Maternity Care Survey 2017

Development Report
October 2018
Suggested citation:


Published October 2018

Please note that there is the potential for minor revisions of data in this report. Please check the online version at [bhi.nsw.gov.au](http://bhi.nsw.gov.au) for any amendments.
Maternity Care Survey 2017
Development Report

Background

In early 2017, the Bureau of Health Information (BHI) reviewed the questionnaire used in the 2015 Maternity Care Survey to prepare for the collection of experience data from women who gave birth from January to December 2017. Mothers were surveyed approximately three months after discharge to understand experiences of antenatal care, during the birth and the hospital stay, as well as followup care and outcomes after discharge from hospital. Accordingly, data collection began in May 2017 and ended in June 2018.

BHI undertakes reviews of all recurrent surveys before the surveys are repeated. The purpose of the review is to ensure the questionnaire is still appropriate for the NSW context and that all questions remain optimal.

This document summarises the changes to the Maternity Care Survey questionnaire made in 2017 to the 2015 questionnaire version. Please refer to the 2015 Maternity Care Survey development report, available at bhi.nsw.gov.au, for information about how that questionnaire was developed, including details on stakeholder consultation and engagement, questionnaire development, sampling methodology, and additional development notes.

Method

As this was the second implementation of the Maternity Care Survey, the review of the questionnaire focused on a methodological analysis of the 2015 data, as well as a review of the use of the survey data for reporting maternity care performance. The changes and rationale are presented in this document.

The following stages were undertaken in the analysis of the 2015 Maternity Care Survey data to test the quality of question and questionnaire design:

- Response patterns for each question, including rates of item non-response (not answering a question when they should have), invalid responses (selecting more than one answer to a single response question or answering a question they should have skipped past) and non-specific responses, such as ‘don’t know’, ‘can’t remember’ or ‘not applicable to me’
- Ceiling and floor effects of response categories (responses where almost all patients are very positive or very negative, with little variation between hospitals) using the scored mean, standard deviation and skewness of responses
- Correlations between questions (using the most positive response option) to understand if any questions appear to be duplicating the same aspect of care (using the Pearson method)
- Following the analysis of the survey data, stakeholders were invited to provide comments on the questions and propose changes.
Overview of changes to the Maternity Care Survey

NEW Questions

- **Question 2.** Was your antenatal care provided using a Shared Care model, i.e. some care provided by a GP and some by a hospital?
- **Question 8.** Do you think the time you had to wait was...?
- **Question 22.** Did you receive enough information about pain relief options prior to the birth?
- **Question 26.** How much did your baby weigh at birth? (If you gave birth to more than one baby, please answer for the lightest baby)
- **Question 27.** In the two weeks following the birth, did your baby spend any time being cared for in a neonatal intensive care unit (NICU) or similar unit?
- **Question 58.** Were the visiting times convenient for your friends and family?
- **Question 80.** In your opinion, were members of the hospital staff open with you about this complication or problem?
- **Question 86.** Overall, how would you rate the care you received in the first two weeks after arriving home from the hospital?
- **Question 97.** How often do you need to have someone help you when you read instructions, pamphlets, or other written material from your doctor or pharmacy?

DELETED Questions

- **Previous Question 16.** Were you told about programs you could join or take part in to stop smoking?
- **Previous Question 21.** Where did you get information about pain relief options for this birth? Please x all the boxes that apply to you
- **Previous Question 26.** Why was your baby born by caesarean section?
- **Previous Question 47.** How would you describe your health immediately after the birth?

MODIFIED Questions and questionnaire content

- **Cover letter**
- **Question 5.** (Previous Q4.) How long did you usually have to travel (one way) for antenatal care check-ups during your pregnancy?
- **Question 6.** (Previous Q5.) How long did you usually spend at your antenatal check-ups between the time you arrived and when you left?
- **Question 7.** (Previous Q6.) How much of this time did you usually spend waiting to be seen?
- **Question 24.** (Previous Q23.) Did you give birth to a single baby or multiple babies (twins, triplets or more)?
- **Question 25.** (Previous Q24.) How many weeks pregnant were you when your baby was born?
- **Question 78.** (Previous Q76.) During your hospital stay or soon afterwards, did you experience any of the following complications or problems? Please x all the boxes that apply to you
- **Question 81.** (Previous Q78.) In the first two weeks after arriving home, did you have a follow-up appointment with a midwife or nurse? Please x all the boxes that apply to you
- **Question 90.** (Previous Q86.) What is the highest level of education you have completed?
- **Question 95.** (Previous Q91.) Did the hospital provide an interpreter when you needed one?
Details of changes

New questions

Question 2.
Was your antenatal care provided using a Shared Care model, i.e. some care provided by a GP and some by a hospital?

