NIHR | National Institute for Health and Care Research

ESMI-III: The Effectiveness and Implementation of Maternal Mental Health Services

Interim Report: Phase 1

September 2022

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Summary

Background

Maternal Mental Health Services (MMHS) are being implemented across England as part of the NHS Long Term Plan commitment to transforming and improving access to perinatal mental health care. MMHS (previously referred to as Maternity Outreach Clinics in the NHS Long Term Plan) aim to provide evidence-based psychological interventions, integrated within maternity and obstetric pathways, for women and birthing people experiencing moderate to severe or complex mental health difficulties related to their maternity experience. This may include those who experience post-traumatic stress disorder following birth trauma, perinatal loss (e.g. miscarriage, stillbirth, neonatal death, termination of pregnancy, and parent-infant separation at birth due to safeguarding concerns), and/or severe fear of childbirth (tokophobia).

The Effectiveness and Implementation of Maternal Mental Health Services (ESMI-III) study aims to understand and inform the most effective ways of implementing and scaling up MMHS. The purpose of this report is to provide timely learning from phase one of the study focused on the early implementation phases of MMHS in Early Implementer and Fast Follower sites.

Aims and methods

The ESMI-III study is being undertaken in two phases:

- **Phase 1: Organisational Mapping and Early Barriers and Facilitators to Implementing MMHS**
  Phase one of the study aims to: 1) understand the core components and variation in MMHS delivery models, and 2) identify barriers and facilitators to implementing MMHS in the pilot phase. To achieve these aims we conducted an organisational mapping exercise of Early Implementer and Fast Follower sites across England and focus groups with staff and service delivery managers.

  Phase one of the study was undertaken between September 2021 and June 2022. Eighteen sites participated in the organisational mapping of the 33 Early Implementer and Fast Follower sites. Four focus groups were conducted in February 2022, with a total of 25 participants, representing 12 different MMHS sites. Focus groups were recorded and analysed using Template Analysis to identify key barriers and facilitators to implementation.

- **Phase 2: Organisational Case Studies with selected MMHS sites**
  Phase two of the study aims to: 1) understand which MMHS models works, for whom, and in what circumstances, 2) How and why MMHS aim to improve maternal mental health for women who have experienced loss, trauma or fear related to childbirth, using a Realist Evaluation Approach. Phase two of the study will be undertaken between August 2022 and September 2023.

Findings

The organisational mapping exercise of Early Implementer and Fast Follower sites has identified core components and goals across the participating MMHS pilot sites in England. While core components were shared across all sites, services had made individual adaptations to respond to local needs and existing service provision. Variation in service delivery models were identified, including: the cohort of the service, inclusion and exclusion criteria, referral route, workforce size, timing and type of interventions provided, embeddedness within maternity services and inclusion of partners and families.

Based on analysis of Focus Group data from Phase 1 of the ESMI-III study, the following overarching themes and sub-themes have been identified.

Challenges and learning. Three overarching themes related to the challenges and learning from MMHS during the pilot phase were identified:

1) 'Need for clear guidance during planning and development of service models': Sites described the challenges experienced during the early planning stage, when they felt they lacked national guidance about different aspects of service development.

2) 'Logistical challenges when establishing services': Services experienced logistical challenges during the implementation phase, including getting the skill-mix right and working across integrated care systems.

3) 'Expectations for a sustainable service when demands exceed capacity': Sites expressed concerns about how to ensure the services are sustainable beyond the pilot stage, particularly given the high demand for the service in the pilot phase.

Success and innovation. Despite the challenges experienced by services, three key areas of success and innovation were identified:

1) 'Forging new ways of working': Pilot sites described the value in having the opportunity to think 'outside the box' and rethink care pathways and roles in a creative and innovative way.

2) 'Feelings of pride, optimism and hope': Pilot sites captured healthcare professionals' hopes for the new service, optimism about improving care and the positive feedback from service users.

3) 'Embracing a systems approach in healthcare': Pilot sites explored the benefits of co-design and working and learning from others across the healthcare system.

Recommendations from ESMI-III Phase 1 findings

The findings from Phase 1 of the ESMI-III study have led to the development of national and local facilitators to implementing MMHS.

National and local facilitators to implementing MMHS:

- Develop a shared understanding of (short-, medium-, and long-term) scope of the services
- Create strong local and national leadership

- Provide clear communication and engagement between national and local leads
- Facilitate mechanisms and access to robust data on local population maternal mental health need
- Provide adequate funding and resources for all elements of the programme
- Ensure integration of mental health and maternity at all levels of the programme
- Enable time-efficient procedures for recording and reporting of service level data to national teams
- Generate feedback loops from service users and opportunities for sites to share challenges and learning
- Support local commissioning processes for scale-up and sustainability of services

Lessons to support the development of new MMHS:

- Involve service users and co-design services from the outset
- Adopt a flexible and iterative approach to developing services
- Assess the clinical skill-mix needed to support provision of care to the different cohorts of women
- Identify and support funding mechanisms for appropriate clinic space for MMHS
- Ensure sufficient 'lead in' time to establish clear job descriptions, roles, and contracts
- Engage in opportunities to share challenges and learning with other sites
- Develop processes for embedding psychological care within maternity services
- Engage with voluntary and third sector organisations
- Invest time and resources into processes to determine local population needs and pathways
- Develop mechanisms to integrate services within multidisciplinary care teams
- Identify workforce training needs and ring-fence time for training

1. Background to Maternal Mental Health Services

Policy context

The development and implementation of Maternal Mental Health Services (MMHS) has been shaped by two recent major policy documents: 1) the NHS Long Term Plan 2019-2029 published in January 2019 [1], in which MMHS were referred to as "Maternity Outreach Clinics" under the maternity ambitions; and 2) the NHS Mental Health Implementation Plan 2019/20 - 2023/24, published in July 2019 [2] with more detailed guidance for MMHS implementation issued by NHS England [3].

These policy documents were informed by consultation events, held by NHS England and NHS Improvement (NHSE&I) in 2018 with a range of stakeholders. They highlighted that some women with moderate to severe or complex mental health difficulties relating to, or arising from, their maternity experience were falling through the gaps in existing service provision. This was especially the case for those experiencing Post-Traumatic Stress Disorder (PTSD) following birth trauma, perinatal loss (e.g. including early miscarriage, recurrent miscarriage, stillbirth, neonatal death, termination of pregnancy for any reason, parent-infant separation at birth due to safeguarding concerns), and tokophobia (severe fear of childbirth).

It was recognised that in many cases the current provision of care through Community Perinatal Mental Health Services (CPMHS) and Improving Access to Psychological Therapy (IAPT) services did not include provision of care for birth trauma, perinatal loss and tokophobia. As such, it was recommended that these women needed greater access to specialist psychological interventions, integrated within maternity and obstetric pathways, beyond the support provided by other mental health services, for women experiencing mild or non-complex psychological distress, such as IAPT or third sector organisations offering counselling or bereavement care.

Although service provision and referral criteria for Community Perinatal Mental Health Services can vary across the country, further information on the wider perinatal mental health care pathway and implementation guidance has been published by the National Collaborating Centre for Mental Health, NHSE&I and the National Institute for Health and Care Excellence [4-6].

More recently, the need for integrating trauma-informed care within maternity services was also highlighted by the interim and final Ockenden Report [7, 8], the independent review of maternity services at the Shrewsbury and Telford Hospital NHS Trust. Trauma-informed approaches to care recognise the widespread impact of trauma on individuals and seeks to integrate knowledge about trauma, its signs and symptoms, into organisational policy and practices, and actively resist creating an environment that can cause re-traumatisation [9-11]. The final Ockenden Report states that 'care and consideration of the mental health and

wellbeing of mothers, their partners and the family as a whole must be integral to all aspects of maternity service provision' [8]. Recommendations relevant to the scope of this report include the following:

- Robust mechanisms for the identification of psychological distress
- Clear pathways for women and their families to access emotional support and specialist psychological support as appropriate
- Access to timely emotional and psychological support without the need for formal mental health diagnosis
- Psychological support for the most complex levels of need delivered by psychological practitioners who have specialist expertise and experience in the area of maternity care

Aims of Maternal Mental Health Services

MMHS were proposed in the NHS Long Term Plan (referred to as Maternity Outreach Clinics) as a key joint ambition between perinatal mental health and maternity services. MMHS have two overarching aims for women with 'trauma or loss in the maternity, perinatal or neonatal context':

1. Offer timely access to specialist assessment and evidence-based treatment, with a focus on psychological interventions in line with NICE guidance [12, 13]

2. Implement holistic, personalised and trauma-informed approach to care both within and outside of the service [14]

Early Implementer and Fast Follower sites

More detailed information about MMHS service specifications were communicated via regional perinatal NHSE&I networks in the lead-up to the call for expressions of interest, in July 2020. Interested sites were invited to submit their expression of interest, which contained information about local population, staffing model, costings, and their local service configuration. Selected sites (Table, 1; N=32) were informed by NHS England with funding made available for testing these models in these areas for 2020/21 and 2021/22. NHSE&I provided guidance via written documents, webinars, and the FutureNHS Collaboration Platform, an online platform where pilot sites could also access 'peer-support' from other pilot sites.

A distinction was made between 'Early Implementers' and 'Fast Followers', depending on the timeframes of service implementation and delivery, with the Fast Followers usually running six months behind the Early Implementers. However, due to the Covid-19 pandemic, timeframes were reviewed for all sites.

