BIRMINGHAM CITY University

RCN MULTIPLE BIRTHS MIDWIFE STANDARD

REVIEW OF DISTRIBUTION AND IMPLEMENTATION

Multiple Births Foundation and the Elizabeth Bryan Multiple Births Centre Birmingham City University, in collaboration with the Royal College of Nursing (RCN).

May 2023

THE ELIZABETH BRYAN Multiple Births Centre

Royal College of Nursing

CONTENTS

EXECUTIVE SUMMARY

Introduction

Reports of an 'excellent and comprehensive document', pride, and success stories have shown that the Multiple Births Midwife Standard (MBMS) can be an effective tool for providing multiple birth mothers with personalised and professional care. When staffing, funding, and resources allow, Multiple Births Midwives have affirmed how valuable the role is for co-ordinating care and improving experiences for multiple pregnancy families. Accompanying these success stories are reports from other services around implementation challenges, a lack of strategic plans for improvement, and incomplete multidisciplinary teams.

Background

Improving multiple birth care is a priority. Recent reports have identified failings in effective care and demonstrated that the gap in stillbirth rates between singleton and multiple births is widening (Ockenden 2022, Draper 2022). The NICE guidelines recommend a core team, including a Multiple Birth Midwife, to provide multiple pregnancy care (NICE, 2019). However, the specialist role remained undefined. Supported by the Multiple Births Foundation (MBF), the Royal College of Nursing (RCN) created the Multiple Births Midwife Standard (MBMS) to set a role standard. In 2022, the MBF and Birmingham City University's Elizabeth Bryan Multiple Births Centre (EBMBC), with RCN collaboration, reviewed the distribution and implementation of the Standard, to make recommendations for maternity services.

Aim

To evaluate the distribution, awareness and implementation of the Multiple Births Midwife Standard in UK maternity services and, based on this, make recommendations for implementation uptake.

METHOD AND APPROACH

An anonymous online survey was distributed to Directors/Heads of Midwifery for each UK maternity service, where snowball sampling ensured the survey reached the most appropriate respondents within organisations. The survey was developed using an Appreciative Inquiry (AI) approach, asking about what worked well and what could be improved. Through highlighting examples of successful implementation and actively involving practitioners, the evaluation sought to encourage organisations to improve implementation practices. A realist view aided in identifying potential implementation barriers and explored opportunities for optimal real-world use.

RESULTS OVERVIEW

- 30 completed surveys were submitted and included in analysis, 8 surveys were completed by a Multiple Birth Midwife and the remaining 22 were completed by Senior Midwives (DoM, HoM, Senior managers, Consultant Midwives).
- 77% of respondents were aware of the MBMS before the survey.
- When asked about their Multiple Birth service:
- 20% of respondents indicated that they considered their service 'established'.
- 50% reported having no immediate plans for general multiple birth service improvement (including those who felt it was established).
- 46% reported having general improvement plans in progress or planned in the next 6 months.
- 3% (one service) considered that establishing plans for general improvement to multiple births services would be unfeasible.
- When asked about a business plan for a Multiple Births Midwife role:
- 30% of respondents considered their business case 'established'.
- 47% indicated that although this was 'desired', they had no current plans to establish a MBM business plan.
- 20% indicated that plans for a MBM role would be unfeasible for their service.
- 3% had plans in progress.
- Annual multiple birth caseload sizes varied greatly form service to service (range of 5 - 300 per year) but 67% of services supported over 50 multiple births per year.
- Multiple birth networks, together with Regional Chief Midwife networks were a source for learning about the MBMS.
- There was evidence of regular transferring of care, with some services accepting referrals for more complex cases while others referred out.
- Availability of the wider multidisciplinary team, as outlined in NICE Twin and Triplet Guidance (NG137, 2019), was incomplete across all responding services.

  Free text responses were thematically analysed, with four main themes emerging (Summary Figure 1).

Summary Figure 1: Thematic Diagram representing the four key themes generated from free text responses.

CONCLUSION

This report has highlighted significant shortcomings in the implementation of the MBMS across services, whilst celebrating successes and producing recommendations to improve implementations for all. Ultimately, actions need to be taken by organisations to implement MBM roles and to meet the National Institute of Health and Clinical Excellence (NICE) guideline [NG137] Twin and Triplet pregnancy (2019).

Recommendations

- Implementation of the MBMS should be further supported and promoted.
- Multiple birth services should be regularly audited and reviewed to benchmark the delivery of care against NICE Twin and Triple Guidance (NG 137, 2019) and to assess and understand the complexity and outcomes of locally supported multiple birth cases.
- Regional commissioning services (Integrated Care Boards, Local Maternity and Neonatal Systems) should consider collaboration and/or co-ordination of the MBM role to overcome the problem of small or inconsistent caseloads of multiple births within individual services.
- Multiple births care should be a priority within the context of other work being done locally and nationally to reduce stillbirth, improve maternity safety and consider the impact of the impact of health inequalities and socio-demographic diversity.
- Service leaders should consider how specialist Midwifery roles, such as the Multiple Births Midwife, align with Midwifery Continuity of Carer, while maintaining continuity with the wider multi-disciplinary team.
- The Specialist Multiple Birth Midwife role, as outlined by the Multiple Births Midwife Standards, should be aligned with NHS job descriptions for appropriate Agenda for Change Banding.

