

DATA CLEANING INSTRUCTION MANUAL FOR THE NHS MATERNITY SURVEY 2017

The Co-ordination Centre for the
NHS Patient Survey Programme

Contacts

The Co-ordination 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: mat.cc@pickereurope.ac.uk
Website: www.nhssurveys.org

Key personnel

Jenny King
Caroline Killpack
Rory Corbett
Fiona Roth
Steve Sizmur

Updates

Before using this document, please check that you have the latest version, as small amendments are made 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 email all trust contacts and contractors directly to inform them of the change.

This document is available from: www.nhssurveys.org

Questions and comments

If you have any questions or concerns regarding this document, or if you have any specific queries regarding the submission of data, please contact the Co-ordination Centre using the details provided at the top of this page.

Contents

1	Maternity Survey 2017 – data cleaning	3
1.1	Introduction	3
1.2	Definition of key terms	3
2	Submitting raw ('uncleaned') data.....	5
3	Editing/cleaning data after submission	6
3.1	Approach and rationale.....	6
3.2	Dealing with filtered questions	6
3.3	Dealing with multiple response questions.....	7
3.4	Dealing with demographics.....	8
3.5	Usability and eligibility.....	9
3.6	Missing responses	10
3.7	Non-specific responses	10
Appendix A	An example of incorrectly followed routing.....	11
Appendix B	Non-specific responses	13

1 Maternity Survey 2017 – data cleaning

1.1 Introduction

After fieldwork for the Maternity Survey 2017 has been completed, participating trusts and contractors will be required to submit data to the Co-ordination Centre in a **raw (uncleaned)** format. Once the Co-ordination Centre has received data from all participating trusts, the data must be cleaned. To ensure that the cleaning process is comparable across 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 Co-ordination Centre to clean and standardise data submitted by contractors and trusts as part of the Maternity Survey 2017. By following the guidance contained in this document, it should be possible to recreate this cleaning process.

If you have any comments or queries regarding this document please contact the Co-ordination Centre on 01865 208 127, or email us at mat.cc@pickereurope.ac.uk.

1.2 Definition of key terms

Definitions of terms commonly used in this document as they apply to the Maternity Survey 2017 are as follows:

Raw/uncleaned data – ‘Raw’ or ‘uncleaned’ data is data that has been entered from completed questionnaires without any editing taking place to remove contradictory or inappropriate responses; thus, all responses ticked on the questionnaire should be included in the data entry spreadsheet¹ (see Section 2 below for detailed guidance on submitting raw data). The requirement for raw or uncleaned data does **NOT**, however, preclude the checking of data for errors resulting from problems with data entry or similar. Ensuring high data quality is vital and errors resulting from data entry problems can and should be corrected by checking against the appropriate completed questionnaire.

Data cleaning – The Co-ordination Centre uses the term ‘data cleaning’ to refer to all editing processes undertaken upon survey data once the survey has been completed and the data has been entered and collated.

Routing questions – These are items on the questionnaire which instruct respondents to either continue on to the next question or to skip past irrelevant questions depending on their response to the routing question. For the Maternity Survey 2017, the routing questions are **C5, C7, D3, E2, F4, and G2**. There are also two routing statements at the start of sections **C** and **D** which instruct respondents to skip questions that are not applicable to them.

¹ Except where:

- a) Multiple responses have been ticked - set these to missing (The **exceptions** to this are for the ‘tick all that apply’ questions **B4, C4, C6, C14, D8** and **G4** where respondents may tick more than one response option)
- b) Year of birth has been entered in incorrect format - if the patient’s *intended* response is unambiguous from the questionnaire, then enter this.

Filtered questions – Items on the questionnaire that are not intended to be answered by all respondents are referred to as filtered questions. Whether individual respondents are expected to answer filtered questions depends on their individual experiences and on their responses to preceding routing questions. For the Maternity Survey 2017, the filtered questions are **C1-C6, C8-C9, D1-D9, E3, F5-F11, F20² and G3**.

Non-filtered questions – These are items in the questionnaire which are not subject to any routing/filtering and which should therefore be answered by all respondents. For the Maternity Survey 2017, the non-filtered questions are **A1-B16, C7, C10-C20, E1-E2, E4-F4, F12-F19, G1-G2 and G4-G7**.