Table 1: **Early Implementer and Fast Follower Sites**

Early Implementers	Fast Followers
Midlands Birmingham & Solihull Leicestershire Northamptonshire Shropshire Telford & Wrekin	**East of England** Bedfordshire, Luton and Milton Keynes Norfolk and Waveney
North East South Yorkshire and Bassetlaw	**London** North Central London North East London North West London
North West Lancashire and South Cumbria	**South East** Berkshire, Oxfordshire and Buckinghamshire Frimley Health Surrey Heartlands
South East Hampshire and Isle of Wight Kent and Medway	**South West** Bath, Swindon and Wiltshire Gloucester Somerset
South West Cornwall Devon	**North West** Greater Manchester Lancashire and South Cumbria Cheshire and Merseyside
	North East North East and North Cumbria Humber, Coast and Vale
	Midlands Derbyshire Lincolnshire Nottinghamshire Coventry and Warwick Black Country and West Birmingham Staffordshire Hereford and Worcester

North West

Early implementers
Lancashire and South Cumbria

Fast Followers
Greater Manchester
Lancashire and South Cumbria
Cheshire and Merseyside

North East

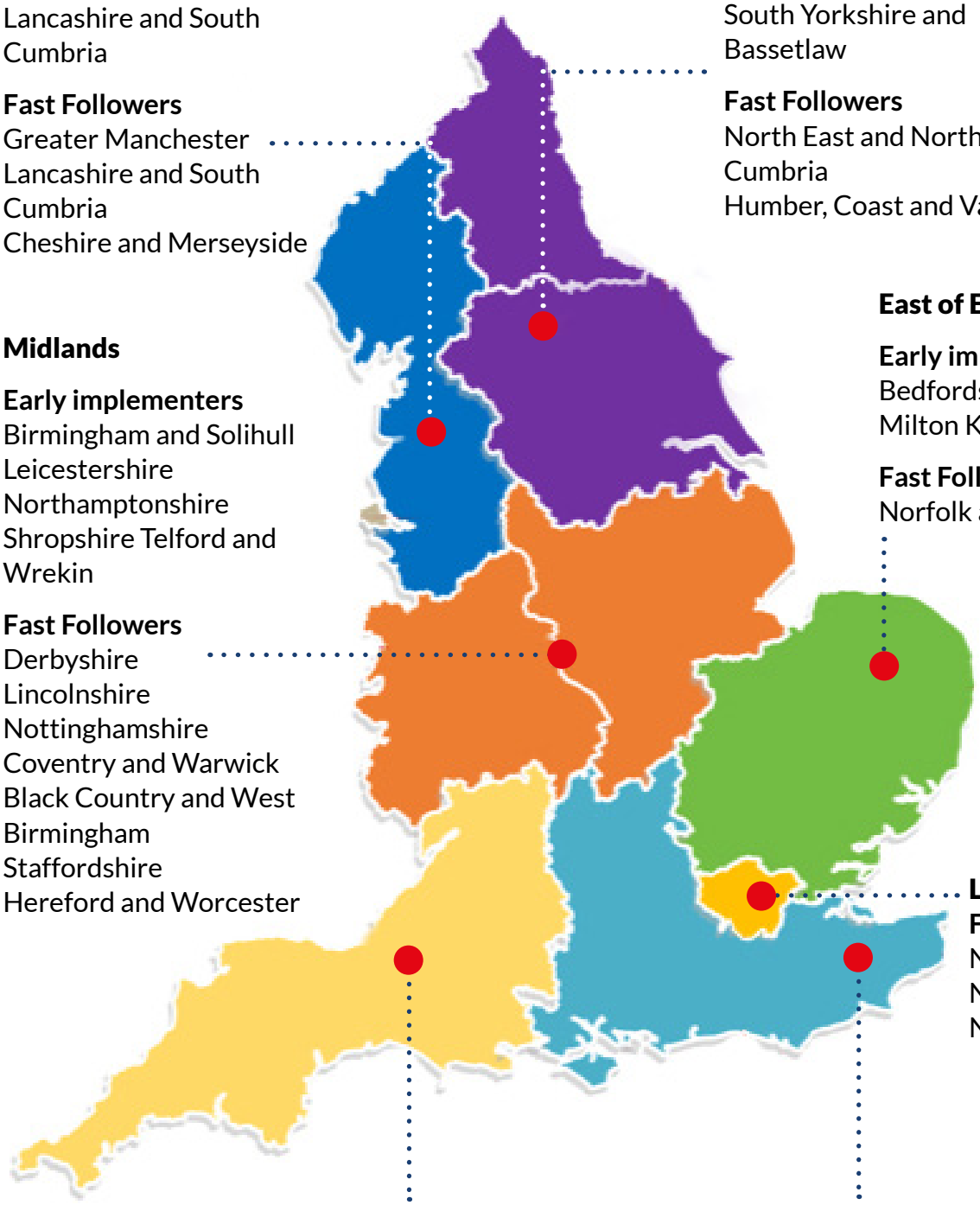
Early implementers
South Yorkshire and Bassetlaw

Fast Followers
North East and North Cumbria
Humber, Coast and Vale

Midlands

Early implementers
Birmingham and Solihull
Leicestershire
Northamptonshire
Shropshire Telford and Wrekin

Fast Followers
Derbyshire
Lincolnshire
Nottinghamshire
Coventry and Warwick
Black Country and West Birmingham
Staffordshire
Hereford and Worcester



East of England

Early implementers
Bedfordshire, Luton and Milton Keynes

Fast Followers
Norfolk and Waveney

London
Fast Followers
North Central London
North East London
North West London

South West
Early implementers
Cornwall
Devon

Fast Followers
Bath
Gloucester
Swindon and Wiltshire
Somerset

South East
Early implementers
Hampshire and Isle of Wight
Kent and Medway

Fast Followers
Berkshire, Oxfordshire and Buckinghamshire
Frimley Health
Surrey Heartlands

Integration with existing services

The services form part of the wider ambitions for perinatal mental health set out in the NHS Long Term Plan. MMHS sites were encouraged to undertake a 'gap analysis' to identify gaps in their current service provision within their local area, to build partnerships with existing services, and develop a multidisciplinary skill-mix that integrates psychological therapies, midwifery care and peer support. Where existing services were meeting the needs of some, or all, of the cohorts of women (e.g. those with PTSD following birth trauma, perinatal loss, or removal and tokophobia), MMHS were not expected to replace existing provision but rather to develop clear pathways and stepped care models.

National roll out of MMHS

Central transformation funding was available for Early Implementer and Fast Follower sites testing the MMHS models in 2020/21 and 2021/22. Following the implementation of MMHS in Early Implementer and Fast Follower sites, it is expected that all areas of England should be planning how to develop, maintain and expand their MMHS. In 2022/23, part of the MMHS funding went into system baselines and will be included within expenditure under the Mental Health Investment Standard (MHIS), and part of the funding remained under the Strategic Development Fund. MMHS funding is expected to become recurrent.

In the early implementation phase of MMHS, emphasis was placed on gathering local, regional, and national evaluation data to learn from and share learning across England.

2. The ESMI-III Study

Background and aims

The Effectiveness and Implementation of Maternal Mental Health Services (ESMI-III) study was funded through the National Institute for Health and Care (NIHR) Applied Research Collaborations (ARCs) Children's and Maternity Research Priority Programme [15]. It is part of a three-year programme aimed at identifying effective ways to implement evidence-based interventions to improve children's health and maternity services across England. The study is led by the NIHR ARC South London maternity and perinatal mental health theme at King's College London, in collaboration with Liverpool University and Exeter University.

The study aims to provide timely learning from the implementation of MMHS in Early Implementer and Fast Follower sites, to identify barriers and facilitators to early implementation and identify optimal service delivery and context-specific barriers to implementations across the pilot sites.

A realist approach

Healthcare systems are known to be complex adaptive systems, where transformation and implementation of new processes can only be completely understood by acknowledging the complexity, unpredictability and multitude of components inherent to the healthcare system [16]. By adopting a realist approach [17, 18], we aim to understand which MMHS model works, for whom, in what circumstances, how and why (i.e. what are the underlying circumstances).

To develop the Initial Programme Theory and to understand the different contexts (C), mechanisms (M) and outcomes (O) in the second phase of the study, we required a clear understanding of the service configuration and implementation at each of the MMHS Early Implementer and Fast Follower sites. To achieve this overview, we conducted an organisational mapping of the Early Implementer and Fast Follower sites.

The ESMI-III study is being undertaken in two phases, this report on the findings from phase one of the study:

Phase 1: Organisational mapping and early facilitators and barriers to implementing MMHS
Phase one of the study aims to: 1) understand the core components and variation in MMHS delivery models in Early Implementer and Fast Follower sites, and 2) identify facilitators and barriers to implementing MMHS in the testing phase.

To achieve these aims we will conduct an organisational mapping exercise of all Early Implementer and Fast Follower sites across England and focus groups with staff and service delivery managers (see Chapter 3).

Phase 2: Organisational case studies with selected MMHS sites

Phase two of the study aims to: 1) understand the contexts, mechanisms, and outcome configurations in the selected MMHS sites, 2) investigate whether MMHS are effective in improving maternal mental health for women who have experienced loss, trauma or fear related to childbirth.

To achieve these aims we will: 1) recruit three groups of participants (service users, key providers, and national stakeholders) in each of the selected sites, to take part in realist interviews to examine what mechanisms of care worked for whom and in what circumstances, 2) collect maternal mental health outcome measure data at each of the sites at the start of treatment and post-treatment.

Phase 1 of the ESMI-III Study received ethical approval by the King's College London Ethics Committee in July 2021 (REC Reference: MRA-20/21-25656).

3. Maternal Mental Health Services Logic Model and Programme Theory Development

Background

Complex interventions are defined as 'any intervention with several interacting components' and are common in health and social care settings [19]. MMHS form part of an extensive service delivery transformation for perinatal mental health care and can be considered as complex interventions on several different dimensions. These include variation in the number of different components of the interventions being delivered, the context within which they are delivered in, the groups that it targets and the interactions between the different components [20].

Exploring the mechanisms through which complex interventions, such as MMHS, bring about change is crucial to understanding and evaluating how the effects of the specific intervention occurred, and how interventions might work to bring about change in different contexts. Context includes anything external to the intervention that may act as a barrier or facilitator to its implementation, or its effects [21], and is an important aspect of conducting complex intervention research.

A programme theory describes how an intervention is expected to lead to its effects and under what conditions. It describes the key components of the intervention, how they interact and by what mechanisms, as well as the wider context which might influence how the programme is delivered. They can help to communicate a shared understanding of a programme among stakeholders, clarify areas of uncertainty, and guide research and evaluation questions. In line with MRC Guidance for the Development and Evaluation of Complex Interventions [20], the ESMI-III study sought to develop a programme theory at the beginning of the research project and to refine it during successive phases.

Depicting the intervention in a logic model can be a useful starting point to help clarify causal assumptions and map out the theory of change for a given intervention. It acts as a graphical representation of the programme and includes the resources (inputs) and activities that will take place, to the deliverables (outputs) and goals (outcomes) that the programme aims to achieve [22].

Description of the MMHS Logic Model

The initial logic model for MMHS depicted below has been developed to provide an understanding of the programme at a national level. It has been constructed by reviewing national policy documents and guidance for the MMHS, and from discussions with key stakeholders both nationally and locally. Figure 1 outlines the overarching 'problem statement' and identified seven key goals of the programme, as well as key Inputs (e.g. central transformation funding for the development and implementation of MMHS, national guidance and support), Activities (e.g. workforce and service development), Outputs (e.g. assessment and provision of evidence-based psychological interventions), Outcomes (e.g. increased access to care and improved mental health).

As a logic model for the national delivery of the programme it may not be applicable to local areas and different context, which are likely to include more complex and less linear relationships between the programme's contexts, mechanisms, and outcomes. It serves as a first step towards the development of the initial programme theory that will be tested in Phase two of this study. At the end of the study, we will produce a refined programme theory, which will help inform transferability of the interventions across different settings and provide understanding that can help inform policy.

