

# 2015 Scottish Maternity Care Survey

## Technical Report



December 2015

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# 1 SURVEY OVERVIEW

## Introduction

- 1.1 This report provides information on the technical aspects of the 2015 Scottish Maternity Care Survey, including development, implementation, analysis and reporting.
- 1.2 The survey was commissioned by the Scottish Government as part of the Scottish Care Experience Survey Programme. The survey provides high quality and comprehensive information on women's experiences of maternity care in 2015 and repeats the survey undertaken in 2013. The results provide benchmark data for NHS Boards and will inform the current national review of maternity services in Scotland.
- 1.3 The survey covered women's experiences around each stage of their maternity care:
  - antenatal care
  - care during labour and birth
  - postnatal care in hospital
  - feeding their baby
  - care at home after the birth
- 1.4 This survey was undertaken in partnership with the Nursing, Midwifery and Allied Health Professions (NMAHP) Research Unit at the University of Stirling. The NMAHP Research Unit is a multidisciplinary national research unit funded by the Scottish Government Health and Social Care Directorate Chief Scientist Office. The survey was administered by a patient survey contractor, Quality Health Ltd.
- 1.5 National results as well as individual reports for maternity units and mainland NHS Boards were published in December 2015 and are being used by Scottish Government, national partners, NHS Boards and hospitals to identify areas for improvement:  
[www.gov.scot/Topics/Statistics/Browse/Health/maternitysurvey/2015Results](http://www.gov.scot/Topics/Statistics/Browse/Health/maternitysurvey/2015Results).

## 2 OUTPUTS OF THE SURVEY

2.1 This section provides more details of the range of outputs from the survey. In addition to the national report [www.gov.scot/stats/bulletins/01190](http://www.gov.scot/stats/bulletins/01190), there are a number of other outputs from the survey. Reports for individual hospitals and Health Boards have been produced where possible and are available at [www.gov.scot/Topics/Statistics/Browse/Health/maternitysurvey/2015Results](http://www.gov.scot/Topics/Statistics/Browse/Health/maternitysurvey/2015Results).

### Hospital and NHS Board reports

2.2 These reports contain hospital and NHS Board level analyses for all of the questions in the survey. For each question the results have been calculated after removing responses from any women who said that the question did not apply to them, who ticked ‘don’t know/can’t remember’ or who did not answer at all. The results are compared to the Scottish average and to the equivalent figure from the last survey (where possible).

2.3 The first section of the report presents the results of the four overarching questions where women were asked to rate the care that they received overall at each stage of their maternity care, before during and after the birth of their babies.

2.4 The second section of the report presents results for the scored questions for each stage of the maternity care. Results are shown as the percentage of women who answered each question positively. Bar charts show the percentage of patients answering positively as green, and the percentage negatively as red. Where answers are partially positive, the percentage is shown in yellow. More information about the percentage positive and negative analysis is available in Section 8 and Annex A.

2.5 Differences which are significantly<sup>1</sup> higher or lower than the national average, or the equivalent figures from the last survey, are marked with an “S”.

2.6 An example is shown below. In the example 50% of patients for the Board responded positively, which is 6 percentage points lower than the national average and 2 percentage points lower than the equivalent figure from the previous survey. The “S” symbol shows that this difference is statistically significant.

Question	Number of responses	Response			% Positive 2015	Change from 2013	Difference from Scotland 2015
		Positive	Neutral	Negative			
<b>1.1 Rated Results - Antenatal Care</b>							
B6. Got enough information from either midwife or doctor to help to decide where to have baby	500	50%	28%	23%	50%	-2%	-6% <sup>S</sup>

<sup>1</sup> [www.gov.scot/Resource/0049/00490160.pdf](http://www.gov.scot/Resource/0049/00490160.pdf)

- 2.7 The third section presents results for the non-scored questions for each stage of maternity care. These questions are either information questions or multiple choice questions which could not be calculated as per cent positive.
- 2.8 The final section of the report presents demographic information on women who responded to the survey showing first the hospital or board results followed by the national average.

### **Availability of data for further research**

- 2.9 The NMAHP-RU will undertake further analysis to provide a report on variations on experiences of maternity care by different groups of women, for example first time mothers, mothers from different socio-economic groups or mothers from rural communities. This will provide further insights into some of the issues highlighted in this report. For example, the national report has identified that women do not always feel that they have been given sufficient advice and support for infant feeding however, it is not yet clear whether this applies more to specific groups such as first time mothers or to mothers who have chosen to breast feed their babies. This secondary analysis will provide information to inform specific areas of need for service improvements.

