

# DATA CLEANING GUIDANCE

## URGENT AND EMERGENCY CARE SURVEY 2018

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## 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: <http://nhssurveys.org/surveys/1254>

## Questions and comments

If you have any questions or concerns regarding this document, please contact the Survey Coordination Centre 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 Urgent and Emergency Care Survey **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 2018 Urgent and Emergency Care Survey participating trusts and contractors are required to submit data to the Survey Coordination Centre in a raw / uncleaned format<sup>1</sup>. The Survey Coordination Centre 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 Survey Coordination Centre to clean and standardise data submitted by contractors and trusts as part of the 2018 Urgent and Emergency Care Survey. By following the guidance in this document, it should be possible to recreate this cleaning process.

## Definitions

Definitions of terms commonly used in this document, as they apply to the 2018 Urgent and Emergency Care 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 Survey Coordination Centre 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 2018 Urgent and Emergency Care Survey **Type 1** questionnaire, the routing questions in the questionnaire are **Q1, Q4, Q9, Q19, Q26, Q28, Q29, Q31, Q36, Q37 and Q52**.

For the 2018 Urgent and Emergency Care Survey **Type 3** questionnaire, the routing questions in the questionnaire are **Q1, Q8, Q18, Q24, Q26, Q28, Q33, Q34 and Q49**.

**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 2018 Urgent and Emergency Care Survey **Type 1** questionnaire, the filtered questions in the questionnaire are **Q2, Q3, Q5, Q10, Q11, Q20, Q27-Q30, Q32, Q37-Q44, Q53 and Q54**.

For the 2018 Urgent and Emergency Care Survey **Type 3** questionnaire, the filtered questions in the questionnaire are **Q2, Q3, Q9, Q10, Q19, Q25-Q27, Q29, Q34-Q41, Q50 and Q51**.

**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.

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

For the 2018 Urgent and Emergency Care Survey **Type 1** questionnaire, the non-filtered questions are **Q1, Q4, Q6-Q9, Q12-Q19, Q21-Q26, Q31, Q33-Q36, Q45-Q52 and Q55**

For the 2018 Urgent and Emergency Care Survey **Type 3** questionnaire, the non-filtered questions are **Q1, Q4-Q8, Q11-Q18, Q20-Q24, Q28, Q30-Q33, Q42-Q49, and Q52**

**Sample data:** Patient data that is provided from the trust as part of the sampling process. This includes: gender, year of birth, ethnicity, department type, date of attendance, time of attendance, CCG code and NHS site code 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 Q55 for the Type 1 questionnaire, and Q1 to Q52 for the Type 3 questionnaire.

**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 2018 Urgent and Emergency Care Survey can be found in [Appendix B: Out-of-range data – Type 1](#) and [Appendix C: Out-of-range data – Type 3](#).

**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 need any help" or "I did not need an explanation". A full list of such responses for the 2018 Urgent and Emergency Care Survey can be found in [Appendix D: Non-specific responses – Type 1](#) and [Appendix E Non-specific responses – Type 3](#).

## Editing and Cleaning Final Data

### Approach and rationale

The aim of the Survey Coordination Centre 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>2</sup>. See table 1 for a list of all routing questions included in the 2018 Urgent and Emergency Care Survey Type 1 questionnaire, and table 2 for the 2018 Urgent and Emergency Care Survey Type 3 questionnaire, the response values that require cleaning and the appropriate filtered questions to recode as '998'.

Table 1. Appropriate cleaning for routing questions in the 2018 Urgent and Emergency Care Survey – Type 1 Questionnaire

Routing question	Response values requiring cleaning	Filtered questions to be recoded as '998'
Q1	1	Q2 - Q3
Q4	2	Q5
Q9	1	Q10 - Q11
Q19	2	Q20
Q26	2	Q27 - Q30
Q28	2 or 3	Q29
Q28	4	Q29 - Q30
Q29	1 or 2 or 3 or 4	Q30
Q31	2	Q32
Q36	1	Q37 - Q44
Q37	2	Q38 - Q39
Q52	2	See <a href="#">Cleaning Special Cases</a>

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

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<sup>2</sup> Code '998' is an arbitrary value chosen because it is out of range for all other questions on the survey.

