Early Life Cohort Feasibility Study

Technical Report

Ipsos

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1 Introduction

Overview of Generation New Era

The Early Life Cohort Feasibility Study (ELC-FS), known to participants as Generation New Era was commissioned to explore the feasibility of a new birth cohort study for the UK. The study was funded by the Economic and Social Research Council (ESRC) and led by UCL's Centre for Longitudinal Studies (CLS). Ipsos was commissioned by UCL, via a competitive tender process in summer 2022, to carry out the study fieldwork. Ipsos worked with UCL from September 2022 to December 2024 to set up and conduct the sampling and fieldwork, and to deliver the final data collected. UCL were responsible for the study design and key aspects of implementation, including negotiating access to relevant sample frames, ethical approvals, questionnaire content, and the final approval of the study materials.

The UCL team was supported by a network of partners, scientific advisors and expert advisory committees. Partners involved in the study design included the Fatherhood Institute (a UK charity focusing on fathers and fatherhood), Hudson Fuggle (a brand design agency), and Susan Purdon (who advised on the sample design). Academic partners from the universities of Edinburgh, Swansea and Ulster were also involved in the study design and implementation; and the study relied on NHS England, National Records Scotland and Public Health Scotland, and Northern Ireland's Business Services Organisation to draw samples for the study.

Generation New Era aims to paint a nationally representative picture of the circumstances and lives of a new cohort of babies born at a critical time in the UK's history, and to understand how inequalities in early child development are changing over time.

The study involved data collection from families during the first year of life, in each of the four nations of the UK. It tested the sampling and data collection protocols that are planned to be used in the main study. The feasibility study itself provides data on several thousand families; the data from the study, available on the UK Data Archive, will be of value to the research and policy community. The intention was to continue to follow the families involved in Generation New Era longitudinally as babies grow older. However, future funding is not available so the families will not be followed up.

Aims of this report

Some of the development work for Generation New Era took place before (or outside of) the Ipsos contract. This report briefly summarises some of the public engagement activities that helped to shape key features of the study design, but mainly focuses on the protocols and implementation of fieldwork, as well as the fieldwork outcomes. The numbers of interviews, families and babies reported use Ipsos's fieldwork data prior to validation by CLS. This means the numbers may differ from the data made available for research through the UKDS or other sharing platforms.

Some aspects of the study development have been reported separately; where more detailed accounts of the development are available this report provides a summary of key findings, with links to more detailed information reported elsewhere.

2 Background

Study overview

Generation New Era was based on a sample of babies born in England, Wales and Scotland in November-December 2022 and in Northern Ireland in June-July 2023. In England, Wales and Scotland, samples were drawn from birth registration data that was matched with maternity records; samples were provided by NHS England, National Records Scotland and Public Health Scotland. In Northern Ireland, samples were drawn from maternity records only, provided by the Business Services Organisation on behalf of Health Trusts. The study aimed to recruit families when their babies were aged 8-10 months, with the target age of recruitment at 9 months; however, fieldwork sometimes occurred later than planned due to delays meaning the babies' ages ranged from 8-19 months, with most being between 9-12 months.

Generation New Era comprised the following elements:

- Interviews with parents (and the co-residential partners of parents, where applicable), including parents who live apart from their babies;
- Informing parents that the study would like to link their survey responses to their own and their baby/ies' administrative records, for their health, education and social care records, and how to make their choice about this. The study experimentally tested two consent models: an opt-in model and an opt-out model (see chapter 7).
- Collection of saliva samples from biological parents and babies, from a sub-set of the study sample, for the purposes of DNA extraction (see chapter 8).

There were three types of interview for each baby which were allocated following a doorstep screening exercise:

- the Primary Informant (PI) interview, for a parent living with their baby and who spends the most time caring for their baby (60 minute interview).
- the Own Household Parent (OHP) interview, for any parents living apart from their baby (40 minute interview). Details for these parents were in some cases available on the sample, and in some cases collected from Primary Informants during their interview.
- the Additional Informant (AI) interview, usually for a parent living with a Primary Informant, but also including the co-residential partners of Primary Informants or Own Household Parents (30 minute interview).

Interviews were usually carried out face-to-face, but options for interviews by telephone and Teams video-call were available. The Additional Informant and Own Household Parent interviews also had a web completion option. When the main fieldwork period was finished, non-responding households were sent a postal invitation to complete a short web survey (the online follow-up survey).

Overview of study timings for each country

The overall study ran from September 2022 to December 2024, with the actual data collection between September 2023 and September 2024; broad milestones are shown below. The study in Northern Ireland

ran to a different schedule than other countries because it took longer to secure access to the sample frame for Northern Ireland. As a result, babies in Northern Ireland were born in June/July 2023, while in other countries babies were born in November/December 2022. The sampling agreement in Northern Ireland was also slightly different than in other countries which meant that there were some differences in the contact protocols: for example, parents' first notification letter about the study was sent from the Business Services Organisation on behalf of Northern Ireland Health Trusts (rather than the UCL/Ipsos study team), and the Northern Ireland sample contained less information about babies and parents than in other countries.

In Scotland, there was a 3-month delay to fieldwork due to an adverse event while dataholders reviewed the sampling protocols used by the study, which meant that fieldwork started slightly later than originally planned (and babies were slightly older at the point parents were interviewed).

Table 2.1: Overview of study timings by country

Milestone	Dates
Materials and cognitive testing	September 2022-February 2023
Other study set-up (scripting, sampling)	September 2022-September 2023
Fieldwork (England and Wales)	Main fieldwork: September 2023-March 2024 Online follow-up survey: March – April 2024
Fieldwork (Scotland)	Main fieldwork: November 2023-April 2024 Online follow-up survey: May-June 2024)
Fieldwork (NI)	Main fieldwork: April 2024-July 2024 Online follow-up survey: August-September 2024)
Final data delivery	December 2024

Innovation and experimentation

The study included a number of innovative features and experiments to explore ways of reducing sample bias and improving response rates, and to improve the survey data quality and optimise the value of outputs.

Some of the key innovations in study design included:

- Sample boosts of babies living in low-income areas and babies from ethnic minority backgrounds in England, and sample boosts of babies in Scotland, Wales and Northern Ireland.
- An experiment to test the most effective way of collecting parents' consent for administrative data linkage for themselves and their child.
- An experiment to test the most effective combination of unconditional (pre-interview) and conditional (post-interview) incentives.
- An experiment to explore the impact of requesting the collection of saliva samples from parents and babies for DNA extraction at this first wave of the study.

Developing an inclusive cohort

The study design also aimed to ensure the survey was accessible to all parents, including those typically under-represented in surveys. Some steps taken to ensure this included:

- Accessible study materials and design so that parents from a wide range of backgrounds and circumstances could take part. This included, for example, different types of parent interview to allow parents in a range of family circumstances to take part; a flexible approach to scheduling

interviews and offering interviews in different modes; messaging in the study materials designed to appeal to and cover a range of family types and backgrounds (including all four UK countries); ensuring all materials met web content accessibility guidelines and creating large print/plain text copies; and providing the study's advance materials and showcards in translation into ten languages.

- Wide ranging academic consultation and participant testing of questionnaire content.
- A focus on fathers, including efforts to implement effective methods of identifying and interviewing fathers who live apart from their babies.

Further details of the development work that informed these measures are provided in the next chapter.

3 Public engagement by the UCL team

The UCL project team carried out public engagement with parents of children and young people to ensure the proposed approaches to sampling, data collection and record linkage were acceptable. This chapter includes a summary of public engagement activities, most of which were outside of the work Ipsos was contracted to do on the study. As such, this chapter has been drafted by the UCL team to provide context to the final study design and implementation.

Aims and design of public engagement activities

The public engagement work was designed by UCL to enable individuals' voices to be heard and acted upon in the design of the study, and to help ensure the study serves the needs of the people it represents. In addition, the UCL project team carried out extensive public engagement and consultation with policy and practitioner networks and with academic data users; this helped to determine evidence needs and scientific priorities for the feasibility study.

These consultations resulted in the identification of groups that may face particular barriers to participating in this type of study. The groups identified included fathers, ethnic minority families, low-income parents, those whose first language is not English or who have low literacy levels, and young parents.

Prior to fieldwork, five different projects were carried out to understand more about barriers and motivations to participation among parents of young children, and particularly among groups we aimed to maximise recruitment for in Generation New Era. The aims and design of each of the studies is summarised below (all reports can be accessed at: www.cls.ucl.ac.uk/cls-studies/early-life-cohort-feasibility-study/public-engagement). **Table 3.1: Overview of public engagement activities commissioned by CLS for the study**

Project	Aim	Partner	Study group	Topics covered
1	Explore acceptability of using administrative data	Kantar Public (now Verian)	122 mothers and fathers of young children	Understand acceptability of using administrative data as a sampling frame, for targeted recruitment and tracing.
2	Explore wider participant engagement issues	National Children's Bureau	Family (parents, mainly mothers) and youth (10-20 years old) research advisory group	Questionnaire design, motivations and barriers to taking part, recruitment strategy, publicity strategy, study name ideas, feedback on website and impact examples
3	Testing study name and brand	IFF research	Two focus groups of mothers and fathers, split by lower and higher socio-economic status	Tested four name and brand ideas

4	Engaging target groups in Generation New Era	Ipsos	Qualitative interviews with 30 OHPs and 30 low-income parents with a high quota of ethnic minority parents.	Motivations and barriers to taking part, recruitment approaches, questionnaire design, attitudes to saliva collection, study engagement strategy
5	Materials testing and cognitive testing	Ipsos	Qualitative interviews with 32 mothers and fathers from a range of backgrounds	Testing key engagement messages and content of recruitment materials and the comprehension of new or sensitive questions

As project 5 was part of the main contract to administer the study, more information about the findings from this work can be found in Chapter 4; the other projects listed above were tendered separately. The Ipsos team was directly involved in projects 4 and 5 but drew on the findings reported from other studies to help inform the study implementation.

How public engagement findings informed key study innovations to maximise inclusion

Detailed findings from each of the public engagement projects outlined above can be found in their standalone reports. In summary, these studies collectively informed:

- The choice of **sampling frame (**National Health Service/Public Health Scotland maternity records matched with birth registration records). The UCL study team, working with Kantar Public (now Verian), engaged with expert stakeholders and parents of young children to understand the acceptability of using this sample frame, and the study recruitment approach more generally. This work also informed the development of the data linkage approaches. The sample frame has high population coverage, provided detailed information for conducting non-response analyses, and has additional details which allowed for boost samples to be drawn. More information about the sampling frame is provided in Chapter 5.[1]

  The choice of sampling frame also allowed the study to recruit mothers and fathers directly (including OHPs). A major benefit of birth registration records is that both mothers' and fathers' details are included when a birth is jointly registered (95% of cases). This includes addresses for parents living together or separately. Having details for both parents allows direct recruitment of each parent into the study in their own right, and means that either parent can take part even if their child's other parent does not. This builds on recommendations from previous cohort studies, such as ALSPAC and Life Study, to recruit fathers independently from mothers (Kiernan, 2016; Overy et al., 2012), as well as those from a scoping study for the ESRC about how to recruit and engage fathers in longitudinal family research (Goldman et al., 2019). It also builds from findings in the qualitative work conducted with own household fathers (OHFs), who were clear that it

[1] A separate project dedicated to understanding how vulnerable children could be recruited into the study in future (Children in Need) was also commissioned.

would be difficult for them to take part in the study if recruitment was done via their child's mother, for example:

"I never see my ex now, we have barely any contact, very little. The last thing I would want to do is have a conversation with her. I think it would be very, very difficult therefore for them [CLS] to get through to me through my ex."

- The **development of four different interviews** to accommodate different family structures and parent roles, without making assumptions that families were nuclear/heteronormative. Feedback from parents and young people (the NCB research advisory groups and materials testing) highlighted how motivating it was that parents across a wide range of family situations could take part. The study allowed for up to four parent informants and two households per child, ensuring parents from across a range of family situations could take part.

- An **incentive experiment** was conducted as part of the feasibility study to maximise inclusion, and to test the most cost-effective approach to incentivising parents. Consultations with parents during the development phase confirmed that using differential incentives, including targeting low-income areas with higher incentives, was acceptable. The NCB groups also suggested a gift for the baby might be an effective incentive. The feasibility study tested the impact of different unconditional (£5 / baby's bib / none) and conditional (£10 / £20) incentives, and different incentive schemes for the online follow-up survey in Scotland and Northern Ireland (additional £10 / additional £20 for participants from low-income areas and OHPs, compared with original conditional incentive offer).

- An **accessible and inclusive fieldwork protocol**. Based on the principles that were important to parents from a diverse range of backgrounds, the fieldwork protocols and interviewer training emphasised the following:

    - Interviewers were briefed to accommodate parents' time constraints by offering various interview times, including evenings and weekends, and to allow breaks during interviews as needed.
    - Parents were offered face-to-face, telephone, Teams, and web interviews to cater to different needs and preferences.
    - Interviewers were trained to be calm, reassuring, and non-judgmental.
    - Interviewers were trained on the importance of including fathers and OHPs. The qualitative project with OHPs helped to identify concerns and barriers that were likely to affect their participation. For example, some OHPs were concerned that they would be judged on their circumstances, or asked questions about their child that they could not answer based on the amount of contact they had with them. The messages in the letters and booklets provided to families tried to address these concerns, and interviewers were given in-depth training on encouraging participation among fathers generally, and OHPs in particular. Questionnaire routing was also used to ensure question/response options were appropriate to different parental circumstances.
    - Parents were given choices about what they did and did not consent to, including recruitment, data linkage, ongoing participation and saliva collection.

- The **study materials and branding,** developed by Hudson Fuggle, were informed by parents and stakeholders. The study name "Generation New Era" was chosen based on feedback on different possible names from parents gathered by Hudson Fuggle and IFF research. The name was particularly popular among parents from low-income backgrounds. Ipsos used the brand guidelines developed by Hudson Fuggle to create a wide range of study materials (see Chapter 11 on the study materials).

  Findings from all of the five public engagement projects were used to develop engaging messaging that resonated with participants from a diverse range of backgrounds. This messaging emphasised the importance of participation, the value of each family's perspective, and reassured participants about confidentiality and data security. These messages were woven throughout the study recruitment materials (following materials testing) and highlighted in interviewers' training.

  A protocol was also developed to make materials accessible: materials were tested for readability; materials were provided in various formats, adhering to WCAG 2.1 level AA guidelines; an accessibility statement was developed; large print and plain text versions of materials were offered; and materials were translated into 10 languages.

  The materials testing work also highlighted the importance of providing information that was clear and transparent about what taking part in the study would involve, where parents had a choice, and how data would be used. For example, messages such as 'It's your choice' about whether to participate, and which elements of the study to take part in, were effective in reassuring parents that they had control over what happened; parents were given more detailed information about what the interview would involve and the types of questions they would be asked; and the study leaflets, website, and animations provided clear and transparent information about biosample collection, addressing concerns identified in qualitative work.

- The **questionnaire coverage and content**. The survey included topics suggested by parents (in the NCB and qualitative projects) to make sure the interviews were relevant and interesting to parents. Careful routing ensured that parents were not asked questions that were not relevant to their own circumstances: the qualitative work highlighted that being able to reassure parents that they would only be asked about experiences that were relevant to their own parenting circumstances would help in recruiting parents – and especially in recruiting Own Household Parents whose involvement with their baby may be more limited. Towards the end of the development period, cognitive testing helped to refine question wording to ensure clarity and inclusivity for a diverse range of families.

4 Questionnaire and recruitment materials development

This chapter outlines the questionnaire development work that was carried out prior to the start of the main stage of fieldwork, including early scientific consultation and cognitive testing. This chapter also describes qualitative testing of the recruitment materials prior to fieldwork, and the changes that were made to these materials because of the findings.

Questionnaire development

Developing the questionnaire began with extensive consultation and review of the initial questionnaire content, followed by cognitive testing and further revisions of the questionnaire modules, and scripting and testing before it was available for interview. The purpose of this development work was to ensure that the interview content covered the most important topic areas for research, and that the questions were clear, easy to answer, and captured accurate and high-quality data.

Early scientific development

In 2021, CLS carried out wide-ranging scientific consultation work on the content and design of the study. The five phases of consultation included in-person events and online surveys with stakeholders from across academic, government, and third-party sectors. Full descriptions and reports on this work can be found here: https://cls.ucl.ac.uk/cls-studies/early-life-cohort-feasibility-study/early-life-cohort-feasibility-study-consultation/. The earlier phases of the stakeholder events highlighted priority topic areas for inclusion in the questionnaire, as well as some guidance on specific scales and measures. Attendees were asked to provide guidance on key topic areas highlighted by the study team in the original bid:

- cognitive, social, and emotional development of infants;
- infant-parent relationships, and the early home environment;
- infant health, including growth, nutrition and sleep;
- mental health of parents and the developing child;
- social, environmental and neighbourhood influences on infant and family;
- inequality, disadvantage, and social mobility in the new cohort; and,
- genomics, early adversity and biological embedding of stress.

Following this consultation, the study team explored which topics/measures are typically included in other 9-month birth cohorts, in order to allow for comparisons between Generation New Era and these other cohorts. The study team compared the first waves of the Millenium Cohort Study, Growing up in Scotland, Growing up in Ireland, Born in Bradford, Life Study, ALSPAC and SEED. Detailed work was also done to ensure direct comparability between Generation New Era and the Children of the 2020s (COTs) study (as the most recent birth cohort in England) and the other CLS UK-wide birth cohorts.

Findings from public engagement work with parents and young people about questionnaire content important to them was also factored into questionnaire decision-making.

These harmonisation comparisons, the public engagement work and the stakeholder engagement activities all informed early versions of the questionnaire, which were distributed for comment among stakeholders to improve them in the later phases of the consultation.

The process of producing the questionnaire prior to Ipsos' review and cognitive testing took almost two years. This development and refinement period involved prioritising content to keep the survey under an hour, as any longer would affect response rates. Overall, CLS were guided by the framework of 1) prioritising harmonisation with COTs to allow comparisons to be made between these two contemporary cohorts, 2) deprioritising content which could be asked in later waves, and 3) deprioritising content which could be gained from other sources like record linkage or geo-linkages. In terms of new questionnaire content, the CLS study team asked academic experts for guidance. These experts suggested questions/scales already used by other surveys so the study team could look at the validity of the items, and in some cases helped the team to write questions from scratch. These included new questions about fertility treatments, vaping behaviour, and smoking/drinking behaviour in pregnancy. These 'new' questions were cognitively tested.

Cognitive testing and implications for questionnaire design

Ipsos then carried out cognitive testing as well as qualitative testing of the recruitment materials (described in the next section). The cognitive testing involved 32 online or face-to-face individual depth interviews lasting up to one hour each.

The research sample was designed to include mothers and fathers with a child aged under 2 years old from a mix of family backgrounds and circumstances with quotas set for: age, gender, social grade, region, ethnicity and household type: mother only households, Own Household Fathers and two parent households.

The aim of the cognitive testing was to explore ease of answering questions and comprehension, whether information requested was easy to recall, and comfort in being asked questions. Participants were shown sections most relevant to their household, and not all participants reviewed each section.

A number of changes were made to the questionnaire specifications as a result of the cognitive testing; specific changes are outlined in the main report[2]. These changes included:

- Clarifying questions that had caused confusion, including introducing reference periods so that questions were more specific. In some instances, help screens or additional text to clarify terminology or answer codes were introduced.
- Simplifying questions where participants reported finding it difficult to recall precise answers – for example, allowing respondents to provide a range rather than the number of times they had used particular services since their child was born.
- Adding more information before and within sensitive questions to stress the confidentiality and voluntary nature of the study, reminders of the ability to skip questions, and explanations about why information is being sought.

Following cognitive testing, specifications of each questionnaire module were written to then be scripted. Ipsos supported CLS with technical advice on question operationalisation at this stage, as well as

[2] https://cls.ucl.ac.uk/wp-content/uploads/2024/02/ELC-FS-Participant-Materials-and-Questionnaire-Development-Qualitative-Report-February-2024.pdf

offering advice based on their own expertise (e.g. using a sex and gender question they had extensively tested).

Qualitative testing of recruitment materials[3]

In addition to the cognitive testing work described above, Ipsos conducted qualitative testing which focused on the content and design of the recruitment materials.

The UCL public engagement work (see Chapter 3) had confirmed that parents and stakeholders were content with a two-stage recruitment approach before face-to-face visits started. In this two-stage approach, parents first received a notification ('opt out') letter that provided basic information about the study and how their contact details had been obtained, and gave them the chance to refuse any further contact about the study; those who did not opt-out after the first letter then received a second mailing containing a more detailed invitation ('advance') letter and study guide.

This qualitative research tested the following materials: notification letter, invitation letter, study guide, and study guide sections focusing on data linkage, geo-linkages, DNA samples and confidentiality and data security. This included exploration of study consent processes.

Background

The qualitative research set out to understand views towards the study engagement materials and key study processes to contribute to their development. It involved online or face-to-face individual depth interviews lasting up to one hour each. Participants were sent study materials to review in advance of their interview.

The research sample was designed to include mothers and fathers with a child aged under 2 years old from a mix of family backgrounds and circumstances with quotas set for: age, gender, social grade, region, ethnicity and household type to include mother only households, Own Household Fathers and two parent households.

Two stages of interviews were carried out. This enabled testing and refinement of study materials as they were being developed. Sample size and interview coverage for each stage are summarised below.

Table 4.1: Overview of qualitative testing of study materials and processes

Stage	Stage 1	Stage 2
Sample size	32 interviews	12 interviews with participants re-contacted from the stage 1 sample
Interview coverage	Testing of notification letter, invitation letter, study guide. This included exploration of study opt-out processes.	Testing of study guide sections focusing on data linkage, geo-linkages, DNA samples and confidentiality and data security. This included exploration of study consent processes.

[3] The full findings of the qualitative testing can be found here: https://cls.ucl.ac.uk/wp-content/uploads/2024/02/ELC-FS-Participant-Materials-and-Questionnaire-Development-Qualitative-Report-February-2024.pdf

Findings

4.1.1 Motivation and comfort in participation

Across the research, eight key factors were identified as important in influencing both comfort and motivation to participate in Generation New Era.

Factors contributing to participants' motivation to take part in the survey were social value, aiding the understanding of a new generation, financial incentive, the study's inclusion of diverse families and opportunities to share opinions and experiences.

Other factors relevant to their likelihood of taking part in the survey were time and availability, trustworthiness and reassurances given by the study team, and perceptions around choices and control given to participants.

4.1.2 Processes for taking part

A number of study processes were explored in the research, and key reactions to these alongside changes and steps implemented in the final study approach and materials are summarised below.

Sending an individually addressed notification letter to each parent in the household.
• Whilst two-parent households felt this approach clearly gave both parents the opportunity to take part in the study, there were queries around whether this was necessary. Environmental and cost concerns were also raised. • Those living apart from their baby's other parent noted that the information within the letter about 'What if I live apart from my baby's other parent' was important and reassuring given the different relationships and sensitivities amongst parents not living together. • Overall, the study materials tested felt aimed at both mothers and fathers and participants did not expect different versions.
Changes implemented: • Individual notification letters were sent to parents living in the same household in separate envelopes to treat each parent as a potential respondent in their own right, and to emphasise the importance of both parents taking part. Individual invitation letters were also sent (the second mailing) but packaged together in the same envelope to reflect environmental and cost concerns.
The opt-out process.
• The opt-out process as described in the notification letter was not always clear to participants often due to low recall amongst those who skim read the letter. • When prompted to read the notification letter in detail, participants felt that the letter including the information regarding opt-out was long and wordy, and the opt-out information not always clear and easily navigated. • There were mixed views on individual opt-outs for parents living in the same household. The key benefit of this approach was that it offered flexibility where only one parent in the household may be able to take part. However, there were suggestions that a household level opt-out could be simpler and would be preferrable where the reason for opting out was lack of comfort with the child being part of the study.
Changes implemented: • The notification letter was shortened, with detailed Q&As provided on the reverse.

- A process was introduced where parents were able to opt-out individually, but when doing so asked if they were opting out personally or on behalf of both parents.

