2015 Community Mental Health Survey: Quality and Methodology
Contents

Introduction .................................................................................................................................. 3
Survey development ................................................................................................................ 3
  Survey design and implementation ...................................................................................... 3
Patient and service user feedback ........................................................................................... 4
Stakeholder consultation ......................................................................................................... 4
Questionnaire development .................................................................................................... 5
Sampling and fieldwork ......................................................................................................... 5
  Sampling ................................................................................................................................. 5
  Sampling error ......................................................................................................................... 5
Ineligible trusts ........................................................................................................................ 6
Trust Mergers .......................................................................................................................... 6
Excluded trusts .......................................................................................................................... 6
Errors in drawing samples ....................................................................................................... 6
Data analysis and reporting .................................................................................................... 9
  Data cleaning and editing ....................................................................................................... 9
Statistical Release ................................................................................................................... 10
  Trust results ........................................................................................................................... 10
NHS England National Statistics ............................................................................................ 11
Quality assurance .................................................................................................................... 11
  Approved contractor / in house trust checks ....................................................................... 11
  Co-ordination Centre checks ............................................................................................... 12
Data Limitations ..................................................................................................................... 13
  Context ................................................................................................................................... 13
  Seasonal effects ....................................................................................................................... 13
  Response rates ......................................................................................................................... 13
  Non response Bias .................................................................................................................... 15
  Addressing non response bias in the survey results ............................................................. 17
Data Revisions ......................................................................................................................... 19
Further information ................................................................................................................ 19
Feedback ................................................................................................................................... 20
Introduction

This report provides detailed information on key quality and methodological issues relating to the 2015 Community Mental Health Survey. It covers the development, implementation and analysis of the survey. This document also describes the quality of the data and details any points that should be noted when using the outputs.

Survey development

Survey design and implementation

The survey programme implements general principles of good survey practice. The programme has put in place a number of measures to help maximise response rates and these include:

- Up to two reminders are set to non-responders
- A Freephone language line provides translation services. MENCAP also provide support for people with learning difficulties.
- Questionnaires are written using simple and clear language
- Rigorous testing of questions and response options with people who have used services to ensure that they are easily understood and are relevant (‘cognitive testing’)
- Reassurances of anonymity and confidentiality
- Long fieldwork period to encourage lesser heard groups, such as minority ethnic groups, to respond
- Development of questions that are relevant to all or most people in the sample
- A Quality Assurance Framework ensuring all survey materials and results are reliable and accurate.

There is also an on-going programme of pilot work as part of the acute inpatient survey looking at improving response rates.

Like most surveys in the National Patient Survey Programme, the Community Mental Health Survey uses a postal survey methodology, and a questionnaire is sent to people after their healthcare experiences. This helps to reduce the effects of ‘gratitude bias’ which can arise when people give feedback either direct to staff, or whilst on trust premises.

In terms of the survey design and implementation, a number of steps are taken to ensure its robustness. As with all surveys in the patient survey programme, as well as consulting with relevant policy stakeholders (for example, NHS England, NHS Trusts) the involvement of people who use services is fundamental to the design and development of a new questionnaire, or new questions. This helps to ensure that questionnaire content reflects not only the requirements of stakeholders but what is important and meaningful to people. The community mental health survey underwent a major redevelopment in 2014 which included consultation with a wide group of stakeholders. For more information, please see the ‘stakeholder consultation’ section in the development report available at: www.nhssurveys.org/surveys/750
Questionnaires are ‘cognitively tested’ with people to ensure that questions and response options are understood as intended. This means that a respondent works through the questionnaire with a researcher to understand how they interpret questions and what they are thinking about when they answer. All questions in the 2015 questionnaire were tested with service users during development of the 2014 version (as the questionnaire was unchanged). For more information, please see the ‘cognitive testing’ section of our development report.

The only major methodological changes made to survey implementation in 2014 affected the the sampling period (the time during which sampled respondents had been seen by the trust). Between 2004-2013 service users had been sampled during July-September, however in 2014 the sampling period was changed to September-November, reducing the length of time between sampling months and the time questionnaires are mailed out. The anticipated benefit of this was improving recall for respondents. Further detail can be found in the ‘changes to the methodology’ section of the survey development report.

All surveys follow a strict methodology as specified in the survey guidance manual which all trusts (or the contractors they appoint to run the survey on their behalf) must follow. Any deviation from the survey guidance, depending on severity, may result in data being excluded from published results. Any decision to exclude data is made by the Surveys Team at the Care Quality Commission in conjunction with the Patient Surveys Coordination Centre based on discussion with, and evidence provided by the trust(s).