### **Comparability with the English Maternity Services Survey**

- 2.10 The Care Quality Commission publish the results of their maternity care surveys for England at [www.cqc.org.uk/content/maternity-services-survey-2013](http://www.cqc.org.uk/content/maternity-services-survey-2013).
- 2.11 Results from the English surveys are partially comparable to the Scottish ones. Both surveys have similar and in many cases identical questions; however the Scottish survey introduced questions that were relevant to Scotland only. Therefore not all questions are comparable. The national results report for the 2013 Scottish survey provides comparisons between the two surveys (English and Scottish in 2013) where possible. The report is available at [www.gov.scot/Resource/0044/00442822.pdf](http://www.gov.scot/Resource/0044/00442822.pdf).

### 3 SURVEY DESIGN

#### Survey development

3.1 The survey questionnaire was largely based on the one used in the 2013 survey, modified slightly to ensure its continued relevance and based on our learning from the previous results. The survey covered women's experiences of:

- antenatal care
- care during labour and birth of their baby
- postnatal care in hospital
- feeding their baby
- care at home after the birth

3.2 A copy of the 2015 questionnaire is available here:

[www.gov.scot/Topics/Statistics/Browse/Health/maternitysurvey/2015Results](http://www.gov.scot/Topics/Statistics/Browse/Health/maternitysurvey/2015Results)

3.3 It asks women both to report their experiences of key aspects at each of these stages and also to give an overall rating of the care that they received at each stage. The overall rating of care reflects the individual women's evaluation and values in relation to her actual experience. At the end of each section women were invited to provide free text comments specific to that stage. For the first time an analysis of these comments have been incorporated into the main report alongside the quantitative analysis.

#### Changes to the 2015 survey, compared with the 2013 survey

##### New questions

3.4 We added 8 new questions to the 2015 Scottish Maternity Care survey. They are shown in [Table 1](#) below:

Table 1 New questions for the 2015 Scottish Maternity Care survey

Question Number	Question	Reason for new question
B13	During your antenatal check-ups, were your personal circumstances taken into account?	Consistency with the same question asked in the postnatal at home section
B14	During your pregnancy, did you have a discussion with your Health Visitor?	In order to understand the extent of contact by Health Visitors, in line with the new Health Visitor pathway which stipulates a contact during pregnancy, and whether this contact was important to women.
C3	During your pregnancy, were you given enough information about the pain relief you could use when giving birth?	In recognition of the importance of assisting women to cope with the pain that they experience. Previous question on methods of pain relief (2013) was difficult to interpret
C4	Did you feel that you had enough help to enable you to cope with your pain during labour?	
D5	Thinking about your stay in hospital, if your partner or someone else close to you was involved in your	Recognising the importance placed on this issue by women and

Question Number	Question	Reason for new question
	care, were they able to stay with you as much as you wanted?	increased opportunity for partner to stay.
F4	Since your baby's birth have you seen a midwife at a clinic?	To assess the extent to which new approaches to provision of postnatal care have been introduced.
F5	Was it convenient for you to see a midwife at a clinic?	To assess women's views of use of clinics.
F6	Were you given a choice about where you saw a midwife?	Consistency with antenatal section.

3.5 We changed 4 questions for the 2015 Scottish Maternity Care survey. They are shown in [Table 2](#) below:

Table 2: Questions changed for the 2015 Scottish Maternity Care survey

Question Number	Question in 2015	Question in 2013	Reason for change
B10	Did you have a named midwife?	Was this your named midwife?	To provide clarity about the extent to which women have a named midwife
F8	Did you see your named midwife at home or in a clinic after birth?	Was this your named midwife?	
F18	Were you given enough information about your own physical recovery after the birth?	Were you given enough information about your own recovery after the birth?	To clarify that the question relates to physical recovery (emotional changes covered elsewhere)
F20	Were you told who you could contact if you needed advice about emotional changes you might experience after the birth?	Did a midwife or health visitor ask you how you were feeling emotionally?	To ask more specifically the extent to which women knew where to go for advice

3.6 We removed 4 questions from the 2013 Scottish Maternity Care survey. They are shown in [Table 3](#) below:

Table 3: Questions removed from the 2013 Scottish Maternity Care survey

Question Number in the 2013 survey	Question	Reason for deletion
A2	What time was your baby born?	Insufficient use made of this data
C3	During your pregnancy, what type of pain relief did you plan to use when giving birth?	Did not give useful information and was difficult to interpret when analysed with C4 and 5 below. These questions did not address the question of adequate pain relief.
C4	Did the pain relief you used change from what you had originally planned?	
C5	Why did you not use the choice of pain relief that you had originally planned to?	