Figure 1: **Maternal Mental Health Services Logic Model**

Problem statement

Perinatal Mental Health (PMH) problems have a significant impact on health and wellbeing outcomes for women, children, and families, which is associated with long-term costs to health and social care.

Current PMH service provision means that some women (e.g. those experiencing perinatal loss or trauma) are less likely to have access to mental health care and support. Inequalities in access among minority and underrepresented groups exist.

Goals

1. Provide timely access to evidence-based specialist assessment and treatment (e.g. psychological interventions in line with NICE guidance) for women experiencing moderate-severe or complex mental health difficulties directly arising from maternity/perinatal/ neonatal experiences

2. Prevent women "falling through the gaps" of existing service provision (e.g. to provide a service for women who would not currently meet criteria for other mental health services or provisions)

3. Implement a holistic, personalised and trauma-informed approach to care (within and outside of the MMHS)

4. Ensure a fully integrated care pathway for the cohort of women (e.g. with specialist CPMHS, maternity & neonatal services, bereavement care, GPs, IAPT, reproductive and sexual health services, Children's Social Care and Early Help Services, safeguarding teams, third sector or mental health services (CYP and adult), health visiting, other acute services, etc.) and not replace existing service provision in the area

5. Adopt a multidisciplinary and stepped-care approach to developing services and pathways

6. Meet the needs of local populations (e.g. be reflective and responsive to identifying and responding to local population needs and gaps in service provision)

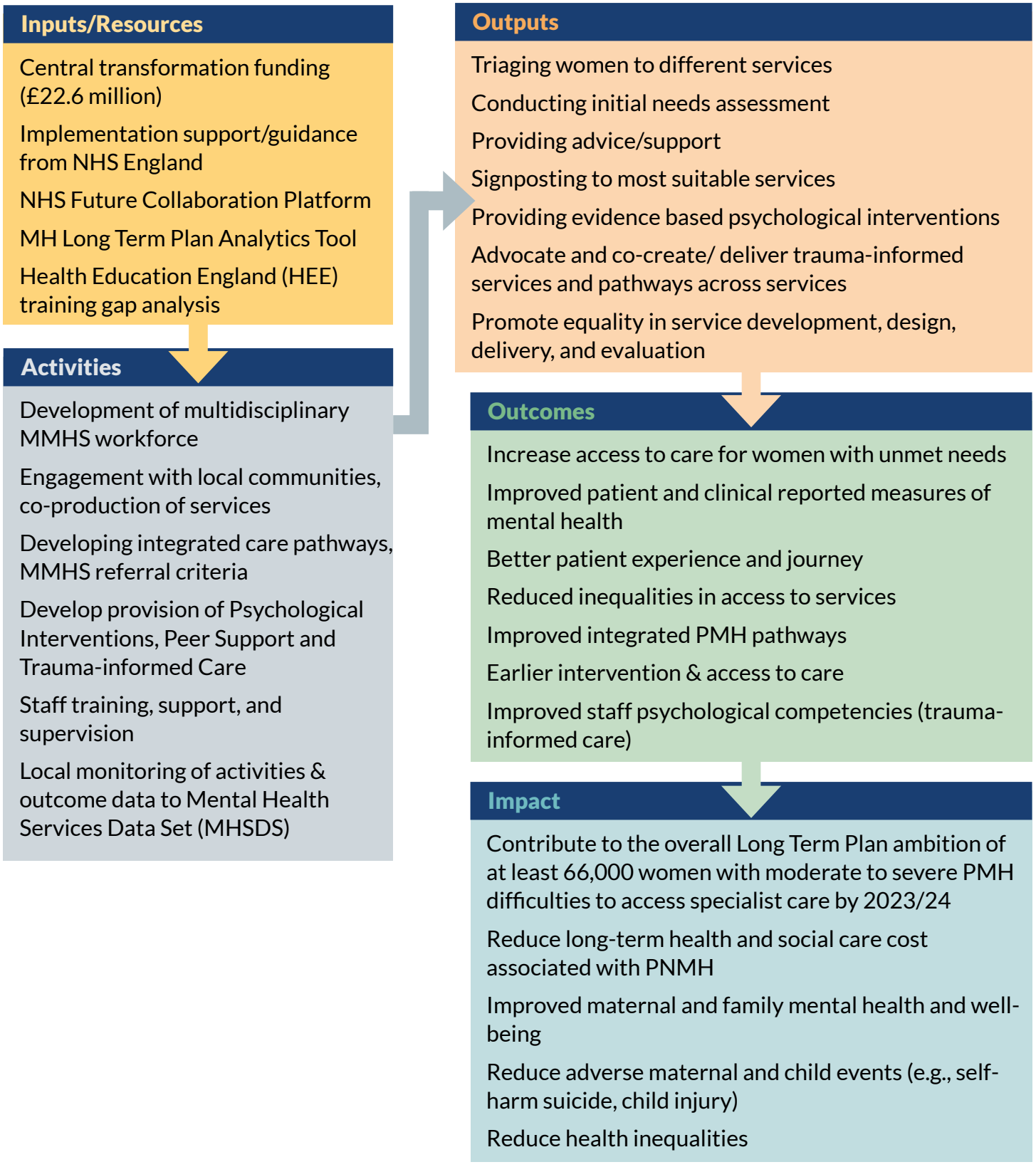
7. Contribute to reducing health inequalities in their area for this cohort of women

8. To offer assessment and signposting for partners

Cohort

Women with moderate–severe/ complex mental ill health relating to the experience of loss or trauma in maternity/neonatal/perinatal contexts.

Presentations may include, but are not limited to, PTSD following birth trauma or PTSD following perinatal loss (early miscarriage, recurrent miscarriage, stillbirth, neonatal death, termination of pregnancy for any reason, Children's Social Care intervention during pregnancy/ separation of an infant from parent's care due to safeguarding concerns) and tokophobia.



Assumptions	External Factors
The NHS will have capacity to develop and deliver MMHS	Covid-19 service reconfiguration and pandemic restrictions
Staff training, support, and supervision will lead to increased trauma-informed care	Workforce capacity, changes to commissioning of services
MMHS provide an acceptable and appropriate service for the cohort of women	Expansion of other mental health services (CMHT, CPMHS, IAPT)
Integrated care pathways improve patient outcomes and experiences	Local variation in service provision of partner organisations

4. Organisational Mapping of Early Implementer and Fast Follower Sites

Aims

The Organisational Mapping of Early Implementer and Fast Follower Sites aimed to capture the variation in configuration and components of MMHS in pilot areas, (e.g. workforce, type and range of interventions offered, referral pathways and criteria) to inform the initial programme theory and understand the development and implementation of MMHS in these settings.

The mapping of services was undertaken during September 2021 and February 2022 and aims to provide a snapshot of how these services were developing in the early implementation phase, rather than a final depiction of MMHS provision in England.

Methods

Data collection

Initial contact with all MMHS pilot sites (N=32) was established through an introductory email from the NHSE&I Programme Manager for Perinatal Mental Health. Following this introduction, a member of the research team contacted the pilot sites via email, providing a description of the aim of the organisational mapping and an invitation to participate by providing any service-related documents (e.g. site proposals, service delivery plans, referral criteria) that may be deemed helpful to understanding how the services are being set up and implemented in different areas.

Sites that responded to the invitation were subsequently provided with further detailed information, including a participant information sheet and link to the online consent form. Individual (virtual) meetings with project leads or service managers were held to provide further information and address any questions of the interested sites. Sites that did not respond to the initial invitation, were contacted again between September 2021 and January 2022, to allow them to participate at a stage that was convenient for them. Participating sites had full control of which documents they wanted or were able to share. Recruitment was finalised in February 2022.

Analysis

One researcher analysed the documents per site, using the Template for Intervention Description and Replication (TIDieR) Checklist [23]. The TIDier Checklist is a 12-item template designed to improve completeness of reporting of interventions and focuses on the why (rationale, theory, or goal), what (materials used), what (procedure), who provided, how, where, when and how much, tailoring, modifications, how well (planned) and how well (actual) interventions work. Any service-related documents that were shared with the research team were mapped against this 12-item checklist and information from the documents was extracted into Excel. Where required, a follow-up meeting with the service manager or clinical lead was held to obtain further detailed information, in order to complete the checklist as much as possible.

An internet search was also conducted to search for webpages of pilot sites that did not respond to the invitation to participate or any follow-up reminders. Where these services had an active webpage online, information on the website was analysed using the TIDieR checklist.

Findings

A total of 18 (56% response rate) sites participated in the organisational mapping review of MMHS by sharing their service-related documents. Another three sites were assessed for inclusion based on the available information from their service website but as information was sparse, they did not meet final inclusion criteria. Variation was identified on all items of the checklist. A table with the core components of MMHS pilot sites and the level of variability can be found below (see table 2).

Table 2: **Core Components of MMHS pilot sites**

Mapping item	Range/variability
Geography	North-South representation Urban-Rural representation
Service delivery	1. Cohort of Service/Service Offer 2. Provision of Psychological Therapies
Referral criteria	Criteria common to all MMHS pilot sites vs service specific criteria
Exclusion criteria	Criteria common to all MMHS pilot sites vs service specific criteria
Referral route	Health – Local authority -Self-Referral – Third sector
Timescale specifications for referring into the service	Strict vs unlimited timescales
Resources	Variation across roles, banding and WTE
Training and Supervision	Trauma-informed, bespoke intra and extra mural supervision
Partners and family	Offers of care and support to partners
Location	Remote/traditional settings/settings outside maternity and MH settings
Outcome measures	Visual representation of pathway, outcome measures and interventions

Geography
MMHS sites from all regional areas across England are represented in the organisational mapping, which included both rural and urban settings across the North-South/East-West axis.

Service delivery
MMHS pilot sites all shared a common goal to improve care for those women affected by loss, trauma and/or fear during the maternity experience. Where this information was available, the gap analysis that several pilot sites had completed locally was shared with the research team, to evidence and understand the service provision that was already in place in this field and the needs of the local community. This local gap analysis subsequently informed decisions around local MMHS delivery, leading to variability between pilot sites' service delivery.