To support implementation of the MBMS and the recommendations above the EBMBC will:

- Continue to develop high quality and accessible continuing professional development opportunities on the topic of multiple births.
- Develop tools to support organisations with writing a business case for the Multiple Birth Midwife role in line with the MBMS.

FULL REPORT

Background

Improving care for multiple births is a priority. The most recent MBRRACE-UK (Draper et al 2022) perinatal surveillance report discovered a 19% increase in the twin stillbirth rate (risk over twice as high as singletons) and a 16% increase in the twin neonatal death rate (risk of neonatal death over 3 times higher than in singletons. While singleton stillbirths are reducing, the gap between singleton and twin death rates is becoming wider (Draper et al, 2022). In recognition of the need for safe and effective care, the requirement that:
'Trusts must have in place specialist antenatal clinics dedicated to accommodating women with multifetal pregnancies. They must have a dedicated consultant and have dedicated specialist midwifery staffing.'
is included in Immediate and Essential Action 8, Complex Antenatal Care in the Ockenden Report (2022).

Over 40 years, multiple births have risen significantly in the United Kingdom (UK) due to increased use of assisted conception, improved obstetric and neonatal care and women delaying childbearing (HFEA, Fertility Trends 2021). The National Institute for Health and Care Excellence (NICE) have produced clinical guidelines on Twin and Triplet pregnancy (NG129) and a Quality Standard on Multiple Pregnancies: Twin and Triplets (QS46) (NICE, 2019a, 2019b). Both recommend a core team including a specialist midwife to provide care for women with a multiple pregnancy. Previously, some midwives had developed roles caring for women with a multiple pregnancy, but this varied greatly across the UK. The specialist midwife role remained undefined, so the Royal College of Nursing (RCN), supported by the Multiple Births Foundation (MBF) created a project to set a standard for the role.

The resulting 'Multiple Births Midwife Standard' (MBMS) was published and distributed across the UK in 2021 (RCN, 2021). The MBMS aimed to outline the required elements to practice as a multiple births specialist midwife, including clinical practice and leadership skills, levels of education and training and a remit to implement care pathways and audit services. The MBMS set standards for leading the co-ordination of care for women with a multiple pregnancy and working in a multidisciplinary team, aligning with the existing NICE publications (NICE, 2019a, 2019b).

For this project, the Elizabeth Bryan Multiple Birth Centre have collaborated with the RCN, to evaluate the distribution and implementation of the MBMS across maternity services in England, Scotland, Wales, and Northern Ireland. The evaluation aimed to determine the degree to which the MBMS is being used in maternity services and to consider and reflect on the resources required to best support its national implementation.

Project Aim:

The aim of the project was to conduct an evaluation of the distribution and implementation of the RCN's MBMS and to subsequently make recommendations to assist implementation.

METHODOLOGICAL APPROACH

Based on the seminal work of Cooperrider and Whitney (2000), Appreciative Inquiry (AI) underpins this evaluation with theoretical and philosophical foundations in action research and organisational change. Already employed in health service evaluations (Fry et al 2008), AI posits that through highlighting positive aspects of implementation, investigating what is working well, and involving practitioners, inquiry can encourage organisational change.

One core principle of AI is the Simultaneity Principle, which recognises that inquiry and change are not truly separate moments; they can, and should be, simultaneous. AI critics question whether this attitude could lead to a harmful 'positive bias', resulting in unrealistic findings, however, this project embraced the potential benefit for promoting action whilst discovering barriers. A realist view was taken to identify potential barriers to implementation and for exploring development opportunities for optimal MBMS use. Such discussions were contextualised within the current drivers and pressures within UK maternity services.

AI typically follows a '4D Cycle', of Discovery, Dream, Design, and Destiny (Figure 1). The project aligned with stages one and two, Discovery (understanding what the best is) and Dream (what could possibly be). The project aims were to Discover what maternity services know and understand of the MBMS, and to encourage them to Dream of what might be possible and how this might be enabled. Project findings will prompt moving into the stages of Design (creating what will be) and Destiny (inviting action) by creating recommendations.

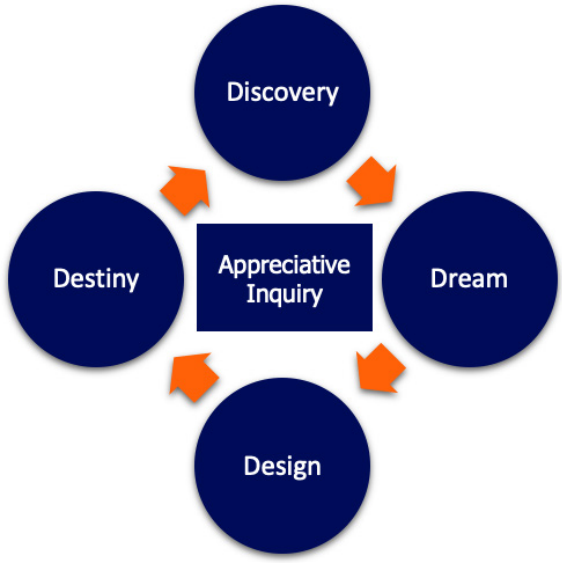


Figure 1: representing the '4D cycle' of Appreciative Inquiry as outlined by Cooperrider and Whitney (2000).

METHODS

Using the AI approach to structure and phrase the questions, an online survey was developed which featured both closed (quantitative) and open-ended (qualitative) questions. The survey stayed concise to increase engagement and completion likelihood from health professionals.

