NMPA

National Maternity & Perinatal Audit

Annual Clinical Report

Based on births in NHS maternity services in England, Scotland and Wales

Measures Review Process

Published August 2025

LONDON SCHOOL of HYGIENE &TROPICAL MEDICINE
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Royal College of Midwives
Royal College of Obstetricians & Gynaecologists
HQIP Healthcare Quality Improvement Partnership

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Introduction

The National Maternity and Perinatal Audit (NMPA) has been reporting on measures of maternity care processes and outcomes since 2014, a period of key developments in maternity and perinatal services.[1–5] The need for continuous audit, service evaluation and timely reporting of measures remain paramount to inform and sustain quality improvement at local and national level. Recent high-profile maternity investigation reports have highlighted the need for identifying in particular, measures capable of differentiating "signals among the noise" to describe significant trends and outliers.[6–9]

The NMPA has been re-commissioned by the Healthcare Quality Improvement Partnership (HQIP) for another term of three years commencing in 2023. As part of the new contract period and in response to the changing maternity and data landscape, the NMPA undertook a process of re-evaluating its existing suite of measures.

Objectives:

- To review and revise the 2014–2022 measures against key auditable standards, or where standards are not available, against the objectives of national quality improvement initiatives and recommendations.
- To evaluate existing and potential measures using explicit criteria, also considering data availability and quality in centralised maternity datasets.
- To identify key measures that are known to be routinely collected by maternity units but cannot be reported in the NMPA because of data availability/quality in centralised maternity datasets and to advocate for improvement of data availability/quality for these measures.
- To compile a finalised list of maximum 15 measures (as required by HQIP) to take forward into the NMPA contract period commencing 2023.

About the NMPA approach

The NMPA aims to evaluate a range of care processes and outcomes in order to identify good practice and areas for improvement in the care of women and birthing people and their babies.

The NMPA does not limit its set of audit measures to only those that have 'auditable standards'. Very few standards exist in maternity care that can be measured via a national audit and there are no clear standards to define 'acceptable ranges' for rates of common interventions such as caesarean birth and induction of labour. For this reason, the NMPA presents a broad range of measures that enable maternity service providers, commissioners and other stakeholders to reflect on service provision and to benchmark their results against national averages and other services.

The existing NMPA measures (2014–2022) are listed in Table 1:

Table 1 A list of the NMPA current measures (2014–2022) and their relevant national guidance

Measure	Relevant National Guidance
The proportion of women and birthing people with a singleton baby between 37^{+0} and 42^{+6} weeks of gestation who have an induction of labour.	NICE Intrapartum Care Guide, NICE Inducing Labour, RCOG standards for maternity care, RCOG A Framework for Maternity Service Standards
Of term singleton babies born small for gestational age (defined as below the 10th birthweight centile using UK 1990 charts) the proportion who are born at or after their estimated due date (40 weeks of gestation).	NICE Intrapartum Care Guide
Of women and birthing people who give birth to a singleton baby between 37^{+0} and 42^{+6} weeks of gestation, the proportion with each mode of birth: Unassisted vaginal birth: vaginal birth without the use of instruments Assisted vaginal birth: vaginal birth with the assistance of instruments (total and stratified by forceps and ventouse) Caesarean birth (total and stratified by elective and emergency caesarean birth).	RCOG OASI Care Bundle, NICE Caesarean Birth, NICE Intrapartum Care Guide, RCOG A Framework for Maternity Service Standards
Of women and birthing people who give birth to a singleton baby between 37^{+0} and 42^{+6} weeks of gestation, the proportion who give birth without intervention.[#]	
Of women and birthing people having their second baby after having had a caesarean birth for their first baby, the proportion who give birth to their second baby vaginally.	RCOG Birth After Previous Caesarean Birth, NICE Caesarean Birth , NICE Intrapartum Care Guide, RCOG standards for maternity care
Of those women and birthing people who are recorded as being current smokers at their booking visit, the proportion who are no longer smokers by the time of birth.	NICE Antenatal Care Guide, RCOG standards for maternity care, NHS England MatNeoSip, RCOG A Framework for Maternity Service Standards
Of women and birthing people who give birth vaginally to a singleton baby in the cephalic position between 37^{+0} and 42^{+6} weeks of gestation, the proportion who have an episiotomy.	NICE Intrapartum Care Guide
Of women and birthing people who give birth vaginally to a singleton baby in the cephalic position between 37^{+0} and 42^{+6} weeks of gestation, the proportion who sustain a third- or fourth-degree tear.[*]	NICE Intrapartum Care Guide, RCOG standards for maternity care, RCOG OASI Care Bundle
Of women and birthing people who give birth to a singleton baby between 37^{+0} and 42^{+6} weeks of gestation, the proportion who have an obstetric haemorrhage of 1500 ml or more.[*]	NICE Intrapartum Care Guide, NHS England MatNeoSip, RCOG A Framework for Maternity Service Standards
Of women and birthing people giving birth to a singleton baby between 37^{+0} and 42^{+6} weeks of gestation, those who have an unplanned, overnight readmission to hospital within 42 days of giving birth, excluding those accompanying an unwell baby.	RCOG standards for maternity care, RCOG A Framework for Maternity Service Standards
Of liveborn babies born between 34^{+0} and 42^{+6} weeks of gestation, the proportion who receive skin-to-skin contact within 1 hour of birth.	NICE Intrapartum Care Guide, NICE Postnatal Care, UNICEF Skin-to-skin
Of liveborn babies born between 34^{+0} and 42^{+6} weeks of gestation: • Proportion who receive any breast milk at first feed • Proportion who receive any breast milk at discharge from the maternity unit	NICE Intrapartum Care Guide, RCOG standards for maternity care
Of liveborn, singleton babies born between 37^{+0} and 42^{+6} weeks of gestation, the proportion who are assigned an Apgar score of less than 7 at 5 minutes of age.[*]	NICE Intrapartum Care Guide, RCOG standards for maternity care

[#] Two definitions of birth without intervention have been reported by the NMPA due to differences in data availability between England, Scotland and Wales. Definition 1: spontaneous onset, progress and birth, without epidural/spinal/general anaesthesia or episiotomy. Definition 2: spontaneous onset and birth, without epidural/spinal/general anaesthesia or episiotomy.

* Used for outlier reporting.