Out-of-range data – This refers to instances where data within a variable has a value that is not accepted. For data with categories – most of the variables in this survey – this would mean a value not allowed in the data: for example, a value of ‘3’ being entered in a variable with only two response categories (1 or 2). For data that is on a scale, such as year of birth, data is considered out of range if it specifies a value that is not possible (for instance, year of birth as ‘983’ or ‘2983’). Out-of-range responses entered into the dataset should **not** be automatically removed prior to submitting data to the Co-ordination Centre (see Section 2).

Non-specific response – This term refers to response options that do not directly answer the question; that is, they do not provide an evaluative response. Most commonly, these are responses such as “Don’t know / can’t remember”. In addition, responses that indicate the question does not apply 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”. A full listing of such responses for the Maternity Survey 2017 can be found in Appendix B.

² Note that the filtering from routing question **F4** applies to **F20** (in addition to **F5-F11**). This is because **F20** was moved from the middle of section **F** (**F11**) to the end of section **F** for the 2017 questionnaire due to concerns that its original placement may cause respondents to interpret the subsequent questions as applying to the postnatal check-up mentioned in the question.

2 Submitting raw ('uncleaned') data

For the Maternity Survey 2017, trusts and contractors are required to submit raw ('uncleaned') data to the Co-ordination Centre. For clarification, raw data is created by the following guidelines:

- i All responses should be entered into the data template, regardless of whether or not the respondent was meant to respond to the question (i.e. where women answer questions that they have been directed to skip past, these responses should still be entered).
- ii Where a respondent has selected more than one response category on a question, this question should be set to 'missing' for that person in the data (i.e. left blank, or coded as a full stop '.'). **The exceptions to this are for the 'multiple response' questions B4, C4, C6, C14, D8 and G4** where respondents may tick more than one response option (i.e. 'Cross ALL that apply').
- iii Where a respondent has crossed out a response, this should not be entered in the data (i.e. the response should be left blank, or coded as a full stop '.'). Where a respondent has crossed out a response and instead selected a second response option, this second choice should be entered into the data.
- iv Where a response is inconsistent with the formatting of the questionnaire but, upon inspection of the completed questionnaire, the intended response is unambiguous, then the respondent's *intended* response should be entered. For example, where a respondent has written their *date* of birth in the boxes for **G1**, but written their *year* of birth to the side of this, then the respondent's year of birth should be entered.
- v For the year of birth question (**G1**), unrealistic responses should still be entered except following rule iv above. For example, if a respondent enters '2017' in the year of birth box, this should still be entered unless the respondent has unambiguously indicated their actual year of birth to the side.
- vi Once the data has been entered, no responses should be removed or changed in any way **except** where responses are known to have been entered incorrectly or where inspection of the questionnaire indicates that the respondent's intended response has not been captured. This includes 'out-of-range' responses, which must **NOT** be automatically removed from the dataset.
- vii Responses in the dataset should **only** be changed before submission to the Co-ordination Centre where they are found to have been entered inconsistently with the respondent's *intended* response.

3 Editing/cleaning data after submission

3.1 Approach and rationale

The Co-ordination Centre's purpose in cleaning the data submitted to us is to ensure an optimal balance of data quality and completeness. We therefore seek to remove responses that are known to be incorrect or inappropriate but do this in a relatively permissive way so as to enable as many responses as possible to contribute to the overall survey results.

3.2 Dealing with filtered questions

Some of the questions included in the survey are only relevant to a subset of respondents, and in these cases instructions are included in the questionnaire to route respondents past questions that are not applicable to them. For example, people who tick "No" to **D3** ("On the day you left hospital, was your discharge delayed for any reason?") are instructed to skip question **D4** on the reason for the delay.

It is necessary to clean the data to remove inappropriate responses where filter instructions have been incorrectly followed. In such cases, participants' responses to questions that were not relevant to them are deleted from the dataset. Responses are **only** deleted where respondents have answered filtered questions despite ticking an earlier response on a routing question instructing them to skip these questions (e.g. a respondent ticking "No" to **D3** but then answering question **D4** on the reason for the delay, as in the example above).

Responses to filtered questions are **NOT** removed where the response to the routing question is *missing*. For example, **C8-C9** are filtered by the response to **C7**, but if a respondent does not answer **C7**, or if the **C7** response is missing for any reason, then responses to **C8-C9** should **NOT** be removed. Furthermore, missing responses to routing questions should remain missing even if a respondent has answered the related filtered questions. For example, an appropriate response to **C7** should not be backcoded when **C8** and/or **C9** have been answered.

