



# Delivering Midwifery Continuity of Carer at full scale:

## Technical annex

Definitions for Maternity Services Data  
Set (MSDS) measures

## 1. Percentage of women placed on a Midwifery Continuity of Carer pathway (placement measure)

### Plain English summary

This measure looks at women who are/have reached 29 weeks gestation in a given month. It counts how many by this point have been placed on a Midwifery Continuity of Carer (MCoC) pathway and assigned a named lead midwife and team, as indicated on their maternity care plans.

Within this, two measures will look specifically at women who are recorded as Black, Asian and Mixed ethnicity, or as women living in the most deprived 10% of areas. This is defined in measures 1A and 1B below.

### Definitions

The number and proportion of women who are placed on a MCoC pathway by the 28-week antenatal appointment, as measured at 29 weeks gestation.

A MCoC pathway means that a woman can expect to see the same lead/buddy midwife or a midwife from a defined team of up to eight midwives over the course of their antenatal, intrapartum and postnatal care.

### Technical specification

**Numerator:** Number of women who reach 29 weeks gestation in the month, who are marked as being on a MCoC pathway and have a named lead midwife and team as part of their maternity care plan.

**Denominator:** Number of women who reach 29 weeks gestation in the month.

### Calculation of metric

$$\text{Indicator construction: } \frac{\text{Numerator}}{\text{Denominator}} * 100$$

The **denominator** is the number of women who reach 29 weeks gestation in the month.

To calculate the **numerator**, an algorithm will interrogate records of women included in the denominator to see if they were booked onto a MCoC pathway at 29 weeks gestation.

To be counted in the numerator:

- a woman's latest antenatal maternity care plan (MSD102) should indicate that she has been placed on a MCoC pathway ('Continuity of Carer Pathway Indicator')
- a named lead midwife ('Care Professional Local Identifier') and that midwife's team ('Care Professional Team Local Identifier') should be specified in that care plan
- the 'Maternity Care Plan Date' should not be later than 28 weeks + 7 days gestation, as determined by 'Estimated Date of Delivery' (MSD101).

Only antenatal maternity care plans will be interrogated ('Maternity Care Plan Type' = 05). A worked example of this calculation can be found in **Resource A** below.

**Relevant data fields:** A visualisation of the data items in MSDS v2 required for this indicator, and how they will be used, can be found in **Resource B** below.

- MSD001 – mother's demographics:
  - POSTCODE OF USUAL ADDRESS (MOTHER)
  - ETHNIC CATEGORY (MOTHER)
- MSD101 – pregnancy booking:
  - UNIQUE PREGNANCY ID
  - APPOINTMENT DATE (FORMAL ANTENATAL BOOKING)
  - GESTATIONAL AGE AT BOOKING
- MSD102 – mat care plan:
  - MATERNITY CARE PLAN DATE
  - MATERNITY CARE PLAN TYPE
  - CONTINUITY OF CARER PATHWAY INDICATOR
  - CARE PROFESSIONAL LOCAL IDENTIFIER
  - CARE PROFESSIONAL TEAM LOCAL IDENTIFIER

### **Monitoring frequency**

Monthly.

### **Aggregation of data**

Provider-level MSDS data will be aggregated first to responsible CCG and then to LMS level.

## **1A. Percentage of 'Black' and 'Asian' women placed on a Midwifery Continuity of Carer pathway**

### **Plain English summary**

This measure looks at women with a recorded ethnicity of 'Black' or 'Asian' (including mixed ethnicity) who reached 29 weeks gestation in a given month. It counts how many by this point have been placed on a MCoC pathway and assigned a named lead midwife and team, as indicated on their maternity care plans.

### **Definitions**

As per measure 1 with the numerator and denominator filtered to only include women with a recorded ethnicity of 'Black' or 'Asian' or 'Mixed'.

### **Technical specification**

**Numerator:** As per measure 1 and filtered to only include those women with a recorded ethnicity of 'Black' or 'Asian' or 'Mixed'.

