

NHS Patient Survey Programme

2016 Community Mental Health Survey: Quality and Methodology Report

Contents

1	Introduction	3
2	Survey development	4
	2.1 Survey design and implementation	4
	2.2 Questionnaire development	5
	2.3 Cognitive testing	5
3	Sampling and fieldwork	7
	3.1 Sampling	7
	3.2 Sampling error	7
	3.3 Trust Mergers.....	7
	3.4 Errors in drawing samples.....	7
	3.5 Historical sampling errors and excluded trusts	9
4	Data analysis and reporting	10
	4.1 Data cleaning and editing.....	10
	4.2 Statistical Release	11
	4.3 Trust results	11
	4.4 NHS England National Statistics	12
5	Quality assurance	13
	5.1 Approved contractor / in house trust checks	13
	5.2 Co-ordination Centre checks	13
6	Data limitations	15
	6.1 Context	15
	6.2 Seasonal effects	15
	6.3 Response rates.....	15
	6.4 Non response bias.....	16
	6.5 Addressing non response bias in the survey results	19
7	Data revisions	22
8	Further information	23
9	Feedback	24
10	Appendix A: Question weighting	25

List of tables

Table 1	Respondents and non-responders to the 2016 community mental health survey by key demographics	18
Table 2	Sample and demographic profile for the 2016 community mental health survey	19

1 Introduction

This report provides detailed information on key quality and methodological issues relating to the 2016 Community Mental Health Survey. It covers the development, implementation and analysis of the survey. This document also describes the quality of the data and statistics and details any points that should be noted when using the outputs. More detail on development of the survey and errors made during the sampling process can also be found here:

<http://www.nhssurveys.org/surveys/877>

An overview of our approach to quality within the NHS Patient Survey Programme (NPSP) is available in the 'NHS Patient Survey Programme: Quality Statement' document, available here:

http://www.cqc.org.uk/sites/default/files/20151125_nhspatientsurveys_quality_statement.pdf

This report provides detailed information on key quality and methodological issues relating to the 2016 Community Mental Health Survey. It covers the development, implementation and analysis of the survey. This document also describes the quality of the data and statistics and details any points that should be noted when using the outputs. More detail on development of the survey and errors made during the sampling process can also be found here:

<http://www.nhssurveys.org/surveys/877>

An overview of our approach to quality within the NHS Patient Survey Programme (NPSP) is available in the 'NHS Patient Survey Programme: Quality Statement' document, available here:

http://www.cqc.org.uk/sites/default/files/20151125_nhspatientsurveys_quality_statement.pdf

2 Survey development

2.1 Survey design and implementation

The NHS Patient Survey Programme implements general principles of good survey practice. The programme has put in place a number of measures to help maximise response rates, including:

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

Like most surveys in the NHS Patient Survey Programme, the Community Mental Health survey uses a postal survey approach: a questionnaire is sent to people's home addresses. This helps to reduce the effects of social desirability bias, which may happen when people give feedback either directly 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 (e.g. 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 using the services.

Questionnaires are 'cognitively tested' before the surveys start to ensure that questions and response options are understood as intended. This means that a participant works through the questionnaire with a researcher to understand how they interpret questions and what they are thinking about when they answer. Please see the Section 2.3 '*Cognitive testing*' of this report for details of the cognitive testing conducted for the 2016 survey.

There were three minor methodology changes in 2016, two of which were to the sample declaration form. The most significant change was the inclusion of an additional signatory, who counter-signed the sample declaration form to indicate the sample had been checked by someone other than the person who drew the sample. The second change to the sample declaration form relates to the inclusion of a new Section A, which asked providers to indicate the total number of service users from their total population who had specifically indicated they did not wish to take part in a survey. This was introduced to help identify where providers have large proportions of

their service users indicating dissent (who are therefore not eligible to participate in the survey due to information governance approvals). Where there are large proportions of dissenters there can be issues with the representativeness of a provider's sample, which will in turn impact the response data collected. Providing this information at the very early stages of the sampling process allows the Co-ordination centre and CQC to explore potential concerns with providers and safeguard their participation in the survey. The contractor and in-house versions of the sample declaration forms can be found here: <http://www.nhssurveys.org/surveys/893>

The third minor change was the inclusion of a new code to the 'Outcome' field of the weekly monitoring sheets and data entry templates, available here: <http://www.nhssurveys.org/surveys/878>.

