

DATA CLEANING GUIDANCE

NHS MATERNITY SURVEY 2019

Last updated: 21st May 2019

Contacts

The Survey Coordination Centre for the NHS Patient Survey Programme
Picker Institute Europe
Buxton Court
3 West Way
Oxford
OX2 0BJ

Tel: 01865 208 127
Fax: 01865 208 101
E-mail: maternity@surveycoordination.com
Website: www.nhssurveys.org

Updates

Before you use this document, please check that you have the latest version as small amendments may be made from time to time (the date of the last update is on the front page).

This document is available from: <http://www.nhssurveys.org/surveys/1425>.

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 contractors and in-house trusts:

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

Contents

1	Data cleaning overview	3
1.1	Introduction	3
1.2	Definitions	3
2	Cleaning final data	6
2.1	Approach	6
2.2	Filtered questions	6
2.3	Long-term conditions questions	8
2.4	Multiple response questions	8
2.5	Demographic questions	9
2.6	Eligibility	10
2.7	Out-of-range data	11
2.8	Usability	12
2.9	User-missing responses	12
2.10	Non-specific responses	13
Appendix A	Example of cleaning	14
Appendix B	Out-of-range data	15
Appendix C	Non-specific responses	18

1 Data cleaning overview

1.1 Introduction

Once fieldwork for the 2019 Maternity Survey has been completed, contractors and in-house trusts are required to submit final data to the Survey Coordination Centre in a **raw (uncleaned)** format. The Survey Coordination Centre will clean the data once all contractors and in-house trusts have submitted their files. To ensure the cleaning process is comparable across all trusts, cleaning is carried out on the full collated dataset.

This document provides a description of the processes the Survey Coordination Centre will use to clean and standardise data submitted by contractors and in-house trusts as part of the 2019 Maternity Survey. By following the guidance contained in this document it should be possible to recreate this cleaning process.

1.2 Definitions

Definitions of key terms used in this document, as they apply to the 2019 Maternity Survey, are as follows:

Raw data

This is uncleaned data that has been entered from completed questionnaires, following the instructions in the [Entering and Submitting Final Data](#) document. The requirement for raw data does **NOT**, however, preclude the checking of data for errors resulting from problems with data entry or similar, as detailed in the [Final Data Checklist](#).

Data cleaning

This refers to all editing processes applied to the final collated dataset by the Survey Coordination Centre.

Routing questions

These are items in the questionnaire which instruct respondents to either continue to the next question or to skip non-applicable questions, depending on their response to the routing question. For the 2019 Maternity Survey, the routing questions are **B12, C4, C8, D2, F4, G2** and **G4**. There are also two routing statements at the beginning of Sections **C** and **D** which instruct respondents to skip questions that are not applicable to them.

Filtered questions

These are items in the questionnaire that are not intended to be answered by all respondents. Whether a respondent is expected to answer a filtered question depends on their response to the relevant routing question. For the 2019 Maternity Survey, the filtered questions are **B13, C1-C7, C9-C10, D1-D8, F5-F10, G3** and **G5-G6**.

Non-filtered questions

These are items in the questionnaire which are not subject to any filtering and should therefore be answered by all respondents. For the 2019 Maternity Survey, the non-filtered questions are **A1-A2, B1-B12, B14-B18, C8, C11-C22, E1-E4, F1-F4, F11-F20, G1-G2, G4** and **G7-G9**.

Sample data

This is patient data that is provided by the trust as part of the sampling process. It includes variables such as ethnicity and year of birth, as recorded on the trust's system.

Response data

This is data from questionnaires which respondents have completed, and includes answers to **A1** through **G9**.

Out-of-range data

This refers to instances where a variable contains a value that is not permissible. For categorical data – most of the variables in this survey – this would mean, for example, a value of '3' being entered for a variable with only two response categories (1 or 2).