**Denominator:** As per measure 1 and filtered to only include those women with a recorded ethnicity of 'Black' or 'Asian' or 'Mixed'.

### **Calculation of metric**

**Indicator construction:** As per measure 1 and filtered to only include those women with a recorded ethnicity of 'Black' or 'Asian' or 'Mixed'.

### **Monitoring frequency:**

Monthly.

### **Aggregation of data**

Provider-level MSDS data will be aggregated first to CCG of responsibility and then to LMS level.

## **1B. Percentage of women in the most deprived IMD decile of areas placed on a Midwifery Continuity of Carer pathway**

### **Plain English summary**

This measure looks at women who are resident in the most deprived IMD decile of areas who are/have reached 29 weeks gestation in a given month. It counts how many by this point have been placed on a MCoC pathway and assigned a named lead midwife and team, as indicated on their maternity care plans.

## Definitions

As per measure 1 with the numerator and denominator filtered to only include women who are resident in the most deprived IMD decile of areas.

## Technical specification

**Numerator:** As per measure 1 and filtered to only include those women who are resident in the most deprived IMD decile of areas.

**Denominator:** As per measure 1 and filtered to only include those women who are resident in the most deprived IMD decile of areas.

## Calculation of metric

**Indicator construction:** As per measure 1 and filtered to only include those women who are resident in the most deprived IMD decile of areas.

## Monitoring frequency

Monthly.

## Aggregation of data

Provider-level MSDS data will be aggregated first to CCG of responsibility and then to LMS level.

## 2. Percentage of women who have received Midwifery Continuity of Carer (receipt measure)

### Plain English summary

Like the placement measure, the receipt measure looks at women who are/have reached 29 weeks gestation in a given month. It counts how many go on to receive MCoC by waiting 4 months, until they have received all their maternity care.

Looking back, it identifies how many of these women were placed on MCoC pathways, either at the booking appointment or by the 28-week antenatal appointment. It then assesses whether MCoC was achieved for these women. This is done by assessing – from point of placement – which midwife and team provided midwifery care antenatally, during the birth and postnatally.

Within this, two measures will look specifically at women who are recorded as Black, Asian and Mixed ethnicity, and as living in the most deprived 10% of areas. This is defined in measures 2A and 2B below.

## Definitions

The number and proportion of women who are placed on a MCoC pathway at booking or by the 28-week antenatal appointment (measured at 29 weeks gestation); and at that point and up to discharge have been seen by their lead/team midwife in antenatal and postnatal care (at least 70% of appointments) and during intrapartum care.

## Technical specification

**Numerator:** Number of women who:

- reach 29 weeks gestation in [a given] month
- have been placed on a MCoC pathway at antenatal booking, or after booking and by 29 weeks gestation and
- at that point and up to discharge, have been seen by a lead/team midwife in antenatal and postnatal care (at least 70% of appointments) and during intrapartum care.

**Denominator:** Number of women who are/reach 29 weeks gestation in [a given] month.

**Measurement considerations:** For a record to be successful in this measurement, a lead/team midwife must be present at the labour. In long labours, or where multiple midwives are recorded as having been present, one of these midwives must be a lead/team midwife for the woman to be included in the numerator. Intrapartum care is additional to the 70% requirement for antenatal and postnatal appointments (which will be combined when calculating compliance).

Only women who have been discharged from maternity services will be included in this measure. From the month a woman reaches 29 weeks gestation, four months will elapse before the data extract is taken. For example, for women reaching 29 weeks gestation in March, the data extract will be taken for July as it is expected that by July all these women will have been discharged from maternity services. As MSDS data is reported with a three-month time lag, the results will be reported in October.

## Calculation of metric

**Indicator construction:** 
$$\frac{A + B}{\text{Denominator}} * 100$$

Where:

**A** is the number of women who reach 29 weeks gestation in [a given] month; are placed on a MCoC pathway at antenatal booking; and from booking and up to discharge are seen by a lead/team midwife in antenatal and postnatal care (at least 70% of appointments) and during intrapartum care.

