 5.6 **postnatal appointments** on average. The average time to discharge was 31 days after birth.

The MSW carried out 172 **postnatal plus** contacts which are personalised to address relevant areas such as safe sleep, smoking, baby weight, next pregnancy and contraceptive choice. The MSW completed 231 other postnatal appointments and 134 were carried out by a MSW not known to the woman.

Women's satisfaction

What women said about the support they received:



19 women supported by the Clover team completed and returned questionnaires, but only 12 had complete responses. These results should be interpreted cautiously as this is a very small sample which has a risk of bias.

Choice is an important element of this model

- 92%** of women said they were **always** given choice about their care in pregnancy
- 82%** of women said they were **always** given choice about their care during labour and birth
- 92%** of women said they were **always** given choice for themselves and their baby postnatally

Women's care during labour and birth



- 64%** of women said they were **always** listened to by the midwives
- 82%** of women said they **were given** the help they wanted during labour and/or birth
- 73%** Overall, care in labour and birth was 'definitely' good

Note: all women chose an answer from a list of stated answers.

Women's experience of antenatal care

- 92%** of women said they were **always** listened to during antenatal check-ups
- 92%** of women said midwives **always** supported their health during pregnancy
- 92%** of women said they were **definitely** given information about breastfeeding



92% Overall, care in pregnancy was 'definitely' good

Women's experience of postnatal care

- 75%** of women said they were **definitely** given enough information about possible emotional changes after birth
- 75%** of women said they were **definitely** given the help they needed to care for their baby
- 83%** of women said they were supported with their health after birth



75% Overall, care postnatally was 'definitely' good

Evaluation Findings

Qualitative Evaluation

The aim of the process evaluation was to explore the experiences of both the midwives and team leaders delivering this model of care and the women who have recently been discharged after receiving this model of care.

To date (end of August 2023), 10 interviews have been completed and diaries completed by 2 midwives and 4 team leaders. The findings below present preliminary analysis of the first 6 interviews and all the diaries gathered to date.



Midwives and team leaders

Feasibility and facilitators of the model

Team leaders acknowledged the MCC model would not work without midwives that have **passion** and **dedication** for the model. All midwives and team leaders reported that the impact of staff shortages for the team was difficult. Team leaders reported on some of the specific strategies they were using to try and alleviate the **pressures** felt by midwives in their team.

"...the team consistently remain committed to ensuring full commitment to the model"



"I have tried to ensure the off duty gives them adequate time off to rest between shift..."



Staff acknowledged that they felt that their managerial team were not always supportive of the MCC model.

"I have felt that support from XXX has not been there, This makes me feel like we are constantly battling to promote continuity of carer with little support from higher management."



"We have also experienced negativity and an unwillingness to embrace continuity from many colleagues"



Qualitative Evaluation

Feasibility and facilitators of the model continued

Although both midwives and team leaders acknowledged staffing challenges and other barriers to providing care the team expressed **pride** in their work within the MCC model.

"Antenatal and postnatal care has been maintained [to] a very good standard throughout the whole of the operation of the team."



"...team members that have been left working within the team have still [put] 100% effort in...this should be recognised as a big achievement."



Some staff reported concerns for their fellow midwives with burnout being identified as a real possibility. This was primarily because of the difficulties staffing shortages were causing and team leaders referred to "staffing challenges and low morale" amongst their teams.

"The team believe their team dynamic have improved this quarter, this can be seen visibly..."



"Burn out has been a problem for us but we had a strategy planned to mitigate this unfortunately staff shortages have scuppered our plans."



"The model can only succeed if both the team and the unit it works within are fully staffed."



Staff stated that they did not think the team would be able to show long-term success with the MCC model provision until their team and the wider midwifery unit was fully staffed.

Qualitative Evaluation

Women Themes identified in interviews

Trust

Feeling safe appeared important for many women, this often hinged on being able to trust their midwifery team.

"...she made me feel really comfortable from day one."



"...yeah, I felt like comfortable to talk to both of them."



Many women believed they had the opportunity to share their feelings, with many saying that they had opened up about mental health concerns or difficulties with their midwives.

"...I remember when I had the baby and I was feeling a bit low in myself, she stayed a lot longer with me, just to sit with me and talk to me and that just made the day for me."



"...I trusted her to kind of listen to me and help me through it."



Relationship

Women spoke openly about the bond they formed with their main midwife. The extended visits and having a named midwife aspect of the MCC model seemed to give all women the time to build a strong and personal relationship with their midwife.

"...it wasn't just like a midwife, it was like a family member type of midwife."



"I remember one of the appointments, because I was a little overwhelmed, that's the appointment she stayed a little longer..."



Qualitative Evaluation

Convenience and adaptability

The model seemed to offer many benefits to women, with many stating they were grateful to have had their antenatal and postnatal appointments at home with their midwife coming out to see/visit them. These women enjoyed being at home and feeling more comfortable for their checkups.

"It was a lot easier because they came to me and I wasn't trailing out to the doctors all the time to see them and it was more comfortable with being at home."