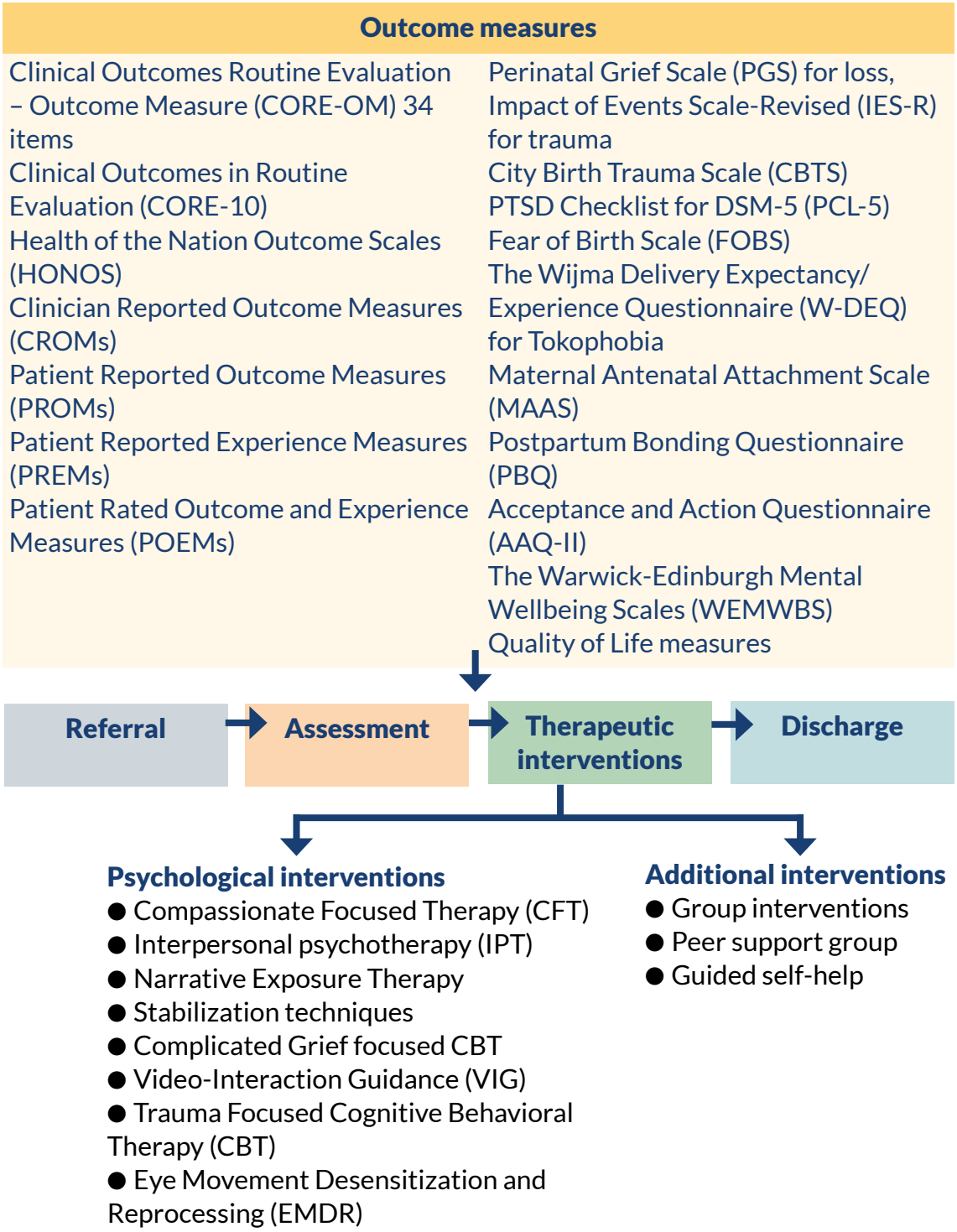
Two key components of service delivery were identified in the organisational mapping exercise:

1) Cohort for service/service offer
Most sites within the scope of the organisational mapping (n=14; 78%) had a 'broad focus' for their service i.e. three distinct pathways for 1) perinatal loss (including loss through care proceedings); 2) birth trauma; and 3) fear of birth (tokophobia). In contrast, four sites (22%) had a 'single focus' within their service model, which was predominantly to support women with perinatal loss (e.g. stillbirth, miscarriage, or neonatal loss, and excluding loss through care proceedings). At the time of the mapping exercise, one pilot site provided a service exclusively to women who suffered a miscarriage before 24 weeks gestation, and one for support after birth trauma. In this initial mapping exercise, among those pilot sites that offered a 'broad focus', seven sites (39%) provided a service for women who faced loss of their baby through care proceedings.

Decisions about defining the service cohort were in keeping with 'decisions' found to be driven by two key factors. Some sites based their decision-making on gaps in the local service provision after identifying a specific local service gap and aimed to create a service to meet this specific local need. Others decided to expand an existing service, building on the expertise and experience within existing service provision, with the aim to offer this type of support to a larger cohort of people.

2) Provision of psychological therapies
A full overview of therapeutic interventions available across MMHS pilot sites is available in figure 2.

Figure 2: **Visual representation of pathway, outcome measures and interventions**



Most sites offer at least two of the interventions listed often in combination with psycho-education, antenatal preparation (including birth planning), group interventions and/or peer support.

Timeframes for interventions were not always available from the mapping exercise but ranged from one to two sessions for short-term interventions, two to twelve sessions for medium-term interventions, up to more than twelve sessions for long-term interventions. Most services offered a flexible approach to determine the length of the intervention, based on need. An average of eight sessions or six months was reported by several sites.

Referral criteria (inclusion and exclusion)

Variability in services was also evident from differences in referral criteria, shaped by the service delivery model described above. Table 3 highlights the key commonalities and differences in referral criteria across the services included within the mapping exercise.

Table 3: **Referral criteria (inclusion and exclusion)**

Inclusion	Exclusion
Present in all services	
● Resident in geographically determined area or registered with GP in geographically determined area	● Women with mild to moderate depression or anxiety disorders that can be treated in IAPT
● Experiencing moderate to severe or complex mental illness which directly relate to their pregnancy or birth experience (cause to be further specified)	● Women who do not present with a trauma or loss response relating to their pregnancy or birth experience, but do present with distress relating to pre-existing psychological difficulties or other perinatal issues
● Require psychological intervention and cannot access existing pathways and provision	● Women with high risk to self or others
Present in some services	
● Causes of mental health difficulties: birth trauma, fear of childbirth (tokophobia) or perinatal loss (still birth, miscarriage, or neonatal death as well as women who have endured complex fertility issues) or restricted to any of these (single focus model)	● Women whose primary diagnosis and concerns of mental health relate to any of the following: alcohol or substance misuse disorders; eating disorder; learning disability
● A severe fear of medical procedures relating to pregnancy or the unborn baby (including assessment of foetal growth and wellbeing, and diagnosis and management of foetal disorders or abnormalities)	● Women who have child removal through care proceedings
● Experience of feeling marginalised as part of their perinatal experience. This may include difficult and complex journeys to becoming pregnant, those from LGBTQ+ communities and assisted pregnancy	● Women who have a diagnosis of a personality disorder without any other presenting mental health difficulties associated with perinatal loss
● Women who experienced miscarriage (in its broadest sense: complete miscarriage; incomplete miscarriage; missed miscarriage; chemical pregnancy; molar pregnancy; recurrent miscarriage; ectopic pregnancy)	● Infertility issues
	● Early hysterectomy or early menopause
	● Termination due to non-medical reasons

Where pilot sites did include a separate pathway for mothers with custody loss (n=7), these pathways differed greatly, as evident from their referral criteria for this group of women:

- women who experienced temporary removal of their baby due to Local Authority planning but are now parenting their baby
- women who experienced removal of previous baby but have now opportunity to parent their current unborn baby
- parents who experienced removal of their baby within the first year of life, with no plans for reconciliation and the parent is not currently pregnant
- women who experienced removal of a previous child removed into care or face high likelihood of future removal
- women who experienced the removal of a previous child or children due to Children's Services' involvement and who have a desire to process this loss and to consider the impact upon potential future pregnancies.

This means that across these services, two distinct service models have been developed: Those services that are supporting women who have an opportunity to parent their current unborn or newborn baby after a previous or temporary loss of custody; and those services only supporting women where there are no plans for reconciliation.

Referral pathways

The main referral route for all 18 sites that took part consisted of healthcare professionals in primary and secondary health care settings. This included General Practitioners (GPs), midwifery services, IAPT services, secondary mental health services, including community perinatal mental health teams. Within the sample, 6 (35%) sites also explicitly welcomed referrals from professionals in Local Authorities, including children's social care. Seven (39%) sites accept self-referrals directly from women in need of support. One of these sites only offered this self-referral option into their pathway for women who face removal of their infant in response to safeguarding concerns. Furthermore, two services accepted referrals from voluntary third sector organisations.

All services had a similar model, whereby referrals are discussed weekly at a multidisciplinary, and often multi-agency, meeting. Appropriate referrals were offered an assessment (most typically with a clinical psychologist) with a Key Performance Indicator (KPI) target of four weeks from referral to assessment, although some sites had a KPI target of two weeks.

Timescale

The majority of services (n=15; 83%) had pathways accessible from pregnancy up to the postnatal period. However, the definition of this 'postnatal' remit differed from service to service. In contrast, three services (16%) in the sample had no time restrictions for referrals after birth trauma or perinatal loss, if the inclusion criteria for severity and impact on daily functioning were fulfilled. Four sites did not provide clarity in their service documents about the timescales for referrals to be accepted.

Table 4 gives an overview of the variety of timescales, based on the review of service-related documents, the following cut-off timescales were identified.

Table 4: **Definitions for referral timescales**

Description of timescale	Number of sites
Pre-conception up to 24 months postnatal	2 (11%)
Pre-conception up to 12 months postnatal	3 (17%)
Pregnancy up to 15 months postnatal	1 (6%)
Pregnancy up to 13 months postnatal	1 (6%)
Loss or trauma occurred less than 12 months ago	2 (11%)
Loss or trauma occurred less than 24 months ago	2 (11%)
Loss or trauma occurred any time in the past	3 (17%)
No information available	4 (22%)

Outcomes

The use of outcome measures varied greatly across all sites, in line with their local service provision, leading to a multitude of outcome measures as can be seen in Figure 2. Consistency was lacking as to which measures are used for trauma, tokophobia or loss, making any comparison between MMHS sites difficult. Further work is currently being undertaken by NHS England to explore which outcome measures MMHS are using and whether further guidance support or recommendations need to be developed.

Resources

Based on their service model, MMHS have composed their local teams to meet the needs of the service and expectations of service delivery. Table 5 reflects the variation in roles, range in pay scale bandings and Whole Time Equivalents (WTE) for these roles. Clinical teams are likely to vary in size dependent on the geographical location and number of births, although we were unable to directly compare the size and composition of clinical teams in relation to the overall population they served.