**B** is the number of women who reach 29 weeks gestation in [a given] month; are placed on a MCoC pathway after booking and by 29 weeks gestation; and from placement up to discharge are seen by a lead/team midwife in antenatal and postnatal care (at least 70% of appointments) and during intrapartum care.

The **denominator** is the number of women who reach 29 weeks gestation in [a given] month.

A worked example of this calculation can be found in **Resource A** below.

To be counted in **A**:

- a woman's first antenatal maternity care plan (MSD102) should indicate that she has been placed on a MCoC pathway ('Continuity of Carer Pathway Indicator')
- a named lead midwife ('Care Professional Local Identifier') and that midwife's team ('Care Professional Team Local Identifier') should be specified in that care plan
- the 'Maternity Care Plan Date' should match the date of the formal antenatal booking (MSD101) and be no later than 28 weeks + 7 days gestation, as determined by 'Estimated Date of Delivery' (MSD101)
- for 70% of all antenatal and postnatal care contacts between the antenatal booking date and the discharge date ('Discharge date (Mother Maternity Services)' MSD101) and intrapartum care, the 'Care Professional Local Identifier' or 'Care Professional Team Identifier' (MSD202 + MSD302) should match the corresponding fields in the care plan (table MSD102)
- where multiple midwives are recorded as being present during the birth in MSD302, one of these midwives' 'Care Professional Local Identifier' or 'Care Professional Team Identifier' (MSD302) should match the corresponding fields in the care plan (table MSD102)
- where the 'Care Contact Date' (MSD201) = formal antenatal booking date (MSD101), the 'Care Professional Local Identifier' or 'Care Professional Team Identifier' (MSD202) must match the corresponding fields in table MSD102.

To be counted in **B**:

- a woman's latest antenatal maternity care plan (MSD102) should indicate that she has been placed on a MCoC pathway ('Continuity of Carer Pathway Indicator')
- a named lead midwife ('Care Professional Local Identifier') and that midwife's team ('Care Professional Team Local Identifier') should be specified in that care plan
- the 'Maternity Care Plan Date' should be after the date of the formal antenatal booking (MSD101) but not be later than 28 weeks + 7 days gestation, as determined by 'Estimated Date of Delivery' (MSD101)
- for 70% of all antenatal and postnatal care contacts that occur between the 'Maternity Care Plan Date' and the discharge date ('Discharge date (Mother Maternity Services)' MSD101) and intrapartum care, the 'Care Professional Local Identifier' or 'Care Professional Team Identifier' (MSD202 + MSD302) should match the corresponding fields in table MSD102
- where multiple midwives are recorded as being present during the birth (MSD302), one of these midwives' 'Care Professional Local Identifier' or 'Care Professional Team Identifier' (MSD302) should match the corresponding fields in table MSD102.

Only antenatal maternity care plans will be interrogated ('Maternity Care Plan Type' = 05).

Any further maternity care plans submitted after 29 weeks gestation will not be considered for the purposes of measuring receipt of MCoC.

Only care contacts where a midwife is present will be interrogated. The 'care professional staff group' (MSD901) of the 'care professional local identifier' (MSD202 + MSD302) =

- 05 – an NHS employed midwife
- 06 – a private midwife contracted to the NHS
- 07 – an independent midwife.

Student midwives/midwifery support staff appointments do not qualify to be assessed.



Only appointments that were attended by the woman will be interrogated ('Attended or did not attend code' (MSD201) =

- 05 – attended on time or, if late, before the relevant CARE PROFESSIONAL was ready to see the PATIENT
- 06 – arrived late, after the relevant CARE PROFESSIONAL was ready to see the PATIENT, but was seen.

**Relevant data fields:** A visualisation of the data items in MSDSv2 required for this indicator, and how they will be used, can be found in **Resource B** below.

