



**Survey  
Coordination  
Centre**

# 2020 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 NHS Surveys website:

<https://nhssurveys.org/surveys/survey/05-community-mental-health/year/2020/>

## Questions and comments

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

## 1. Introduction

The Community Mental Health Survey 2020 (CMH20) included 55 participating trusts. Their sample files were submitted to the Survey Coordination Centre for Existing Methods (SCCEM) for quality control checks before survey packs could be mailed to service users. This included their sample declaration form and sample data, with the latter being sent in a password protected file. For trusts working with contractors, a contractor checklist was also submitted which outlined the checks that contractors had conducted on the sample files.

Data inspections were undertaken by the SCCEM to check that trusts had drawn samples correctly according to the sampling criteria to aid trusts in avoiding common errors prior to fieldwork commencing. It is important that errors are identified as they can lead to delays in the survey process and/or poor data quality. Such errors are flagged to the trust in order to help them avoid these types of errors in future iterations of the survey.

This report details the errors that were found during the course of the sample checking conducted by the SCCEM. It is worth noting that it only gives details of the major, minor and historical errors found by the SCCEM; many samples may have contained further errors which would have been identified and corrected during checks by their trust-appointed contractor, if the trust used one. For the CMH20 survey, 54 of the 55 trusts had a trust-appointed contractor.

Four types of error were identified by the SCCEM during the sample drawing and submission processing, including:

- **Major errors** – errors that require the sample to be redrawn. For example, where ineligible service users have been included or eligible service users have been excluded from the eligible population and/or drawn sample, or where a sample has not been drawn at random. 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 2020 sample and therefore cannot be corrected. Depending on the nature of the historical error, it may not be possible to provide historical data comparisons for the trust in question during the reporting stage of the survey.
- **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.

## 2. Frequency of errors

During the sample checking process for CMH20, the SCCEM detected two major errors, two minor errors, five historical errors and three Section 251 breaches (see figure 1).

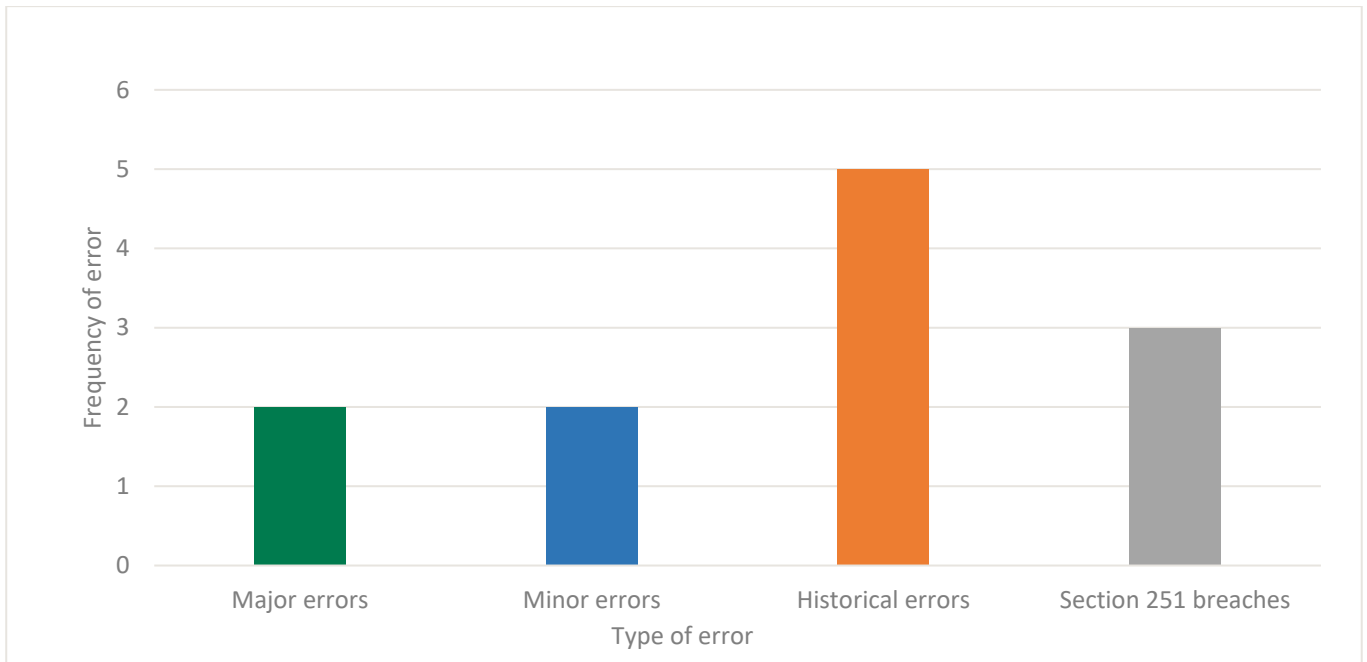


Figure 1: Frequency of errors in the CMH20 survey

### 3. Major errors

Major errors tend to take the form of either extract logic being incorrectly scripted when drawing the eligible population or misunderstanding the survey’s eligibility criteria. As with previous iterations of the survey, the sampling frame<sup>1</sup> for CMH20 was from 1<sup>st</sup> September 2019 to 30<sup>th</sup> November 2019. Samples are drawn randomly from the eligible population, following instructions published by the SCCM<sup>2</sup>.