The survey was built using SurveysOnline™ (licensed by BCU), through which anonymous responses were collected. The survey was open for 4 weeks, with a reminder survey link sent out after 3 weeks. Data from SurveysOnline™ was exported into MS Excel for analysis and reporting purposes. Data was stored in secure OneDrive locations.

Recruitment

The survey was distributed to Directors/Heads of midwifery for each maternity service in England, Wales, Scotland, and Northern Ireland. Utilising each country's national and regional Chief midwives' network ensured dissemination to each service. Snowball sampling within the organisation was permitted to ensure the survey reached those who were deemed most appropriate to complete it.

Data Analysis approaches

Simple statistics were used to describe the outcomes (percentages, ratios etc) from quantitative and categorical data responses. Specific relationships between data points were not anticipated to contribute to the interpretation of the findings, and so statistical analysis was not performed.

An emergent, or flexible, analysis approach was undertaken to identify themes from the qualitative data, which varied in breadth and depth. Thematic analysis (Braun and Clarke, 2006) facilitated an understanding of the findings through an AI lens, answering 'what is working well?' and 'what could be improved?'. Thematic analysis involves reading and re-reading survey text data and coding for common themes. Partial and complete quotes that support the themes and findings can be found in the supplementary material.

Ethical approval

This project was granted ethical approval through BCU Research Ethics committee, (reference: Turville /#10118 /sub1 /R(C) /2022 /Feb /HELS FAEC (Evaluation of the RCN Multiple Births Midwife Standard).

RESULTS

The respondents and their maternity services

Responders were catagorised by job title and highest level of education. Just over a quarter (26.67%) were MBMs (n=8), with the remaining respondents being senior midwives (Directors or Heads of midwifery or other senior roles) (n=22) (Figure 1). Just less than two thirds or respondents (n=18, 60%) were educated to a degree level, four of which (22%) were subsequently working towards a Masters. Just under a third of respondents had achieved a Masters degree (n=9, 30%) (Supplementary Material, Figure 1).

Services varied in supported birth numbers and level of Neonatal care. Just over half of respondents' services (53%) supported 3000-6000 births per year (n=16) with under a fifth (17%) supporting over 6000 births per year (n=5) (Supplementary Material, Figure 2). The level of neonatal care provided by each trust varied, one trust did not have neonatal provisions. Neonatal Intensive Care was provided in just under two thirds of services (n=18, 60%). Special Care was provided in 10% of services (n=3) and High Dependency was provided in the remaining 28% (n=8) (Supplementary Material, Figure 3).

Two services did not report any multiple births in the year. If possible, respondents provided the number of multiple births their maternity service supported, in terms of pregnancies/birth episodes (Supplementary Material, Figure 4). The number of multiple births each service supports per year varied largely (range 5-300) (Figure 2). Respondents accessed the data for how many multiple births they supported per year from a combination of digital and analogue methods with varying degrees of confidence (Table 1).

Of those services reporting multiple births, less than half (just over 39%) indicated having a specialist FMU (n=11) and less than a third (29%) had a MBM (n=8) (Figure 2). There was no apparent correlation to the number of births and the presence of a Fetal Medicine Unit (FMU) or a MBM (Figure 2).

Job title	Number of respondents
Other	3
Specialist Midwife for Multiple Births	8
Matron	3
Head of Midwifery	7
Director of Midwifery	4
Consultant Midwife	2
Antenatal clinic manager	3

Figure 1: Bar Chart displaying respondent's job title by number.

Break down of where respondents accessed the source of the data for how many multiple births they support per year:

Confident - Data collected manually from records	2
Confident - Data retrievable from digital systems	13
Estimate for the purpose of the survey due to time restraints	8
Rough estimate - data difficult to access	2
Sound estimate based on knowledge of birth outcome/ antenatal caseload data	5

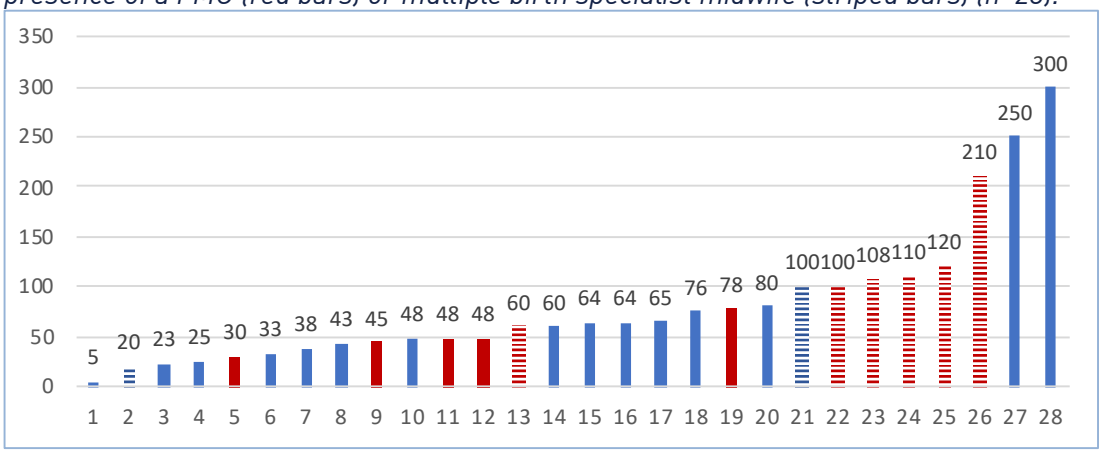
Multiple Births Specialist Midwives

Respondents who were a multiple births specialist midwife were asked if this was their only role or if they held additional roles (Supplementary Material, Table 1). Free text responses indicated that one of the respondents had this as their only role with others sharing this role with other specialist midwifery activities (Supplementary Material, Table 1). Multiple births specialist midwives had been in the role between 1-9 years and the services in which they worked supported a wide range of numbers of multiple births per year (from 20-210). Multiple births specialist midwives had accessed training via study days or webinars (mostly those provided by Twins Trust) or through mentorship from medical consultants. One had completed the post-registration module on multiple births provided by Birmingham City University (Supplementary Material, Table 1)

