

# DATA CLEANING GUIDANCE

# NHS ADULT INPATIENT SURVEY 2019

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## Contacts

The Survey Coordination Centre for Existing Methods  
Picker Institute Europe  
Buxton Court  
3 West Way  
Oxford  
OX2 0BJ

Tel: 01865 208127  
Fax: 01865 208101  
E-mail: [inpatient@surveycoordination.com](mailto:inpatient@surveycoordination.com)  
Website: [www.nhssurveys.org](http://www.nhssurveys.org)

## Updates

Before you use this document, check that you have the latest version, as there might be some small amendments from time to time (the date of the last update is on the front page). In the very unlikely event that there are any major changes, we will e-mail all trust contacts and contractors directly to inform them of the change.

This document is available from: <https://nhssurveys.org/surveys/survey/02-adults-inpatients/>

## Questions and comments

If you have any questions or concerns regarding this document, please contact the Survey Coordination Centre for Existing Methods (SCCEM) using the details provided at the top of this page.



### For trusts and contractors taking part in the survey:

Contractors and trusts submitting final data for the NHS Adult Inpatient **must not** clean their data before submitting it to the Survey Coordination Centre. Please refer to the [Survey Handbook](#) and [Entering and Submitting Final Data](#) instructions for more details.

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# Data Cleaning – An overview

## Introduction

At the end of fieldwork for the 2019 Adult Inpatient Survey participating trusts and contractors are required to submit data to the Survey Coordination Centre for Existing Methods (SCCEM) in a raw / uncleaned format<sup>1</sup>. The SCCEM will clean the data once all trusts and contractors have submitted their files. To ensure that the cleaning process is comparable across all NHS trusts, data for all trusts in the survey are collated and cleaning is carried out on the full collated dataset.

This document provides a description of the processes that will be used by the SCCEM to clean and standardise data submitted by contractors and trusts as part of the 2019 Adult Inpatient Survey. By following the guidance in this document, it should be possible to recreate this cleaning process **however all data submitted to the SCCEM at the end of the survey must be uncleaned.**

## Definitions

Definitions of terms commonly used in this document, as they apply to the 2019 Adult Inpatient Survey, are as follows:

**Raw / uncleaned data:** Raw or uncleaned data has been entered from returned questionnaires following the instructions detailed in the [Entering and Submitting Final Data](#) document.

**Data cleaning:** The SCCEM uses the term 'data cleaning' to refer to all editing processes applied to the final collated dataset.

**Routing questions:** These are items in the questionnaire which instruct respondents to either continue on to the next question or to skip irrelevant questions depending on their response to the routing question. For the 2019 Adult Inpatient Survey, the routing questions in the questionnaire are **Q1, Q2<sup>2</sup>, Q12, Q41, Q44, Q50, Q53, Q57, and Q74.**

**Filtered questions:** These are items on the questionnaire that are not intended to be answered by all respondents. Whether individual respondents are expected to answer filtered questions depends on their responses to preceding routing questions. For the 2019 Adult Inpatient Survey, the filtered questions in the questionnaire are **Q2-Q4, Q5-Q8, Q13, Q42, Q45-Q47, Q51- Q52, Q54, Q58 -Q59, Q75 and Q76.**

**Non-filtered questions:** These are items in the questionnaire which are not subject to any filtering and which should therefore be answered by all respondents. For the 2019 Adult Inpatient Survey, the non-filtered questions are **Q1, Q9-Q12, Q14-Q41, Q43- Q44, Q48-Q50, Q53, Q55-Q57, Q60-Q74 and Q77-Q82.**

**Sample data:** Patient data that is provided from the trust as part of the sampling process. This includes: gender, year of birth, ethnicity, date of admission and discharge, length of stay, treatment

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<sup>1</sup> For specific information on how data is entered and coded by trusts/contractors before submission to the SCCEM, please refer to the [Entering and Submitting Final Data](#) guidance

<sup>2</sup> Please note that Q4 contains a reminder of the filtering instructions from Q1 and Q2, directing respondents to skip 'waiting or planned admission' section.

function code, admission method code, CCG code, ICD-10 chapter code and NHS site code for both admission and discharge as it is recorded on the trust's system.

**Response data:** Data from the completed questionnaire which is provided from the patient. This includes answers to Q1 through Q82.

**Out-of-range data:** This refers to instances where data within a variable have values that are not permissible. For categorical data – most of the variables in this survey – this would mean a value not allowed in the data entry sheet for that specific variable. For example, a value of '3' being entered in for a variable with only two response categories (1 or 2). A full list of such responses for the 2019 Adult Inpatient Survey can be found in Appendix B: Out-of-range data.

