Appendix A. Survey Methodology

A1 Mode of data collection

As outlined in Chapter 1, the methodology for the survey was broadly similar to that used in previous surveys. Mothers were asked to complete a questionnaire at three time points (stages) within the first year of their baby’s life. The main data collection mode was a postal self-completion questionnaire, however, for the first time in 2010, mothers were offered the option to complete the survey online. This was entirely voluntary and all mothers were sent a paper questionnaire at Stage 1 as well. At Stages 2 and 3 of the survey, mothers who did not complete a postal or online questionnaire were followed up either by telephone or face-to-face. Further information is provided in the section on Fieldwork procedures.

A2 Sample design and drawing the sample

The sample was drawn from birth registration records and covered births occurring between August and October 2010. The target sample sizes by Stage 3 of the survey in each country were as follows:

<table>
<thead>
<tr>
<th>Country</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>5,000</td>
</tr>
<tr>
<td>Wales</td>
<td>1,800</td>
</tr>
<tr>
<td>Scotland</td>
<td>1,800</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>1,800</td>
</tr>
<tr>
<td><strong>UK</strong></td>
<td><strong>10,400</strong></td>
</tr>
</tbody>
</table>

Because of the different target sample sizes the precise length of the sampling period varied in each country. Births in Scotland, Northern Ireland and Wales had a much greater chance of selection compared with births in England. In fact, in both Wales and Northern Ireland all births in the sample period were included (for which details were available at the time of sampling). Births were drawn at random from all those registered in England and Scotland during the defined sampling period.

In 2005, births where no partner details were recorded at registration were over-sampled. This was on the grounds that mothers who did not register a partner were likely to be younger and from a lower socio-economic group and both of these groups required sufficient numbers for analysis. In 2010, it was decided to over-sample mothers from the most deprived quintile of each country’s Index of Multiple Deprivation (IMD) instead, as it was felt that it would have a stronger correlation with low socio-economic group than not having registered a partner. This approach also helped to ensure sufficient younger mothers were included, as they were more likely to be from lower socio-economic groups. As response was predicted to be lower amongst mothers from lower socio-economic groups, and because these mothers are known to be less likely to breastfeed, over-sampling them ensured that we would have a sufficient numbers of mothers in this group. Over-sampling of mothers living in the most deprived areas occurred only in England and Scotland because, as mentioned, all births in Wales and Northern Ireland were sampled.

The samples in each country were selected from births occurring in a given range of dates between August and October 2010 and were designed to be representative of all births during that period.
The exact sampling period in each country varied depending upon the number of births overall and by deprivation quintile. Since the precise number of births in any period is subject to inevitable variation and could not be known in advance (although estimates were made based on the previous year’s figures which were provided by the registration offices to aid planning), the actual numbers being sampled were reviewed on an ongoing basis and decisions made about extending or shortening the sampling period as thought necessary in order to achieve the required target numbers.

Registration date was also taken into account as no sample was drawn where the baby was registered more than eight weeks after the birth of the baby (as the baby would be too old to be in the target age range by the time their mother received a questionnaire).

The sample design was carried out in two phases with the initial sample design being based on achieving a response rate similar to that achieved in 2005 (62% at Stage 1). Partway through fieldwork, response rates were looking lower than anticipated so more sample was drawn as part of a contingency plan to achieve the overall target sample sizes for each country. The periods this extra sample was drawn from followed on seamlessly from the originally designated dates.

The time periods used were as follows (covering the original and contingency period):

- England: 16 August – 26 September 2010
- Wales: 9 August – 17 October 2010
- Scotland: 16 August – 17 October 2010
- Northern Ireland: 9 August – 24 October 2010

### A3 Questionnaire design and piloting

#### Questionnaire design

Although there was a desire to maintain consistency with previous surveys in order to be able to track key measures over time, a number of amendments were made to the 2010/11 questionnaires to reflect the changed landscape of infant feeding and up-to-date policy requirements.