Fetal Medicine Units (FMUs)

Some maternity services have a specific Fetal Medicine Unit with a team caring for women with high-risk pregnancies. Other services may have staff with specialist fetal medicine experience but not a dedicated unit. In this survey, 39% of respondents reported having a Fetal Medicine Unit (n=11) (Figure 2). Respondents gave free text responses regarding the multiple pregnancies they saw in their FMUs and detailed their referral processes for either accepting or referring on more complex multiple pregnancies (Supplementary Material, Table 2).

Figure 2. Individual data for the number of multiple births supported per year, plus presence of a FMU (red bars) or multiple birth specialist midwife (striped bars) (n=28).



Red colour = Also have a Specialist Fetal Medicine Unit.
Blue colour = no Fetal Medicine Unit
Stripes = Answered by a Multiple Births Specialist Midwife.

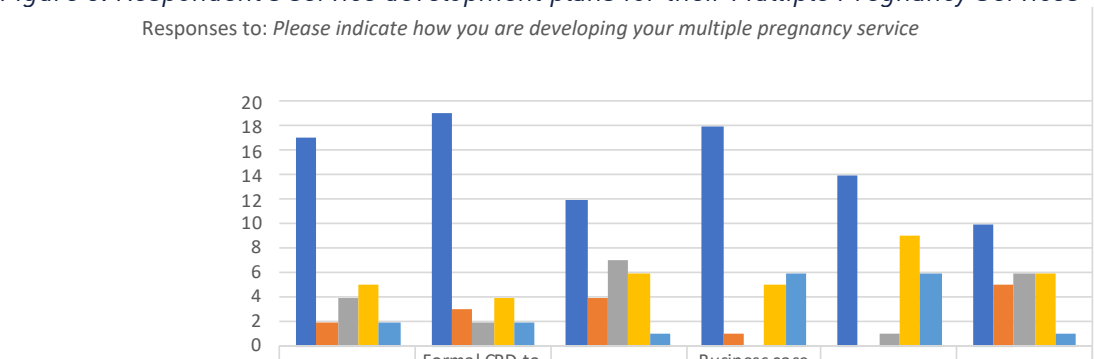
Plans for service development

The survey asked about immediate improvement plans for multiple birth services and how the MBMS was expected to support these (Figure 3). Respondents were asked about general multiple birth service improvements and about their business cases for the MBM role (Supplementary Material, Table 2). Further discussions encompassed plans for multiple births provision, business plans for enhanced services, staff continuing professional development, and planned audit (Supplementary Material, Table 2).

When asked about general multiple birth service improvements, a fifth of all respondents (20%) indicated that they considered their service 'established' (n=6). Half (50%) of respondents without 'established' services reported having no immediate plans for general multiple birth service improvement (n=12). Just under a half (46%) of services without established multiples service provision reported having general improvement plans currently in progress or planned in the next 6 months (n=11). One service considered that establishing plans for general improvement to multiple births services would be unfeasible.

Separately, when asked about their business case for an MBM role, under a third (30%) of respondents considered their business case 'established' (n=9). Of the remaining two thirds of services without established plans for an MBM role (n=21), roughly 67% (n=14) indicated that, although this was 'desired', they had no current plans to establish anything further. Just over a quarter (29%) of services indicated that plans for a MBM role would be unfeasible (n=6). Similar numbers were echoed across all areas of development relating to the MBMS, reflecting the real-world impact of various barriers to implementation.

Figure 3. Respondent's service development plans for their Multiple Pregnancy Services



	Staff personal development	Formal CPD to increase specialist knowledge and skills	General multiple birth service improvements	Business case for enhancing multiple pregnancy service	Business case for Multiple Birth Specialist Midwife role	Demonstration of standards met for audit/quality
Desired but no current plans	17	19	12	18	14	10
Planned in the next 6 months	2	3	4	1	0	5
In progress	4	2	7	0	1	6
Established	5	4	6	5	9	6
Not feasible within our service	2	2	1	6	6	1

Awareness of the RCN Multiple Births Midwife Standard

Over three quarters (77%) of respondents were aware of the Multiple Births Midwife Standard (MBMS) (n=23). Typically, respondents detailed learning about the MBMS through existing multiple birth networks or via regional NHS England communication (Supplementary Materials, Table 3). Those unaware of the MBMS were linked the document.

THEMATIC ANALYSIS OF FREE TEXT RESPONSES

Within the survey, respondents gave free text responses exploring various facets of the MBMS and its implementation in their services. Four primary themes of 'What worked well', 'What could be improved', 'Implementation barriers', and 'MBMS successes' emerged. These themes, along with their sub-themes, are represented in the thematic map below (Figure 4). More detailed thematic discussions follow.