The new code was used to indicate service users who had been traced as being deceased after the sample file had been prepared and signed off but before any mailings had been sent out. In these instances, the new code of '7- *service user deceased prior to fieldwork*' would be used. Where the first mailing had been sent out and a service user had subsequently been identified as having died, the outcome code of '3 – *service user died*' would instead be used.

All surveys follow a strict methodology, as specified in the survey instruction manual which all trusts (or the contractors they appoint to run the survey on their behalf) must follow. Any deviation from the survey instructions, 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 Co-ordination Centre based on discussion with, and evidence provided by, the trust(s).

2.2 Questionnaire development

Efforts were taken to ensure the 2016 questionnaire was as similar as possible to the 2015 version to maximise comparisons between survey years. The 2016 survey has 47 questions, one fewer than in 2015. Following analysis of the 2015 survey data and consultation with colleagues from the CQC, NHS England and the Department of Health, the questionnaire was amended for the 2016 survey. Three questions included in 2015 were removed, two questions added, a minor amendment made to one question and the title changed for one of the questionnaire sections.

For more information please see the 'Development Report for the Community Mental Health Survey 2016' available here: <http://www.nhssurveys.org/survey/1730>

2.3 Cognitive testing

As is common practice in the NPSP, the revision and re-development of all questionnaires follows best practice. All question changes, regardless of the extent, are cognitively tested with a group of people with recent and current experience of NHS mental health services. 'Cognitive testing' is a process which tests both new questions, and questions used in previous years, to check whether they are understood as intended by participants and that they are able to answer them appropriately with the response options provided. The participants are recruited via different mechanisms such as local advertisements in newspapers, public buildings (shops, cafes, libraries, community centres, community noticeboards etc.), online forums and websites (such as Gumtree) and social media. People were recruited to cover a wide demographic base and range of experiences.

For the 2016 survey fourteen people participated:

- 7 men
- 7 women
- Aged 18 - 57 years old
- A mix of ethnic backgrounds
- A variety of experience of different services and delivery teams

Cognitive interviews were conducted in Oxford during the two-week period between 10th and 20th November 2015. Following a review of the feedback from the first week, which did not highlight any necessary changes to the cognitive questionnaires used, the second week of interviews continued with the same 'round' of questioning and prompts. Further details are given in the Development Report, at the link above (section 2.2).

3 Sampling and fieldwork

3.1 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](#)', had been seen by the trust between 1 September 2015 and 30 November 2015 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. For more information please see the 'Sampling handbooks' available here: <http://www.nhssurveys.org/surveys/894>

All trusts providing community mental health services were eligible to take part in the survey. No trusts were excluded as a consequence of sample checking or analysis of the final data. Fieldwork for the survey (the time during which questionnaires were sent out and returned) took place between February and June 2016.

3.2 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 to November 2015). 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.

3.3 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 2015 and the 2016 survey.

3.4 Errors in drawing samples

The chances of sampling mistakes being made by trusts (for example, 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 Patient Survey Co-ordination Centre at the Picker Institute Europe

¹ These are companies that have been approved by the Care Quality Commission during a competitive tendering process to carry out surveys in the NPSP on behalf of trusts. For more information please see: <http://www.nhssurveys.org/approvedcontractors>

who look for extraordinary errors that are more noticeable when pooling data together (for example, unusual or skewed age distributions).

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, ethnicity and CPA status. Should there be any discrepancies that merit investigating, queries will be raised with the contractor working on behalf of the trust or, in the case of in-house trusts, the trust directly.

Errors identified from these checks are classified as either minor or major.

A minor error is defined as an error that will not affect the usage or quality of the survey response data, but is still classed as a mistake. For example, a minor sampling error would be if the service user record numbers (SURNs) used by a trust were applied in an incorrect format. In this case, the trust could amend the sample's SURNs and it would not undermine the quality of the sample. This type of error would be rectified by the trust or contractor, or by the Co-ordination Centre if possible.

A major error is defined as an error that will affect the usage or quality of the survey response data: these are errors that are non-rectifiable. For example, a major sampling error would be if the eligible service user population drawn by the trust for the survey excluded outpatients, potentially creating bias in the sample. If the error was spotted during checking the sample, the trust would be required to re-draw the sample in line with the guidance. Major errors within the survey response data submissions would result if there was an error in the wording of a question (where the questionnaire had been set up for use on different data capture software).