In 2015, one trust was excluded from the survey publication due to a sampling error and this is discussed in the ‘errors in drawing samples’ section of this document. This means that no results are available for this trust and the data has been excluded from the full data set.

**Patient and service user feedback**

The re-development of the 2014 survey included engagement with a variety of stakeholders, CQC’s Experts by Experience and current service users. This process was undertaken over four months. Engagement in this instance largely took the format of workshops run with different groups to identify topic areas to be included in the questionnaire – hearing from service users directly what is most important to them. 2014 marked a major redevelopment of the survey, meaning such widespread consultation was not required again in 2015.

**Stakeholder consultation**

Owing to the limited number of changes made to the 2015 survey after a period of substantial redevelopment in 2014, consultation was restricted to a small number of key stakeholders including key users of the survey data in CQC and NHS England.
**Questionnaire development**

Efforts were taken to ensure the 2015 questionnaire was as similar as possible to the 2014 version to maximise comparisons between survey years. For the 2015 survey, there were 48 questions, one question less than 2014.

The 2015 questionnaire also included a new statement highlighting that any free text commentary would be shared in full with trusts, CQC and researchers, but would not be published.

For further information please see the [development report](#) for the 2015 survey.

**Sampling and fieldwork**

**Sampling**

Service users aged 18 and over were eligible for the survey if they received specialist care or treatment for a mental health condition, including those who received care under the ‘Care Programme Approach’, and had been seen by the trust between 1 September 2014 and 30 November 2014 and who met certain other eligibility criteria. Trusts drew a random sample from their records of 850 people who had been seen at the trust during the sampling period. The sample size was sufficient to allow analysis of results at individual trust level. Full details of the sampling are available in the [instruction manual for the survey](#).

All trusts providing community mental health services were eligible to take part in the survey. One trust was excluded from the results as it made an error when drawing its sample. Two trusts were unable to take part in the survey (due to the consent mechanisms implemented), and one trust was not eligible. More detailed information is available in the ‘errors in drawing sample’ section of this document.

Fieldwork for the survey (the time during which questionnaires were sent out and returned) took place between February and July 2015.

**Sampling error**

The sample for the community mental health survey is a random sample of 850 people who had been seen by services during the sampling period (September-November 2014). NHS records are large enough to minimise any sampling error (for example, errors arising by chance, by selecting a set of people who happened to have a more positive experience). The number of received responses is also large, usually around 13,000 for the community mental health survey, and sufficient to ensure that sampling error is very small.

Samples may be considered representative of the population of all people using services providing the sample period is not atypical. This is unlikely given the size of samples selected. The risk of sample bias is therefore small.
Ineligible trusts
Tavistock and Portman NHS Foundation Trust do not take part in the survey due to the different nature of the services they provide and the population they serve.

Trust Mergers
The results for England are based on an average of the results from all participating trusts pooled. Changes in the number of participating trusts can have a very small effect on the results for England.

There were no trust mergers between the 2014 and the 2015 survey.

Excluded trusts
Two trusts were excluded from the 2015 community mental health survey as they were not able to draw a sample for the survey as specified in the survey instruction manual. These trusts are:

- Northamptonshire Healthcare NHS Foundation Trust (RP1)
- Somerset Partnership NHS Foundation Trust (RH5)

Both trusts had introduced an ‘opt-in’ consent policy meaning people using their services have to explicitly agree to take part in research such as surveys. The national patient survey programme operates under an ‘opt-out’ model meaning people need to explicitly opt out.

This had significantly reduced the number of people eligible to be selected to take part in the survey and was therefore considered to introduce an unacceptable level of bias in the sample for the survey. This bias could be due to a number of factors, including:

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

Errors in drawing samples
The chances of sampling mistakes being made by trusts (for example, mistakes arising due to incorrect sampling, such as by accidentally excluding certain people) are minimised by multi-stage sample checks. Trusts are provided with a checklist to review their drawn sample. Those trusts that appoint an ‘approved contractor’\(^1\) to undertake the survey on their behalf will have their sample reviewed by this company. Finally, all anonymised samples are checked by the Survey Co-ordination Centre at the Picker Institute Europe who will look for extraordinary errors that are more noticeable when pooling data together (for example, unusual or skewed age distributions).

---

\(^1\) These are companies that have been approved by the Care Quality Commission during a competitive tendering process to carry out surveys in the National Patient Survey Programme on behalf of trusts. For more information please see: [www.nhssurveys.org/approvedcontractors](http://www.nhssurveys.org/approvedcontractors)
Several items are checked against the previous year’s submission to help ascertain whether a trust has followed the guidelines correctly. These include comparisons of population size, and demographics such as age, gender, ethnicity and CPA profiles.

