

Measuring Continuity of Carer: A monitoring and evaluation framework



November 2018 Jane Sandall King's College London



Contents

1. Background	
2. Aim	4
3. Continuity of carer expectations	4
4. Definitions	
5. Monitoring and evaluating continuity of carer	
6. Data sources	6
6.1. The Maternity Services Dataset	
6.2. Care Quality Commission Survey	7
6.3. NMPA Organisational Survey	7
7. Monitoring continuity of carer in 2018/19	
8. Conclusion and next steps	

About the author

Professor Jane Sandall CBE is Professor of Social Science and Women's Health at King's College London. Professor Sandall's research is interdisciplinary between the clinical and social sciences and addresses a range of fundamental questions regarding maternal health and reproduction including the implementation of policy and new models of care.

King's is ranked in the world's top 25 universities* and is London's most central university, with five campuses in the capital. Our faculties, institutes and schools deliver world-leading research, enabling groundbreaking new discoveries. This research underpins all of King's teaching and enables us to make the world a better place.

*QS World University Rankings, 2017-8

Project funded by NHS England

NHS England is leading NHS policy on Continuity of Carer in England, and is driving implementation under the clinical leadership of Professor Jacqueline Dunkley-Bent OBE. For more information, please visit england.nhs.uk/maternity, or contact england.maternitytransformation@nhs.net.

1. Background

*Better Births*¹, the report of the National Maternity Review, the Five Year Forward View for NHS maternity services in England, set out a vision for maternity services in England which are safe and personalised. A vision that puts the needs of the woman, her baby and family at the heart of care; with staff who are supported to deliver high quality care which is continuously improving.

At the heart of this vision is the ambition that women should have continuity of the person looking after them during their maternity journey, before, during and after the birth. This continuity of care and relationship between care giver and receiver has been shown to lead to better outcomes and safety for the woman and baby² as well as offering a more positive and personal experience³. Women told the review team how important it was for them to know and form a relationship with the professionals caring for them. They preferred to be cared for by one midwife or a small team of midwives throughout the maternity journey.

The Maternity Transformation Programme was established to deliver the vision set out in *Better Births*, working through Local Maternity Systems (LMS) to deliver change locally. In March 2017 NHS England published *Implementing Better Births: A Resource Pack for Local Maternity Systems*⁴, which set an expectation on LMS to include details of how they will meet the ambition that 'most women receive continuity of the person caring for them during pregnancy, birth and postnatally by the end of 2020/21' in local maternity transformation plans.

In December 2017 *Implementing Better Births: Continuity of Carer*⁵ set out guidance for Local Maternity Systems to define and implement continuity of carer based on a local ambition and trajectory. This Monitoring & Evaluation Framework should be used in conjunction with this guidance.

To help generate momentum and ensure that the NHS is on track to deliver the ask that most women receive continuity of carer by March 2021, *Refreshing NHS Plans for 2018/19* (p30) requires LMS to ensure that from March 2019, 20% of women at booking are placed onto continuity of carer pathways and **receive continuity of the person caring for them during pregnancy, birth, and postnatally**.

¹ Better Births: Improving outcomes of maternity services in England: A Five Year Forward View for maternity care

² Sandall J, Soltani H, Gates S, Shennan A, Devane D. Midwife-led continuity models versus other models of care for childbearing women. Cochrane Database of Systematic Reviews 2016, Issue 4 . Art. No.: CD004667

³ Jennifer Hollowell, Alison Chisholm, Yangmei Li, Reem Malouf, Evidence Review to Support the National Maternity Review 2015 Report 4: A systematic review and narrative synthesis of the quantitative and qualitative literature on women's birth place preferences and experiences of choosing their intended place of birth in the UK.

⁴ https://www.england.nhs.uk/publication/local-maternity-systems-resource-pack/ (March 2017)

⁵ Implementing Better Births: Continuity of Carer, Five year forward view, December 2017, Publications Gateway Ref No. 07342.

2. Aim

The aim of this framework is to help Local Maternity Systems and the Maternity Transformation Programme to measure, consistently, the level of continuity of carer being provided over time, not only to monitor delivery, but also to help evaluate the extent to which particular models realise the benefits set out in evidence.

This document summarises the policy expectations and then suggests a measurement framework that draws on existing data, or that can be incorporated into other existing data collection thus imposing minimal burden on health care organisations and staff. It provides clarity in terms of how continuity of carer is to be defined and measured, and benchmark data upon which improvement can be measured.