☐ Yes
☐ No

Rationale
During consultation on the content of the Patient Perspectives: Experiences of maternity care in NSW public hospitals, stakeholders from the Ministry of Health identified that the questionnaire did not appropriately address the concept of a ‘Shared Care’ model of maternity care. This was supported by data from the 2015 survey, specifically by those who had entered two responses to Q2 “Who provided most of your antenatal care?” In those cases where respondents did not follow instructions and selected more than one response option, it was seen that a combination of public hospital midwife and GP was most common, followed by public hospital obstetrician and GP. Please note that this question was a late addition to the survey and it was not possible to test with patients before it was included in the questionnaire.

Question 8.
Do you think the time you had to wait was…?

☐ About right
☐ Slightly too long
☐ Much too long
☐ Don’t know/can’t remember

Rationale
This question was added to provide patient insight into the amount of time women spend waiting for antenatal services. This was identified as a ‘gap’ in the 2015 report and the addition of this question brings the maternity care questionnaire into alignment with other BHI questionnaires.

Question 22.
Did you receive enough information about pain relief options prior to the birth?

☐ Yes, definitely
☐ Yes, to some extent
☐ No
☐ I did not need information about pain relief options

Rationale
The 2015 questionnaire included a question about the information source for pain relief during labour. This question provided useful information about provision of information but not about the patient’s perception about the quality of information. Due to limited space, it was decided that a question about getting enough information on pain relief options was preferable to the existing question.

Question 26.
How much did your baby weigh at birth? (If you gave birth to more than one baby, please answer for the lightest baby)

☐ Less than 2500g (Less than 5 pounds 8 ounces)
☐ 2500g or more (5 pounds 8 ounces or more)
☐ Don’t know/can’t remember

Rationale
The issue of low weight babies was identified by peer reviewers of the maternity report as impacting on the model of care of newborns and potentially on the mother’s experience of care. This type of question was frequently asked by other jurisdictions and countries, and the English survey question was seen to fit best with the tone of the NSW survey. It should be noted that this question was used in the 2007 and 2010 English survey before being removed as “the question does not have a defined purpose and does not focus on patient experience”. BHI will use this question in 2017 but will likely rotate it out of use every second or third survey year.
**Question 27.**

In the two weeks following the birth, did your baby spend any time being cared for in a neonatal intensive care unit (NICU) or similar unit?

- [ ] Yes
- [ ] No
- [ ] Don’t know/can’t remember

**Rationale**

This question was added following review of the free text comments made by respondents. Many of these comments indicated a much longer and more involved relationship with the hospital following labour and discharge, which could be investigated as a potential influencer of patient experience.

**Question 58.**

Were the visiting times convenient for your friends and family?

- [ ] Yes, definitely
- [ ] Yes, to some extent
- [ ] No
- [ ] I did not have any visitors

**Rationale**

Review of patient free text comments identified this as a polarising issue with women, both in terms of access by their family but also with regard to noise and disturbance by other people's families. In addition, there was international focus observed in the literature about the removal of restricted visiting hours, so a question was added to assess this.

**Question 80.**

In your opinion, were members of the hospital staff open with you about this complication or problem?

- [ ] Yes, completely
- [ ] Yes, to some extent
- [ ] No
- [ ] Not applicable, as it happened after I left

**Rationale**

This question was added to align with other BHI patient survey questionnaires. This question provides evidence relevant to the NSW Health Open Disclosure Policy by reflecting on experiences of staff and patient interactions following complications or problems.

**Question 86.**

Overall, how would you rate the care you received in the first two weeks after arriving home from the hospital?

- [ ] Very good
- [ ] Good
- [ ] Neither good nor poor
- [ ] Poor
- [ ] Very poor

**Rationale**

The 2015 questionnaire included an overall rating question at the end of the antenatal care, labour and birth, and discharge from hospital sections. This question was added in order to assess 'overall care' for all parts the 'patient' journey.

**Question 97.**

How often do you need to have someone help you when you read instructions, pamphlets, or other written material from your doctor or pharmacy?