A report is produced each year of these errors and is published on the NHS surveys website² (available here for the 2015 survey: www.nhssurveys.org/surveys/873) . Trusts and approved contractors are encouraged to review this report to minimise recurrence of previously detected errors. From this report it can be seen that the incidence of both major and minor errors have decreased since centralised sample checking was introduced in 2006.

In 2014 a ‘sampling checklist and declaration form’ was introduced which trusts are required to sign and submit with their sample. As well as helping to ensure that trusts have followed the sampling methodology as specified in the survey guidance, this form also helps ensure that trusts ensure that confidentiality is maintained by taking the required steps as specified in the guidance, such as only sharing the required variables.

One trust made an error in drawing their sample in 2015 which resulted in data for the trust being excluded from the publication:

**Nottinghamshire Healthcare NHS Trust (RHA)**

When extracting the sample for the survey, the trust excluded anyone who had ever been an inpatient which was around a third of their eligible population³. As the Trust had not only excluded such a large group of its service users, but a specific group who can reasonably be assumed to have more complex needs, it was the assessment of the Surveys Team at the Care Quality Commission, in conjunction with the Surveys Co-ordination Centre (The Picker Institute Europe) that this error would substantially bias the results for this trust.

Due to this error, results for Nottinghamshire Healthcare NHS Trust were excluded from the 2015 publication: no results are available for this trust and the data has been excluded from the national data set.

Four trusts were found to have introduced error into their sampling in 2014:

**Nottinghamshire Healthcare NHS Trust (RHA)**

In 2014, the trust incorrectly included around 20 people who used services that are excluded from the sample for the survey (forensic, learning disabilities and Improving Access to Psychological Therapies or IAPT).

As the response rate for the survey nationally is around 30% it can reasonably be assumed that only around a third of these, or less, will have responded. Due to the very small number of people involved it was the assessment of the Surveys Team at

---

² This website hosts all survey materials (questionnaires, covering letters, guidance manuals etc.) for all current and past surveys as well as results from previous surveys and development reports.
³ The eligible population is all people seen at the trust during the sampling months (September-November 2015) excluding those not eligible for participation. For more information on the survey inclusion and exclusion criteria, please see the instruction manual available at: www.nhssurveys.org/surveys/824
the Care Quality Commission, in conjunction with the Surveys Co-ordination Centre that this error would have little impact on the 2014 results for the trust which remain valid.

North Essex Partnership University NHS Foundation Trust (RRD)
In 2014 the trust manually removed around 10 people who had dementia from their sample who were eligible to be included in the survey.

Due to the very small number of people that were removed it was the assessment of the Surveys Team at the Care Quality Commission, in conjunction with the Surveys Co-ordination Centre that this error would have little impact on the 2014 results for the trust which remain valid.

Greater Manchester West Mental Health NHS Foundation Trust (RXV)
The trust applied the survey inclusion criteria incorrectly in 2014 and wrongly excluded a large proportion of people who use their services. In 2014 the trust explained the difference in their eligible population compared with 2013 as due to investment in particular services though has subsequently accepted this was down to human error, whereby an error was made in copying, pasting and filtering data.

Analysis by the Surveys Co-ordination Centre showed that the 2015 eligible population size, gender profile and CPA breakdown for the trust profile closely matched the 2013 figures. It was evident that as a result of the error, the profile of the service users in the 2014 sample was different than expected.

The assessment of the Surveys Team at the Care Quality Commission, in conjunction with the Surveys Co-ordination Centre is that the 2014 trust level data for Greater Manchester West Mental Health NHS Foundation Trust was erroneous and not comparable with their 2015 data. This means that in the benchmark report for this trust, we are not able to include comparative data to 2014.

However, we did not remove the data for this trust from the national data set for 2014, which was used to compare the findings between 2015 and 2014 for this report. We assessed whether including the results from this trust in the 2014 national data set had an impact on the 2014 national results. Our findings indicate that when including the trusts’ data in the 2014 pool of results this does not bias the national results.

South Staffordshire and Shropshire Healthcare NHS Foundation Trust (RRE)
The eligible population for the 2015 survey was significantly smaller than it was for the trust compared with the 2014 survey. The trust had previously outsourced its clinical data which was bought in-house in 2015. The trust has confirmed that data quality improvements have been made and are confident their 2015 sample is correct. As the trust could not explain the large difference in eligible population between 2015 and 2014, and were unable to replicate the 2014 sample data, the trust concluded that there was an error in their sample for 2014.

The assessment of the Surveys Team at the Care Quality Commission, in conjunction with the Surveys Co-ordination Centre is that the 2014 trust level data for South Staffordshire and Shropshire Healthcare NHS Foundation Trust was
erroneous and not comparable with their 2015 data. This means that in the benchmark report for this trust, we are not able to include comparative data to 2014.

