

# NMPA Outlier Policy

## Introduction

This document provides an overarching outlier policy statement for the National Maternity and Perinatal Audit (NMPA). The outlier process aims to facilitate clinical improvement and reduce variation in practice by using audit data to identify areas where improvement is required.

The policy sets out:

- How data submitted to the NMPA will be analysed to detect potential outliers (NHS maternity service providers that have a result for a specific performance indicator that falls outside a predefined range).
- How the NMPA team will engage with NHS maternity service providers that are identified as potential outliers.

## Choice of performance indicators for outlier reporting

The NMPA performance indicators measure a range of processes and outcomes of maternity care. These indicators were selected on the basis of a number of criteria,<sup>1</sup> including that they need to:

- be valid and accepted measures of a provider's quality of care
- meet feasibility and data quality standards – that available information can correctly identify the required women and babies and their associated features and outcomes
- be fair – it should be possible to accurately adjust for the differing case mix of women and babies between participating data providers
- occur frequently enough to provide sufficient statistical power for analysis to identify outlying performance.

The performance indicators selected for outlier reporting were chosen because they represent adverse outcomes for women or babies with potential serious or long-term effects. The performance indicators included in the outlier reporting for the 2016/17 NMPA Clinical Report are:

- Proportion of women who sustained a 3<sup>rd</sup> or 4<sup>th</sup> degree perineal tear
- Proportion of women with an obstetric haemorrhage of 1500 ml or more
- Proportion of singleton, term, liveborn infants with a 5-minute Apgar score of less than 7

The level of reporting for the performance indicators is NHS Trust in England and Health Board in Scotland and in Wales.

The results for each of the performance indicators are adjusted for case-mix. For more detail about the data quality checks, the case-mix factors for these performance indicators, and how the performance indicators are defined and calculated, please see the [NMPA Technical Specification](#).

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<sup>1</sup> Geary RS, Knight HE, Carroll FE, Gurol-Urganci I, Morris E, Cromwell DA, van der Meulen JH. A step-wise approach to developing indicators to compare the performance of maternity units using hospital administrative data. BJOG. 2018 Jun;125(7):857-865.

## Data sources

The analyses that the NMPA carries out are restricted to NHS maternity service providers that passed the NMPA Trust or Board level data quality checks. This means that there will be no results available for some Trusts and Health Boards. If that is the case, results for these Trusts or Health Boards will be listed as 'No data available/data unsuitable for analysis'.

## Detection of a potential outlier

The target for the expected performance is based on the average performance of all maternity service providers. Statistically derived limits around this target are used to define whether a participating Trust or Health Board is a potential outlier.

A result for a performance indicator that is higher than the upper 99.8% control limit is considered to be an **'alarm'**. The Trust or Health Board is then deemed a potential outlier and will be required to follow all steps in the outlier management process shown below.

Results that fall in the range between the upper 95% and 99.8% control limits are considered to be **'alerts'**. A relatively large number of Trusts and Health Boards will have results for performance indicators within this range. These Trusts or Health Boards will be notified but they will not be required to follow the outlier management process.

## Management of a potential outlier

The following table summarises the key steps that the NMPA will follow in managing potential outlier maternity service providers, including the action required, the people involved, and the maximum time scales.

Trusts and Health Boards need to invest the time and resources required to review the data when they are identified as a potential outlier. Trusts and Health Boards that are still considered to be potential outliers after completing all steps of the outlier management process will be reported to the CQC/NHS England and NHS Improvement (English Trusts), the Scottish Government (Scottish Health Boards) or the Welsh Government (Welsh Health Boards).

Outlier management process			
Stage	Action	Who?	Within how many working days?
1	<p>If a Trust or Health Board is considered to be a potential outlier, the NMPA team will carry out a careful scrutiny of the data handling and analyses performed to determine whether there is:</p> <p><b>'No case to answer'</b></p> <ul style="list-style-type: none"><li>• Potential outlier status not confirmed</li><li>• Data and results revised in NMPA records</li><li>• Details formally recorded</li></ul> <p><b>'Case to answer'</b></p> <ul style="list-style-type: none"><li>• Potential outlier status</li></ul>	NMPA team	10