Table 2. Appropriate cleaning for routing questions in the 2018 Urgent and Emergency Care Survey – Type 3 Questionnaire

Routing question	Response values requiring cleaning	Filtered questions to be recoded as '998'
Q1	1	Q2 - Q3
Q8	1	Q9 - Q10
Q18	2	Q19
Q24	2	Q25 - Q27
Q26	2 or 3 or 4	Q27
Q28	2	Q29
Q33	1 or 2	Q34 - Q41
Q34	2	Q35 - Q36
Q49	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](#).

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 as seen in example 1 below.

**Example 1:**

**24.** Did you have any tests (such as x-rays, scans or blood tests) when you visited the urgent care centre?

1  Yes → Go to 25

2  No → Go to 28

**25.** Did a member of staff explain **why you needed** these test(s) in a way you could understand?

1  Yes, completely

2  Yes, to some extent

3  No

In the example above, the response to Q25 would be recoded to '998' because according to their answer from Q24 (the routing question), respondents were supposed to skip Q25.

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 2:

**24.** Did you have any tests (such as x-rays, scans or blood tests) when you visited the urgent care centre?

1  Yes → Go to 25

2  No → Go to 28

**25.** Did a member of staff explain **why you needed** these test(s) in a way you could understand?

1  Yes, completely

2  Yes, to some extent

3  No

In the example above, Q24 would be coded as missing ('999') and the response to Q25 would remain as code 3.

## Cleaning Special Cases

### Cleaning of the long-term condition questions

The long-term condition questions refer to **Q52**, **Q53** and **Q54** in the **Type 1** questionnaire and **Q49**, **Q50** and **Q51** in the **Type 3** questionnaire. The cleaning rules are the same for both questionnaires though in the following instructions, **Type 1** question numbers are used.

**Q52** 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.

**Q53** 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.

**Q54** Do any of these reduce your ability to care out day-to-day activities?

Although **Q52** is a routing question and **Q53** and **Q54** 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 **Q52** but has answered **Q53** by selecting one or more long term condition, their response to **Q52** is cleaned by setting it to missing (code '999'). This is because their response to **Q53** indicates that they do in fact consider they have a long-standing condition. Instead of changing their response to **Q52** to an answer the patient did not select (i.e. "Yes"), we set it to missing so that it is no longer inconsistent with their response to **Q53**.

However, when a respondent has answered "No" to **Q52** and has not selected any long-term conditions in **Q53** but has answered **Q54** then their response to **Q54** is cleaned by setting it to not-applicable



(code '998'). As they have indicated that they do not have a long-term condition and have also skipped **Q53**, this would suggest that **Q54** was not applicable to them. See table 3 for a summary of how **Q52**, **Q53** and **Q54** in the Type 1 questionnaire are cleaned, and table 4 for a summary of how **Q49**, **Q50** and **Q51** in the Type 3 questionnaire are cleaned.

Table 3. Cleaning for Q52, Q53 and Q54 in the Type 1 questionnaire

Q52 response	Q53 response	Q54 response	Cleaning
Ticked option 2 (no)	Ticked one or more options	No response	Q52 is set to missing – '999'.
Ticked option 2 (no)	Ticked one or more options	Ticked any option	Q52 is set to missing – '999'.
Ticked option 2 (no)	No response	Ticked any option	Q54 is set to not-applicable – '998'.

Table 4. Cleaning for Q49, Q50 and Q51 in the Type 3 questionnaire

Q49 response	Q50 response	Q51 response	Cleaning
Ticked option 2 (no)	Ticked one or more options	No response	Q49 is set to missing – '999'.
Ticked option 2 (no)	Ticked one or more options	Ticked any option	Q49 is set to missing – '999'.
Ticked option 2 (no)	No response	Ticked any option	Q51 is set to not-applicable – '998'.

## 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 5). 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 5 and table 6).