Methods

The NMPA's existing suite of measures were identified by a systematic review and consultation with relevant stakeholders and were developed using a step-wise approach briefly described in Box 1.[10] While the measure definitions have had only minor revisions in the last decade, the NMPA's move to the use of centralised datasets for England (using MSDS v1.5 in the 2017/18 clinical report), and data availability and quality in NMPA data sources (Box 2), has had an impact on whether some of measures were reported and their geographical coverage within a given reporting period.

Box 1: How to develop clinical indicators

1. Identification

Identify candidate indicators with a systematic review. Use clinical and lay input to decide which are important.

2. Development and Evaluation

Evaluate indicators in terms of validity, statistical power, technical specification and fairness in turn. If an indicator fails to meet one criteria, remove it.

Validity: Are differences in an indicator likely to reflect quality of care?

Statistical power: What is the chance of detecting a true outlier?

Technical specification: How well can the data define patients, procedures or outcomes for an indicator?

Fairness: How different are patients treated by different units? Can we capture and adjust for this?

The NMPA team held preliminary discussions reviewing the 2014–2022 measures, as well as a list of other potential measures, that could provide information on the care and outcomes and inform quality improvement for women and birthing people and their babies. These potential measures were identified from national guidelines, quality improvement initiatives and a rapid review of literature on maternity and perinatal care indicators. When reviewing existing and potential measures, the NMPA team considered various aspects such as up-to-date evidence, clinical relevance, the importance of the measure for women and birthing people and their families, and whether (and how) the measure is reported elsewhere. Some potential topics that were deemed unsuitable for consideration as an audit measure have been added to a list of potential topic-specific 'snapshot audits' or future NMPA research outputs.

Following preliminary discussions, each existing and potential measure was further evaluated with respect to the same four criteria described in Box 1: 'validity', 'statistical power', 'technical specification'

and 'fairness'.[10] Given the NMPA team's experience with various data sources, we also considered the following challenges to the technical specification and methodological robustness of existing and potential measures:

- **Lack of uniformity across nations:** This limits comparisons made between the devolved nations and is evident across several variables in current datasets. For example, data on skin-to-skin contact is captured in the English dataset but not in the Welsh or Scottish datasets.
- **Conflicting information from different sources:** This potentially reflects underlying coding issues. Differences in coding strategies by frontline clinical staff delivering the care episode and clinical coders reliant on retrospective notes may contribute to this. The NMPA performs thorough data checks and cleaning prior to data analysis; at a service user level, this process frequently highlights conflicting or implausible values across many key variables including gestational age at birth, birth weight and maternal body mass index (BMI). Where possible, self-evident corrections are made through cross checking against other variables and/or datasets. When this is not possible, data must be recoded as 'missing'.
- **Poor completeness:** Our previous reports have highlighted data completeness and data quality issues across most trusts and boards, affecting several key variables.[11] These include variables capturing important risk factors such as smoking status and BMI. Consequently, we were unable to incorporate these factors into our case-mix adjustment for our last two annual reports.
- **Poor design:** The design of certain variables is insufficient for the type of data it records. For example, in the Welsh dataset only one type of pain relief can be recorded, whereas in practice several types of pain relief are often administered.
- **Not being captured in dataset despite being recorded at unit level:** A number of important data items are recorded locally, but not captured in national maternity datasets. These include indications for induction of labour, use of intrapartum antibiotics, cord blood gas results, and baby's temperature and blood glucose levels.

Box 2: NMPA data sources

England: For 2017/18 births onwards, the NMPA were mandated to use centralised English data that comes from the Maternity Services Data Set (MSDS), with the MSDS data linked to Hospital Episode Statistics (HES) Admitted Patient Care (APC) administrative data, as well as the Personal Demographics Service (PDS) Birth Notification data and the Office for National Statistics (ONS) Civil Registration data (deaths), all are supplied directly to the NMPA by NHS England (formerly NHS Digital).

Wales: The Digital Health & Care Wales (DHCW) (formerly NHS Wales Informatics Service (NWIS)) supplies the NMPA with data from the Maternity Indicators data set (MIds), linked to the Patient Episode Database for Wales (PEDW) Admitted Patient Care (APC) and the National Community Child Health Database (NCCHD).

Scotland: Public Health Scotland Data and Intelligence (PHSDI) (formerly the Information Services Division (ISD) Scotland) provides data from the Maternity and Inpatient and Day Case (Scottish Morbidity Records 02 (SMR-02)), linked to the General / Acute Inpatient and Day Case (SMR-01), as well as the Scottish Birth Records (SBR) and data from the National Records of Scotland (NRS) (births, stillbirths and infant deaths).

It is important throughout this process to maintain an awareness of the value of consistency in measures, in both description and the potential to measure long-term changes over time, to assist clinicians in using the data for quality improvement. After careful consideration of data quality challenges described above, as well as the value of consistency, the NMPA team agreed to remove two of the existing measures from the final list for the new 2023 contract period. A brief rationale for removing the measures are as follows:

- **Birth without intervention** was removed due to data quality issues and questions surrounding the meaningfulness of this composite outcome as a measure. From the data alone, we are unable to ascertain if no interventions were required or wanted, or if interventions that were indicated or desired were not provided.
- Whilst we have previously reported **smoking cessation** rates in annual clinical reports, it has become evident that data quality remains insufficient for meaningful clinical interpretation. Recognising the importance of smoking cessation as an important public health metric and as a modifiable risk factor on the pathway to important outcomes such as stillbirth, we propose utilising smoking cessation as an interim measure of data quality and completeness until such point as when data completeness across the majority of trusts and boards has improved. During the course of the new contract period, the NMPA will consider whether other measures would benefit from being highlighted for data completion and data quality improvement.

The NMPA also considered amendments to existing measures for example, reporting episiotomy within mode of birth and anal sphincter measures rather than as a freestanding measure of clinical care. Amendments were also required for the reporting of caesarean births following written guidance from NHS England and the House of Commons Health and Social Care Committee "[recommending] an immediate end to the use of total Caesarean Section percentages as a metric for maternity services, and that this is replaced by using the Robson criteria to measure Caesarean Section rates".[12] This was taken forward for discussion with the NMPA Clinical Reference Group (CRG) and Women and Families Involvement Group (WFIG).