## Survey materials

- 3.7 The survey mail out included a questionnaire, an invitation letter, an information leaflet in a range of languages and a freepost return envelope. Women had the option to complete and return the paper version of the questionnaire, to complete the questionnaire online or via a telephone helpline in a wide range of languages. The helpline was also available to handle questions or complaints about the survey.
- 3.8 A copy of the questionnaire and other survey materials can be found at: [www.gov.scot/Topics/Statistics/Browse/Health/maternitysurvey/2015Results](http://www.gov.scot/Topics/Statistics/Browse/Health/maternitysurvey/2015Results).

## 4 SAMPLE DESIGN

### Sampling frame

- 4.1 Women eligible to be sampled for the survey were those who had given birth between 01 February and 31 March 2015, and aged 16 or over at that date. Eligible women were identified by NHS Central Register (NHS CR), using the Birth Registrations from the National Records of Scotland and the Community Health Index (CHI) database.
- 4.2 Permission for access to identifiable patient data to send the questionnaire to mothers was granted by the Community Health Index Advisory Group (CHIAG). All data was accessed, managed and stored in accordance with the data confidentiality protocols<sup>2</sup>.
- 4.3 Birth registrations take place within 21 days of the birth and contain information about the child (date, place and time of birth, full name, sex), the parents/partners' names (including maiden surname of mother), the mother's normal place of residence, the mother's occupation (or last occupation).<sup>3</sup>
- 4.4 NHS CR provided birth registration details such as birth registration numbers, and hospital codes from the birth registration forms to Health ASD to allow a random sample to be drawn.

### Sample design

- 4.5 The survey used a stratified sample design rather than a simple random sample approach. Those included in a simple random sample are chosen randomly by chance giving an equal probability of being selected. Simple random samples can be highly effective if all subjects return a survey; giving precise estimates and low variability. However, simple random samples are expensive and cannot guarantee that all groups are represented proportionally in the sample.

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<sup>2</sup> [www.gov.scot/Resource/0049/00490164.pdf](http://www.gov.scot/Resource/0049/00490164.pdf)

<sup>3</sup> For more information on Birth registration please see [www.nrscotland.gov.uk/registration/registering-a-birth](http://www.nrscotland.gov.uk/registration/registering-a-birth)

4.6 Stratified sampling involves separating the eligible population into groups (i.e. strata) and then assigning an appropriate sample size to each group to ensure that a representative sample size is taken. This survey was stratified by the hospital where women gave birth (with separate strata for home births) and was based on a disproportionate stratified sample design, because the sampling fraction was not the same for each birth site. Some birth sites were over-sampled relative to others (i.e. had a higher proportion of their mothers included in the sample) in order to achieve the minimum number of responses required for analysis.

### Sample size calculation

4.7 Sampling was based on the numbers of births in Scottish hospitals, to aim for sufficient responses to achieve a reasonably reliable result for each hospital. The reliability of the result depends on the number of questionnaires returned, and also the variability of the responses.

4.8 The sample size that was calculated for each hospital was based on the minimum number of responses that would be required to achieve an estimate of a percentage that has a 95% confidence interval with width +/- 5 percentage points, sampled from a finite population.

4.9 The formula for the minimum sample required (M) is

$$M = B/(1+(B-1)/N).$$

Where:

- N is the number of births in a hospital on the sampling frame
- $B = z^2p(1-p)/c^2$
- p = the proportion answering in a certain way (assume 0.5 as this gives maximum variability)
- z is 1.96 for a 95% confidence interval (from standard normal distribution)
- c gives maximum acceptable size of confidence interval, in this case 0.05 (5 percentage points).

Based on the above, B=384

4.10 [Table 4](#) below shows examples of this minimum number of responses required (M) based on the assumptions above for some example birth numbers.

Table 4 Minimum sample size required for different sites, based on number of births

Total numbers of births (N)	100	200	500	1000
Minimum sample required (M)	80	132	217	278
Percentage of total births	80%	66%	43%	28%

4.11 In practice, if the underlying proportion is actually higher, or lower, than 0.5, then these numbers of responses would give narrower confidence intervals (or fewer responses would be required for the same accuracy).