Table 5. Eligibility and outcome codes of patients based on sample and response data of age – Type 1 questionnaire

Original outcome code	Sample data	Response data	Eligibility	Final outcome code
1	YoB ≤ 2002	Q49 > 2002	Eligible	1
1	YoB ≤ 2002	Q49 ≤ 2002	Eligible	1
1	YoB ≤ 2002	Q49 = missing	Eligible	1
1	YoB ≤ 2002	Q49 = out of range	Eligible	1
1	YoB = missing	Q49 > 2002	Ineligible	5
1	YoB = missing	Q49 ≤ 2002	Eligible	1

Table 6. Eligibility and outcome codes of patients based on sample and response data of age – Type 3 questionnaire

Original outcome code	Sample data	Response data	Eligibility	Final outcome code
1	YoB ≤ 2002	Q46 > 2002	Eligible	1
1	YoB ≤ 2002	Q46 ≤ 2002	Eligible	1
1	YoB ≤ 2002	Q46 = missing	Eligible	1
1	YoB ≤ 2002	Q46 = out of range	Eligible	1
1	YoB = missing	Q46 > 2002	Ineligible	5
1	YoB = missing	Q46 ≤ 2002	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>3</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 **Q49** in the Type 1 questionnaire (**Q46** in the Type 3 questionnaire) would be considered as an out-of-range response and would therefore be set to missing. For the 2018 Urgent and Emergency Care Survey, out of range responses for **Q49** in Type 1 (and **Q46** in Type 3) are defined as **Q49 ≤ 1900 or Q49 ≥ 2003**. 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. Q11, Q13, Q15, Q17, Q18, Q22, Q24, Q27, Q30, Q34, Q43, Q45, and Q54 in the Type 1 questionnaire, and Q6, Q10, Q12, Q14, Q16, Q21, Q22, Q25, Q31, Q33, Q40, Q42, and Q51 in the Type 3 questionnaire) with response data of **≤ 0 or ≥ 4** would be set to missing. A full list of out-of-range responses for the 2018 Urgent and Emergency Care Survey is listed in [Appendix B: Out-of-range data – Type 1](#) and [Appendix C: Out-of-range data – Type 3](#).

## Usability

Sometimes questionnaires are returned with only a very small number of questions completed. As in previous years, for the 2018 Urgent and Emergency Care Survey, questionnaires containing fewer than five responses are considered 'unusable' – we will set all responses pertaining to such cases as 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, Q50 from the Type 3 questionnaire would be counted as one response in the below scenario.

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<sup>3</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.

**Q50.** 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 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 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 Survey Coordination Centre codes missing responses in the data as '999'<sup>4</sup>. For results to be consistent with those produced by the Survey Coordination Centre, missing responses should be presented but should not be included in the base number of respondents for percentages.

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<sup>4</sup> This is an arbitrary value chosen because it is 'out-of-range' for all other questions on the survey.

The Survey Coordination Centre will suppress results at both national and trust level for questions that have fewer than 30 respondents.

## Non-specific responses

As well as excluding missing responses from results, the Survey Coordination Centre 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. For a full listing of 'non-specific' responses in the 2018 Urgent and Emergency Care Survey, please see [Appendix D: Non-specific responses – Type 1](#) and [Appendix E: Non-specific responses – Type 3](#).

# Appendix A: Example of cleaning

Figure 1 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 attendance to the A&E was the first service they went to or contacted for help with their condition (Q1=1), but have both responded to subsequent filtered questions which are only applicable for patients that visited or contacted a different service before the A&E (respondent '0005' has answered the first filter question (Q2) before skipping the remaining filter questions, whilst respondent '0007' has answered Q2 and Q3).

Record	Outcome	Q1	Q2	Q3
Patient Record Number	Outcome of Sending questionnaire (N)	Was this A&E department the <b>first</b> service you went to, or contacted, for help with your condition?	Before going to this A&E department where did you go to or contact, for help with your condition?	What was the MAIN reason for going to A&E following your contact with the service above?
UEC18...0001	6			
UEC18...0002	1	1	.	.
UEC18...0003	1	2	3	1
UEC18...0004	4			
UEC18...0005	1	1	2	.
UEC18...0006	6			
UEC18...0007	1	1	1	2
UEC18...0008	1	2	2	1

Figure 1. 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	1	Q2 – Q3

In accordance with this, all responses for **Q2** and **Q3** must be set to missing in cases where the respondent has ticked **Q1 = 1** (i.e. "yes they visited A&E first").

Figure 2 below shows how the data would look after cleaning is complete by the Survey Coordination Centre to remove responses to filtered questions that should have been skipped – cells where responses have been set to missing are shaded.