3. Continuity of carer expectations

*Implementing Better Births*⁴ outlines a definition of continuity, how it will be delivered and locally specified arrangements. These expectations guide the measurement framework definitions and measures in the boxes below.

These expectations have been interpreted in the measurement framework in Appendix 1.

What is meant by continuity of carer?

As set out in *Implementing Better Births: Continuity of Carer*, continuity of carer means each woman:

- Has consistency in the midwife or clinical team that provides hands on care for a woman and her baby throughout the three phases of her maternity journey: pregnancy, labour, and the postnatal period.
- Has a named midwife who takes on responsibility for coordinating her care, and for ensuring all her needs and those of her baby are met, at the right time and in the right place, throughout the antenatal, intrapartum and postnatal periods.
- Has "a midwife she knows at the birth".
- Is enabled to develop an ongoing relationship of trust with her midwife who cares for her over time.

How will continuity of carer be delivered?

As set out in *Implementing Better Births: Continuity of Carer*, there are two main models which meet these principles which Local Maternity Systems will want to consider for implementation locally:

- Team continuity, whereby each woman has an individual midwife, who is responsible for coordinating her care, and who works in a team of four to eight.
- Full case loading, whereby each midwife is allocated a certain number of women (the caseload).

Neither of these models need to be operated in their pure forms and may be mixed. For example, grouping case loading midwives together in teams/group practices, with midwives in teams organising their time to make the best use of their availability and arranging scheduled care with the same midwife as much as possible.

Both models can operate with a buddy system, whereby each woman has a first alternative point of contact within the team.

A hub and spoke model may be adopted, where each team is a self-determining unit, in its own right, supported by a central hub which ensures a robust governance framework around them.

Where possible the model should be implemented in both the hospital and community settings.

4. Definitions

Key definitions for this report are provided in the table below.

Term	Definition
Lead midwife	A lead midwife is the named midwife assigned to each pregnant woman. It is expected that out of all midwives in the team assigned to the pregnant woman, the lead midwife will know the pregnant woman the best and have met her the most times.
Buddy midwife	Within each team, pairs of midwives work together as buddies. If a woman's lead midwife is unavailable the buddy is the first choice for replacement.
Team midwife	This refers to the team of midwives that each maternity case has been assigned to. If the lead /buddy midwife is not available, then a team midwife is assigned. It is presumed that the women will have met all team midwives prior to going into labour. Evidence shows good outcomes for teams of 4 to 8.

5. Monitoring and evaluating continuity of carer

The aim of monitoring is to gain an understanding of the extent to which continuity of carer is being delivered locally and nationally.

We plan to track three specific nationally defined measures:

1. A service-reported measure of which person manages a specific care episode for the women concerned.

We will do this by recording which team provided the midwifery care for each woman at each contact, and how many times it was provided by the lead midwife or a member of a defined team of four to eight midwives. This will be made possible by changes to the Maternity Services Data Set.

A new national continuity of carer indicator will be developed drawing on this data. For this indicator, it is planned that the numerator will be the number of women who were seen by the lead midwife or member of a defined team of four to eight midwives at *every* appointment / care episode.

This approach will allow measurement specifically of whether continuity of carer has been provided within the definition and implementation models set out in *Implementing Better Births: Continuity of Carer.*

Within this, Local Maternity Systems may wish to set an internal target of, for example 70% contact with the lead midwife, and judge compliance with this target. However, this does not necessarily comply with the national definition and models because it does not track who the woman receives care from when her lead midwife is not available. Should areas choose to set their own KPI or establish local service-level monitoring arrangements until national data is available, they should do so in a manner consistent with the definitions set out above, against which they will be measured nationally.

2. A woman-reported measure of whether women feel they have had continuity.

We will use the results of the CQC maternity survey, which includes a question on continuity, to form an indicator. This will not enable a judgement of whether the definition and implementation models set out in *Implementing Better Births: Continuity of Carer* have been met – seeking to answer that question would be too complicated for a survey. However, by asking women what they experienced, we are testing whether the service-reported measure is having the impact we expect. The woman is the ultimate arbiter of whether she felt she had sufficient continuity.

3. By asking how teams are organising care.

Work is underway with the Healthcare Quality Improvement Partnership (HQIP)National Maternity and Perinatal Audit team as they plan the 2018 organisational survey, to take account of the roll-out of continuity of carer teams.