Over the three stages of the survey, 43 new questions were added to the questionnaires and 28 removed, giving a net increase of 15 questions. Further questions were subject to small wording changes or changes to precodes or instructions.

Full copies of the 2010/11 questionnaires can be found in the appendices. The main changes from previous surveys were as follows:

- A series of questions were added on the Healthy Start scheme, including eligibility, whether registered, awareness of the scheme, what spent vouchers on, why not used vouchers
- There were additional questions in 2010/11 on skin to skin contact, allergies, consumption of peanuts and peanut products, paternity leave, confidence feeding baby in front of others and dummy usage amongst other topics
To be able to identify premature babies, a question was added on how many weeks into pregnancy the baby was born.

To identify mothers who gave birth in hospitals which were fully accredited by UNICEF’s Baby Friendly Initiative, a question asking for hospital of birth (name and town/city) was added.

The existing question on the types of problems which can occur as a result of breastfeeding was refined by splitting it into two questions, separating out the pain felt from other issues.

Questions on the use of the combined pill were removed.

**Respondent burden**

In total Stage 1 was 150 questions long, Stage 2 was 99 questions long and Stage 3 118 questions long. The estimated completion time for each of the questionnaires was 25-30 minutes.

**Piloting**

As the changes to all three questionnaires were fairly substantial, and as the 2010/11 questionnaires were available to complete online for the first time, the pilot exercise conducted before each stage was substantially larger than in previous years.

<table>
<thead>
<tr>
<th>Stage</th>
<th>Date of pilot</th>
<th>Interviews completed</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Paper</td>
</tr>
<tr>
<td>1</td>
<td>July 2010</td>
<td>29</td>
</tr>
<tr>
<td>2</td>
<td>Sept 2010</td>
<td>36</td>
</tr>
<tr>
<td>3</td>
<td>Feb/March 2011</td>
<td>21</td>
</tr>
</tbody>
</table>

For each stage a member of the research team attended ‘mother and baby’ groups / clinics across the UK and asked mothers of babies in the target age range for each stage to fill in a paper copy of the questionnaire. The age range of the babies was slightly wider than the age range of the babies who would be targeted by the mainstage of the questionnaire in order to be able to achieve a good number of interviews at the pilot stage. Mothers who participated in the pilots included both mothers who breastfed and those who formula fed their babies. The pilot interviews were conducted with a new set of mothers at each stage.

After a questionnaire had been completed, each mother was asked a number of questions about their experience of filling in the questionnaire and any issues they had encountered. They were also asked how likely it would be for them to complete the questionnaire, either online or on paper, if they received an invitation to take part through the post (or by email for Stages 2 and 3).

Piloting took place in all four countries of the UK, with the exception of Northern Ireland at Stage 1 where it was not possible to obtain permission to carry out the interviews in time. More specifically, interviews were conducted in Oxford, Glasgow, Newport, Cardiff and Belfast.

To test the online survey at Stage 1, mothers at the pilot locations were able to fill in the online survey, using a laptop with Wi-Fi access via a ‘dongle’. However, poor internet connection / signal...
coverage was experienced in each area and resulted in few surveys being completed online at baby groups / clinics. The second phase of the Stage 1 pilot involved:

- publishing a link to the online survey on the York NCT yahoo group and publicising it via Twitter;
- sending the link to antenatal teachers in Northern Ireland to email to their class members;
- distributing the link to other mothers of babies through personal contacts.

Due to difficulties with wireless internet at the Stage 1 pilot, a different approach was taken at Stages 2 and 3. At each stage an email invitation was sent to 200 NCT members across the UK with babies in the target age range. In addition, at Stage 2, contact information was collected from mothers who were not able to fill out the paper questionnaire at the baby clinics / mother and baby groups so they could also receive an online invitation. This was not repeated at Stage 3 due to low participation rates via this method.

At all stages, follow up interviews with online respondents (who had provided telephone numbers) were conducted over the telephone.