<b>Record</b>	<b>Outcome</b>	<b>Q1</b>	<b>Q2</b>	<b>Q3</b>
Patient Record Number	Outcome of Sending questionnaire (N)	Was this A&E department the <b>first</b> service you went to, or contracted, for help you're your condition?	Before going to this A&E department where did you go to or contact, for help with your condition?	What was the MAIN reason for going to A&E following your contact with the service above?
UEC18...0001	6			
UEC18...0002	1	1	.	.
UEC18...0003	1	2	3	1
UEC18...0004	4			
UEC18...0005	1	1	998	.
UEC18...0006	6			
UEC18...0007	1	1	998	998
UEC18...0008	1	2	2	1

Figure 2. Example of cleaned data.

# Appendix B: Out-of-range data – Type 1

Variable	Out-of-range data
Birth	≤ 1900 ≥ 2003
Gender	≤ 0 3-8 ≥ 10
Ethnicity	Anything except A-H, J-N, P, R, S or Z
DateOfAttendance	≤ 0 ≥ 31
MonthOfAttendance	≤ 8 ≥ 10
YearOfAttendance	≤ 2017 ≥ 2019
TimeOfAttendance	Anything not between the hours of 00:00 and 23:59
DayQRec	≤ 0 ≥ 32
MonthQRec	≤ 0 4-9 ≥ 13
YearQRec	≤ 2017 ≥ 2020
Q1	≤ 0 ≥ 3
Q2	≤ 0 ≥ 9
Q3	≤ 0 ≥ 7
Q4	≤ 0 ≥ 3
Q5	≤ 0 ≥ 8
Q6	≤ 0 ≥ 5
Q7	≤ 0 ≥ 6
Q8	≤ 0 ≥ 6
Q9	≤ 0 ≥ 8

Variable	Out-of-range data
Q10	≤ 0 ≥ 6
Q11	≤ 0 ≥ 4
Q12	≤ 0 ≥ 9
Q13	≤ 0 ≥ 4
Q14	≤ 0 ≥ 5
Q15	≤ 0 ≥ 4
Q16	≤ 0 ≥ 5
Q17	≤ 0 ≥ 4
Q18	≤ 0 ≥ 4
Q19	≤ 0 ≥ 3
Q20	≤ 0 ≥ 5
Q21	≤ 0 ≥ 5
Q22	≤ 0 ≥ 4
Q23	≤ 0 ≥ 6
Q24	≤ 0 ≥ 4
Q25	≤ 0 ≥ 5
Q26	≤ 0 ≥ 3
Q27	≤ 0 ≥ 4
Q28	≤ 0 ≥ 5
Q29	≤ 0 ≥ 5
Q30	≤ 0 ≥ 4



Variable	Out-of-range data
Q31	$\leq 0$ $\geq 3$
Q32	$\leq 0$ $\geq 5$
Q33	$\leq 0$ $\geq 6$
Q34	$\leq 0$ $\geq 4$
Q35	$\leq 0$ $\geq 6$
Q36	$\leq 0$ $\geq 3$
Q37	$\leq 0$ $\geq 3$
Q38	$\leq 0$ $\geq 5$
Q39	$\leq 0$ $\geq 5$
Q40	$\leq 0$ $\geq 5$
Q41	$\leq 0$ $\geq 6$
Q42	$\leq 0$ $\geq 5$
Q43	$\leq 0$ $\geq 4$
Q44	$\leq 0$ $\geq 5$
Q45	$\leq 0$ $\geq 4$
Q46	$< 0$ $\geq 11$
Q47	$\leq 0$ $\geq 5$
Q48	$\leq 0$ $\geq 3$
Q49	$\leq 1900$ $\geq 2003$
Q50	$\leq 0$ $\geq 10$
Q51	$\leq 0$ $\geq 6$
Q52	$\leq 0$ $\geq 3$
Q53_1	$< 0$ $\geq 2$

Variable	Out-of-range data
Q53_2	$< 0$ $\geq 2$
Q53_3	$< 0$ $\geq 2$
Q53_4	$< 0$ $\geq 2$
Q53_5	$< 0$ $\geq 2$
Q53_6	$< 0$ $\geq 2$
Q53_7	$< 0$ $\geq 2$
Q53_8	$< 0$ $\geq 2$
Q53_9	$< 0$ $\geq 2$
Q53_10	$< 0$ $\geq 2$
Q53_11	$< 0$ $\geq 2$
Q53_12	$< 0$ $\geq 2$
Q53_13	$< 0$ $\geq 2$
Q54	$\leq 0$ $\geq 4$
Q55	$\leq 0$ $\geq 19$