- MSD001 – mother's demographics:
  - POSTCODE OF USUAL ADDRESS (MOTHER)
  - ETHNIC CATEGORY (MOTHER)
- MSD101 – pregnancy booking:
  - UNIQUE PREGNANCY ID
  - APPOINTMENT DATE (FORMAL ANTENATAL BOOKING)
  - GESTATIONAL AGE AT BOOKING
  - DISCHARGE DATE (MOTHER MATERNITY SERVICES)
- MSD102 – mat care plan:
  - MATERNITY CARE PLAN DATE
  - MATERNITY CARE PLAN TYPE
  - CONTINUITY OF CARER PATHWAY INDICATOR
  - CARE PROFESSIONAL LOCAL IDENTIFIER
  - CARE PROFESSIONAL TEAM LOCAL IDENTIFIER
- MSD201 – care contact preg:
  - CARE CONTACT DATE
  - ATTENDED OR DID NOT ATTEND CODE
- MSD202 – care activity preg:
  - CARE PROFESSIONAL LOCAL IDENTIFIER
  - CARE PROFESSIONAL TEAM LOCAL IDENTIFIER
- MSD302 – care activity lab del:
  - CARE PROFESSIONAL LOCAL IDENTIFIER
  - CARE PROFESSIONAL TEAM LOCAL IDENTIFIER
- MSD901 – staff details:

- CARE PROFESSIONAL LOCAL IDENTIFIER
- CARE PROFESSIONAL STAFF GROUP (MATERNITY)

### **Monitoring frequency**

Monthly.

### **Data timeliness**

- Receipt for women who reach 29 weeks gestation in a given month would be available around seven months later. This ensures that all women reaching 29 weeks gestation in a given month complete their maternity (birthing up to 44 weeks). For example, women who reach 29 weeks gestation should reach 44 weeks gestation in July, for which the data will be available at the end of October.

### **Data quality**

The proposed indicator will operate in shadow form – ie it will not be used formally for LMS assurance – until a sufficient number of providers are submitting data for a sufficient percentage of women; and longitudinal analysis of data demonstrates that the proposed methodology is representative.

In the meantime, as it is possible that providers' records may not all be complete for the tables/fields required in the calculation set out above, a data quality completeness score will be provided alongside each provider's indicator value. A data quality RAG rating will be provided, based on thresholds of submission, to inform users of the data.

All individual records with insufficient data quality will be included in a provider's denominator.

### **Aggregation of data**

Provider-level MSDS data will be aggregated first to responsible CCG and then to LMS level.

## **2A. Percentage of 'Black' and 'Asian' (including Mixed ethnicity) women who have received Midwifery Continuity of Carer**

### **Plain English summary**

This measure looks at women with a recorded ethnicity of 'Black' and 'Asian' who reached 29 weeks gestation in a given month. It counts how many go on to receive MCoC by waiting four months, until they have received all of their maternity care.

Looking back, it identifies how many of these women were placed on MCoC pathways, either at the booking appointment or by the 28-week antenatal appointment. It then assesses whether MCoC was achieved for these women. This is done by assessing – from point of placement – which midwife and team provided midwifery care antenatally, during the birth and postnatally.

### **Definitions**

As per measure 2, with the numerator and denominator filtered to only include women with a recorded ethnicity of 'Black', 'Asian' or 'Mixed'.

### **Technical specification**

**Numerator:** As per measure 2 and filtered to only include those women with a recorded ethnicity of 'Black', 'Asian' or 'Mixed'.

**Denominator:** As per measure 2 and filtered to only include those women with a recorded ethnicity of 'Black', 'Asian' or 'Mixed'.

### **Calculation of metric**

**Indicator construction:** As per measure 2 and filtered to only include those women with a recorded ethnicity of 'Black', 'Asian' or 'Mixed'.

### **Monitoring frequency**

Monthly.

### **Aggregation of data**

Provider-level MSDS data will be aggregated first to CCG of responsibility and then to LMS level.

## **2B. Percentage of women in the most deprived IMD decile of areas who have received Midwifery Continuity of Carer**

### **Plain English summary**

This measure looks at women who are resident in the most deprived IMD decile of areas who reached 29 weeks gestation in a given month. It counts how many go on to receive MCoC by waiting four months, until they have received all their maternity care.