In addition to the normal routing questions, please note that for the Maternity Survey 2017 there is a general instruction prior to question **C1** instructing respondents to skip to **C7** if they had a planned caesarean. Responses for **C1-C6** are therefore removed if a woman has answered "A planned caesarean delivery" (option 3) for question **C7**.³

Figure 1 below shows a summary of all routing questions/instructions, and the filtered questions they relate to, that are included in the Maternity Survey 2017. Please note that these instructions should be followed sequentially in order to be consistent with the procedures applied by the Co-ordination Centre. A worked example of the cleaning process for removing unexpected responses to a filtered question is included in Appendix A.

³ Note that while section D has a routing instruction for women who 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, the data is therefore *not* filtered by response to question C2 ("Did you have a home birth?").

Figure 1 List of routing/filtering instructions for data cleaning

ROUTING QUESTION/ INSTRUCTION	RESPONSE VALUES		FILTERED QUESTIONS
if C5	= 2, 3 or 4	then delete response to:	C6
if C7	= 3	then delete responses to:	C1-C6
if C7	= 3 or 4	then delete responses to:	C8-C9
if D3	= 2	then delete response to:	D4
if E2	= 1 or 2	then delete response to:	E3
If F4	= 4, 5 or 6	then delete responses to:	F5-F11, F20²
If G2	= 2	then delete response to:	G3

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

3.3 Dealing with multiple response questions

For most questions, each column of data corresponds to one survey question. However, there are some exceptions to this rule. For multiple response questions (**B4**, **C4**, **C6**, **C14**, **D8** and **G4**) where respondents are instructed to 'Cross *ALL* that apply', each response option is treated as a separate question and the number of columns for these questions in the data file will therefore correspond to the number of response options.

When entering data for multiple response questions, each response option must be coded '1' where it is crossed, or '0' where it is not crossed. However, if a respondent does not answer any part of a multiple response question, then all response options should be coded as blank/full-stop. See Figure 2 below for an example of coding for question **G4**.

Figure 2 Entering data for multiple response questions

G4. Do you have any of the following long-standing conditions? (Cross *ALL* that apply)

1 ☒ Deafness or severe hearing impairment

2 ☐ Blindness or partially sighted

3 ☐ Long-standing physical condition

4 ☐ A learning disability

5 ☒ A mental health condition

6 ☐ A long-standing illness, such as cancer, HIV, diabetes, chronic heart disease, or epilepsy

7 ☐ No, I do not have a long-standing condition

Responses to each part of this question are coded: **1 if the box is crossed**
0 if the box is not crossed

G4 takes up seven columns in the data file, labelled as follows:

Column headings	G4_1	G4_2	G4_3	G4_4	G4_5	G4_6	G4_7
Codings for this example	1	0	0	0	1	0	0

Four of the six multiple response questions are scored (**B4**, **C14**, **D8** and **G4**) and as such these questions undergo additional cleaning – the instructions for this are outlined below.

Question B4: If respondents identify 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 then option 7 ("Don't know") is set to '0'. If options 6 **and** 7 are selected, option 6 is given precedence because it indicates a choice (whereas option 7 has no information about the respondent's experience) and option 7 is then set to '0'.

Question C14: If a respondent selects conflicting responses (i.e. 5 **and** any of 1-4), all of their responses to this question are recoded to missing (blank or full-stop '.'). 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 D8: Similar to the cleaning for **C14**, if respondents select conflicting responses (either 1 or 5 **AND** any of 2–4) for question **D8**, all their responses for this question are set to missing (blank or full-stop '.'). If respondents select both 1 **and** 5, their responses for this question are also set to missing (blank or full-stop '.').

Question G4: The last response to question **G4** is an exclusive option. If a respondent ticks option 7 ("I do not have a long-standing condition"), options 1-6 should not have also been ticked. If any of these options *have* been ticked in addition to option 7, these responses are set to '0' (but option 7 remains as '1').