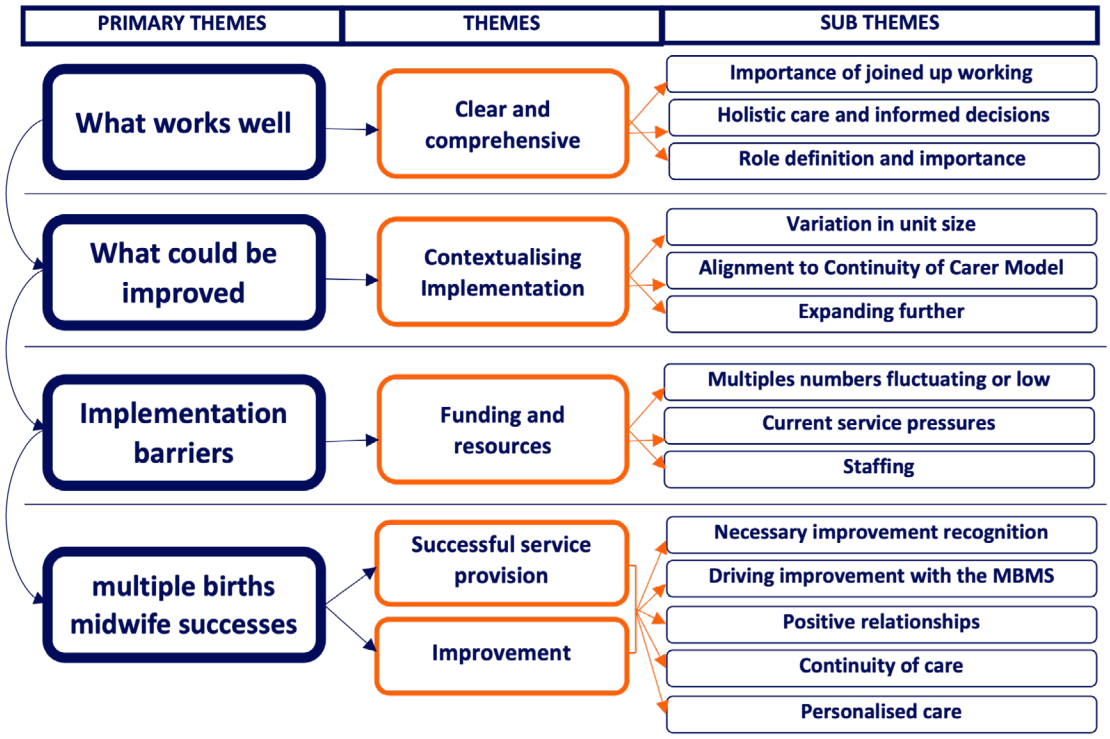


Figure 4. Thematic map representing all themes and subthemes found in free text survey responses, concerning MBMS implementation.

WHAT WORKED WELL

Free text answers explored what respondents thought worked well with the MBMS. A thematic analysis of the responses generated four themes: 'Clear and comprehensive', 'Role definition and importance', 'Holistic care and informed decisions for the family' and 'Importance of joined up working'. A thematic map (Figure 5) presents these themes, and further quotations have been tabulated evidencing the themes (Supplementary Material, Quotation Table 1).

Figure 5: Thematic map representing the theme 'What worked well', and its accompanying subthemes.

Clear and comprehensive

The first theme generated was 'Clear and comprehensive', where respondents felt that the MBMS was clear in outlining the MBM role and explaining the rationale underpinning the standard. Respondents felt there was a clear sense of understanding about the MBMS. One respondent described the document as 'excellent and comprehensive'. This theme is viewed as a linking theme and is underpinned by the three sub-themes below (Supplementary Material, Quotation Table 1).

Role definition and importance

A further theme identified was 'Role definition and importance'. Linked to the 'Clear and comprehensive' theme, respondents often reported that there was also a clear definition of the MBM role. Respondents felt that the MBMS conveyed the importance of the role, which was enhanced by the standard's clear rationale, noting that the 'standard looks fantastic and sets out clear guidance and role descriptions for multiple pregnancy midwives' (Supplementary Material, Quotation Table 1).

Holistic care and informed decisions

Linked to the importance of the role is the theme of 'Holistic care and informed decisions'. Responses reflected that the standard considered 'both the midwife and the family so that they are supported to make informed decisions relating to their care'. Respondents often conveyed a belief in the importance of holistic care, in line with the philosophy of the MBMS, and advocated for the involvement and importance of all key family members (Supplementary Material, Quotation Table 1).

Importance of joined up working

Building on the above is the theme 'Importance of joined up working'. The responses reflected that the MBMS remained clear and comprehensive for all staff involved in multiple birth family care and recognised 'the benefits of continuity of care'. Joined up working was thought to enable optimal and holistic care by providing care continuity, which the MBMS reflected (Supplementary Material, Quotation Table 1).

WHAT COULD BE IMPROVED

Free text answers explored what respondents thought could be improved for optimal use of the MBMS. The theme 'Contextualising implementation' emerged from thematic analysis, from which emerged three additional themes, 'Variation of unit size', 'Expanding further' and 'Alignment to Continuity of Carer model'. A thematic map (Figure 6) presents these themes. (Further quotations evidencing the themes can be found in Supplementary Material, Quotation Table 2).

Figure 6. Thematic map representing the theme 'What could be improved' and its accompanying subthemes.

Contextualising Implementation

'Contextualising implementation' encompassed thoughts on strategies for MBMS implementation and identifies what would need to be different in services struggling with implementation, including challenges like funding, resources, recognition, and establishing an action plan (Supplementary Material, Quotation Table 2).