There were two major errors identified by the SCCM during sample checking for CMH20. One trust failed to draw a sample at random, while another had a data extraction error (see table 1). The former trust had to redraw their sample as a result of their error.

Table 1. Frequency of major errors	
Type of major error	Frequency
Failure to draw the sample at random	1
Last contact date extraction error	1

#### 3.1 Failure to draw the sample at random

When one trust submitted their sample, it was identified by the SCCM that there were large differences in many of the sample data breakdowns compared to last year. The SCCM would typically expect the profile of service users to remain similar year on year, unless there is a valid

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

<sup>2</sup> Sampling instructions provided by the Survey Coordination Centre can be found here: <https://nhssurveys.org/wp-content/surveys/05-community-mental-health/03-instructions-guidance/2020/Sampling%20instructions.pdf>

reason for such changes, e.g. the trust has taken on additional services. In addition, the profile of the trust's eligible population by CPA status was quite different from the profile of the sample, suggesting the sample had not been drawn at random.

In order to investigate this further, the SCCEM asked the trust to submit additional eligible population data that is not typically provided as part of the standard sample submission process, including year of birth, month of last contact, care cluster code, ethnicity and gender. This data was compared to the equivalent breakdowns in the sample data. In addition to the CPA status differences, the comparison highlighted large differences between the eligible population and sample data, which further suggested the trust's sample was not drawn at random. The trust redrew their sample and upon inspection, their sample data showed alignment with the sample data submitted in previous years, as well as the current year's eligible population data.

It was hard for the trust to identify which step(s) they had incorrectly conducted in their random sample drawing process but some of the most common errors include: 1) sorting the list in an order (e.g. by oldest to youngest) before drawing the sample 2) leaving filters on columns before drawing the sample 3) not applying the =Rand() formula and choosing the first required number of service users in the list. The SCCEM recommends all trusts attend the trust webinar<sup>3</sup> where a researcher talks through a live example of drawing a random sample that can help to avoid any errors in the sample drawing process. In addition, the sampling instructions have a clear step by step guide on how to draw the sample – the SCCEM recommend having this printed or viewable online while the sample is being drawn in order to help avoid errors such as this.

### 3.2 Last contact date extraction error

While inspecting one trust's sample data, the SCCEM noticed that around half of service users' last contact date was in November 2019. This raised concerns that the sample had been incorrectly drawn because the sample was drawn in March and it would therefore be likely that many last contact dates would fall in to January or February 2020. Upon investigation, the trust discovered that they had included details of the last contact that took place between September and November (the sample frame dates) for a cohort of service users, rather than the last contact date before the sample was drawn. The trust resubmitted their sample to include the correct last contact dates for this cohort of service users. The last contact date proportions were as expected upon resubmission and no other data was affected by this error.

## 4. Minor errors

There were two minor errors identified during the CMH20 sample checking (see table 2).

Type of minor error	Frequency
Incorrect number of dissenters	1
Invalid CCG codes	1

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<sup>3</sup> The webinar slides for trusts provided by the Survey Coordination Centre can be found here: [https://nhssurveys.org/wp-content/surveys/05-community-mental-health/03-instructions-guidance/2020/Webinar%20for%20trusts\\_slides.pdf](https://nhssurveys.org/wp-content/surveys/05-community-mental-health/03-instructions-guidance/2020/Webinar%20for%20trusts_slides.pdf)

## 4.1 Incorrect number of dissenters

The number of dissenters at a trust appeared to have significantly decreased from 2019 to 2020. After querying this, the trust submitted new dissenter data which showed the opposite trend – the dissenters this time had significantly increased year on year. The SCCEM queried why there had now been such an increase in the number of dissenters. Upon investigation, the trust realised that their resubmitted data was incorrect and that the figure for dissenters originally submitted was correct. However, they were unable to explain why the number of dissenters had decreased compared with last year, other than to suggest that this was due to an increased focus on data cleaning and quality this year.

## 4.2 Invalid CCG codes

During the sample checking process, the SCCEM check that each service user has been assigned a valid CCG code as a quality check. While inspecting one trust's sample data, the SCCEM identified invalid CCG codes for two service users. The trust updated their sample data with the correct CCG codes.