Consent processes for adding information from administrative records (participants were asked for their views on both opt-in and opt-out approaches).

- Overall participants reported a preference for an opt-in approach as they felt they would receive more detailed and transparent information via this approach which would support decision-making. However, it was noted that this information was lengthy, which prompted concerns about potential take-up for the study.
- Whilst participants did not feel that an opt-out only approach would deter them from taking part in the study, they anticipated that they would be likely to have questions about which records were being accessed and the type of data shared.
- The materials informed participants that the study would like to add publicly available information about their local area to their survey data. Participants felt that information about where they lived seemed less sensitive compared to the information which could be added from administrative records. They typically felt comfortable with the suggested approach to these geo-linkages, particularly when they had noted the statement '*these geographical data are publicly available'* in the study materials.
- Participants noted that giving consent for their child's data linkage was an important decision and not all felt comfortable about making it.
- Overall, there were mixed views on which parent could give consent for their child's linkages, with varied views about whether consent should be given by one or both parents. Family dynamics influenced these views, reflecting the diversity of experiences across the research sample.

Changes implemented:

- As both opt-in and opt-out consent models were considered acceptable to participants, the two consent models were tested experimentally in the main study, with half the families randomly asked to give opt-in consent to data linkage, and half using the opt-out consent model.
- Detailed information about the types of data being linked and examples of the type of data that would be accessed were provided within the script and supporting materials available to participants and interviewers.
- Only Primary Informants were able to give consent to child data linkages, although the study's advance materials encouraged parents to discuss and agree an approach in advance of the interview.

The provision of confirmations.

- Participants were positive towards the idea of receiving a confirmation for both data linkage and the provision of DNA samples. This was considered to be a transparent approach and a clear record of what had been agreed.

Changes implemented:

- Confirmation letters/ emails of data linkage consents were sent to all participants with information about how to change permissions if respondents change their mind.
- A leaflet was left at the end of each interview to remind respondents of the study elements, what will happen to their data and how to change permissions in the future.

The approaches for keeping in touch with the study.

- Participants felt comfortable sharing their phone number and email address for the study to contact them. However, they were less keen on sharing details of family and friends ('stable contacts').

- There was negative reaction to tracing participants through the use of administrative data without notifying families first.

Changes made following qualitative testing

Overarching feedback and changes made across materials included:

4.1.3 Length and layout

The length of study materials was considered important. Whilst positive towards the 1-page length of the invitation letter, it was noted that the longer notification letter, the study guide and study guide sections could feel daunting. Building on the findings, the following changes were implemented:

- Where possible materials were shortened and condensed including the use of more visual elements to ensure key messages stood out.
- The study guide section regarding DNA samples was shortened to a paragraph with an additional Saliva Information booklet developed to provide participants with more information, whilst avoiding overwhelming readers with detailed information in the initial study guide.
- Information in study materials has been structured to support navigation of content. For example, through the use of FAQs and use of colours and headings to identify sections of information.

4.1.4 Tone

Whilst the notification letter felt ‘friendly’ in tone, with welcoming content and phrases or words placing active choice on the reader regarding participation, in comparison the invitation letter felt ‘direct’ and ‘assumptive’. Making clear that the latter was a follow-up letter was considered key in mitigating the impact of this tone. The study guide was considered inviting in feel, with the use of images creating an inclusive feel.

4.1.5 Content and clarity

Whilst the study materials were considered easy to understand there were suggestions for ways in which clarity could be improved.

- For both the notification and invitation letters, participants suggested that the focus of the research could be made clearer. It was further noted that the notification letter and invitation letter could clarify frequency of participation over time.
- Participants liked the fact that their interviewer's name and number were included on the invitation letter. This made the interviewer visit feel less like 'cold calling' and gave the participant a clearer idea of what to expect next. Interviewers were briefed to include their name and (if possible) telephone number with the invitation mailing.
- Participants queried some of the phrases in the letter, such as 'your family has been specially chosen' to take part in the study, when the letter elsewhere explained they had been randomly selected. The phrasing of the letter was refined to remove or clarify phrases that seemed confusing or contradictory.

4.1.6 Colours and imagery

Colours used in the study guide were positively considered bright and friendly. There were suggestions that colour contrast could be improved for those who were colourblind and/ or dyslexic. Whilst images showing diverse families in the study guide were appreciated, it was suggested that this could be

improved by including images of children with visible disabilities. Building on these findings the colour palette was expanded and tested to ensure colour contrast of text met Web Content Accessibility Guidelines (WCAG) – Level AA standards[4].

4.1.7 Logos and signatures

The inclusion of NHS or Public Health agency related logos signified to participants the importance of communications and provided reassurance that the study was professional in nature. Reflecting this, university logos (UCL and the university of the country study lead) were included on the letters to signal credibility, as well as on the external envelopes to encourage recipients to open these. Recruitment materials were also co-signed by the study director and the country study leads. A health agency logo was added for Scotland only (Public Health Scotland), based on the permissions granted to the team to use health agency logos in each country.

[4] https://www.gov.uk/service-manual/helping-people-to-use-your-service/understanding-wcag

5 Sampling

This chapter describes the sampling approach for the feasibility study, including the processes used in each UK country to draw samples of children, and the sample sizes for each country.

Sample frame

The UCL team secured access to a sampling frame based on birth registrations linked to NHS maternity records in England, Wales and Scotland. This was considered the optimal sampling frame for the study for a number of reasons. Birth registrations provide universal coverage of the population of babies, contain key characteristics of the infant, mother and father, including where they live, and provide contact details for own-household fathers. Linkage to NHS maternity records meant additional variables were available for sampling purposes. These included details on the ethnic group of the baby which allowed for an ethnic minority boost in England. Linking information from NHS records also meant the team had timely access to updated addresses for any post-birth moves as well as notifications of infant and parent deaths. In Northern Ireland, the sampling frame was based on maternity records.

The frames were supplied by different agencies across the UK, each of which applied data sharing agreements with the following (initial) conditions for case inclusion:

- In England and Wales, the sample frame was supplied by NHS England (at the time referred to as NHS Digital). Cases were removed if it was known that the baby or mother died, for possible adoption cases or other sensitive situations, and (in England) if any of the baby or parents were registered for National Data Opt-Out[5].
- In Scotland, the sample frame was provided by Public Health Scotland, including information from National Records Scotland (NRS) and NHS Central Register (NHSCR). Cases were removed if it was known that the infant or mother died, and for finalised adoptions.
- In Northern Ireland, the sample was provided via the Northern Ireland Business Services Organisation (BSO) and required linking National Health Application and Infrastructure Services (NHAIS) data to Northern Ireland Maternity System (NIMATS) records. Cases were removed if it was known that the infant or mother had died, mother/infant were not registered with a GP and for finalised or pending adoptions. In Northern Ireland, unlike other countries, the sample included only the mother's contact details, did not list names or addresses for fathers and had much less information about the baby and mother.

The feasibility study was an opportunity to test the use of this sampling frame in advance of the planned main study, including whether permissions could be gained to use these frames in each UK nation, to explore how quickly sampling processes could be carried out, and to assess the quality of the sample data received.

Sampling approach

The aim of the sampling was to obtain clustered samples of children in the four countries of the United Kingdom. Originally the sample was to be births in November and December 2022 for all four countries,

[5] The national data opt-out is a service that allows patients to opt out of their confidential patient information being used for research and planning.

but due to delays in obtaining the sample in Northern Ireland this was changed to June and July 2023 for Northern Ireland only.

The sample design for the feasibility study included boost samples in Scotland, Wales and Northern Ireland, as well as two additional boosts in England only: an ethnic minority boost of Black African and Black Caribbean babies and Pakistani and Bangladeshi babies, and an area-based low-income boost. The large boost samples were designed to allow ESRC and CLS to assess response rates across a range of subgroups in the population.

The samples were selected in two stages. At the first stage, a random sample of areas using Census geographies was selected for each country with probability proportionate to the number of births. At the second stage, a stratified random sample of children was sampled within each selected area. The approach to sampling at this second stage varied by country, as described below. Because of differences in the Census geographies across the four countries, the definitions of the areas varied, comprising merged lower super output areas (LSOAs) for England and Wales, data zones (DZs) for Scotland, and super output areas (SOAs) for Northern Ireland.

The sampling process also varied. For England and Wales, both stages of the sampling were carried out by Ipsos on anonymised population files. Due to differences in the data sharing agreements for sample frame data for Scotland and Northern Ireland compared to England and Wales, Ipsos carried out the first stage of sampling in Scotland and Northern Ireland (selecting the areas) and then sent the data holders counts of the number of children to sample in each area so that they could carry out the second stage of sampling (selecting the children). The following sections of this chapter describe the sampling process for each country in more detail. Information on the calculation of selection weights is provided in Chapter 23, Data Processing.

Securing access to sampling frames

CLS worked with ESRC and other study partners to secure access to sampling frames in each UK nation.

Table 5.1 shows the timings for the key sampling steps in each nation and illustrates differences in the sampling approach across each country. In Northern Ireland only, the data sharing agreement stipulated that sample members should have the opportunity to opt-out of the study before the sample was transferred to Ipsos, which meant that the BSO administered the notification mailing before transferring the sample to Ipsos; in other nations, Ipsos administered the notification mailing.

In England and Wales and in Northern Ireland, babies were 8-10 months old at the start of fieldwork. In Scotland, the study was put on hold due to an adverse event following the initial notification mailing. The sample providers investigated the sampling processes in further detail, and recommended additional exclusions to the sample for potentially sensitive cases before the study was allowed to resume. This delayed the start of fieldwork in Scotland by almost 3 months, and meant that babies in the Scotland sample were 12-13 months old when fieldwork started.

Table 5.1: Key sampling steps and timings

	England and Wales (babies born November-December 2022)
5 May 2023	Data Sharing Agreement signed with NHS England (formerly NHS Digital[6]) to allow sample transfer
15 May 2023	NHS England transferred anonymised population data to Ipsos
18 May 2023	Ipsos returned IDs for selected sample to NHS Digital
19 June 2023	NHS England transferred the full named sample to Ipsos
10 July 2023	Opt-out letters posted to all parents in sample
31 July 2023	Opt-out period ended
1 August 2023	Ipsos processing sample updates from NHS Digital, final checks and sample set-up for fieldwork
1 September 2023	Fieldwork start
27 November 2023	NHS England sent sample updates to Ipsos (including new addresses)
January 2024	NHS England sent sample updates to Ipsos (including new addresses)

	Scotland (babies born November-December 2022)
23 March 2023	NRS sent aggregate birth counts for Data Zones for November/December births
3 May 2023	Ipsos sent selected sample of Data Zones to NRS
12 May 2023	Data Sharing Agreement signed with NRS to allow sample transfer
12 May – 9 June 2023	Processing of sample by NRS and other agencies (PHS, CHILI, NHSCR); sample of births selected from the Data Zones selected by Ipsos
9 June 2023	NRS transferred the full named sample to Ipsos
10 July 2023	Opt-out letters posted to all parents in sample
31 July 2023	Opt-out period ended
28 July 2023	Study put on hold due to adverse event
November 2023	Study resumes
14 November 2023	Sample updates provided by NRS, processed by Ipsos
24 November	Fieldwork start
12 Feb 2024	NRS sent sample update to Ipsos
5 April 2024	NRS sent sample update to Ipsos

	Northern Ireland (babies born June-July 2023)
December 2023	Ipsos received aggregate data counts for Super Output Areas for births in June and July 2023, selected a sample of Super Output Areas
December 2023/ January 2024	Agreements signed to allow transfer of samples (including Data Sharing Agreement, and Data Access Agreements with NI Health Trusts)
22 January-15 February	BSO selected sample of births from the selected Super Output Areas
16 February 2024	BSO posts opt-out letters to selected sample
6 March 2024	Opt-out period ends
15 March 2024	BSO transferred full sample to Ipsos
16 March – 2 April 2024	Ipsos processing sample, sample set-up for fieldwork
4 April 2024	Fieldwork start
7 June / 12 July 2024	Death screening updates

[6] At the time of these activities, NHS England was known as NHS Digital

Sample Selection

This section details the approach for selecting the sample for each country separately. A summary of the initial selected sample, the sample returned from the data holder, including any exclusions applied, and the sample selected from the returned sample (relevant in Scotland only), are provided in Section 1 of Table 5.8.

England

Primary Sampling Unit (PSU) sampling frame and sample

NHS England extracted and supplied a dataset listing all the children born in England in November and December 2022 which contained the following variables from birth notification records: an anonymised individual-level ID, LSOA from baby's address, the ethnicity code of the baby[7] and the month of birth. This dataset was at individual child level, so for multiple births (e.g. twins, triplets) each child appeared as a separate row, sampled independently and treated as discrete births as information was not available to identify babies in the same household. The ethnicity variable was used to generate three additional variables: Black Caribbean and Black African; Pakistani and Bangladeshi; and all other ethnic groups. The number of births supplied (95,157) was consistent with the number of births that we would have expected from the published estimated birth records from 2021[8] (99,325), which were used as a sense check of the data received from the sampling agency. The profile by region also matched the expected profile based on the birth records (see Appendix A).

The Income Deprivation Affecting Children Index (IDACI) score,[9] Middle Layer Super Output Area (MSOA) and the urban/rural indicator were added to the dataset at the LSOA-level, and the children in the 20% most deprived LSOAs based on the raw IDACI code were identified in an additional variable. The dataset was then aggregated to the MSOA level, and MSOA-level counts calculated for: being in the 20% most deprived LSOAs; Black African and Black Caribbean; and Bangladeshi and Pakistani, as well as counts for all children. The MSOA was designated as either urban or rural according to the urban/rural designation of the LSOA/s in which the majority of the children in the MSOA were assigned.

Region and the O/S grid references were merged in for the MSOAs, and the latter were used to iteratively combine contiguous MSOAs to form the PSUs, so that every PSU contained 18 or more children. The aggregated counts for the PSUs were then calculated, and each PSU assigned to its most prominent MSOA-level urban/rural group and region; this dataset formed the sampling frame of PSUs.

The 3,111 PSUs were assigned to five hierarchical strata: PSUs with seven or more Black African and Black Caribbean children; PSUs with seven or more Bangladeshi and Pakistani children; PSUs with three or more Black African, Black Caribbean, Bangladeshi and Pakistani children; all other PSUs in

[7] The ethnicity variable was complete for 93,175 cases, 97.9% of the sample.

[8] https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/livebirths/datasets/Birthcharacteristicsinenglandandwales

[9] IDACI is the 'Income Deprivation Affecting Children Index' quintile. IDACI is a subset of the income deprivation domain of the Index of Multiple Deprivation (IMD) and is a measure of the proportion of children under the age of 16 in low-income households for an area. IMD is a measure of multiple deprivation of small areas covering deprivation in relation to income, employment, education, health, crime, housing and living environment.

deprived areas (defined as more than half of babies in a deprived LSOA); and all other PSUs not previously allocated to a stratum.

Within each of the five strata, the PSUs were first sorted (stratified) by: region, the urban/rural indicator for the PSU and the mean IDACI score for the PSU, and then a systematic random sample was taken down the ordered list. Random stratified samples of 30 PSUs were then selected with probability proportional to the number of births in each stratum, except for the last stratum for which the sample size was 23 PSUs. This generated a selected sample of 143 PSUs.

Child sample

The aim of the child sampling was to select 18 children within each of the 143 selected PSUs to have approximately: 425 Black African and Black Caribbean in total, with a maximum of 17 in any PSU; 425 Bangladeshi and Pakistani, with a maximum of 17 from any of the four ethnic groups in any PSU; 655 children in a deprived area (LSOA), but not in one of the four ethnic groups; the remaining 1,069 children being neither in a deprived area nor in one of the four ethnic groups.

The approach used was to select the samples for the four ethnic groups first across all 143 PSUs to achieve the target sample sizes, while not completely filling up the sample for any single PSU. The remaining sample for each PSU was filled up with children from the other two groups to get as close to the targets as possible. For the Black African and Black Caribbean babies, we calculated the sampling probabilities within each PSU so that the sum of the sampling probabilities was 17 (i.e. a maximum of 17 births could be sampled in any one PSU). For the Bangladeshi and Pakistani sample, the probabilities were calculated to sum to 17 minus the number of Black African and Black Caribbean babies already sampled. The final sample was comprised of the following counts: 426 Black African and Black Caribbean; 428 Bangladeshi and Pakistani; 688 children in a deprived area, but not in one of the four ethnic groups; and 1,032 children being neither in a deprived area nor in one of the four ethnic groups. The components of the samples of children were all sampled stratified by PSU and the LSOA-level IDACI measure.

The anonymised IDs for the selected 2,574 children were sent to NHS England to obtain the contact details. The sample had been designed to be slightly larger than required in the original design to take account of the predicted rate of cases lost to the National Data Opt-out[10] and other exclusions by the data holder. Of the 2,574 children sampled, 326 had been removed from the returned sample which contained 2,248 children, an exclusion rate of 12.7%. No detailed information was supplied about these exclusions, so the precise rate of the National Data Opt-out exclusion could not be extracted, however it would have accounted for a large proportion of those exclusions. Moreover, the level of exclusions was much higher than we had expected, which is likely to be due to a much higher than predicted rate of exclusions due to National Data Opt-out, which we had predicted (based on published data) to be 5.4%. The returned sample file included details from birth notifications linked to birth registration data (in two separate files).

[10] See NHS National Data Opt-out https://digital.nhs.uk/services/national-data-opt-out

Exclusions

The exclusion rate (National Data Opt-out and other data holder exclusions) varied by ethnic group from 12.8% for Black African to 36.8% for Black Caribbean (see Table 5.2), although the sample size was quite small for the latter group meaning the high exclusion rate could possibly be a chance finding not replicated in a larger sample. There was little difference for the children not from those four ethnic groups that lived in an area defined as deprived (10.2%) and those that lived in an area not defined as deprived (10.9%). There was also some variability in the exclusion rate across the regions, ranging from 7.4% in the North East to 16.3% in the South East (see Table 5.3).

Table 5.2: Exclusions in England by ethnic group and area deprivation stratum

	Exclusions	Originally selected	% excluded
Pakistani	56	320	17.5%
Bangladeshi	17	108	15.7%
Black Caribbean	25	68	36.8%
Black African	46	358	12.8%
Ethnic subtotal	***144***	***854***	***16.9%***
Non ethnic deprived	70	688	10.2%
Non ethnic not deprived	112	1032	10.9%
Non ethnic subtotal	***182***	***1720***	***10.6%***
Total	326	2574	12.7%

Table 5.3: Exclusions in England by region

	Exclusions	Originally selected	% excluded
East Midlands	11	108	10.2%
East of England	23	234	9.8%
London	99	684	14.5%
North East	8	108	7.4%
North West	57	432	13.2%
South East	44	270	16.3%
South West	15	108	13.9%
West Midlands	41	342	12.0%
Yorkshire and the Humber	28	288	9.7%
Total	326	2574	12.7%

Wales

Primary Sampling Unit (PSU) sampling frame and sample

NHS England extracted and supplied a dataset listing all the children born in Wales in November and December 2022 which contained the following variables from birth notification records: an anonymised individual-level ID, LSOA, (from baby's address), the ethnicity code of the baby[11] and the month of birth. As in England, this dataset was at individual child level, so for multiple births (e.g. twins, triplets) each child appeared as a separate row. The number of births supplied (4,589) was consistent with the number of births that we would have expected from the published birth records[12] (4,800). The profile by region also matched the expected profile based on the birth records (see Appendix A).

The Welsh Index of Multiple Deprivation (WIMD) rank, MSOA, and the urban/rural indicator were added to the dataset at the LSOA-level. The dataset was then aggregated to the MSOA level, and MSOA-level counts calculated for all children. The MSOA was allocated to the urban/rural group to which most of the children in the MSOA were assigned, and to the aggregated WIMD rank. The aggregated WIMD rank was the average WIMD rank for the babies in the sampling frame within each MSOA. Region and the O/S grid references were merged in for the MSOAs, and the latter were used to iteratively combine contiguous MSOAs to form the PSUs, so that every PSU contained 18 or more children. The aggregated counts for the PSUs were then calculated, and each PSU assigned to its prominent MSOA-level urban/rural group and region (based on babies) and the aggregated WIMD rank calculated; this dataset formed the sampling frame of PSUs.

The PSUs were sorted (stratified) by: region, the urban/rural indicator for the PSU and the mean WIMD rank for the PSU. A random stratified sample of 35 PSUs was then sampled with probability proportional to the number of babies.

The selected PSUs were checked for any that could be split to reduce the geographic size of the cluster, while still having at least 18 children. Two such PSUs were identified, and were split[13] into two sub-clusters each, of which one in each of the original PSUs was sampled at random.

Child sample

Eighteen children were randomly sampled in each of the 35 PSUs, stratified by the LSOA-level measures of urban/rural indicator and WIMD rank. This generated a random sample of 630 children.

The anonymised IDs for the selected 630 children were sent to NHS England to obtain the contact details. The sample had been designed to be slightly larger than required in the original design to take account of the predicted rate of cases lost due to exclusions by the data holder. The returned sample with contact details was 618, so 12 children were removed implying an exclusion rate of 1.9%. This is much lower than in England, as the National Data Opt-out does not apply in Wales. The returned sample file included details from birth notifications linked to birth registration data (in two separate files).

[11] The ethnicity variable was complete for 2,871 cases, 62.6% of the sample.

[12] https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/livebirths/datasets/birthcharacteristicsinenglandandwales

[13] It was much more efficient to split the PSUs after selecting the sample of PSUs as then only the selected PSUs would need to be checked, rather than all of them. The parts of the PSUs were sampled at random, so the sample remains an equal probability sample.

Scotland

Primary Sampling Unit (PSU) sampling frame and sample

National Records of Scotland (NRS) extracted and supplied counts of the children born in Scotland in November and December 2022 aggregated at the Data Zone (DZ) level. The number of births supplied (7,517) was consistent with the number of births that we would have expected from the published birth records[14] (7,870). The profile by Health Board also matched the expected profile based on the birth records (see Appendix A).

All children that were living on one of the Islands in Scotland were removed[15], and the Scottish Index of Multiple Deprivation (SIMD) rank, Intermediate Data Zone (IDZ), the Regional Resilience Partnerships (RRPs) and the urban/rural indicator were added to the dataset. The dataset was then aggregated to the IDZ level, and IDZ-level counts calculated for children, as well as the aggregated O/S grid references. Neighbouring IDZs were then merged to form the PSUs, so that every PSU contained 20 or more children. Eighteen children were required, but 20 were requested in order to allow for contingencies; at the time of sampling in Scotland, we anticipated that there may be more problems with the addresses, so we asked for two more per PSU.

The aggregated counts for the PSUs were then calculated, and each PSU assigned to its prominent DZ-level urban/rural group and RRP that the majority of the babies within a PSU lived in, and the aggregated SIMD rank calculated; this dataset formed the sampling frame of PSUs.

The 220 PSUs were sorted (stratified) by: RRPs, the urban/rural indicator for the PSU and the mean SIMD rank for the PSU. A random stratified sample of 35 PSUs was then sampled with probability proportional to the number of babies

The selected PSUs were checked for any that could be split to reduce the geographic size of the cluster, while still having at least 20 children. Three such PSUs were identified, split into two sub-clusters each, of which one in each of the original PSUs was sampled at random. Each part of the PSU was sampled in proportion to its size (number of births) so the sample selected was an equal probability sample.

Child sample

Twenty children were randomly sampled in each of the 35 PSUs, and the children were stratified by the LSOA-level measures of urban/rural indicator and WIMD rank. This generated an initial random sample of 702 children.

The list of sampled DZs with an indicator of the number of children to sample in each was sent to NRS to obtain the contact details. As noted earlier, the sample had been designed to be slightly larger than required in the original design to allow for any unforeseen issues with the sample. The number of children returned by NRS was 696. Six of these children were twins where only one of the twins had

[14] https://webarchive.nrscotland.gov.uk/20240326182110/https://www.nrscotland.gov.uk/statistics-and-data/statistics/statistics-by-theme/vital-events/general-publications/quarterly-births-deaths-and-other-vital-events/archive/4th-quarter-2022

[15] This is a longstanding and standard approach for probability surveys in Scotland, due to low population density in these areas, and in line with UCL's sampling specification. Children living in the Islands in Scotland are included in the Main Study specification.

been selected. For these cases, the other twin was added to the sample. Therefore, the sample provided was increased by six to 702 children. As there were 12 sets of twins in total (in six cases both twins had been selected) this represented 690 birth events.