Six new potential measures were identified for discussion and consideration by the NMPA CRG and WFIG. These potential measures were evaluated using the NMPA's indicator development framework, against the criteria of validity, statistical power, technical specification and fairness. As the NMPA had not yet received MSDS v2 at the time of writing, there remains considerable uncertainty about the feasibility of some of the proposed measures until the new dataset is received however, a brief rationale for proposing these six potential measures are as follows:

- **Of the babies born preterm (<37^{+0} weeks of gestation), the proportion that are spontaneous or iatrogenic births:** Preterm birth is a leading cause of neonatal morbidity and mortality. Investigating the variation and factors associated with preterm births remains a priority of the Saving Babies Lives Care Bundle version 3 (SBLCB v3) to target interventions to predict and prevent preterm birth and better prepare when preterm birth is unavoidable.[2]

- **Of babies born between 35^{+0} and 42^{+6} weeks of gestation, the proportion who have a diagnosis of encephalopathy**: Encephalopathy is the clinical manifestation of altered neurological function that may have preventable causes and that may be considered a marker of quality of maternity care. This measure could help identify units requiring support and quality improvement needs, and contribute to the national ambition to halve the rates of brain injury occurring during or soon after birth.[1] This has previously been reported by the National Neonatal Audit Programme (NNAP) but is not one of their current measures.

- **Of babies born between 34^{+0} and 42^{+6} weeks of gestation, the proportion born to women and birthing people who receive antenatal steroids/magnesium, intrapartum antibiotics but who are then not admitted to a neonatal unit:** The NNAP are reporting a composite measure that includes antenatal steroids (within 7 days prior to birth for babies born between 22^{+0} and 33^{+0}) and magnesium sulphate (within 24 hrs prior to birth for babies born <30^{+0}) given to the mothers of babies admitted to a neonatal unit (NNU) but they are unable to measure these rates for babies who are not admitted to a neonatal unit (i.e., when a woman or birthing person does not go on to give birth preterm, or preterm enough, for the baby to be admitted to an NNU). Challenges around the prediction of preterm birth, neonatal early onset infection and the identification of intrapartum sepsis mean that these interventions may be under- or over-utilised with consequential harms. The aim would be to identify possible low level harm at a population level.

- **Of women and birthing people attending a first (booking) appointment with a midwife, the proportion that do so after 10^{+0} weeks of gestation:** The NMPA currently lacks measures of antenatal care. Antenatal care forms an important part of the maternity care pathway and should be subject to assessment by national audit. National Institute for Health and Care Excellence (NICE) guidance states that the first booking appointment should take place by 10^{+0} weeks of pregnancy. If a woman or birthing person contacts, or is referred to, maternity services later than 9^{+0} weeks of pregnancy, a booking appointment should be offered within two weeks if possible.[13] Crude rates of gestational age at booking are reported by the NHS Maternity Dashboard but with further adjustment by the NMPA, these results could help in identifying barriers and inequalities encountered by women and birthing people in accessing antenatal care.

- **The proportion of women and birthing people who receive intrapartum analgesia:** Consultation with service users during previous work has highlighted the importance of equitable and timely access to analgesia for women and birthing people. The Royal College of Anaesthetists have recently published guidelines on the provision of anaesthesia services in maternity care, including auditable standards for the provision of regional anaesthesia.[14] Whilst the data around wait times are not captured in routinely collected national datasets, understanding the demand for, and utilisation of, analgesia could help structure the provision of anaesthesia and analgesia within maternity units.

- **Of the babies born between 24^{+0} and 42^{+6} weeks of gestation, the proportion who are stillborn or who die within seven days of birth:** Perinatal mortality is one of the most important and consequential maternity outcome measures for healthcare professionals and service users. This is reflected at national, parliamentary and strategic levels following publication of maternity care reports and SBLCB v3.[2, 6–9] The ultimate aim of the NMPA is to provide data to improve maternity standards and empower women and birthing people to make informed choices. By not being able to report stillbirths or neonatal seven-day mortality, the NMPA project team believe that outputs will provide an incomplete picture of quality of care, thereby limiting the impact of potential recommendations and failing to empower service users with the data that are most important to them.

The NMPA recognises that stillbirth and neonatal mortality rates are reported by other organisations, including the Mothers and Babies: Reducing Risk through Confidential Enquiries across the United Kingdom (MBRRACE-UK) and the NHS Maternity dashboard (reporting MBRRACE-UK data). However, it is important to understand the differences between the rates available, with Table 2 comparing organisational objectives, data sources and methodologies used to present perinatal mortality. Stillbirth and neonatal mortality details are also reported by the Office of National Statistics (ONS), however there are differences in reporting time periods.

We believe that NMPA perinatal mortality reporting should be considered as a supplement to existing reporting and not in competition. While there is a possibility of discrepancies in rates reported between the different organisations, this may be attributable to data quality issues, some of which may not be identified without cross-verification against perinatal mortality reporting from

an alternative organisation. We recognise the importance and net benefit of overall data quality improvement and feel that NMPA reporting of perinatal mortality may contribute towards this.

Table 2 Comparison of organisations reporting stillbirth and neonatal mortality data in the UK

Organisation	Objective	Perinatal mortality data source	Methodology and definitions
MBRRACE-UK	To conduct methodologically rigorous research to provide evidence to improve the care provided to women, babies and families during pregnancy, childbirth, the newborn period and early childhood as well as promoting the effective use of resources by perinatal health services.	MBRRACE-UK web-based case reporting system Datasets: ONS, PDS, National Records of Scotland (NRS), Personal Demographic Services (PDS) Public Health Scotland (PHS), Northern Ireland (NISRA), Health and Social Services Department (Bailiwick of Guernsey), and the Health Intelligence Unit (Bailiwick of Jersey).	In depth individual reported case reviews combined with calculation of adjusted and stabilised mortality rates. Stillbirth – a baby born at or after 24^{+0} weeks' showing no signs of life, irrespective of when the death occurred. Neonatal mortality – a liveborn baby (born at 20^{+0} weeks' gestational age or later) who died before 28 completed days after birth.
ONS	To report stillbirths, infant and childhood deaths.	Datasets: Child mortality (death cohort) tables in England and Wales Birth characteristics Births in England and Wales	The death record is linked to the relevant birth registration record and where relevant, linked to the NHS birth notification. Stillbirth – a baby born after 24 weeks of gestation and did not breathe or show signs of life. Early neonatal mortality – death of an infant aged under 7 days. Perinatal mortality – a baby who was recorded as either stillborn or early neonatal death.
Maternity Services Dashboard (NHSE)	To track, benchmark and improve the quality of maternity services.	MBRRACE-UK data	As above. MBRRACE-UK rates reported by the Dashboard are adjusted and stabilised.
NMPA	To evaluate a range of care processes and outcomes, in order to identify good practice and areas for improvement in the care of women and birthing people and babies looked after by NHS maternity services.	Digital Health and Care Wales: Maternity Indicators dataset (MIds), Patient Episode Database for Wales (PEDW) NHS England: MSDS, Hospital Episode statistics (HES) Patient demographics Service (PDS), Office of National Statistics (ONS)	Robust analysis of linked routinely collected data that has been case-mix adjusted.