A4 Fieldwork procedures

The fieldwork procedures used in 2010/11 were broadly the same as in previous surveys, however as discussed earlier, for the first time in 2010/11, mothers could respond online if they wished (although all mothers were also sent a paper questionnaire).

The key reasons for introducing the online approach were as follows:

- It reflects the communications channels the public (including mothers of young babies) use nowadays;
- It gives respondents a choice of feedback channels;
- It is a more efficient and cost effective means of collecting data than paper questionnaires;
- It improves data quality, since questionnaire routing is built into the online survey, ensuring that respondents do not accidentally miss questions;
- It is better for the environment, as less paper is used.

**Stage 1 fieldwork**

At Stage 1 of the survey the drawing of the sample and the despatch of questionnaires and reminders was done through the respective Registration Offices in the different countries:

- In England and Wales this part of the survey was carried out by the Office for National Statistics (ONS);
- In Scotland it was done by the General Register Office (GRO-S);
• In Northern Ireland it was carried out by the Northern Ireland Statistics and Research Agency (NISRA).

This system was followed because names and addresses collected as part of the birth registration process could not be released to any third party.

Although the sampling and despatch was done by the respective Registration Offices, IFF was responsible for the printing and packing of all questionnaire packs and reminder letters and worked closely with the different organisations to manage the process efficiently.

The main Stage 1 fieldwork period was from September to December 2010, with the despatch of the initial questionnaire being staggered on a weekly basis to ensure it reached the mother when the baby was approximately six weeks old.

A total of up to four mailings were sent to mothers in the sample. These were as follows:

• an initial mailing which contained a leaflet from ONS/GROS/NISRA, a questionnaire with a unique serial number on it, and a reply paid envelope for returning the questionnaire to IFF. In Wales, English and Welsh language versions of the questionnaire and leaflet were sent to mothers.

• a first reminder letter that was sent about a week after the initial mailing. This letter was sent as a blanket reminder to all mothers in the sample irrespective of whether they had completed the questionnaire or not (this was because the time period between the first and second mailings was too short to allow mothers who had already completed the survey to be excluded);

• a second reminder pack was sent approximately two weeks after the first reminder. This contained a letter, another copy of the questionnaire, and a reply paid envelope. This reminder was targeted only at those mothers who had not yet returned their questionnaire; and

• a final reminder letter was sent out two weeks after the second reminder pack. Again, this was targeted only at those mothers who had not returned the questionnaire.

The leaflet in the initial mailing, as well as all subsequent reminders, included the web address of the online survey which mothers could log on to using their unique serial number. This unique serial number allowed mothers to save their progress so that they could complete the questionnaire in more than one sitting if desired.

Although the design and implementation of the fieldwork procedures at Stage 1 were intended to ensure babies were between six and ten weeks old, there was no control over when mothers chose to complete and return the questionnaire so the actual age distribution of babies at Stage 1 was wider than the target age band, something which had been a feature of all previous surveys (see Chapter 1).

All paper questionnaires returned were booked-in on a daily basis and also scanned to capture the data from them. The online survey allowed instant data capture. The serial numbers of the booked-in questionnaires were passed by IFF to the respective Registration Offices on a regular basis, to allow them to target the reminder mailings.
**Stage 2 fieldwork**

At the end of Stage 1, the names and addresses of all mothers who had returned a questionnaire were given to IFF by the respective Registration Offices. Additionally, all mothers were asked at Stage 1 to give any forwarding details if they were planning to move in the near future. This meant that IFF was able to update any contact information received from the Registration Offices prior to the Stage 2 despatch. Mothers were also asked to provide a contact telephone number for any follow-up contact required.

The fieldwork period for Stage 2 was from January to April 2011.

The first part of Stage 2 fieldwork involved a self-completion survey which – for those who had responded to Stage 1 on paper (or who had responded online but not provided their email address) – followed a similar process to Stage 1 in terms of the number of mailings and the content of each mailing. At this stage the despatch was handled entirely by IFF using their company letterhead.