**Outcome:** An outcome code is given to each patient to indicate the end result of their participation in the survey. This is used when calculating the adjusted response rate for the survey and is therefore vital to ensure all patients are coded appropriately. The coding for outcome is as follows:

- Outcome 1: Returned completed questionnaire
- Outcome 2: Undelivered / moved house
- Outcome 3: Deceased after the start of fieldwork
- Outcome 4: Too ill / opt out
- Outcome 5: Ineligible
- Outcome 6: Unknown
- Outcome 7: Deceased before the start of fieldwork

**Non-specific responses:** This term describes response options that do not provide evaluative information. Most commonly, these are responses such as "Don't know / can't remember". Likewise, responses that indicate the question is not applicable to the respondent are considered 'non-specific' – for example, responses such as "I did not have any questions" or "I did not need an explanation". A full list of such responses for the 2019 Adult Inpatient Survey can be found in Appendix C: Non-specific responses.

**Missing' responses:** This term is used to describe data which are not stored as a valid response for a question or variable in a dataset. There can be a number of different types of missing data, with the most common being classed as 'user missing' data. Within the data cleaning process, a number of different missing response codes are used to identify how data for a particular respondent has been handled. These codes are as follows:

- 999: this code is used when someone should have answered a question, but didn't or contradicts a response to a later question.
- 998: this code is used when someone answered a question but shouldn't have. For example, filtered questions.
- 997: this code is used when someone answered Q11 from one of the following all women trusts; Birmingham Women's and Children's NHS Foundation Trust (RQ3) and Liverpool Women's NHS Foundation Trust (REP)
- 996: this code is used to suppress data at trust level when a question has fewer than 30 responses. These responses would also remain suppressed from the overall base at national level.

# Editing and Cleaning Final Data

## Approach and rationale

The aim of the SCCEM in cleaning the collated final data is to ensure an optimal balance between data quality and completeness. We do this by removing responses that are known to be erroneous or inappropriate.

## Cleaning filtered questions

When routing questions are not followed correctly and participants have answered questions in which they are instructed to skip, it is necessary to clean the data to remove these inappropriate responses. In such cases, participants' responses to questions that were not relevant to them are recoded to '998' to indicate a non-applicable response<sup>3</sup>. See table 1 for a list of all routing questions included in the 2019 Adult Inpatient Survey, the response values that require cleaning and the appropriate filtered questions to recode as '998'.

Table 1. Appropriate cleaning for routing questions in the 2019 Adult Inpatient Survey

Routing question	Response values requiring cleaning	Filtered questions to be recoded as '998'
Q1	2	Q2 – Q4
Q2	1	Q5 – Q8 (See <a href="#">Cleaning Special Cases</a> )
Q2	2	Q3 – Q4
Q12	3	Q13
Q41	2	Q42
Q44	2	Q45 – Q47
Q50	2	Q51 – Q52
Q53	3 or 4 or 5	Q54
Q57	5	Q58 – Q59
Q74	2	See <a href="#">Cleaning Special Cases</a>

Please note that these instructions should be followed in the order shown above.

A worked example of the cleaning process for removing unexpected responses to filtered questions is included in [Appendix A: Example of Cleaning](#).

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<sup>3</sup> Code '998' is an arbitrary value chosen because it is out of range for all other questions on the survey.

The recoding of filtered questions into 998 only applies where the response to the routing question is not missing. Indeed, in this case, it is considered that the respondent contradicted their previous answer (example 1 below). However, where the response to a routing question is missing, responses to filtered questions are not removed. It is considered that the respondent might have been unsure or missed the routing question and therefore, their responses to filtered questions are still relevant (example 2 below).

**Example 1:**

**Q50.** On the day you left hospital, was your discharge delayed for any reason?

1  Yes                      → **Go to 51**

2  No                         → **Go to 53**

**Q51.** What was the **MAIN** reason for the delay?  
(**Cross ONE box only**)

1  I had to wait for **medicines**

2  I had to wait to **see the doctor**

3  I had to wait for **hospital transport**

4  Something else

In the example above, the response to Q51 would be recoded to '998' because according to their answer from Q50 (the routing question), respondents were supposed to skip Q51 and Q52.

**Example 2:**

**Q50.** On the day you left hospital, was your discharge delayed for any reason?

1  Yes                      → **Go to 51**

2  No                         → **Go to 53**

**Q51.** What was the **MAIN** reason for the delay?  
(**Cross ONE box only**)

1  I had to wait for **medicines**

2  I had to wait to **see the doctor**

3  I had to wait for **hospital transport**

4  Something else

In the example above, Q50 would be coded as missing ('999') and the response to Q51 would remain as code 2.