- [ ] Never
- [ ] Rarely
- [ ] Sometimes
- [ ] Often
- [ ] Always

**Rationale**

This question about ‘health literacy’ was included in 2017 to pilot a single use ‘health literacy’ question that could potentially be added to other BHI questionnaires. The question is referred to as the Single Item Literacy Screener (SILS) and is a validated question supported in published literature. This question is especially relevant to the maternity care questionnaire because of the larger proportion of maternity patients who speak a language other than English at home.
Deleted questions

Previous Question 16.
Were you told about programs you could join or take part in to stop smoking?

☐ Not applicable, I don’t smoke
☐ Yes
☐ No
☐ Don’t know/can’t remember

Rationale
BHI engaged with the NSW Health Quit for Life program to review two smoking questions following the 2015 survey. The advice received from the program coordinators is that this question implied access to specific but unnamed programs. The coordinators felt that while these programs are available in some locations, there are many locations where they are not and there are other reasons too why these programs may not be appropriate for all women. Due to limitations on questionnaire length, this question was retired from the 2017 questionnaire but a version of it may be reconsidered for the 2019 survey.

Previous Question 26.
Why was your baby born by caesarean section?
Please x all the boxes that apply to you

☐ My health was at risk
☐ My baby’s health was at risk
☐ Labour had ‘failed to progress’
☐ I wanted my baby born this way
☐ I’d had a caesarean previously
☐ Other reason
☐ Don’t know/can’t remember

Rationale
This question had a very high percentage who reported an “other reason” for the caesarean section (20%). In addition, this question addressed a research question rather than patient experience and so was not prioritised. Finally, the question required some difficult questionnaire filtering instructions which were resolved with its removal.

Previous Question 21.
Where did you get information about pain relief options for this birth? Please x all the boxes that apply to you

☐ Antenatal check-ups
☐ Birthing classes
☐ Online (website or apps)
☐ Other
☐ I did not need this information

Rationale
This question was removed to allow room for a question about whether enough pain relief information was received during antenatal care. This question may be included in future maternity surveys every two to three cycles to collect evidence on whether the sources of information change over time.

Previous Question 47.
How would you describe your health immediately after the birth?

☐ Excellent
☐ Very good
☐ Good
☐ Fair
☐ Poor

Rationale
This question addresses the health status of the mother following birth. This question was not used in reporting the 2015 maternity survey results and does not provide information about the experience of care received. Because of these reasons, the question was removed from the 2017 questionnaire to provide space for other questions but may be included again in the future.
Modified questions and questionnaire content

Cover letter

Action

Three main changes to the cover letter were made:

- Changes to improve the information provided and the invitation to participate
- Addition of maternity survey-specific branding and colouring
- Addition of full-colour BHI logo.

Rationale

International research has demonstrated that succinct text and clear subheadings on a survey cover letter are associated with increased response rates. The cover letter and information sheet for the Maternity Care Survey were modified to make this more accessible to patients and to promote use of the online completion tool.

In terms of branding, BHI applied survey-specific branding to all survey types so that each survey has its own logo and colour-scheme. This had become necessary due to the large suite of surveys developed by BHI and ensures each survey can be distinguished from the others. This will make it easier for patients to describe which survey they received and reduce errors in printing and processing survey materials.

Question 5. (Previous Q4.)

How long did you usually have to travel (one way) for antenatal care check-ups during your pregnancy?

Question 6. (Previous Q5.)

How long did you usually spend at your antenatal check-ups between the time you arrived and when you left?

Question 7. (Previous Q6.)

How much of this time did you usually spend waiting to be seen?

- Under 30 minutes
- 30-59 minutes
- 1 hour to under 2 hours
- 2 hours or more
- Don’t know/can’t remember

Rationale

On review of data, very few women answered the longest response category (3 hours or more) – 0.3%, 3.5% and 1.2% for Q5, Q6 and Q7 respectively. To reduce the cognitive burden of many response options, to shorten the questionnaire, and for consistency across the 2017 questionnaire, all three questions were modified to remove the longest response option.

Question 24. (Previous Q23.)

Did you give birth to a single baby or multiple babies (twins, triplets or more)?

- A single baby
- Twins or more

Rationale

The existing instructions were inappropriate for inclusion at Q24 following the addition of a follow-up question about when the birth occurred. This instruction has now been applied to Q26 “How much did your baby weigh at birth? (if you gave birth to more than one baby, please answer for the lightest baby)”
**Question 25.** (Previous Q24.)

How many weeks pregnant were you when your baby was born?