Table 5: **MMHS staffing models**

Role	NHS Agenda for Change Banding	WTE
Consultant clinical psychologist 8c	8b - 8c	0.8
Clinical/counselling psychologist 8a	8a	0.3 – 2.3
Project manager	7 - 8a	0 – 0.8
Clinical/counselling psychologist	7	0 – 1.2
Art therapist	7	0 – 1.0
Specialist mental health practitioner (CBT)	7	0 – 1.2
Mental health nurse	6	0 – 0.6
Specialist midwife	6 - 7	0 – 2.0
Peer support worker	3 - 4	0 – 1.0
Assistant psychologist	4 - 5	0 – 0.5
Project officer	5	0 – 0.8
Administrator	3 - 4	0 – 0.6

Based on the table above, the following observations can be made:

- Teams generally consisted of one or more clinical psychologists, taking on the clinical lead role of the service, and often in combination with a patient-facing role. In addition, some teams had band 7 psychologists in their teams.
- Specialist midwives were not consistently part of the MMHS teams. Where services had a sole focus on support in the post-loss or post-trauma period, the role of specialist midwives in such a service was unclear and not well defined. This led several services to the decision not to include them in their staffing model.
- Banding for several roles was inconsistent and ranged across different pay scales for a variety of roles, including specialist midwives, peer-support workers, administrators, and assistant psychologists.

Training and supervision

Bespoke inductions were offered to new staff in all MMHS pilot sites, where this information was available. A focus on trauma-informed care and trauma-focused psychological interventions (such as EMDR and trauma-focused CBT) was present in many sites. Wherever the pilot site's staffing model included specialist midwives, special attention was given to an extensive training package for those midwives to be able to perform their duties within a psychology-orientated service. Competencies were mapped against the Health Education England, The Competency Framework for Professionals working with Women who have Mental Health problems in the Perinatal Period. 2018 , although this information was not available from all participating sites.

All staff employed by the MMHS site have access to supervision, which in the vast majority of cases was provided by the lead/consultant clinical psychologist. Supervision was in some cases also provided to external partners, outside the MMHS service. In most cases, this would relate to clinical supervision of specialist midwives in the acute hospital setting, such as bereavement midwives, perinatal mental health midwives and other groups of specialist midwives.

Partners and family

The NHS Long Term Plan's perinatal mental health ambitions have clearly focused on improving access to support for partners of women and birthing people. Both access to specialist CPMHS and Maternal Mental Health Services were included in the NHS Long Term Plan, ensuring partners would receive evidence-based assessment of their mental health and signposting to support as required [1].

Among the 18 sites that participated in the organisational mapping, 9 (44%) accepted referrals of partners and provided assessment and signposting to partners, mostly signposting to IAPT or other mental health services, or voluntary sector organisations. Although there is not the expectation within the current implementation guidance for MMHS to provide psychological interventions to partners, two services provided individual and/or couple therapy, enabling partners to access brief psychological interventions. A further three sites explicitly encouraged partners 'to attend appointments alongside their partner', without offering individual assessment and signposting for partners. Five services did not have information available regarding service provision for partners or wider family members.

Location
All MMHS sites endeavoured to offer therapeutic interventions and support in appropriate locations away from maternity or child-related locations, in addition to more traditional locations such as maternity settings or perinatal mental health service offices, in line with the trauma-informed approach of the service. Alternatives were found in library settings, children centres, community settings and local healthcare facilities. MMHS that were embedded within Community Perinatal Mental Health Services tended to share their offices and therapeutic spaces.

Conclusions

The findings of this organisational mapping exercise are based on documents provided by 56% of MMHS pilot sites. Therefore, it does not provide a complete picture of what MMHS are offering, both at present and in the future. As the Covid-19 pandemic disrupted timescales for designing and implementing in many of the MMHS pilot sites, this has also led to significant delays in launching MMHS. At the point of participating in the mapping exercise, some services were not accepting referrals and were fully aware they would inevitably evolve as they 'went live', with modifications made to the various components.

Nevertheless, this organisational mapping exercise of Early Implementer and Fast Follower sites has identified core components across the participating MMHS pilot sites in England. While the main structure of many of these core components (such as staffing models, supervision structure, triage, and assessment processes) are shared across all sites, it has also become clear services have made individual adaptations, to respond to local needs within the community and existing service provision. This, in combination with local capacity within their MMHS, due to budgetary restrictions and availability of appropriate staff, has led MMHS pilot sites' service provision to develop in different ways, with high levels of variety in pathways across England. Although these variations have been driven by local needs and expertise, it highlights the risk of unmet needs if the gaps in current service provision are not being met by other parts of the pathway as services further develop and adjust.

These findings resonate with earlier reports on transformation of mental health services, highlighting the complexity of setting up national services, amidst a locally diverse landscape of existing services and pathways [24].

5. Focus groups with those involved in planning, implementing, and delivering MMHS

Aims

A second part of this phase of the ESMI-III study aimed to gain a better understanding of the variations, facilitators, barriers, challenges and successes in service configuration, delivery, and implementation of MMHS in Early Implementer and Fast Follower sites across England. Where the organisational mapping explored the 'what?' question, the focus groups allowed us to understand the 'why?' part of our research question.

The specific objectives of the focus groups were to:

1. Understand the core components and variation in MMHS service delivery models in Early Implementer and Fast Follower sites across England

2. Explore the early facilitators, barriers, and challenges to implementing MMHS service delivery models in Early Implementer and Fast Follower sites across England

3. Identify areas of shared learning, innovation, and successes from the early implementation phase of MMHS

Findings from the focus groups will help inform the development of an initial programme theory of how MMHS are expected to improve outcomes for women accessing the services and generate shared learning and innovation across MMHS nationally. The focus group findings will also contribute to the programme theories in the next stage of the ESMI-III study.

Methods

Ethical approval to conduct the focus groups was received by the King's College London Ethical Committee, with Ethical Clearance Reference Number MRA-20/21-25656. A further modification request was submitted and granted in December 2021 to include recruitment for focus groups through the FutureNHS Collaboration Platform. Invitations to participate in the focus groups were sent via email to the existing contact list the research team had built throughout the organisational mapping exercise, with the request to share widely with the local MMHS team and relevant partners. In addition, an invitation to participate was also posted on the National Perinatal Mental Health Workspace on the Future NHS Collaboration Platform. An online consent form was shared to those who expressed interest and all data was handled and processed in accordance with the General Data Protection Regulation 2016 (GDPR).

Data collection

A topic guide was designed to explore challenges, successes and learning points during the planning and implementation of the MMHS pilot sites. Four focus groups were conducted via Microsoft Teams, within the span of two weeks in February 2022, lasting between 1hr 10mins and 1hr 30mins, and with three to nine participants each (total N =25), from 12 different MMHS pilot sites. Focus groups were recorded, with only the audio-recording being saved and sent to an external transcription company.

Data analysis

Transcripts were checked by two research assistants for accuracy and first familiarisation with the dataset. The dataset was analysed using Template Analysis, a qualitative method of thematically organising and analysing qualitative data [25-27]. An initial coding template was developed by the principal investigator and two research assistants, based on the data in one of the focus groups. Subsequently this coding template was used to thematically code the three remaining focus groups. Further refining of the coding template was achieved iteratively, before final consensus on the coding template was achieved through regular team meetings with the wider research team.

More information about participants' demographics can be found in table 6.

Table 6: **Characteristics of focus group participants**

Demographics table (N=25)	
Representation from EI/FF sites	
EI	**4 (16%)**
FF	**20 (80%)**
Other	**1 (4%)**
Main trust involved in MMHS	
Solely led by MH trust	**15 (60%)**
Embedded in Maternity	**9 (36%)**
NA	**1 (4%)**
Single/Broad focus within MMHS	
Broad focus including safeguarding pathway	**4 (16%)**
Broad focus excluding safeguarding pathway	**14 (56%)**
Single focus	**5 (20%)**
Unknown	**1 (4%)**
NA	**1 (4%)**
Role within MMHS	
Psychology	**13 (52%)**
Midwifery	**4 (16%)**
Manager	**6 (24%)**
Other	**2 (8%)**

Findings

Two overarching categories of themes were identified, almost in juxtaposition to each-other, i.e. 'Challenges and Learning' and 'Success and Innovation', each with three themes and sub-themes. An overview of the coding template, with brief explanations of the themes and sub-themes as well as illustrative quotations can be found below in table 7.

Under the major topic of 'Challenges and learning' three themes were identified:

1) 'Need for clear guidance during planning and development of service models'. This theme explored the challenges pilot sites faced during the planning stage, when they felt they lacked guidance about different aspects of service development. It includes two sub-themes; 'Macro strategies' (e.g. national

implementation plans and clinical guidance) and 'Micro strategies' (e.g. local level strategy and service delivery plans).

2) 'Logistical challenges when establishing services' looked at logistical challenges during the implementation phase of services, with sub-themes 'Getting the skill-mix right' and 'Integrated Care Structures/Systems'.

3) 'Expectations for a sustainable service when demands exceed capacity' explores the learning from those initial stages of planning and implementation, with a forward look to how services can remain sustainable and meeting the demands while facing budgetary limitations. Three sub-themes have been identified here: 'Scope of the service within budgetary constraints'; 'Clinical demands exceeding capacity'; 'Achieving culture change re trauma-informed care'.

The topic of 'Success and innovation' brought together three themes that expressed the excitement, pride and opportunity of the new services:

1) 'Forging new ways of working' explores the experiences of pilot sites as they seized the opportunity to think 'outside the box' and rethink care pathways and roles in a creative and innovative way. Subthemes included 'Rethinking roles and processes' and 'Personalised Care'.

2) 'Feelings of pride, optimism and hope' captured the positive feelings about the new service in three sub-themes: 'Pride about the service'; 'Optimism about improving care'; and 'Positive feedback from service users'.

3) 'Embracing a systems approach in healthcare' explores the exciting opportunities of working together with and learning from others in three sub-themes: 'Working across systems'; 'Service user involvement'; and 'Learning from each other'.

These themes are detailed further in table 7 below, with quotations from the focus groups.

Table 7: **Coding template with themes and quotations from focus groups with MMHS**

Challenges and learning	
Theme 1: Need for clear guidance during planning and development of service models This theme explores the challenges at the planning stage, when services felt they lacked guidance around different aspects of service planning and development:	
Macro strategies This sub-theme explores the challenges reported by services in need for clear guidance from official bodies at a macro level, such as NHS England, NICE, etc.	"Because we still feel a bit unsure about what the messages are coming through from NHS England because it had been you deliver the spec that you've worked out, and then it had been all of these other things need to be covered. What about child removal? What about child loss? So I think my Psychology Clinical Lead still feels a little bit uncertain and unsure just about how much we are actually supposed to now be delivering on, and realistically what… I mean, we know realistically what we can do and we can't do everything..." **Participant FG012** "I think the other area – and I think this has been a theme more generally – has been about how to think about the loss pathway and lots of questions about who should be doing what and when to intervene. You could, I'm sure services are taking NICE guidance and saying well we'll offer this many sessions or that many sessions whatever, but that doesn't apply to bereavement in the same way and I think that's been a struggle and I think that's starting to be a bit more of an area." **Participant FG003** "I think the other thing is having clarity from NHS England because we didn't really have clarity, or at least for us we didn't understand that and I'll explain that a little bit further later, but I think if upfront the clarity, had been really clear about what they had asked for, then that would have helped us on the journey." **Participant FG023**

Micro strategies

This sub-theme explores the internal challenges of services around the need for clear operational policies, job descriptions, a clear understanding of referral pathways by referring agencies, etc.