# Appendix C: Out-of-range data – Type 3

Variable	Out-of-range data
Birth	≤ 1900 ≥ 2003
Gender	≤ 0 3-8 ≥ 10
Ethnicity	Anything except A-H, J-N, P, R, S or Z
DateOfAttendance	≤ 0 ≥ 32
MonthOfAttendance	≤ 7 ≥ 10
YearOfAttendance	≤ 2017 ≥ 2019
TimeOfAttendance	Anything not between the hours of 00:00 and 23:59
DayQRec	≤ 0 ≥ 32
MonthQRec	≤ 0 4-9 ≥ 13
YearQRec	≤ 2017 ≥ 2020
Q1	≤ 0 ≥ 3
Q2	≤ 0 ≥ 9
Q3	≤ 0 ≥ 7
Q4	≤ 0 ≥ 5
Q5	≤ 0 ≥ 6
Q6	≤ 0 ≥ 4
Q7	≤ 0 ≥ 7
Q8	≤ 0 ≥ 8
Q9	≤ 0 ≥ 6

Variable	Out-of-range data
Q10	≤ 0 ≥ 4
Q11	≤ 0 ≥ 6
Q12	≤ 0 ≥ 4
Q13	≤ 0 ≥ 5
Q14	≤ 0 ≥ 4
Q15	≤ 0 ≥ 5
Q16	≤ 0 ≥ 4
Q17	≤ 0 ≥ 5
Q18	≤ 0 ≥ 3
Q19	≤ 0 ≥ 5
Q20	≤ 0 ≥ 5
Q21	≤ 0 ≥ 4
Q22	≤ 0 ≥ 4
Q23	≤ 0 ≥ 5
Q24	≤ 0 ≥ 3
Q25	≤ 0 ≥ 4
Q26	≤ 0 ≥ 5
Q27	≤ 0 ≥ 5
Q28	≤ 0 ≥ 3
Q29	≤ 0 ≥ 5
Q30	≤ 0 ≥ 6

Variable	Out-of-range data
Q31	$\leq 0$ $\geq 4$
Q32	$\leq 0$ $\geq 6$
Q33	$\leq 0$ $\geq 4$
Q34	$\leq 0$ $\geq 3$
Q35	$\leq 0$ $\geq 5$
Q36	$\leq 0$ $\geq 5$
Q37	$\leq 0$ $\geq 5$
Q38	$\leq 0$ $\geq 6$
Q39	$\leq 0$ $\geq 5$
Q40	$\leq 0$ $\geq 4$
Q41	$\leq 0$ $\geq 5$
Q42	$\leq 0$ $\geq 4$
Q43	$< 0$ $\geq 11$
Q44	$\leq 0$ $\geq 5$
Q45	$\leq 0$ $\geq 3$
Q46	$\leq 1900$ $\geq 2003$
Q47	$\leq 0$ $\geq 10$
Q48	$\leq 0$ $\geq 6$
Q49	$\leq 0$ $\geq 3$
Q50_1	$< 0$ $\geq 2$
Q50_2	$< 0$ $\geq 2$
Q50_3	$< 0$ $\geq 2$
Q50_4	$< 0$ $\geq 2$

Variable	Out-of-range data
Q50_5	$< 0$ $\geq 2$
Q50_6	$< 0$ $\geq 2$
Q50_7	$< 0$ $\geq 2$
Q50_8	$< 0$ $\geq 2$
Q50_9	$< 0$ $\geq 2$
Q50_10	$< 0$ $\geq 2$
Q50_11	$< 0$ $\geq 2$
Q50_12	$< 0$ $\geq 2$
Q50_13	$< 0$ $\geq 2$
Q51	$\leq 0$ $\geq 4$
Q52	$\leq 0$ $\geq 19$