## Cleaning of Q11

**Q11** While in hospital, did you ever share a sleeping area, for example a room or bay, with patients of the opposite sex?

While **Q11** is not a filtered question, it is only applicable to respondents who stayed in a mixed-sex hospital or ward. Two trusts in the 2019 survey were all women trusts (Birmingham Women's and Children's NHS Foundation Trust (RQ3) and Liverpool Women's NHS Foundation Trust (REP)) and therefore **Q11** would not apply to them and the responses should be removed and coded as '997'.

## Cleaning of Q5

**Q5** When you were referred to see a specialist, were you offered a choice of hospital for your first hospital appointment?

**Q5** is only applicable to patients referred from English CCGs and therefore responses from other countries need to be cleaned out of the dataset. A derived variable is created with all non-english CCGs responses removed and set to user-missing (999).

## Cleaning Special Cases

There are a few exceptions to the rules described above for some questions of specific nature. For instance, the below questions require additional cleaning to ensure that the results of the analysis are as fair as possible when assessing trust performance.

### Cleaning of Q5, Q6, Q7 and Q8.

**Q5** When you were referred to see a specialist, were you offered a choice of hospital for your first hospital appointment?

**Q6** How do you feel about the length of time you were on the waiting list before your admission to hospital?

**Q7** Was your admission date changed by the hospital?

**Q8** In your opinion, had the specialist you saw in hospital been given all of the necessary information about your condition or illness from the person who referred you?

**Q1** (*"Was your most recent hospital stay planned in advance or an emergency?"*) should not be considered a routing question in the traditional sense. For example, responses to **Q5-Q8** (the questions on planned admissions) must not be automatically cleaned if **Q1**=1 (i.e. the respondent indicates their hospital stay was an emergency or urgent). This is due to the fact that although patients responding *"Emergency or urgent"* to **Q1** are identifying themselves as emergency admissions, they may subsequently report *not* going to an Emergency Department as part of their admission (i.e. **Q2**=2) and in such cases will be instructed in the questionnaire to go to **Q5**. Thus **Q5-Q8** are only cleaned if patients answer option 1 (*"Emergency or urgent"*) or 3 (*"Something else"*) to **Q1** **AND** option 1 (*"Yes"*) to **Q2** (*"When you arrived at the hospital, did you go to the A&E Department?"*).

### Cleaning of Q74, Q75 and Q76

**Q74** Do you have any physical or mental health conditions, disabilities or illnesses that have lasted or are expected to last for 12 months or more? Include problems related to old age.

**Q75** Do you have any of the following? Select ALL conditions you have that have lasted or are expected to last for 12 months or more.

**Q76** Do any of these reduce your ability to carry out day-to-day activities?



Although **Q74** is a routing question and **Q75** and **Q76** are the corresponding filtered questions, these three questions are cleaned differently due to the nature of the questions.

When a respondent has answered “No” to **Q74** but has answered **Q75** by selecting one or more long term condition, their response to **Q74** is cleaned by setting it to the missing code ‘999’. This is because their response to **Q75** indicates that they do in fact consider they have a long-standing condition. Instead of changing their response to **Q74** to an answer the patient did not select (i.e. “Yes”), we set it to missing (999) so that it is no longer inconsistent with their response to **Q75**.

However, when a respondent has answered “No” to **Q74** and has not selected any long-term conditions in **Q75** but has answered **Q76** then their response to **Q76** is cleaned by setting it to not-applicable (998). As they have indicated that they do not have a long-term condition and have also skipped **Q75**, this would suggest that **Q76** was not applicable to them. See table 2 for a summary of how **Q74**, **Q75** and **Q76** are cleaned.

Table 2. Cleaning for Q74, Q75 and Q76

Q74 response	Q75 response	Q76 response	Cleaning
Ticked option 2 (no)	Ticked one or more options	No response	Q74 is set to missing (999).
Ticked option 2 (no)	Ticked one or more options	Ticked any option	Q74 is set to missing (999).
Ticked option 2 (no)	No response	Ticked any option	Q76 is set to not-applicable (998).

## Cleaning of Q77

**Q77** Have you experienced any of the following in the last twelve months? (Cross ALL that apply)

**Q77** is a multiple choice question, where respondents are allowed to tick more than one option. If a respondent has conflicted their response by selecting response options 1, 2, 3 in addition to response option 4 (‘none of these’) then their response to option 4 is cleaned out, keeping in their responses at 1, 2 and/or 3.