Table 3 Measures for discussion with CRG and WFIG. Existing NMPA measures (1–12 with suggested amendments in *italics*), potential new measures (13–18)

	Measure	Relevant National Guidance	Validity/reported elsewhere	Statistical Power (high/med/low)	Tech Spec (can be defined)	Fair
1	The proportion of women and birthing people with a singleton baby between 37^{+0} and 42^{+6} weeks of gestation, who have an induction of labour.	NICE Intrapartum Care Guide, NICE Inducing Labour, RCOG standards for maternity care, RCOG Maternity Service Standards Framework	NMPA measure Maternity dashboard	high	yes	yes
2	Of term babies born small for gestational age (defined as below the 10th birthweight centile using UK 1990 charts), the proportion who are born at or after their estimated due date (40 weeks of gestation).	NICE Intrapartum Care Guide	NMPA measure Maternity dashboard	high	yes	yes
3	Of women and birthing people who give birth to a singleton baby between 37^{+0} and 42^{+6} weeks of gestation, the proportion of women and birthing people giving birth vaginally, at term: • *without the use of instruments* • *with the use of instruments*	NICE Intrapartum Care Guide, RCOG OASI Care Bundle	NMPA measure Maternity dashboard	high	yes	yes
4	Of women and birthing people who give birth to a singleton baby between 37^{+0} and 42^{+6} weeks of gestation, the proportion of women and birthing people who have a caesarean birth *stratified by Robson group*[*]	NICE Caesarean Section Guidelines 2021	Maternity dashboard	high	yes	yes
5	Of women and birthing people having their second baby after having had a caesarean birth for their first baby, the proportion who give birth to their second baby vaginally.	RCOG Birth After Previous Caesarean Birth, NICE Caesarean Birth , NICE Intrapartum Care Guide	NMPA measure Maternity dashboard	med	yes	yes
6	Of women and birthing people giving birth between 37^{+0} and 42^{+6} weeks of gestation, the proportion who have an episiotomy.	NICE Intrapartum Care Guide	NMPA measure	high	yes	yes
7	Of women and birthing people who give birth vaginally to a singleton baby in the cephalic position between 37^{+0} and 42^{+6} weeks of gestation, the proportion who sustain a third- or fourth-degree tear.	NICE Intrapartum Care Guide, RCOG standards for maternity care, RCOG OASI Care Bundle	NMPA measure Maternity dashboard	med	yes	yes
8	Of women and birthing people who give birth to a singleton baby between 37^{+0} and 42^{+6} weeks of gestation, the proportion who have an obstetric haemorrhage of 1500 ml or more.	NICE Intrapartum Care Guide, NHS England MatNeoSip, RCOG A Framework for Maternity Service Standards	NMPA measure Maternity dashboard	?MSDS V2	yes	yes
9	Of women and birthing people giving birth to a singleton baby between 37^{+0} and 42^{+6} weeks of gestation, those who have an unplanned, overnight readmission to hospital within 42 days of giving birth, excluding those accompanying an unwell baby. *Of those, the proportion who had a length of stay >3 days.*	RCOG standards for maternity care, RCOG A Framework for Maternity Service Standards	NMPA measure	high	yes	yes

	Measure	Relevant National Guidance	Validity/reported elsewhere	Statistical Power (high/med/low)	Tech Spec (can be defined)	Fair
10	Proportion of babies born between 34^{+0} and 42^{+6} weeks of gestation who receive skin-to-skin contact within 1 hour of birth.	NICE Intrapartum Care Guide, NICE Postnatal Care, UNICEF Skin-to-skin	NMPA measure Maternity dashboard	high	yes	no case-mix (NMPA choice)
11	Of liveborn babies born between 34^{+0} and 42^{+6} weeks of gestation: - Proportion who receive any breast milk at first feed - Proportion who receive any breast milk at discharge from the maternity unit	NICE Intrapartum Care Guide, RCOG standards for maternity care	NMPA measure Maternity dashboard (first feed and 6–8 weeks)	high/med	yes	no case-mix (NMPA choice)
12	Of liveborn, singleton babies born between 37^{+0} and 42^{+6} weeks of gestation, the proportion who are assigned an Apgar score of less than 7 at 5 minutes of age.	NICE Intrapartum Care Guide, RCOG standards for maternity care	NMPA measure Maternity dashboard	high	yes	yes
13	Of the babies born between 24^{+0} and 42^{+6} weeks of gestation, the proportion who are stillborn (and/or who die within 7 days of birth, potentially modifiable to report perinatal death).	NICE Intrapartum Care Guide, RCOG standards for maternity care	Previously in NMPA Rapid Quarterly Reporting Maternity dashboard (crude rates only). MBRRACE-UK	low	yes, caveat type of stillbirth	case-mix adjustment to be considered
14	Of the babies born preterm (<37^{+0} weeks of gestation), the proportion that are: • spontaneous • iatrogenic	NICE Intrapartum Care Guide, NICE Preterm labour and birth, NHS England MatNeoSip, BAPM Management of extreme preterm birth <27 weeks	Maternity dashboard	high	yes	case-mix adjustment to be considered
15	Of babies born between 35^{+0} and 42^{+6} weeks of gestation, the proportion who have a diagnosis of encephalopathy within 72 hours of birth.	NHS England MatNeoSip, BAPM Therapeutic Hypothermia, NICE Therapeutic Hypothermia for perinatal brain injury	NNAP	low	yes	case-mix adjustment to be considered
16	Of babies born between 35^{+0} and 42^{+6} weeks of gestation, the proportion born to women and birthing people who receive antenatal steroids/magnesium, intrapartum antibiotics but who are then not admitted to a neonatal unit.	NICE Intrapartum Care Guide, NICE Neonatal Infection, NHS England MatNeoSip, NICE Preterm labour and birth	NNAP (NNU-admitted babies only)	?	yes	yes
17	Of women and birthing people attending a first (booking) appointment with a midwife, the proportion that do so after 10^{+0} weeks of gestation.	NICE Antenatal Care Guide	Maternity dashboard	high	yes	yes
18	Proportion of women and birthing people who receive intrapartum analgesia.	NICE Intrapartum Care Guide, NICE Inducing Labour, RCOG A Framework for Maternity Service Standards, RCoA Provision of Anaesthesia Services		high	yes, caveat data quality	yes

