

# Maternity Survey 2015: Sampling Problems

## 1. Introduction

For the 2015 National Maternity Survey all trusts were required to submit their samples to the Co-ordination Centre for final quality control checks before they were able to mail out any questionnaires. Final sampling inspection by the Co-ordination Centre is useful for identifying errors made when drawing samples and helping trusts to avoid the common mistakes that result in delays to the survey process and problems with poor-quality samples. This document describes the errors made by some trusts when drawing their sample and the recommendations made by the Co-ordination Centre to correct these errors. Errors are divided into major (those requiring the sample to be re-drawn or patients to be replaced) or minor (those where re-drawing the sample is not necessary).

This document should be used by trusts and contractors to become familiar with past errors so as to prevent them from recurring. If further assistance is required, please contact the Co-ordination Centre on 01865 208127. For more information on the 2015 National Maternity Survey, refer to the Quality and Methodology report, available from the CQC at:

<http://www.cqc.org.uk/content/maternity-services-survey-2015>

## 2. Frequency of errors

This year all samples from the 133 trusts taking part in the 2015 National Maternity Survey were checked by the Co-ordination Centre.

In 2015 there were eight major errors found in samples submitted to the Co-ordination Centre, and the Co-ordination Centre required seven trusts to redraw their sample as a result of these errors (one trust was required to redraw their sample twice due to different errors). An additional 19 minor errors were also identified, as seen in the table below.

***Table 1 – Frequency of major and minor errors by survey year***

	<b>2015</b>
Major errors	8
Minor errors	19
<b>Total</b>	<b>27</b>

## 3. Types of major error

Eight major errors were identified during sample checking in 2015. Errors are classified as major if they require the trust to redraw their sample, or to replace patients from the sample. If major errors are not corrected, the trust's survey data might not be usable by the Care Quality Commission for regulatory activities, such as monitoring trusts' compliance with the essential standards of quality and safety, and in such cases the trust will be reported as not submitting data for the national survey. Table 2 below outlines the frequency of major errors by the type of error that occurred. More detail about each of these errors is provided below.

**Table 2 – Frequency of major errors by type of major error**

<b>Major errors</b>	<b>2015</b>
Sampled incorrect period	3
Wrong site codes submitted	2
Homebirths excluded	1
Incorrectly excluded by age	1
Exclusion of some hospital sites	1
Dates excluded from the sample	0
Incorrect record numbers used	0
Ethnicity code Z coded as missing records	0
Postcode submitted with too many digits or in the wrong format	0
Submitted patient identifiable data	0
<b>Total</b>	<b>8</b>

### **Sampled incorrect period**

Trusts are required to sample all eligible women who gave birth in the month of February. Where this totals fewer than 300 women, trusts are required to sample consecutively from January 31<sup>st</sup> backwards until they have either included 300 in total, or have reached January 1<sup>st</sup>. Where the sample included January births to achieve the sample size, trusts therefore have a maximum sample size of 300, whereas if they have more than 300 eligible women in February, they should include all of these. This distinction occasionally leads to sampling errors; if the Co-ordination Centre discovers a trust has only drawn 300 eligible women who gave birth in February, for instance, we request the trust redraw and resubmit the sample. Three trusts sampled incorrectly when drawing their Maternity sample and were required to resample and resubmit.

### **Wrong site code submitted**

Site codes are submitted with the sample information to indicate the site at which each woman gave birth. These site codes generally refer to a hospital site at the trust. NHS site codes are cross-referenced with the most current information from the NHS regarding existing sites; where a site code is not recognized, the Co-ordination Centre requests the trust resubmit the sample with the correct site code. Two trusts submitted samples with incorrect site codes and had to resubmit their sample.

### **Homebirths excluded**

Trusts submit information on the actual delivery place for each birth in the sample. Where no homebirths are recorded, the Co-ordination Centre checks with the trust/contractor to ensure they have not been excluded. One trust excluded home births from their initial sample submission and had to redraw and resubmit their sample.