Those who had participated in the Stage 1 online survey and who had provided their email address were invited by email to take part in the Stage 2 survey. They also received a letter, despatched at the same time as the initial postal questionnaires, telling them that the online survey was ready to complete. A first reminder email was sent one week after the original invitation. For the second and third reminders, the online responders received a paper questionnaire and then a reminder letter in the same way as those who had responded to Stage 1 on paper. This was to ensure that no mothers who wished to complete the Stage 2 questionnaire on paper were excluded from the survey.

As at Stage 1, the despatch of the mailings was staggered. The sample was divided into four batches, based on when the Stage 1 questionnaire had been returned (so that there would be a reasonably consistent time period for all mothers between them completing the two stages of the survey) and the age of the baby at the date the mother had completed the Stage 1 questionnaire (to try and ensure that the baby would fall in the target age range for Stage 2). All mothers who did not return a Stage 2 questionnaire in response to postal or online reminders were then followed up either by telephone (where a telephone number had been provided at Stage 1) or face-to-face. Where mothers were willing to participate in the survey, they were taken through the questionnaire verbally by an interviewer. Given the sensitive nature of some of the questions, only female interviewers were used, in order to put mothers at ease when responding to the questionnaire.

The data from the face-to-face questionnaires were processed in the same way as for the postal questionnaires. The same survey scripting software was used for the online survey as for the telephone survey (which was conducted using CATI (Computer Assisted Telephone Interviewing)). This meant that the data collected during online and telephone interviews could easily be combined at the analysis stage. All elements of the survey were then merged together.

**Stage 3 fieldwork**

The fieldwork period for Stage 3 was from May to August 2011, when all mothers who had completed and returned a questionnaire at Stage 2 were contacted for the last time.

The fieldwork procedures for Stage 3 were exactly the same as for Stage 2, with the exception of a slight modification to the procedures for the online survey. At the end of the Stage 2 questionnaire, respondents were asked to provide their email address, as well as their telephone number.
respondents who responded to the survey online at Stage 2 and any who had responded postally but provided their email address were sent an email inviting them to take part in the Stage 3 survey, with a link to the online survey. They also received a letter telling them the online survey was ready to complete. This may have contributed to the higher proportion of respondents completing the survey online at Stage 3 than at Stage 2 (as discussed in the next section). As at Stage 2, all these respondents received a first reminder email, then joined the ‘paper respondents’, receiving a paper copy of the questionnaire and a further reminder letter.

A5 Response

Response at Stage 1

Table A.1 gives details of response by country at Stage 1. A total of 15,724 mothers returned the first stage questionnaire, representing an overall response rate of 51%. The response rate varied by country:

- Northern Ireland 54%
- England 53%
- Wales 50%
- Scotland 45%

A total of 30,760 questionnaires were sent out. This included a contingency mailing across all countries, as it was felt that the response rate in the early stages might be lower than anticipated\(^3\). Due to time constraints, only one questionnaire and one reminder letter could be sent to mothers in the contingency mail out in Scotland, Wales and Northern Ireland, which will have depressed response rates overall, but it helped ensure that target base sizes for Stage 3 were achieved (see later discussion). A higher proportion of questionnaires issued to mothers in Scotland, relative to the other countries, were from the contingency mail out, which may account for the lower than average response rate in Scotland.

In terms of method of completion, the majority of mothers completed it on paper (49%), while a further 2% chose to complete the Stage 1 survey online.

Efforts were made by the Registration Offices to identify any deaths of mothers or babies so that these cases could be removed from the sample before questionnaires were sent out. However, mothers who received the questionnaire and whose baby was no longer with them, for example if the baby had died, been adopted or was in hospital, were not expected to complete a questionnaire but were asked to return it so that they would not be contacted again. In total, 18 mothers were identified in this category at Stage 1.