However, we did not remove the data for this trust from the national data set for 2014, which was used to compare the findings between 2015 and 2014 for this report. We assessed whether including the results from this trust in the 2014 national data set had an impact on the 2014 national results. Our findings indicate that when including the trusts’ data in the 2014 pool of results this does not bias the results for England.

Data analysis and reporting

Data cleaning and editing

Survey data from each participating trust, whether conducting the survey themselves ‘in-house’ or using an approved contractor, is submitted to the Co-ordination Centre for cleaning. During fieldwork a data cleaning guidance manual covering the checks that the Co-ordination Centre undertakes and is published on the NHS Surveys website. This document allows participating trusts, and contractors, to understand what processes the Co-ordination Centre will undertake and what common errors they will be looking for. This enables contractors and in-house trusts to replicate the cleaning undertaken for the national reports. The data is submitted to the Co-ordination Centre in excel but the final dataset for the survey that is used by secondary data users and deposited with the UK Data Service (UKDS) is in SPSS.

For each survey, there are a number of standard checks undertaken on the data. These include:

- Checks of the hard copies of questionnaires from contractors and in-house trusts to verify that questions, response options, routing and instructions are as they should be
- Check that number of rows of data is as expected, i.e.: we have the number of service users in the data file as expected
- Variable, question and response options wording checks, i.e.: that the data matches the questionnaire
- Out of range checks (both on sample and response data, such as age)
- Incorrect filtering: where respondents have answered a question that does not apply to them
- Coding: where the answer given is outside the expected range of response options for a question
- Data validation: using the response date to confirm whether the sample data submitted by the trust is valid for certain demographics
- Eligibility: using the response data to check that only eligible service users were included in the survey

The data is also checked for a number of other, more in depth, errors. These include looking at questionnaire item non response: high levels of missing data on suites of questions that are positioned next to each other in the survey can indicate that there is an issue with page turnover. This can also indicate if a question is not necessarily being understood in the way that it is designed.
When data is suppressed for a question, where there are fewer than 30 responses for a trust, this is cross referenced against the raw excel data submitted by a trust to confirm that the suppression was correct. Where a trust has a low response rate the data is also checked for representativeness, with regards to demographics, against the sample to determine whether the data should be included. There were no exclusions made for the 2015 data due to representativeness concerns. Where errors are found trusts or contractors are asked to re-submit the data with corrections made. No re-submissions were necessary for the 2015 survey.

**Statistical Release**

A statistical release has been published which provides full England level results for the 2015 survey, comparing results against the 2014 survey. This is published on the CQC website at: [www.cqc.org.uk/cmhsurvey](http://www.cqc.org.uk/cmhsurvey). This statistical release document is distinct from the ‘CQC response’ to the survey which comments on findings from the perspective of the regulator.

The data is weighted to ensure that each response to a question has the same influence/impact on the national average, regardless of individual trust response rates and comparisons using a Z-test of column proportions with the Bonferroni correction to the previous survey year are made where applicable. The 2015 questionnaire is a repeat of the 2014 version, with the exclusion of one question this year and therefore historical comparisons have been made for all questions.

**Trust results**

Detailed information on the analysis method applied to the trust level data is available in the technical document published on the [community mental health survey page](http://www.cqc.org.uk/community-mental-health-survey) on the CQC website.

Benchmark reports are produced for each trust illustrating their performance on particular questions compared to all other trusts involved in the survey. These reports are published at: [www.nhssurveys.org/surveys/874](http://www.nhssurveys.org/surveys/874)

For applicable questions, each response option is assigned a score (0-10) and composite section score which groups similar questions together. Demographic questions, non-specific responses, some routing questions and other questions that do not evaluate a trust’s performance are not scored.

A trust’s question score is calculated by taking the weighted average\(^4\) of scores for the trust, for the given question. For each scored question and each section of the questionnaire, a chart is produced. This chart shows the overall range of trusts’ scores for the question, broken down into three parts:

- If a trust scores lies in the red section of the graph, the trust result is ‘worse’ than expected when compared with most other trusts in the survey.
- If a score lies in the green section of the graph, the trust result is ‘better’ than expected when compared with most other trusts in the survey.
- If a trust score lies in the orange section of the graph, the trust result is ‘about the

---

\(^4\) Weighting the averages adjusts for variation between trusts in age and sex.
A black diamond indicates the score of the specific trust. If a trust has fewer than 30 responses to a question, a chart will not be produced\(^5\).

Tables are also produced, giving the trust’s score and the range of scores for each section and question, and the number of responses to each question. An additional table gives the number of respondents, response rate and demographic information, at trust level and for all respondents across England\(^6\).