Variation in unit size

Responses identified that further thought was needed by service leaders to consider the variation in numbers of multiple births and caseload size implications for implementation of the MBMS. In smaller units with a low number of multiple births, it was considered unjustifiable to devote the resources required to implement the MBMS and to employ a full time specialist multiple births midwife (Supplementary Material, Quotation Table 2).

Alignment to Continuity of Carer

Respondents questioned how the MBMS would work alongside/with the Continuity of Carer (CoC) model. Respondents felt that further national discussion was needed on how specialist roles were integrated with CoC models and how this may work without causing 'hugely problematic' role dilution (Supplementary Material, Quotation Table 2).

Expanding further

Considering implementation strategies for the MBMS, respondents identified certain demographics and topics which they felt required further exploration within the standard. This included the consideration of the needs of underserved groups and socio-demographic diversity of service users, focusing on intrapartum and post-natal care and more reference to external specialist services and established networks (Supplementary Material, Quotation Table 2).

MAIN BARRIERS TO IMPLEMENTING THE MBMS

Free text responses explored the main barriers to implementing the MBMS within respondents' service. 'Funding and resources' emerged as the main theme, which ran through subthemes of 'Staffing', 'Current service pressures' and 'Fluctuating or low multiple numbers'. A thematic map (Figure 7) presents these themes. (Further quotations evidencing the themes can be found in Supplementary Material, Quotation Table 3).

Figure 7: Thematic map representing the theme 'Implementation barriers' and its accompanying subthemes.

Funding and resources

Funding and resources were seen as significant barriers to MBMS implementation. MBMs commented on the need for more resources and a recognition of the responsibility of the role by senior staff and commissioners. It was noted that 'supporting midwives to complete training at Masters-level [was challenging] due to funding/ releasing midwives from clinical practice' (Supplementary Material, Quotation Table 3).

Staffing

Staffing problems were highlighted and linked to the barriers of funding and resources. Services were experiencing a high turnover of staff or staff shortages. While there was a recognition that higher pay bandings should be given for specialist roles, senior teams were perceived to be hesitant to enact this, possibly because of a lack of awareness surrounding the role (Supplementary Material, Quotation Table 3).

Current service pressures

Again, while respondents recognised the importance of the MBMS, respondents noted that services were under existing pressures particularly considering existing post-Ockenden immediate and essential actions. One respondent predicted that 'core attention will be made to supporting 1:1 care in labour and delivery suite acuity'. Existing national maternity service improvement pressures were reported as priorities, and therefore a barrier for implementing initiatives considered to fall outside this immediate remit (Supplementary Material, Quotation Table 3).

Fluctuating or low numbers of multiples

As with 'Contextualising implementation', fluctuating or low multiple numbers were seen to make planning and implementation difficult. Amongst other points, respondents from smaller services felt like integrating MBMs would be challenging or that there would be a lack of opportunity to gain experience (Supplementary Material, Quotation Table 3)

SUCCESSES

Free text responses explored implementation and elicited stories of 'Successful service provision' with examples of best practice, alongside respondents' 'improvement aspirations' and future plans. Further analysis generated the subthemes of 'Necessary improvement recognition' and 'Driving improvement with the MBMS'. The subthemes of 'Positive relationships', 'Continuity of care' and 'Personalised care' were also identified. A thematic map (Figure 8) presents these themes. (Further quotations evidencing the themes can be found in Supplementary Material, Quotation Table 4).

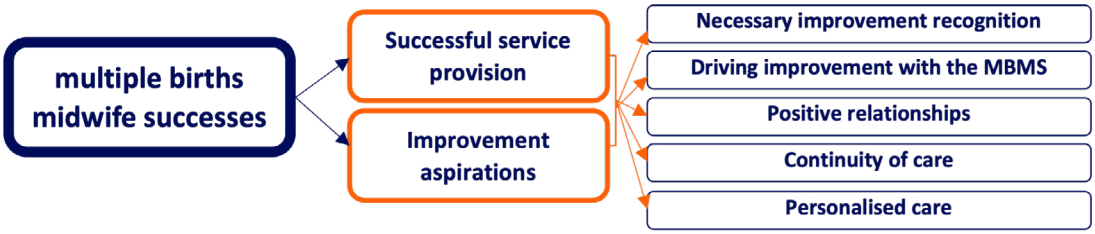


Figure 8: Thematic map representing the theme 'MBMS successes' and its accompanying subthemes.

Successful service provision

Respondents had positive feedback about successful execution of multiple births provision, conveying pride in their successful MBMS implementation. The respondents reflected on the facilitation of personalised care and positive relationships between multiple births families and multidisciplinary team staff, saying that women in their services were feeling valued. Continuity of Care was highlighted frequently, with respondents feeling that women were feeling informed about their care (Supplementary Material, Quotation Table 4).

Improvement aspirations: recognition and driving this forward thanks to MBMS

Often, respondents recognised that improvements were necessary and conveyed aspirations for multiple birth service improvement. However, these statements were frequently followed by concerns about funding. Most respondents were aware of the MBMS, and that the MBMS could be a tool for driving forward positive change, and informing service design and planning (Supplementary Material, Quotation Table 4).

DISCUSSION

This survey-based evaluation explored MBMS awareness, implementation barriers and successes, and highlighted aspirations for future improvements and how these might be actioned. Through Appreciative Inquiry, it is hoped that the evaluation was able to promote improvement, inform practice, and collect data simultaneously.