## Eligibility

### Age / Year of birth

There may be instances where the sample and response data is mismatched and the response data indicates that the respondent is under the age of 16. When this occurs, respondents will *not* be considered ineligible for the survey and therefore remain as outcome 1 (see table 3). This is because of the difficulty of inferring the source of errors when year of birth from sample and response data are mismatched. We cannot be certain whether this mismatch occurs due to an error in the sample file or an error in the patient’s completion of the questionnaire form.

Another scenario could be that the respondent has indicated they are under the age of sixteen in the response data, but year of birth is missing from the sample data. As this is the only available data for their year of birth, these respondents would be considered ineligible for the survey and would therefore be recoded to outcome 5 (see table 3).

Table 3. Eligibility and outcome codes of patients based on sample and response data of age

Original outcome code	Sample data	Response data	Eligibility	Final outcome code
1	YoB ≤ 2003	Q79 > 2003	Eligible	1
1	YoB ≤ 2003	Q79 ≤ 2003	Eligible	1
1	YoB ≤ 2003	Q79 = missing	Eligible	1
1	YoB ≤ 2003	Q79 = out of range (≤ 1900 ≥ 2004)	Eligible	1
1	YoB = missing	Q79 > 2003	Ineligible	5
1	YoB = missing	Q79 ≤ 2003	Eligible	1

## Demographics

In a small number of cases, sample data and response data does not correspond for age and gender. For example, the sample may identify a patient as male only for them to report being female, or the sample data may identify an individual as being born in 1980 only for the patient to report being born in 1985.

Where responses to demographic questions are present, it is assumed these are more likely to be accurate than sample data (since it is assumed that respondents are best placed to know their own gender and age). However, because questions about demographics tend to produce relatively high item non-response rates, it is not appropriate to rely on response data alone.

For demographic analysis on groups of cases, it is therefore necessary to use some combination of the information supplied in the sample data and response data. To do this, we first copy all valid responses to survey demographic questions into a new variable. Where response data is missing we then copy in the relevant sample data (note that for a very small number of respondents demographic information may be missing in both the sample and response data; in such cases data must necessarily be left missing in the new variable)<sup>4</sup>

## Out-of-range data

A common error when completing year of birth questions on forms is for respondents to accidentally write in the current year. In this case, the response to **Q79** would be considered as an out-of-range response and would therefore be set to missing. For the 2019 Adult Inpatient Survey, out-of range responses for **Q79** are defined as **Q79 ≤ 1900 or ≥ 2004**. This must only be done after eligibility has been set as described in the earlier section titled '[Eligibility](#)'.

Out-of-range data must also be set for invalid responses to all other questions in the survey. The out-of-range responses will depend on the number of response options given for each question. For instance, all questions with 3 response options (i.e. Q1, Q6, Q9, Q10, Q12, Q13, Q20, Q24, Q25, Q27, Q28, Q29, Q30, Q33, Q34, Q35, Q39, Q40, Q42, Q46, Q47, Q49, Q63, Q64, Q65, Q66, Q67, Q70, Q71 and Q76) with response data of **≤ 0 or ≥ 4** would be set to missing. A full list of out-of-range responses for the 2019 Adult Inpatient Survey is listed in [Appendix B: Out-of-range data](#).

<sup>4</sup> The exception to this is when response rates are calculated. Because response rates vary between demographic groups, using response and sample data to calculate response rates would create a systematic source of bias in that we are only able to amend information for the *respondents*. Therefore, only the sample data should be used to calculate response rates by demographic groups.

## Usability

Sometimes questionnaires are returned with only a very small number of questions completed. As in previous years, for the 2019 Adult Inpatient Survey, questionnaires containing fewer than five responses are considered 'unusable' – we will set all responses pertaining to such cases as system missing and recode outcome to 6. This should only affect a very limited number of cases and so should not have a significant impact on response rates. The number of responses per questionnaire (including responses to the demographic questions) will be counted after all cleaning has been conducted.

When counting the total number of responses for the purpose of determining if a questionnaire is usable, multiple choice questions are counted once. For instance, Q75 would be counted as one response in the below scenario.

### Q75. Do you have any of the following?

Select **ALL** conditions you have that have lasted or are expected to last for 12 months or more.