Historical comparisons, where possible, are made against the 2014 survey. Text next to these questions illustrates whether a trust’s performance is significantly better, worse or the same as the previous survey year. Benchmark data will be available on the CQC website.

As was detailed in the ‘errors in drawing sample’ section of this document, we were unable to include comparisons to 2014 data for two trusts (Greater Manchester West Mental Health NHS Foundation Trust and South Staffordshire and Shropshire Healthcare NHS Foundation Trust) due to a 2014 sampling error. One trust (Nottinghamshire Healthcare NHS Trust) was excluded from the 2015 publication due to a sampling error and no results are available for this trust.

**NHS England National Statistics**

Fifteen questions within the 2015 survey contribute to Patient Experience Scores as outlined by NHS England. These cover four domains of patient experience: Access and waiting; Safe, high quality, co-ordinated care; Better information, more choice; and, Building closer relationships. More information is available at: www.england.nhs.uk/statistics/statistical-work-areas/pat-exp/

**Quality assurance**

**Approved contractor / in house trust checks**

Each contractor and in-house trust undertake a series of checks for different stages of the survey. These checks are focussed on the key stages of the survey especially the sample preparation and data cleaning stages. Contractors and in-house trusts will undertake a series of set checks on the sample file. These checks are to identify any obvious errors in the sampling phase such as including ineligible service users. As contractors are able to receive mailing information, contractors also do validation checks on mailing information by determining whether the address is complete enough for a survey to be sent.

Survey progress is monitored weekly during fieldwork at trust level. Should any potential problems be identified, such as a high number of unreturned questionnaires, the coordination centre will investigate to explore the reasons for this.

---

\(^5\) If a question has fewer than 30 responses for a given trust, the confidence interval around the trust’s question score is considered too large to be meaningful and results are not reported. Additionally, for any such question, the trust is excluded from national averages and the trust is not given a section score.

\(^6\) ‘National’ figures are calculated using survey data from all trusts - these figures refer to the sampled population, which may have different characteristics to the population of England.
Co-ordination Centre checks
There are a number of quality assurance (QA) checks undertaken by the Co-ordination Centre at various stages of the survey lifecycle.

The first QA checks undertaken are on the sample files submitted by either contractors or in-house trusts. The checks are to determine that there are no errors in the sample file that is used for mailing. These checks help to minimise any exclusions of data at the analysis stage of the survey, due to eligibility issues.

The Co-ordination Centre also check hard copies of the covering letters and questionnaire used by each trust within the survey. This can help to identify where errors have been introduced when the survey documents are reproduced by either contractors or in house trusts. These errors are typographical such as words being misspelt, words missing from questions, improper use of emboldening (which is normally used to highlight key words for cognition reasons), response options missing or misworded. If an error is identified that would compromise the data collected (i.e.: the data could not be used due to the error), either the data for that particular question would be excluded from the final dataset and outputs for the affected trusts; or if the mistakes can be rectified before the mailing commences, this is the most favourable option. There have been no exclusions made on this basis for the 2015 survey.

During fieldwork, the Co-ordination Centre monitor the progress of the mailings and response rates both at national and trust level. This monitoring is not a QA check in the strictest definition but does allow for the Co-ordination Centre to flag where there are concerns with how the survey is progressing which could impact on the data collected. When response rates are low, this can affect the representativeness of the data which potentially limits the usability of that data. In addition, the survey is to be administered in a standardised approach with a set number of mailings during fieldwork, and with a particular final mailing date. This is to allow groups that tend to respond late in surveys, sufficient time to respond.

The final set of QA checks undertaken by the Co-ordination Centre focus on the response data and the analysis. In addition to the specific checks undertaken on the survey data, as outlined in the previous section, each stage of the data cleaning is second checked internally.

All analysis outputs based on the data (such as the trust level results and England level reporting) go through a two stage quality assurance process, being checked by the coordination centre and CQC.
Data Limitations

Context
As with any survey, statistics based on results from the community mental health survey are subject to different sources and types of error and this must be considered in the survey responses and/or survey design. While there are a number of potential sources of error, these are carefully controlled through rigorous development work behind the questionnaire design and sampling strategy, and extensive quality assurance at every stage.

These statistics relate to people who used community mental health services at a particular point in time and the results are an indication of the average or typical quality of experience for that population. Each participating NHS Trust selected people who had been seen by community mental health services during September, October or November 2014.

Seasonal effects
In determining the sample period for the survey, seasonal effects were considered. The sampling period (1 September to 30 November) has remained the same since the community mental health survey was first implemented in 2004.