Work is underway with NHS Digital to set out how nationally collected data can be used to evaluate the extent to which particular models realise the benefits set out in evidence. In the meantime, Local Maternity Systems planning locally-led evaluations of their models should, for consistency, take account of the clinical outcomes of interest set out in Appendix 2.

6. Data sources

To ensure that data collected are comparable and consistent across all users and jurisdictions, the data elements should be developed in a standardised methodical way using established data development practices which specifies the agreed name, definition, response values and other metadata (data about data) as well as guidelines for their collection.

Appendix 1 outlines proposed measure, definition and data source for all measures.

6.1. The Maternity Services Dataset

The Maternity Services Dataset (MSDS) is the primary source of data on maternity services. NHS Digital is in the process of making changes to the MSDS, improving its content, structure, quality and accessibility. The updated data set will provide information to support implementation of a number of recommendations from *Better Births*, including Continuity of Carer. A new information standard for data submission is expected to be published by summer 2018, with a revised data collection by spring of 2019. The plan to allow for a process measure of

continuity of carer is through the introduction of a 'staff details' table to capture the details of clinicians involved in a woman's care, which will include the following information:

- the professional registration code;
- a clinician's staff group (e.g. midwife);
- a local care professional identifier to enable the professional registration code to be linked to the episode of care;
- a local team identifier to enable the professional registration code to be linked to a team.

This will enable calculation of the number of different midwives, all professionals, and teams who cared for a woman across the maternity pathway. It is possible that data quality, validity and/or access issues will limit the use of this data initially. However, Local Maternity Systems will need to take action to resolve these as soon as possible and may wish to use local data collections in the interim.

*Implementing Better Births*⁴ outlines how some processes of continuity outlined in the box below may impact on clinical outcomes identified in the Appendix 2.

6.2. Care Quality Commission Survey

The 2017 CQC Maternity Survey involved 130 NHS trusts in England, who sent questionnaires to a total of 50,008 women. Responses were received from 18,426 women, a response rate of 37.4%. Women in the sample who had a live birth between 1 and 28 February 2017 were invited to take part (with smaller trusts sampling back into January). The 2017 CQC survey contains one specific piloted and validated question related to measuring women's experience of continuity of carer: "Had any of the midwives who cared for you [during labour] been involved in your antenatal care?". However, from the 2018 survey onwards, women will also be asked "Had any midwives who cared for you postnatally also been involved in your labour and antenatal care?". From 2018, it is intended that this new, broader question will be used as a single indicator.

6.3. NMPA Organisational Survey

The NMPA organisational report presents a snapshot of maternity and neonatal care provision at the start of 2017, based on information submitted by every NHS trust and board in England, Scotland and Wales⁶. The NMPA organisational survey was developed with reference to national standards, recommendations and government policy regarding organisational aspects of maternity and neonatal care. Following a pilot with a diverse sample of 9 trusts and boards, the survey was conducted online from late January to March 2017. All NHS trusts and boards providing intrapartum care on site across England, Scotland and Wales were eligible to take part and 100% of the 155 eligible trusts and boards submitted a completed survey (134 English trusts, 14 Scottish and 7 Welsh boards).

The 2017 survey found that 15% of trusts and boards use care models for which they report that women see the same midwife for most care contacts in the antenatal, intrapartum and postnatal period, including care in labour from a known midwife⁷. However, none use these care models for all women. Services rely mainly on timeconsuming audit of paper records and 40% of maternity services do not monitor continuity of carer at all. The report recommended that maternity services, and where applicable commissioners, should work towards electronic

⁶ NMPA project team. National Maternity and Perinatal Audit: organisational report 2017. RCOG London, 2017.

⁷ Continuity of carer within the antenatal or postnatal period is interpreted as women seeing the same midwife for most (more than 50%) of their antenatal or postnatal care contacts respectively. Continuity across care periods would imply women seeing the same midwife for most care contacts in these periods, including care in labour from a known midwife for continuity across the antenatal and intrapartum period.

recording of all maternity care contacts to monitor progress in the ability to provide continuity of carer and to evaluate which care models are associated with the highest levels of continuity of carer.