- 4.12 The minimum sample size required ([Table 4](#)) is adjusted upwards to allow for assumed non-response to the survey. The response rates from the 2013 Maternity Care Experience Survey were used to estimate the expected responses for this survey, on a site by site basis (the national response rate in 2013 was 48%).

### **Sample selection**

- 4.13 A random sample of infants was prepared by Health ASD, using the information provided by NHS CR. For the majority of birth sites in Scotland, a random sample of the required number of patients from each birth site was made using the “surveysselect” procedure within the SAS software package. For some sites with very small numbers of eligible patients, all patients were included in the survey in order to meet the minimum sample size requirements identified from the calculation above.
- 4.14 This list of infants was then returned to NHS CR who added on the mothers’ information, including name and address for the survey mail out, and removed any women who had either lost a baby or who had died.
- 4.15 Women were also excluded from the survey if they were not resident in Scotland. We made the assumption that in most cases, if women were resident in Scotland, they would have had their whole maternity care in Scotland. Women who had given birth to more than one baby were only eligible for sampling once, therefore other babies’ registrations were removed from the file we took the sample from.
- 4.16 Additionally, women who gave birth somewhere other than a hospital or their home were excluded, as many questions would not apply.
- 4.17 A total of 5,025 women were sampled for inclusion in the Scottish Maternity Care Survey 2015. [Table 5](#) provides the number of women selected to take part in the survey for each NHS Board and Scotland.

Table 5 Women selected to take part in the survey

<b>NHS Board</b>	<b>Number of women selected</b>
Ayrshire & Arran	309
Borders	144
Dumfries & Galloway	172
Fife	389
Forth Valley	271
Grampian	577
Greater Glasgow and Clyde	1193
Highland	338
Lanarkshire	430
Lothian	690
Orkney	29
Shetland	30
Tayside	426
Western Isles	27
<b>Scotland</b>	<b>5,025</b>

## 5 FIELDWORK

- 5.1 The Scottish Government contracted [Quality Health Ltd](#) to administer the survey. Quality Health Ltd has in-depth experience of NHS surveys, and has provided support for other patient experience survey work both in Scotland and elsewhere in the UK.

### Mail-out

- 5.2 The initial mail out was sent on Wednesday 27 May 2015 to 5,025 women, followed by two reminders, at three weeks intervals, to those who did not initially respond in order to boost the response rate.

### Data collection

- 5.3 Data was collected in the form of hardcopy returns and online returns. For more information on the format of returns refer to section 7.3 of this report.
- 5.4 During the fieldwork a freephone helpline answered queries from patients surveyed. In total, 14 telephone enquiry calls were answered by the telephone helpline. In proportion of the number of surveys sent out (0.3%) this is very similar to the numbers from the last survey. This low level of enquiries could be attributed to a good supporting documentation and instructions being sent with the questionnaire. Another possible explanation could be that patient experience surveys are now fairly common and people may simply be more familiar with completing them.

### Deceased patients

- 5.5 The women included in the 2015 survey were sampled based on the Births Registrations Records for babies born in February and March 2015. The questionnaire printing and mail-out process extended from late May 2015 through to the last mailing date of 8 July 2015. This meant that some women or babies may have died between the sample and mail out dates.
- 5.6 To minimise the risk of questionnaires being sent to deceased women, or women whose baby would have died, a list of women included in the survey was sent to the NHS CR along with the birth registrations of their baby or babies. Both women and babies details were linked to the National Records of Scotland (NRS) database of registered deaths and Quality Health Ltd were notified of any individuals who should be removed from the mail-out. This check happened on the morning of each mail-out to ensure that the most up to date information was used. Having access to daily death information greatly reduced possibility of questionnaires being sent to addresses of deceased women or babies. We are grateful to NHS CR for their help and support during this stage of the project.
- 5.7 One record included in the sample were flagged as deceased by NHS CR prior to the first reminder and another one prior to the second reminder. Details of these individuals were flagged to Quality Health Ltd and removed

from the mail-out process prior to dispatch. There were no reports of any questionnaires being sent to mothers who had died, or whose baby had died.

- 5.8 Any death which occurs in Scotland must be registered within eight days of the date of death. This means that there can be a delay between the actual date of death and the date that it is registered and updated on the CHI and NRS databases.