A report is produced each year of these errors and is published on the NHS surveys website (available for the 2016 survey [here](#)). Trusts and approved contractors are encouraged to review this report to minimise the recurrence of previously detected errors. In the 2016 survey there were two major errors and one minor error.

We have explored the way in which trusts input data for service users before it is used to create survey samples, to identify the level of risk for error at that stage, and this is outlined in the Statement of Administrative Sources, available on the surveys section of the CQC website ([here](#)).

We conclude that there may be potential for incorrect addresses or inaccurate coding of cases – however this is unlikely due to the requirements placed on NHS trusts and their interests in maintaining accurate records. The effects of this on trust results would therefore be small due to the scale of likely error, and this would have an even smaller impact on England level statistics due to aggregation of trust results to the England average.

A sample checklist and sample declaration form are required to be completed prior to submitting the sample. As well as helping to ensure that trusts have followed the sampling methodology as specified in the survey instructions, the sample declaration form also helps confirm trusts have maintained confidentiality by taking the required steps as specified in the guidance, such as only sharing the required variables. Having this checklist and sample declaration form approved before sending samples fulfils NHS trusts' own requirements under the Data Protection Act and helps to reduce the potential for breaches to the support received under section 251 of the NHS Act 2006 (which provides a legal basis for the transfer of data to a survey contractor).

3.5 Historical sampling errors and excluded trusts

During the sample-checking investigations for the 2016 survey, it was found that six trusts had made major errors in drawing their sample from the previous year (2015). These had gone undiscovered at the time because the errors only became apparent when compared with the 2016 sample². These six trusts were excluded from any trust-level historical comparisons produced for the 2016 survey (i.e. comparing 2016 data against 2015 data) and their 2015 results were removed from the NHS Surveys website. Their 2016 results were unaffected.

The six trusts were:

- Oxford Health NHS Foundation Trust (RNU)
- South Staffordshire and Shropshire Healthcare NHS Foundation Trust (RRE)
- Hertfordshire Partnership University NHS Foundation Trust (RWR)
- Cumbria Partnership NHS Foundation Trust (RNN)
- Isle of Wight NHS Trust (R1F)
- Cheshire and Wirral Partnership NHS Foundation Trust (RXA)

For more information on the sampling errors investigated in the 2016 survey please see the sampling errors report located [here](#).

One trust was excluded from the results published for the 2015 Community Mental Health Survey because it was found that they had made a major error in drawing their sample for 2015. Quality assurance checks on the final data submitted for this trust revealed the error:

- Nottinghamshire Healthcare NHS Foundation Trust (RHA)

Two trusts had been excluded from participation in 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:

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

These trusts were excluded from any trust-level historical comparisons produced for the 2016 survey (i.e. comparing 2016 data against 2015 data).

A further trust was unable to take part due to the make-up of the services it provides and the population it serves:

- Tavistock and Portman NHS Foundation Trust (RNK)

² Whilst the Patient Survey Co-ordination Centre undertake robust checks on the sample, it is not always possible to identify all sampling errors from the sample declaration form and anonymised sample file. Therefore some errors are identified retrospectively when checking the subsequent year's data. It remains the responsibility of the trust to ensure that the sample is drawn correctly and all inclusion and exclusion criteria correctly applied.

4 Data analysis and reporting

4.1 Data cleaning and editing

Survey data from each participating trust - whether conducting the survey themselves 'in-house' or using an approved contractor - are submitted to the Co-ordination Centre for cleaning. During fieldwork, a data cleaning guidance manual covering the checks that the Co-ordination Centre undertakes is published on the [NHS Surveys website](#). This document allows participating trusts and contractors to understand the processes that the Co-ordination Centre will undertake and which common errors they will be looking for. This enables contractors and in-house trusts to replicate the cleaning undertaken for the benchmark reports. The data are submitted to the Co-ordination Centre in Excel although the final dataset for the survey that is used by secondary data users and deposited with the [UK Data Archive](#) 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.: the number of service users in the data file is 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 are 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 are 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 are 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 2016 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 2016 survey.