A classification system of how continuity models are organized will enable comparisons of variation, outcomes, progress and assessment of resource use. Reflecting Implementing Better Births 2017 guidance, items in Appendix 1 draw upon the methodology in the Maternity Care Classification System in Australia to classify models of maternity care, their characteristics and an overarching broad model descriptor⁸. It will enable large-scale evaluations of maternal and perinatal outcomes under different models of care independently of the model's name⁹. It accommodates the model variation that influences maternal and perinatal outcomes and provides a more accurate method for grouping and classifying models of care. Piloting would be required to assess validity and usefulness in England.

Additional / amended questions could be requested to be added to the HQIP NMPA Organisational Survey¹⁰ which gained 100% response in 2017 from NHS trusts. This contains:

- Information on population: type of risk, target group.
- Information on model: Professional affiliation of lead/primary carer, planned medical visits, professional affiliations of other routine carer(s), continuity of lead carer across stages, total number of maternity care providers.
- Information on organisation: main planned location of care, organisation of maternity care providers.

7. Monitoring continuity of carer in 2018/19

The approach outlined above is not feasible for 2018/19 for two reasons:

- The MSDS requires amendment to enable the tracking of which midwife provided the care at each contact, and the first data (from April 2019) will not be available until summer 2019.
- The specific ask included in *Refreshing NHS Plans for 2018/19* which was intended to encourage LMS to begin implementing continuity of carer is framed in terms of the number of women who start on a continuity of carer pathway in March 2019, rather than in terms of how many women ultimately receive continuity of carer.

Accordingly, LMS will need to use local data sources to track progress. An approach to doing so has been included at Appendix 2.

Whilst the official ask relates to the percentage of women booked on a continuity of carer pathway in March 2019, some pilots are already up and running or will be throughout the year. Where this is the case, LMS may wish to use the approach detailed in this framework for monitoring or evaluation, using local data sources.

9 Donnolley NR, Chambers GM, Butler-Henderson KA, Chapman MG, Sullivan E. A validation study of the Australian Maternity Care Classification System. Women and Birth. 2018 Aug 27.

10 http://www.maternityaudit.org.uk/downloads/OrganisationalSurveyPrintableNMPA.PDF

⁸ Donnolley, Natasha, et al. "The development of a classification system for maternity models of care." Health Information Management Journal 45.2 (2016): 64-70.

8. Conclusion and next steps

Nationally agreed definitions and categories for continuity of carer models support accurate comparison and evaluation of these models locally and nationally.

They can also help women and their families to make informed choices about their care.

For the purposes of classifying and monitoring continuity of carer models consistently, **Local Maternity Systems** should note the definitions and measures set out in the measurement framework on the next page, in Appendix 1.

Refreshing NHS Plans for 2018/19 requires LMS to ensure that from March 2019, 20% of women at booking are placed onto continuity of carer pathways and receive continuity of the person caring for them during pregnancy, birth and postnatally. Local Maternity Systems should note the methodology for calculating compliance with this requirement, including clear definitions of the numerator and denominator, which is included in Appendix 3.

Work is underway with the NMPA to better take account of continuity in future organisational surveys, and the CQC to improve questions relating to continuity of carer in the maternity survey.

A clear measure of how continuity is being delivered is required to inform any benefits realisation package of indicators. Such measures need to be clearly defined, measurable using existing data and piloted before widespread use.

NHS England is working with NHS Digital to set out how nationally collected data can track the number of women considered to have received continuity of carer from April 2019, and support the evaluation of continuity of carer models against the improvements in clinical outcomes set out in evidence. In the meantime, Local Maternity Systems planning locally-led evaluations of their models should consider the clinical outcomes set out in Appendix 2.

Appendix 1 – Measurement Framework

The term 'continuity of carer' is difficult to define, however it is important that a common terminology in describing and comparing continuity models and the outcomes for women and their babies. The lack of a consistent and agreed method for defining and categorising models of continuity of carer restricts the ability to accurately compare, or evaluate, different models of care. Local variation in naming models of care can also make it more difficult for women and their families to make informed decisions.

Hence, the Classification System below has been developed to classify, record and report data about maternity models of care. Standardising a nomenclature and definitions for maternity models of care would allow data to be collected at LMS level and nationally to facilitate meaningful analysis and comparisons of maternal and perinatal outcomes in differing models of care. It would also help in evaluating the success of Better Births at a local and national level.