The evaluation found that the MBMS was considered clear and comprehensive by practitioners, who also valued that the MBMS aligned with principles of holistic care and the Continuity of Carer model (National Maternity Review, 2016). There were reports of successful implementation in some services, with aspirations to utilise the MBMS to drive improvements in others. However, respondents highlighted how certain aspects of the MBMS could be improved to support implementation. Common organisational challenges, like limited funding and resources, alongside multiples-specific challenges like fluctuating multiple birth rates, emerged as barriers.

This evaluation also identified common areas where services were not yet able to meet the MBMS standard and NICE Twin and Triplet guidelines (NICE NG137, 2019). In recognition of the leadership and expertise requirements of the role of the MBM, the MBMS proposes masters-level education, alongside specialist knowledge of multiples. This level of education was not reflected in practice, with one MBM responding to this survey working towards a masters. Nevertheless, several sources for training in specialist multiples' knowledge were identified. Most common were learning from others, study days, and webinars. One respondent suggested that funding and time-restraints inhibited intentions of supporting midwives' higher education. Although a small sample, from the 30 senior midwives responding to this survey five were working towards and seven had achieved master's degrees. This points to long-standing issues in resource availability for educational attainment along with career progression for midwives.

The MBMS outlines that the MBM role includes co-ordinating care within a multidisciplinary team (MDT). This aligns with practices described within the NICE guidelines on Twin and Triplet pregnancy (NICE, 2019). In practice, the MDTs reported in the survey varied in composition, with most professionals having general pregnancy knowledge rather than specialist multiples knowledge (<15% reported perinatal mental health professional, <7% with women's physiotherapist, and zero dieticians with specialist multiple knowledge). Furthermore, the challenge of having the MBM role more widely recognised was reported. Whilst these findings are not entirely unexpected, this indicates that organisations may not have the capacity to work within current NICE guidance.

Unfortunately, there was imperfect reporting of multiples births in some services, and limited plans for developing multiples services in most. The number of multiples births per-year varied highly between services, but data collection methods and accuracy also displayed high variation. Some survey responses were based on degrees of estimation, from confident to rough estimates. This has negative implications for the ability to audit services and outcomes.

While some services had plans to establish general multiple birth service improvements, fewer anticipated developing a MBM role. Only a fifth (20%) of respondents considered their general multiple births services 'established' (n=6). Slightly over half (54%) of respondents without established services either had no plans for general development or considered general development of multiple births services unfeasible (n=13). Nevertheless, the remaining 46% of respondents either had general improvement plans in progress or planned within the next six months (n=11). About two thirds (67%) of services without established business plans for the MBM role indicated having no plans to develop anything further (n=14). Significantly, over a quarter (29%) of services without established business plan for the MBM role felt that establishing plans would be unfeasible in their service (n=6).

This evaluation had notable strengths and uncovered positive experiences of MBMS implementation. The survey enabled respondents to describe their successes at driving improvement in multiple birth services, where personalised and specialist care were reported to have positive patient-experience impacts. The use of Appreciative Inquiry allowed for service providers to celebrate their successes, while promoting awareness of the MBMS. The MBMS was welcomed by MBMs in validating the value of the role in delivering safe care and clearly outlined the skills and experience required. However, a different perspective was offered by those not working in the role who appeared to view the MBMS outline for the role as "aspirational".

Combining the MBM role with additional roles may provide a solution for services that believed MBM role integration unfeasible due to caseload size. Merging roles may support professional development by providing opportunities to develop across complex care areas and should be explored further. Being able to develop a regional role of a MBM who supports care at more than one hospital/trust could be another solution for low multiple birth caseloads, or for maternity services who routinely refer multiple pregnancies to other NHS Trusts. A regional role may also offer additional familiarity, continuity, and improve multidisciplinary communication across sites where neonatal transfers are also likely.

Although the evaluation methodology was carefully planned, limitations emerged. The survey facilitated anonymised participation, to encourage open and honest responses, but anonymisation meant that it was not possible to determine the respondents' geographical distribution. Furthermore, not all maternity services completed the survey, limiting generalisability of findings such as the reported 77% awareness-rate of the MBMS (n=23). Awareness of the evaluation survey may have been subject to the same barriers of MBMS awareness, producing a non-response bias. Nevertheless, although not all maternity units completed the survey, the correlations between the responses could indicate a reasonable reflection of the status quo. Certainly, the 30 responses here reflected the well-publicised pressures on maternity services and the internal pressure to prioritise specific policy-driven improvement initiatives.

CONCLUSION

The MBMS was considered clear and comprehensive by many and aligned well with NICE guidelines about multidisciplinary multiple birth care. Successful multiple birth service improvements which incorporated the MBMS were reported, along with examples of effective personalised care provided to those experiencing multiple pregnancy. Importantly, the evaluation found variation in MBMS knowledge and implementation, and highlighted common implementation barriers reported by most services. Despite long-standing organisational challenges, professionals conveyed aspirations for improvement, and the MBMS emerged as an inspiring and supportive resource. Drawing on the collective findings, actions aimed at supporting these aspirations and further supporting effective MBMS implementation are outlined at the end of this report.