- 1  Breathing problem, such as asthma
- 2  Blindness or partial sight
- 3  Cancer in the last 5 years
- 4  Dementia or Alzheimer's disease
- 5  Deafness or hearing loss
- 6  Diabetes
- 7  Heart problem, such as angina
- 8  Joint problem, such as arthritis
- 9  Kidney or liver disease
- 10  Learning disability
- 11  Mental health condition
- 12  Neurological condition
- 13  Another long-term condition

## Missing responses

It is useful to be able to see the number of missed responses for each question. Responses are considered to be user missing when a respondent is expected to answer a question but no response is present. For non-filtered questions, responses are expected from all respondents – thus any instance of missing data constitutes a user missing response. For filtered questions, only respondents who have

answered a previous routing question instructing them to go on to that filtered question or set of filtered questions are expected to give answers. Where respondents have missed a routing question, they are not expected to answer subsequent filtered questions; thus only where respondents were explicitly instructed to answer filtered questions should such blank cells be coded as missing responses.

The SCCEM codes user missing responses in the data as '999'<sup>5</sup>. For results to be consistent with those produced by the SCCEM, missing responses should be presented but should not be included in the base number of respondents for percentages.

The SCCEM will suppress results at both national and trust level for questions that have fewer than 30 respondents<sup>6</sup> and code as '996'.

## Non-specific responses

As well as excluding missing responses from results, the SCCEM also removes non-specific responses from base numbers for percentages. The rationale for this is to facilitate easy comparison between institutions by presenting only results from those respondents who felt able to give an evaluative response to questions. As shown in figure 1, using hypothetical data, non-specific response option 5 'Don't know/ can't remember' has been excluded from the base number when calculating percentages for Q3. For a full listing of 'non-specific' responses in the 2019 Adult Inpatient Survey, please see [Appendix C: Non-specific responses](#).

<b>Q3. While you were in the A&amp;E department, how much information about your condition or treatment was you given?</b>				
<b>Response options</b>	<b>Original Base numbers</b>	<b>Percentage (Including non-specific)</b>	<b>Base numbers for percentages</b>	<b>Percentage (Excluding non-specific)</b>
1. Not enough	6,000	14.8%	6,000	15.0%
2. Right amount	30,000	74.1%	30,000	75.0%
3. Too much	400	1.0%	400	1.0%
4. I was not given any information about my treatment or condition	3,600	8.9%	3,600	9.0%
5. Don't know/ can't remember	500	1.2%	-	-
<b>Total number of respondents</b>	<b>40,500</b>		<b>40,000</b>	<b>100%</b>

Figure 1. Example of excluding non-specific responses from results

<sup>5</sup> This is an arbitrary value chosen because it is 'out-of-range' for all other questions on the survey.

<sup>6</sup> This does not include the demographic items included in the 'about you' section of the questionnaire

# Appendix A: Example of cleaning

Figure 2 shows hypothetical raw / uncleaned data for eight patients, five of whom have responded to the survey. It can be seen from this data that some of the respondents have followed instructions from routing questions incorrectly:

Respondents '0005' and '0007' have reported that their admission to hospital was planned or from a waiting list (Q1=2), but have both responded to subsequent filtered questions which are only applicable to emergency patients (respondent '0005' has answered the first filter question (Q2) before skipping the remaining filter questions, whilst respondent '0007' has answered Q2, Q3 and Q4).

Record	Outcome	Q1	Q2	Q3	Q4
Patient Record Number	Outcome of sending questionnaire (N)	Was your most recent hospital stay planned in advance or an emergency?	When you arrived at the hospital, did you go to the A&E Department (also known as the Emergency Department, Casualty, Medical or Surgical Admissions unit)?	While you were in the A&E Department, how much information about your condition or treatment was given to you?	Were you given enough privacy when being examined or treated in the A&E Department?
IP19...0001	6				
IP19...0002	1	2	.	.	.
IP19...0003	1	1	1	1	2
IP19...0004	4				
IP19...0005	1	2	2	.	.
IP19...0006	6				
IP19...0007	1	2	1	2	1
IP19...0008	1	3	2	1	1

Figure 2. Example of raw/'uncleaned' data.

Following the cleaning instructions, the filter instructions specify that:

Routing question	Response values requiring cleaning	Filtered questions to be recoded
Q1	2	Q2 – Q4

In accordance with this, all responses for **Q2** to **Q4** must be set to missing '998' in cases where the respondent has ticked **Q1 = 2** (i.e. "Waiting list or planned in advance").

Figure 3 below shows how the data would look after cleaning is complete by the SCCEM to remove responses to filtered questions that should have been skipped – cells where responses have been set to missing are shaded and coded '998'.