*Robson groups: A well-established system that stratifies of caesarean births into 10 mutually exclusive groups based on parity, gestational age, previous caesarean birth, onset of labour and fetal presentation at birth. A full breakdown of each group by definition is available online

Stakeholder Engagement

The NMPA undertook separate virtual meetings with the CRG and WFIG in May 2023. All members were provided with an interim version of this document in the weeks preceding them. Members who were unable to attend were encouraged to provide written feedback prior to each meeting. The CRG meeting contained 19 individuals representing a variety of clinical, research, voluntary sector organisations, and a service user representative. The WFIG meeting involved seven service user representatives, all with recent lived experience of accessing NHS maternity services.

The discussion was centred around the measures proposed in Table 3, the majority of which were identified as clinically relevant and important for continued reporting into the 2023 period. Additionally, there was some valuable discussion around the more detailed aspects of the measure construction for example, expanding measures to include multiple births where appropriate. A summary of the measures that drew more in-depth discussion can be found in Table 4. Obstetric measures relating to preterm birth, episiotomy and late booking were perceived to be of more value than measures reporting frequency of intrapartum analgesia. Suggestions to refine the proposed neonatal measures were offered by the CRG, whereas the WFIG felt unable to comment due to lack of lived experience and understanding of these specific clinical situations.

The agenda of both meetings were dominated by discussions around the potential reporting of perinatal mortality where the NMPA explored the concerns regarding duplicated reporting, data overload and how to interpret a difference in rates. Opinions were split amongst the CRG, with some members supportive of the NMPA reporting perinatal mortality rates and others suggesting that NMPA reports should directly quote or direct readers to MBRRACE-UK data. WFIG members were in favour of reporting stillbirth and neonatal seven-day mortality data from the NMPA. When presented with the options and concerns around the difficulty in interpreting different rates, one member responded as follows:

> *"It would probably be better to share both results, to have the [NMPA's] and to have a link to [MBRRACE-UK results], because then that way you highlight the fact there are different data and different measures. It gives people access to twice the amount of good information and data to make informed decisions, that's quite important."*
>
> *(WFIG member)*

Final NMPA measures proposed for 2023 onwards

Following input from the CRG and WFIG, the final list of measures to be taken to our commissioner, HQIP, can be found in Table 5. Each measure has been defined with appropriate strata, a numerator and denominator and these measures will be put forward to HQIP. Consideration will be given to providing national and/or regional level results for multiple birth pregnancies where possible. We recognise that until we receive datasets we are unable to accurately gauge the technical specification and data quality and completeness for some of these measures. Therefore, the proposed list is greater than the pre-specified threshold of 15 as some may prove to be unfeasible.

Table 4 Summary of discussion with CRG and WFIG

Measure	CRG feedback	WFIG feedback
Of women and birthing people who give birth to a singleton baby between 37^{+0} and 42^{+6} weeks of gestation, the proportion of women and birthing people who have a caesarean birth stratified by Robson group.	In support of measure. Potential to report both Robson group as well another method. Planned vs unplanned caesarean birth more useful than Robson group for patients.	In support of any measure to better understand caesarean birth data. Value in both planned an unplanned and categorisation by Robson groups.
Of women and birthing people giving birth between 37^{+0} and 42^{+6} weeks of gestation, the proportion who have an episiotomy.	Considered important measure. Episiotomy important for service user experience, and related to performance of care.	Considered important measure. Episiotomy data valuable to support informed decision making.
Of the babies born between 24^{+0} and 42^{+6}, the proportion who are stillborn (and/or who die within seven days of birth, potentially modifiable to report perinatal death).	Split in opinion. Recognised value of reporting as it is an important outcome. Suggestions for adaptation to better detect variation in care e.g., term stillbirth, stillbirth excluding congenital anomaly. Suggested focusing purely on stillbirth. Recognised duplication of effort and risk of confusion given multiple reporting sources. Unclear how NMPA reporting would be better than existing reporting streams. In favour of quoting/directing readers to other reporting streams.	In support of measure. Feel that extra data will support informed decision making. Not concerned about potential for confusion.
Of the babies born preterm (<37^{+0} weeks of gestation), the proportion that are: • spontaneous • iatrogenic	In support of measure. Recommended also reporting gestational age categories and consider multiple pregnancies	In support of measure.

Of babies born between 35^{+0} and 42^{+6} weeks of gestation, the proportion who have a diagnosis of encephalopathy within 72 hours of birth.	In support of measure.	Unable to comment as no lived experience/knowledge of this condition.
Of babies born between 34^{+0} and 42^{+6}, the proportion born to women and birthing people who receive antenatal steroids/magnesium, intrapartum antibiotics but who are then not admitted to a neonatal unit.	In support of measure. Recognition of data gap addressed by this measure. Potential for adaptation suggested receiving intervention and experiencing subsequent term birth. Recommend ensuring measure is easy to understand.	Unable to comment as no lived experience/knowledge of this condition
Of women and birthing people attending a first (booking) appointment with a midwife, the proportion that do so after 10^{+0} weeks of gestation.	In support of measure. Recognised balance as provides a measure of early pregnancy care. Helpful to consider impact of inequalities on access to antenatal care.	In support of measure Good measure. Requires a lot of context in order to interpret accurately. Useful to understand access issues within a hospital
Proportion of women and birthing people who receive intrapartum analgesia.	Not in favour of measure.	Not in favour of measure. Unclear what good or bad performance in this measure looks like. Needs better definition. Relevance of this measure to service users is unclear.