- □ Less than 32 weeks
- □ 32 - 36 weeks
- □ 37 - 41 weeks
- □ 42 or more weeks

**Action**

In 2015, the response options were set to differentiate at 40 weeks. Changes were made to the third and fourth response options from 2015:

- □ 37 - 40 weeks
- □ More than 40 weeks

**Rationale**

This change was made following advice from content experts for 'normal' gestation period.

**Question 78.** (Previous Q76.)

During your hospital stay or soon afterwards, did you experience any of the following complications or problems? Please x all the boxes that apply to you:

- □ An infection
- □ Excessive bleeding/haemorrhage
- □ Perineal/vaginal tear
- □ Complications as a result of an operation or surgical procedure
- □ A negative reaction to medication
- □ A bed sore or pressure wound
- □ A blood clot in the leg/DVT
- □ Any other complication or problem
- □ None of these

**Action**

Added new response options:

- □ Perineal/vaginal tear
- □ A bed sore or pressure wound

Change in order of response options:

- □ Complications as a result of an operation or surgical procedure
- □ A negative reaction to medication

Deleted response options:

- □ Complications as a result of tests, X-rays or scans
- □ A fall

**Rationale**

New response options: In 2015, 7% of respondents selected 'any other complication or problem' in response to this question. To reduce this ‘other’ group, BHI conducted a review of maternity questionnaires used in other Australian jurisdictions and internationally.

Following review, two new response options were added: ‘Perineal/vaginal tear’ and ‘a bed sore or pressure sore’.

**Perineal/vaginal tear**

There is a high risk of perineal tears for vaginal births, and there is a wide range of risk factors. The literature is mixed as to the extent to which perineal tears can be prevented, though it does identify a number of factors, some principally at the discretion of hospital staff, which may mitigate the risk and lasting consequences of perineal tears.

Perineal tears are identified as a complication of labour in the Maternity Information Matrix (AIHW/UNSW), a summary of data items relevant to maternal and perinatal health in Australian jurisdictions (http://maternitymatrix.aihw.gov.au/Pages/Details.aspx?DataItemID=242). Severe (3rd and 4th degree) tears are also identified as Hospital Acquired Complications (HACs) by the Australian Commission for Safety and Quality in Healthcare.

BHI also reviewed the free text comments made by women who reported ‘any other complication or problem’ in 2015. BHI found that women reported problems associated with perineal tears as well as expressing their views about the actions staff could have taken to minimise or prevent this harm.

BHI used the term "perineal / vaginal tears" to help maximise the likelihood of survey participants understanding the question. In the literature, BHI noted that, while perineal tears was the most commonly used term in Australia, vaginal tearing was commonly used internationally, especially in North America.

**A bed sore or pressure sore**

Although the likelihood of developing a pressure sore during a maternity stay is low, this response option is included in other BHI surveys of admitted patients.
Change in order of existing responses

Two response options ("a negative reaction to medication" and "complications as a result of an operation or surgical procedure") were reordered as more respondents selected the latter response (3% at NSW level) than the former (1% at NSW level). Good survey practice dictates that the most frequently selected response options should come first to reduce the cognitive demand on survey participants.

Deleted response options

Two of the response options in the 2015 questionnaire ("falls" and "complications from tests") were selected by very few respondents (~0% at NSW level). Because of this, and to ensure the question length does not become excessive, these response options were removed.

Question 81. (Previous Q78.)

In the first two weeks after arriving home, did you have a follow-up appointment with a midwife or nurse? Please x all the boxes that apply to you

Action

Changed numerical ‘2’ with text ‘two’.

Rationale

BHI style guide specifies that all numbers less than ten are presented alphabetically instead of numerically.

Question 90. (Previous Q86.)

What is the highest level of education you have completed?

- Less than Year 12 or equivalent
- Completed Year 12 or equivalent
- Trade or technical certificate or diploma
- University degree
- Post graduate/higher degree

Action

Deleted the 2015 response option:

- Still at secondary school

Rationale

This question was amended to align with the education questions used in other BHI questionnaires.

Question 95.

Did the hospital provide an interpreter when you needed one?

- Yes, always
- Yes, sometimes
- No
- I did not need the hospital to provide a professional interpreter

Action

Modified the 2015 question wording and added an additional response option of:

- I did not need the hospital to provide a professional interpreter

Rationale

This question was amended to align with the interpreter questions used in other BHI questionnaires. This question now focuses on interpreter services provided by the hospital, thereby excluding interpretation provided by family and friends of the woman.