## Incorrectly excluded by age

Trusts are directed to include all mothers aged 16 and older at the time they give birth. The Co-ordination Centre checks if there are no mothers with birth year 1999 in the sample to ensure that trusts have not excluded women from the sample. One trust submitted a file where an eligible 16 year-old was excluded; they were instructed to correct the file and resubmit.

## Exclusion of some hospital sites

As noted above, trusts include site codes with each birth record; in one case, a trust submitted sample from only one of their sites. The Co-ordination Centre contacted the trust/contractor to request a redraw and resubmission of the sample.

## 4. Types of minor error

Eighteen minor errors were identified during sample checking in 2015. Errors are considered to be minor if they can be corrected without the need for the sample to be redrawn or for patients to be replaced. In 2015, trusts that have made minor errors are advised to make the necessary corrections to the sample information and resubmit the final data set to their contractor or the Survey Co-ordination Centre to be rechecked before mailing.

Below, Table 3 details the frequency of minor errors for 2015. More details about each of these errors are provided below.

**Table 3 – Frequency of minor errors by type of minor error and survey year**

Minor problems	2015
Actual Delivery Place coded incorrectly	5
CCG codes missing or incorrect	4
Site codes included for inappropriate delivery place codes	4
Incorrect record number format	3
Incorrect ethnicity code included	2
Duplicate records submitted	1
Incorrect formulas contained in sheet	0
Column of data missing or incomplete	0
<b>Total</b>	<b>19</b>

## Actual Delivery Place coded incorrectly

Actual Delivery Place refers to the ward where the birth occurs, and, if the birth took place in an NHS hospital, which type of professional (e.g. midwife) runs the ward. In some cases, trusts were unsure if this referred to the presiding professional at the birth itself; in others, recent trust mergers and closures of wards complicated the coding and created inaccuracies. When these errors occur, we require the trust/contractor to correct the codes and resend the file. Five trusts incorrectly coded the Actual Delivery Place in their files, and were asked to correct and resubmit their files.

## **CCG codes missing or incorrect**

The CCG (Clinical Commissioning Group) code is the code identifying which CCG was billed for the care of each woman in the sample. These replaced Primary Care Trusts (PCTs) since the last iteration of the National Maternity Survey. As with site codes, CCG codes are cross-referenced with the most current NHS information on existing CCGs, and where codes are not found, the Co-ordination Centre contacts the trust/contractor to request they correct and resend the file. Three trusts included incorrect CCG codes and one omitted a CCG code; in all four cases, trusts submitted corrected files or information.

## **Site codes included for inappropriate delivery place codes**

Site codes should not be included where the delivery code is 1 'At a domestic address', 8 'None of the above' or 9 'Not known' (unless it is known that the delivery took place in hospital). These delivery codes do not relate to a specific NHS delivery site and therefore shouldn't be provided with the data. In the four instances where this occurred, we required the trust/contractor to delete out the site codes and resubmit the sample for checking.

## **Incorrect record number format**

Trusts are instructed to include record numbers in the following format: survey code followed by their trust code and the record number: e.g. MAT15ABC0001. Record numbering errors include excluding the leading zero (only three digits instead of four) or including a leading one instead of zero. Three trusts submitted files with incorrect record numbers and were asked to correct and resubmit their data.

## **Incorrect ethnicity code included**

There are specific codes provided in each sample which relate to a specific ethnic group, if the data is missing or incomplete the field should be left blank. In many cases trusts will code missing cases as something else, such as '99'. In these cases the trust/contractor is asked to remove these codes as they are not consistent with our ethnicity coding. Two trusts submitted files with incorrect or unaccepted ethnic coding.

## **Duplicate records submitted**

Records are assigned a Unique Record Number (URN) to identify them as different because some record information is commonly similar – such as postcode, CCG, or year of birth – and records can look very similar to each other. However, in some cases records are erroneously duplicated; this was the instance with one trust, who removed this extra case.