## **6 DATA ENTRY AND FIELDWORK QUALITY CONTROL**

### **Scanning process and data capture**

- 6.1 Once the survey was issued, paper copies of questionnaires received were scanned on a daily basis by staff at Quality Health Ltd. A verification process was then carried out for each batch scanned and a number of checks were undertaken to ensure that the scanning process had worked correctly.
- 6.2 All verification staff at Quality Health Ltd were given in-house training and detailed instructions about this survey to ensure that any particular nuances in the data, critical questions and coding rules were understood. Managers were on hand at all times to answer queries or provide additional advice.
- 6.3 A mandatory look up was in place to check multi-choice questions response options, or where there was doubt in respect of multiple marks on the page, crossing out, changes of mind or routing issues.
- 6.4 The data entry system ensured that only valid answer codes for each question could be entered and that the correct data appeared in each field. Other checks included ensuring that numeric data was the correct format and that fields were not truncated in error.

### **Secure disposal**

- 6.5 Once processed, all returned questionnaires were immediately stored in labelled containers and archived in a secure room on-site until they reach their agreed destruction date. Once destroyed a certificate of destruction was received.

### **Free text comments**

- 6.6 The survey asked respondents if there was anything else that they would like to tell us about their experiences of their maternity care. Almost 2,700 comments were left by almost 1,250 mothers (with some mothers commenting on more than one section).
- 6.7 Disclosive details that could be used to identify women were suppressed when the comments were entered. These details included personal names, addresses, ages, dates, medications and medical conditions. Staff names were also suppressed.

6.8 Quality checks were undertaken on records to ensure that the free text comments were linked to the correct record and that the instructions for suppressing disclosive details were followed.

## 7 SURVEY RESPONSE

### Overview

7.1 The response rate for the survey is the number of forms returned as a percentage of the number of people in the sample. In total, 5,025 surveys were sent to patients and 2,036 were returned completed, giving an overall response rate of 41 per cent. This is slightly lower than the response rate for the 2013 Maternity Care survey which had a response rate of 48 per cent.

### Overall response rates for NHS Board areas

7.2 The highest response rate for an NHS Board was Shetland (70%) and the lowest response rate was for the Western Isles (33%) and Greater Glasgow and Clyde (36%).

Table 6 Response rate by NHS Board

<b>NHS Board</b>	<b>Total forms sent out</b>	<b>Number of Responses</b>	<b>Response Rate (%)</b>
Ayrshire and Arran	309	119	39
Borders	144	68	47
Dumfries and Galloway	172	78	45
Fife	389	159	41
Forth Valley	271	111	41
Grampian	577	263	46
Greater Glasgow and Clyde	1,193	425	36
Highland	338	151	45
Lanarkshire	430	140	33
Lothian	690	298	43
Orkney	29	18	62
Shetland	30	21	70
Tayside	426	176	41
Western Isles	27	9	33
<b>Scotland</b>	<b>5,025</b>	<b>2,036</b>	<b>41</b>

## Method of response

7.3 Of the 2,036 respondents, the majority (91%) sent their surveys back in the post. A total of 181 completed their survey online ([Table 7](#)).

Table 7 Method of response

Method of response	Number of questionnaires completed	Questionnaires completed (%)
Post	1,854	91
Online	181	9
Helpline	0	0
Translation	1	<1
<b>Total number of respondents</b>	<b>2,036</b>	<b>100</b>

7.4 Of the women who were sent a questionnaire, 62 (1%) were returned as undelivered. It is likely that this list will include women who moved away from their address without notifying their GP practice. As a result the wrong address would have been extracted by NHS CR and sent to the contractor.

## 8 ANALYSIS AND REPORTING

### Introduction to analysis

- 8.1 The survey data was collected and coded by Quality Health Ltd. Quality Health Ltd produced the analysis for the hospital reports and produced the hospital and NHS Board reports. Data quality checks were carried out by Quality Health Ltd and Health ASD. Health ASD also undertook the NHS Board and National analyses. The national report was produced by the NMAHP-RU with support from Health ASD.
- 8.2 Given that the survey is based on only a sample of mothers, the figures included in the report are estimates for the 'true' figures that would have been found if we had surveyed every eligible mother in Scotland. Confidence intervals, which are included in most tables of the national report, provide a way of quantifying this sampling uncertainty. A 95% confidence interval means that, over many repeats of a survey under the same conditions, one would expect that the confidence interval would contain the true population value 95 times out of 100.

### Number of responses analysed

8.3 The number of responses that have been analysed for each question is often lower than the total number of responses received. This is because not all of the questionnaires that were returned could be included in the calculation of results for every individual question. In each case this was for one of the following reasons:-

- The specific question did not apply to the respondent and so she did not answer it. For example if a woman gave birth at home she would not have completed the section on giving birth at hospital.
- The respondent did not answer the question for another reason (e.g. refused). Women were advised that if they did not want to answer a specific question they should leave it blank.
- The respondent answered that she did not know or could not remember the answer to a particular question.
- The respondent gave an invalid response to the question, for example she ticked more than one box where only one answer could be accepted.