However, some of those could not be used for the reasons set out in Table 5.4:

Table 5.4: Cases initially removed from the returned sample (Scotland)

	Removed	Subtotal
Sample returned (birth event)		690
Ineligible**	22	668
Missing postcode	1	667
Outside of the PSUs	12	655
TOTAL	35	

Reasons for ineligibility, as suggested by NRS are set out in Table 5.5.

Table 5.5: Reasons for ineligibility (Scotland)

	Removed
Armed forces posting	1
Cancelled from NHS list	2
Mother not resident in Scotland	1
No current Scottish registration	15
Not resident in Scotland	3
Total removed	**22**

Of the 655 birth-event level cases (comprising 667 children) that could be used, 595 (comprising 601 children) were sampled by taking simple random samples within each PSU for the first opt-out mailing, as this was the required sample size for Scotland. As mentioned above, a higher number of cases than was required were sampled at the first stage in case of any unforeseen issues. The aim was to have 17 cases in each PSU, but for some there was a shortfall, so the size of each PSU varied from 16 to 18. A number of subsequent exclusions were applied after the opt-out mailing, in order to remove potentially sensitive cases – see below for more details.

Northern Ireland

Primary Sampling Unit (PSU) sampling frame and sample

Health and Social Care Northern Ireland (HSCNI) extracted and supplied counts of the children born in Northern Ireland in June and July 2023 aggregated at the super output area (SOA) level. The number of births supplied (3,242 was consistent with the number of births that we would have expected from the published birth records[16] (3,369). The profile by Health and Social Care Trusts (HSCTs) also matched the expected profile based on the birth records.

[16] https://www.nisra.gov.uk/publications/monthly-births

The following measures were merged into the SOA-level dataset: the O/S grid references, the Health and Social Care Trusts (HSCT) name, urban/rural indicator and the Northern Ireland Multiple Deprivation Measure (NIMD) rank. Neighbouring SOAs were then merged to form the PSUs, so that every PSU contained 19[17] or more children. The aggregated counts for the PSUs were then calculated, and each PSU assigned to its prominent SOA-level urban/rural group and HSCT, and the aggregated NIMD rank calculated (of babies); this dataset formed the sampling frame of PSUs.

The 103 PSUs were sorted (stratified) by: HSCT, the urban/rural indicator for the PSU and the mean NIMD rank for the PSU. A random stratified sample of 35 PSUs was then sampled with probability proportional to size.

Child sample

Nineteen children were randomly sampled in each of the 35 PSUs; this generated a random sample of 665 children.

The list of sampled SOAs with an indicator of the number of children to sample in each was sent to HSCNI to extract. The sample had been designed to be slightly larger than required in the original design to allow for issues with the sample.

Table 5.6 shows the summary of the selected sample sent by HSCNI. There were 645 births in the sample. N.b. the cases selected here are referred to as 'births', as we were unable to determine whether these were children or 'birth events' due to data holder data minimisation requirements.

Table 5.6: Selected sample- Northern Ireland

Total births June – July 2023	3242
Births removed*	371
Number of included births linked to requested SOAs (287 SOAs)	1153
Number of births selected from sample frame**	645

*Births were removed for the reasons below:

- Adoption Pending on maternity system
- Mother not on GP registration system
- Infant not on GP registration system
- Mother deceased
- Infant deceased
- Infant address does not match mother's

The majority of cases removed were due to infant and mother not appearing at the same address on the GP registration system. Counts for individual reasons were not provided by HSCNI due to small counts.

[17] Although we sampled 18 cases in England, we sampled more than 18 cases in NI to allow for cases being removed. We sampled 20 cases in Scotland to provide more of a 'buffer' because we expected the addresses in Scotland to be less accurate.

**Though 665 children were requested in the sample frame, only 645 births were available when linking to sample frame, as for some SOAs the number of births requested was more than the number available after births had been removed. In some cases, the original requested number of births was equal to all births in the SOA so as soon as any cases were excluded it was not possible to meet the requested number. There was a shortfall of 20 because some SOAs had fewer births than we requested; as we had anticipated this could be a problem, the sample design had mitigated for this by selecting slightly higher numbers than required. The births were removed before the sample was selected.

Once sampled, the families of the 645 selected cases were contacted by HSCNI to allow potential participants to opt out of the survey.

Summary of the sample

Sample sizes per country and strata

The following table shows a summary of the selected sample sizes for each country (referred to in Table 5.7 as "sample children"), broken down by the five strata for England, and the number who were returned by the data holder after their exclusions ("returned children"). These reflect the sample numbers upon completion of the sampling process for England, Wales, Scotland and Northern Ireland.

As we had anonymised birth records, it was not possible to sample by families. Therefore, the sampling took place at the level of individual child, meaning that where a child which was part of a multiple birth was selected, the other children in the multiple birth were also selected and added to the sample; however, their numbers are not included in this Table. This means that the actual number of children in the initial selected sample ("sample children") and the number who were returned by the data holder after their exclusions or excluded due to other ineligibility ("returned children") is higher than indicated in this table due to the addition of other children in multiple births (see next section for sample numbers).

Table 5.7: Sample Sizes per country and strata

	Number of births supplied	Total PSUs	Sample PSUs	Sample children	Returned eligible children
England	95,157	3,111	143	2,574	2,248
Black African and Caribbean (7+ births in PSU)	*5841*	*155*	*30*	*540*	*456*
Bangladeshi and Pakistani (7+ births in PSU)	*8919*	*265*	*30*	*540*	*473*
All ethnic (3+ births in PSU)	*26160*	*837*	*30*	*540*	*481*
Other deprived	*5142*	*180*	*30*	*540*	*485*
All other	*49095*	*1,674*	*23*	*414*	*353*
Wales	4589	160	35	630	618
Scotland	7517	220	35	702	667
Northern Ireland	3242	103	35	665	645
United Kingdom	110488	3594	248	4571	4178

Issued sample

Section 2 of Table 5.8 below shows the sample numbers issued to the opt-out stage for the notification mailing, opt-outs, and additional exclusions applied. Section 3 shows the sample issued (at birth-event level) to interviewers for each country, and additional exclusions applied at that stage as well as exclusions to the sample found later in fieldwork.

Table 5.8: Selected sample and Issued sample (exclusions and removals shown in red font)

		England	Wales	Scotland	NI	Total
1	***SAMPLE SELECTION***					
1a	Initial selected sample (designed to be larger than needed): children	2574	630	702	665	4571
1b	Dataholder (or ineligibility) exclusions from returned sample: children	326	12	35	20[18]	393
	% excluded from originally requested sample	*12.7%*	*1.9%*	*5.0%*	*N/A*	*8.6%*
1c	Returned eligible sample: children (birth events)	2248 (2223)	618 (614)	667 (655)	*645*[19] (645)	4178 (4137)
1d	Selected sample: children (birth events)	2248 (2223)	618 (614)	601 (595)	*645* (645)	4112 (4077)
2	***OPT-OUT STAGE***					
2a	Cases removed prior to opt-out mailing (address issues): birth events	8	2	0	n/a	10
2b	Issued for notification mailing: birth event	2215	612	595	645	4067
2c	Opt outs: birth event	19	9	13	56	97
2d	*% opted out from those issued notification mailing*	*0.9%*	*1.5%*	*2.2%*	*8.7%*	*2.4%*
2e	Additional exclusions due to sensitivity	18	7	40	0	65
2f	Additional exclusions (RTS or other ineligibility)	1	2	1	0	4
2g	**Remaining families**: birth event	2177	594	541	589	3901
3	***MAIN FIELDWORK***					
3a	Issued to field: birth event	2177	594	541	589	3901

[18] This represents the shortfall of children in the sampled SOAs.

[19] Number of birth events/children unknown for NI, as sample not provided to Ipsos until after the opt-out stage. The figure for the returned sample plus reported opt-outs was used to calculate the selected sample figure. The returned sample did not indicate multiple births in a family and therefore the birth event/child figures for NI are not known.

3b	Ineligible cases identified in the field	16	0	2	6	24
3c	**Remaining families**: birth event	2161	594	539	583	3877
4	Fraudulent interviewer cases	97	147	0	0	244
5	***FINAL ELIGIBLE 'ISSUED TO FIELD':***					
5a	Eligible families issued to field: birth event (excluding ineligible and fraudulent interviewer cases) (3c-4)*	**2064**	**447**	**539**	**583**	**3633**
5b	Eligible families issued to opt-out stage: birth events (includes Issued to field + opted out cases) (5a+2c)**	**2083**	**456**	**552**	**639**	**3730**
6	***CASES WITHDRAWN DURING FIELDWORK***					
6a	Total additional exclusions due to sensitivity prior to online follow-up survey from address updates	56	13	3	0	72
7	***Total excluded from selected sample due to sensitivity or ineligibility*** *(2a+2e+2f+3b+6a)*	99	24	46	6	175
7a	*% families/birth events excluded from selected sample (7/1d)*	*4.4%*	*3.9%*	*7.7%*	*.9%*	*4.3%*

*This is the number of eligible families issued to field (row b of Table 19.1, Response Rate Chapter) used to calculate Survey response rate.

** This is the number of eligible families issued to the opt-out stage (row a of Table 19.1, Response Rate Chapter) used to calculate the Study response rate.

Opt-out stage

Prior to the notification mailing, 10 cases were removed from the selected sample due to problems identified with the selected cases (table 5.8, row 2a):

- In England 8 cases were removed: 2 were missing parent address details; 5 were missing from the NHS Registration file; and 1 removed after consulting NHS England because it had been assigned a duplicate NHS number, and two different sets of details were provided in the files provided by NHS England.

- In Wales 2 cases were removed because they were missing from the NHS Registration file.

The cases remaining from the selected sample were sent a notification letter in the post (table 5.8, row 2b). A total of 4,067 birth events were included in the notification mailing. In Northern Ireland, BSO administered the notification mailing: they sent notification letters to 645 families (or addresses)[20]. Forty-two families opted out, so Ipsos received contact details for 607 children across 603 addresses **after** this opt-out stage. There were then 14 subsequent opt-outs received after the sample was sent to Ipsos, for a total of 56 opt-outs. In other countries, Ipsos sent the mailing: a total of 3,422 families (birth-events)[21] across England, Wales and Scotland were sent notification letters by Ipsos. Parents were asked to opt-out within a two-week window. Across the study, 2.4% of cases (at the birth event level) (table 5.8, row 2d) opted out. The opt-out rate was higher in Northern Ireland (8.7%) than other countries (1.2% average), which may have reflected differences in the way the notification mailing was administered in Northern Ireland. All opt-outs were removed from the sample issued to interviewers for main fieldwork.

The notification mailing highlighted a case in Scotland in which parents in a sensitive family situation were part of the study sample and had been sent a notification letter which resulted in an adverse event. Fieldwork was paused in Scotland while the sampling process and exemptions were reviewed by the NRS/PHS, to ensure that any other potentially sensitive cases were removed from the sample and to ensure that all parties (NRS/PHS) agreed with the way Ipsos processed the received sample file. A discussion was held with the NRS/PHS/CHILI teams involved in the sampling process to clarify the sample processing steps, and the best format in which to provide any further address updates.

Therefore, following discussions with sample providers, cases where the mother's and baby's address differed were not issued to field in order to avoid approaching parents in potentially sensitive circumstances: a total of 65 birth events (table 5.8, row 2e) were withdrawn following the notification mailing, but before face-to-face fieldwork started, because address updates received prior to the start of fieldwork placed the mother and baby at separate addresses, or did not confirm that mother and baby were at the same address. An additional 4 cases were withdrawn due to receiving 'return-to-sender' (RTS) notifications or other reasons for ineligibility (table 5.8, row 2f), e.g. in Scotland, one other case was not issued to field because the parent had moved to the Scottish Highlands which was outside the area covered by fieldwork.

Main Fieldwork

A total of 3,901 birth events were initially issued to interviewers for the main fieldwork period (table 5.8, row 3a).

Following the start of fieldwork a small number of families were identified as being ineligible (table 5.8, row 3b) (for example because the baby had died or the family had moved overseas).

Following these exclusions, a total of 3877 birth events remained (table 5.8, row 3c).

Fraudulent interviewer cases

There were 244 birth events (across 287 households, see table 19.3) affected by an interviewer who was found to have been falsifying parts of interviews (row 4). Information about these cases and re-issuing of these cases are provided in the Response Rate chapter.

[20] In Northern Ireland, fathers' information was not provided; therefore notification letters were only sent to mothers (one address) in the sample frame.

[21] As Own Household Parent details were available on the sample frame in these countries, this amounted to 3,960 addresses.

These cases are noted separately (table 5.8, row 4), as they are excluded from the final eligible issued to field numbers (table 5.8, rows 5a-5b).

Final eligible issued to field

In total, accounting for exclusions related to ineligibility, sensitivity, opt-outs, and excluding fraudulent interviewer cases, there were 3633 birth events issued to field (table 5.8, row 5a). Adding in the families who opted-out, 3730 eligible families were issued to the opt-out stage (table 5.8, row 5b). These figures are used to calculate the survey response rate and study response rate, respectively, presented later in Chapter 19 of this report.

Cases withdrawn during fieldwork

Following address updates, another 72 cases (table 5.8, row 6a) were withdrawn from fieldwork prior to the online follow-up period, because it could not be confirmed that the mother and baby lived together. This included 56 cases in England and 13 in Wales withdrawn after the face-to-face fieldwork period but before the online follow-up survey fieldwork in November 2023, and 3 birth events in Scotland withdrawn in February 2024. Further details on address updates are provided below.

Total exclusions from selected sample

Taken together with other cases excluded prior to fieldwork for reasons of sensitivity or unknown eligibility, this meant that 4.3% of eligible birth events within the selected sample were excluded from at least part of the fieldwork for the study (table 5.8, row 7a).

Sample processing

Initial sample processing

Once each of the country samples were received by Ipsos, they were checked and restructured into a consistent format. The initial processing steps included:

- Checking whether mother and baby addresses matched (in Scotland), and identifying where fathers had a different address to the mother (in Scotland, England and Wales).
- Checking for duplicate cases (births, addresses).
- Formatting names and addresses consistently.
- Creating a unique birth identifier for each birth event, and a unique serial for each address.
- Restructuring the file at the address (rather than baby, or birth event) level, with one record/row per address.
- Creating sample points for fieldwork – although the sample was originally selected in clusters, in some cases it made sense to combine or reorganise the clusters for fieldwork assignments. Checks were also done on the accuracy and completeness of addresses.
- Allocation of cases to one of six experimental incentive groups, the opt-in/opt-out data linkage experimental group, and to the biosample study.
- Creation of a file for the opt-out mailing, structured by individual parent on the sample (rather than address).

Initial checks on the samples identified a small number of cases that were potentially too sensitive to include in the study and Ipsos/CLS worked with the sample providers to agree a resolution, or to clarify the meaning of variables in the initial sample files (see earlier in this section for details of cases removed from the sample before it was issued to field).

Sample identification numbers and structure of issued sample

Each birth event on the sample was assigned a unique five-digit birth ID number (with twins/triplets all were assigned the same birth event ID).

Each birth event record was duplicated in the sample file so that it appeared twice. The first iteration of each record was referred to as 'Address 1' and the second iteration as 'Address 2'. The unique address number was created by appending a '1' or '2' to each birth ID. This set-up ensured two addresses could be used during fieldwork for every birth event, including cases where we already had two addresses on the sample because parents lived separately, and cases where we had only one address on the sample but where parents may be living separately by the time the fieldwork took place. Where a mother and father were listed as living at separate addresses, the mother's name and contact details were used to populate the first address serial and the father's name and address were used to populate the second address serial. Where a mother and father were listed as living at the same address on the sample, both parents' names and details appeared in the first address serial. In these instances, the second address serial formed a dummy record in the sample, populated with background details about the birth event but with blank address fields. If during fieldwork, an interviewer found that the parents now lived at separate addresses, the interviewer could populate name/address into the second serial. Similarly, if only one parent was listed on the sample, a dummy address was available in case the other parent's details could be gathered from the parent who was listed. This set-up was used in all countries, including Northern Ireland. In Northern Ireland, all second address serials were blank at the point sample was issued as no father details were provided in the Northern Ireland sample.

The script was programmed so that information collected during the screening and main interviews was fed across to the relevant address record in the Electronic Contact Sheet – for example, if a Primary Informant provided a name and address for the baby's other non-resident parent (the Own Household Parent) during the interview, the Own Household Parent's contact details would appear in the second address serial so that the interviewer could proceed with contacting them.

This set-up ensured that the sample was flexible to changes in family circumstances – a second address was available for every birth event in case it was needed, parents living separately could be recorded as moving together into one household, and addresses could be updated on the sample to accommodate movers.

During and after fieldwork, each responding parent was assigned a unique seven-digit ID (Respondent ID). This comprised the six-digit address number followed by an additional digit to represent the type of parent/interview done: '1' for Primary Informants; '2' for Additional Informants living in the baby's main household; '3' for Own Household Parents; and '4' for Additional Informants living in OHP households.

Sample updates

Sample updates were received before, during and at the end of the face-to-face fieldwork period (prior to the online follow-up survey invitations being sent) for each country.

Prior to face-to-face fieldwork the addresses were allocated into sampling points. These sampling points were based around the original PSU selections but were sometimes altered to ensure the assignments were sensible for interviewers to cover. Where families had moved from the PSU area in which they were originally sampled, this means they would be allocated to the closest sampling point. In Scotland,

where there were more cases available than we required for the sample, 12 families that had moved outside the PSU where they were sampled were excluded at the sampling stage.

Address updates proved very complex to deal with, partly due to the format in which they were received (see below for details from each country) but also because of the nature of the sample, as Ipsos were receiving address updates for up to three individuals per birth event – mother, father and baby. The address updates fell into a number of scenarios, many of which had to be assessed on a case-by-case basis. For example, the update may have listed a new address for a mother but not the baby (or vice versa), so they appeared to be living at separate addresses. In other instances, mother, father and baby were listed as living at the same address originally, but an address update was received for mother and baby only. In addition, because the sample contained up to two addresses per birth event, it was also necessary to check further scenarios such as cases that had been split households originally, but where mother and father were listed at the same address in later updates.

Ipsos dealt with these cases by coding the address updates into a number of scenarios: whether mother and father were living together in the update file; whether mother or father were living together in the original file; whether mother and baby address were the same in the update file; and whether any addresses were blank in the update file. Ipsos highlighted any scenarios that were potentially problematic (i.e. mother and baby living separately, or mother and/or baby's address not confirmed in later updates so potentially no longer living at the same address) to discuss with CLS and the sample providers further. Decisions were taking in consultation with CLS and sample providers about how to proceed with cases falling into the different scenarios considered. Most scenarios where parents had different addresses either in the original or tracing files required manual checks before deciding whether to issue the new address: e.g. where a father originally living separately had a different address on the update file, checks were done as to whether this address matched the first/mother address provided for the case and the fieldwork outcome at the original address.

Further details of how address updates were processed in each country are given below.

England and Wales

Address updates, as well as checks on deaths and embarkations, were run by the Personal Demographics Service (PDS) within NHS England.

For updated addresses, it was not possible to request/receive a date stamp for the addresses. It was also not possible for the address updates to be provided only for those addresses that had changed compared to the birth registration addresses. Because of differences in formatting of addresses and postcodes in the birth registration and PDS data, this involved a significant amount of manual work for Ipsos to determine whether an address was the same as that originally supplied or not.

In the initial update provided by NHS England (July 2023, after the opt-out period but before issuing cases to field) the serial number allocated to each case was not provided, which made it complex to match the update to the original file. In later updates the serial was provided.

Comparing the addresses supplied from the birth registration data to the PDS addresses, almost a third of households seemed to have moved. As this seemed to be highly unlikely, it suggested that the PDS addresses are a mixture of actual moves together with addresses that haven't been updated at the GP (particularly likely to be the case for fathers as birth mothers are likely to access GP services during pregnancy). The study therefore decided to only use the PDS addresses for letters returned to sender,

cases where the respondent was not at the (original) sample file address when the interviewer visited, and as a flag for removal of cases (25 birth events/families) where the addresses for the baby, mother and father all differed from one another which could indicate uncertainty about the family situation / possible sensitive cases (see row 2e in Table 5.8 above). For other addresses, the study team decided to continue to use the birth registration addresses because they were fairly recent, valid and reliable sources of addresses and, without a date stamp for the PDS updates, the study couldn't be sure they were actually more up to date than the birth registration address.

During fieldwork, if interviewers reported that addresses were incomplete or found that the family had moved, the team manually checked against the address update file in case more complete details were available. In a small number of cases, the team was able to provide missing address information (e.g. a flat number, or house number).

Additional updates were also received late November 2023 for use during face-to-face fieldwork and in February 2024, in advance of the online follow-up survey period.

Scotland

Before starting fieldwork, Ipsos received mother and baby address updates from CHILI and deaths and embarkation updates from NHSCR. The deaths and embarkations updates included fathers, as well as mothers and babies. The sample had already been screened for deaths prior to fieldwork, and no further deaths were identified in subsequent updates.

The initial address updates (August 2023, prior to the start of fieldwork) included a set of addresses for every case sampled, regardless of whether addresses had changed. It was very resource intensive to process these address updates, which required significant manual checking, as addresses that were unchanged were sometimes superficially different because of formatting or spelling differences. For subsequent address updates, the CHILI team agreed to provide updates just for addresses that were changed.

A number of households (24) were removed because the case was potentially sensitive (the baby was not living with the mother, for example) following an update in August 2023. Following another update in December 2023 prior to fieldwork starting, another 16 cases were removed where the mother's CHILI address differed to the baby's CHILI address, or where there was an unconfirmed address status for either the mother or the baby. One further case was removed when the invitation mailing was returned to sender (table 5.8, row 2f). Therefore, a total of 41 (table 5.8, row 2e, 2f) cases were removed prior to fieldwork. Further updates were received mid-fieldwork in February and April 2024. After the February 2024 update, three more cases were excluded due to potential sensitivity (table 5.8, row 6a). In total, therefore, 43 cases were withdrawn prior to or during fieldwork due to concerns about the potential sensitivity of the case (table 5.8, row 2e and 6a), and a total of three cases were . withdrawn due to return-to-sender or other ineligibility during fieldwork (table 5.8, row 3b and 2f), taking the total excluded to 46 (row 7).

Northern Ireland

Before sending the sample to Ipsos following the opt-out period, the BSO team checked for any further address updates or deaths. The BSO team ran checks on the sampled cases for any deaths in June and July 2024. No deaths were reported. By the terms of the sampling agreement, no address updates were provided to Ipsos for Northern Ireland during / after the fieldwork period.

Experimental Allocation

The final stage of processing the sample was allocating each sampled case to the experimental groups. These experiments were:

- Allocating each birth event to one of six incentive conditions (No unconditional & £10 conditional; No unconditional & £20 conditional; £5 unconditional & £10 conditional; £5 unconditional & £20 conditional; Bib & £10 conditional; Bib & £20 conditional)
- Allocating each birth event to one of two data linkage consent conditions (opt-in or opt-out consent)
- Allocating a sub-set of birth events in each country to be part of the biosample study.

All allocations were done at the birth event level so that parents associated with the same birth would be in the same groups, regardless of whether they still lived together.

The incentive allocation was done after stratifying the sample by PSU and mother's postcode. Where there were two addresses associated with a birth event, and the second address was allocated to an incentive condition that included a bib, they were reallocated to receive a £5 advance incentive rather than a bib (as some may not have contact with the baby). However, in England and Wales there was an error in applying this correction, so it was only applied in Scotland.

The data linkage experiment allocation was done after stratifying the sample by incentive allocation, PSU and mother's postcode. Cases were systematically allocated to either opt-in or opt-out following the stratification.