Outcome

An outcome code is given to each woman to indicate the end result of their participation in the survey. These codes are used when calculating the adjusted response rate for the survey and it is therefore vital to ensure all women are coded appropriately. The coding for outcome is as follows:

Outcome 1: Returned completed questionnaire

Outcome 2: Undelivered / moved house

Outcome 3: Mother / baby deceased (during fieldwork)

Outcome 4: Too ill / opted out / returned blank questionnaire

Outcome 5: Ineligible

Outcome 6: Questionnaire not returned

Outcome 7: Mother / baby deceased (before fieldwork)

Non-specific responses

These are response options that do not provide useful evaluative information. Most commonly, these are responses such as "Don't know / can't remember". In addition, responses that indicate the question is not applicable to the respondent are considered non-specific, for example, responses such as "I did not see a midwife" or "I did not use pain relief".

Missing responses

This describes cases where a valid response is not present for a question. There are two types of missing data:

- Non-applicable: this is when a respondent did not answer a question they were **not expected** to answer. These cases are recoded to '998'¹ during data cleaning.
- User-missing: this is when a respondent did not answer a question they were **expected** to answer. These cases are recoded to '999'¹ during data cleaning.

¹ This is an arbitrary value chosen because it is out-of-range for all questions in the survey.

2 Cleaning final data

2.1 Approach

The Survey Coordination Centre's aim in cleaning the collated final data is to ensure an optimal balance between data quality and completeness. We do this by recoding responses that are known to be erroneous or inappropriate.

2.2 Filtered questions

Certain responses to routing questions indicate that the corresponding filtered questions are not applicable to the respondent, and should therefore be skipped. During cleaning, filtered questions that are supposed to be skipped are recoded to '998' to indicate a non-applicable response. This code is applied regardless of whether the respondent correctly skipped the filtered question, or incorrectly answered it. See Table 1 for a summary of the cleaning applied to filtered questions in the 2019 Maternity Survey².

Table 1: Cleaning instructions for filtered questions

Routing question	Response value	Filtered question
if B12 = 2, 3 or 4 then recode	B13	to '998'
if C4 = 2, 3 or 4 then recode	C5	to '998'
if C8 = 3 then recode	C1-C7 ³	to '998'
if C8 = 3 or 4 then recode	C9-C10	to '998'
if D2 = 2 then recode	D3	to '998'
if F4 = 4, 5 or 6 then recode	F5-F10	to '998'
if G2 = 2 then recode	G3	to '998'
if G4 = 2 see Section 2.3		

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

² While there is a routing instruction at the beginning of Section **D** instructing respondents to skip to Section **E** if they had a home birth and did not go to hospital, it is still possible for women who had home births to spend time in hospital right after birth. To avoid cleaning out valid responses, Section **D** questions are therefore *not* recoded to '998' if women indicated they had a home birth (**C6** = 3).

³ There is a routing instruction at the beginning of Section **C** instructing respondents to skip to **C8** if they had a planned caesarean. Responses to **C1-C7** are therefore recoded to '998' if a woman indicated they had a planned caesarean in question **C8** (**C8** = 3).

Responses to filtered questions are *only* recoded where respondents have ticked a response on an earlier routing question instructing them to skip these questions. In the example below, the response to **D3** would be recoded to '998' because according to the respondent's answer to **D2** (the routing question), they were supposed to skip **D3**.

<p>D2. On the day you left hospital, was your discharge delayed for any reason?</p> <p>1 <input type="checkbox"/> Yes → Go to D3</p> <p>2 <input checked="" type="checkbox"/> No → Go to D4</p> <p>D3. What was the main reason for the delay? (Cross ONE only)</p> <p>1 <input type="checkbox"/> I had to wait for medicines</p> <p>2 <input type="checkbox"/> I had to wait to see the midwife</p> <p>3 <input type="checkbox"/> I had to wait to see the doctor</p> <p>4 <input type="checkbox"/> I had to wait for test results</p> <p>5 <input type="checkbox"/> I had to wait for a check to be done on my baby</p> <p>6 <input checked="" type="checkbox"/> Something else</p>
--

Responses to filtered questions are *not* removed where the response to the relevant routing question is *user-missing*⁴. In the example below, the response to **D3** would remain as code 6 and **D2** would be coded as user-missing ('999').