"I don't know if it's confusion but not necessarily a full understanding of what we do or what we're trying to achieve and I think to enable, even just to go back to appropriate referrals, you need to invest and ensure that your referrers, your stakeholders, really get the remit of your service."
Participant FG001

"The challenge I guess for me, I guess personally really, was just coming into a brand new area, to set up a service from nothing with lots of recruitment issues in the beginning, hence why we couldn't really go live until quite recently. So, we had no service spec or anything like that or operational policy, so that's been a lot of the work that I've been doing for the past six months or so and I felt that there was a lot of initial background work and – yes, groundwork really - that needed to be done before we could even contemplate going live."
Participant FG019

"In terms of the midwifery element, definitely having a clearer idea of what the role of the midwife is. Having said that, because it's a new service, I think it is constantly evolving and we're constantly learning about our parameters and boundaries. But we started off with quite a specific job spec and job description and it doesn't really look a huge amount like that anymore, so that's quite interesting."
Participant FG024

Theme 2: Logistical challenges when establishing services

This theme explores the logistical challenges that services experienced during the implementation phase. These challenges caused delays in service implementation and hindered efficient working from the start.

Getting the skill-mix right

This sub-theme explores the challenges around recruitment, part-time working, the value of a psychology-led service, and the challenge when there was an absence of psychiatry input.

"We've definitely found that [it was difficult to recruit psychologists] and I think one of the positions is now actually a CBT therapist, not fully qualified. But we went internationally to try to find people and what we've found is that actually they were more on the – well the ones that applied – were more research based than actually having practical experience. So yes, we struggled."
Participant FG023

"Our consultant psychiatrist within perinatal has been absolutely amazing and right from really early days said that she was very happy that she would oversee, from a governance perspective. There was a bit of argy-bargy at that time because we'd got a wider psychiatric consultant team, but it's now reduced. But at that time it was like, well we're not commissioned to do that and nobody's paying us and I don't think we should be doing it. And in actual fact, she's our clinical leader for the perinatal service, she's really strong in saying, actually I need to have that oversight, it needs to all come through our governance."
Participant FG002

"I guess it's one of the reasons I was drawn to the post but also it's one of the things I love most about this role, is that it's Psychology led. So, it's the first time in my career, and it just feels absolutely wonderful [laughs] to be a bit more free from the medical/ psychiatric model. And having never worked with Midwifery staff before either, that's just lovely as well because it just feels… I mean, I don't know whether I was just getting a bit jaded [laughs] and I'd been in Adult Mental Health for far too long, but my sense is that everyone that's involved in this project and everyone that's hearing about the service and wanting to come along to our referrals meetings, they're so keen and just really up for learning more about psychological approaches to distress and trauma. And it feels like because we're psychology led, we can really, hopefully make a point of being quite different to the other mental health services in the Trust because as we know, most adult mental health services are very medically led."
Participant FG019

Integrated care structures/systems

This sub-theme explores the challenges of working across different healthcare systems as a key essential component of the MMHS. This includes challenges around access to IT systems and suitable clinical space, working with a multitude of Trusts in an often large geographical area, all amidst a major staffing crisis in maternity services and limited funding.

"We're asking two different work programmes to work together. Perinatal and maternity have been separate work streams. To suddenly say 'oh let's combine two whole different programmes that haven't done it before.' And it sounds brilliant and it should be, but in practice it has been… And if you can't do that nationally, how on earth are we meant to be doing it in each individual thing?"
Participant FG025

"Some of the challenges we've experienced is that our midwives have actually got split roles across [name of team 2] and [name of team 1], which means that they've got even more systems to try and get on to and get used to, get access to, which has been really, really challenging."
Participant FG006

"A couple of other challenges that we've had is actually Estates. So, we cover – I'm just going to speak for [name of team 1] – we've got three maternity hospitals and we've only got half a day in one of them for clinics. We don't have any other space, we've really struggled to get Estates, we literally just beg, borrow and steal anything we can get."
Participant FG009

Theme 3: Expectations for a sustainable service when demands exceeds capacity

This theme captures reflections about how to ensure the service are sustainable beyond the pilot stage.

Scope of the service within budgetary constraints

This sub-theme explores the concerns about meeting expectations to offer the full range of pathways for trauma, loss and fear, with a limited resource.

"How do you meet the demand in a meaningful way, because certainly with our service, we're offering all three care pathways, so they're potentially really huge. The perinatal loss pathway, I mean that's a real gap in service provision, as is the recurrent care proceedings [pathway] and so we initially got a huge influx of referrals and we've had to work really, really hard at A. refining our service spec and our criteria, because we just recognise that we've not been able to meet the demand in the way that we had hoped or thought that the service might. And I think that's been really tricky. We've had to shave parts of our service off and refine what we can actually offer. And so, the demand is always going to be greater than the resource that we've got […]"
Participant FG001

"That's the crux of it; you really need to look in the antenatal period for that support ongoing really, but you can only do what you can do, can't you, and you can only do what you can do with the finance that you've got. And that's the difficulty with this service; I think it's such, so much needed but I think it's been a bit short-sighted with regards to finance and you know roles, and it's just been thrown out to us really, [laughs] hasn't it, to develop?"
Participant FG011

"Now, looking at the other safeguarding aspect around women and birthing people who may eventually, unfortunately have their babies removed, I actually think that this needs to come back to the drawing board because it's a far bigger pathway that needs all the relevant people in agreement to actually work with those particular cases, because they are far more complex than I think we've given time to really look at. And I think it would be really challenging for our staff to take those particular cases on board unless you've got that other support…"
Participant FG014

"Our service is only going to run three days a week. There is no funding to do any more than that."
Participant FG023

Clinical demands exceeding capacity

This sub-theme explores reflections on the ongoing struggles of the service to meet the clinical demand in the community, with limited capacity in the service available.

"There's this ocean of need that we're aware of and we want to get going," but I suppose what we don't want to do is do a big launch really early on and then find that we can't meet the needs of these women that they've been promised, or women are then bounced around from Perinatal Mental Health to our service to IAPT to the Crisis Team; that's not what we want."
Participant FG020

"We've only just opened to referrals but the worry is that yes, we'll be swamped really."
Participant FG022

Achieving culture change re trauma-informed care

This sub-theme explores the challenges to meet additional expectations, apart from providing clinical care, to achieve a culture change in maternity service around trauma-informed care.

"[Referring to implementation of trauma-informed maternity care] It is a culture change, it's huge. And to do that on top of three pathways, with the resource we've got, it's like, how could we possibly even have thought, at the beginning, that we could have achieved this?"
Participant FG001

"It's not only about delivering psychological therapy, there's a part of the remit that's around working with maternity services to make them more trauma-informed so part of my role should be delivery and training, consultation, supervisions, things like that. And so it's important that the staff we've got aren't completely bogged down with seeing people, kind of really huge caseloads to allow them to do that other type of work. I've been doing quite a lot of teaching and things like that, but if the referrals increase or keep going at this rate, then I'm going to have really limited time to be able to do that type of thing." –
Participant FG022

Success and innovation

Theme 1: Forging new ways of working

This theme explores the experiences of pilot sites as they seized the opportunity to think 'outside the box' and rethink care pathways and roles in a creative and innovative way

Rethinking roles and processes

This sub-theme explores how services creatively approached processes and job roles in the service, to ensure the most efficient ways of working amidst budgetary and time constraints.

"It's really nice to hear Peer Support's working well in [name of area] as well. [...] I very strongly felt that women were going to assessments and not really getting anywhere, almost were in danger of being passed from pillar to post. And with Peer Support sitting in on these assessments, I'm able to put some input in at assessment and do things like linking in with local community. And a big project that me and my colleague have been doing is collating all the resources and finding all the community groups in the area and things, so we can recommend appropriate resources, because there's so much out there and there's no point in reinventing the wheel [laughs], and so that's been quite a useful practice of having Peer Support you know at the beginning of a woman's journey through the system."
Participant FG005

"We [specialist midwives] do joint assessments with the psychologists as well which is really helpful, because often there's a birth trauma or a story that's come out and the psychologists are not necessarily

aware of what certain things mean or how maternity systems work and what a birth reflections is and what a Datix is. All that kind of stuff, and actually having someone there that knows the system inside out is really helpful to understand the woman as well. So we've found that works really, really well."
Participant FG024

Personalised care

This sub-theme explores the innovative ways to provide care and support for women in need of the service.

"I think one of the things is that with the psychologically informed birth planning, that I think that's worked really well in terms of I guess more of a consultation type model, and we've done some training, and some of the Specialist Perinatal Teams, the Psychologists are using them with some of the women. And we're doing, if people become pregnant under our service, we're using them with women that – well, we don't know the outcome totally – but it seems to really make sense for people and help people feel more in control, so that's probably going quite well."
Participant FG008

"That's the feedback we've had, that's what we've seen, where we've had real successes. Our midwives are wonderful and they are very much holding a lot of our women who've had previous birth trauma. Those that are pregnant again, following a loss or trauma, that's where we're seeing a lot of the successes and the real positive stories, because actually they're being held by someone who can do that extra bit and then we're offering the add-ons around."
Participant FG002

Theme 2: Feelings of pride, optimism and hope

This theme captures the different positive emotions as expressed by the services.

Pride about service

This sub-theme explores feelings of pride and a sense of achievement, felt by those establishing the service.

"I'm actually really proud of where we've got to. So although we've been talking about the challenges, when I look back to last April and people starting to come in to post and now we're in February, so we're ten months on, I think when I realised that 112 women have been referred to the service, and there's been some really good, meaningful pieces of work that have been carried out."
Participant FG002

Optimism about improving care

This sub-theme explores feelings of optimism by partner agencies that are referring into service.