The biosample allocation involved first selecting 61 PSUs to form part of the biosample study. Within PSU, cases were stratified by biosample allocation, PSU, incentive condition, data linkage condition, and mother's postcode. In each PSU, 10 of the 17 cases were allocated to the biosample condition.

6 Questionnaire

This chapter provides details of the general content of the questionnaire and how the questionnaire worked in each household for the main survey, as well as the online follow-up survey. Additionally, this chapter details the changes made during the fieldwork period and the differences between the questionnaire in the different countries of the UK.

Main survey questionnaire content

Parents were asked about their baby's health and growth, behaviour and development, sleep, diet and activities they do with their child. They were also asked about their home and family, including other children and their partner/other parent, their work situation and family finances, health and wellbeing, parenting approach and relationship with their baby, relationship support and services received, and childcare arrangements.

Three different types of interviews for up to four different types of respondents were developed for each family: Primary Informant (PI), Additional Informant (AI), and Own-Household Parent (OHP) (see below for further description of each type). Additional Informants included those who lived in the child's main household with the PI (AIMain) and those who lived with the OHP (AIOHP). The type of interview assigned to each participant was determined during a short screener survey (described in more detail in the "Household contact, cooperation and engagement" chapter).

This set-up meant that the study could: accommodate different types of family structures; make the interview structures efficient so that questions that only needed to be answered once were not answered multiple times within families; ensured that only parents with legal parental responsibility gave data linkage and bio-samples consents for their child; and allowed a flexible structure that could accommodate changes in information from the sample frame and some parental choice about who was better placed to answer questions about their child (not assigning this on the basis of gender).

The different types of respondent interviews were:

1. **Primary Informant (PI):** this was a 60-minute interview completed with an interviewer, primarily face-to-face, but alternative modes of interview included telephone and Teams. The parent who completed this interview was living in the child's main household, and ideally was the parent who spent the most time looking after the child. This respondent was asked about their own characteristics, their household's characteristics and detailed questions about their child's characteristics.

2. **Additional Informant (AI):** this interview was for a parent or partner who lived with the Primary Informant (**AIMain**) or a live-in partner of an Own-Household Parent, who had some contact with the child (**AIOHP**). Most often this was the baby's other parent, but they could also be a new partner (i.e. step-parent). This interview was 30-minutes long and could be completed with an interviewer face-to-face, via telephone, Teams, or online. The interview asked about their own characteristics and their activities with the child.

3. **Own-household parent (OHP):** this was a 40-minute interview completed with an interviewer or online. This interview was for parents who did not live full-time or mainly in their child's main household. The questions asked covered the individual's characteristics, their household's characteristics and some questions about their relationship with their child.

Data linkage consents (health, education and social care records) were sought for each respondent and the cohort child. The sample was experimentally split to test two types of consent approaches: an opt-in group who gave consent for each type of data linkage, and an opt-out group who were informed that Generation New Era wished to link their administrative records and they should inform the study team if they did not want this to happen. In the questionnaire, the opt-in group was asked to indicate consents in the Data Linkage module, which was towards the end of the questionnaire, whilst the opt-out group was shown information in the Introduction module. More information on data linkage can be found in chapter 7.

Questions that were deemed more sensitive were included in a self-completion module. Respondents could choose to complete the module or skip it. When the interview was completed with an interviewer, respondents were asked to complete the module using the interviewer's tablet during the face-to-face interviews. If necessary, they could be assisted in completing the module by the interviewer, a friend, a family member including their partner, or a non-friend/family-member individual. If they were assisted by their partner, questions on relationships were skipped altogether. To skip the module, respondents indicated to the interviewer that they refused to do the module if they were completing an interview with an interviewer; or selected "Prefer not to say" to all questions if they were completing the online survey.

Table 6.1 summarises the questionnaire modules, topics covered, and which respondents answered which questions in the main survey. As shown in Table 6.1, the Primary Informant interview covered all the topics asked. As some questions only needed to be asked once per child or household, the Additional Informant interview was shorter. The OHP interview included the same content as the Additional Informant interview, as well as some questions about their household. The OHP interview included some questions about the child that were filtered depending on whether or not the OHP spent much/any time with the baby, to avoid asking OHPs questions that were inappropriate or could be upsetting.

Table 6.1: Summary of Generation New Era questionnaire modules, topics, and which respondents are asked which questions

Module	Topics covered	Primary Informant	Own Hhold Parent	Additional Informant
Introduction	Interview set up (mode, use of showcards)	x	x	x
	Consents including opt-out data linkage (for opt-out group only)	x	x	x
	Respondent details (confirm name, address, gender)	x	x	x
	Baby details (name, DOB, gender) and relationship to respondent	x	x	x
	Other parent details (name & relationship) (for AI in the main household only)			x
Household Grid	Household grid (names, DoB, gender, relationships of all in household)	x	x	
	Co-resident parent and/or partner details (all residences, past/current relationships with the named parent)	x	x	

	Second household parent details, if any (name, DoB, gender, involvement in child's life, past/current relationships with the named parent)	x	x	
	Non-resident children	x	x	
Housing	Housing (tenure, size)	x	x	
	Languages spoken	x	x	
Background	Employment	x	x	x
	Parental leave	x	x	x
	Education	x	x	x
	Ethnicity (own, child)	x	x	x
	Religion	x	x	x
About Partner	Employment	x		
	Parental leave	x		
	Education	x		
	Ethnicity	x		
	Health	x		
Income	Benefits	x	x	
	Income	x	x	
	Debt	x	x	
Self-completion	Pregnancy history (biological birth mother only)	(x)	(x)	(x)
	Bonding	x	x	x
	Disadvantage	x	x	x
	Health	x	x	x
	Life events	x	x	x
	Social support, life satisfaction and loneliness	x	x	x
	Couple relationship	x	x	x
	Mental health	x	x	x
	Smoking, alcohol, vaping	x	x	x
	Information: sources of support	x	x	x
Child Health	Fertility treatments	x		
	Birth & delivery	x		
	Anthropometrics	x		
	Health	x		
	Diet	x		

	Sleep	x		
	Screen use and crying	x		
	Development	x		
Child activities & temperament	Activities	x	x	x
	Parenting engagement	x	x	x
	Temperament	x	x	x
Childcare	Childcare providers	x		
	Grandparent support	x		
	Service use	x		
Data Linkage (for opt-in group only)	Data Linkage-OPT IN GROUP	(x)	(x)	(x)
Stable Contact and Voucher	Contact details	x	x	x
	OHP Contact Details	x	x	
	Stable Contact	x	x	x
	Moving address	x	x	
	Incentive and Outro	x	x	x

In addition to these modules, for respondents eligible for the saliva collection study, the questionnaire included a separate Saliva Collection module. This module guided the interviewer through the process of collecting saliva consents and samples from biological parents and/or their child. Further information on the saliva study can be found in chapter 8.

Mode of interview

For the PI, the interview was mainly conducted face-to-face (CAPI), with Teams or Telephone (CATI) options. A small number of PI interviews were conducted online (the reasons for these are explained in more detail in Chapter 13).

AI interviews were mainly conducted face-to-face or via web survey (interviewers placed a letter with the link to the survey during the PI's interview if they thought this would be the best), though Teams and Telephone options were also available.

OHP interviews were conducted face-to-face, or by telephone, teams, or web.

More detail on the number of interviews by each mode for each type of respondent and the average interview length by respondent type is found below. These timings relate to interviews conducted during the main fieldwork stage, and do not include time spent conducting the initial doorstep screening or the timings for the online follow-up survey. The number of interviews the average length is based on are given in brackets in each cell. Calculations exclude extreme outliers with timings over 200 minutes, and are all based on complete interviews.

Table 6.2: Average interview length in minutes (fully productive interviews only; excludes partial completes; excludes outliers with timings recorded under 10 mins/ over 200 mins)

	CAPI	CATI	TEAMS	CAWI
PI	58.7 (1,622)	60.51 (110)	79.4 (18)	50.0 (4)
AI in the main/PI household	29.7 (667)	30.9 (90)	42.7 (10)	33.7 (379)
OHP	40.6 (38)	35.9 (9)	No interview	46.5 (9)
AI in OHP household	27.3 (4)	No interview	No interview	No interview

Average module timing (in minutes)

Based on the average timings across all participants and modes, the self-completion module was the longest module, and the housing module was the shortest. Detailed timings based on complete interviews are listed below.

Table 6.3: Average module timings by interview type (all modes, in minutes).
Outliers for each module are excluded (timings >100 minutes) so the base size for each module varies slightly.

Module	Average length	PI	AI Main	OHP	AI OHP
Introduction (not including screener)	3.8	4.0 (1,768)	3.6 (1,128)	3.9 (56)	3.6 (3)
Household Grid	4.8	4.8 (1,778)	5.8 (32)[22]	5.9 (53)	Not asked
Housing	1.2	1.2 (1,779)	0.8 (33)	1.3 (53)	Not asked
Background	6.6	6.5 (1,773)	6.7 (1,146)	6.0 (59)	5.6 (4)
About Partner	1.8	1.9 (1,573)	1.4 (31)	0.6 (35)	No data
Income	1.9	1.9 (1,774)	1.5 (31)	1.7 (53)	Not asked
Self-completion	11.6	13.4 (1,759)	8.9 (1,143)	9.6 (58)	4.5 (4)
Child Health	6.9	7.0 (1,767)	5.4 (33)	5.9 (1)	Not asked

[22] A small number of AIs answered the PI version of the web survey, either due to respondent or administration error (e.g. interviewer using the Second Household Letter instead of the AI letter) – this means a small number of AIs answered some modules of the survey that AIs typically should not answer, including the household grid, housing, partner, income and childcare modules.

Child activities & temperament	7.7	7.4 (1,768)	8.1 (1,147)	7.3 (54)	9.6 (4)
Childcare	4.9	4.9 (1,764)	3.7 (30)	6.8 (1)	Not asked
Data Linkage (for opt-in group only)	1.7	2.0 (897)	1.2 (577)	1.3 (28)	1.6 (3)
Stable Contact and Voucher	4.1	4.7 (1,767)	3.1 (1,149)	5.6 (58)	2.4 (4)

Adaptations for each mode

There were four interview modes in the study: computer-assisted personal interview aka face-to-face (CAPI), computer-assisted telephone interview (CATI), Microsoft Teams interview (Teams), and computer-assisted web interview (CAWI). In CAPI and CATI, the interviewer used a tablet, and read the questions out, either reading answer categories or referring the respondent to a showcard (for the CATI interviews interviewers were asked either to leave a showcard pack with the respondent when booking the appointment or to give them a link to a set of online showcards). In Teams, interviewers shared their device screen whilst reading out the questions[23]. The respondent was able to see the questions and answer options on the screen. In CAWI (the online survey), no interviewer was involved.

As the self-completion module contained question items that were more sensitive in nature, CAPI respondents had the option to input their answers directly on the device or seek assistance from the interviewers or another individual. Where respondents had help from a partner, they were routed out from questions about the partner relationship. For CATI respondents with access to showcards, interviewers refrained from reading out the answer options; instead, respondents provided the number corresponding to their answer for the interviewer to input on their device. Similarly, Teams respondents could read the questions themselves and provide the interviewer with the number corresponding to their answer. In cases where CATI respondents did not have access to showcards or Teams respondents could not see the screen, the interviewer read out both the questions and answer options.

Adaptations were made to ensure that the questionnaire instruments worked effectively in all modes. More specifically:

- Question text: for CAPI, CATI, and Teams, the question text and information screens were worded so that the interviewer could read them out, whilst for CAWI, the questions and information screens were designed to be read from the screen and answered directly by the respondent.

- Interviewer instructions: for CAPI & CATI, interviewer instructions were available on the tablet – and marked with the word “INTERVIEWER” and coloured red. These instructions provided further clarification on the questions as well as guidance on how to code the answer. These instructions

[23] Participants could choose whether to activate their camera during the call or not. The interviewers did not make use of their cameras.

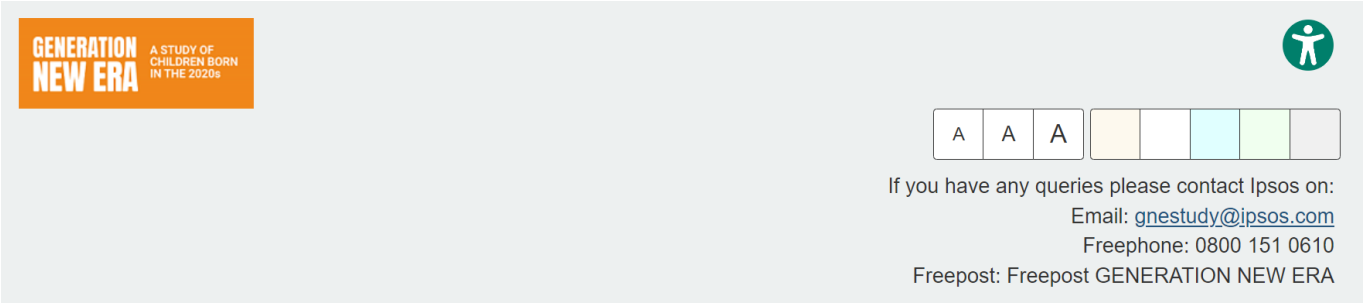
were not provided in this way on Teams and CAWI. Where there needed to be further clarification, this was provided for the respondent directly after the question text or via help screens.

- "Don't know"/"Prefer not to say"/Spontaneous codes: for CAPI and CATI, the interviewer was able to use these codes, but they were not read out to the respondent or offered on showcards, except for a few selected questions. For the self-completion section, these codes were available for all questions. For the Teams and CAWI scripts, for most questions these answer categories only appeared if the interviewer or respondent progressed to the next answer without providing an answer. Sensitive questions did offer these options explicitly in Teams and CAWI.

Accessibility template for web

To ensure that the web scripts used in the main survey and in the online follow-up period were accessible to as many people as possible, Ipsos' accessible online template was used. This template is designed to be optimised for mobile devices. At the top right corner of the screen, a green icon was provided which if clicked allowed the respondent to make the survey more accessible by changing the screen colour and font size. There were 5 colours and 3 font sizes (see the image). This button was available throughout the whole interview allowing the respondents to make changes at any time during the survey.

At the beginning of the survey, participants were informed about this accessibility icon, how to skip a question if they did not wish to answer, that they could stop the survey at any time and return to it later, as well as the contact details of the study team.



Scripting of questionnaire instrument

Scripting was a collaborative process between Ipsos and CLS with the purpose of turning the questionnaire specifications into a computerised script that could be used during fieldwork. Scripting was carried out once the majority of the questionnaire modules were in their final forms from March 2023 and was completed around two weeks before the launch of face-to-face fieldwork in England and Wales in mid-August 2023.

Approach to scripting and script checking

Scripters first scripted each module before creating a combined script. The scripting template included global rules for each mode, so that a single script contained the relevant layout for each mode (for example, if CAPI or CATI, interviewer instructions were shown; if Teams or web, respondent-facing instructions were shown instead). For each module, the script was checked thoroughly by the study team at both Ipsos and CLS before signing it off. Once the individual modular scripts had been signed off, a combined script was created and checked.

Script checking was carried out in 3 main stages:

- First, for each module, extensive manual checks were carried out, including question text, response labels, textfills, routing, handling of feedforward information (and what to do if that was missing), and the "look and feel" of the questionnaire. The checks were conducted across all modes to ensure that adaptations had been made.

- Second, when the individual scripts had been finalised and the combined script was created, extensive manual checks were performed again to ensure that the combined script worked as intended.

- Third, the study team developed dummy samples by replacing all personal information on the real samples in the four countries with dummy values. These covered all scenarios that could happen during fieldwork. There were two dummy samples, one for testing the CAPI/CATI/Teams scripts, and one for the CAWI script. The CAWI script sample was supplemented with online test links and dummy IDs to enter into the script. These dummy samples were used to test that the scripts worked well in all scenarios, focusing on the feedforward and feed across information. For CAPI/CATI/Teams scripts, the study team also checked that the scripts functioned properly on the interviewer tablet. The interaction between the ECS (electronic contact sheet) and screener was also checked on the tablet. The CAWI script was tested on several devices, with different screen sizes and operating systems, to check that everything was displaying appropriately. This was to ensure that respondents would experience a user-friendly survey, with a consistent format, whether they were completing it using a PC, a tablet, or a smartphone.

Variations by country

England, Wales, and Scotland used the same scripts developed and finalised prior to the main fieldwork period in England & Wales. Some minor changes had to be made to dates in the Scotland script to account for an extended period of fieldwork due to a 3-month delay to its start. A few changes were also made to the Northern Ireland scripts because the babies in the sample were born in a different period (June/July 2023) and because fieldwork protocols differed as the sampling frame only included mothers:

- Where the child's DOB was mentioned in the script, instead of "November/December 2022" as in the other 3 countries, it was replaced with "June/July 2023".

- This meant that some possible answers on the birth month, parental leave, pregnancy dates etc. had to allow for dates in 2023 as well as 2022.

- OHPs in Northern Ireland were no longer asked to provide contact details for the parent living somewhere else (as, in NI, we would only be able to interview an OHP if we had already interviewed the PI).

- Where the address of the Own Household Fathers was provided by the PI (mother), interviewers were asked to try to cover this address wherever it was in the country, rather than asking for it to be reallocated to another interviewer, as the geographical spread of NI is smaller than the other countries. Interviewers in NI were also encouraged to use any contact information they had managed to obtain to contact the fathers – so if they only had a phone number they were asked to phone the father to try to arrange an interview. In the other countries, interviewers were instructed only to contact OHPs where they had been given an address.

- As the interviewer was encouraged to get hold of the fathers where they received contact details from the mothers; and the sample did not have their contact details, interviewers always shared

with the fathers that they got the contact details from the mothers. In England/Wales/Scotland, interviewers only shared that information where they were asked.

- Any script changes made during England, Wales, and Scotland fieldwork (see Appendix) were made to Northern Ireland scripts before they were ready for fieldwork.

Online follow-up survey questionnaire content

Following the completion of the main fieldwork in each country, households that hadn't yet participated were asked to complete an online follow-up survey (see chapter 16 for more information on the administration of the online follow-up survey). This was a web survey with a target interview length of around 30-40 minutes (so around half the main PI interview) and, in Scotland and Northern Ireland, higher incentives aiming to encourage participation among non-responsive households. Only one parent per household was asked to complete the online follow-up survey. Where two parents were listed on the sample, an invitation was sent addressed to both parents but inviting one of them to complete the survey. Both (assumed) PI and OHP households were invited to complete the online follow-up survey, so those completing could be either Primary Informants (PI) or Own Household Parents (OHP), depending on whether they reported that the baby lived with them all/most of the time.

The online follow-up survey in its full form can be found in the separate questionnaire documentation (variables followed by '@'). It was created by removing questions from the full web survey for the PI interview; the OHP interview remained the same. Table 6.4 summarises the topics that were covered in online follow-up survey.

Table 6.4: Online follow-up survey modules, topics covered

Module	Topics covered in main survey	Primary Informant	Own Household Parent
Introduction	Interview set up (mode, use of showcards)		
	Respondent assignment/checks (for CAWI only)	x	x
	Consents including opt-out data linkage (for opt-out group only)	x	x
	Respondent details (confirm name, address, gender)	x	x
	Baby details (name, DOB, gender) and relationship to respondent	x	x
	Other parent details (name & relationship) (for AI in the main household only)		
Household Grid	Household grid (names, DoB, gender, relationships of all in household)	x	x
	Co-resident parent and/or partner details (all residences, past/current relationships with the named parent)	x	x
	Second household parent details, if any (name, DoB, gender, involvement in child's life, past/current relationships with the named parent)	x	x

	Non-resident children	x	x
Housing	Housing (tenure, size)		
	Languages spoken		
Background	Employment	x	x
	Parental leave	x	x
	Education	x	x
	Ethnicity (own, child)	x	x
	Religion		
About Partner	Employment	x	
	Parental leave	x	
	Education	x	
	Ethnicity		
	Health		
Income	Benefits	x	x
	Income	x	x
	Debt	x	x
Self-completion	Pregnancy history (biological birth mother only)		
	Bonding	x	x
	Disadvantage	x	x
	Health	x	x
	Life events		
	Social support, life satisfaction and loneliness	x	x
	Couple relationship	x	x
	Mental health	x	x
	Smoking, alcohol, vaping	x	x
	Information: sources of support	x	x
Child Health	Fertility treatments		
	Birth & delivery	x	
	Anthropometrics	x	
	Health	x	
	Diet		
	Sleep		

	Screen use and crying	x	
	Development		
Child activities & temperament	Activities		
	Parenting engagement	x	x
	Temperament	x	x
Childcare	Childcare providers	x	
	Grandparent support		
	Service use	x	
Data Linkage (for opt-in group only)	Data Linkage-OPT IN	(x)	(x)
Stable Contact and Voucher	Contact details	x	x
	OHP Contact Details	x	x
	Stable Contact	x	x
	Moving address	x	x
	Incentive and Outro	x	x

The saliva study was not conducted as part of the online follow-up survey.

Online follow-up survey length

The average completion time for the online follow-up survey was approximately 35 minutes for PI respondents. A single OHP respondent completed the online follow-up survey, which took about 71 minutes. As the OHP online follow-up survey was shorter than the PI interview, and contained the same content as the mainstage OHP web interview (where average length was around 47 minutes across 9 OHP web responses), the 71-minute length is unexpected, and could indicate that this respondent paused mid-way through completing the survey.

As with the main fieldwork, participants had to complete the household grid to be considered a partial complete and only those who answered all questions were considered full completes.

7 Data linkage

In addition to participants' survey responses, Generation New Era also aimed to collect consent to add information from administrative records. This chapter describes the experiment conducted to test two different approaches to collecting consent: opt-in and opt-out, and the protocols for each approach, including how information across both approaches were provided in order to ensure fully informed consent. Response rates to this element are provided in Chapter 19.

Data linkage Overview

Government departments and agencies, such as the National Health Service (NHS) or Department for Work and Pensions, routinely collect information from the population, stored in administrative records, to help plan and provide services. The study intends to link information from these records to survey responses in order to shorten interview lengths, gain a more comprehensive picture of children's lives, and to obtain follow-up data to families lost to attrition in the future.

The types of administrative records CLS aim to link are:

- **Health records,** including records held by NHS Digital (now NHS England) in England, Public Health Scotland, Digital Health and Care Wales, NHS National Services Scotland, and Health and Social Care (HSC) in Northern Ireland.
- **Education records,** including records held by the Department of Education in England, the Welsh Government Knowledge and Analytical Services, the Scottish Government Education Analytical Services, the Northern Ireland Department for Education.
- **Social care records,** including records held by the Department for Education in England, Public Health Scotland, the Scottish Government, the Welsh Government, Health and Social Care in Northern Ireland.

All parents invited to take part in the study were provided with information about this in the advance study guide. Further information was available on the study website, including a short video explaining how data linkage would work and how data security would be ensured, and a detailed set of Frequently Asked Questions about data linkage. The information for parents explained that the data would be linked on an ongoing basis unless they told the study not to, even if they did not take part in future waves of the study, and that data would be linked that related to their past, present and future circumstances.

All respondents were informed the study wanted to link their administrative records, and how to make their choice about this. Only a parent with legal responsibility could provide consent for their child's administrative records to be linked. While only the Primary Informant (PI) was asked to provide consent for their child's records to be linked, the study guide did encourage parents to discuss this prior to the interviewer visit.

Consent approaches

The survey tested two different approaches to collecting consent – an opt-in approach and an opt-out approach. Within each country, each family (birth event) was randomly assigned to one of these two approaches, so that all those interviewed about a specific baby would have the same data linkage approach. Therefore, within each country, half of the sample was assigned to the opt-in condition and half of the sample was assigned to the opt-out condition. The purpose of this experiment was to gather

information on and test out both approaches for consideration at the potential future survey. CLS were particularly interested in participants' perceptions of the different consent models, as well as their impact on consent rates. CLS were also interested in analysing the consent rates for each consent model by ethnicity, IMD and mode.

Opt-in

Those in the opt-in condition were asked to provide consent for data linkage in a dedicated module towards the end of the survey. The module provided information about each type of record and then asked participants to provide consent for each in turn. This allowed participants to give consent to all, some or none of the records. PIs gave consent for themselves and their child/children separately. Their choices were recorded within the survey script.