<b>Record</b>	<b>Outcome</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>
Patient Record Number	Outcome of sending questionnaire (N)	Was your most recent hospital stay planned in advance or an emergency?	When you arrived at the hospital, did you go to the A&E Department (the Emergency Department / Casualty / Medical or Surgical Admissions Unit)?	While you were in the A&E Department, how much information about your condition or treatment was given to you?	Were you given enough privacy when being examined or treated in the A&E Department?
IP19...0001	6				
IP19...0002	1	2	.	.	.
IP19...0003	1	1	1	1	2
IP19...0004	4				
IP19...0005	1	2	988	.	.
IP19...0006	6				
IP19...0007	1	2	998	998	998
IP19...0008	1	3	2	1	1

Figure 3. Example of cleaned data.

## Appendix B: Out-of-range data

Variable	Out-of-range data
Birth	$\leq 1900$ $\geq 2004$
Gender	$< 0$ 3-8 $\geq 10$
Ethnicity	Anything except A-H, J-N, P, R, S or Z
DayOfAdmission	$\leq 0$ $\geq 32$
MonthOfAdmission	$\leq 0$ $\geq 13$
YearOfAdmission	$\leq 2017$ $\geq 2019$
DayOfDischarge	$\leq 0$ $\geq 32$
MonthOfDischarge	$\leq 0$ $\geq 8$
YearOfDischarge	$\leq 2018$ $\geq 2020$
LengthOfStay	$\leq 0$
DayQRec	$\leq 0$ $\geq 32$
MonthQRec	$\leq 0$ 2-7 $\geq 13$
YearQRec	$\leq 2019$ $\geq 2020$
Q1	$\leq 0$ $\geq 4$
Q2	$\leq 0$ $\geq 3$
Q3	$\leq 0$ $\geq 6$
Q4	$\leq 0$ $\geq 5$
Q5	$\leq 0$ $\geq 5$
Q6	$\leq 0$ $\geq 4$

Variable	Out-of-range data
Q7	$\leq 0$ $\geq 5$
Q8	$\leq 0$ $\geq 5$
Q9	$\leq 0$ $\geq 4$
Q10	$\leq 0$ $\geq 4$
Q11	$\leq 0$ $\geq 3$
Q12	$\leq 0$ $\geq 4$
Q13	$\leq 0$ $\geq 4$
Q14	$\leq 0$ $\geq 3$
Q15	$\leq 0$ $\geq 3$
Q16	$\leq 0$ $\geq 5$
Q17	$\leq 0$ $\geq 5$
Q18	$\leq 0$ $\geq 6$
Q19	$\leq 0$ $\geq 6$
Q20	$\leq 0$ $\geq 4$
Q21	$\leq 0$ $\geq 5$
Q22	$\leq 0$ $\geq 5$
Q23	$\leq 0$ $\geq 5$
Q24	$\leq 0$ $\geq 4$
Q25	$\leq 0$ $\geq 4$
Q26	$\leq 0$ $\geq 5$

Variable	Out-of-range data
Q27	$\leq 0$ $\geq 4$
Q28	$\leq 0$ $\geq 4$
Q29	$\leq 0$ $\geq 4$
Q30	$\leq 0$ $\geq 4$
Q31	$\leq 0$ $\geq 5$
Q32	$\leq 0$ $\geq 5$
Q33	$\leq 0$ $\geq 4$
Q34	$\leq 0$ $\geq 4$
Q35	$\leq 0$ $\geq 4$
Q36	$\leq 0$ $\geq 6$
Q37	$\leq 0$ $\geq 5$
Q38	$\leq 0$ $\geq 5$
Q39	$\leq 0$ $\geq 4$
Q40	$\leq 0$ $\geq 4$
Q41	$\leq 0$ $\geq 3$
Q42	$\leq 0$ $\geq 4$
Q43	$\leq 0$ $\geq 5$
Q44	$\leq 0$ $\geq 3$
Q45	$\leq 0$ $\geq 5$
Q46	$\leq 0$ $\geq 4$
Q47	$\leq 0$ $\geq 4$
Q48	$\leq 0$ $\geq 5$

Variable	Out-of-range data
Q49	$\leq 0$ $\geq 4$
Q50	$\leq 0$ $\geq 3$
Q51	$\leq 0$ $\geq 5$
Q52	$\leq 0$ $\geq 5$
Q53	$\leq 0$ $\geq 6$
Q54	$\leq 0$ $\geq 5$
Q55	$\leq 0$ $\geq 5$
Q56	$\leq 0$ $\geq 3$
Q57	$\leq 0$ $\geq 6$
Q58	$\leq 0$ $\geq 5$
Q59	$\leq 0$ $\geq 6$
Q60	$\leq 0$ $\geq 5$
Q61	$\leq 0$ $\geq 6$
Q62	$\leq 0$ $\geq 7$
Q63	$\leq 0$ $\geq 4$
Q64	$\leq 0$ $\geq 4$
Q65	$\leq 0$ $\geq 4$
Q66	$\leq 0$ $\geq 4$
Q67	$\leq 0$ $\geq 4$
Q68	$< 0$ $\geq 11$
Q69	$\leq 0$ $\geq 5$
Q70	$\leq 0$ $\geq 4$



