



**Survey
Coordination
Centre**

2018 Community Mental Health Survey: Sampling Errors Report

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Updates

Before using this document, please check that you have the latest version, as small amendments are made from time to time (the date of the last update is on the front page). In the unlikely event that there are any major changes, we will email all trust contacts and contractors directly to inform them of the change.

This document is available from the Survey Coordination Centre [website](#).

Questions and comments

If you have any questions or concerns regarding this document, please contact the [Survey Coordination Centre](#).

Introduction

Sample files for all 56 trusts participating in the 2018 Community Mental Health Survey (CMH18) were submitted to the Survey Coordination Centre for quality control checks before mailings could begin. Sample data inspections aid trusts in avoiding common errors prior to fieldwork commencing. Such errors may lead to delays in the survey process and/or poor data quality.

This report gives a summary of the mistakes made and errors found during the course of the Survey Coordination Centre's checks of trust's sample data. It is important to note that this report only gives details of the errors found by the Survey Coordination Centre; many samples may have contained further errors which would have been identified and corrected during checks by their trust-appointed contractor.

This document outlines the following types of errors identified by the Survey Coordination Centre in the sample drawing process:

- **Major errors** – errors that require the sample to be redrawn, commonly where ineligible service users have been included or eligible service users have been excluded from the eligible population and/or drawn sample. If such errors cannot be corrected they can invalidate a trust's participation in the survey, preventing the trust's survey data from being used by the Care Quality Commission (CQC) for regulatory and assessment activities.
- **Minor errors** – errors that do not require the sample to be redrawn, but instead require amendments to be made to the sample data.
- **Historical errors** – errors relating to a trust's previous survey sample submission(s). These errors come to light during checks of their 2018 sample and therefore cannot be corrected.
- **Section 251 breaches** – these are failures to adhere to the stated processes which give the survey approval for the common law duty of confidentiality to be put aside.

This document should be used by trusts and contractors to familiarise themselves with past errors to prevent them from recurring.

Frequency of errors

During the sample checking process for CMH18, the Survey Coordination Centre detected 11 major errors, 1 minor errors and 8 historic errors (see table 1). No Section 251 breaches occurred during the sample checking process.

Table 1. Frequency of Errors	
Error	Frequency
Major errors	11
Minor errors	1
Historical errors	8
Section 251 breaches	0
Total	20

Major errors

In total, there were 11 individual major errors made during sampling for CMH18, resulting in 10 trusts having to resample. These errors tend to take the form of either incorrectly coding their extract logic when drawing the eligible population or misunderstanding the survey's eligibility criteria.

All trusts whom made a major error were asked to redraw their samples and were subsequently approved for mailing. Table 2 outlines the types of major errors that occurred. More detail about each of these errors is provided below.

Major error	Frequency
Included ineligible service users	6
Excluded eligible service users	4
Sorting error	1
Total	11

Included ineligible service users

As with previous iterations, the sampling frame¹ for the CMH18 survey was from 1st September 2017 to 30th November 2017. One trust was asked to redraw their sample due to applying an incorrect sampling frame to their extraction logic for drawing their eligible population. The sampling frame used by the trust ran from September 2017 to November 2018. This error led to the eligible population, from which the sample was drawn, to include ineligible service users who were not seen within the specified sampling frame for the survey.

Samples for the Community Mental Health Survey are drawn randomly from the eligible population, following instructions published by the Survey Coordination Centre². Following assessment of the sampled service user's months of most recent contact, one trust did not appear to have drawn their sample randomly as there was an atypical spread of dates. A sample for this survey will display dates of most recent contact which are skewed towards the date the sample was drawn.

Two trusts included duplicate records (the same service user included more than once) in their sample and therefore were required to resample. It is stated explicitly in the sampling instructions to check and remove any duplicate records prior to drawing their sample to ensure 850 unique service users receive questionnaires.

Following queries around how a trust applied service user's unique record number (SURN), one trust identified they had included both dissenters and deceased service users in their sample,

¹ The period of time service users eligible for the survey must have had contact with participating trusts

² Sampling instructions provided by the Survey Coordination Centre can be found here: <http://nhssurveys.org/survey/2048>

resulting in two major errors. The removal of these service users from the eligible population is also stated explicitly in the sampling instructions as part of the exclusion criteria.

The Community Mental Health Survey only includes service users age 18 and older at the time the sample was drawn. Following extensive investigation into age profile changes compared to previous samples, it was found one trust included service users aged 17 in their sample and were therefore asked to remove these from their eligible population and to redraw their sample.

Excluded eligible service users

Following queries sent from the Survey Coordination Centre, two trusts noticed errors in their extraction logic which resulted in certain teams within the trust to not be accounted for when identifying the eligible population. The result of this would be for eligible service users seen by these teams to be excluded from the eligible population. The trusts corrected the coding errors and redrew their respective eligible populations.