Opt-out

Those in the opt-out group were provided with information about data linkage in the introduction at the beginning of the interview. Rather than asking for consent for each type of record, participants were informed that CLS would link records from administrative records for the participant and, when interviewing the Primary Informant, their child as a standard part of the study. If a participant did not want this to happen (for either their own records or their child's), they were able to let the research team know using the contact details provided in their recruitment materials they received or on the study website. The survey script also included an option for interviewers to code spontaneous refusals during the interview.

Informed consent

Both approaches were found to be acceptable to respondents in qualitative testing, as discussed in detail in Chapter 3. Both groups were provided the same level of information about administrative linkages, and the materials and question text emphasised respondent choice about whether and which records would be linked.

All parents were given the choice for their own records to be linked to their study responses. Only a parent with legal parental responsibility who lived in the child's main household was able to give consent for data linkage for the cohort child/ren, and in practice only Primary Informants were able to give consent for their children. However, parents were notified about this element of the study in the study guide and encouraged to discuss and agree on their approach before the interview.

The information that parents received about the data linkage – including the explanation in the study guide sent with the advance invitation mailing, the information provided in the CAI/web scripts, and the supporting Q&As on the participant website giving more information – were refined through qualitative testing with parents. The testing confirmed that parents were content with both consent models, as long as they were given a choice about consenting, clear information about what was involved, and received confirmation by letter or email about what they had agreed to following their interview. The qualitative work highlighted that some parents with greater concerns would seek more information about how the data linkage would work. The testing work helped to distil the key messages that were included in the study guide leaflet for all parents, and to develop a set of Q&As for the study website with more details for those who wanted further details and reassurance.

The CAI and web scripts gave detailed information about the records the study team would link to their responses and examples of the types of records and information that would be linked. Interviewers were

advised to check participants' understanding to make sure they understand what was being agreed and how to make or change their choices.

The 'What happens next?' leaflet left by interviewers at the end of the interview reiterated participants' ability to change their consents or dissent to data linkage and gave details of how to do this via an online form, or study telephone helpline or email.

In the thank you letter sent after the interview, participants in the opt-in data linkage group were given a summary of which records they had consented to be linked to their responses. Participants in the opt-out data linkage group were sent a letter reminding them about the study's intention to link their health, education and social care records. For both groups, full information about how to change their consents through a form on the study website or via the study helpline or email was provided to all participants in the thank you letter. The team did not receive any complaints or negative feedback from participants or interviewers about the data linkage, nor was any conflict between parents noted. Details of consent rates, and the numbers requesting changes to their consents after the interview, are provided in Chapter 19.

Adding information about where the participant lives

Parents were also informed in the study booklets that the study would add information about their local area and property. This could be information such as air pollution levels, green spaces, local amenities, or the energy efficiency of their home. As these analyses will use publicly available data, consent was not sought for this linkage, but the leaflet left at the end of the interview (What Happens Next) informed participants how they could opt out of this if they preferred to do so.

8 Biosample study

This chapter describes the aims, sample design, and protocol of the biosample study, including materials, training and reconciliation processes. Response rates to this element are provided in Chapter 19.

Aims of the biosample study

A subset of 610 birth events from across the UK were initially selected for the biosample study. For these cases, in addition to administering the survey, the study aimed to collect saliva samples from both biological parents and oral swabs from the cohort baby/ies, for the purposes of DNA extraction. This will allow the CLS study team to add genetic information to data collected in the interview. While other cohort studies have collected similar samples, this was the first time on a UK birth cohort that DNA extraction was done at the baseline wave. The intention is that having parents' and babies' genetic information from baseline will enable new scientific insights into children's health and development in the early years.

The specific aims of this element of the study were to:

- Set up processes to collect biosamples from parents and babies for DNA extraction;
- Estimate the impact of the request for biosamples on the overall recruitment rates into the study;
- Measure the response rates to the request for saliva samples, the return rates of samples following consent; and,
- Assess the quality of the DNA samples extracted from the biosamples.

In designing the protocols and materials for this element of the study, an important aim was to (i) maximise consent rates to the biosample element of the study while (ii) minimising the risk that saliva collection would affect recruitment rates into the overall study.

Piloting of baby biosample collection

For adults, the saliva collection kit, protocol, and materials mirrored the approaches used on other studies (for example, the Next Steps Age 32 study run in 2022-23). As they used tried-and-tested procedures, and given the short set-up period for the study, the adult saliva collection was not piloted in advance of fieldwork.

However, the collection of biosamples from infants was relatively untested. Participants in the qualitative research had also raised concerns about how easy it would be to take a sample from a baby, and the lab had not previously extracted DNA from the selected paediatric kit. As such, the team ran an informal pilot in March-April 2023 with parents of children aged 12-24 months old. The sample was drawn from personal contacts of the Ipsos team. The protocols for the pilot were approved by UCL's Research Ethics Committee in March 2023.

The pilot participants were provided with materials to explain the biosample study, including a cover letter, a Frequently Asked Questions sheet, a consent form, and privacy notice. Once they had consented, participants were given a kit and a set of instructions. They were asked to collect a sample from their baby at home using the instructions and post the completed sample directly to the lab. They were also asked to complete a feedback sheet to give information about how long it took to collect the sample, their experience of using the swab kit, and the clarity of the instructions provided.

In total, 8 of the 10 sampled parents took part (one kit appeared to be lost in the post and did not arrive, and another did not take part after receiving materials), and 7 returned samples within the pilot fieldwork period. These samples were assessed by the University of Bristol research lab, and DNA was extracted to test whether the quality of the samples was sufficient for DNA extraction, and to test the yield and quality of DNA obtained from the selected paediatric kit (ORAcollect OC-175).

The pilot feedback confirmed that the collection process was straightforward and quick. The lab report on the quality of the samples stated that, *total DNA obtained was as high as could be expected from any cheek swab sample*, and confirmed that the quality of all the samples provided were sufficient for DNA extraction and that the yield of DNA obtained would be sufficient for analyses such as genotyping. All saliva and DNA samples were destroyed, and no DNA analysis was conducted.

Pilot feedback from parents also provided additional information and tips for collecting samples from babies that were fed into participant materials and interviewer training.

Biosample study sample design

A random stratified sub-set of the overall sample was selected for the biosample study. The biosample sample was selected in two stages:

- Once the sample was clustered into sampling points, 61 of these sampling points were selected for inclusion in the biosample study; the table below shows the number selected in each sampling stratum and country.

- Within each of the selected sampling points, the sample was stratified by incentive group, whether an opt-in or opt-out approach to data linkage was being used, and the mother's postcode before 10 birth events were selected for the study.

Table 8.1: Biosample study: sample overview

Stratum	Sampling points selected	Birth events selected	Issued to field (following opt-out stage, excl fraudulent interviewer cases)
ENGLAND			
1 (PSUs with 7+ Black births)	7	70	60
2 (PSUs with 7+ Asian births)	7	70	69
3 (PSUs with 3+ Black or Asian)	7	70	66
4 (Low income)	7	70	68
5 (Other)	9	90	88
Total (England)	**37**	**370**	**351**
WALES	**8**	**80**	**78**
SCOTLAND	**8**	**80**	**79**
NORTHERN IRELAND	**8**	**80**	**77**
TOTAL	**61**	**610**	**585**

The sample was selected across 61 sampling points, rather than the entire sample of birth events, so that a smaller pool of interviewers could be trained on how to collect the samples and thereby contain the study/training costs.

Although 610 birth events were initially selected, 25 of these cases are excluded as the interviewer working on these cases was found to have been falsifying parts of interviews. No saliva samples were collected from these 25 families.

Saliva packs

The adult collection kit was the Oragene OG-500, which had been used successfully on other CLS projects including Next Steps. The Oragene OG-500 collects saliva samples by having participants spit into a tube. CLS consulted with partner organisations, including Rebecca Reynolds at the University of Edinburgh, and reviewed the protocols used for other studies to identify the most appropriate kit to use for the infant biosample collection. After consultation and pilot testing (described above), the ORAcollect OC-175 kit was selected for the infant swabs. The ORAcollect OC-175 collects both saliva and epithelial cells from the baby's lower gums via an oral swab and is designed for paediatric use.

The kits were packaged ready for either interviewers (if samples were taken in the home during interview appointments) or to be posted to parents (if the parent had completed the interview remotely - online, by telephone or Teams).

The packs were enclosed in large, padded envelopes with stickers on the outer envelope with unique IDs ready for interviewers to scan. The packs included:

- An instruction booklet: "How to give your saliva sample" (B02) in the parent packs, and "How to take your baby's saliva sample" (B03) in the baby packs;
- A saliva kit (Oragene OG-500) for parents, or an oral swab kit (ORAcollect OC-175) for babies;
- A plastic specimen bag to place the saliva tube or swabbing kit in for return with absorbent material inside
- A barcode label sheet with two barcodes, one to attach to the sample tube and one to attach on the plastic bag containing the sample.
- A jiffy bag (padded envelope) for return, with prepaid postage and addressed to the research laboratory at the University of Bristol. The envelopes were approved for sending biological samples.

Figure 8.1 The saliva collection kit for adults

Figure 8.2 The saliva collection kit for babies

Materials and training

The table below highlights the materials developed for interviewers to use in the administration of the biosample element of the study.

During the initial materials testing, Ipsos tested parents' reactions to a version of the study guide booklet that was posted with the advance mailing that included four pages of detail about the biosample study. Parents found the amount of information in the longer study guide overwhelming and found it difficult to digest some of the important messages within the booklet. As a result, the biosample information was removed from the study guide and a separate information booklet was created to introduce the details of the biosample study ('Be part of research about genes…', F02). Parents in the biosample study received a slightly different version of the study guide booklet in their advance invitation mailing where the saliva collection was briefly mentioned.

This materials testing work (described in Chapter 4) also found participants had concerns about confidentiality regarding DNA data. There were also concerns, particularly among Own Household Fathers and ethnic minority families, about possible use by advertisers, police or solicitors, including whether the samples could be used for paternity testing. Therefore, the 'Be part of research about genes' information leaflet was adapted to emphasise that the DNA would be stored securely and anonymously, and would only be used for research purposes. It explained that permissions for allowing the use of the DNA can be withdrawn at any time by participants; when the baby is an adult, they can also choose to withdraw permission. The leaflet also stated that the DNA data would never be used for paternity testing, human cloning or be used for profit, and would never be given to lawyers or insurance companies. In addition, a Frequently Asked Questions (FAQ) page on the website was developed to answer questions in greater detail. This was also provided to interviewers to help in answering any questions during the interview or at the doorstep.

The Next Steps age 32 survey had found it useful to supply participants with an instructional video showing how to collect good quality saliva samples, alongside the written instruction leaflets. Ipsos

therefore worked with a specialist provider of medical instructional videos (explainmyprocedure) to create two short animations, one explaining how to collect the parent saliva samples and one explaining how to use the baby swab kits. The Ipsos and UCL teams worked together with the video providers to develop a script and storyboard, and reviewed draft animations before finalising the videos. The videos used the same branding guidelines as the other study materials and similar images to other Generation New Era animations (see Chapter 11 on in-field materials for details of the other animations).

The interviewer briefing sessions included an additional 90-minute session about how to collect saliva samples. During the session the team:

- Explained the purpose of saliva collection and the types of analyses that would be done with the findings.
- Explained the protocol for saliva collection (see next section), including:
    - Looking at the saliva packs and collection kits, and the instructions provided for parents (including the videos and leaflets).
    - The CAPI script for saliva collection.
    - How to manage the household to ensure high quality samples were collected.
- Discussed the types of concerns that parents might have and how to reassure them and encourage parents to provide saliva samples.

Table 8.2: Materials provided to participants and interviewers about Biosample study

Material (reference code)	Purpose
'Be part of research about genes - your guide to giving a saliva sample' information leaflet (F02)	Provides detail of why saliva collection is being done, what the saliva collection involves, how the DNA will and won't be used.
Saliva samples FAQ document for interviewers (Q01)	Detailed Q&A on questions that parents may ask interviewers. Also available on the study website, and within the CAPI script's saliva module.
'How to give your saliva sample' booklet (instructions for adults) (B02)	Instruction booklet with step-by-step instructions on how to take a high quality sample, and package up the sample to return to the lab.
'How to take your baby's saliva sample' booklet (instructions for babies) (B03)	Instruction booklet with step-by-step instructions on how to take a high-quality sample from a baby, and package up the sample to return to the lab.
Video: Adult saliva collection video	Short instruction video for parents illustrating how to collect their own saliva sample to a high quality. This video was created by 'Explain my procedure' to ensure parents and interviewers felt confident and sure about how to collect the sample.
Video: Baby saliva collection video	Short instruction video illustrating how to collect a high-quality sample from a baby. This video was created by

	'Explain my procedure' to ensure parents and interviewers felt confident and sure about how to collect the sample.
Video: Saliva collection - Hints & Tips (VIDX)	Issued during fieldwork for England, Wales and Scotland interviewers, and as part of the Northern Ireland briefing, a short video from an interviewer on the project with tips on how to encourage a positive response from parents and how to organise the household visit to ensure saliva is collected.
Tips on collecting saliva for Generation New Era (C10NI)	Hints and tips from an experienced interviewer working on the project with tips on how to encourage a positive response from parents and how to organise the household visit to ensure saliva is collected.

Copies of the saliva materials can be found in the appendix.

Saliva protocols

Before the interview: informing participants

The study guide booklet in the advance invitation mailing for biosample participants briefly mentioned the saliva collection. Then, when making an appointment with participants flagged as eligible for the saliva component, interviewers were asked to hand over the 'Be part of research about genes' information leaflet, which provided more detailed information about why the study was collecting saliva samples, how to collect them, and how samples would be used. Interviewers were asked to hand over the leaflet when making an appointment for the interview visit, or earlier if possible. Interviewers also had the website Q&As available in order to help answer any questions about this element.

The information provided to parents to help inform them about the saliva collection – including the biosample information leaflet and website Q&As – was developed iteratively, using feedback from parents gathered via the qualitative testing. The testing helped to ensure that the information provided reassured parents about the voluntary nature of participation, and their likely concerns around DNA collection, and to make sure that the key messages were conveyed in a way that parents understood.

Interviewers were asked to use their judgement in introducing the saliva element of the study. They were asked to emphasise that parents could choose whether or not to provide their saliva samples, and that they could read the information and discuss further during the interview. Interviewers would also explain that parents could provide their own samples but not provide a sample for their babies (or vice versa) if preferred, as the information would still be useful even if it was not available for all participants. Interviewers were also advised to stress to parents that their participation in the study was still valuable even if they decided not to provide a saliva sample.

During the interview: confirming eligibility and consent

The saliva collection script was set up as a separate script rather than integrated into the main interview script, with one script for the PI saliva collection (which also included the baby's saliva consent) and one script for the AI. In OHP households, there was an OHP saliva script. This allowed interviewers to administer the saliva element of the study at any point during their household visit, giving them scope to work around parents' availability and periods when babies were awake and cooperative. Interviewers were

advised that parents/babies should not eat or drink for at least 30 minutes before giving their sample (as this can affect the quality of the saliva sample), so this flexibility also allowed interviewers to work around these constraints.

Interviewers administered the saliva collection via the CAPI script. The script (a) checked parents' eligibility to provide a saliva sample – checking that they were a biological parent, and for the parent providing consent for the baby's saliva, that they had legal parental responsibility for the child, (b) collected informed consent from parents by reiterating key points from the leaflet and giving parents the chance to ask further questions and (c) ensured interviewers inputted or scanned the barcode associated with each saliva pack/kit, so that the samples could be matched to the correct participant once received at the lab.

As only the Primary Informant could give consent to provide their baby's saliva sample, the PI biosample script covered the consent and collection procedure for both parent and baby. If the parent was a PI with parental responsibility but not a biological parent, they were only asked to consent to providing their baby's saliva sample. Consent was recorded electronically in the CAPI script, and for those who refused, the script collected their reasons for refusing. The script allowed interviewers/parents to choose whose sample they would like to provide first. The AI script and the OHP script related to that parent's own sample only.

Interviewers were asked to record an outcome for the saliva consent/collection process for all cases, including refusals, either by completing the saliva CAPI script or by recording an outcome for the saliva element in their Electronic Contact Sheet. Where consent was refused, the CAPI script also asked for reasons for refusal.

Sample collection for face-to-face interviews

For two parent households, interviewers were encouraged to collect samples from both parents during their household visit where at all possible, even if the Additional Informant intended to complete or had completed the web survey. This was because previous studies suggested that the return rates of samples left behind for participants to complete on their own was much lower than the return rates associated with interviewer in-home collection. Interviewers were asked to return the kits they had collected in the pre-paid return envelopes supplied in each pack as soon as possible, using normal post boxes.

Interviewers were able to leave saliva packs behind for parents and babies to complete later and post themselves where necessary (for example, if parents/babies had eaten or drunk in the last 30 minutes; or where one of the parents was not present and was going to complete the survey online). Where packs were left behind, interviewers administered the CAPI script so they had recorded parents' consent and scanned the barcodes for individual kits so they could be linked to the correct participant if/when returned to the lab. If interviewers were leaving more than one adult kit behind, they were asked to write the name of each parent on the outer envelope of the pack so that parents used the correct kits.

To encourage response, interviewers were also encouraged to:

- Remind participants about the benefits of providing a saliva sample.
- Remind participants there was a £5 incentive per sample provided.
- Mention that postage was pre-paid, and the sample could be mailed using a standard post box.
- Take the kits out of the envelope and show the participants what was included, and pack up the kits into the return envelope (unsealed) so they were ready to be sent.

The CAPI script guided interviewers through the process of collecting or leaving behind samples for respondents to complete later.

Specifically, interviewers' role in sample collection was to:

- Select an appropriate kit for each member of the family: the kits were labelled as 'adult' or 'baby' and had ID numbers starting 'A' (for adult) or 'B' (for baby kits).
- Scan the QR code on the outside of the kit using their tablet. This contained a unique ID for each kit, and meant that the kit ID was linked to an individual participant. Interviewers could also enter the barcode on the kits manually.
- Remind participants that they should not have eaten, drunk, chewed or smoked anything within the last 30 minutes. If they had, the collection would have to be delayed until later in the appointment or a kit left behind for participants to complete on their own later.
- Provide the link to the instruction video (on the front of the instruction leaflet) so parents could watch the videos before collecting their own and/or their baby's sample.
- Collect the completed samples from parents and enclose them in the return envelope for the interviewer to post as soon as possible. Where more than one sample was collected in a household, each sample was returned in its own jiffy bag.
- Record the outcome of the saliva collection in the script.

Parents provided their own samples by spitting into a tube, and parents collected their baby's sample by swabbing the baby's lower gums using the provided kits. Interviewers themselves did not collect samples, but they provided assistance and guidance when necessary, helped to answer any questions and reassure participants, and provided quality assurance by helping to ensure parents followed the protocol (e.g. not drinking or eating before the collection, and packaging the samples correctly).

Sample collection for web survey, Teams and telephone interview participants

Participants in the biosample study who took part remotely in a Teams or telephone interview or completed the web survey, were also asked to give consent to provide a sample during their interview. Where consent was given, participants were sent a saliva pack in the post. The pack contained everything required for participants to take their own and/or their baby's sample (i.e. the saliva collection kit, instruction leaflet, barcodes, clear plastic bag, and return envelope) as well as a covering letter to remind parents why the pack was being sent. Each parent was sent their own kit, but if there was more than one baby in a household requiring a kit, the packs were mailed for both/all babies together.

During fieldwork, these packs were mailed out on a weekly basis. The barcodes assigned to each participant were logged in a spreadsheet that was maintained during fieldwork, so that the samples could be matched to participants.

In cases where the AI completed the web survey whilst the interviewer was in the home conducting the PI interview, the interviewer could administer the saliva collection module in person and collect their sample in the home. Initial analysis suggests that of 19 AIs involved in the biosample study who were completing the web survey while the interviewer was present, 17 agreed to provide a saliva sample; 7 were recorded as providing a sample directly to the interviewer, and 10 were recorded as being ineligible to supply a sample 'there and then' as they had eaten/drunk within the past 30 minutes so a kit was left behind for them to administer later.

Reminders

During fieldwork the research laboratory provided a weekly report that listed the barcodes of the biosample kits received to date (see below). Where participants had consented to give their own and/or their baby's/ies' samples and kits were left behind or posted for them to complete, but they had not yet been received, reminders were sent by email and text message. Email reminders were used for participants who had given the study their email address, and text messages were sent where emails were either not provided by participants, or where participants had provided their email for the purposes of receiving their incentive but did not want to receive study information via email.

The first reminder was sent two weeks after the interview (for those who had completed a face-to-face interview) or two weeks after the kit was posted (for those completing via web/Teams/telephone). The second reminder was sent a week after the first reminder.

Each participating parent was sent an email or text reminder separately; the PI reminder included a reminder to complete and return any baby samples they had consented to provide.

Saliva confirmation and incentive administration

A £5 voucher code was included in an email or letter sent by post (where email was not available) for those who had returned samples, once they were confirmed as received by the laboratory. The email/letter also confirmed receipt of the saliva sample, and included information about how consent could be withdrawn and study contact details for other questions. The incentive mailings were administered on a monthly basis, so that participants had their incentive within 4-5 weeks of providing their sample at the latest. An incentive of £5 per sample was given, including £5 per baby sample, in the form of Love2Shop e-vouchers.

Further details on in-field mailings to saliva study respondents can be found in Chapter 18, Fieldwork Management.

Biosample reconciliation between Ipsos and laboratory

List of saliva samples received by the laboratory

Collected saliva samples were sent directly to the University of Bristol's laboratory for DNA extraction by interviewers or respondents. Every week on Tuesday, the laboratory sent a cumulative list of saliva samples received, including the barcodes, type of saliva kit (adult or baby), date received, sample volume, and any comments on the sample (e.g. if it was discoloured, leaked, or other indications of poor quality). These reports were used to check against received consents in the CAPI data as well as to confirm receipt for issuing saliva confirmation letters and incentives.

In some cases, the laboratory reported receiving samples with barcodes that did not appear in Ipsos' data. This was generally because interviewers had entered the barcode reference incorrectly during the interview. In these instances, the team attempted to trace the correct barcodes using a log of the barcodes supplied to each interviewer at the start of fieldwork.

Saliva collection consent list

A cumulative list of cases consenting to the saliva study within the interview or web survey was collated and shared with the University of Bristol's laboratory every week on Thursday. For each respondent, the list had the following information: unique respondent ID, type of saliva kit (adult or baby), and the saliva barcode. The list was used by the laboratory to confirm consent in order to extract and store DNA

samples from the received saliva samples. This was required for auditing purposes, and ensured that the laboratory only processed samples where participants had given valid consent.

All reports shared by Ipsos and the laboratory were transferred using secure file transfer protocols.

9 Ethics and consent

This chapter sets out the ethical approvals gained for the study, and how the study approached some of the main ethical issues, including making sure that participants could give informed consent to taking part in the study. Consent and ethical considerations for the data linkage and saliva components of the study are discussed in their dedicated chapters.

Ethical approvals obtained for the study

The UCL team obtained approval for the study from relevant bodies for each nation:

- *in England and Wales:* the NHS Health Research Authority (NHS HRA) ethics committee; NHS England's approval committee, the Advisory Group for Data (AGD); and the NHS Health Research Authority's Confidentiality Advisory Group (CAG).
- *in Scotland:* the NHS HRA ethics committee and the NHS Scotland Public Benefit and Privacy Panel for Health and Social Care (PBPP).
- *in Northern Ireland:* the NHS HRA ethics committee; the Northern Ireland Health and Social Care Privacy Advisory Committee; and Northern Ireland Health Trusts.

The study materials and fieldwork protocols were approved by UCL's Joint Registration Office in its role as sponsor for the study before being submitted to the NHS HRA ethics committee. The study also followed the guidance of the Economic and Social Research Council's Research Ethics Guidance, and the Market Research Society Code of Conduct.