4.2 Statistical Release

A statistical release has been published which provides full England level results for the 2016 survey, comparing results against the 2014 and 2015 surveys. This is published on the CQC website here: www.cqc.org.uk/cmhsurvey.

The data are weighted to control for individual trust response rate's influence / impact on the England average and year-to-year changes in the age / sex profile of respondents³. Significance testing was conducted using a z-test applied to the standardised proportions, to see whether the difference is unlikely to have been due to chance and is 'statistically significant'. The 2016 survey excluded three questions used in the 2014 and 2015 surveys and included two new questions. Historical comparisons have been made for all questions, with the exception of the two new questions, one redeveloped filter question and its two dependents; the redeveloped question has a new response option, and as the base answering the two subsequent questions has changed they are no longer comparable.

4.3 Trust results

Detailed information on the analysis method applied to the trust level data is available in the technical document published on the CQC website here: www.cqc.org.uk/cmhsurvey

Benchmark reports are produced for each trust illustrating their performance on particular questions compared with all other trusts involved in the survey. These reports are published here: <http://www.nhssurveys.org/surveys/981>

For applicable questions, each response option is assigned a score (0-10) and composite section scores are produced, by grouping 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 average⁴ 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 same' when compared with most other trusts in the survey

³ More information on the weighting approach applied to the data can be found in Section 6.5 'Addressing non response bias in the survey results'.

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 produced⁵.

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 England⁶.

Historical comparisons are made, where possible, against the 2015 survey. Arrows next to these questions indicate where the 2016 score is significantly higher or lower than the 2015 score. No arrow reflects no statistically significant change. Benchmark data will be available on the CQC website: www.cqc.org.uk/cmhsurvey

As detailed in Section 3.5 'Historical sampling errors and excluded trusts' in this document, we were unable to include comparisons to 2016 data for nine trusts.

4.4 NHS England National Statistics

Fifteen questions within the 2016 survey contribute to Overall 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 here: <https://www.england.nhs.uk/statistics/statistical-work-areas/pat-exp/sup-info/>

⁵ If a question has fewer than 30 responses for a given trust, because the uncertainty round the result is too great. Additionally, for any such question, the trust is excluded from England averages and the trust is not given a section score.

⁶ 'England' 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.

5 Quality assurance

5.1 Approved contractor / in house trust checks

Each contractor and in-house trust undertakes 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 during fieldwork, such as a high number of unreturned questionnaires, the Co-ordination Centre will investigate to explore the reasons for this.

5.2 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 whether there are any 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 boldening (which is normally used to highlight key words for cognition reasons), or 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 2016 survey.

During fieldwork, the Co-ordination Centre monitor the progress of the mailings and response rates both at England 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 to have 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, checked by both the Co-ordination Centre and CQC.

6 Data limitations

6.1 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 2015.

6.2 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 redeveloped in 2014.