<p>D2. On the day you left hospital, was your discharge delayed for any reason?</p> <p>1 <input type="checkbox"/> Yes → Go to D3</p> <p>2 <input type="checkbox"/> No → Go to D4</p> <p>D3. What was the main reason for the delay? (Cross ONE only)</p> <p>1 <input type="checkbox"/> I had to wait for medicines</p> <p>2 <input type="checkbox"/> I had to wait to see the midwife</p> <p>3 <input type="checkbox"/> I had to wait to see the doctor</p> <p>4 <input type="checkbox"/> I had to wait for test results</p> <p>5 <input type="checkbox"/> I had to wait for a check to be done on my baby</p> <p>6 <input checked="" type="checkbox"/> Something else</p>

A worked example of the cleaning process for recoding non-applicable responses to filtered questions is included in [Appendix A](#).

⁴ Please note that user-missing responses to routing questions should remain user-missing (instead of being back-coded) even if a respondent has answered the related filtered questions.

2.3 Long-term conditions questions

The long-term conditions questions (routing question **G4** and filtered questions **G5-G6**) require special cleaning.

If a respondent answers “No” to **G4** (“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?”), but selects one or more long-term conditions in **G5**, their response to **G4** is set to user-missing (‘999’) and their response to **G5** (e.g. “Breathing problem, such as asthma”) is retained. This is because their response to **G5** indicates that they do in fact consider themselves to have a long-term condition.

However, if a respondent answers “No” to **G4** and does not select any long-term conditions in **G5**, but then goes on to answer **G6**, their response to **G6** (“Do any of these reduce your ability to carry out day-to-day activities?”) is set to non-applicable (‘998’). As they have indicated that they do not have a long-term condition and have also skipped **G5**, this would suggest that **G6** is also not applicable to them. See Table 2 below for a summary of the cleaning applied to the long-term conditions questions.

Table 2: Cleaning instructions for the long-term conditions questions

G4 response	G5 response	G6 response	Cleaning
“No”	any option(s)	user-missing	recode G4 to ‘999’
“No”	any option(s)	any option	recode G4 to ‘999’
“No”	user-missing	any option	recode G6 to ‘998’

2.4 Multiple response questions

There are six multiple response questions in the 2019 Maternity Survey (where respondents are allowed to tick more than one option): **B4**, **C3**, **C5**, **C15**, **D7** and **G5**. Three of these receive scoring during data analysis (so that trusts can be benchmarked against each other) and as such undergo additional cleaning, as outlined below. A summary of the cleaning applied to these questions is provided in Table 3.

Question B4

If a respondent identifies that they were given a choice of where to give birth by selecting any of the options 1-4, this takes precedence over the other options indicating that a choice was not possible or not known (i.e. options 5-7 are coded to ‘0’ if options 1, 2, 3 **or** 4 are selected). If options 5 **and** 6 are ticked then 6 is given precedence because it indicates that the respondent could not have a choice for medical reasons; therefore option 5 is set to ‘0’. If options 5 **or** 6 are ticked and option 7 is also ticked, then option 7 (“Don’t know / can’t remember”) is set to ‘0’. If options 6 **and** 7 are selected, option 6 is given precedence because it indicates a choice (whereas option 7 provides no information about the respondent’s experience), and option 7 is then set to ‘0’.

Question C15

If a respondent selects conflicting responses (i.e. 5 **and** any of 1-4), all of their responses to this question are recoded to user-missing. This is because there is no way to clarify the respondent's choice, and as the question is scored, it is important not to include incorrect data.

Question D7

Similar to the cleaning for **C15**, if a respondent selects conflicting responses (either 1 or 5 **and** any of 2-4) for question **D7**, all of their responses for this question are set to user-missing. If a respondent selects both 1 **and** 5, their responses for this question are also set to user-missing.