Looking back, it identifies how many of these women were placed on MCoC pathways, either at the booking appointment or by the 28-week antenatal appointment. It then assesses whether MCoC was achieved for these women. This is done by assessing –

from point of placement – which midwife and team provided midwifery care antenatally, during the birth and postnatally.

### **Definitions**

As per measure 2 with the numerator and denominator filtered to only include women who are resident in the most deprived IMD decile of areas.

### **Technical specification**

**Numerator:** As per measure 2 and filtered to only include those women who are resident in the most deprived IMD decile of areas.

**Denominator:** As per measure 2 and filtered to only include those women who are resident in the most deprived IMD decile of areas.

### **Calculation of metric**

**Indicator construction:** As per measure 2 and filtered to only include those women who are resident in the most deprived IMD decile of areas.

### **Monitoring frequency**

Monthly.

### **Aggregation of data**

Provider-level MSDS data will be aggregated first to CCG of responsibility and then to LMS level.

## **Resource A: Worked example for placement and receipt measures**

**Townbury NHS Trust** offers two different models of MCoC:

- a small number of ‘all risk’ teams based in deprived neighbourhoods, where women see their named lead midwife from the booking appointment
- a team specialising in diabetes during pregnancy, where women are placed from booking or later.

In March 2022, **100 women in the trust’s care reached 29 weeks gestation**, as recorded by the provider Maternity Information System. Of these 100 women:

- 35 were recorded as ‘Black’ or ‘Asian’

- 30 provided postcodes that were in the most deprived 10% of areas (IMD decile).

## Placement

Of these 100 women, **35 were marked as being on a MCoC pathway**, with a named lead midwife and team recorded on the Maternity Information System. Of these 35 women:

- 13 were recorded as 'Black' or 'Asian'
- 12 were resident in the most deprived IMD decile.

**It was therefore determined that at Townbury NHS Trust, 35 of 100 women (35%) were placed on a MCoC pathway in March 2022.** Within this, it is also determined that the following subsets of women were placed on a MCoC pathway:

- **13 of 35 (37%) Black and Asian women**
- **12 of 30 (40%) women who are resident in the most deprived IMD decile.**

This data will be published in June 2022 based on MSDS data submissions for March 2022.

## Receipt

Four months later, this same cohort of women was analysed again, once they had received all their maternity care. Of the 35 women who were placed on a MCoC pathway, it was identified that:

- **20** were seen by their lead/team midwife from booking went on to have 70% or more of their antenatal and postnatal contacts with their lead or team midwife, and their intrapartum care:
  - 7 of these were recorded as 'Black' or 'Asian'
  - 8 of these were resident in the most deprived IMD decile
- **10** were seen by their lead/team midwife by 29 weeks gestation and went on to receive 70% or more of their antenatal and postnatal contacts with their lead or team midwife, and their intrapartum care:
  - 4 of these were recorded as 'Black' or 'Asian'
  - 2 of these were resident in the most deprived IMD decile

- **5** of 35 women who were placed on a MCoC pathway did not go on to receive MCoC.

**Therefore, for measure 3, it was reported that at Townbury NHS Trust, 30 (20 + 10) of 100 women (30%) received MCoC for March 2022.** Within this, it was also determined that the following subsets of women received MCoC:

- **11 (7 + 4) of 35 (31%) Black and Asian women**
- **10 (8 + 2) of 30 (30%) women who are resident in the most deprived IMD decile.**

This will be published in October 2022, using MSDS data submitted up to July 2022.

For subsequent months, the above steps will be repeated, and the data will be published to the following timescales:

<b>Women reaching 29 gestation in:</b>	<b>Month when placement measure will be published</b>	<b>Month when receipt measure will be published</b>
March 2022	June 2022	October 2022
April 2022	July 2022	November 2022
May 2022	August 2022	December 2022
June 2022	September 2022	January 2023
...	...	...

## Resource B: Placement and receipt measures visual aid