3.4 Dealing with demographics

Basic demographic information including women's age and ethnicity are included in the sample data, but the 'You and your household' section at the end of the questionnaire also asks respondents to provide this information. In a minority of cases, the information provided from the sample and by respondents does not correspond – for example, the sample may identify an individual as being born in 1980 only for the patient to report being born in 1985.

Because of this, and because questions about demographics tend to produce relatively high item non-response rates, it is not appropriate to rely on either source of data alone for any sub-group analyses (e.g. if you wanted to examine the response to a particular question by age, or ethnic group). Where responses to demographic questions are present, it is assumed these are more likely to be accurate than sample information (since it is assumed that respondents are best placed to know their own age and ethnicity)⁴. Where responses to

⁴ Despite this assumption, please note that any respondents recorded as over the age of sixteen in the sample information, but who report themselves as under the age of sixteen in their response to the survey, should *not* be considered as ineligible. This is because of the difficulty of inferring the source of errors when year of birth from sample and response sections are mismatched. We cannot be *certain* whether this mismatch occurred due to an error in the sample file, an error in the patient's completion of the questionnaire form, or an error in data entry. See Section 3.5.

demographic questions are missing, however, sample data is used in their place⁵.

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

Age (**G1**) requires special consideration during data cleaning. A common error when completing year of birth questions on forms is for respondents to accidentally write in the *current* year – thus responses to **G1** of ‘2017’ will be set to missing during cleaning. Out-of-range responses will also be set to missing⁶. For the Maternity Survey 2017, out-of range responses are defined as **G1 ≤ 1947 OR G1 > 2001**.

3.5 Usability and eligibility

Sometimes questionnaires are returned with only a very small number of questions completed. For the Maternity Survey 2017, questionnaires containing *fewer than five responses* are considered ‘unusable’ – we will delete all responses for such cases and outcome codes of 1 (‘returned useable questionnaire’) relating to these cases will be changed to 6 (‘questionnaire not returned’). 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 other cleaning has been completed⁷.

Outcome codes for respondents will also be changed if the respondents are believed to be under the age of sixteen when they had their baby and therefore ineligible for participation. Since the sample files for the survey are to be checked by the Co-ordination Centre prior to mailing, this is unlikely to affect more than a handful of cases throughout the survey, as women coded as being aged under 16 will be identified and removed from the sample *before* the start of the survey. Sample members will *not*, however, be removed from the sample if data on their year of birth is missing from the sampling frame. If sample information on a respondent’s year of birth is missing, though, and their response to **G1** indicates that they are under 16 (specifically, **if G1 ≥ 2002**) then the outcome code for that respondent should be recoded from 1 (‘returned completed questionnaire’) to 5 (‘ineligible for participation in the survey’) and we will delete all question responses relating to such a case. This should *only* be done where sample information is missing. If sample information indicates a woman is

⁵ 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 information should be used to calculate response rates by demographic groups.

⁶ The majority of out-of range responses relating to year of birth questions result from errors in data entry (for example, not keying one of the digits – so ‘1983’ may become ‘983’, ‘183’, ‘193’, or ‘198’). In such cases it is important that the responses be checked against the completed questionnaire forms, and data corrected if necessary, **prior** to submission of data to the Co-ordination Centre.

⁷ Please note that the multiple response questions **B4**, **C4**, **C6**, **C14**, **D8** and **G4** are only counted once. So for example, even if **B4_1** and **B4_3** are crossed, this would count as only one response for the purpose of determining if a questionnaire is usable.

aged 16 or over, but this is contradicted by the woman's response, then the woman's survey outcome should remain as 1. This is to avoid removing legitimate responses because of an overly conservative approach to assessing eligibility; in other words, where the patient's age is uncertain (because sample and response information contradict each other, and either of them could be accurate) the benefit of the doubt is given in any assessment of eligibility.

3.6 Missing responses

It is useful to be able to see the numbers of respondents who have missed each question for whatever reason. 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 routing question⁸ 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 related filtered questions; thus only where respondents were explicitly instructed to answer filtered questions should such blank cells be coded as missing responses.

The Co-ordination Centre codes missing responses with the value '999'⁹. For results to be consistent with those produced by the Co-ordination Centre, missing responses should be presented but should not be included in the base number of respondents for percentages.

3.7 Non-specific responses

As well as excluding missing responses from results, the Co-ordination 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 women who felt able to give an evaluative response to questions. For a full listing of non-specific responses in the Maternity Survey 2017, please see Appendix B.