In designing and implementing the study the team sought to ensure that:

- participants were treated with respect, that their rights, safety and well-being were protected, and to minimise any potential harm or discomfort;
- participants gave fully informed consent to take part in the study, and in different study elements, and that they understood their participation was voluntary; and,
- participants' privacy and confidentiality were respected, by protecting respondent information.

Further information about how the study was designed to inform and protect respondents from potential harm is discussed in this chapter.

Sampling

The information on the sample frame allowed the team to identify cases where mother and baby were registered at separate addresses. Initially, the team highlighted these cases but did not remove them from the study. However, following an adverse event following the notification mailing, the team excluded a number of cases that were potentially too sensitive to include in the study, including those where mother and baby were not registered at the same address. More information is provided in the sampling chapter.

Following the notification mailing in Scotland it became clear that the study had contacted a family that should not have been approached for the study. As a result, the study was paused so that the sample holder, CLS and Ipsos could explore how the case could have been identified and how the processing of sample cases should be changed to avoid any other adverse events. Following consultations with the

sample holder and CLS, changes were made to avoid contacting any other families in potentially sensitive situations before fieldwork in Scotland commenced. More information is provided in the Sampling chapter (Chapter 5).

Informed consent

The study used a two-stage model that provided two opportunities to opt-out prior to an interviewer doorstep visit. In the first stage, sample holders in England, Wales and Scotland sent details of eligible parents to Ipsos so that Ipsos could administer a notification mailing which provided a brief overview of the study, explained that parents' details had been transferred from the sample holder to Ipsos for the purposes of conducting the study, and explained the study was voluntary and that parents could contact Ipsos to 'opt out' of any further contact. Details of how parents could contact the study team to opt-out were provided.

In the second stage, an invitation mailing was sent to parents who had not opted out, with further details about the study and explaining that an interviewer would visit to invite them to participate, and which provided details of how they could contact the study to opt-out prior to this visit.

This model required ethical approval from the NHS HRA ethics committee, and was scrutinised by each of the sample holders to ensure that the processes were satisfactory to them.

The same two-stage model was followed in Northern Ireland, except the initial mailing was sent by the data holder, and the sample given to Ipsos following the opt-out period.

The notification and invitation mailings sent to participants, along with the study website, provided detailed information about the study – for example, why it was being carried out, by whom, and what it involved for the participant and the baby. Interviewers were asked to ensure parents had read and understood this information before proceeding with the interview.

A consent question in the introduction of the script, shown in Figure 9.1 below, confirmed consent before proceeding with the interview. This question reiterated key points about the study to ensure that all parents understood what they were taking part in. This included how their information will be used and the ongoing nature of the study, and it also provided consent to future follow-up.

Figure 9.1 Consent information provided at the start of the interview (the same information was provided to web participants)

INTERVIEWER: READ OUT FOLLOWING INFORMATION – REFER PARTICIPANT TO SHOWCARD
Generation New Era is a scientific study of several thousand children born in 2022 and their families.
By taking part in this interview as part of Generation New Era, you understand that:

- the Centre for Longitudinal Studies (CLS), at University College London, is in charge of the study, and Ipsos is carrying out the interviews.
- Generation New Era is an ongoing study and may contact you again in the future to update you about the study and to invite you to take part again as your child gets older. It will always be up to you to decide whether you want to take part. You can withdraw from the study at any stage.
- this interview will take around *{IF PI=1: "an hour"; IF OHP=1: "40 minutes"; IF AI=1: "30 minutes"}*.
- your participation is voluntary, and you can end this interview at any stage.
- the interview you complete today will ask questions about your *{IF NOT OHP:* "family life, including about your"; *IF OHP*: "life, and any time spent with your"} "baby" or "babies" born in November or December 2022, and (if this applies) about your baby's other parent or your partner. You can skip any question if you do not wish to answer.
- this research is being carried out in accordance with data protection regulations and the Market Research Society Code of Conduct.
- the information you give will be kept entirely confidential and used for research purposes only.

More information about the study can be found on the website gnestudy.info, including the study's privacy notice which covers legal rights and responsibilities.
Please confirm which of the following statements applies:
1. I agree to take part in Generation New Era.
2. I do not want to take part in Generation New Era. [CLOSE INTERVIEW].

After interviewers had read out the introductory information (see above) to ensure participants were aware of what they were agreeing to, parents being interviewed gave verbal consent to take part in the study, which interviewers recorded in the CAI at the start of the interview. Those completing the survey online were shown a screen with the same introductory information and asked to record their consent through similar questions in the web survey.

Verbal consent was also recorded in the CAI for the data linkage element and for saliva collection (for those to whom it was applicable). Consent protocols for the biosample and data linkage elements of the study are detailed in the respective chapters about biosamples and data linkage.

Privacy and confidentiality

Participants were given information about how their data would be kept confidential, and reassured that their data would be used for the study only. The study guide sent with the invitation mailing included details of how information collected in the study would be used and protected, and respondents were assured that their information would be treated in strict confidence in accordance with the General Data Protection Regulation (GDPR) and used for research purposes only. Further details were available on the study website, in the form of questions and answers about how data would be used and stored (gnestudy.info/privacy), and a detailed privacy notice (version 1 of the privacy information used at the start of fieldwork is included in the materials appendix) .

The wording of the privacy and confidentiality information in the study leaflets was explored with parents during the qualitative testing phase to help refine and simplify the messaging to ensure clarity.

The data controller for the study is University College London (UCL). UCL's legal basis for using the information is for 'a task in the public interest' under GDPR. Ipsos are a data processor for the study.

Duty of care and disclosure of harm

Some of the interview topics were sensitive, and could have been upsetting or concerning for some participants, especially those experiencing difficulties in their lives. The materials provided in advance of the interview aimed to be transparent about the topics covered in the study and to ensure parents understood they could skip past any questions they did not want to answer. The consent information provided at the start of the survey, and at the start of various sections in the self-completion module also reiterated that participants could skip any question they did not want to answer.

The leaflet left by interviewers after the interview - 'Being part of Generation New Era – Your guide to what happens next' – included a list of charity helplines and a link to a longer list of sources of support for each country on the study website. Parents completing web interviews were directed to a version of this leaflet online via a link in the script. Country-specific sources of support were also available on the participant website. The final screen of the self-completion section of the interview also pointed respondents to sources of support.

Interviewers were instructed that if any participants appealed to them for help they should encourage participants to think of anyone in their lives they could contact for help and advice (e.g. family, friends, local services). However, if interviewers were concerned that someone was at serious risk of harm and was not in a position to act for themselves, they were briefed to escalate their concerns in anonymous form to a senior field manager who would contact the research team to discuss the issue and decide how to proceed. Interviewers were advised that if there was an emergency situation where someone was at immediate risk they should contact the emergency services. Participants were informed of this possibility in the study guide ('In very exceptional circumstances, your confidentiality may be broken, for example, if something you tell us indicates that someone is at significant risk of harm'.)

There were no disclosures of harm or concerns about potential harm raised by interviewers during the fieldwork period.

10 Incentives

This chapter describes the incentive experiments conducted during the main fieldwork period, testing both unconditional and conditional incentives (monetary and non-monetary), and the sample allocation for each type of incentive. The chapter also details the additional and targeted incentives offered during the online follow-up period. Response rates by incentive group are shown in Chapter 19.

Incentive experiments during main fieldwork

The study tested both 'unconditional' and 'conditional' incentives. The purpose was to identify which combination of incentives resulted in the highest response rates. Unconditional incentives were sent ahead of any agreement to participate and were given regardless of participation in the survey. These were sent once per household. In the invitation mailing, around a third of the families were sent a **£5 note per parent**; another third were sent a **baby's bib** and the final third did not receive any unconditional incentive. The bib was chosen as an unconditional incentive, as it was thought to feel more personal than the £5 note and as it was thought that a gift specifically meant for the baby would be received more positively based on earlier qualitative work. Table 10.1 shows the number of families (birth events) in each country allocated to each unconditional incentive conditions prior to the start of fieldwork.

Table 10.1: Number of families assigned to each unconditional incentive group, by country

	£5 note	Bib	No unconditional incentives
England	729	717	731
Wales	197	204	193
Scotland	180	181	180
Northern Ireland	197	195	197
All countries	1,303	1,297	1,301

(Based on sample issued to fieldwork, inclusive of ineligible cases later identified in fieldwork and of fraudulent interviewer cases later removed))

'Conditional' incentives were only given after a respondent had completed the interview/survey. Within each country, half of the families were offered a **£10 voucher** for each person who completed an interview, and the other half were offered a **£20 voucher** for each person who completed an interview. Face-to-face participants could choose to receive their voucher in the form of a physical gift card or digital 'e-voucher'. Among those completing a full CAPI interview and who did not refuse an incentive, 57% opted to receive an e-voucher and 43% chose to receive a gift card. Participants completing their interview remotely received an e-voucher. Table 10.2 shows the number of families (birth events) in each country allocated to each conditional incentive condition

Table 10.2: Number of families assigned to each conditional incentive group, by country

	£10	£20
England	1,089	1,088
Wales	297	297
Scotland	267	274
Northern Ireland	294	295
All countries	1,947	1,954

(Based on sample issued to fieldwork, inclusive of ineligible cases later identified in fieldwork and of fraudulent interviewer cases later removed)

A 3 x 2 factorial design was used, so that families were randomly allocated to both an unconditional and a conditional incentive level within each country allowing each combination of incentives to be compared.

Table 10.3: Number of families assigned to each incentive group, by country

	No unconditional and £10 conditional	No unconditional and £20 conditional	£5 note and £10 conditional	£5 note and £20 conditional	Bib and £10 conditional	Bib and £20 conditional
England	366	365	366	363	357	360
Wales	98	95	97	100	102	102
Scotland	88	92	90	90	89	92
Northern Ireland	99	98	100	97	95	100
All countries	651	650	653	650	643	654

(Based on sample issued to fieldwork, inclusive of ineligible cases later identified in fieldwork and of fraudulent interviewer cases later removed))

Design/sourcing the bib

The bib was designed in accordance with the branding guidelines of the study. The final design is shown in the figure below.

Figure 10.2 Image of baby bib given as unconditional incentive

Various suppliers were considered in the process of producing the bibs. With consideration to the resources and timeline, a4apparel was chosen as the supplier of the bibs. The bib size was advertised as ‘one size’ – it measured 21cm across at the widest point and had a length of 19cm. Some interviewers reported that the bib was slightly small on some babies. This was especially true towards the end of the fieldwork period and in Scotland, where the delay in fieldwork start meant that the babies were older than in the other countries at the point of interview.

Allocation of bib incentive

For the England and Wales fieldwork, bibs were sent to fathers listed at a different address to the mother, as well as to the mother. As it was felt that this could be sensitive for situations where the father does not have much contact with their baby, in Scotland, fathers in the “bib” group who lived at a different address to the mother were sent a £5 note instead of a bib. (These cases are still included as a “bib” family in the tables above and below). No fathers were sampled in Northern Ireland, so no bibs were sent to fathers.

Incentives for the online follow-up survey

For the online follow-up survey, as well as reducing the length of the questionnaire, the study team also explored offering a larger incentive, at least to some groups within the sample who had been less likely than average to take part during the main fieldwork period.

However, in England and Wales, due to a lack of time to get ethical approval for increased incentives and use of targeted differential incentives, the incentive conditions for completing the online follow-up survey remained the same as for the main fieldwork (either £10 or £20 conditional on completing the survey).

In Scotland and Northern Ireland, following the receipt of ethical approval, the conditional incentive was increased by £10 for everyone (taking the conditional incentive to either £20 or £30). In addition, those living in more deprived areas (IMD deciles 1-3 where response rates had been lower), were offered an additional £10 on top of this (meaning that the incentive in these areas was £30 or £40).

Based on this, the study team could get an indication (albeit not experimentally, and based on small numbers) whether an increase in the conditional incentive offered for online follow-up respondents improved response rates in Scotland and Northern Ireland compared to England and Wales; and if the extra incentive offer for people in IMD 1-3 appeared to help to boost participation among this demographic group.

11 In-field materials

A large number of materials were developed to administer the study (see later in this chapter for a complete list). Chapter 4 focuses on the development of the recruitment materials used to introduce the study to parents, including the notification letter (first mailing about selection into the study), invitation letter and study guide (second mailing sent if participant had not opted out). As these materials are described in detail elsewhere, this chapter focuses on the development of other main fieldwork materials provided to administer the survey in the field, as well as online resources – two short animations and the participant website - developed to provide information about the study. We also describe the development of the study brand and translation decisions for materials. Materials specific to the data linkage and biosample components are detailed in their respective chapters.

Animations

Two short animations were developed to complement the recruitment mailings. The animations aimed to summarise key information and engagement messages that had emerged from the study development work and qualitative feedback on the notification and advance invitation mailings. The animations aimed to engage parents who would prefer video over the written information in the study guide; the videos were linked via QR codes in the study guide for ease of access by parents and for interviewers on the doorstep. They were also linked on the homepage of the study website (gnestudy.info).

The aim was to develop very short, visually engaging, animations that were similar in length to Instagram reels, at around 30-40 seconds long.

The Ipsos and CLS teams worked together to develop a script and storyboard for the animations, working closely with a creative from Ipsos' Studio.

Generation New Era animations

Why take part?

https://youtu.be/bC_RWYmVk48

What's involved?

https://www.youtube.com/watch?v=2QmraMGVhy8

Animations were also developed for the saliva and data linkage components of the study, and these are discussed in Chapters 7 and 8.

Website and social media

A participant website was set up (gnestudy.info) to provide further information and answer any questions participants may have. The website contains information on the background and purpose of the study, why people should take part, what is involved in taking part, and the different aspects of the study (such as the saliva element and data linkage). The website also included a FAQ page with commonly asked questions, contact details and links to sources of support. The main study materials, such as letters and leaflets could also be downloaded from the website and was available in translation (10 languages). The website and materials were designed to be accessible according to WCAG 2.1 guidelines.

In addition to the website, an Instagram account was set up (gnestudy), where updates and engagement messages are shared. The website and Instagram accounts are managed by CLS.

Materials for main fieldwork

CLS and the Ipsos research team drew on the consultation work and the expertise of partner organisations and stakeholders to develop the final set of materials to administer the study. A list of materials given to interviewers is provided below and copies can be found in the appendix.

Table 11.1: Respondent facing fieldwork materials provided to interviewers

Ref*	Document	Purpose
-	Police letter	A letter template for interviewers to inform the local police station that they are calling at addresses in the area. Sent to the police station before interviewer commences working in an area.
L01G	Notification letter	A generic copy of a letter sent to all parents in the sample (by the head office). To be used where respondents had not received the letter or did not remember receiving it.
C09	Interviewer contact card	To be completed by the interviewer and added one to each advance invitation mailing pack before posting to personalise the letters.
L02EG	Invitation letter	A generic laminated version of the letter sent in the advance invitation mailing packs. To use on the doorstep where respondents had not received the letter or did not remember receiving it.
L02G	Invitation letter (spares)	A generic version of the letter sent in the advance invitation mailing packs. To use when the named parent(s) have/has moved, or when the original letter wasn't seen.
B01S	Study guide spares – standard (teal cover)	Handed out to respondents, as required. The study guide was sent to respondents as part of the advance invitation mailing. However, as this contained important information, spares were handed out to respondents who needed them.
B01B	Study guide spares – saliva version (purple cover)	Handed out to respondents in the saliva sample, as required. This study guide was similar to the standard study guide – except for one page explaining the saliva element.
C01	Language card (laminate)	Used to determine what language a resident speaks. The language card included the sentence “I speak [language]” in different languages. By asking the respondent to indicate which of these sentences they could speak, the interviewer could identify which language to request an interpreter for.

C02	Calling card	Used to let households where the interviewer has been unable to make contact know that they have called.
L07	Occupier letter	Left at address if the interviewer has not made contact with anyone after four f2f visits (or 3 visits for movers). This let the resident know that the interviewer had tried to contact them and provided contact details to get in touch with the field team. This letter also included information on what to do if the resident was not the sampled person.
L08	Forwarding letter	For current occupiers to forward to the sampled parent(s) (to use where the sampled parent has moved, current occupiers know but won't share their current address but will forward the letter).
HEALTH 1	Health screener laminate	Used to confirm residents are healthy and well. To be used each and every time the interviewer is entering a household.
C03	Appointment card	Reminded participants of an upcoming appointment, and provide details of how to access the showcards, or use MS Teams, as relevant.
MSTEams1	Teams instruction card**	Provided participants with details of how to log into a Teams call.
F02	Saliva sample information leaflet***	For those in the saliva study only - to use when making an interview appointment for parents in the saliva study. This leaflet introduced the saliva element of the study in more depth.
C07	Showcards	Used in interviews to allow respondents to select their answer to questions.
F04	What happens next? leaflet	Provided at the end of the interview (one per household) to ensure participants know what to expect from future waves of the study, where to find support, and what happens with their information
	Thank you leaflets	Standard field leaflet given to respondents at the end of the visit
C05	Change of address card	Given to respondents at the end of the interview (one per household). This card was intended to be filled out and posted back if they move, to inform the study team of the new address.
	Love2Shop Vouchers	Voucher cards given to respondents at the end of the interview
L09	Additional Informant letter	Left with Primary Informant when interviewers first identified there was a partner/second parent in the household. Could be left again as required, e.g. to give details of the web survey. Asked the parent to contact the interviewer to arrange an interview or complete the web survey. The language and engagement messages are tailored to encourage the participation of both parents.
L10	Second household pass-on invitation letter	Sent when: 1) Interviewers find the address for a second household - letter to be sent by post with the teal Study Guide if interviewers can obtain the address 2) to send in a pass-on pack (this letter and the teal Study Guide B01NIS), which the PI will pass on to the OHP. 3) Interviewers could leave additional copies to place the web survey, or to remind OHPs to get in touch with them, if they have not secured an interview.

*The references in this table refer to the materials used in England, Wales and Scotland. More information on the differences made to materials in Northern Ireland can be found below.

**Only applies to households that are doing a Teams/ telephone interview

***Only applies to households that are part of the saliva study

Changes to field materials for Northern Ireland

The materials used for fieldwork in Northern Ireland were broadly consistent with those used to administer the survey in other nations, with minor changes made to reflect the different sampling/fieldwork dates. However, there were some other changes made, either due to differences in the sample and protocols in Northern Ireland or to make materials easier for interviewers to use:

- The notification letter was drafted by the Northern Ireland health trusts, and sent on their own headed paper for each trust. Unlike other countries, parents in Northern Ireland also received an eight-page booklet with the notification letter, which contained key points from the study guide booklet.
- Clearer labelling was added to the letters (L07, L08, L09, L10) and the header colours on the letters changed to help interviewers differentiate the letters more easily.
- A saliva tips card (C10NI) was developed based on feedback from interviewers involved in earlier waves of the study. (Similar information had been cascaded via email to interviewers in England, Wales and Scotland)
- The colour scheme of the 'What Happens Next?' booklet was updated, to better differentiate from other booklets.

Other materials

Other materials were sent by the head office research team during fieldwork, including mailings for second households identified during fieldwork; saliva reminders and confirmations; thank you mailings; and invitations/reminders to the online follow-up survey. Interviewer training materials are covered in Chapter 17 in more detail, and further information about the materials used to support the collection of saliva can be found in Chapter 8.

Materials specific to OHP fieldwork and the online follow-up survey are detailed in Chapters 15 and 16, respectively.

Translation of materials

Core materials, including the study website[24], the invitation letter, the notification letter and the study guide, were made available in various languages. The languages these were available in were chosen based on the number of native speakers in the UK. These were English, Polish, Romanian, Turkish, Welsh, Arabic, Bengali, Gujarati, Punjabi, and Urdu. Showcards used during the interview were also available in the same languages.

In Wales, all materials were sent out to participants in both English and Welsh. All other translated materials were available on the study website only.

[24] https://gnestudy.info/

Branding and design

The study brand was developed for CLS by Hudson Fuggle. They produced brand guidelines (i.e. use of colours, layout, fonts and images in the study materials) and developed the study name following testing they conducted with a diverse group of parents, and with academic stakeholders (more details on this development work are provided in Chapter 3). Once the study name was agreed, they then developed a logo. Branding guidelines were applied to all survey materials. The branding guidelines were carefully designed to comply with accessibility standards, such as acceptable colour contrasts to ensure easy readability of texts.

The Notification letter, study guide and 'What happens next' leaflet were all available in plain text. In addition, a range of materials were available in large print upon request, including the notification and invitation letters.

12 Household contact, cooperation and engagement

England, Wales and Scotland

Before fieldwork

Every named mother and father on our sample in England, Wales and Scotland was sent a notification letter (L01) by Head Office early in July 2023. These were sent separately in different envelopes addressed to each named parent, including where the two parents were at the same address. This letter explained to participants that their family had the opportunity to be part of Generation New Era, how their family was chosen, where we got their details from and why taking part was important. It also included a brief description of what taking part involved and information on how to opt-out of the study. Participants in Wales were sent this letter in both English and Welsh. In Wales, the letter was co-signed by the study co-director at Swansea University, and in Scotland by the co-director at the University of Edinburgh, alongside the UK study director at UCL. The letter was also available in large print (on request), plain text and in translation on study website.

Before the face-to-face visit

Before they started interviewing, interviewers were asked to inform their local police station that they would be interviewing in the local area.

Interviewers posted the invitation mailings 3-4 days before they started visiting a household. The mailing pack included personalised invitation letters (L02) for each parent enclosed in separate envelopes, one study guide information booklet (B01) for the household in the outer envelope, and (for some households) an incentive of £5 per person in cash (in the envelope with the invitation letter) or a bib for their baby (one bib per address). Interviewers were also provided with 'contact cards' (C09) that included spaces for them to write their name and mobile number, to enclose with the invitation mailing. We found in our pre-testing qualitative work that parents were very keen to have these details in advance of a face-to-face visit and liked the option of being able to contact their interviewer to arrange a convenient time for a visit. The main purpose of this mailing was to provide full information to parents in order for them to decide whether or not to take part, and to tell them that an interviewer would call at their address in the coming days to ask them about this. For families eligible for the saliva sample, this was mentioned for the first time in the invitation letter (this was not mentioned in the notification letter).

Making contact/The household visit

Interviewers were required to make a minimum of six face-to-face calls at all the sampled households they had been provided with at the start of fieldwork. They were also encouraged to call at non-contacted households/addresses whenever they were in the area, such as on days they had a scheduled appointment to interview at another household/address nearby. Interviewers had to vary the time of their visits to meet the conditions of the calling pattern. They had to make at least one attempt to make contact on a weekday evening (between 5pm and 9pm), at least one attempt on a Saturday or Sunday, and at least one further attempt on either a weekend or during the evening. The time between the first and last visit at the household had to be at least two weeks. In addition to the requirement to make at least six calls to contact the named parents, if interviewers achieved an interview with the PI/OHP and there was still an AI interview needed at that household, we asked them to make at least one additional face-to-face visit to try to make contact with the AI. If they interviewed the AI first and still needed to

interview the PI or OHP, then we asked them to make up to two additional calls to try to contact and interview the PI/OHP.

Where interviewers were unable to make contact at a household, they were instructed to leave a calling card (C02) to let the household know that they attempted to make contact. This calling card emphasised the importance of the survey, and also allowed interviewers to write in their name and number, so that the participant could call them directly to make an appointment at a suitable time. Interviewers could leave this at any point, and at the latest after three visits to the household if no contact had been made.

The calling card initially included the Generation New Era logo. Due to confidentiality reasons, the calling card was left in a neutral envelope in England and Wales. For the fieldwork in Scotland and Northern Ireland, new calling cards were printed which did not include the study logo.

If no contact had been made by the last visit, interviewers left the occupier letter (L07) in a final attempt to make contact and achieve an interview. The letter included a space for the interviewer to fill in the date, reference number and name(s) at the top of the letter.

The work packs also included a supply of appointment cards (C03). Where contact had been made, interviewers left these with participants to confirm the appointment time that had been agreed. If interviewers scheduled a telephone or Teams interview, they provided participants with a link to the online showcards (C06) or with a set of paper showcards. If the interview would be conducted via MS Teams, interviewers additionally left the instruction card for the Teams interviews with the participant. If the respondent was part of the saliva sample, the interviewer also left a saliva information booklet (F02) for them to read ahead of the interview.