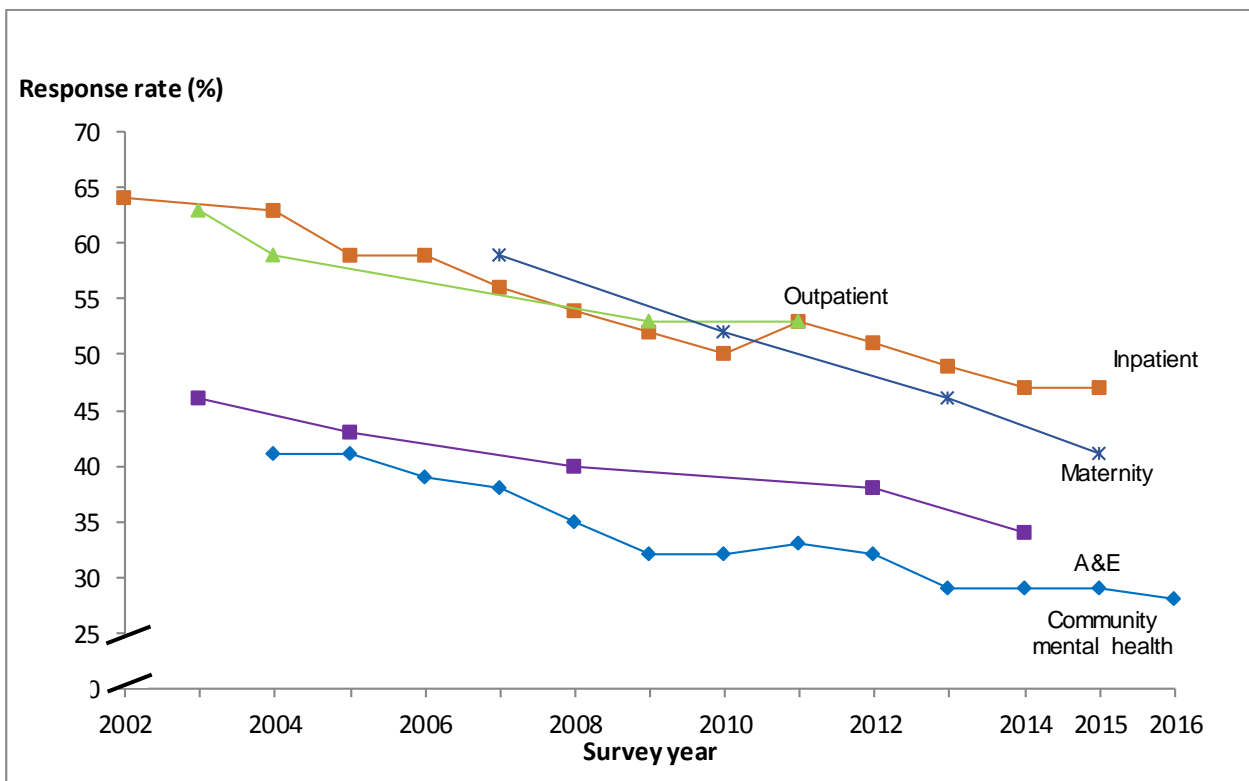
Due to the sampling approach, seasonal effects are unlikely to be an issue. The Community Mental Health survey does not take a flow of patients, for example, whereby a consecutive sample is taken according to discharge dates (as in the inpatient survey). Instead, the sample is based on people who have 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.

6.3 Response rates

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

Figure 1 below illustrates response rate trends for the more established surveys in the NHS 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 had sustained a 29% response for the three previous years, but for 2016 it has fallen to 28%, in line with broader trends. 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.

Figure 1: response rates for established surveys in the NHS Patient Survey Programme



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 work⁷ had shown can take longer to respond.

To further improve the survey, CQC reviewed the response rates for the Community Mental Health survey prior to the start of the 2016 survey. A paper was published on the Co-ordination Centre website outlining the issues relating to response, and identifying potential measures for future piloting: <http://www.nhssurveys.org/survey/1704>.

In preparing for the 2016 survey, trusts were contacted by the Co-ordination Centre to encourage them to strengthen their pre-survey publicity. The development of the 2017 Community Mental Health survey has included a more in-depth review of feasible interventions or measures that might further boost response, and those selected will be piloted alongside the 2017 survey. More detail on specific measures will be communicated to participating trusts, and published as part of the information for the 2017 survey.

Pilot work to improve response was conducted as part of the 2015 acute Inpatient survey: <http://www.nhssurveys.org/survey/1733>. The aim was to test different approaches with the aim of increasing response rates and improving participation, particularly from groups known to be less likely to respond.

6.4 Non response bias

One of the main issues that can affect the survey results is non-response bias.

⁷ <http://www.nhssurveys.org/survey/513>

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 NHS 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 1 and 2 below show that age, gender and ethnic group response bias exists in the Community 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 1 shows respondents and non-responders. Table 2 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 slightly more likely to respond than males, respondents aged between 51 and 65 years are more likely to respond compared with other age groups and people from the White ethnic groups 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.

Please note that tables 1 and 2 are based on information from trust sample files¹¹ 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

⁸ http://www.nhssurveys.org/Filestore/documents/Increasing_response_rates_literature_review.pdf

⁹ http://www.nhssurveys.org/Filestore/documents/Review_BMEcoverage_HCC_surveys.pdf

¹⁰

http://www.nhssurveys.org/Filestore/documents/Increasing_response_rates_stakeholder_consultation_v6.pdf

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

removed anyone who had since died, or anyone for whom the questionnaire was undeliverable, from the base.