Table 5 Final NMPA measures (2023 onwards)

	Measure	Numerator	Denominator
1	Of women and birthing people who give birth between 24^{+0} and 42^{+6} weeks, the proportion attending the first appointment with a midwife (booking) after 10^{+0} weeks of gestation.	Number of women and birthing people giving birth between 24^{+0} and 42^{+6} weeks who attend the booking appointment after 10^{+0} weeks gestation.	Number of women and birthing people giving birth between 24^{+0} and 42^{+6} weeks of gestation.
2	Of women and birthing people who give birth to a singleton baby between 24^{+0} and 42^{+6} weeks of gestation: a) the proportion whose baby is born preterm between 24^{+0} and 36^{+6}, and: Of those, the proportion whose birth is recorded as: b) spontaneous c) iatrogenic	a) Number of women and birthing people giving birth to a singleton baby between 24^{+0} to 36^{+6} weeks of gestation. b) Of those who give birth to a singleton baby between 24^{+0} and 36^{+6} weeks gestation, the number of births that were spontaneous. c) Of those who give birth to a singleton baby between 24^{+0} and 36^{+6} weeks gestation, the number of births that were iatrogenic.	a) Number of women and birthing people giving birth to a singleton baby between 24+0 and 42^{+6} weeks of gestation. b) and c) Number of women and birthing people giving birth to a singleton baby between 24^{+0} and 36^{+6} weeks of gestation
3	Of women and birthing people who give birth to a singleton baby between 37^{+0} and 42^{+6}, the proportion who have an induction of labour.	Number of women and birthing people giving birth to a singleton baby between 37^{+0} and 42^{+6} weeks of gestation, who have an induction of labour.	Number of women and birthing people giving birth to a singleton baby between 37^{+0} and 42^{+6}weeks of gestation.
4	Of singleton term babies born small for gestational age (defined as below the 10th birthweight centile using the British 1990 charts*), the proportion who are born at or after their estimated due date (40 weeks of gestation).	Number of singleton babies born small for gestational age (defined as less than the 10th birthweight centile using the British 1990 charts*) that are born on or after their estimated due date (between 40^{+0} weeks and 42^{+6} weeks).	Number of singleton babies born small for gestational age (defined as less than the 10th birthweight centile using the British 1990 charts*) between 37^{+0} and 42^{+6} weeks of gestation.
5	Of women and birthing people who give birth vaginally to a singleton baby between 37^{+0} and 42^{+6} weeks, the proportion who experience a third- or fourth-degree perineal tear.	Number of women and birthing people giving birth vaginally to a singleton baby between 37^{+0} and 42^{+6} weeks of gestation, who experience a third- or fourth-degree perineal tear.	Number of women and birthing people giving birth vaginally to a singleton baby between 37^{+0} and 42^{+6} weeks of gestation.
6	Of women and birthing people who give birth vaginally to a singleton baby between 37^{+0} and 42^{+6} weeks, the proportion who have an episiotomy.	Number of women and birthing people giving birth vaginally to a singleton baby between 37^{+0} and 42^{+6} weeks of gestation, who have an episiotomy.	Number of women and birthing people giving birth vaginally to a singleton baby between 37^{+0} and 42^{+6} weeks of gestation.

	Measure	Numerator	Denominator
7	Of women and birthing people who give birth to a singleton baby between 34^{+0} and 42^{+6} weeks, the proportion giving birth vaginally: a) without the use of instruments b) with the use of instruments (overall) c) with the use of forceps d) with the use of ventouse	Number of women and birthing people giving birth to a singleton baby between 34+0 and 42+6 weeks of gestation who have the following mode of birth: a) vaginal birth without the use of instruments b) vaginal birth with the use of instruments (overall) c) vaginal birth with the use of forceps d) vaginal birth with the use of ventouse	Number of women and birthing people giving birth to a singleton baby between 34^{+0} and 42^{+6} weeks of gestation.
8	Of women and birthing people who give birth to a singleton baby between 34^{+0} and 42^{+6} weeks, the proportion who have: a) an unplanned / emergency caesarean birth b) a planned / elective caesarean birth c) a caesarean birth reported by selected Robson groups	Number of women and birthing people giving birth to a singleton baby between 34+0 and 42+6 weeks of gestation, who have the following mode of birth: a) unplanned / emergency caesarean birth b) planned / elective caesarean birth c) caesarean birth by selected Robson groups	a) and b) Number of women and birthing people giving birth to a singleton baby between 34^{+0} and 42^{+6} weeks of gestation. c) will be the Robson group
9	Of women and birthing people having their second baby between 34^{+0} and 42^{+6}, after having had a caesarean birth for their first baby, the proportion who give birth vaginally (VBAC).	Number of women and birthing people having their second baby between 34^{+0} and 42^{+6} weeks of gestation, following a caesarean birth for their first baby and without an indication for repeat caesarean birth, who give birth to their second baby vaginally.	Number of women and birthing people having their second baby between 34^{+0} and 42^{+6} weeks of gestation, following a caesarean birth for their first baby and without an indication for repeat caesarean birth.
10	Of women and birthing people who give birth to a singleton baby between 34^{+0} and 42^{+6}, the proportion who have a postpartum haemorrhage of ≥1500 ml.	Number of women and birthing people giving birth to a singleton baby between 34^{+0} and 42^{+6} weeks of gestation who have a postpartum haemorrhage of ≥1500 ml.	Number of women and birthing people giving birth to a singleton baby between 34^{+0} and 42^{+6} weeks of gestation.
11	Of women and birthing people who give birth to a singleton baby between 37^{+0} and 42^{+6} weeks, those who have an unplanned overnight readmission to hospital within 42 days of birth.	Number of women and birthing people giving birth to a singleton baby between 37+0 and 42+6 weeks of gestation, (excluding those who died before discharge or who were not discharged within 42 days of birth) who were readmitted to hospital within 42 days^. ^excluding: planned readmissions, planned transfers, readmissions of less than one day and women accompanying an unwell baby.	Number of women and birthing people giving birth to a singleton baby between 37^{+0} and 42^{+6} weeks of gestation (excluding those who died before discharge or are not discharged within 42 days of delivery).
12	Of liveborn singleton babies born between 34^{+0} and 42^{+6}, the proportion who receive skin-to-skin contact within one hour of birth.	Number of liveborn singleton babies born between 34^{+0} and 42^{+6} weeks of gestation who receive skin-to-skin contact within one hour of birth.	Number of liveborn singleton babies born between 34^{+0} and 42^{+6} weeks of gestation.