Interviewers were also provided with an Additional Informant (AI) letter (L09), which was used to help interviewers to obtain an interview with the AI, either in-person or online, and to provide the login details for the online survey. Although the preferred mode for interviewing the AI was face-to-face, they could also take part online to allow more flexibility. The AI letter was used:

- If the interviewer had spoken to the AI and they agreed to complete the web survey, the letter provided the login details for the survey.
- If the interviewer had not made contact with the AI by the time they had conducted their visit to interview the PI/OHP.
- As a way of reminding the AI to take part in the study if the interviewer had made several visits/phone calls to remind them.

Tracing movers

Interviewers were only asked to complete the tracing steps if the whole household had moved. If only one of two named parents had moved, they were asked to try to conduct the interview with the named parent who still lived there. They then asked that parent as part of the interview for the address of the other parent. However, if the parent was reluctant to be interviewed, then the interviewer asked them if they could provide the address of the other parent or pass on a forwarding letter (L08) to them.

The key tracing steps to find a household that had moved were to:

- Try to speak to the current occupier and ask if they could provide a forwarding address. As the current residents of the issued address may know where the named parent(s) have moved to or if

they do not know themselves, they may be able to provide details of friends or relatives nearby who will know how to contact them.

- If the current occupier was reluctant to reveal any details, the interviewer was asked to leave a forwarding letter (L08) for them to send onto the named parent(s).

- If the current occupier did not know the address, or was unwilling to help, interviewers were asked to make a couple of face-to-face visits to neighbours to see if they could provide an address or were willing to pass on a forwarding letter (L08).

If interviewers obtained an updated address for the household, they could enter the new details into the ECS.

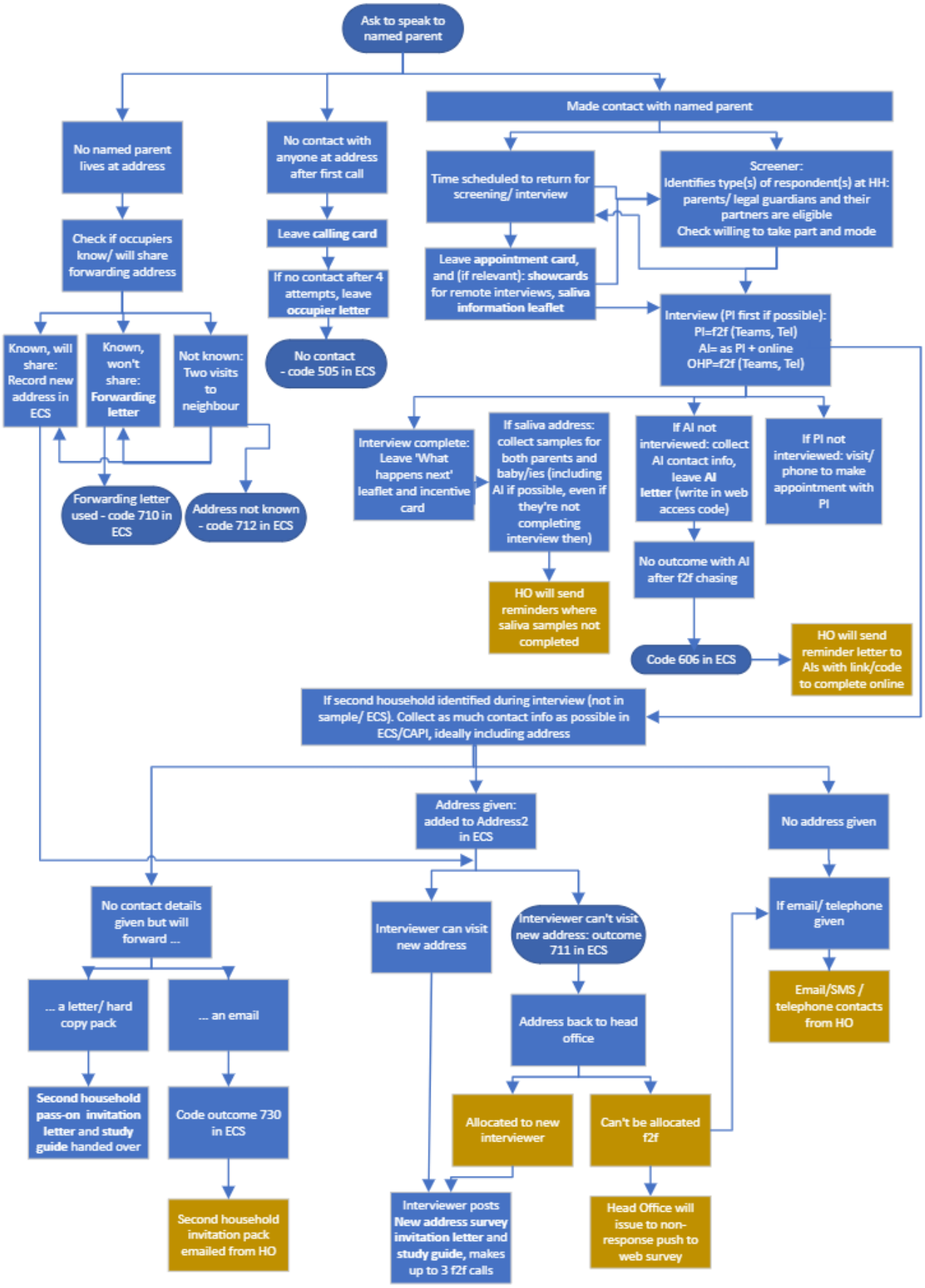
Contacting new addresses

During fieldwork, interviewers were occasionally required to attempt to find new addresses for families that had moved, where one parent had moved, or where only the mother had been listed on the sample and the other parent lived elsewhere.

If the new address was within 15 miles of the original sample address, or closer to the interviewer's address than the original address, the interviewers were asked to add the newly acquired address to their assignment by updating or adding the address details to the Electronic Contact Sheet (ECS). If the address was too far away, interviewers were asked to contact the Head Office, so that the address could be reallocated to another interviewer.

As the parent(s) living at this 'new' address did not receive the initial notification or invitation letters (L02), the interviewer sent or delivered the 'New address invitation letter' (LG02), which was a generic copy of the invitation letter, and a copy of the standard (teal cover) study guide. Interviewers then made at least 3 visits at these 'new' addresses to attempt contact.

Figure 12.1: Summary of contact protocols in England, Scotland and Wales



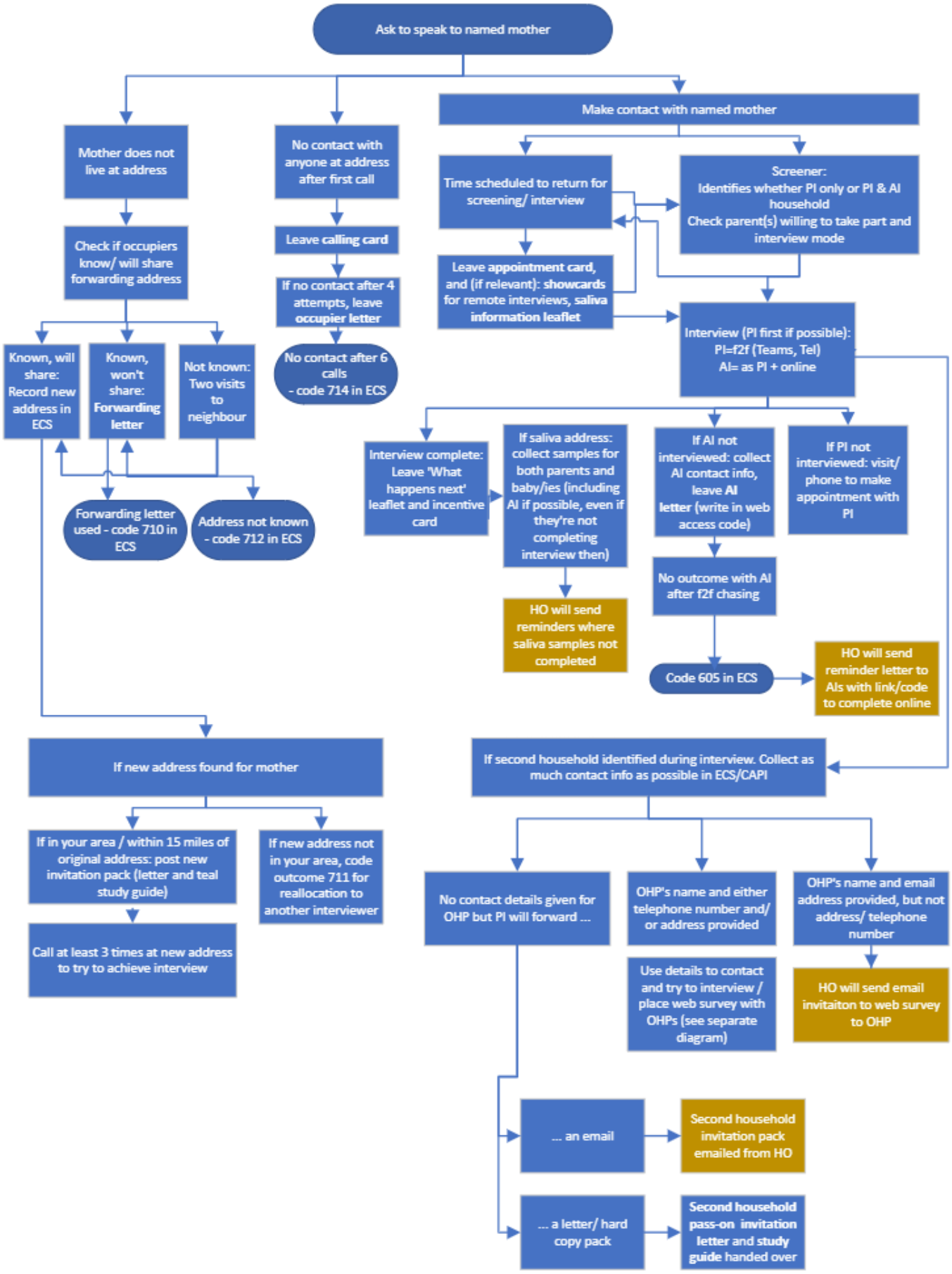
Northern Ireland

Due to the delay of fieldwork starting and the different information provided in the sample, there were some differences in how household contact was established in Northern Ireland:

- The Notification letter (L01) was sent by the Health and Social Care Business Services Organisation (BSO) directly, accompanied by a notification leaflet which was designed specifically for Northern Ireland.
- The Invitation letter was co-signed by the study co-director at Ulster University.
- Certain materials differed slightly in Northern Ireland, in order to reflect for example, the different birth months of the babies.
- As only mothers were included on the sample, letters were only addressed to the mother. All initial contact and the screener had to be conducted with the mother named on the sample.
- Collecting details for AIs and OHPs was especially important in Northern Ireland, as they were not included on the sample.
- Where interviewers collected details for a second household which was outside of their local area, this was not reassigned to another interviewer as was the case in England, Wales and Scotland. Instead, interviewers were asked to try to achieve an interview (online, telephone or MS Teams) by making contact with them via letter or phone.

An overview of the contact protocols in Northern Ireland can be found in figure 1.2 below.

Figure 12.2: Summary of contact protocols in Northern Ireland



Screener

Implementation

Before starting the interview, interviewers were asked to complete the screener when first making contact at a sampled address. The screener was set up as a separate element within the Electronic Contact Sheet (ECS) to allow the interviewer to complete the screener with either parent named on the sample. As discussed in Chapter 5, for each sampled cohort member (baby) the interviewer could have the names of one or two parents, across one or two addresses provided to them at the start of fieldwork. This short screening module took 2.5 minutes on average and was done prior to the main interview by the interviewer.[25]

Purpose

The purpose of the screener was to establish whether the interviewer was talking to the correct parent, confirm that the named parent(s) was a parent or legal guardian for the sampled child, to establish which interviews would be needed at that household (e.g. PI, AI, OHP) and to assign which parent would be doing which interview. Parents were eligible for the study if they had legal parental responsibility for the baby (or if they were living with a partner who had legal parental responsibility).

Interviewers were given detailed guidance on relatively rare scenarios they may encounter, to help ensure consistent eligibility criteria were used:

- If neither person on the sample was a parent or legal guardian for the baby, the case may not be eligible: interviewers were asked to refer any cases to the office to review.
- Parental deaths: where mothers/babies were known to have died, cases were excluded from the sample. However, it was possible that interviewers would identify more cases in the field. Where a singleton baby had died, the family was no longer eligible for the study. Where one baby of multiples had died (but others survived), or where there was a maternal/paternal death, the family was still eligible if they wished to take part, but interviewers did not pressure or expect these families to take part in the study.
- Babies in the process of adoption. Interviewers were briefed that if a baby was in the process of being adopted that they should treat the case with caution and inform the office.
- Surrogacy cases: it was likely that the transfer of legal parental responsibility from the birth mother to the intended parents would not be complete by the time the sample was drawn, and that the sample would list the birth mother's address rather than the address where the baby/intended parents resided. Interviewers were briefed to treat cases sensitively, and not try to trace the baby.
- Foster parents, grandparents and kinship carers who were not legal guardians for children were not eligible for the study.

[25] CAPI timings data shows the screening taking a mean of 2.5 minutes and a median of 2 minutes. However, interviewers during debrief sessions explained that they would sometimes do the screening without using their tablet, and input the data once they got back to their car (to avoid approaching a household for the first time with their interview tablet visible, which some thought was off-putting to potential participants). This means the actual screening time was likely to have been longer than the data suggests.

In addition, the screener checked for any split households (where the sample had two named parents at one address, but one parent had since moved to a different address) or merged households (the sample had two named parents at different addresses, but the two named parents were now living together at one address)

Additionally, interviewers were provided with a laminate of the **Health Screening** question that all participants were asked to answer on each visit before interviewers entered their homes. The screening is a way to check that both the interviewer and the participant were comfortable with proceeding to an in-home interview.

Content

The screener in its final form can be viewed in full in the questionnaire in the appendix. The first few questions checked whether the sampled parent(s) were still living at the sampled address and if not, whether the interviewer had managed to get an updated address, or whether they needed to do tracing steps.

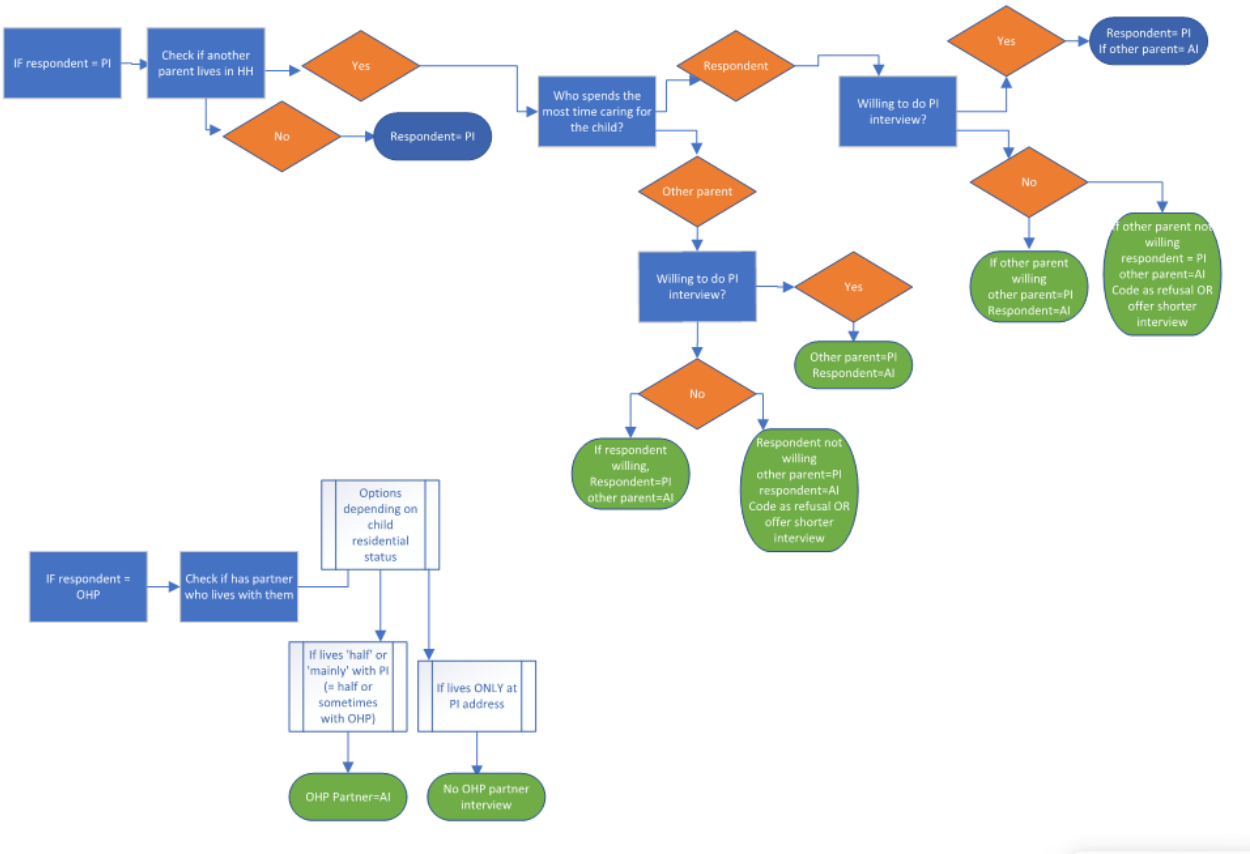
The screening module also confirmed if the person named on the sample was the parent or legal guardian of the child; that the child was born during the correct reference period, and that the child was still alive. If the named person was not the parent or legal guardian, or if the child was not born in the reference period or had died, the interview did not proceed. Where there was a multiple birth, and a baby had died, the interview could proceed, but, of course, this was a sensitive situation, so the interview only went ahead if the parent suggested that they were still interested to take part.

After that, the screener established whether the household being visited was the only or main residence of the baby, or if the baby mainly lived elsewhere. This was used to identify whether the household was a Primary Informant (PI) address or an Own Household Parent (OHP) address. The screener also asked if the baby's other parent, or the respondent's partner, lived at the household. Where the names of both parents were available on the initial sample the screener checked if this person was the other parent. In the case of PI households, where the other parent was living at the address, another question was asked to establish who should do the PI interview and who should do the AI one. The PI was defined as the parent who spent most time caring for the baby, or, where the two parents spent equal time caring for the baby, the one who was answering the screener questions was assigned as the PI. The other parent then became the AI. In PI households, any cohabiting partner was eligible to complete the AI interview: as they lived with the child it was assumed they were a parent figure to the cohort baby, and would spend a significant amount of time with them. In OHP households where there was a resident partner (AIOHP), the screener confirmed whether the AIOHP spent time with the baby; only those who spent time with the baby were eligible for the interview.

Screener questions about 'main' residence and about identifying the PI as the one who 'spent the most time caring for the baby' were tested as part of the Cognitive testing detailed in Chapter 4.

The screener concluded by informing the interviewer of (1) which interviews were required in the household, and (2) which respondent was assigned to which interview. Where there was a parent who had opted out of the study prior to the fieldwork, the interviewer was also informed of this in the screener.

Figure 12.3 Screener flow



Country variations

Due to variations in the fieldwork protocols and sampling (see chapter 5), the screening module needed to be able to manage several differences by country. In England, Wales, and Scotland, the sampled babies were born between November and December 2022, thus these were the birth months referred to in the screener.

In addition, in England, Wales and Scotland details of both mothers and fathers were provided for most babies. This meant:

- Interviewers could conduct the screening module with either the mother or father of the baby (if they were both listed at the household).
- Where the sampling frame indicated that both parents lived in the address, the interviewer checked whether both parents still lived there or whether one parent had moved out (i.e. whether the household was a split household) or both parents had moved (requiring mover tracing). If one of the parents had moved out, the interviewer needed to try to trace them and this could be done at the time of the screener, but the address details of parents living elsewhere were also asked about in the main questionnaire.
- Where it was established that there was an Additional Informant in the Primary Informant's household, the interviewer was able to check whether the Additional Informant was one of the named parents or a new partner of the Primary Informant. Additionally, the interviewer was able to check whether the household was a merged household (whether a parent listed as living elsewhere now lived with the other parent).

In Northern Ireland, the cohort babies were born between June and July 2023, so the birth months referred to in the screener had to be updated. Furthermore, only details of mothers were provided for each baby, and the baby's name was not provided. As a result:

- Interviewers could only conduct the screening module with the mother of the baby and asked if they were the parent of a baby born in June or July 2023.
- If the mother had moved out, the interviewer could only trace the mother.
- Interviewers were not able to check for any split or merged households as the address of the father was not given in the sampling frame.
- When the mother indicated that there was an Additional Informant in the household, this person would not have been on the sampling frame. Thus, interviewers always needed to record their full name.

Another difference in the screener in Northern Ireland was that information on multiple births was not available on the sample. Therefore, an additional question checked how many babies were born to them during June/July 2023.

13 Primary Informant (PI) interviews

Main Fieldwork protocols for Primary Informants

The Primary Informant (PI) interview was for the parent living in the baby's main or only household who spent the most amount of time caring for the baby. The interview was designed to take around 60 minutes to complete. Interviewers were asked to complete the interview face-to-face, but Teams and telephone options were available where face-to-face was not possible or where respondents requested other modes. The interview asked about the parent's own characteristics, their household's characteristics and detailed questions about their child's characteristics (see Chapter 6 for a full list of topics covered).

The introductory letters and study guide booklet sent to families emphasised that the study would like to speak to both parents, and no assumptions were made about which parent (in two-parent households) would complete the longer PI interview, and which would complete the Additional Informant interview.

Any legal parent of the sampled child was eligible for the PI interview. To identify PIs, the screener completed at each household checked that the household was the baby's main residence; it then identified which parent spent the most time caring for the baby and allocated that parent to complete the PI interview. If the identified PI refused or was unavailable to take part in the interview, and there was another parent in the household, then the parent available for interview was allocated to the PI interview. Interviewers were able to over-ride the allocation made in the screener where necessary: for example, if it was clear to interviewers that the parent allocated to the PI interview was not going to be available for the duration of the fieldwork period, or they felt the designated PI was highly unlikely to take part, they were able to switch the parent allocations. Interviewers were encouraged to do this where necessary, so that the study secured a PI interview for each baby in as many cases as possible, as it was the interview that provided most detail about the baby.

Interviewers were encouraged to complete the PI interview first where there were two parents or parent figures in the household. However, interviewers could complete the interviews in any order to fit around parents' availability. If the Additional Informant (AI) interview was completed first, interviewers were asked to call back at the household at least twice to try to secure the PI interview.

Profile of Primary Informants

As described in chapter 5, the sample included up to two addresses (or 'households') for each sampled birth in England, Wales and Scotland. The address of the mother was allocated as 'address 1' and, if there was a father living at a different address in the sample, that address was assigned as 'address 2'. Our assumption was that the 'address 1' cases would likely be households where babies lived all/most of the time (given that OHPs in the UK are much more likely to be fathers than mothers), and therefore where the Primary Informant would be based. In total, the sample issued to the notification mailing included 4,067 'address 1' cases that were suspected PI addresses, and 545 'address 2' cases that were suspected Own Household Parent addresses. In Northern Ireland only mother addresses were provided.

Screener data shows that 97% of the households screened were PI households – the address where the baby lived all or most of the time. Sixteen percent of screened households were PI-only households (i.e. only one parent living there), and 81% were households with a PI and AI.

In total, 92% of Primary Informants were female/ the baby(ies) mother, 8% were fathers, and all but two were biological parents.[26] Response rates are given in chapter 19.

Mode of interview outcomes for Primary Informants

Table 13.1 shows the mode of interview for productive PI interviews, including full and partially complete interviews. Partial interviews were considered productive interviews if at least the first two modules (Introduction and Household Grid) were completed. The great majority of PI interviews were completed face-to-face (92%). Of the remote interview modes, telephone was used more often than Teams for PI interviews (for 6% and 1% of PI interviews, respectively). Where interviews were conducted by telephone or Teams, interviewers were asked to specify why: in 86% of cases (n=188) this was because it was more convenient for respondents; in another 13 cases interviewers specified there was illness in the household; and in 6 other cases they reported the respondent did not want them to enter the house for work or childcare-related reasons.

