

Community Mental Health Survey 2014: Sampling Errors

1. Introduction

For the Community Mental Health Survey 2014, all participating 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. These sample files did not include patient identifiable data such as names or addresses, but did include demographic and clinical information about each service user. Supporting information was also supplied in each trust's Chief Executive Declaration.

Demographic information:

- gender;
- year of birth;
- ethnicity.

Clinical information:

- date of last contact;
- CPA status;
- GP practice code.

Supporting information about the trust:

- total eligible population size;
- total eligible population on CPA, not on CPA, and with CPA status unknown.

This allowed the Co-ordination Centre to identify some common mistakes that can then be corrected before questionnaires are sent out.

Errors are divided into major (those requiring the sample to be redrawn) and minor (those that could be corrected using the same sample). It is important to note that these are only the errors caught by the Co-ordination Centre; many trusts had errors in their samples caught earlier by their contractors.

This document should be used by trusts and contractors to become familiar with past errors and to prevent these from recurring. If further assistance is required, please contact the Co-ordination Centre on 01865 208134.

2. Exclusions

One trust was excluded from the Community Mental Health Survey 2014.

Problem with consent forms in an opt-in system

In 2013, one trust had begun to implement an opt-in system for service users willing to be contacted for all surveys, with non-return of the consent form taken as the service user opting out. The trust's record keeping system did not make it clear whether service users had opted out by not returning the consent form or had not yet been asked; 25% of service users fell into this category, including all CAMHS users. The consent form did not mention the National Survey Programme or explain its purpose.

The Community Mental Health Survey uses an opt-out consent model, where service users are assumed to consent to being contacted unless they explicitly opt out¹. This has received full support from the Confidentiality Advisory Group under section 251 of the NHS Act 2006. Opt-in consent models lead to lower overall response rates² and introduce biases in respondent demographics that are not reflected in response/non-response patterns for opt-out surveys³. Since the trust used the opt-in system, it was excluded from the survey in 2013.

In 2014, the trust changed their system so that the new consent form enabled distinctions to be made between patients who had declined to complete the form, who had completed it and who had not been offered it. The approach was changed into an opt-out one; however, an opt-in question was also concurrently included. That meant that the trust was only able to accept those who had given consent for their data to be used and those who had not previously been asked to consent. Based on the figures we received from the trust, this meant that the total eligible population for the survey was reduced from 7,012 service users to 4,322 (1,271 service users who had consented and 3,051 who had yet to be asked). This represented 62% of the original total population, which was a considerable reduction and was likely to include some bias in those who remained eligible. This bias could be due to a number of factors, namely in terms of:

- a) differences between those likely to provide consent and those who choose not to;
- b) differences in teams or areas for whom the consent system has been applied;
- c) other unknown and as yet unquantified factors such as inconsistency in how the consent form had been presented to service users.

On the basis of this, a decision was made to exclude the trust from the Community Mental Health Survey 2014.

¹ Participating trusts must display posters, during the sample period, drawing service users attention to the national survey and how they can indicate dissent should they not wish for their details to be used for anything other than clinical care

² See, for instance, Angus VC et al (2003) The requirement for prior consent to participate on survey response rates: a population-based survey in Grampian. BMC Health Services Research; 3: 21.

³ See, for instance, Al-Shahi R et al (2005) Bias from requiring explicit consent from all participants in observational research: prospective, population based study. BMJ, 331, 942-5.

3. Major Errors

There were five trusts that needed to re-draw their samples due to samples being drawn incorrectly. These occasions are classified as major errors, and if they are not corrected then they can invalidate a trust's participation in the survey. This means that the trust's survey data cannot be used by the Care Quality Commission in its assessment of mental health trusts in England.

Errors in compiling the total eligible population

There were three major errors in compiling the total eligible population from which the sample of service users was to be drawn.

- One trust did not include patients suffering from dementia into their total eligible population.
- One trust had significant discrepancies between the populations in 2014 compared to 2013. In this trust in 2013 there were no service users with CPA status unknown, whereas in 2014 44% of the population fell into this category. Also, in 2013 they had 21% of service users aged 75+, compared to only 12%.
- One trust has excluded anyone who had a comment on their trust's electronic patient records system from counting that as lack of consent.

Errors in drawing the random sample

There were two major errors found in a trust's method of drawing the random sample from the total eligible population.

- In one trust, the disparity between the population CPA proportions and the sample CPA proportions reached 11%. This happened because the trust has accidentally filtered out the service users who had their ethnic category down as "Z" or "blank".
- One trust removed four service users with missing NHS numbers from the sample. They were asked either to put these service users back in or to redraw the sample completely.

4. Minor Errors

There were twelve errors found that did not require the sample to be redrawn. These are classified as minor errors. They must be corrected, but they will not invalidate a trust's participation in the survey if they are not caught before the mailings begin.

It is important to note that minor errors can obscure the presence of major errors, and so samples are not approved with outstanding minor errors.

Most minor errors were caused by information being incorrectly submitted to the Coordination Centre:

Errors in supporting information

- There were seven minor errors in supporting information supplied by trusts in their Chief Executive (CE) declarations, resulting in mismatches between the numbers provided in the CE declarations and the actual samples. These errors were fixed by trusts confirming that a number of substitutions took place (e.g. due to service users in the sample having no fixed address).
- One trust submitted their non-CPA and CPA-unknown proportions as reversed for the total population and the sample.
- For one trust, the contractor accidentally left some query columns in for three service users when submitting the sample.
- In one trust, ethnic coding was submitted incorrectly, so that blanks and Zs were reversed.

Minor errors that needed further clarification

In one trust, there has been a 50% increase in the total population since 2013. The trust has informed the Coordination Centre that this is due to introduction of a new patient management system and a substantial increase in the number of patients being treated.

Technical problems

One trust had a problem with running the Demographic Batch Service (DBS) checks in time for the mailing to take place. The problem was resolved on time, so the trust could proceed with the mailing and did not have to opt out of the survey.