Table 1 Respondents and non-responders to the 2016 community mental health survey by key demographics

Demographics	Responded (%)	
	Yes	No
Gender		
Male	27%	73%
Female	28%	72%
Age		
18-35	18%	82%
36-50	26%	74%
51-65	35%	65%
66+	31%	69%
Ethnicity		
White	29%	71%
Mixed	23%	77%
Asian or Asian British	23%	77%
Black or Black British	21%	79%
Chinese or other	26%	74%
Not stated or missing	25%	75%

Table 2 Sample and demographic profile for the 2016 community mental health survey

Demographics	Profile (%)	
	Sample	Respondent
Gender		
Male	45%	44%
Female	55%	56%
Age		
18-35	23%	14%
36-50	23%	22%
51-65	19%	25%
66+	35%	39%
Ethnicity		
White	79%	82%
Mixed	2%	1%
Asian or Asian British	5%	4%
Black or Black British	4%	3%
Chinese or other	2%	2%
Not stated or missing	8%	7%

6.5 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 are 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 NHS 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 England level results for the survey are 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.

As the 2016 England level results present trend comparisons across surveys from 2014 to 2016, it is also necessary to standardise the data. Weights derived from the average age / sex profile of the 2016 survey and average trust are multiplied together to produce a single, combined weight. This combined weight is applied to the 2014, 2015, and 2016 England level results, standardising them to the 2016 respondent age / sex profile. Doing so controls for demographic changes in trust's respondents which accumulate over time¹².

This weighting has been applied to the results for scored questions only. Results for demographic questions at the end of the survey questionnaire and all non-scored questions are left unweighted (a table listing which questions have been weighted can be found in Section 10 - Appendix A: Question weighting). 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. Non-scored questions are unweighted to ensure consistency across the NHS Patient Survey Programme.

The potential non-response bias is partly addressed via statistical standardisation by age and gender in the trust level results¹³. Standardising by ethnicity would in theory 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 of a very good quality with only very few, if any, missing cases once this has been done, ethnicity is much poorer: in 2016, 479 people (3.6%) did not answer the question asking their ethnicity. In trust sample file information, for responders, this data was missing for 474 people (3.6%) and was not stated at the time of collection by 496 people (3.7%). 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

¹² Please note, due to the approach taken to standardise the data, England level results in the 2015 and 2014 Community Mental Health Surveys will differ slightly from the 2014-to-2016 trend comparison results in the 2016 survey's England level results.

¹³ For more information on the methodology for the trust level results, please see the technical document which is referenced in the Section 8 'Further Information' at the end of this document.

on respondent-provided information for ethnicity. If we were to additionally standardise by ethnicity, we would have to remove 479 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-responders. 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 support under section 251 of the NHS Act¹⁴ 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 NHS Patient Survey Programme send up to two reminders to non-responders.

The effect of non-response bias is also reduced by the survey methodology. The NHS Patient Survey Programme follows best practice methodologies to maximise response rates and this is discussed in the Section 2.1 'Survey design and implementation' of this document.

¹⁴ For more information on section 251 support, please see: <http://www.hra.nhs.uk/about-the-hra/our-committees/section-251/what-is-section-251/>

7 Data revisions

CQC publishes a [Revisions and Corrections Policy](#) relating to these statistics. The NHS Patient Survey data are not subject to any scheduled revision as the surveys 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.

8 Further information

The report outlining the England 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

The **trust results** from previous community mental health surveys that took place between 2004 and 2008, and from 2010 to 2014¹⁵ are available at the below link. Please note that due to redevelopment work, results from the 2016 survey are only comparable with 2014 and 2015¹⁶:

<http://www.nhssurveys.org/surveys/290>

The results for **England** from previous community mental health surveys that took place between 2004 and 2008, and from 2010 to 2014, are available at the link below:

<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:

<http://www.nhssurveys.org/surveys/877>

More information on the NHS Patient Survey Programme, including results from other surveys and a programme of current and forthcoming surveys, can be found at:

<http://www.cqc.org.uk/content/surveys>

¹⁵ In 2009 a survey of mental health inpatient services took place

¹⁶ 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 to 2008.

9 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 NHS Patient Survey Programme.

10 Appendix A: Question weighting

The following table lists the questions included in the 2016 Community Mental Health Survey and whether weighting is applied for England level results.