⁸ For **C1-C6** an indirect routing question is used to define whether women should have answered, as discussed in Section 3.2 of this document. As noted in footnote 3, responses for **D1-D8** are *not* cleaned based on responses to question **C2** ("Did you have a home birth?"), however if a woman has responded "Yes" to **C2** and has not answered any of **D1-D8**, it is assumed she followed the routing direction at the beginning of **D1-D8** and responses to **D1-D8** will not be coded as '999' (missing).

⁹ This is an arbitrary value chosen because it is out of range for all other questions on the survey.

Appendix A An example of incorrectly followed routing

Figure 3 Example raw ('uncleaned') data

Record	Outcome	C7	C8	C9	C10
Patient Record Number	Outcome of sending questionnaire	Thinking about the birth of your baby, what type of delivery did you have?	Where did you give birth? (Cross ONE only)	What position were you in when your baby was born? (Cross ONE only)	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	6				
B	1	2	1	.	1
C	1	3	.	.	1
D	1	3	1	4	1
E	4				
F	1	2	1	.	3
G	6				
H	1	4	1	.	3
I	1	.	3	1	2

Figure 3 shows hypothetical raw/uncleaned data for nine sample members, six of whom have responded to the survey. It can be seen from this data that some of the respondents have followed filter instructions from routing questions incorrectly:

Respondents 'D' and 'H' reported that they had caesarean deliveries (C7 = 3 or 4), but both responded to filtered questions which they should have skipped past. ('D' has answered C8 and C9, whilst 'H' has answered C8).

Following the cleaning instructions in Section 3.2 above will remove these inappropriate responses. The filter instructions specify that:

if **C7** = 3 or 4 then delete responses to: **C8-C9**

In accordance with this, all responses for **C8-C9** must be removed in cases where the respondent has ticked options 3 **or** 4 for **C7** (caesarean section). This will lead to data from two cells (**C8** and **C9**) being removed for respondent 'D', and data from one cell for respondent 'H' (**C8**), who followed the routing instructions incorrectly and continued to answer the questions applicable only to vaginal deliveries.

Respondent 'I' did not respond to the routing question **C7**, but has responded to the following filtered questions. Responses to the filtered questions are **NOT** removed where the response to the routing question is missing.

Figure 4 (below) shows how the data would look following cleaning by the Co-ordination Centre to remove responses to filtered questions that should have been skipped – cells where responses have been removed are shaded grey.

Figure 4 Data after cleaning

Record	Outcome	C7	C8	C9	C10
Patient Record Number	Outcome of sending questionnaire	Thinking about the birth of your baby, what type of delivery did you have?	Where did you give birth? (Cross <i>ONE</i> only)	What position were you in when your baby was born? (Cross <i>ONE</i> only)	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	6				
B	1	2	1	.	1
C	1	3	.	.	1
D	1	3	.	.	1
E	4				
F	1	2	1	.	3
G	6				
H	1	4	.	.	3
I	1	.	3	1	2

Appendix B Non-specific responses

The following table lists all 'non-specific responses' included in the Maternity Survey 2017. Numbers in the right 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.

Question number	Question	Non-specific responses
A1	Did you give birth to a single baby, twins or more in your most recent pregnancy?	-
A2	What time was your baby born?	-
A3	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 your pregnancy notes)?	6
B4	Were you offered any of the following choices about where to have your baby?	6, 7
B5	Before your baby was born, did you plan to have a home birth?	-
B6	Did you get enough information from either a midwife or doctor to help you decide where to have your baby?	4, 5
B7	During your pregnancy were you given a choice about where your antenatal check-ups would take place?	3
B8	If you saw a midwife for your antenatal check-ups, did you see the same one every time?	5, 6, 7
B9	During your antenatal check-ups, did the midwives appear to be aware of your medical history?	4
B10	During your antenatal check-ups, were you given enough time to ask questions or discuss your pregnancy?	4
B11	During your antenatal check-ups, did the midwives listen to you?	4
B12	During your antenatal check-ups, did a midwife ask you how you were feeling emotionally?	4
B13	During your pregnancy, did you have a telephone number for a midwife or midwifery team that you could contact?	3
B14	During your pregnancy, if you contacted a midwife, were you given the help you needed?	5
B15	Thinking about your antenatal care, were you spoken to in a way you could understand?	4