Refusal to take part in the survey was extremely low with just 125 mothers explicitly opting out of the research. Mothers who simply did not respond to the initial mailing or subsequent reminders accounted for the majority of non-response (48%).

Table A.1
Response at Stage 2

The issued sample at Stage 2 comprised all mothers who responded at Stage 1. A small number of mothers (34) who completed the Stage 1 questionnaire specifically requested not to be contacted again. These mothers are included in the Stage 2 response rate, but were not actually sent a questionnaire. Overall, response at Stage 2 of the survey was 80%, which ranged from 82% in Scotland and Northern Ireland to 78% in England. Two-thirds of mothers (67%) responded to the postal survey and 3% responded online. A further 10% of mothers responded to the interviewer follow-up (either by telephone (6%) or face-to-face (4%)). Again, levels of refusal were extremely low (2%) and the major reason for non response was due to either no reply or not being able to make any contact with the mother (17%).

Table A.2

Response at Stage 3

The issued sample at Stage 3 comprised all mothers responding at Stage 2. Again a small number of mothers (28) requested at the end of Stage 2 not to be contacted again and these mothers were not sent anything further (but are included in the Stage 3 response rate).

The overall response rate at Stage 3 was 86%, higher than that achieved at Stage 2 and Stage 1, and ranged from 88% in Northern Ireland to 84% in Wales and Scotland. Most mothers (68%) again responded to the postal survey, although a greater proportion responded to the online survey than in previous stages (11%). Follow-up interviews yielded a further 7% uplift in response, with 5% completing the interview by telephone and 2% during a face-to-face interview. No reply was again the main reason for non response (13%).

The final achieved sample size (10,768) was higher than the original target of 10,400 interviews. This was due to the targets of 1800 interviews each in Scotland, Wales and Northern Ireland being exceeded (particularly in Scotland). The final sample size in England fell slightly short of the original target of 5000, but only by 65 interviews.

Table A.3

Cumulative response across all stages

Since mothers were only contacted in later stages of the survey if they had responded to the previous one, the effect of non-response at each stage is cumulative. Table A.4 shows the final response rates at each stage of the survey calculated on the basis of the initial sample of mothers. This shows that 35% of all mothers who were initially sampled responded to all three stages of the surveys, and this ranged from 39% in Northern Ireland to 31% in Scotland.

Table A.4
Comparison with previous surveys

Table A.5 shows the response rates at all stages of the survey compared with the last survey in 2005. Response at Stage 1 of the 2010 survey was significantly lower in all countries compared to the previous survey – at UK level, Stage 1 response was 51% in 2010 compared to 62% in 2005. There are a number of factors which may have influenced this. The 2010 questionnaire was longer than the one used in 2005 – it was 150 questions in length and the estimated completion time was 25-30 minutes – which may have put some mothers off completing it. While this issue was considered when designing the questionnaire, it was felt that the value gained from the additional data collected outweighed the risk of a lower response. Additionally, as discussed earlier, contingency mail outs depressed the response rate, but were necessary to help ensure that the target sample sizes were reached. It may also partly reflect the trend of declining response rates that has affected all government surveys over the last 10 years (the Stage 1 response in 2005 (62%) was also lower than that in 2000 (72%)).

Response rates at Stage 2 were also lower than in 2005 (although the difference was not as marked – 80% across the UK in 2010 compared to 88% in 2005), while the response rate achieved at Stage 3 of the survey was broadly similar compared to the previous survey (86% in 2010, 87% in 2005). Overall, the drop in response in Stage 2 came equally from the self-completion (postal/online) and interviewer follow-up elements. For Stage 3, the response to the postal or online questionnaire was slightly higher than in 2005, while the response to the follow-up element was lower.

A6 Comparison of the sample profile with the population

Apart from the overall level of non-response outlined in the previous section it is also the case that different sub-groups of the population are likely to have differential levels of non-response which can lead to non-response bias. For this reason it is important to compare the profile of the sample of mothers against the population on key demographic variables1.