The eligibility criteria for the Community Mental Health Survey states to include service users seen face-to-face at least once between 1st September 2017 and 30th November 2017, with at least one other contact with the trust either before, during or after this period. In addition, it is stated in the sampling instructions that the 'other contact' does not have to be face-to-face however one trust only included service users whose contact had been face-to-face. This would have excluded service users whose only other contact was via phone or email. This error was identified following queries around a substantial decrease in their eligible population compared to the previous iteration.

One trust mistakenly excluded service users whose ethnicity was missing from their system. They corrected this in their extraction logic and redrew their sample.

Sorting error

Following sample data approval from the Survey Coordination Centre, one trust realised all data within their sample had become misaligned. This causes service users sample data to be attributed to the incorrect individual. This can occur if sorting is applied without selecting all data in a spreadsheet. With the feasibility of being able to correctly re-attribute service user's sample data questionable, it was decided for the trust to redraw their sample.

Minor errors

In total, only one minor error was identified during sample checking.

For CMH18, a pilot study involving 10 trusts required those participating to draw two additional samples of eligible service users who would receive specific interventions. Additional scrutiny was placed on these trust's sample data to ensure the specific sampling instructions for these pilot trusts had been followed.

At one trust, The Survey Coordination Centre noticed a dramatic increase in the proportion of service users with a missing ethnic code within one of the additional pilot samples. This was both substantially different in terms of the trust's other pilot and 'control' samples, but also when compared to all other trusts. While investigating this discrepancy, the trust found they had generated a 'copy and paste' error when handling the data where not all data had been selected. As this error did not impact their eligible or sample populations, the trust were required only to update the ethnicity codes for their sampled cohort and to resubmit their data to Survey Coordination Centre.

Historic errors

Part of the sample checking process involves comparing a trust's sample data to their previous submissions of the survey and investigating any discrepancies. On occasion, these checks can uncover errors made during these previous survey iterations³. In certain cases, historical comparisons between trusts current and previous iteration's data may not be possible as a result of these errors.

In total, 8 historic errors were identified.

Two trusts were found have included a small proportion of duplicate records in their 2017 eligible population. Due to the small number of duplicate cases at each of these trusts, no significant impact on historical comparability would be anticipated as a result of this error.

In the notes provided by a trust to account for the decrease in their eligible population, one trust stated they had included ineligible service users from their Learning Disability services in their previous year's eligible population. Service users primarily seen by learning disability services are excluded from the survey. As these service users form a distinct group who would correctly not be included in this year's eligible population, it was deemed inappropriate to make comparisons between the current and previous iteration's data as any significant variation in patient experience at the trust may be due to the differing eligible population profile, rather than an actual change in patient experience.

Two further trusts only included service users whose contact with the trust had been face-to-face, excluding eligible service users who may have had other contacts via phone or email. Due to the small number of eligible service users excluded at each of these trusts as a result of this error, no adverse impact on either trust's historical comparability was expected.

³ Whilst the Survey Coordination Centre undertakes thorough checks on the sample data file, all possible sampling errors cannot be identified from an anonymised file.

Three trusts were found to have excluded service users from specific services/teams when drawing their eligible populations:

- One trust excluded several teams due to an error in their extraction logic, though this did not appear to affect a large proportion of eligible service users.
- One trust excluded eligible service users aged 18 and above at the time of sampling who were seen by the trust's Child and Adolescent Mental Health Service. This error was identified as the cause of a substantial shift in the sample age profile in this year's sample when compared to previous years. As a result, the trust were not permitted to receive historical comparisons.
- One further trust excluded a large proportion of service users from several services including Eating Disorder, Child and Adolescent Mental Health and Community Recovery services, amongst others. These exclusions appeared to have a large impact on the size and service user profile of the eligible population compared to the previous iteration's data. As a result, historical comparisons were also not permitted for this trust.

Dissenters

While having a large proportion of dissenters is not considered a sampling error, it can impact the eligible population. If the proportion of dissenters changes substantially from the previous year, this can impact the comparability between the trust's data historically. Furthermore, having a large proportion of dissenters may impact the comparability between the trust and the other trusts participating in the survey, resulting in removal from England-level reporting. In extreme cases, a trust may not be able to participate in the survey at all if their proportion of dissenters is considered extremely high.

Three trusts were investigated following an increase in their 2018 dissenting populations:

- One trust added a field within their internal consent form specifically relating to participation in the Community Mental Health Survey. This resulted in an increase in the proportion of dissenters in their total population from 3% to 6%. As this increase is comparatively small, no impact on historical comparability was expected.
- A further trust added a new question to their consent model specifically relating to participation in surveys. This resulted in dissenters increasing from none in 2017 to 13% this year within their total population. Although the trusts proportion of dissenters remained comparable to other trusts participating in this year's survey, the rise in dissenters attributed to a dramatic increase in their eligible population compared to the previous year, prohibiting historical comparisons.
- A final trust stated that their clinical staff had actively improved the recording of consent / dissent responses on their system, resulting in an increase in dissenters from 13% to 18%. Again, as this increase is comparatively small, and still comparable to other trusts, no impact on comparability was expected.