"...she was really flexible as well because whenever I asked her, I can't do this day and I can do this day, she'd move everything around for me."



Intrapartum care

All women had received standard care during their labour and birth. When questioned on their experience, women reported that it would have been nice to receive care from one of their MCC midwives at this time. However, they acknowledged that the care they received from hospital midwives during labour was broadly positive.

"...I would have preferred it if it was somebody who I had seen throughout my pregnancy, just for my own piece of mind that she knows how I'm like."



"...I think it would have been nice if my midwife could have been there, it would have just been obviously completing the journey...the midwives at the hospital were amazing as well..."



Qualitative Evaluation

Value of the continuity of carer model

All women expressed value and/or appreciation for the care they received in the continuity of carer model.

"I received the best care you could ever receive from my midwives."



"...it's been a lovely experience... it was a different experience with the home visits, which I honestly preferred...it was just a lot nicer."



All women wanted this level of care to continue because of the difference it was making.

"I've always been so thankful for the support."



"...I would like to have Clover team again if I had the chance..."



Student nurse/midwife

A few women acknowledged the presence of a student nurse/midwife at some point in their pregnancy. Although there was an overwhelming sense of understanding as to why student staff would need to be there, there was a sense that they were reluctant to have a student present.

"...I do feel a bit conscious if, you know, if I had to weigh myself, and stuff, and like there was two of them there...."



"...I just remember thinking oh the student midwife is here so I'm not going to ask, I'm not going to discuss it..."



Evaluation Findings

Conclusions



The COVID-19 pandemic and staffing issues within the midwifery team and nationally meant that only one MCC team was implemented. Due to circumstances outside the control of the MCC team, intrapartum continuity was paused from August 2022 - October 2023 due to wider midwifery capacity difficulties.

From the 1st April 2021 to 31st July 2023, the MCC team supported 438 women which was 89% of the planned target (490).

100% of antenatal appointments were provided by the MCC team (72% of which were delivered by the named midwife), 13% of births were attended by the MCC team and 79% of postnatal appointments were provided by the MCC team (47% of which were delivered by the named midwife).

Women acknowledged that their care had given them the ability to trust and build a strong relationship with their midwife and women also spoke of the convenience (and adaptability) of the model, acknowledging the value of the model. Women also stated that MCC care during the intrapartum period would have been a good addition but that it was not necessary.

Midwives and team leaders spoke about the negative impact staff shortages were having on their ability to adhere to the MCC model and to try and avoid burnout amongst the team. Staff reported feeling a lack of support from managers around the MCC model. However, despite staff shortages, many acknowledged the high quality care that the team were delivering.

Recommendations for Practice

Continuity of care in the antenatal period is embedded into the MCC team at BTHFT. Postnatal continuity is also achieved for 79% of appointments despite staffing issues. Continuity in the intrapartum period is much harder to achieve, and is dependent upon a stable system which includes secure staffing levels across midwifery and system-wide support for this model of care. In this model, overall continuity was just 13%.

Low staffing levels within the MCC team risks midwives burning out, and may reduce the impact of this model of care on women's outcomes.

The ability of BTHFT to implement MCC in the intrapartum period as well as antenatally and postnatally, needs to be re-visited in 6 months time once the full continuity has been re-introduced for a period of time.

Research findings should be reviewed once the qualitative study has completed (April 24) and the RCT results have been analysed (March 25).

Based on all of the above planned findings, the ongoing delivery of a full continuity model (including intrapartum care) should be considered in balance with the system stability and capacity as well as the needs of women and midwives.



References

- [1] Prady, S. L., Endacott, C., Dickerson, J., Bywater, T. J., & Blower, S. L. (2021). Inequalities in the identification and management of common mental disorders in the perinatal period: An equity focused re-analysis of a systematic review. *PLoS One*, 16(3), e0248631.
- [2] NHS. Better Births. Improving outcomes of maternity services in England. A five year forward view for maternity care. <https://www.england.nhs.uk/wp-content/uploads/2016/02/national-maternity-review-report.pdf>. 2017. Date accessed 03/04/2022
- [3] NHS. Continuity of carer. <https://www.england.nhs.uk/publication/implementing-better-births-continuity-of-carer/>. Date accessed 16/08/2022
- [4] Sandall J, Soltani H, Gates S, et al. Midwife-led continuity models versus other models of care for childbearing women. *Cochrane database of systematic reviews*, (4). 2016. <https://doi.org/10.1002/14651858.CD004667.pub5>
- [5] Dharni N, Essex H, Bryant MJ, et al. The key components of a successful model of midwifery-led continuity of carer, without continuity at birth: findings from a qualitative implementation evaluation. *BMC pregnancy and childbirth*, 21(1), 1-11. 2021.
- [6] Jackson, C., Brawner, J., Ball, M., Crossley, K., Dickerson, J., Dharni, N., ... & Smith, H. (2023). Being pregnant and becoming a parent during the COVID-19 pandemic: a longitudinal qualitative study with women in the Born in Bradford COVID-19 research study. *BMC pregnancy and childbirth*, 23(1), 494.