Question number	Question	Non-specific responses
B16	Thinking about your antenatal care, were you involved enough in decisions about your care?	4, 5
C1	At the very 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	Did you have a home birth?	-
C3	During your labour, were you able to move around and choose the position that made you most comfortable?	4
C4	During your labour, what type of pain relief did you use?	-
C5	Did the pain relief you used change from what you had originally planned (before you went into labour)?	3, 4
C6	Why did you not use the choice of pain relief that you had originally planned (before you went into labour)?	-
C7	Thinking about the birth of your baby, what type of delivery did you have?	-
C8	Where did you give birth?	-
C9	What position were you in when your baby was born?	-
C10	Did you have skin to skin contact (<i>baby naked, directly on your chest or tummy</i>) with your baby shortly after the birth?	4, 5
C11	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
C12	Did the staff treating and examining you introduce themselves?	4
C13	Had any of the midwives who cared for you been involved in your antenatal care?	5
C14	Were you (and/or your partner or a companion) left alone by midwives or doctors at a time when it worried you?	-
C15	If you raised a concern during labour and birth, did you feel that it was taken seriously?	3
C16	If you needed attention during labour and birth, were you able to get a member of staff to help you within a reasonable time?	5, 6
C17	Thinking about your care during labour and birth, were you spoken to in a way you could understand?	4
C18	Thinking about your care during labour and birth, were you involved enough in decisions about your care?	4, 5
C19	Thinking about your care during labour and birth, were you treated with respect and dignity?	4
C20	Did you have confidence and trust in the staff caring for you during your labour and birth?	4
D1	How long did you stay in hospital after your baby was born?	-

Question number	Question	Non-specific responses
D2	Looking back, do you feel that the length of your stay in hospital after the birth was...	4
D3	On the day you left hospital, was your discharge delayed for any reason?	-
D4	What was the main reason for the delay?	-
D5	If you needed attention while you were in hospital after the birth, were you able to get a member of staff to help you within a reasonable time?	4, 5
D6	Thinking about the care you received in hospital after the birth of your baby, were you given the information or explanations you needed?	4
D7	Thinking about the care you received in hospital after the birth of your baby, were you treated with kindness and understanding?	4
D8	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
D9	Thinking about your stay in hospital, how clean was the hospital room or ward you were in?	5
E1	During your pregnancy did midwives provide relevant information about feeding your baby?	4, 5
E2	In the first few days after the birth how was your baby fed?	4
E3	Did you ever try to breastfeed your baby (even if it was only once)?	-
E4	Were your decisions about how you wanted to feed your baby respected by midwives?	4
E5	Did you feel that midwives and other health professionals gave you consistent advice about feeding your baby?	4, 6
E6	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 midwife or midwifery team that you could contact?	3
F3	If you contacted a midwife were you given the help you needed?	5
F4	Since your baby's birth have you been visited at home by a midwife?	-
F5	Did you see the same midwife every time?	5, 6, 7
F6	How many times in total did you see a midwife after you went home?	5
F7	Would you have liked to have seen a midwife...	-
F8	Did the midwife or midwives that you saw appear to be aware of the medical history of you and your baby?	3

Question number	Question	Non-specific responses
F9	Did you feel that the midwife or midwives that you saw always listened to you?	4
F10	Did the midwife or midwives that you saw take your personal circumstances into account when giving you advice?	4, 5
F11	Did you have confidence and trust in the midwives you saw after going home?	4
F12	Did a midwife or health visitor ask you how you were feeling emotionally?	3
F13	Were you given enough information about your own physical recovery after the birth?	4, 5
F14	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
F15	If, during evenings, nights, or weekends, you needed support or advice about feeding your baby, were you able to get this?	4, 5
F16	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
F17	Were you given enough information about any emotional changes you might experience after the birth?	4, 5
F18	Were you told who you could contact if you needed advice about any emotional changes you might experience after the birth?	3
F19	Were you given information or offered advice from a health professional about contraception?	3
F20	Did a midwife tell you that you would need to arrange a postnatal check-up of your own health with your GP? (Around 6-8 weeks after the birth)	3
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	Did you have any of the following long-standing conditions?	-
G5	What is your religion?	-
G6	Which of the following best describes how you think of yourself?	-
G7	What is your ethnic group?	-