Table 3: Cleaning instructions for multiple response questions

Multiple response question		Response values		Response values	
if	B4	=	1, 2, 3 or 4	then recode	5, 6, 7 to '0'
if	B4	=	5 and 6	then recode	5 to '0'
if	B4	=	5 or 6	then recode	7 to '0'
if	B4	=	6 and 7	then recode	7 to '0'
if	C15	=	5 and (1, 2, 3 or 4)	then recode	1, 2, 3, 4, 5 to '999'
if	D7	=	(1 or 5) and (2, 3 or 4)	then recode	1, 2, 3, 4, 5 to '999'
if	D7	=	1 and 5	then recode	1, 2, 3, 4, 5 to '999'

2.5 Demographic questions

In a small number of cases, sample data and response data do not correspond for year of birth and ethnicity. For example, the sample may identify a woman as being born in 1980 only for the woman to self-report being born in 1985.

Where responses to demographic questions are present, it is assumed that these are more likely to be accurate than sample data (since respondents are presumably best placed to know their own age and ethnicity). However, because demographic questions 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 sample data and response data⁵. To do this, we first copy all valid responses to survey demographic questions into a new variable. Where response data is user-missing we then copy in the relevant sample data. Note that for a very small number of women demographic information may be missing in both the sample and response data. In such cases data must be left missing in the new variable.

2.6 Eligibility

Women aged under 16 (year of birth \geq 2004) at the time of delivery are ineligible for the survey. However there may be instances where respondents are recorded as over 16 in the sample data, but who report themselves as under 16 in the response data. When this occurs, respondents are *not* considered ineligible and will therefore remain as outcome 1, as shown in Table 4. This is to avoid removing legitimate responses because of an overly conservative approach to assessing eligibility. In other words, where a woman's age is mismatched between the sample and response data, the benefit of the doubt is given when assessing eligibility because we cannot be certain whether this mismatch occurred due to an error in the sample file, an error in the respondent's completion of the questionnaire, or an error in data entry.

An unlikely scenario is that a respondent indicates they are under 16 in the response data, but year of birth is missing from the sample data. As the response data is the only available information for their year of birth, these respondents will be considered ineligible for the survey and will therefore be recoded to outcome 5 ('ineligible'), except where the respondent has accidentally entered the current survey year (2019), as shown in Table 4.

In the unlikely event that the sample data indicates a respondent is under 16, they will be considered ineligible and changed to outcome 5 *only* if the response data is user-missing or out-of-range (except where the respondent has accidentally entered the current survey year – 2019), as shown in Table 4. However, since the sample data is checked for ineligible women prior to approval, there are unlikely to be any such cases in the final data.

⁵ The exception to this is when response rates are calculated. Because response rates vary between demographic groups, using combined 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 women who completed the questionnaire. Therefore, only the sample data should be used to calculate response rates by demographic groups.

Table 4: Outcome code cleaning for ineligible respondents

Original outcome	Age from sample data	Age from response data	Eligibility	Cleaned outcome
1	over 16 (≤ 2003)	over 16 (≤ 2003)	eligible	1
1	over 16 (≤ 2003)	under 16 (≥ 2004)	eligible	1
1	over 16 (≤ 2003)	user-missing	eligible	1
1	under 16 (≥ 2004)	over 16 (≤ 2003)	eligible	1
1	under 16 (≥ 2004)	under 16 (≥ 2004 but $\neq 2019^*$)	ineligible	5
1	under 16 (≥ 2004)	user-missing	ineligible	5
1	under 16 (≥ 2004)	over 70 (≤ 1948)	ineligible	5
1	missing	over 16 (≤ 2003)	eligible	1
1	missing	under 16 (≥ 2004 but $\neq 2019^*$)	ineligible	5
1	missing	user-missing	eligible	1

* *i.e. the current survey year.*

2.7 Out-of-range data

Out-of-range data must be set to user-missing for each question in the survey. Out-of-range responses will depend on the number of response options for each question. For instance, all questions with two response options (i.e. **D2**, **G2** and **G4**) that have response values of ≤ 0 or ≥ 3 would be set to user-missing.