2	<p>The Clinical Director and Head of Midwifery in the identified Trust or Health Board will be informed about the potential outlier status and requested to identify any data errors or justifiable explanations if applicable.</p> <p>All relevant data and analyses will be made available to the Clinical Director.</p> <p>A copy of the request will be sent to the Medical Director and Chief Executive Officer of the involved Trust or Health Board.</p>	NMPA team	5
3	The Clinical Director to provide a written response to the NMPA.	Clinical Director of Trust/Health Board	20 (NMPA to chase non-responders after 10 working days)
4	<p>Review of the Clinical Director's response to determine whether there is:</p> <p><b>'No case to answer'</b></p> <ul style="list-style-type: none"> <li>It is confirmed that the data contain inaccuracies. Re-analysis of accurate data no longer indicates outlier status or – in case re-analysis is not possible – further analysis demonstrates that the results are invalid.<sup>2</sup></li> <li>Invalid results will <b>not</b> be displayed in the published results.</li> <li>The Clinical Director will be notified in writing with a copy sent to the Head of Midwifery, Medical Director and Chief Executive Officer.</li> </ul> <p><b>'Case to answer'</b></p> <p>Either:</p> <ul style="list-style-type: none"> <li>It is confirmed that the NMPA data were accurate, thus confirming that the Trust or Health Board is still a potential outlier.</li> </ul> <p>Or:</p> <ul style="list-style-type: none"> <li>It is confirmed that, although the data used for analyses were inaccurate, analysis indicates that the Trust or Health Board is still a potential outlier.</li> </ul>	NMPA team	10

<sup>2</sup> Participating Trusts and Health Boards should be aware that while the NMPA has a duty to report on the data it holds, the NMPA is not responsible for the accuracy and completeness of the data it has received. This responsibility dually rests with the Trusts and Health Boards providing maternity services as well as with the providers of secondary datasets. Issues with audit data, whether case ascertainment, data completeness or data quality, must be addressed by the participating Trust or Health Board concerned. The NMPA will support the Trusts and Health Boards by identifying areas where data submission requires improvement, whilst providing consistent analysis and case mix adjustment of all data received from units, and in making the reports on structure, process and outcomes of care publicly available.

5	<p>The NMPA team will contact the Clinical Director and Head of Midwifery in writing to confirm outlier status, prior to sending written confirmation to Medical Director and Chief Executive.</p> <p>All relevant data and statistical analyses, including previous responses from Clinical Director, will be made available to the Medical Director and the Chief Executive Officer.<sup>3</sup></p> <p>The NMPA team will indicate that</p> <ul style="list-style-type: none"> <li>• Results for the Trust or Health Board will be published.</li> <li>• The CQC will be informed for Trusts in England, the Scottish Government for Health Boards in Scotland, and the Welsh Government for Health Boards in Wales.</li> <li>• The Trust or Health Board needs to inform commissioners, NHS England and NHS Improvement (England only), and relevant Royal Colleges.</li> </ul>	NMPA team	5
6	<p>Acknowledgement of receipt is required from the Trust or Health Board, confirming that a local investigation will be undertaken with independent assurance of the validity of this exercise, copying in the CQC at <a href="mailto:clinicalaudits@cqc.org.uk">clinicalaudits@cqc.org.uk</a>, the Scottish Government at <a href="mailto:nss.SNAP@nhs.net">nss.SNAP@nhs.net</a>, or the Welsh Government at <a href="mailto:wgclinicalaudit@gov.wales">wgclinicalaudit@gov.wales</a> as appropriate.</p>	Clinical Director of Trust/Health Board	10 (NMPA to chase non-responders after 5 working days)
7	<p>If an acknowledgement is not received within 10 working days, a reminder letter will be sent to the Trust or Health Board's Chief Executive Officer. The CQC/ NHS England and NHS Improvement, the Scottish Government or the Welsh Government (as appropriate) will be notified of non-compliance.</p>	NMPA team	5
8	<p>Public disclosure of comparative information identifying Trusts and Health Boards through planned reporting and online reporting tools.</p>	NMPA team	On publication date

<sup>3</sup> Where a Trust or Health Board is identified as an outlier, the NMPA team will seek to support and provide additional help to trusts and boards wanting to review data entry and quality. Participating data providers or clinicians with concerns about data quality are urged to contact the NMPA at the earliest opportunity.