Recommendations

- Implementation of the MBMS should be further supported and promoted.
- Multiple birth services should be regularly audited and reviewed to benchmark the delivery of care against NICE Twin and Triple Guidance (NG 137, 2019) and to assess and understand the complexity and outcomes of locally supported multiple birth cases.
- Regional commissioning services (Integrated Care Boards, Local Maternity and Neonatal Systems) should consider collaboration and/or co-ordination of the MBM role to overcome the problem of small or inconsistent caseloads of multiple births within individual services.
- Multiple births care should be a priority within the context of other work being done locally and nationally to reduce stillbirth, improve maternity safety and consider the impact of the impact of health inequalities and socio-demographic diversity.
- Service leaders should consider how specialist midwifery roles, such as the multiple births midwife, align with midwifery Continuity of Carer, while maintaining continuity with the wider multi-disciplinary team.
- The specialist multiple birth midwife role, as outlined by the Multiple Births Midwife Standard, should be aligned with NHS job descriptions for appropriate Agenda for Change Banding.

To support implementation of the MBMS and the recommendations above the EBMBC will:

- Continue to develop high quality and accessible continuing professional development opportunities on the topic of multiple births.
- Develop tools to support organisations with writing a business case for the multiple birth midwife role in line with the MBMS.

REFERENCES

Braun, V. & Clarke, V. (2012) Thematic analysis. In Cooper, H. (Ed.), The Handbook of Research Methods in Psychology. American Psychological Association.

Cooperrider, D.L., and Whitney, D. (2000). Collaborating for change: Appreciative inquiry. San Francisco: Berrett-Koehler Publishers.

Draper ES, Gallimore ID, Smith LK, Matthews RJ, Fenton AC, Kurinczuk JJ, Smith PW, Manktelow BN, on behalf of the MBRRACE-UK Collaboration. (2022) MBRRACE-UK Perinatal Mortality Surveillance Report, UK Perinatal Deaths for Births from January to December 2020. Leicester: The Infant Mortality and Morbidity Studies, Department of Health Sciences, University of Leicester.

Fry, R. et al. (2008) The Appreciative Inquiry Handbook: For Leaders of Change. Oakland: Berrett-Koehler Publishers, Incorporated.

Human Fertilisation and Embryology Authority. (2021). Fertility treatment 2019: trends and figures. Available at: Fertility treatment 2019: trends and figures | HFEA. [Accessed 07 December 2022].

Independent Maternity Review. (2022) Ockenden Report: Findings, Conclusions, and Essential Actions from the Independent Review of Maternity Services. Available at: Ockenden review: summary of findings, conclusions and essential actions - GOV.UK (www.gov.uk) [Accessed 13 December 2022]

National Institute for Health and Clinical Excellence (NICE) (2019) Twin and Triplet Pregnancy (NICE Guideline 137). Available at: https://www.nice.org.uk/guidance/ ng137 [Accessed 27 September 2022].

National Institute for Health and Clinical Excellence (NICE) (2019) Quality Standard on Multiple Pregnancies: Twin and Triplets (NICE Quality Standard 46). Available at: About this quality standard | Multiple pregnancy: twin and triplet pregnancies | Quality standards | NICE [Accessed 07 December 2022].

National Maternity Review. (2016). Better Births: Improving outcomes of maternity services in England: A Five Year Forward View for maternity care. Available at: https://www.england.nhs.uk/publication/better-births-improving-outcomes-of- maternity-services-in-england-a-five-year-forward-view-for-maternity-care/ [Accessed on: 13 December 2022]

Office for National Statistics (ONS), released 19th January 2023, ONS website, dataset, Birth characteristics. 2021 edition.

Royal College of Nursing (RCN) (2021) Multiple Births Midwife Standard RCN guidance for midwifery. Available at: Multiple Births Midwife Standard | Royal College of Nursing (rcn.org.uk) [Accessed 27 September 2022]

FUNDING

This project did not receive external funding. Access and use of SurveysOnline™ was provided though BCU licensing. Project time from the project team is included in existing work plan and roles.

COPYRIGHT AND CONFLICT OF INTEREST

We do not believe there is any conflict of interest with this project. Carmel Bagness, Jane Denton and Nathalie Turville were part of the team that developed the RCN Multiple Births Midwife Standard and provided oversight of this evaluation. The protocol for this evaluation was developed by Elizabeth Bailey before refinement with the wider team and data analysis was undertaken by Martha Burlingham and Lorna Hibberd independently before being written into this report with support from the whole team.

FEEDBACK

If you would like to provide any feedback on this resource, particularly if applied to practice, please email the Elizabeth Bryan Multiple Births Centre at multiples.births@bcu.ac.uk.

PROJECT TEAM

Lorna Hibberd, Research Assistant, Elizabeth Bryan Multiple Births Centre, Birmingham City University, lorna.hibberd@bcu.ac.uk

Martha Burlingham, Research Assistant, Elizabeth Bryan Multiple Births Centre, Birmingham City University, martha.burlingham@bcu.ac.uk

Jane Denton, CBE, F RCN, Co-lead Elizabeth Bryan Multiple Births Centre & Director Multiple Births Foundation jane.denton@bcu.ac.uk

Nathalie Turville, Deputy Director, Elizabeth Bryan Multiple Births Centre, Birmingham City University, Nathalie.turville@bcu.ac.uk

Carmel Bagness, RCN Professional Lead Midwifery & Women's Health carmel.bagness@rcn.org.uk

Elizabeth Bailey, Director, Elizabeth Bryan Multiple Births Centre, Birmingham City University elizabeth.bailey@bcu.ac.uk


BIRMINGHAM CITY
University


THE
ELIZABETH BRYAN
Multiple Births Centre


Royal College
of Nursing