## Appendix D: Non-specific responses – Type 1

The following table lists all ‘non-specific responses’ included in the 2018 Urgent and Emergency Care Survey Type 1 questionnaire. Numbers in the final column indicate the response option(s) 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 this A&E department the first service you went to, or contacted, for help with your condition?	-
Q2	Before going to this A&E department, where did you go to, or contact, for help with your condition? (Cross ONE only - if more than one option applies, cross the last one you went to, or contacted, before A&E)	-
Q3	What was the MAIN reason for going to A&E following your contact with the service above?	-
Q4	Were you taken to A&E in an ambulance?	-
Q5	Once you arrived at A&E, how long did you wait with the ambulance crew before your care was handed over to the A&E staff?	7
Q6	Were you given enough privacy when discussing your condition with the receptionist?	4
Q7	Before your most recent visit to A&E, had you previously been to the same A&E department about the same condition or something related to it?	5
Q8	How long did you wait before you first spoke to a nurse or doctor?	5
Q9	Sometimes, people will first talk to a doctor or nurse and be examined later. From the time you arrived, how long did you wait before being examined by a doctor or nurse?	7
Q10	Were you informed how long you would have to wait to be examined?	5
Q11	While you were waiting, were you able to get help from a member of staff?	3

No.	Question	Non-specific responses
Q12	Overall, how long did your visit to A&E last?	8
Q13	Did you have enough time to discuss your condition with the doctor or nurse?	-
Q14	While you were in A&E, did a doctor or nurse explain your condition and treatment in a way you could understand?	4
Q15	Did the doctors and nurses listen to what you had to say?	-
Q16	If you had any anxieties or fears about your condition or treatment, did a doctor or nurse discuss them with you?	4
Q17	Did you have confidence and trust in the doctors and nurses examining and treating you?	-
Q18	Did doctors or nurses talk to each other about you as if you weren't there?	-
Q19	When you were at A&E, did you have a family member, friend or carer with you?	-
Q20	If a family member, friend or carer wanted to talk to a doctor, did they have enough opportunity to do so?	4
Q21	While you were in A&E, how much information about your condition or treatment was given to you?	-
Q22	Were you given enough privacy when being examined or treated?	-
Q23	If you needed attention, were you able to get a member of medical or nursing staff to help you?	5
Q24	Sometimes, a member of staff will say one thing and another will say something quite different. Did this happen to you?	-
Q25	Were you involved as much as you wanted to be in decisions about your care and treatment?	4
Q26	Did you have any tests (such as x-rays, scans or blood tests) when you visited A&E?	-
Q27	Did a member of staff explain why you needed these test(s) in a way you could understand?	-
Q28	Before you left A&E, did you get the results of your tests?	4
Q29	Did a member of staff explain the results of the tests in a way you could understand?	4
Q30	If you did not get the results of the tests when you were in A&E, did a member of staff explain how you would receive them?	3

No.	Question	Non-specific responses
Q31	Were you in any pain while you were in A&E?	-
Q32	Do you think the hospital staff did everything they could to help control your pain?	4
Q33	In your opinion, how clean was the A&E department?	5
Q34	While you were in A&E, did you feel threatened by other patients or visitors?	-
Q35	Were you able to get suitable food or drinks when you were in A&E?	5
Q36	At the end of your visit to A&E, were you transferred to a hospital ward?	-
Q37	Before you left A&E, were you prescribed any new medications?	-
Q38	Did a member of staff explain the purpose of the medications you were to take at home in a way you could understand?	4
Q39	Did a member of staff tell you about medication side effects to watch for?	4
Q40	Did a member of staff tell you when you could resume your usual activities, such as when to go back to work or drive a car?	4
Q41	Did hospital staff take your family or home situation into account when you were leaving A&E?	4, 5
Q42	Did a member of staff tell you about what symptoms to watch for regarding your illness or treatment after you went home?	4
Q43	Did hospital staff tell you who to contact if you were worried about your condition or treatment after you left A&E?	3
Q44	Did staff give you enough information to help you care for your condition at home?	4
Q45	Overall, did you feel you were treated with respect and dignity while you were in A&E?	-
Q46	Overall...(Please circle a number)	-
Q47	Who was the main person or people that filled in this questionnaire?	-
Q48	Are you male or female?	-
Q49	What was your year of birth? (Please write in)	-

<b>Q50</b>	What is your religion?	-
<b>Q51</b>	Which of the following best describes how you think of yourself?	-
<b>Q52</b>	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.	-
<b>Q53</b>	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.	-
<b>Q54</b>	Do any of these reduce your ability to carry out day-to-day activities?	-
<b>Q55</b>	What is your ethnic group?	-