	Measure	Numerator	Denominator
13	Of liveborn singleton babies born between 34^{+0} and 42^{+6}, the proportion who receive: a) any breast milk at first feed b) any breast milk at discharge from the maternity unit	Number of liveborn singleton babies born between 34+0 and 42+6 weeks of gestation who receive: a) any breast milk for their first feed b) any breast milk at discharge from the maternity unit	Number of liveborn singleton babies born between 34^{+0} and 42^{+6} weeks of gestation.
14	Of liveborn singleton babies born between 34^{+0} and 42^{+6} weeks of gestation, the proportion who are assigned an Apgar score of less than 7 at 5 minutes of age.	Number of liveborn singleton babies born between 34^{+0} and 42^{+6} weeks of gestation with a 5-minute Apgar score less than 7.	Number of liveborn singleton babies born between 34^{+0} and 42^{+6} weeks of gestation.
15	Of women and birthing people who give birth to a singleton baby between 24^{+0} and 42^{+6}, the proportion who receive: a) antenatal steroids b) magnesium sulphate c) intravenous antibiotics	Number of women and birthing people giving birth to a singleton baby between 24^{+0} and 42^{+6}, the proportion who receive: a) antenatal steroids b) magnesium sulphate c) intravenous antibiotics	Number of women and birthing people giving birth to a singleton baby between 24^{+0} and 42^{+6} weeks of gestation.
16	Of the liveborn singleton babies born between 35^{+0} and 42^{+6} weeks of gestation, the proportion with a diagnosis of encephalopathy within 72 hours of birth.	Number of liveborn singleton babies born between 35^{+0} and 42^{+6} weeks of gestation, who have two or more of the following neurological signs recorded in the same daily data summary within the first 72 hours of life: • Tone: Abnormal • Consciousness: Lethargic or Comatose • Convulsions: Yes	Number of liveborn singleton babies born between 35^{+0} and 42^{+6} weeks.
17	Of the singleton babies born between 24^{+0} and 42^{+6} weeks of gestation, the proportion who are stillborn or die within seven days of birth.	a) Number of singleton babies born between 24^{+0} and 42^{+6} weeks of gestation, who are stillborn or die within seven days of birth. b) Number of singleton babies born between 24^{+0} and 42^{+6} weeks of gestation, who are stillborn. c) Number of singleton babies born between 24^{+0} and 42^{+6} weeks of gestation, who die within seven days of birth.	Number of singleton babies born between 24^{+0} and 42^{+6} weeks of gestation.

*Cole et al, British 1990 growth reference centiles for weight, height, body mass index and head circumference fitted by maximum penalized likelihood. 1998. PMID: 9496720

2024 update

Following considerable delays in data release from NHS England, the NMPA received English data on 09.02.2024. Linked English data received were the in the format described in Box 2 of this report, with the NMPA receiving 4 years of data (April 2019–March 2023) during this submission, equating to over 2.4 million birthing episodes. Furthermore, the MSDS maternity provided by NHS England been upgraded to the new version 2 (MSDS v2) format, compared to MSDSv1.5 used by the NMPA reports since 2020. Upgrades to the dataset included for the first time presence of SNOMED CT data.

SNOMED CT is a comprehensive and validated network of over 350,000 clinical terms and codes used to identify a range of clinical concepts including diseases, symptoms, procedures, settings, situations and medication. By harmonising clinical terminology across healthcare systems SNOMED CT supports data sharing, analysis and improving quality of healthcare through data analytics. NMPA access to SNOMED CT data presents the opportunity for maternity care to be evaluated with greater granularity, and for measures of maternity processes and outcomes to be enhanced or expanded as SNOMED CT data coding becomes more engrained in routinely collected maternity data.

Since receiving the current English dataset, the NMPA have been cleaning and processing the data with the aim of examining the completeness of key variables, and the feasibility of reporting the above measures developed during stakeholder consultation. Tables 6 and 7 presents the results of variable feasibility in English data following interim data checks and processing (up to November 2024). Reporting availability for these tables is colour-coded using the below key.

KEY:

Reportable

Concerns About Completeness / Ability To Report

Not Reported

Table 6 Assessment of NMPA measure reporting availability in English data

	MEASURE FULL DESCRIPTION	MEASURE	KEY VARIABLES FOR MEASURE CONSTRUCTION	REPORTING AVAILABILITY	MSDS AVAILABLITY	HES AVAILABILITY
1	Of women and birthing people who give birth between 24^{+0} and 42^{+6} weeks, the proportion attending the first appointment with a midwife (booking) after 10^{+0} weeks of gestation.	Late booking	Date of first antenatal appointment			Standalone variable "anasdate", only available in maternity tail
2	Of women and birthing people who give birth to a singleton baby between 24+0 and 42+6 weeks of gestation: a) the proportion whose baby is born preterm between 24+0 and 36+6, and: Of those, the proportion whose birth is recorded as: b) spontaneous c) iatrogenic	Preterm Birth	Gestational age mode of birth labour onset			Labour onset incomplete
3	Of women and birthing people who give birth to a singleton baby between 37^{+0} and 42^{+6}, the proportion who have an induction of labour.	Induction	Labour onset induction of labour			Labour onset incomplete
4	Of term babies born small for gestational age (defined as below the 10th birthweight centile using the British 1990 charts*), the proportion who are born at or after their estimated due date (40 weeks of gestation).	SGA	Gestational age, birthweight, baby sex			
5	Of women and birthing people who give birth vaginally to a singleton baby between 37^{+0} and 42^{+6} weeks, the proportion who experience a third- or fourth-degree perineal tear.	3rd/4th tears	Mode of birth, third and fourth degree tear		Preliminary rates questionable	
6	Of women and birthing people who give birth vaginally to a singleton baby between 37^{+0} and 42^{+6} weeks, the proportion who have an episiotomy.	Epis	Mode of birth, episiotomy		Preliminary rates questionable	

7	Of women and birthing people who give birth to a singleton baby between 34+0 and 42+6 weeks, the proportion giving birth vaginally: a) without the use of instruments b) with the use of instruments (overall) c) with the use of forceps d) with the use of ventouse	Mode of birth (instruments/no instruments)	Mode of birth			
8	Of women and birthing people who give birth to a singleton baby between 34+0 and 42+6 weeks, the proportion who have: a) an unplanned / emergency caesarean birth b) a planned / elective caesarean birth c) a caesarean birth reported by selected Robson groups	Caesarean	Mode of birth labour onset parity gestation previous caesarean section		Presentation at birth incomplete	
9	Of women and birthing people having their second baby between 34^{+0} and 42^{+6}, after having had a caesarean birth for their first baby, the proportion who give birth vaginally (VBAC).	VBAC	Mode of birth obstetric history			Possible to check for evidence of previous caesarean sections in HES.
10	Of women and birthing people who give birth to a singleton baby between 34^{+0} and 42^{+6}, the proportion who have a postpartum haemorrhage of ≥1500 ml.	PPH	PPH (in ml)		Completeness and data quality issues	
11	Of women and birthing people who give birth to a singleton baby between 37^{+0} and 42^{+6} weeks, those who have an unplanned overnight readmission to hospital within 42 days of birth.	Readmission	Readmission			Might be possible to identify from date of admission to hospital and date of discharge and date of delivery
12	Of liveborn singleton babies born between 34^{+0} and 42^{+6}, the proportion who receive skin-to-skin contact within one hour of birth.	S2S	Skin-to-skin contact			