Indicator	Purpose	Definition	Measure	Data Source
Population target group	The characteristics of women or their pregnancy that define a target group for a specific maternity model of care, as represented by a code	All women from defined geographical area (mixed risk)	Locality based (by postcode / GP practice)	NMPA
		Women who are on a low risk pathway	Low risk	
		Women with complex social needs	Social complexity	
		Women with complex medical needs	Medical complexity	
Setting	Location team is based, as represented by a code.	Team office based in hospital	Hospital based	Local monitoring
		Team office based in community	Community based	
Model	An indicator of whether a model is a midwifery caseload model of care, team model or other, as represented by a code.	Team continuity, whereby each woman has a lead midwife, who is responsible for providing most of her care.	Team	NMPA
		Full case loading, whereby each midwife is allocated a certain number of women (the caseload).	Caseload	
		A hub and spoke model where each team is a self-determining unit, supported by a central hub.	Hub and Spoke	
		Other model	Other	

Indicator	Purpose	Definition	Measure	Data Source
Midwifery caseload size and skillmix	The total number of women (caseload) cared for per year by each full- time equivalent midwife working in a continuity model of care, as represented by a number.		Number of women (births) /WTE midwife P/A Number of women (bookings) /WTE midwife P/A	Local monitoring
	Size and skill mix of team, as represented by a number.		Number of midwives WTE Number of midwives in total Number of support workers Number of other	
Level of continuity of carer ¹¹	The extent to which continuity of carer is provided across the continuum of maternity care within a model of maternity care, as represented by a code.	Lead midwife who takes on responsibility for co- ordinating a woman's care, and for ensuring all the needs of a woman and her baby are met, throughout the antenatal, intrapartum and postnatal periods.	Which team provided the midwifery care for each woman at each contact, and how many times it was provided by the lead midwife or a member of a defined team of four to eight midwives. For this indicator, it is planned that the numerator will be the number of women who were seen by the lead midwife or member of a defined team of four to eight midwives at every appointment / care episode.	NHS Digital
		Each woman would have "a midwife she knows at the birth".	Percentage of women who have the lead midwife attending their birth. Percentage of women who have a buddy/team midwife attending their birth.	

11 Based on NHS England Maternity System modelling definition

CQC Maternity Survey

Indicator	Purpose	Definition	Measure (CQC Question Number)	Data Source
Womens' experience of continuity of carer	Measure of continuity of carer, as indicated by response.		New question. Had any midwives who cared for you postnatally also been involved in your labour and antenatal care?	CQC Survey of women
			B8: If you saw a midwife for your antenatal check- ups, did you see the same one every time? (yes 38%)	
			Had any of the midwives who cared for you during your labour and birth been involved in your antenatal care? ¹² (yes, 20%)	
			C13: Had any of the midwives who cared for you been involved in your antenatal care? (yes, 15%)	
			Had you met the midwife who helped you birth your baby beforehand?1 (yes, 30%).	
			Did any of the midwives who you saw in the postpartum period, care for you during your pregnancy, and/or labour and birth? ¹ (yes, 31%)	
			F5: When you were at home after you had your baby. Did you see the same midwife every time? (yes, 28%)	
			Was the majority of your maternity care delivered by the same midwife throughout your complete maternity pathway/ journey?' (yes, 39%)	
			B9: During your antenatal check-ups, did the midwives appear to be aware of your medical history? (yes always 50%)	

12 Tested in NHS England (London) Continuity of care audit.

Indicator	Purpose	Definition	Measure (CQC Question Number)	Data Source
Women's perception of care safety and quality			B12: During your antenatal check-ups, did a midwife ask you how you were feeling emotionally? (Yes, definitely 64%)	CQC Survey of women
			C14: Were you (and/ or your partner or a companion) left alone by midwives or doctors at a time when it worried you? (No, not at all, 77%).	
			C15: If you raised a concern during labour and birth, did you feel that it was taken seriously? (yes, 81%)	
			C16: If you needed attention during labour and birth, were you able to get a member of staff to help you within a reasonable time? (yes, always, 65%)	
			C20: Did you have confidence and trust in the staff caring for you during your labour and birth? (Yes, definitely 82%)	
			If you were transferred during labour (such as from home to hospital or from a midwife led centre to the labour ward) were the reasons for this, including what to expect and the time needed for transfer explained to you?' (yes, 33%)	
			F18: Were you told who you could contact if you needed advice about any emotional changes you might experience after the birth? (yes, 78%).	
			F11: Did you have confidence and trust in the midwives you saw after going home? (Yes, definitely 73%).	