Variable	Out-of-range data
Q71	$\leq 0$ $\geq 4$
Q72	$\leq 0$ $\geq 5$
Q73	$\leq 0$ $\geq 5$
Q74	$\leq 0$ $\geq 3$
Q75_1	$< 0$ $\geq 2$
Q75_2	$< 0$ $\geq 2$
Q75_3	$< 0$ $\geq 2$
Q75_4	$< 0$ $\geq 2$
Q75_5	$< 0$ $\geq 2$
Q75_6	$< 0$ $\geq 2$
Q75_7	$< 0$ $\geq 2$
Q75_8	$< 0$ $\geq 2$
Q75_9	$< 0$ $\geq 2$
Q75_10	$< 0$ $\geq 2$
Q75_11	$< 0$ $\geq 2$
Q75_12	$< 0$ $\geq 2$
Q75_13	$< 0$ $\geq 2$
Q76	$\leq 0$ $\geq 4$
Q77	$\leq 0$ $\geq 5$
Q78	$\leq 0$ $\geq 3$
Q79	$\leq 1900 \geq 2004$
Q80	$\leq 0$ $\geq 10$
Q81	$\leq 0$ $\geq 6$

Variable	Out-of-range data
Q82	$\leq 0$ $\geq 19$

## Appendix C: Non-specific responses

The following table lists all 'non-specific responses' included in the 2019 Adult Inpatient Survey. Numbers in the final column indicate the response options that should be considered non-specific. Where the 'non-specific responses' column contains only a dash, the relevant question has no such response options. The data presented in the table below is for all questions, whether they are scored or not. The non-specific responses given below are defined for all survey outputs (trust level data and national level reporting).

No.	Question	Non-specific responses
Q1	Was your most recent hospital stay planned in advance or an emergency?	-
Q2	When you arrived at the hospital, did you go to the A&E Department (also known as the Emergency Department, Casualty, Medical or Surgical Admissions unit)?	-
Q3	While you were in the A&E Department, how much information about your condition or treatment was given to you?	5
Q4	Were you given enough privacy when being examined or treated in the A&E Department?	4
Q5	When you were referred to see a specialist, were you offered a choice of hospital for your <b>first hospital appointment</b> ?	4
Q6	How do you feel about the length of time you were on the waiting list before your admission to hospital?	-
Q7	Was your admission date changed by the hospital?	-
Q8	In your opinion, had the specialist you saw in hospital been given all of the necessary information about your condition or illness from the person who referred you?	4
Q9	From the time you arrived at the hospital, did you feel that you had to wait a long time to get to a bed on a ward?	-
Q10	While in hospital, did you ever stay in a critical care area (e.g. Intensive Care Unit, High Dependency Unit or Coronary Care Unit)?	3
Q11	While in hospital, did you ever share a sleeping area, for example a room or bay, with patients of the opposite sex?	-
Q12	Did you change wards <b>at night</b> ?	-
Q13	Did the hospital staff explain the reasons for being moved in a way you could understand?	-

No.	Question	Non-specific responses
Q14	Were you ever bothered by noise <b>at night</b> from <b>other patients</b> ?	-
Q15	Were you ever bothered by noise <b>at night</b> from <b>hospital staff</b> ?	-
Q16	In your opinion, how clean was the hospital room or ward that <b>you</b> were in?	-
Q17	Did you get enough help from staff to wash or keep yourself clean?	4
Q18	If you brought your own medication with you to hospital, were you able to take it when you needed to?	4, 5
Q19	How would you rate the hospital food?	5
Q20	Were you offered a choice of food?	-
Q21	Did you get enough help from staff to eat your meals?	4
Q22	During your time in hospital, did you get enough to drink?	4
Q23	When you had important questions to ask a doctor, did you get answers that you could understand?	4
Q24	Did you have confidence and trust in the doctors treating you?	-
Q25	Did doctors talk in front of you as if you weren't there?	-
Q26	When you had important questions to ask a nurse, did you get answers that you could understand?	4
Q27	Did you have confidence and trust in the nurses treating you?	-
Q28	Did nurses talk in front of you as if you weren't there?	-
Q29	In your opinion, were there enough nurses on duty to care for <b>you</b> in hospital?	-
Q30	Did you know which nurse was in charge of looking after you? (this would have been a different person after each shift change)	-
Q31	Did you have confidence and trust in any <b>other clinical staff</b> treating you (e.g. physiotherapists, speech therapists, psychologists)?	4
Q32	In your opinion, did the members of staff caring for you work well together?	4
Q33	Sometimes in a hospital, a member of staff will say one thing and another will say something quite different. Did this happen to you?	-