The survey was compared against the population on two key variables, namely the age of the mother and the deprivation status of mother (‘deprived’ was defined as living in an area in the lowest quintile of deprivation according to the Indices of Multiple Deprivation). The population was defined as the total number of births within the defined sampling period in each country.

In all countries younger mothers were slightly under represented in the sample compared to the population of all births during the sampling period, while older mothers were slightly over represented. For example, in England, mothers aged under 20 constituted 3% of the sample compared with 5% of the population. Similarly, in both England and Scotland mothers aged 30 or over constituted 55% of mothers in the survey compared with 48% of mothers in the population.
The deprivation profile of the sample was also similar to the population profile, although mothers in the most affluent areas were slightly over represented and mothers living in the most deprived areas were under represented in the survey. Scotland proved an exception to this rule, in that mothers from the most deprived quintile were slightly over represented in the survey (26% in the survey vs. 24% in the population), indicating that the over-sampling of mothers in the most deprived quintile had more impact in Scotland than in England.

Table A.7

The under representation of younger mothers and mothers living in the most deprived areas was likely to be due to the differential levels of non-response already mentioned. In order to take account of this the data have to be weighted to take account of these differences and this is discussed in the next section.

A7 Weighting of the data

Various weights were applied to the data at each stage of the survey. These compensated for differences in the probability of selection for mothers in different countries, for mothers living in deprived areas and for differential non response at each stage of the survey.

Stage 1 weighting

The data presented in this report has been weighted to be representative of all mothers who gave birth in the sampling period within each country by age of mother and deprivation status of mother (‘deprived’ was defined as living in an area in the lowest quintile of deprivation according to the Indices of Multiple Deprivation (IMD)). Weighting in this way corrects for differential non-response (historically, younger and deprived mothers have been less likely to participate in the survey) and also corrects for the over-sampling of mothers living in deprived areas.

There are different weights for:

- England
- Wales
- England and Wales combined
- Scotland
- Northern Ireland
- UK

Where results are reported at UK level, an additional weight has been applied to compensate for the fact that births in Scotland, Wales and Northern Ireland had a greater chance of being selected as part of the sample compared to births in England (an effect of needing to achieve base sizes which allow analysis at an individual country level).

As in previous surveys, all weights have been scaled to the unweighted sample sizes for each country and for the UK as a whole.
**Stages 2 and 3 weighting**

The profiles of several key variables were compared at Stages 2 and 3 of the survey against Stage 1. In particular the response rates of mothers at Stages 2 and 3 by their feeding behaviour at Stage 1 were examined since previous surveys have shown lower response at later stages of the survey among mothers who do not breastfeed. The same was true in the 2010 survey with 82% of mothers in the UK who breastfed initially at Stage 1 responding to the Stage 2 survey compared with 73% of mothers who did not breastfeed initially. The same differential was evident at Stage 3 as well, with response rates in the UK of 87% and 81% respectively.

To prevent any biases in the key feeding measures becoming more pronounced over the course of the survey caused by mothers with particular characteristics dropping out of the survey between stages it was necessary to apply adjustments to the weights at Stages 2 and 3.

The CHAID analysis method was used to identify the characteristics that differed significantly between responders and non-responders at Stages 2 and 3, compared with Stage 1. The variables used in the analysis were feeding status, socio-economic classification, mother’s age, age of the baby, area deprivation quintiles, region, ethnicity, smoking and drinking behaviour and whether the baby was full term or premature.

A three step approach was adopted: firstly using the outputs from the CHAID analysis at the UK level, a model for weighting was created which corrected for biases in response (matching back to the unweighted Stage 1 profile). At this point, the Stage 2 and Stage 3 profiles were compared with the weighted Stage 1 profile, which highlighted that biases for age of mother and IMD still remained. Therefore, the Stage 1 weighting matrix based on age of mother by IMD (within country) was applied. Finally, weights were applied by country to correct the incidence of breastfeeding, so that it matched the Stage 1 weighted figures.