Appendix 2 – Clinical outcomes for evaluation (Source MSDS)

Data item	Preferred format
Site code of actual place of delivery	Alphanumeric site code (min an5; max an9)
	ZZ201 - Not applicable (intended to deliver at home)
	ZZ888 - Not applicable (intended to deliver at non-NHS organisation)
	ZZ203 - Not known (intended place of delivery not known)
Actual place of birth category	0 - In NHS hospital - delivery facilities associated with midwife ward
	1 - At a domestic address
	2 - In NHS hospital - delivery facilities associated with consultant ward
	3 - In NHS hospital - delivery facilities associated with GMP ward
	4 - In NHS hospital - delivery facilities associated with consultant/GMP/midwife ward inclusive of any combination of two of the professionals mentioned
	5 - In private hospital
	6 - In other hospital or institution
	7 - In NHS hospital - ward or unit without delivery facilities
	8 - None of the above
	9 - Not known
Delivery place actual midwifery unit type	1 - Midwifery unit, co-located with Consultant obstetric unit
	2 - Midwifery Unit, co-located with other Non-Obstetric Consultant Unit (Theatre and Anaesthetic Services)
	3 - Midwifery unit, stand alone
Smoking status at delivery	01 - Current smoker
	02 - Ex-smoker - Stopped after conception
	03 - Ex-smoker - Stopped between conception and 12 months before conception
	04 - Ex-smoker - Stopped more than 12 months before conception
	05 - Non-smoker - history unknown
	06 - Never smoked

Data item	Preferred format
Pain relief type (labour and delivery)	01 - TENS (Transcutaneous electrical nerve stimulation)
	02 - Inhalational analgesia
	03 - Narcotics
	04 - Paracetamol
	05 - Immersion in water
	06 - Complementary therapies
	96 - Other pain relief used
	98 - No pain relief used
	99 - Not known
Anaesthesia in labour and delivery	01 - General anaesthetic
	02 - Epidural or caudal anaesthetic
	03 - Spinal anaesthetic
	09 - Pudendal block anaesthetic
	97 - Other anaesthetic or analgesic only
	98 - No anaesthetic administered
Method of delivery	0 - Spontaneous Vertex
	1 - Spontaneous Other Cephalic
	2 - Low forceps, not breech
	3 - Other Forceps, not breech
	4 - Ventouse, Vacuum extraction
	5 - Breech (spontaneous vaginal)
	6 - Breech Extraction
	7 - Elective (planned, prelabour) caesarean section
	8 - Emergency caesarean section
Category of C section (if applicable)	1 - Emergency: immediate threat to life of woman or fetus
5. <i>(</i>	2 - Danger: maternal or fetal compromise, but not immediate life threatening
	3 - No danger: early delivery needed, but no maternal or fetal compromise
	 4 - Elective: at a time to suit the woman and maternity services
	r Elective, aca time to suit the woman and matchinty Scivices

Data item	Preferred format
Perineal tears	01 - None
	02 - Labial tear
	03 - Vaginal wall tear
	04 - Perineal tear - first degree
	05 - Perineal tear - second degree
	06 - Perineal tear - third degree
	07 - Perineal tear - fourth degree
	09 - Cervical tear
	10 - Urethral tear
	11 - Clitoral tear
	12 - Anterior incision
Episiotomy	Preferred format: N = no; Y = yes; 99 - not stated/missing
Maternal critical incident /	01 - Undiagnosed breech
complications arising during labour	02 - PPH >= 500ml and <= 999ml
and delivery	02 - PPH >= 500ml and <= 999ml 03 - PPH >= 1000ml and <= 1499ml
	03 - PPH >= 1000ml and <= 1499ml 04 - PPH >= 1500ml
	05 - Return to theatre
	06 - Hysterectomy / laparotomy
	07 - Anaesthetic complications
	08 - Intensive care admission
	09 - Venous thromboembolism
	10 - Pulmonary embolism
	11 - Unsuccessful forceps or ventouse
	12 - Amniotic Fluid Embolism
Date and time of birth (baby)	Preferred format: an19 YYYY-MM-DDThh:mm:ss
Delivery outcome Type of stillbirth (if applicable)	10 - Live birth
	20 - Stillbirth
	30 - Miscarriage
	40 - Termination of Pregnancy < 24weeks
	50 - Termination of Pregnancy >= 24weeks
	XX - Other inc vanishing/papyraceous twin, ectopic
Type of stillbirth (if applicable)	01 - Anteparum
	02 - Intrapartum
	03 - Timing unknown