Due to the sampling approach, seasonal effects are unlikely to be an issue. The community mental health survey does not take a flow of patients, for example, whereby a consecutive sample is taken according to discharge dates (as in the inpatient survey). Instead, the sample is based on people who have recently had contact with mental health services, during that sample period. Those individuals are likely to have maintained contact with services during a longer time period than the sample period itself and hence are less likely to be affected by any variation in the time of year. In addition, respondents are directed to think about events over the previous 12 months, which negates any effect that there may be in service provision across a given year.

Response rates
Response rates for the survey have dropped since it was first launched. This is consistent with both other surveys in the National Patient Survey Programme and industry wide trends in social and market research.

Figure 1 below illustrates response rate trends for the more established surveys in the National Patient Survey Programme. Please note that not all surveys have been carried out annually. There is a clear downwards trend across all surveys. The acute inpatient survey generally has the highest response rates and the community mental health and A&E surveys the lowest. The community mental health survey has however sustained a 29% response rate for the last three years. There are no appropriate surveys to compare the response rate with, due to differences in the sampled populations and the year of implementation of the surveys.
We have previously made changes across the survey programme as a whole based on pilot work, for example in 2007 the survey fieldwork was extended to 18 weeks to maximise responses from minority groups - which pilot work had shown can take longer to respond.

To further improve the survey, CQC are currently reviewing the response rates for the community mental health survey. As it risks detrimental effects to implement any methodological changes without first piloting them on each survey population to know what effect, if any, they will have, we are currently reviewing which interventions could be usefully piloted. The CQC is reviewing the budget and timetable of the ongoing community mental health survey work within the programme to schedule in pilot work at the earliest opportunity, to enable successful methods to be implemented.

There is an on-going programme of pilot work as part of the acute inpatient survey to test different approaches with the aim of increasing response rates and improving participation, particularly from groups known to be less likely to respond. For example, as part of the 2015 inpatient survey, the use of a more colourful questionnaire (which it is hoped will be more engaging for potential responders) and ‘pre-approach letters’ (a letter letting people know that they will be sent a questionnaire) is being piloted. Results are not be available until early 2016, however, if successful, it is expected that such measure will be piloted for the mental health survey (to ensure the same effect is present) and implemented if successful.

7 www.nhssurveys.org/survey/513
Non response Bias
One of the main issues that affects the survey results is non-response bias.

As the response rates for surveys decline, the risk of non-response bias increases. Non response bias is caused when sampled individuals are unwilling to take part in a survey causing the risk that those who chose to respond are different from those who chose not to respond. This type of bias might arise, for example, if people with more negative views of the service were more likely to respond.

However, whether we do have non-response bias is difficult to assess, as we do not have any way of knowing how those people who did not respond would have answered.

A further factor is that we do not always know the split between those who did not receive a questionnaire, and hence could not respond, versus those who chose not to respond. The number of questionnaires that were ‘returned undelivered’ was logged during the course of the survey. However, there may be another group of individuals who, for example, had changed address but not informed the trust, and therefore did not receive the questionnaire. When logging the outcome of sending a questionnaire, those individuals are placed in the group ‘Outcome unknown’, alongside others who have chosen not to return the questionnaire nor notify us of their decision not to.

As NHS trusts hold the names and address details, we are limited in terms of assessing the data quality of the samples that were drawn, as patient confidentiality prevents us from accessing those details.

Research, including work carried out as part of the National Patient Survey Programme, has shown that certain groups are consistently less likely to respond, and these are: young people, males, black and minority ethnic groups (BME), people from London, people from deprived areas, people with poor literacy and people with a mental health condition.\(^8\)\(^9\)\(^10\) Tables 2 and 3 below shows that age, gender and ethnic group response bias exists in the mental health survey. However, it is worth noting that these are known biases and there may be other types of bias influencing results which cannot be established due to their implicit nature.

Table 2 shows respondents and non-respondents. Table 3 shows the demographic profile for the sample as a whole (everyone selected for inclusion on the survey) and respondents. It can be seen that females are more likely to respond than males, respondents aged 51-65 are more likely to respond compared with other age groups and white respondents are more likely to respond compared with those from other ethnic groups. In interpreting these tables it should be borne in mind that it is very likely that there are also inter-relationships between these groups.

---

\(^8\) [www.nhssurveys.org/Filestore/documents/Increasing_response_rates_literature_review.pdf](www.nhssurveys.org/Filestore/documents/Increasing_response_rates_literature_review.pdf)


Please note that tables 2 and 3 are based on information from trust sample files only so will differ from response rates published elsewhere which are a combination of responses to the demographics questions or sample file information if the response is missing. We cannot use respondent provided information to calculate response rates, as we do not have this for non-responders. The response rate is based on the adjusted response rate which means we have removed anyone who died, or anyone for whom the questionnaire was undeliverable, from the base.