The best predictor of response at Stage 2 of the survey was the socio-economic classification (NS-SEC) of the mother, with response ranging from 86% among mothers from managerial and professional occupation groups to 63% among mothers who had never worked. The best predictor of response at Stage 3 of the survey (relative to Stage 1) was the age of the mother, with response ranging from 46% for mothers aged under 20 and 78% for mothers aged 35 or over.

**Presentation of the weights**

As at Stage 1, separate weights were created for each country, as well as England and Wales combined. Where results are based on the UK as a whole, an additional weight is applied to compensate for the over-sampling in Scotland, Northern Ireland and Wales.

All weights have been scaled to the unweighted sample sizes for each country and for the UK as a whole, a practice similar to that adopted on the 2005 survey.
A8 Multiple birth form

For the first time in 2010, the Infant Feeding Survey included additional questions for mothers of multiple births which asked about their baby / babies other than the first born twin, triplet or quadruplet (for whom data are gathered in the main questionnaire).

This was primarily to obtain valuable information about how these mothers feed all their babies, as little research has been carried out specifically into infant feeding for multiple births.

The questionnaire was designed to fit onto four sides of A4 so as not to place an unnecessary burden on mothers of multiple births. For each question, mothers were able to answer about each of their multiple birth babies other than the first born and tick boxes were available for entering information for up to three more babies (to accommodate mothers of quadruplets). One question, which was different to that which appears in the main questionnaire was also asked of the first born baby – to find out whether each baby had been given breast milk by a breast feed, given expressed breast milk or given banked donor breast milk.

The questionnaire asked about the types of milk given, age at which first solid food had been given (if at all), help and support received as a mother of multiple births and whether / why the multiple birth babies may have been fed differently from each other. Additionally, respondents were given the opportunity to provide feedback on the questionnaire, which will be helpful for future surveys. The full questionnaires can be found in Appendix E.

Mothers of multiple births were identified from their responses at Stage 1. With each paper questionnaire sent out to a mother of twins/triplets at Stage 2, a multiple birth form was sent alongside it and they were asked to return it in the same pre-paid envelope.

In addition, at the end of the online questionnaire the relevant questions were added, so that these would only appear for mothers of multiple births (this was possible as each mother used her own unique reference number to log in to the survey).

Multiple birth forms were sent out to 198 mothers at Stage 2, from which 144 were returned, giving a response rate of 73%. While still a good response rate, this is slightly lower than the overall response rate at Stage 2 (80%) and may reflect the additional pressure that mothers of multiple births are under.

As mothers who completed the multiple birth form also took part in the main Stage 2 survey, the weights from the Stage 2 survey have been used, in order to correct for over-sampling of the devolved nations and differential non-response (see section A.7 for further details on weighting).
Notes and references

1 These are computed separately for each country.

2 In 2005, the majority of mothers were followed up face-to-face, with only a small number of interviews being conducted by telephone. The telephone approach was only used if the respondent lived in a remote area or there was some other practical reason which made it extremely inefficient for a face-to-face interviewer to be allocated. In 2010, it was decided to contact all mothers who had not responded by telephone, where a telephone number had been provided. IFF recommended this approach because it was thought some mothers would find this less intrusive than having an interviewer in their home, but also because it is more cost effective than conducting a face-to-face interview. The expanded use of telephone follow up interviews was found to work well in 2010.

3 The decision on whether to conduct a contingency mail out had to be taken fairly early on in fieldwork due to the lead time required to design this approach, draw sample, print and send questionnaires. This meant that estimates of the number of completed interviews which could be achieved without a contingency mail out were based on projections, which were calculated using the response rate to date.

4 Comparisons are, of course, limited to the information that is available on the population.

5 CHAID is an acronym that stands for Chi-squared Automatic Interaction Detection. CHAID uses chi-squared statistics to identify optimal splits or groupings of independent variables to predict the outcome of dependent variables (e.g. whether an individual responds to a survey or not).