8.4 The number of responses that have been analysed nationally for each of the per cent positive questions is shown in Annex A.

## **Weighting**

8.5 With the exception of the 'Women who responded to the survey' section, the percentages presented in the report have been weighted in order to increase the representativeness of the results. Weights were applied to all survey responses based on the number of eligible mothers who gave birth in each hospital (or gave birth at home). This means that the per cent contribution of each hospital to the NHS Board and Scotland results is proportional to the number of eligible mothers that gave birth there.

8.6 Weighting the results in this way provided results more representative of the population (at Scotland, NHS Board or hospital level) than would have been the case if all hospitals (large and small) had been given equal weighting in the calculation of aggregate results.

## **Percentage positive and negative**

8.7 Per cent or percentage positive is a term frequently used in the reporting. This means the percentage of people who answered in a positive way. For example, when people were asked if they were involved enough in decisions about their care, if people said 'Yes, always', these have been counted as positive answers. Similarly those women who said they 'No' have been counted as negative. Women who said 'Yes, sometimes' were counted as partially positive. Annex A details which answers have been classed as positive, partially positive and negative for each question.

8.8 Percentage positive is mainly used to allow easier comparison rather than reporting results on the three or five point scale that patients used to answer most of the questions. There is also a belief that differences between answers on a five point may be subjective. For example there may be little or no difference between a person who "strongly agrees" and one who "agrees" with a statement. In fact some people may never strongly agree or strongly disagree with any statements.

## Analysis by Health Board

- 8.9 A number of mothers gave birth in a different NHS Board from the one in which they live. In such cases, the mothers' responses for questions relating to hospital care, labour and the birth have been included in the results for the NHS Board in which they gave birth. Responses to other questions, such as those relating to antenatal care and 'care at home', have been included in the results for the Health Board in which they live.

## Analysis of the free-text comments

- 8.10 For the first time the comments which women returned in answer to the open questions in the Scottish Maternity Survey have been analysed for inclusion in the main report. These comments were provided in answer to four 'free text' questions. The number and spread of the comments is described below:

Survey Question	Number of Comments
If there is anything else you would like to tell us about your antenatal care, please do so here	620 comments
If there is anything else you would like to tell us about <b>your labour and birth</b> , please do so here	755 comments
If there is anything else you would like to tell us about <b>your care in hospital after the birth</b> , please do so here	757 comments
If there is anything else you would like to tell us about <b>your postnatal care</b> , please do so here	535 comments

- 8.11 In total 1,244 of the returned surveys included 'free text' comments, meaning that just over 61% of the women who completed this survey chose to provide comment in response to at least one of the above open questions. A total of 2,667 comments were provided by women, meaning that some survey participants answered more than one 'free text' question.
- 8.12 The spread and content of the comments suggest that women were most motivated to tell us about their experiences in hospital; before, during and after the birth of their babies. However a sizeable number of women did choose to make comment on the care they received in the community both during pregnancy and in the post-natal period. As women chose whether or not to provide comment on their experiences, the sample is necessarily unrepresentative but nevertheless was found to contain a broad range of opinion. We are grateful to the women who shared their views with us in this way, as their comments provide real insight into recent experiences of having a baby in Scotland.
- 8.13 The overall aims of our qualitative analysis were as follows:

- To listen to and learn from women's accounts of their experiences
- To better understand the overall ratings of their maternity care provided by women in response to this survey
- To illustrate the main findings from the survey.
- To uncover areas for learning and improvement in Scottish maternity care.

The researchers worked together to fit the statistical and qualitative analysis of the survey data together in order to provide a report on all the responses to the survey. We were also interested in whether the free text comments contained suggestions for the future development of the Scottish Maternity Survey design.