## 5. Historical errors

Part of the sample checking process conducted by the SCCEM involves comparing trust's sample data to that submitted for previous iterations of the survey in order to investigate any discrepancies. This is conducted for two reasons: 1) to give added reassurance that the current sample has been drawn correctly; and 2) to ensure historical comparisons can be made in the analysis.

Sometimes, these checks can uncover errors made during previous survey iterations which are only identifiable with an additional year of data. Such errors may mean that historical comparisons between a trust's current and previous year's data are not recommended.

In total, two types of historical errors were identified across five trusts during the CMH20 sample checking process (see table 3).

**Table 3. Frequency of historical errors**

Type of historical error	Frequency
Attendance criteria incorrectly applied	3
Excluding a service user group	2

### 5.1. Attendance criteria incorrectly applied

The attendance criteria for the survey as stated in the sampling instructions is:

All service users (aged 18 and above) who were seen by someone at your trust between 1st September and 30th November 2019. These are people who:

- a) Had at least one face-to-face contact\* during the sampling period (this could include an initial assessment)

AND

b) Had at least one other contact (face-to-face, phone or email) either before, during or after the sampling period.

*\*By contact, we mean an attendance/appointment where a service user would have received care, treatment, or assessment. For example, do not include service users who simply called the trust to query details about forthcoming appointments.*

- After the SCCEM noticed a significant year on year increase in eligible population, it was uncovered that one trust had made an error in applying the attendance criteria in 2019. The 2019 extraction criteria was such that the trust had *only* applied the logic “at least one other contact\* (face-to-face, phone or email) either before, during or after the sampling period”, and had not applied the rule “one face-to-face contact during the sampling period”. The trust confirmed that the correct sampling rules had been applied when drawing the 2020 sample, with both the face-to-face contact and other contact being applied.
- For another trust, it was discovered that a time limit was being imposed for the “other contact” service users need to have with the trust to be eligible for the survey. There is no time limit imposed on the “other contact” but the trust had applied a 12 month time limit in previous iterations of the survey. This time limit was removed for the 2020 survey and this highlighted differences in their sample data in comparison to previous years. For example, there was a higher proportion of younger service users included in the 2020 sample, and a smaller proportion of those aged 60 years and older.
- While investigating another trust’s sample data, it was identified that their eligible population had significantly increased in 2020. The trust explained that in previous years, they were only including service users whose “other contact” was in the same episode of care and from the same team within the trust, as well as being another face-to-face contact. The trust adjusted their coding for their 2020 submission so that this extra eligibility criteria was not included, which resulted in a higher eligible population size in 2020.

## 5.2 Excluding a service user group

The sampling instructions outline which service users should be included and excluded from the eligible population list.

- In section B of one trust’s sample declaration form (number of service users who meet the eligibility criteria), they flagged that they had used an incorrect script during their 2019 sample submission, where they failed to include older adult community teams. This script was corrected for the 2020 submission.
- For another trust, there was a 10% increase in the proportion of service users identified in section A of one trust’s sample declaration form (number of service users at the trust) from 2019 to 2020. The trust flagged that in 2019 the number of service users from their Dementia Service was pulled from an incorrect source that had omitted some of these users. In 2019, 1,440 service users were included in this group, compared to 2,738 in 2020. This increased the overall number of service users reported to be seen at the trust this year.

## 6. Section 251 breaches

Section 251 gives the survey approval for the common law duty of confidentiality of the NHS Act 2006 to be put aside and it is essential that trusts follow the requirements. When a trust fails to adhere to the processes under the Section 251, process breaches can occur.

Trusts who work with an approved contractor must send their sample declaration form to their contractor for approval. Once approved, the trust can then submit their password protected sample data file to the contractor's secure website. When the contractor has signed off the trust's sample data, both the sample declaration form and anonymised sample data file are submitted to the SCCEM by the contractor. This is the process trusts and contractors must follow in order to adhere to the processes under the Section 251 approval.

In total, one type of Section 251 breach was identified across three trusts during the CMH20 sample checking process (see table 4).

**Table 4. Frequency of Section 251 breaches**

Type of Section 251 breach	Frequency
Failure to password protect sample data and submitting before sample declaration form was approved	3

### 6.1 Failure to password protect sample data and submitting before sample declaration form was approved

Three trusts submitted their sample data to their contractor via unsecured email, without password protecting the file. In addition, this was submitted before their sample declaration form had been approved by their contractor. These breached the process requirements under the Section 251 approval. The CQC followed up with a letter to these trusts to identify next steps, including an investigation to determine how the breach occurred and how this error can be avoided in the future.