Table 2: respondents and non-respondents to the 2015 community mental health survey by key demographics

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Responded (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>28.3</td>
</tr>
<tr>
<td>Female</td>
<td>30.4</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
</tr>
<tr>
<td>18-35</td>
<td>19.4</td>
</tr>
<tr>
<td>36-50</td>
<td>27.7</td>
</tr>
<tr>
<td>51-65</td>
<td>37.4</td>
</tr>
<tr>
<td>66+</td>
<td>32.0</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
</tr>
<tr>
<td>White British / Irish / Other</td>
<td>30.5</td>
</tr>
<tr>
<td>Mixed / Multiple</td>
<td>21.0</td>
</tr>
<tr>
<td>Indian / Pakistani / Bangladeshi / Other Asian</td>
<td>23.8</td>
</tr>
<tr>
<td>African / Caribbean / Other</td>
<td>23.3</td>
</tr>
<tr>
<td>Chinese or other</td>
<td>28.3</td>
</tr>
</tbody>
</table>

Table 3: sample and demographic profile for the 2015 community mental health survey

<table>
<thead>
<tr>
<th>Demographics</th>
<th>Profile (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sample</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>44.4</td>
</tr>
<tr>
<td>Female</td>
<td>55.6</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
</tr>
<tr>
<td>18-35</td>
<td>20.8</td>
</tr>
<tr>
<td>36-50</td>
<td>23.6</td>
</tr>
<tr>
<td>51-65</td>
<td>19.8</td>
</tr>
<tr>
<td>66+</td>
<td>35.8</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
</tr>
<tr>
<td>White British / Irish / Other</td>
<td>86.8</td>
</tr>
<tr>
<td>Mixed / Multiple</td>
<td>1.4</td>
</tr>
<tr>
<td>Indian / Pakistani / Bangladeshi / Other Asian</td>
<td>5.2</td>
</tr>
<tr>
<td>African / Caribbean / Other</td>
<td>4.4</td>
</tr>
<tr>
<td>Chinese or other</td>
<td>2.2</td>
</tr>
</tbody>
</table>

11 Trust sample files contain all people selected to take part in the survey and includes information such as age, gender and ethnicity
Addressing non response bias in the survey results

We have considered the application of non-response weighting to the survey results, for both the England data and the trust level results. However, in the consideration of whether to weight for non-response and whether this should be according to either the sample or population data, we need to factor in the primary aim of why the survey data is being collected.

For the majority of social research studies, in particular those that are cross sectional or general population, non-response is weighted for against the population demographics. This is normally achieved by weighting for key characteristics such as age, gender, marital status, socio-economic status, if these variables exist either on the sampling frame or are collected at the time of interview. For example, in face to face interviewing, interviewers are able to collect observations about non-responding sample units by assessing the characteristics of the dwelling or neighbourhood (Lynn, 1996). Alternatively, if a national dataset exists for these key characteristics, such as the Census, then this can be used in deriving the weighting approach. The reason why weighting back to the population is key for these studies is that they are looking to make generalisations about a population as a whole rather than individual cases or sampling units within it.

For the patient survey programme, the data collected is used for measuring and comparing the performance of individual NHS Trusts. Therefore it is important that we are able to distinguish between the characteristics of different Trusts (i.e. the variation between them) to identify those Trusts that are doing better or worse than the ‘average’ Trust. As demographic characteristics such as age and gender are known to be related to responses, we therefore standardise different organisations to a common average case-mix when calculating organisational results; this removes demographic differences as a source of variation and provides a ‘level playing field’ for comparing providers. Weighting for non-response to either a national population dataset or back to the sample data for a Trust would not achieve this.

The national results for the survey are currently weighted to the average trust. Some trusts have a higher response rate than others and would therefore have a greater influence over the England average if a simple mean was ‘calculated’ across all respondents. To avoid this, weights are applied to the data. By applying these weights the responses from each trust have an equal influence over the England average regardless of differences in response rates between trusts.

This weighting has been applied to all question results for England except for the demographic questions at the end of the survey questionnaire (Q43 to Q48). The demographic questions are presented without weights applied, as it is more appropriate to present the real percentages of respondents to describe the profile of respondents, rather than average figures.

The potential non-response bias is partly addressed via statistical standardisation by age and gender in the trust level results\(^\text{12}\). Standardising by ethnicity would in theory

\(^{12}\) For more information on the methodology for the trust level results, please see the technical document which is referenced in the ‘Further Information’ section at the end of this document.
help address this non-response, however the ability to do this is hindered by a number of limitations detailed below.