"We've had some really lovely feedback from our Maternity colleagues who seem to just be really enjoying linking in with us and coming along to discuss cases, even if they don't end up referring someone but they've had a bit of a space to reflect or formulate, and so we've had some really lovely feedback about that aspect of the service as well which I think is just as important as the face-to-face clinical work."
Participant FG019

"Everyone's been super-keen and we've had lots of support from stakeholders and referrers, everybody's really keen for this to work. There's a lot of optimism in it, which is great and I suppose that presents a bit of a challenge at times because there's a high level of expectation but I think everyone that I speak to, they're really interested and really want this service, because they see that it's filling such a gap."
Participant FG002

Positive feedback from service users

This sub-theme explores the feedback received from service users about the positive impact the service has made.

"Not to kind of blow our own trumpet but it is always lovely to get really nice feedback from the women that we look after, and we've seen that even in the small numbers of women that we've already seen this year. We can do really small pieces of work that are quite specific to these women, and it makes such a massive difference."
Participant FG004

"I think reaping the rewards, I guess, of the service, so we're starting to get some really lovely feedback, some really grateful feedback. And seeing the output of what the service is delivering and the difference it's making to women's lives, so I think that's really important to not lose sight of in the slog it might have felt like it's been along the way at points, that actually we are now in a position that we're making a difference."
Participant FG014

Theme 3: Embracing a systems approach in healthcare

This theme explores the successes of working together across systems, organisations and professional boundaries

Working across systems

This sub-theme explores experiences of working with maternity services, other mental healthcare providers and third sector organisations.

"I think linking up with all your stakeholders, and I think people within the team linking with other teams as well, like we're doing today, but I find it really invaluable linking with other Peer Support Workers, I know [B1]'s found it very helpful to link with other Midwives doing a similar role, you know and although they're different setups it can really help to get ideas and shape the role in ways that you might not have thought of before."

Participant FG005

Service user involvement

This sub-theme explores the valuable learning from co-designing and co-producing services with service user involvement.

"We've just more recently come back to how do we review this and how do we bring back our input from our service users? And we're started to set up a voices partnership, aren't we, like a perinatal voices partnership and thinking about how we can bring our service users into some of our stakeholder meetings. So, yes, that was something that I felt really proud of, but I think there's also room for us to continue that going, and it being an ongoing process rather than just something we did just at the start."

Participant FG001

Learning from each other

This sub-theme explores the experiences of learning from other team members (from a different professional background) as well as learning from other pilot sites, who go through similar learning experiences.

"I think there are a few things that we've done that have really helped with that integration, and that's been any group that we've had regionally, whether it's at a local level or at a regional level has included obstetrics, midwifery, mental health at the core, and service user involvement I guess at the core of those groups. And for our Regional Task and Finish group, that's an obstetric led group as well so the Chair is an obstetrician, so I think having those professions there at the core of those groups from the very start has helped with that integration and helped with that lead, I think helped with that steer and that lead from some of the systems."

Participant FG006

6. Discussion and recommendations

Phase 1 of the ESMI-III study has provided insight into the way MMHS are set up and developing their service provision for women and birthing people in their local areas. It is important to note that the mapping exercise did not consider the whole perinatal mental health pathway, and therefore it is not possible to determine if women who were not eligible for care from the MMHS would be able to access mental health care at a different part of the care pathway.

While the overarching goals and values of the MMHS were found to be fairly consistent across sites nationally, a high level of variability across all aspects of service delivery were identified. Variation in the components of service delivery models during times of service transformation or improvement are not unexpected, as services need to develop to meet local population needs and in response to the existing context with which services are being implemented [17, 28]. Nevertheless, the snapshot of service delivery models identified through the organisational mapping exercise provides an opportunity to reflect on where variation in service delivery models may contribute to unequal provision in healthcare nationally or exacerbate health inequalities, and to consider mitigation strategies as services scale up. It has also provided a foundation to investigate how these services are working to meet local population needs in the Phase 2 of this research.

The key learning from the mapping exercise and focus groups are summarised below. First, we summarise the findings on the challenges and learning from the pilot sites from development, mobilisation, and sustainability. These findings are then mapped onto recommendations for national and local facilitators to developing and sustaining MMHS, and key learning for sites setting up a MMHS.

1. Developing the MMHS service delivery model

Determining the scope of the service

A core aspect of variation in service delivery models that was identified was the scope and cohort of women accessing psychological interventions and support through the MMHS. Although most sites included in the mapping exercise (78%) had three distinct pathways (e.g. perinatal trauma, loss and/or bereavement and tokophobia), several focused on one cohort of women supported through the MMHS (e.g. birth trauma or perinatal loss), and only seven sites currently had a specific pathway for women who had lost custody of their baby. These decisions were often driven by existing expertise in a particular area or by a local gap analysis to determine the needs of the population. A key factor for the decision not to include perinatal loss in the context of care proceedings and custody loss within the MMHS remit, was that many sites felt they lacked the time or clinical skill-mix to design a pathway that would address the complex needs of this group of women. In some cases, this was a temporary decision at this early stage of implementation, allowing services to focus on one cohort of women initially with plans to expand pathways in the future. Nevertheless, it highlights an important area for further guidance, training, and resource to understand this pathway and where it fits within the context of the MMHS, to ensure that women at risk of loss of custody do not continue to fall through the gaps in mental health service provision.

Case study: **The Maternal Mental Health Service in the Humber and North Yorkshire Health and Care Partnership**

The Maternal Separation Support Service is a Sub Pilot that sits within the core Maternal Mental Health Service in the Humber and North Yorkshire Health and Care Partnership. The Maternal Separation Support Service / Sub Pilot has been specifically created in the North East Lincolnshire (NEL) patch. The Sub Pilot has funding for one year, subject to evaluation the learning taking from this Sub Pilot is to be used to expand Maternal Separation Support into different patches across the Humber and North Yorkshire Health and Care Partnership.

The NEL area was chosen as the initial patch due to a combination of efforts to reduce the suicide risk of women who are at risk of or who have had their children removed for safeguarding reasons, as there has been two suspected suicides related to child removal in the NEL in the past year. Furthermore, last year the NEL had twice the national average of care applications according to Children and Family Court Advisory and Support Service (CAFCASS) data.

The service can be accessed by any professional involved in the women's care completing a referral, where the woman is at risk of a child being removed at birth or up to the age of 24 months, and up to 24 months post adoption. There are two referral pathways or routes. The women can be referred directly to the Maternal Separation Support Service where a choice appointment (holistic mental health assessment) will be offered. Furthermore, the main service offer will be stabilisation work in preparation for one-to-one psychotherapy, psychotherapy, and/or a referral to the Flawsome Community.

The Flawsome Community is hosted by Safe Families and is a joint working venture where foundational work/ support is offered. This includes Volunteer Support, Family Support Manager who can advocate for the women through proceedings, Social Groups and Emotional Resilience Workshops. It is noted that at times some women are not prepared to engage with a mental health service, or formal services. In these circumstances women can be referred directly to the Flawsome Community. A representative of the Maternal Separation Support Service attends the social groups and workshops to act as a point of contact, to begin to build relationships, and when ready the women can access a Choice Appointment following a fast-track referral from the Flawsome Community to the Maternal Separation Support Service.

The service has been designed in this way to support access to the service, to reduce the risk of women in this cohort falling between the cracks. A steering group has been a fundamental aspect of developing the service with key stakeholders in attendance to develop ideas and overcome challenges. The Sub Pilot has a designated Project Manager/ Therapist employed by the NEL Mental Health Service Provider NAViGO with an honorary contract under the Hull University Teaching Hospitals Trust (HUTHT).

National implementation guidance aimed to support services to develop their local MMHS in response to local population need and context, rather than being overly prescriptive. Some sites described how the early implementation phase allowed them the opportunity to 'think outside the box', and rethink roles and care pathways in a flexible way. While programme flexibility has been shown to be an enabling factor for the development of new services and innovation in previous research [29, 30], some teams described the lack of specific guidance at the start of the MMHS programme as a barrier and a source of frustration when determining the remit of the services. Some sites expressed confusion about whether they should be providing care to all three cohorts of women, particularly where other appropriate local services did not exist, and sensing a shift in expectation of the breadth of the service offer as the programme developed. This created further uncertainty as to what the service should and could realistically offer in the long-term beyond the scope and funding of sites initial service delivery plans.

Services experienced challenges determining the extent of the local need for the service as incidence and prevalence figures were often not available, resulting in difficulties in setting up clinic models and attempting to forecast whether they would be able to meet the demand. As such, MMHS described the importance of an iterative and responsive approach to developing the scope of their services in their local areas.

Developing pathways and working across systems

Integration of maternity and mental health care, with multidisciplinary teams, is a key aim of the transformation plans set out in the NHS Long Term Plan [1]. The importance of embedding specialist mental health within maternity and neonatal services and providing an integrated care pathway with mental health professionals based within these settings has also been emphasised in recent good practice guidance [31]. Services acknowledged the positive benefits of developing pathways and working across systems, through developing strong relationships and raising awareness of the MMHS within maternity teams. However, in practice, developing integrated care pathways across different healthcare systems and national service delivery programmes has been challenging and time intensive. Challenges included logistical difficulties (e.g. contracts, estates, data flow and commissioning), specificity of roles and culture in different healthcare settings, and staff resources particularly in terms of embedding the MMHS within maternity care. Strategies which teams found helpful included having obstetric, midwifery, mental health, and service user representation at the core of any discussions, whether at a local or regional level and to have this in place from the start.

Case study: **The Maternal Mental Health Service in North East and North Cumbria (NENC MMHS)**

The Maternal Mental Health Service in North East and North Cumbria (NENC MMHS) has chosen to integrate its service within maternity (including Afterthought/Birth Reflection Services). Its primary aim is to co-produce and implement a holistic, personalised and trauma-informed approach to care – within and outside the service. To achieve this goal, NENC MMHS has developed robust links with other services offering psychological or mental health input in the perinatal period (e.g., local key agencies such as First Step and Community Perinatal Mental Health Service (CPMHS).

In addition, NENC MMHS has invested in developing a training package to support the enhancement of a personalised and trauma-informed care approach across maternity, obstetrics, neonatal care, and other related services. The training programme will aim to enhance the skills of non-psychology/mental health professionals, including midwives, nurses, obstetricians, gynaecologists, and health visitors working with women, birthing parents and non-birthing parents in the perinatal period.

Working collaboratively with the Community Perinatal Mental Health Service, the MMHS lead psychologist and maternity colleagues, NENC MMHS aims integrate a new service which not only enhance the patient experience through the maternity pathway but also supported staff involved in the breadth of the Maternal Psychosocial support across the MMHS pathway.