Data item	Preferred format
Birth weight	max n4
Gestational age at birth in days	max n3
Apgar score at 5 minutes	max n2
Baby breast milk status (at discharge	01 - Exclusively Breast Milk Feeding
from hospital)	02 - Partially Breast Milk Feeding
	03 - No Breast Milk Feeding At All
Skin to skin contact within one hour	Preferred format: N = no; Y = yes; 99 - not stated/missing
Baby complications at birth	01 - Shoulder dystocia
	02 - Cord prolapse
	03 - Acute fetal compromise
	04 - Fetal acidaemia
	05 - Meconium Aspiration Syndrome
	06 - Acute blood loss
	07 - Jaundice requiring phototherapy
	08 - Erb's Palsy
	09 - Neonatal abstinence syndrome
	10 - Birth trauma to the newborn
	11 - Fetal laceration at caesarean section
	12 - Cord pH < 7.1 venous
	13 - Neonatal seizures
	14 - Undiagnosed fetal abnormality
	15 - European Congenital Anomalies or Twins (Eurocat)
Maternal Death Date Time	Preferred format: YYYY-MM-DDThh:mm:ss
Neonatal Death Date Time	Preferred format: an19 YYYY-MM-DDThh:mm:ss
Date and time of maternal discharge	Preferred format: an19 YYYY-MM-DDThh:mm:ss
Date and time of neonatal discharge	Preferred format: an19 YYYY-MM-DDThh:mm:ss

Appendix 3 – Monitoring implementation of the requirement set out in Refreshing NHS Plans for 2018/19

Description

The proportion of women for whom it is planned will receive continuity of carer, i.e. the proportion of women who have a named lead midwife providing their care, and who are expected to see the same lead/ buddy / team midwife over the course of their antenatal, intrapartum and postnatal care.

These midwives must be from a defined team of 4 to 8 midwives, unless they operate an individual caseload. All team members should be known to the woman.

Reporting period: March 2019

Reported by: LMS

Definition

Numerator: The number of women who book onto a continuity of carer pathway at a provider within the LMS (i.e. they plan to see the same lead/ buddy midwife or a midwife from a defined team of up to 8 midwives over the course of their antenatal, intrapartum and postnatal care) in March 2019.

Denominator: The number of women booking for maternity care at a provider within the LMS in March 2019.

Measure: Numerator / denominator (expressed as a percentage)

Worked Example

500 women were booked for maternity care at providers in LMS A in March 2019. This equates to approximately 6,000 women per year booking for maternity care in LMS A.

In LMS A, there are 2 maternity providers:

- Provider A consists of an Obstetric Unit and an alongside midwifery-led unit. Under traditional models, it would have capacity to deliver 5,580 births per year (465 per month).
- Provider A has recently set up 4 continuity teams, each consisting of 6 midwives working at a birth: midwife ratio of 35:1. These 4 continuity teams have the capacity to take on 840 women per year (**70 per month**)
- Provider B consists of a 2 teams of continuity midwives working from a community hub and provides home births. Like provider A, these 2 continuity teams, each consist of 6 midwives working at a birth: midwife ration of 35:1. These 2 continuity teams have the capacity to take on 420 women per year (**35 per month**)

During March 2019, of the 500 women who booked for maternity care:

- 70 women booked onto a continuity of carer pathway with provider A
- **35 women** booked onto a continuity of carer pathway with provider B
- The remaining 395 women were booked onto pathways that do not provide continuity of carer.

In total, 105 women (70 + 35) who booked for maternity care, in LMS A in March 2019 were booked onto a continuity of carer pathway. This equates to 21.0% (105/500) of women for whom it is planned will receive continuity of carer.

Table 1: Calculation for LMS A

Number of women booked onto a continuity of carer pathway:	105
Number of women in LMS A who booked in March 2019:	500
Proportion of women in LMS A that are booked onto a continuity carer pathway in March 2019:	21% (105/500)



The Royal College of Midwives 15 Mansfield Street London W1G 9NH

Tel: 0300 303 0444 Email: info@rcm.org.uk Web: www.rcm.org.uk

Promoting • Supporting • Influencing