Where the response rates for different groups vary, we have considered whether we could additionally weight by groups that are less likely to respond. However, there are a number of drawbacks to this approach, hence it has not been implemented:

- The more variables that are included in the standardisation, the more complex the analysis becomes. It also greatly increases the risk of very small groups with large weights.
- In order to weight data by age and by gender, and therefore include it in the trust data, we need to have information on age and gender. To additionally weight by ethnicity we would need to have age gender and ethnicity information for each respondent. In order to maximise the amount of available data, if a respondent has not answered the question asking this, we use information provided to us by trusts in their sample file. While data for age and gender is very good quality with only very few, if any, missing cases once this has been done, ethnicity is much poorer: In 2015, 547 people (4.1%) did not answer the question asking their ethnicity. In trust sample file information, for responders, this data was missing for 578 people (4.3%) and was not stated at the time of collection by 345 people (2.6%). As the questionnaire uses ethnicity categories as used in the census, but trust records have slightly different categories, and due to historical data quality concerns, the survey analysis relies solely on respondent provided information for ethnicity. If we were to additionally standardise by ethnicity, we would have to remove 547 people from the analysis, which is not desirable, particularly in a survey with already low response rates.
- An additional difficulty would be that some trusts have very low proportions of people in some ethnic groups. As weights are capped, this would lead to many respondents having capped weights, which should be avoided as far as possible when standardising data as it limits the comparisons that can be made fairly.
- We would also risk standardising out genuine differences in the experiences across the subgroups.
- Changing the method of weighting the data would make the survey data incomparable with previous data and interrupt trend data.

It is important to note that direct assessment of non-response bias is difficult because of the lack of opportunity to measure the views of non-respondents. Previously, we have not been able to successfully secure ethical approval to carry out non-response surveys on the basis that it is further contacting people who have already declined to be involved in surveys. Now that surveys must receive section 215 approval13 from the Health Research Authority, and given the challenges in receiving approval for the community mental health survey in itself, undertaking non-response research feels increasingly unlikely to receive support or approval.

Rather than further adjusting the data, we therefore seek to manage this issue by using best-practice methodologies to maximise response rates from all groups. For example, all surveys in the national patient survey programme send up to two reminders to non-respondents.

---

13 For more information on section 251 approval, please see: /www.hra.nhs.uk/about-the-hra/our-committees/section-251/what-is-section-251/
The effect of non-response bias is also reduced by the survey methodology. The National Patient Survey Programme follows best practice methodologies to maximise response rates and this is discussed in the ‘survey design and implementation’ section of this document.

**Data Revisions**

CQC publishes a [Revisions and Corrections Policy](#) relating to these statistics. The National Patient Experience Survey data is not subject to any scheduled revision as they capture the views of patients about their experiences of care at a specific point in time. All new survey results are therefore published on CQC’s website and NHS Surveys, as appropriate, and previously published results for the same survey are not revised.

This policy sets out how CQC will respond if an error is identified within this and it becomes necessary to correct published data and/or reports.

**Further information**

The report outlining the CQC response to survey results, and trust level results can be found on the CQC website. You can also find a ‘technical document’ here which describes the methodology for analysing trust level results: [www.cqc.org.uk/cmhsurvey](http://www.cqc.org.uk/cmhsurvey)

The **trust results** from previous community mental health surveys that took place 2004-8 and 2010-2014 are available at the below link. Please note that due to redevelopment work, results from the 2015 survey are only comparable with 2014:

[www.nhssurveys.org/surveys/290](http://www.nhssurveys.org/surveys/290)

The **results for England** from previous community mental health surveys that took place 2004-8 and 2010-2014 are available at the below link:

[www.nhssurveys.org/surveys/872](http://www.nhssurveys.org/surveys/872)

Full details of the methodology for the survey, including questionnaires, letters sent to people who use services, instructions on how to carry out the survey and the survey development report, are available at:

[www.nhssurveys.org/surveys/820](http://www.nhssurveys.org/surveys/820)

More information on the patient survey programme, including results from other surveys and a programme of current and forthcoming surveys can be found at:


---

14 In 2009 a survey of mental health inpatient services took place
15 Please note that the survey was also substantially redeveloped in 2010. This means that results from the 2010 survey are not comparable with those from 2004-2008.
Feedback

We welcome all feedback on the survey findings and the approach we have used to reporting the results, particularly from people using services, their representatives, and those providing services. If you have any views, comments or suggestions on how this publication could be improved, please contact Paul Williamson, User Voice Development Manager, Patient.Survey@cqc.org.uk

The information you provide will be reviewed by CQC and used, as appropriate, to improve the statistics that we publish across the National Patient Survey Programme.