With regards to the year of birth question (**G1**), out-of-range responses for the 2019 Maternity Survey are defined as ≤ 1948 or ≥ 2004 (over 70 or under 16). Such responses must only be set to user-missing after eligibility has been determined as described in [Section 2.6](#).

A full list of out-of-range responses for the 2019 Maternity Survey is available in [Appendix B](#).

2.8 Usability

Sometimes questionnaires are returned with only a very small number of questions completed. For the 2019 Maternity Survey, any returned questionnaires with fewer than five questions answered are considered 'unusable' – we will delete all responses for such cases and recode outcome to 6 ('questionnaire not returned'). This should only affect a very limited number of cases and therefore should not have a significant impact on response rates. The number of responses per questionnaire (including responses to the demographic questions) must be counted *after* all other cleaning has been completed.

It is possible that a questionnaire with an outcome code of 2, 3, 4, 6 or 7 could be considered usable because there are five or more responses. This could occur if, for example, a contractor entered the wrong outcome code, or if a patient died after returning a questionnaire. In these cases, outcome would be recoded to 1 to indicate a usable questionnaire.

When counting the total number of responses for the purpose of determining usability, multiple response questions are only counted once. For example, in the below scenario **C15** would only be counted as one response, even though the respondent has crossed two response options.

<p>C15. Were you (and / or your partner or a companion) left alone by midwives or doctors at a time when it worried you? (Cross ALL that apply)</p> <p>1 <input type="checkbox"/> Yes, during early labour</p> <p>2 <input checked="" type="checkbox"/> Yes, during the later stages of labour</p> <p>3 <input type="checkbox"/> Yes, during the birth</p> <p>4 <input checked="" type="checkbox"/> Yes, shortly after the birth</p> <p>5 <input type="checkbox"/> No, not at all</p>

2.9 User-missing responses

It is useful to be able to see the number of user-missing 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, responses are expected if the related routing question instructed the respondent to answer those filtered questions, but not expected if the respondent missed the routing question⁶. Thus instances of missing data for filtered questions only constitute user-missing responses when respondents were explicitly instructed to answer those questions.

⁶ If a woman has responded "At home" to **C6** ("Where did you have your baby?") and has not answered any of **D1-D8**, it is assumed she followed the routing direction at the beginning of Section **D** and responses to **D1-D8** will not be set to '999' (user-missing).

The Survey Coordination Centre codes user-missing responses with the value '999'. For results to be consistent with those produced by the Survey Coordination Centre, user-missing responses should be presented but should not be included in the base number of respondents for percentages.

2.10 Non-specific responses

As well as excluding user-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 trusts by presenting only results for those women who felt able to give an evaluative response to questions. For a full listing of non-specific responses in the 2019 Maternity Survey, please see [Appendix C](#).

Appendix A Example of cleaning

The table below displays hypothetical raw data for seven women, five of whom have responded to the survey. As shown, some of the respondents have followed routing instructions incorrectly. Specifically, respondents 'B' and 'F' reported that they had caesarean births (**C8** = 3 or 4), but both responded to filtered questions which they should have skipped past ('B' has answered **C9** and **C10**, whilst 'F' has answered **C9**).

Record	Outcome	C8	C9	C10	C11
Patient record number	Outcome of sending questionnaire	What type of birth did you have?	Where did you give birth?	What position were you in when your baby was born?	Did you have skin to skin contact (<i>baby naked, directly on your chest or tummy</i>) with your baby shortly after the birth?
A	1	3			1
B	1	3	1	4	1
C	4				
D	1	2	1		3
E	6				
F	1	4	1		3
G	1		3	1	2

Following the cleaning instructions in [Section 2.2](#) above, all responses for **C9** and **C10** must be set to '998' ('not applicable') where the respondent has ticked options 3 or 4 for **C8**.

The below table shows how the data would look after cleaning is carried out by the Survey Coordination Centre to recode responses to filtered questions that should have been skipped. User-missing responses have also been recoded to '999' where a respondent was expected to answer a question but did not, as explained in [Section 2.9](#).