No.	Question	Non-specific responses
Q34	Were you involved as much as you wanted to be in decisions about your care and treatment?	-
Q35	Did you have confidence in the decisions made about your condition or treatment?	-
Q36	How much information about your condition or treatment was given to <b>you</b> ?	5
Q37	Did you find someone on the hospital staff to talk to about your worries and fears?	4
Q38	Do you feel you got enough emotional support from hospital staff during your stay?	4
Q39	Were you given enough privacy when discussing your condition or treatment?	-
Q40	Were you given enough privacy when being examined or treated?	-
Q41	Were you ever in any pain?	-
Q42	Do you think the hospital staff did everything they could to help control your pain?	-
Q43	If you needed attention, were you able to get a member of staff to help you <b>within a reasonable time</b> ?	4
Q44	During your stay in hospital, did you have an operation or procedure?	-
Q45	Beforehand, did a member of staff answer your questions about the operation or procedure in a way you could understand?	4
Q46	Beforehand, were you told how you could expect to feel after you had the operation or procedure?	-
Q47	After the operation or procedure, did a member of staff explain how the operation or procedure had gone in a way you could understand?	-
Q48	Did you feel you were involved in decisions about your discharge from hospital?	4
Q49	Were you given enough notice about when you were going to be discharged?	-
Q50	On the day you left hospital, was your discharge delayed for any reason?	-

No.	Question	Non-specific responses
Q51	What was the <b>MAIN</b> reason for the delay?	4
Q52	How long was the delay?	-
Q53	Where did you go after leaving hospital?	-
Q54	After leaving hospital, did you get enough support from health or social care professionals to help you recover and manage your condition?	4
Q55	When you left hospital, did you know what would happen next with your care?	4
Q56	Before you left hospital, were you given any written or printed information about what you should or should not do after leaving hospital?	-
Q57	Did a member of staff explain the <b>purpose</b> of the medicines you were to take at home in a way you could understand?	4, 5
Q58	Did a member of staff tell you about medication <b>side effects</b> to watch for when you went home?	4
Q59	Were you given clear written or printed information about your medicines?	4, 5
Q60	Did a member of staff tell you about any danger signals you should watch for after you went home?	4
Q61	Did hospital staff take your family or home situation into account when planning your discharge?	4, 5
Q62	Did the doctors or nurses give your family, friends or carers all the information they needed to help care for you?	4, 5, 6
Q63	Did hospital staff tell you who to contact if you were worried about your condition or treatment after you left hospital?	3
Q64	Did hospital staff discuss with you whether you would need any additional equipment in your home, or any adaptations made to your home, after leaving hospital?	3
Q65	Did hospital staff discuss with you whether you may need any further health or social care services after leaving hospital? (e.g. services from a GP, physiotherapist or community nurse, or assistance from social services or the voluntary sector)	3

No.	Question	Non-specific responses
Q66	After being discharged, was the care and support you expected available <b>when</b> you needed it?	3
Q67	Overall, did you feel you were treated with respect and dignity while you were in the hospital?	-
Q68	Overall...(Please circle a number)	-
Q69	During this hospital stay, did anyone discuss with you whether you would like to take part in a research study?	4
Q70	During your hospital stay, were you ever asked to give your views on the quality of your care?	3
Q71	Did you see, or were you given, any information explaining how to complain to the hospital about the care you received?	3
Q72	Did you feel well looked after by the <b>non-clinical</b> hospital staff (e.g. cleaners, porters, catering staff)?	4
Q73	Who was the main person or people that filled in this questionnaire?	-
Q74	Do you have any physical or mental health conditions, disabilities or illnesses that have lasted or are expected to last for 12 months or more? Include problems related to old age.	-
Q75	Do you have any of the following? Select ALL conditions you have that have lasted or are expected to last for 12 months or more.	-
Q76	Do any of these reduce your ability to carry out day-to-day activities?	-
Q77	Have you experienced any of the following in the last twelve months?	-
Q78	Are you male or female?	-
Q79	What was your <b>year</b> of birth?	-
Q80	What is your religion?	-
Q81	Which of the following best describes how you think of yourself?	-
Q82	What is your ethnic group?	-