MMHS adopted different approaches to developing multidisciplinary practice within the MMHS, often guided by the local structure of current service provision. Some MMHS sites embedded clinics within maternity services where specialist link midwives provide an initial assessment and support (e.g. through birth reflection services) to gauge whether referral to psychological therapy is required or embedded a link Midwife or Psychologist within different parts of the trust. Others adopted an approach similar to that of perinatal mental health teams where women would be referred to MMHS by other healthcare professionals prior to assessment and treatment. Findings from reviewing these models of care emphasised the importance of existing guidance to ensure that MMHS include a strand of prevention work for trauma and loss, which may also reduce demand on other parts of the MMHS[31]. Some MMHS were integrated within perinatal mental health teams and while some teams highlighted this as beneficial in terms of shared pathways and supervision, there were some evident drawbacks when it came to adopting the perinatal services timeframe/criteria and losing the opportunity to create a separate team philosophy.

Co-production and peer support

Co-production and service user involvement have been the cornerstone of the development of MMHS across England. In many MMHS, service users were incorporated from the start of service development plans, and included involving service user representation at stakeholder meetings, in facilitating the scoping and development of local needs and pathways. Some services were linking with or setting up a women's voices partnership and emphasised the importance of on-going co-production and service user involvement in the development and delivery of MMHS.

Case study: **Peer support in the Maternal Mental Health Service in Gloucestershire**

The Maternal Mental Health Service in Gloucestershire was set up within a Perinatal Mental Health Service. The service was commissioned to work with women and birthing people who are experiencing primary or secondary tokophobia, birth trauma or mental health difficulties following a loss. The small team consists of a psychological therapist, specialist midwife, mental health nurse and peer support worker. Peer support and lived experience has been at the heart of the Service from its conception. The Perinatal team has an active group of Experts by Experience who are consulted on all developments within the service and the plans for new MMHS. Once the service was commissioned, several Experts by Experience were invited to join monthly implementation meetings too.

The service started in Spring 2021 with the peer support worker taking up her post in April 2021. As the service developed and grew, the peer support worker was a key part of the team, representing 'the woman's voice' in all decisions and development.

One of the early roles of the team was to develop and deliver training to other professionals, such as midwives, health visitors and other teams and organisations that might be involved in the care of our women. The purpose of this was to make them aware of the service we were offering and support them in the prevention and identification of birth trauma. The peer support worker was fully involved in the development and delivery of this training.

With the service up and running, the peer support worker is fully involved in the day-to-day operations of the team, being potentially involved in all stages of the woman's recovery journey. She attends assessments, offering a shared understanding and hope giving. She will also see women on a one to one basis. The peer support worker, along with peer support colleagues in the Perinatal Team, are developing an endings group, 'Next Steps', to support women, including those from the MMHS as they move away from professional services.

The MMHS continues to evolve and develop. One new project being developed, with the full involvement of the peer support worker both in creation and delivery, is a psycho-education group, 'Birth without fear', for antenatal women experiencing tokophobia. Peer support within this group will focus on recovery, seeking help when needed and building support networks.

The role of peer-support workers was also an important aspect of MMHS teams, with indications that having the voice of lived experience within team meetings, supervision, and training, can positively change the whole dynamic of the team and what they can offer. For example, some services highlighted the positive benefits of having peer supporters involved in joint assessment meetings or in helping women to navigate the pathways to care. In instances where the peer-support workers are linked to host organisations, services found that this brought about opportunities for good outreach work. As with all forms of peer support, it is vital that these peer-support programmes adhere to good practice principles and current guidance, such as ensuring adequate training and supervision processes are in place, to ensure that peer support can be provided safely and effectively [31, 32].

2. Mobilising the MMHS and managing logistical challenges

Recruitment and contracts

During the mobilisation phase of MMHS, pilot sites experienced several universal and logistical challenges, including difficulties with recruiting, IT and data management across different systems, and access to appropriate estates and clinical space. Managing the logistic processes to mobilise the MMHS inevitably required a huge investment in time and in some cases, sites felt it delayed the launch of the services. Where delays did occur, teams spoke about the negative impact on other activities, such as developing cross-pathway relationships and readiness to receive referrals into the MMHS.

Most services that took part in the focus groups had difficulties with staff recruitment, and experienced delays when roles needed to be readvertised and job specifications revised. Sites also expressed concerns that many staff were employed within the MMHS on a part-time or temporary basis, due to funding constraints, and the challenges of protecting midwifery time when maternity workforces are severely stretched [33]. Once staff were in post, there were instances in which it took a lot of liaison and time to set up contracts. This was particularly the case when contracts across both acute and mental health care trusts were needed, highlighting the need for processes to setting up multi-site contracts and plans for protected midwifery time to be in place prior to recruitment to prevent further delays in mobilisation.

Estates

From the focus group it was evident that much effort, time and resource has been dedicated to find suitable estates and clinical space. For services providing care for women who have experienced a loss, challenges arose in accessing estates outside of maternity or child settings and keeping away from hospital and clinical settings (i.e. maternity and children's centres), which may cause further distress to those receiving care. Although some services were utilising video consultation, which has been more heavily relied upon during the Covid-19 pandemic, there was a clear preference for face-to-face consultations to be more readily available. Sites also highlighted that funding for clinical space had not been factored into their MMHS budget and restricted the options of space that they could utilise.

In some instances, being co-located within perinatal mental health teams has meant they have been able to utilise some of this clinical space. However, the downside was that this hindered integration with maternity services and highlighted the need for MMHS to have protected space that was embedded within maternity clinics.

Opportunities for shared learning

These findings highlight not only the complexity of mobilising a new and integrated care service, but also the importance of allowing sufficient time for these processes to be developed. Although sites expressed a need for clearer guidance on the remit of the services in the early implementation phases, some also describe the positive benefits of any opportunities to link in with clinical teams and stakeholders nationally. Resources such as the FutureNHS Collaboration Platform and shared learning events were referred to as a supportive culture with the sharing of resources, information, and practice. This also helped individuals to feel connected and build relationships with sites in different areas of the country. Increased national guidance and support during the mobilisation phase, such as the MMHS Implementation Guide and shared learning events, were also found to be helpful and informative, and establishing shared understanding of setting up and mobilising the services.

Workforce and training (Getting skill-mix right)

As services mobilised and began to accept referrals, there was a period of reflection as to whether the MMHS workforce had the most optimal mix of clinical skills and resources to deliver the service. With the remit of services aiming to provide interventions for individuals experiencing moderate to severe or complex mental health difficulties, services acknowledge that those with severe or complex needs would have greater benefit from longer interventions. Generally, the importance of having a psychologically led MMHS was welcomed and highly valued. However, some services also highlighted the need for greater resources for perinatal psychiatry input into the MMHS, particularly within the safeguarding pathway, that had not been adequately funded in many areas during the pilot phase. Clear pathways to other adult and perinatal mental health services, as well as crisis support, were vital to care-coordination and risk management and an important consideration for future commissioning of the MMHS. Services acknowledged workforce training gaps, particularly where they were unable to recruit psychologists with training in perinatal mental health care. They also mentioned the need for greater resources to deliver and attend training and supervision for trauma-informed and preventative care to be embedded across maternity and perinatal mental health service. In addition, they raised the importance of developing appropriate local key performance indicators that capture the breadth of the prevention and interventions supported by the MMHS within different healthcare systems and trusts.

3. Plans and concerns for scale-up and sustainability of MMHS

Among services that were already receiving referrals, a key concern that was evident from the focus groups was how services could be sustained or expanded to provide care to the wider cohort of women within the remit of the MMHS provision, including those at risk of loss of custody. Sites felt that the investment in MMHS had been underestimated, particularly as the local needs assessments

had identified a much greater need than had been expected, and there were clear concerns about current capacity within the services. Some services described restricting their launch and advertising of the service for fear of services being overwhelmed where waiting lists already existed. While a stepped approach to launching services helped to ensure that care through the MMHS could be offered in a timely way, it also created an ethical dilemma: restricting access to care once the extent of need had been identified may impact on equitable access to the services where greater outreach may be needed.

Sites were in the process of iteratively refining their service specification, sometimes having to scale back on the plans they had initially envisioned being able to offer. During this phase, the importance of understanding and integrating further with the wider pathway of care was important to ensure that women could be signposted and triaged to other psychological services and link with voluntary organisations. This further highlighted the importance of embedding a preventative strand of work within maternity and neonatal context.

Going forward, sites were developing plans to ensure long-term local commissioning of the service is ringfenced by Integrated Care Systems and highlighted a need for further guidance of how to ensure long-term funding of a service that spans across two different health systems, i.e. mental health and maternity. In addition, concerns were raised that the commissioning and governance structures within these two distinct systems may not necessarily reflect the nature of care being provided by MMHS.

Service feedback

Despite the challenges to implementation identified, there was a huge amount of dedication both nationally and locally to develop MMHS, reflected by the passion of teams to meet a long-standing gap in mental health needs. Some teams reflected on the achievements of their services, the amount that had been developed within a short space of time and the difference it is making to women's lives who would otherwise not have received care. MMHS teams were particularly motivated by the positive feedback they had received from service users, the new multidisciplinary relationships and pathways that had been developed and the continuing importance of the need for these services to be implemented. This highlighted the importance of developing routine feedback mechanisms, and opportunities for sharing across the workforce.

Figure 3: **National and local facilitators to implementing and sustaining MMHS**

Figure 4: **Lessons to support the development of new MMHS**

Recommendations for implementation

The findings from Phase one of the ESMI-III study have led to the development of national and local facilitators to implementing MMHS, depicted in figures 3 and 4.

The following recommendations were identified from the focus group discussions:

National recommendations

- Develop and communicate a shared understanding and vision for the scope of the MMHS
- Allow capacity and adequate resource within the service for planning and operational management of the service
- Provide guidance to MMHS for local Key Performance Indicators for waiting times between referral and assessment, and assessment to treatment times
- Consideration of the need for additional funding and guidance for estates is essential to ensure access to neutral therapeutic spaces
- Provide support with modelling service cohort size early in planning phase of new MMHS sites
- Provide templates documents to facilitate integration of healthcare systems, such as job descriptions for key roles in MMHS team, data sharing agreements, etc. with allowance for local refining
- Support commissioning processes for scale-up and sustainability of the services

Recommendations for early planning service delivery

- Engage with maternity services early in service development process
- Ensure contractual and physical access to IT systems across mental health and maternity trusts is in place ahead of launch of service and start of recruitment
- Ensure staff are recruited into posts ahead of launch and allow for sufficient time to finalise contracts
- Ensure all team members, including specialist midwives, have access to training and supervision

Recommendations for working as a multidisciplinary team

- Ensure clear job descriptions, especially for specialist midwife posts, peer-support workers and psychology are in place
- Consider multidisciplinary triage forums, with maternity, mental health colleagues and where appropriate third sector organisations
- Consider engaging peer-support workers at early stage of treatment journey, for instance at assessment
- Ensure clear escalation policy is in place for access to crisis care through integrated care pathways and ensure all relevant services are involved and aware of this policy

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