Record	Outcome	C8	C9	C10	C11
Patient record number	Outcome of sending questionnaire	What type of birth did you have?	Where did you give birth?	What position were you in when your baby was born?	Did you have skin to skin contact (<i>baby naked, directly on your chest or tummy</i>) with your baby shortly after the birth?
A	1	3	998	998	1
B	1	3	998	998	1
C	4				
D	1	2	1	999	3
E	6				
F	1	4	998	998	3
G	1	999	3	1	2

Appendix B Out-of-range data

The following table lists the out-of-range values for each question in the 2019 Maternity Survey, as well as for applicable sample variables.

Variable	Out-of-range data
Year of birth	≤ 1948 ≥ 2004
Gender	≤ 0 3-8 ≥ 10
Ethnic group	Any value except A-H, J-N, P, R, S, or Z
Time of delivery	Any value outside 00:00-23:59
Day of delivery	≤ 0 ≥ 32
Month of delivery	≤ 0 ≥ 3
Year of delivery	≤ 2018 ≥ 2020
Number of babies born at delivery	≤ 0 ≥ 10
Actual delivery place	≤ -1 5-6 ≥ 10
Day questionnaire received	≤ 0 ≥ 32
Month questionnaire received	≤ 3 ≥ 9
Year questionnaire received	≤ 2018 ≥ 2020
Outcome	≤ 0 ≥ 8
A1	≤ 0 ≥ 4
A2	≤ 0 ≥ 4
B1	≤ 0 ≥ 4
B2	≤ 0 ≥ 5

Variable	Out-of-range data
B3	≤ 0 ≥ 5
B4_1 to B4_7	< 0 ≥ 2
B5	≤ 0 ≥ 6
B6	≤ 0 ≥ 5
B7	≤ 0 ≥ 5
B8	≤ 0 ≥ 5
B9	≤ 0 ≥ 5
B10	≤ 0 ≥ 5
B11	≤ 0 ≥ 5
B12	≤ 0 ≥ 5
B13	≤ 0 ≥ 5
B14	≤ 0 ≥ 4
B15	≤ 0 ≥ 6
B16	≤ 0 ≥ 5
B17	≤ 0 ≥ 6
B18	≤ 0 ≥ 5
C1	≤ 0 ≥ 4
C2	≤ 0 ≥ 5

Variable	Out-of-range data
C3_1 to C3_8	< 0 ≥ 2
C4	≤ 0 ≥ 5
C5_1 to C5_8	< 0 ≥ 2
C6	≤ 0 ≥ 5
C7	≤ 0 ≥ 4
C8	≤ 0 ≥ 5
C9	≤ 0 ≥ 5
C10	≤ 0 ≥ 7
C11	≤ 0 ≥ 5
C12	≤ 0 ≥ 6
C13	< 0 ≥ 5
C14	≤ 0 ≥ 4
C15_1 to C15_5	≤ 0 ≥ 2
C16	≤ 0 ≥ 4
C17	≤ 0 ≥ 7
C18	≤ 0 ≥ 5
C19	≤ 0 ≥ 6
C20	≤ 0 ≥ 5
C21	≤ 0 ≥ 5
C22	≤ 0 ≥ 6
D1	≤ 0 ≥ 6

Variable	Out-of-range data
D2	≤ 0 ≥ 3
D3	≤ 0 ≥ 7
D4	≤ 0 ≥ 6
D5	≤ 0 ≥ 5
D6	≤ 0 ≥ 5
D7_1 to D7_5	≤ 0 ≥ 2
D8	≤ 0 ≥ 6
E1	≤ 0 ≥ 5
E2	≤ 0 ≥ 5
E3	≤ 0 ≥ 7
E4	≤ 0 ≥ 6
F1	≤ 0 ≥ 4
F2	≤ 0 ≥ 4
F3	≤ 0 ≥ 5
F4	≤ 0 ≥ 7
F5	≤ 0 ≥ 4
F6	≤ 0 ≥ 4
F7	≤ 0 ≥ 4
F8	≤ 0 ≥ 5
F9	≤ 0 ≥ 5
F10	≤ 0 ≥ 5