13	Of liveborn singleton babies born between 34+0 and 42+6, the proportion who receive: a) any breast milk at first feed b) any breast milk at discharge from the maternity unit	Breast milk	Breast milk at first feed; breast milk at discharge	Only breast milk at first feed	Only breast milk at first feed	
14	Of liveborn singleton babies born between 34^{+0} and 42^{+6} weeks of gestation, the proportion who are assigned an Apgar score of less than 7 at 5 minutes of age.	Apgar	Apgar score	Poor completeness 2020–21	Poor completeness 2020–21	
15	Of women and birthing people who give birth to a singleton baby between 24+0 and 42+6, the proportion who receive: a) antenatal steroids b) magnesium sulphate c) intravenous antibiotics		a) antenatal steroids b) magnesium sulphate c) intravenous antibiotics	Unable to report	Unable to report	Unable to report
16	Of the liveborn singleton babies born between 35^{+0} and 42^{+6} weeks of gestation, the proportion with a diagnosis of encephalopathy within 72 hours of birth.		Diagnosis of encephalopathy; Time of diagnosis	Unable to report	Unable to report	Unable to report

Table 7 Assessment of availability of key data components in English NMPA data

FUNCTION OF COMPONANT	COMPONANT	REPORTING AVAILABILITY	MSDS AVAILABLITY	HES AVAILABILITY	Available in ONS/PDS
Cohort construction	Date of birth				
	Multiplicity		95% complete	maternity tail	
	(Birthorder)		97% complete	maternity tail	
	Fetus outcome		99% complete		incomplete
	Gestational age		99% complete	maternity tail	
	Ethnicity		95% complete		
	IMD				
Level of reporting	Sitecode of birth		<80% complete		some org codes missing / poor
	Trustcode of birth				
Case mix	Parity		99% complete		
	Previous caesaraen birth		93% complete		
	Gestational age		99% complete	maternity tail	
	Birthweight		80% complete	maternity tail	
	Maternal age		99% complete		
	Maternal BMI				
	Diabetes				
	Hypertension				
	Placental disorders				
	Amniotic fluid abnormalities				
	Smoking status at booking				

References

1. NHS England. *The NHS Long Term Plan*. 2019 [www.longtermplan.nhs.uk/publication/nhs-long-term-plan/]
2. NHS England. *Saving Babies' Lives Version Three*. 2023 [www.england.nhs.uk/publication/saving-babies-lives-version-three/]
3. NHS England. *Better Births Four Years On: A review of progress*. 2020 [www.england.nhs.uk/publication/better-births-four-years-on-a-review-of-progress/]
4. NHS England. *Maternity Transformation Programme*. 2021 [www.england.nhs.uk/mat-transformation/]
5. NHS England. *Three year delivery plan for maternity and neonatal services*. 2023 [www.england.nhs.uk/publication/three-year-delivery-plan-for-maternity-and-neonatal-services/]
6. Kirkup B. *The Report of the Morecambe Bay Investigation*. 2015 [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/408480/47487_MBI_Accessible_v0.1.pdf]
7. Kirkup B. *Reading the signals Maternity and neonatal services in East Kent – the Report of the Independent Investigation*. 2022 [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1111992/reading-the-signals-maternity-and-neonatal-services-in-east-kent_the-report-of-the-independent-investigation_print-ready.pdf]
8. Evans D, Macphail S, Hawdon J, Buckley M, Kirby J, Broderick C. *Cwm Taf Morgannwg – latest maternity report*. 2019 [www.gov.wales/cwm-taf-morgannwg-latest-maternity-report]
9. Ockenden D. *Final findings, conclusions and essential actions from the Ockenden review of maternity services at Shrewsbury and Telford Hospital NHS Trust*. 2022 [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1064302/Final-Ockenden-Report-web-accessible.pdf]
10. Geary R, Knight H, Carroll F, Gurol-Urganci I, Morris E, Cromwell D, et al. A step-wise approach to developing indicators to compare the performance of maternity units using hospital administrative data. *BJOG*. 2018;125(7):857–65 [https://doi.org.10.1111/1471-0528.15013]
11. NMPA Project Team. *National Maternity and Perinatal Audit: Clinical Report 2022. Based on births in NHS maternity services in England and Wales btween 1 April 2018 and 31 March 2019*. London: RCOG; 2022 [https://maternityaudit.org.uk/FilesUploaded/Ref%20336%20NMPA%20Clinical%20Report_2022.pdf]
12. House of Commons Health and Social Care Committee. *The safety of maternity services in England. Fourth Report of Session 2021-22*. 2021 [https://committees.parliament.uk/publications/6578/documents/73151/default/]
13. National Institute of Health and Care Excellence. *Antenatal care*. 2021 [https://www.nice.org.uk/guidance/ng201]
14. Royal College of Anaesthetists. *Chapter 9: Guidelines for the Provision of Anaesthesia Services for an Obstetric Population 2023*. 2023. [https://www.rcoa.ac.uk/gpas/chapter-9]

Acknowledgements

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We would like to thank both the NMPA **Clinical Reference Group (CRG)** and our **Women and Families Involvement Group (WFIG)** for their valuable expert input to this report.

The NMPA is supported by the **RCOG Clinical Quality team**, and the **NMPA Project Board** chaired by **Mrs Geeta Kumar**, Consultant Obstetrician and Gynaecologist and RCOG Vice President for Clinical Quality.

Funding Status

The National Maternity and Perinatal Audit is commissioned by the Healthcare Quality Improvement Partnership (HQIP) and funded by NHS England and the Governments of Wales and Scotland as part of the National Clinical Audit and Patient Outcomes Programme.

For further information and resources, please visit the NMPA website where you can also subscribe to the email newsletter for regular audit updates: https://maternityaudit.org.uk

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Please cite as: NMPA Project Team. *National Maternity and Perinatal Audit: Annual Clinical Report. Based on births in NHS maternity services in England, Scotland and Wales. Measures Review Process.* RCOG: London, 2025.