- 8.14 The full data set of 2,667 comments was read and re-read and initial notes on overarching themes were taken. The complete data set was then divided up by question to form 4 smaller sets of data, one for each open question in the survey. Initial 'high level' coding by 'positive' and 'negative' was completed in order to discover the overall balance of opinion in each section. However it should be recognised that the richness of the 'free text' comments returned mean that many included reference to both positive and negative experiences of maternity care.
- 8.15 Following the 'high level' analysis, the content of the comments was then analysed for emergent themes (Miles and Huberman, 1994; Garcia et al, 2004), which were then developed into codes. The data was coded using a process of 'constant comparison' (Glaser & Strauss, 1967; Charmaz, 2014). Some major and a number of more minor themes emerged from each section of the data. To provide an example, many comments returned in relation to community antenatal care referred to whether women had experienced 'continuity' in their care. Therefore, coding was thematic in nature and was derived from the major concerns expressed within the data itself.
- 8.16 The entire data set was then coded line by line in detail. For the comments on antenatal care, care in hospital after the birth, and postnatal care in the community, the data was coded in Excel spread sheets. For the comments on labour and birth, the data was coded using the [QSR International](#) qualitative data analysis software NVivo (version 10). The use of a software package specifically designed for qualitative analysis allowed for more detailed coding of the comments regarding women's labours and births (Bazeley, 2007). This was helpful as women often provided the wider context of their birth experiences in order to explain their views, meaning that comments in this section were generally longer and referred to more than one aspect of care received during labour and birth.
- 8.17 Finally, the comments were grouped by code into word documents and were then used to write a thematic analysis of the data. The analysis drew on previously undertaken, peer-reviewed, research on experiences of maternity care in order to situate the Scottish experience in context, and consider similarities and differences in experience. This qualitative analysis and a selection of the original comments provided by women were included within

the main Scottish Maternity Survey report under the 'what women said' headings for each section.

- 8.18 We hope that the inclusion of both a full analysis of the free text data and a selection of women's comments helps to illustrate the main findings from this survey and brings women's experience of maternity care to life. We further expect that it may provide ideas for ways in which maternity care can further develop to meet the Scottish Government's commitment to providing women and babies with the best quality of health care and to ever improving outcomes for Scotland's children and families.

### **Quality assurance of the national report**

- 8.19 A small group of Scottish Government policy leads were sent a draft version of the national report for quality assurance. In addition Health ASD carried out quality checks of all figures used in the report.
- 8.20 A statement on data quality for all of the patient experience surveys is available at [www.gov.scot/Resource/0049/00490162.pdf](http://www.gov.scot/Resource/0049/00490162.pdf).

### **Revisions to previous publication**

- 8.21 A copy of our revisions policy is available at [www.gov.scot/Resource/0049/00490163.pdf](http://www.gov.scot/Resource/0049/00490163.pdf).
- 8.22 During the analysis of the 2015 data, some small revisions were made to the 2013 results. These revisions were:
- Corrections to the weightings for the "percentage positive" questions and
  - Reanalysis of some of the questions in the 2013 local reports to bring them into line with the methodology used in the 2013 Main Report. (questions B18 and F14).
- 8.23 The change to the data in the 2013 National Report are negligible but are slightly larger for some of questions at a Health Board level. Where figures have been revised these have been marked with an "R" in the 2015 Local Board reports.

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## ANNEX A PER CENT POSITIVE, PARTIALLY POSITIVE AND NEGATIVE RESULTS

The table below shows which answers were classed as positive and which were classed as negative.

Answers such as or “No, but I did not mind” or “Yes, sometimes” and “Fair” were treated as partially positive. Other answers such as “can’t remember / don’t know” were excluded from the analysis.

The table also shows how many respondents there nationally were for each of the per cent positive questions.

Table 8 Number of respondents to the per cent positive questions

Question	Question text	Codes for categories				Number of Respondents
		Positive	Neutral	Negative	Exclude	
B6	Did you get enough information from either a midwife or doctor to help you decide where to have your baby?	1	2	3	4,5	2033
B7	During your pregnancy were you given a choice about where your antenatal check-ups would take place?	1		2	3	2030
B9	If you saw a midwife for your antenatal check-ups, did you see the same one every time?	1,2		3	4,5,6	2029
B10	Did you have a named midwife?	1	2	3,4	5	2027
B11	During your antenatal check-ups, were you given enough time to ask questions or discuss your pregnancy?	1	2	3	4	2034
B12	During your antenatal check-ups, were you listened to?	1	2	3	4	2031
B13	During your antenatal check-ups, were your personal circumstances taken into account?	1	2	3	4	2033
B14	During your pregnancy, did you have a discussion with a Health Visitor?	1		2,3	4,5	2014
B15	During your pregnancy, did you have a telephone number for a midwife or midwifery team that you could contact?	1		2	3	2033
B16	During your pregnancy, if you contacted a midwife or the midwifery team, were you given the help you needed?	1	2	3	4,5	2031
B17	Thinking about your antenatal care, were you spoken to in a way you could understand?	1	2	3	4	2032
B18	Thinking about your antenatal care, were you involved enough in decisions about your care?	1	2	3,4	5	2027