Variable	Out-of-range data
F11	≤ 0 ≥ 6
F12	≤ 0 ≥ 4
F13	≤ 0 ≥ 5
F14	≤ 0 ≥ 4
F15	≤ 0 ≥ 6
F16	≤ 0 ≥ 6
F17	≤ 0 ≥ 6
F18	≤ 0 ≥ 6
F19	≤ 0 ≥ 6
F20	≤ 0 ≥ 6
G1	≤ 1948 ≥ 2004
G2	≤ 0 ≥ 3
G3	≤ 0 ≥ 4
G4	≤ 0 ≥ 3
G5_1 to G5_13	< 0 ≥ 2
G6	≤ 0 ≥ 4
G7	≤ 0 ≥ 10
G8	≤ 0 ≥ 6
G9	≤ 0 ≥ 19

Appendix C Non-specific responses

The following table lists all questions in the 2019 Maternity Survey. Numbers in the final column indicate the response options that should be considered non-specific. Where this column contains only a dash, the relevant question has no non-specific response options. All questions are included in the table, whether scored or unscored. The non-specific responses specified below are defined for all survey outputs (i.e. both trust-level data and national-level reporting) and are excluded when calculating results.

No.	Question	Non-specific responses
A1	Did you give birth to a single baby, twins or more in your most recent pregnancy?	-
A2	Roughly how many weeks pregnant were you when your baby was born?	-
B1	Who was the first health professional you saw when you thought you were pregnant?	-
B2	Roughly how many weeks pregnant were you when you first saw this health professional about your pregnancy care?	4
B3	Roughly how many weeks pregnant were you when you had your 'booking' appointment (the appointment where you were given access to your pregnancy notes)?	4
B4	Were you offered any of the following choices about where to have your baby?	6, 7
B5	Before your baby was born, where did you plan to have your baby?	5
B6	Did you get enough information from either a midwife or doctor to help you decide where to have your baby?	4
B7	At your antenatal check-ups , did you see the same midwife every time?	3, 4
B8	During your antenatal check-ups, did your midwives appear to be aware of your medical history?	4
B9	During your antenatal check-ups, were you given enough time to ask questions or discuss your pregnancy?	4
B10	During your antenatal check-ups, did your midwives listen to you?	4
B11	During your antenatal check-ups, did your midwife ask you about your mental health?	4
B12	During your pregnancy were you offered any antenatal classes or courses provided by the NHS ?	4
B13	Did you find these classes or courses useful?	4
B14	During your pregnancy, did you have a telephone number for a member of the midwifery team that you could contact?	3
B15	During your pregnancy, if you contacted a midwifery team, were you given the help you needed?	5

No.	Question	Non-specific responses
B16	Thinking about your antenatal care , were you spoken to in a way you could understand?	4
B17	Thinking about your antenatal care , were you involved in decisions about your care?	4, 5
B18	During your pregnancy did midwives provide relevant information about feeding your baby?	4
C1	At the start of your labour, did you feel that you were given appropriate advice and support when you contacted a midwife or the hospital?	1
C2	During your labour, did staff help to create a more comfortable atmosphere for you in a way you wanted?	4
C3	During your labour, what type of pain relief did you use?	-
C4	Did the pain relief you used change from what you had originally wanted (before you went into labour) ?	3, 4
C5	Why did you not use the pain relief that you had originally wanted (before you went into labour) ?	-
C6	Where did you have your baby?	4
C7	Thinking about the birth of your baby , was your labour induced?	3
C8	What type of birth did you have?	-
C9	Where did you give birth?	-
C10	What position were you in when your baby was born ?	-
C11	Did you have skin to skin contact (<i>baby naked, directly on your chest or tummy</i>) with your baby shortly after the birth?	3, 4
C12	If your partner or someone else close to you was involved in your care during labour and birth, were they able to be involved as much as they wanted?	3, 4, 5
C13	Did the staff treating and examining you introduce themselves?	4
C14	Had any of the midwives who cared for you been involved in your antenatal care?	3
C15	Were you (and / or your partner or a companion) left alone by midwives or doctors at a time when it worried you?	-
C16	If you raised a concern during labour and birth, did you feel that it was taken seriously?	3
C17	During labour and birth , were you able to get a member of staff to help you when you needed it ?	5, 6
C18	Thinking about your care during labour and birth , were you spoken to in a way you could understand?	4
C19	Thinking about your care during labour and birth , were you involved in decisions about your care?	4, 5
C20	Thinking about your care during labour and birth , were you treated with respect and dignity?	4