## Appendix E: Non-specific responses – Type 3

The following table lists all ‘non-specific responses’ included in the 2018 Urgent and Emergency Care Survey Type 3 questionnaire. 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 this urgent care centre the first service you went to, or contacted, for help with your condition?	-
Q2	Before going to this urgent care centre, where did you go to, or contact, for help with your condition? (Cross ONE only - if more than one option applies, cross the last one you went to, or contacted, before the urgent care centre)	-
Q3	What was the MAIN reason for going to the urgent care centre following your contact with the service above?	-
Q4	Were you given enough privacy when discussing your condition with the receptionist?	4
Q5	Before your most recent visit to this urgent care centre, had you previously been to the same urgent care centre about the same condition or something related to it?	5
Q6	Did you have an appointment on your most recent visit to the urgent care centre?	3
Q7	How long did you wait before you first spoke to a health professional?	6
Q8	Sometimes, people will first talk to a health professional and be examined later. From the time you arrived, how long did you wait before being examined?	7
Q9	Were you informed how long you would have to wait to be examined?	5
Q10	While you were waiting, were you able to get help from a member of staff?	3
Q11	Overall, how long did your visit to the urgent care centre last?	5



No.	Question	Non-specific responses
Q12	Did you have enough time to discuss your condition with the health professional?	-
Q13	While you were in the urgent care centre, did a health professional explain your condition and treatment in a way you could understand?	4
Q14	Did the health professional listen to what you had to say?	-
Q15	If you had any anxieties or fears about your condition or treatment, did a health professional discuss them with you?	4
Q16	Did you have confidence and trust in the health professional examining and treating you?	-
Q17	Did health professionals talk to each other about you as if you weren't there?	4
Q18	When you were at the urgent care centre, did you have a family member, friend or carer with you?	-
Q19	If a family member, friend or carer wanted to talk to a health professional, did they have enough opportunity to do so?	4
Q20	While you were at the urgent care centre, how much information about your condition or treatment was given to you?	-
Q21	Were you given enough privacy when being examined or treated?	-
Q22	Sometimes, a member of staff will say one thing and another will say something quite different. Did this happen to you?	-
Q23	Were you involved as much as you wanted to be in decisions about your care and treatment?	4
Q24	Did you have any tests (such as x-rays, scans or blood tests) when you visited the urgent care centre?	-
Q25	Did a member of staff explain why you needed these test(s) in a way you could understand?	-
Q26	Before you left the urgent care centre, did you get the results of your tests?	4
Q27	Did a member of staff explain the results of the tests in a way you could understand?	4
Q28	Were you in any pain while you were at the urgent care centre?	-
Q29	Do you think the staff did everything they could to help control your pain?	4

No.	Question	Non-specific responses
Q30	In your opinion, how clean was the urgent care centre?	5
Q31	While you were in the urgent care centre, did you feel threatened by other patients or visitors?	-
Q32	Were you able to get suitable food or drinks when you were at the urgent care centre?	5
Q33	What happened at the end of your visit to the urgent care centre?	-
Q34	Before you left the urgent care centre, were you prescribed any new medications?	-
Q35	Did a member of staff explain the purpose of the medications you were to take at home in a way you could understand?	4
Q36	Did a member of staff tell you about medication side effects to watch for?	4
Q37	Did a member of staff tell you when you could resume your usual activities, such as when to go back to work or drive a car?	4
Q38	Did a member of staff take your family or home situation into account when you were leaving the urgent care centre?	4, 5
Q39	Did a member of staff tell you about what symptoms to watch for regarding your illness or treatment after you went home?	4
Q40	Did a member of staff tell you who to contact if you were worried about your condition or treatment after you left the urgent care centre?	3
Q41	Did staff give you enough information to help you care for your condition at home?	4
Q42	Overall, did you feel you were treated with respect and dignity while you were in the urgent care centre?	-
Q43	Overall...(Please circle a number)	-
Q44	Who was the main person or people that filled in this questionnaire?	-
Q45	Are you male or female?	-
Q46	What was your year of birth? (Please write in)	-
Q47	What is your religion?	-

<b>Q48</b>	Which of the following best describes how you think of yourself?	-
<b>Q49</b>	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.	-
<b>Q50</b>	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.	-
<b>Q51</b>	Do any of these reduce your ability to carry out day-to-day activities?	-
<b>Q52</b>	What is your ethnic group?	-