B19	Overall, how would you rate your antenatal care?	1,2	3	4,5		2028
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		2	3	1834
C2	During your labour, were you able to move around and choose the position that made you most comfortable?	1	2	3	4	1791
C3	During your pregnancy, were you given enough information about the pain relief you could use when giving birth?	1	2	3	4,5	1808
C4	Did you feel that you had enough help to enable you to cope with your pain during labour?	1	2	3	4	1791
C10	Did the staff caring for you introduce themselves?	1	2	3	4	2023
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?	1		2	3,4,5	2026
C13	If you raised a concern during labour and birth, did you feel that it was taken seriously?	1		2	3	864
C14	When you called / asked for assistance during labour and birth did you receive it within a reasonable time?	1	2	3	4,5	2005
C15	Thinking about your care during labour and birth, were you spoken to in a way you could understand?	1	2	3	4	2023
C16	Thinking about your care during labour and birth, were you involved enough in decisions about your care?	1	2	3	4,5	2016
C17	Thinking about your care during labour and birth, were you treated with respect and dignity?	1	2	3	4	2023
C18	Did you have confidence and trust in the staff caring for you during your labour and birth?	1	2	3	4	2020
C19	Overall, how would you rate the care you received during your labour and birth?	1,2	3	4,5		2015
D2	Looking back, do you feel that the length of your stay in hospital after the birth was...	1		2,3	4	1986
D3	Thinking about the care you received in hospital after the birth of your baby, were you given the information or explanations you needed?	1	2	3	4	1990

D4	Thinking about the care you received in hospital after the birth of your baby, were you treated with kindness and understanding?	1	2	3	4	1987
D6	Thinking about your stay in hospital, how clean was the hospital room or ward you were in?	1	2	3,4	5	1991
D7	Thinking about your stay in hospital, how clean were the toilets and bathrooms you used?	1	2	3,4	5,6	1991
D8	Overall, how would you rate the care you received in hospital after the birth?	1,2	3	4,5		1977
E1	During your pregnancy did midwives or the midwifery team provide relevant information about feeding your baby?	1	2	3	4,5	2014
E4	Were your decisions about how you wanted to feed your baby respected by staff?	1	2	3	4	2010
E5	Did you feel that midwives and other health professionals gave you consistent advice about feeding your baby?	1	2	3	4,5,6	2012
E6	Did you feel that midwives and other health professionals gave you active support and encouragement about feeding your baby?	1	2	3	4,5	2010
F1	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?	1		2	3	2019
F2	If you contacted a midwife or midwifery team were you given the help you needed?	1	2	3,4	5	2014
F3	Since your baby's birth have you been visited at home by a midwife?	1	2	3	4,5	2017
F5	Was it convenient for you to see a midwife at a clinic?	1	2	3	4	578
F7	If you saw a midwife for your care at home or in a clinic, after birth, did you see the same one every time?	1,2		3	4,5	2006
F8	Did you see your named midwife at home or in a clinic after birth?	2	3	4	1,5	2004
F10	Would you have liked to have seen a midwife...	3		1,2		2003
F11	Did you feel that the midwife or midwives that you saw always listened to you?	1	2	3	4	2015
F12	Did the midwife or midwives that you saw take your personal circumstances into account	1	2	3	4,5	2014

	when giving you advice?					
F13	Did you have confidence and trust in the midwives and midwifery team you saw after going home?	1	2	3	4	2015
F14	Did you see the same midwife for both your antenatal and postnatal care?	1	2	3,4	5	2012
F15	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?	1	2	3	4,5	2020
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?	1	2	3	4,5	2014
F17	Did a midwife tell you that you would need to arrange a postnatal check-up of your own health?	1		2	3	2017
F18	Were you given enough information about your own physical recovery after the birth?	1	2	3	4,5	2018
F19	Were you given enough information about any emotional changes you might experience after the birth?	1	2	3	4,5	2016
F20	Were you told who you could contact if you needed advice about emotional changes you might experience after the birth?	1		2	3	2020
F22	Overall, how would you rate the care you received at home after the birth?	1,2	3	4,5		2012

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### **How to access background or source data**

The data collected for this statistical bulletin may be made available on request, subject to consideration of legal and ethical factors. Please contact [patientexperience@gov.scot](mailto:patientexperience@gov.scot) for further information.

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