No.	Question	Weighted / Unweighted
Q1	When was the last time you saw someone from the NHS mental health services?	Unweighted
Q2	Overall, how long have you been in contact with NHS mental health services?	Unweighted
Q3	In the last 12 months, do you feel you have seen NHS mental health services often enough for your needs?	Weighted
Q4	Did the person or people you saw listen carefully to you?	Weighted
Q5	Were you given enough time to discuss your needs and treatment?	Weighted
Q6	Did the person or people you saw understand how your mental health needs affect other areas of your life ?	Weighted
Q7	Have you been told who is in charge of organising your care and services? (This person may be anyone providing your care, and may be called a "care coordinator" or "lead professional")	Weighted
Q8	Is the person in charge of organising your care and services....	Unweighted
Q9	Do you know how to contact this person if you have a concern about your care?	Weighted
Q10	How well does this person organise the care and services you need?	Weighted
Q11	Have you agreed with someone from NHS mental health services what care you will receive?	Weighted
Q12	Were you involved as much as you wanted to be in agreeing what care you will receive?	Weighted
Q13	Does this agreement on what care you will receive take your personal circumstances into account?	Weighted
Q14	In the last 12 months have you had a formal meeting with someone from NHS mental health services to discuss how your care is working?	Weighted
Q15	Were you involved as much as you wanted to be in discussing how your care is working?	Weighted
Q16	Did you feel that decisions were made together by you and the person you saw during this discussion?	Weighted

No.	Question	Weighted / Unweighted
Q17	In the last 12 months, have the people you see for your care or services changed?	Unweighted
Q18	Were the reasons for this change explained to you at the time?	Weighted
Q19	What impact has this had on the care you receive?	Weighted
Q20	Did you know who was in charge of organising your care while this change was taking place?	Weighted
Q21	Do you know who to contact out of office hours if you have a crisis?	Weighted
Q22	In the last 12 months, have you tried to contact this person or team because your condition was getting worse?	Unweighted
Q23	When you tried to contact them, did you get the help you needed?	Weighted
Q24	In the last 12 months, have you been receiving any medicines for your mental health needs?	Unweighted
Q25	Were you involved as much as you wanted to be in decisions about which medicines you receive?	Weighted
Q26	In the last 12 months, have you been prescribed any new medicines for your mental health needs?	Unweighted
Q27	The last time you had a new medicine prescribed for your mental health needs, were you given information about it in a way that you were able to understand?	Weighted
Q28	Have you been receiving any medicines for your mental health needs for 12 months or longer?	Unweighted
Q29	In the last 12 months, has an NHS mental health worker checked with you about how you are getting on with your medicines? (That is, have your medicines been reviewed?)	Weighted
Q30	In the last 12 months, have you received any treatments or therapies for your mental health needs that do not involve medicines?	Unweighted
Q31	Were these treatments or therapies explained to you in a way you could understand?	Weighted
Q32	Were you involved as much as you wanted to be in deciding what treatments or therapies to use?	Weighted
Q33	In the last 12 months, did NHS mental health services give you any help or advice with finding support for physical health needs (this might be an injury, a disability, or a condition such as diabetes, epilepsy, etc)?	Weighted

No.	Question	Weighted / Unweighted
Q34	In the last 12 months, did NHS mental health services give you any help or advice with finding support for financial advice or benefits ?	Weighted
Q35	In the last 12 months, did NHS mental health services give you any help or advice with finding support for finding or keeping work ?	Weighted
Q36	Has someone from NHS mental health services supported you in taking part in an activity locally?	Weighted
Q37	Have NHS mental health services involved a member of your family or someone else close to you as much as you would like?	Weighted
Q38	Have you been given information by NHS mental health services about getting support from people who have experience of the same mental health needs as you?	Weighted
Q39	Do the people you see through NHS mental health services help you with what is important to you?	Weighted
Q40	Overall....	Weighted
Q41	Overall in the last 12 months, did you feel that you were treated with respect and dignity by NHS mental health services?	Weighted
Q42	Who was the main person or people that filled in this questionnaire?	Unweighted
Q43	Are you male or female?	Unweighted
Q44	What was your year of birth? (Please write in)	Unweighted
Q45	What is your religion?	Unweighted
Q46	Which of the following best describes how you think of yourself?	Unweighted
Q47	What is your ethnic group? (Cross ONE box only)	Unweighted