No.	Question	Non-specific responses
C21	Did you have confidence and trust in the staff caring for you during your labour and birth ?	4
C22	After your baby was born , did you have the opportunity to ask questions about your labour and the birth?	4, 5
D1	How long did you stay in hospital after your baby was born?	-
D2	On the day you left hospital, was your discharge delayed for any reason?	-
D3	What was the main reason for the delay?	-
D4	If you needed attention while you were in hospital after the birth , were you able to get a member of staff to help you when you needed it ?	4, 5
D5	Thinking about the care you received in hospital after the birth of your baby, were you given the information or explanations you needed?	4
D6	Thinking about the care you received in hospital after the birth of your baby, were you treated with kindness and understanding?	4
D7	Thinking about your stay in hospital, if your partner or someone else close to you was involved in your care, were they able to stay with you as much as you wanted?	4, 5
D8	Thinking about your stay in hospital, how clean was the hospital room or ward you were in?	5
E1	In the first few days after the birth how was your baby fed?	4
E2	Were your decisions about how you wanted to feed your baby respected by midwives?	4
E3	Did you feel that midwives and other health professionals took your personal circumstances into account when giving advice about feeding your baby ?	4, 6
E4	Did you feel that midwives and other health professionals gave you active support and encouragement about feeding your baby ?	4, 5
F1	Were you given a choice about where your postnatal care would take place?	3
F2	When you were at home after the birth of your baby, did you have a telephone number for a midwifery or health visiting team that you could contact?	3
F3	If you contacted a midwifery or health visiting team were you given the help you needed?	4
F4	Since your baby's birth have you been visited at home by a midwife?	-
F5	Did you see the same midwife every time?	3
F6	Would you have liked to have seen a midwife...	-
F7	Did the midwife or midwifery team that you saw appear to be aware of the medical history of you and your baby?	3
F8	Did you feel that the midwife or midwifery team that you saw always listened to you?	4

No.	Question	Non-specific responses
F9	Did the midwife or midwifery team that you saw take your personal circumstances into account when giving you advice?	4
F10	Did you have confidence and trust in the midwife or midwifery team you saw after going home?	4
F11	Had any midwives who cared for you postnatally also been involved in your labour and antenatal care?	5
F12	Did a midwife or health visitor ask you about your mental health?	3
F13	Were you given information about any changes you might experience to your mental health after having your baby?	4
F14	Were you told who you could contact if you needed advice about any changes you might experience to your mental health after the birth?	3
F15	Were you given information about your own physical recovery after the birth?	4, 5
F16	In the six weeks after the birth of your baby did you receive help and advice from a midwife or health visitor about feeding your baby ?	4, 5
F17	If, during evenings, nights or weekends , you needed support or advice about feeding your baby, were you able to get this?	4, 5
F18	In the six weeks after the birth of your baby did you receive help and advice from health professionals about your baby's health and progress ?	4, 5
F19	At the postnatal check-up (around 6-8 weeks after the birth), did the GP spend enough time talking to you about your own physical health?	4, 5
F20	At the postnatal check-up (around 6-8 weeks after the birth), did the GP spend enough time talking to you about your own mental health?	4, 5
G1	In what year were you born?	-
G2	Have you had a previous pregnancy?	-
G3	How many babies have you given birth to before this pregnancy?	-
G4	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?	-
G5	Do you have any of the following?	-
G6	Do any of these reduce your ability to carry out day-to-day activities?	-
G7	What is your religion?	-
G8	Which of the following best describes how you think of yourself?	-
G9	What is your ethnic group?	-