While web was not usually offered to PIs as a completion option during the main fieldwork, nine PIs completed via web (eight in England, one in Northern Ireland; of these, five were full completes and four partial completes). This was either due to interviewer error in giving out AI letters with the web link and access codes (L09, see the following AI interview chapter), or where PIs were in the second household (and received the second household letter with web link). In one case, a PI in Northern Ireland requested a link to complete online as they were unable to participate via other modes.

Table 13.1: Main fieldwork mode of interview for Primary Informant interviews (includes all full and partially complete productive interviews)

	England	Wales	Scotland	Northern Ireland	Total
N	935	263	291	294	1,783
Face to face	88%	94%	97%	98%	92%
Telephone	10%	4%	2%	0.3%	6%
Teams	1%	1%	1%	2%	1%
Web	0.4%	1%	0%	0.3%	0.4%

Following main fieldwork, any non-responding addresses on the sample frame (either address 1 or address 2) were invited to take part in an online follow-up survey. This interview was shorter than the main fieldwork PI interview (40 minutes instead of 60). Only one parent from each non-responding address was asked to complete the web survey (meaning that they were allocated a PI or OHP informant status depending on their child's residence). These cases are not included in the table above and more information on the online follow-up survey can be found in chapter 16.

[26] Those who were not biological parents reported being a mother who is not a birth/biological mother.

14 Additional Informant (AI) interviews

Main Fieldwork protocols for Additional Informants

The Additional Informant (AI) interview was for a parent or partner who lived with either the Primary Informant or an Own-Household Parent. Most often the AI was the baby's other parent, but they could also be a new partner (e.g. step-parent). Cohabiting partners of OHPs were only eligible for an AI interview if they spend time with the baby (cohabiting partners of the PI were assumed to spend time with the baby as they reside in the baby's main or only household). The target interview length was 30 minutes. Interviewers were asked to complete the interview face-to-face or offer the web survey, with Teams and telephone options available where necessary. The topics covered in the AI interview (summarised in Chapter 6), included questions about the parent and questions relating to their relationship with their child. The interview was shorter than the PI/OHP interview, as questions that only needed to be answered once for each household or child were removed (e.g. questions about household composition, birthweight of the child).

To identify AIs, the screener completed at each household with a named parent asked whether there was a second parent or cohabiting partner in the household eligible to interview. Any cohabiting partner of the PI was eligible for the AI interview, whether they were biological parents or not. It was assumed that any cohabiting partner living with the baby would be a 'parent figure' to them and spend time with them. The child's other co-resident birth parent was also eligible for the AI interview regardless of whether they were the partner of the PI or not. For cohabiting partners of OHPs, the screener checked whether the partner spent time with the baby; if they did, they were eligible for interview. It then allocated the eligible respondents to complete either the PI/OHP or AI interview. At the same time, it confirmed whether the AI was one of the parents whose names were listed on the sample. If their name was not listed on the sample, it collected their name.

Once interviewers identified an AI, they were encouraged to try to interview the AI in-person. If that was not possible or convenient, interviewers were asked to try to meet the AI in person or speak to them by telephone before placing an 'AI letter' at the household. This 'AI letter' (L09) asked the AI to either contact the interviewer to arrange an interview appointment or complete the survey online.

To allow interviewers to work flexibly around parents' availability, the PI/OHP and AI interviews could be done in any order. The online option also made it possible for the AI to complete the web interview whilst the interviewer was interviewing the PI in-person. If PI/OHP and AI interviews could not be scheduled for the same appointment, after interviewing the PI/OHP, interviewers were asked to make at least one further face-to-face contact at households to try to interview the AI. Where an AI had agreed to take part online, interviewers also used telephone numbers they had collected from parents to call and send messages to remind the AI to complete the web survey.

Country differences

The fieldwork protocols for Additional Informants were the same across England, Wales and Scotland. In Northern Ireland, the sample included only mothers' names. This meant that, unlike fathers in other countries, fathers in Northern Ireland would not have received any mailings to introduce the study prior to the interviewer visits. As such, interviewers were asked to leave an information pack at any households where they identified an AI as soon as they had completed the screening with the mother. This information pack included the AI letter (L09N) and a copy of the Study Guide booklet (B01NIS).

Interviewers were encouraged to leave further copies of the AI letter during their later contact attempts at the household as necessary (and in line with fieldwork protocols in other nations).

Profile of Additional Informant interviews

On the sample issued to opt-out stage for England, Wales and Scotland, a second parent was listed at the same address as the mother for 68% of households (67% in England, 66% in Wales, and 74% in Scotland). In Northern Ireland, only mothers' names were provided.

During screening, 81% of households were identified as having both a PI and AI resident. This was in line with ONS data suggesting that around 4 in 5 children will be living in a two-parent household at this age.

Among productive main households where an AI was identified, an AI was interviewed in 76% of cases (76% in England, 76% in Wales, 82% Scotland, 73% Northern Ireland). Full response rates are given in Chapter 19.

Among all AIs completing an interview or web survey, 91% were male and 9% were female. In Northern Ireland, where only mothers were included on the sample, 98.5% of AIs were male and 1.5% were female. Across all AIs, 99% were biological parents; other AIs reported being same-sex non-biological parents (N=4), stepparents (N=3), or kinship carers (N=1). Only a small number (N=4) of AIs in OHP households were interviewed, which reflects the low number of OHP households interviewed in the study and that few of those interviewed had cohabiting partners.

Mode of interview outcomes for Additional Informants

The table below shows that interviewers followed the guidance and achieved over half the completed AI interviews face-to-face, with around a third completed by web. The mode distribution is different in Northern Ireland, with the majority of AI completes being done online. This could be explained by the fact that the information pack left for AIs at the point of screening effectively placed the web survey with AIs at an earlier point in the process than in the other countries, and/or because interviewers were less likely to pursue a face-to-face interview when fathers' names were not provided on the sample. In Scotland, the rate of web interviews is also higher than England and Wales; this may be down to a change in the labelling of the AI letter in Scotland to make it easier to identify, which may have resulted in interviewers using the letter more widely and/or at an earlier point in the contact process.

AIs were not invited to be part of the online follow-up survey after main fieldwork, as only one parent from each non-responding address was asked to complete this (meaning that they would be assigned to a PI or OHP informant). Due to an error in distributing the online follow-up, two further AIs took part and their responses were retained (these two cases are not included in table below). More information on this can be found in chapter 16.

Table 14.1: Main fieldwork mode of interview for Additional Informant interviews (includes all full and partially complete productive interviews)

	England	Wales	Scotland	Northern Ireland	Total
N	*584*	*180*	*198*	*196*	*1,158*
Face to face	64%	71%	52%	32%	58%
Telephone	12%	4%	4%	3%	8%
Teams	1%	1%	0%	3%	1%
Web	23%	24%	45%	63%	34%

15 Own Household Parents (OHPs)

The Own Household Parent (OHP) interview was an interview for parents who do not live for all or most of the time in their child's main household. The study aimed to collect information from both parents wherever possible to build a holistic picture of the baby's family life and development. The target interview length of the OHP interview was 40 minutes. This was usually the baby's biological father (58 of 60 OHPs interviewed were the baby's father, and 2 were mothers). OHPs were eligible for the study, regardless of the amount of time they spent with their baby, including those with no contact with their baby. Interviewers were initially asked to try to complete interviews face-to-face if possible, but had options for online, Teams and telephone interviews available. In the later stages of fieldwork in England, Wales and Scotland, and from the outset of the Northern Ireland fieldwork period, to increase participation from OHPs, interviewers were encouraged to use any of the modes available to try to secure an interview with an OHP. The questions asked in the OHP interview covered the individual's characteristics and some questions about their relationship with their child (the same topics as the Additional Informant interview), as well as additional questions about their household. A more detailed list of the interview content can be found in Chapter 6.

The mailings and materials sent by the study, including the notification and advance invitation mailings, emphasised that the study was keen to speak with both fathers and mothers, including those who do not live with their baby. The materials were designed to be sensitive to changing and diverse family situations, and to inform participants that we would be contacting both parents even if they lived separately.

Sampling and identification of OHPs

The sample frame for England, Wales and Scotland provided details of fathers for each of the sampled babies, including fathers living at a separate household to the mother and baby. In total, there were 545 fathers listed at 'second addresses' which were assumed likely to be OHP households (this was around 16% of all issued households across England, Wales and Scotland, and ranged from 12% of issued households in Scotland to nearly 19% in Wales). This is broadly in line with ONS data suggesting around 15% of births are joint registrations of parents living separately. We refer to these OHPs in this chapter as 'sample frame OHPs'. These households were confirmed to be OHP households during the screener interview (or by the PI interview if done first). This screener allowed for the possibility that the second address no longer existed i.e. the probable OHP had now moved in with the child's other parent meaning they were instead eligible for the PI/AI interview.

In addition to the OHPs listed on the sample, OHPs could also be identified during fieldwork. This occurred in England, Wales and Scotland where the birth was a sole registration, in which case only mothers' details were available (this was expected for around 5% of cases based on ONS data) or where the other parent was found to no longer live with the mother; and in all cases for Northern Ireland because only mother details were provided on the sample frame. We refer to these OHPs in this chapter as 'new OHPs'.

PIs were always asked in their interview about the whereabouts of the child's other parent if they were not in the household. In all instances where the PI indicated there was an OHP (whether known to the study through the sampling frame or not), interviewers asked the PI to provide contact details for the OHP. Where we did not already have OHP details from the sample frame, these details were added to the study sample so that the 'new OHP' could be contacted and interviewed. Where we did have OHP details from the sample frame, these were used if the 'sample frame OHP' was found to have moved.

The table below shows the number of OHPs on the sample and identified during fieldwork and the changes to their status. In total there were 545 'second address' cases on the sample issued originally, and 519 once cases issued to a fraudulent interviewer identified during fieldwork are removed (see Table 15.1 below, and section on 'Fraudulent interviewer' in Chapter 19 for more details). However, during the initial screening at the address, interviewers found that in 18% (N=98 of 519) of these cases the parent living in the second household had moved into the main household with the PI by the time fieldwork took place. At the same time, interviewers found during screening a similar number of 'new' OHP addresses (N=101), either because parents who had been living together had split into two households or because the original sample only contained the mother's details. As the sample in Northern Ireland only contained mothers' details for all records, a relatively large number of 'new' OHP addresses were identified compared with other countries. Across all countries, the figures suggest a high rate of address changes among this part of the sample and/or that living arrangements for some in this group are flexible (for example, interviewers also noted that it was sometimes difficult to determine where fathers lived and whether they were OHPs because they may officially live at a separate address but spent all/most of their time living at the PI household).

Table 15.1: Number and % of OHPs

	England	Wales	Scotland	Northern Ireland	Total
All families issued to field (excluding cases issued to fraudulent interviewer)	2,177	594	541	589	3,901
Second addresses on the sample among these issued families (% of those issued to field)	348 (16%)	111 (19%)	60 (11%)	n/a	519 (16%[27])
Of which, N that were no longer living separately/ now lived in the main address	58	28	12	n/a	98
N of 'new' OHP addresses identified during screening (in NI, identified during interview)[a]	51	7	5	38[28]	101

[a]'New' OHP addresses were identified if parents who had been living together had split into two households, or where the original sample only contained one parent's details (due to be a sole registrant on the birth registration or in the case of Northern Ireland where only mothers' details were provided).

It is worth noting that the sample design of the study may have increased the proportion of OHPs in the issued sample relative to the population of babies, as there is evidence that OHPs are more likely to come from lower socio-economic backgrounds (Poole et al. 2016)[29].

Protocols for 'sample frame OHP' fieldwork

The initial screening done at each household checked whether the parent(s) listed at the household were still resident, and whether the baby resided there or somewhere else all/most of the time. If interviewers

[27] As a proportion of the England, Wales and Scotland issued families (i.e. excludes NI)

[28] In total, 40 new OHP addresses were identified but during the subsequent fieldwork period two were found to be AIs and have not been recorded here.

[29] POOLE E, SPEIGHT S, O'BRIEN M, CONNOLLY S, ALDRICH M. Who are Non-Resident Fathers?: A British Socio-Demographic Profile. *Journal of Social Policy*. 2016;45(2):223-250. doi:10.1017/S0047279415000653

identified that the baby did not live at the address all/most of the time, the household was considered an 'OHP household'. This screening also identified any co-resident partners of OHPs who spent time with the baby, and collected their name as they would be eligible for an AI interview.

Where OHPs were listed on the sample, they were treated like any other sample member: they were sent the introductory mailings about the study directly prior to interviewer visits; then interviewers made at least 6 contact attempts to secure an interview (see Chapter 12 for a detailed description of contact protocols). Interviewers also followed the standard tracing protocols. Updated details could also be obtained through the PI interview. As described above, this is because the PI and OHP questionnaire asked both about the whereabouts of the child's other parent. More detail about the development of this script can be found in Chapter 6. If the other parent lived in a separate household, the PI and OHP were asked to provide contact details (email, phone number and/or address), regardless of whether the other parent was already known to the study through the sample frame. This was done so that the study team could check if the address for the other parent was correct, and to try to collect some further useful contact details. Any updated addresses identified were passed to the interviewer.

After the main interviewer fieldwork period in England, Scotland and Wales, all non-responding households on the sample (including 'sample frame OHPs') were invited to take part in an online follow-up survey. This was approximately the same length as the original OHP interview, but a higher incentive was offered in Scotland (see online follow-up survey chapter). As no OHP details were available on the sample frame in Northern Ireland, none were invited to the online follow-up survey fieldwork (see next section for exact protocol for Northern Ireland OHPs).

Protocols for 'new OHP' fieldwork

The PI and OHP questionnaire asked about the whereabouts of the other parent if they did not live in the same household. This allowed the study to identify any new parents not previously known to the study through the sample frame. In England, Wales and Scotland, this may be due to a "split" household (where both parents lived at the same address when registering the birth and had since separated) or where there had been sole registration of the baby (where only the mother appeared on the birth certificate). For the former scenario, in most cases the OHP had moved out from the original sample frame address, but in three cases it was found the OHP remained in the original sample frame address and the child's other parent and baby had moved to a different address. Therefore, in these three cases, address 2 would be the PI address. (In one case, the PI was interviewed face to face at address 2; in one case the OHP provided an address for the PI but no interview was obtained and in one case the OHP did not provide any PI contact details and no interview was obtained). In Northern Ireland, as the study had no details of any fathers, all OHPs identified during the PI interview were 'new' cases.

This section covers the approach taken where a new Own Household Parent was identified to try to contact and conduct interviews with this parent.

Where interviewers identified a 'new' OHP, they were encouraged to get any contact details of the OHP from the PI that the PI was willing/able to provide, using a standardised script in CAPI. Where PIs were unable or unwilling to provide any contact details for the OHP, interviewers provided an information pack for the PI to pass on to the other parent (this contains a Pass-on letter (L10) and a study guide). Alternatively, interviewers collected the PI's email address so that the Ipsos Head Office could send them an introductory email about the study with the web survey details that the PI could forward to the OHP.

In England, Wales and Scotland, where an interviewer was given an address for a new parent, and the address was in their allocation area, this was added automatically to their sample, and they were asked to visit that address to try to get an interview. Where the interviewer indicated that the address was out of their allocation area, and so they could not visit, the case was reallocated to another interviewer who lived closer to the OHP address. In Northern Ireland, where interviewers collected details for a second household which was outside of their local area, this was not reassigned to another interviewer as was the case in England, Wales and Scotland. Instead, interviewers were asked to try to achieve an interview (online, telephone or MS Teams) by making contact with them via letter or phone, and where addresses were not supplied, interviewers were advised to use any telephone numbers they had obtained for the OHP to try to make contact and conduct an interview.

In all four countries, when an interviewer was asked to make contact with a 'new' address in-person, interviewers sent or delivered the 'New address invitation letter' (LG02), which was a generic copy of the invitation letter, with a copy of the study guide (B01S/B01B) before starting to visit the household. There was some tailored messaging in this letter about the importance of hearing from mothers and fathers, how the study had received their contact details, and reassuring that all study responses/participation would be confidential. Around 3-4 days after sending this letter, interviewers were asked to make at least 3 visits to attempt contact with the parent.

'New OHP fieldwork' protocol for those not contacted in-person by an interviewer

In England, Wales and Scotland, where no address was provided, but a phone number and/or an email address was provided, these cases were collated centrally and dealt with as part of a separate 'new OHP fieldwork' exercise after the main fieldwork. While this fieldwork could technically cover either newly identified OHPs or PIs, in practice only newly identified OHPs were issued during the Feasibility Study. Any cases with both an address and other contact details that had not been visited or was a non-contact were also included in this fieldwork (these cases were not issued to the online follow-up survey outlined in Chapter 16). In England, Wales and Scotland this separate 'new OHP fieldwork' ran from 18 April to 9 May. The same central collation process was done in Northern Ireland where interviewers were not successful in using any of the contact details provided to them (i.e. cases had not been visited or fully worked). The separate fieldwork exercise was run in Northern Ireland from 17 July to 18 August 2024.

The contact protocol for the separate Own Household Parent fieldwork varied by the type of contact details held:

Table 15.2: Contact protocols for new OHP fieldwork

OHP Contact Details held	Invitation	1-week Reminder (if no response to invitation)	Further follow-up
Telephone number only	SMS	SMS	Two days later (in England, Wales, and Scotland) / One week later (in Northern Ireland), if no response, interviewer to make up to 7 calls across two weeks to offer either telephone interview or prompt to complete via web.
Email address only	Email	Email	Four days later (in England, Wales, and Scotland)/ One week later (in Northern Ireland), if no response, second email reminder.
Email address and telephone number	Email	SMS and Email sent at the same time	Two days later (in England, Wales, and Scotland) / One week later (in Northern Ireland), if no response, interviewer to make up to 7 calls across two weeks to offer either telephone interview or prompt to complete via web.

Number of OHPs issued to the OHP fieldwork

In England, Wales, and Scotland:

- In total, we identified 117 cases where an interview with the PI indicated a new Own Household Parent. Among them:
    - 76 PI/OHP refused to provide contact details of the other parent: 22 of these agreed to pass the information over to the other parent, whilst the rest refused to do so.
    - Among the other 41 cases:
        - 5 provided address only
        - 9 provided phone number only
        - 3 provided email address only
        - 21 provided address and phone number
        - 1 provided address and email address
        - 1 provided address, phone number, and email address
        - 1 did not have any data as the PI interview was only partially complete

- Prior to the new Own Household Parent fieldwork for those not contacted by an interviewer during main fieldwork, 8 complete interviews were achieved among these newly identified parents.

- We only included new Own Household Parents in the separate fieldwork exercise if they had not been contacted by the interviewer and some contact details were provided. This resulted in 7 cases in England, Wales, and Scotland: 6 cases with only a mobile phone number, and 1 with only an email address.

In Northern Ireland:

- As only mothers' information was provided on the sample, where we identified that there was a father living somewhere else, the father was considered a new Own Household Parent. However, there was an exception. In one family, the mother lived elsewhere whilst the father lived with the baby at the sampled address. Acknowledging the potential sensitivity of the situation, the study team decided not to pursue an interview with the mother.

- In total, we identified 40 new Own Household Parents in NI[30]. Among them:

    - 3 interviews were achieved prior to the start of the new OHP fieldwork exercise.

    - 23 Primary Informants refused to provide contact details of the other parent: 8 of these agreed to pass the information over to the other parent, whilst the other 15 refused to do so.

    - Among the other 14 cases:

        - 1 provided address only

        - 1 provided email address only

        - 8 provided address and phone number

        - 4 provided address, phone number, and email address

- Given that interviewers in Northern Ireland were encouraged to use any contact details to get hold of the fathers, fathers that had already completed the interview, refused, lived abroad, or were untraceable, were excluded from further contact. In addition, one case where the interviewer attempted contact more than 10 times without success was also excluded. This resulted in 7 new Own Household Parent cases to be followed up for the survey.

In summary, a total of 14 cases were identified as being eligible for the new Own Household Parent fieldwork over four countries.

[30] 2 parents were contacted as part of the new OHP fieldwork, but in both cases the parent was actually an AI rather than OHP (one was a full complete, one did not complete an interview). So ultimately there were 38 new OHPs identified in Northern Ireland.

Table 15.3: Number of cases issued to 'new' Own Household Parent fieldwork

	Issued in England, Wales, and Scotland	Issued in Northern Ireland
Email address	1	2
Mobile number	6	6
Total new Own Household Parents to contact	**7**	**7**

Among 14 cases invited, 3 telephone interviews were achieved. This included 2 in England, Wales, and Scotland, and 1 in Northern Ireland. The parent in Northern Ireland was found to be living with the PI, and thus was re-classed as an Additional Informant instead of an Own Household Parent.

Note: Responses to the 'new OHP fieldwork' are included in the Main Fieldwork response rates.

Adaptations made to protocols for all OHP fieldwork

At the start of February 2024 – towards the end of the fieldwork period in England and Wales, and part-way through the Scotland fieldwork – the protocols in relation to OHPs were adapted to take account of the difficulties interviewers were experiencing in making contact with this group.

Interviewers reported that OHPs were very difficult to contact for a variety of reasons. For example, because: they were 'sofa surfing' without a fixed address; had frequently moved address; were often out during non-working periods to make contact with the baby; were relatively disengaged in the idea of the study; or because there was uncertainty about where OHPs actually lived (some were suspected by interviewers to live with the PI but also claimed to live elsewhere). Even where contact was made, interviewers reported a high rate of broken appointments with OHPs. Up to the end of January 2024, of PIs asked for contact information for the OHP, 64% provided at least one type of contact details; however, many PIs were unwilling or unable to share contact information: up to the end of January 2024, of 266 PIs asked to provide details for their baby's other parent 22% refused, 10% were unable to give information and 4% wanted to check with the other parent before passing on the information.

In an attempt to increase contact with and response among OHPs, the fieldwork protocols were adapted so that:

- Interviewers were encouraged to leave calling cards with personalised messages on the card to encourage OHPs to make contact with them.
- Interviewers offered Teams and telephone interviews as OHPs may not be easily contactable at the address we held for them. Teams and telephone could make it easier for interviewers to make contact. It was also felt that telephone, Teams and web interviews may give greater privacy where OHPs were living in house-shares and did not want to conduct the interview at home with other bystanders in the vicinity.
- Interviewers were encouraged to interview OHPs at the PI address where the opportunity was available, or where it could be scheduled.

- Interviewers were reminded to collect all contact details they were able to get from the PI, and to make use of phone numbers as well as making personal visits.

- The interview script was changed to encourage PIs to provide contact information for OHPs, including reminding interviewers not to offer refusal options, asking for mobile number and email before home address, and asking for mobile number/email directly (see Questionnaire chapter for full details of these changes).

Ultimately, these changes did not appear to have a great impact on the OHP fieldwork progress. For example, PIs' rates of providing information for their baby's other parent were very similar after the changes were made (65% provided at least one type of contact information, 24% refused, 5% were unable to give information and 6% wanted to check with the baby's other parent). This is at least partly due to the fact that many interviewers were already trying these (or similar) strategies themselves in the field to try to secure OHP interviews.

Response rate and profile of OHP interviews

An OHP interview was achieved at 13% of all non-main addresses (suspected OHP addresses).

Among productive families, where an OHP address was *confirmed* either directly by screening an OHP, or indirectly because a PI interview identified them, 17% went on to complete an interview.

Among productive families, those OHPs identified as seeing their child regularly – at least two days per month – had a response rate of 19%.

The online follow-up survey (England, Wales and Scotland only for OHPs) yielded only one OHP response in England, and none in Scotland (among 19 OHPs invited to take part with a higher incentive value than in main fieldwork). This gave a total of 60 productive OHPs, 59 from the main fieldwork period and one from the online follow-up survey.

Most OHPs interviewed were fathers (58 of 60 OHPs interviewed were the baby's father, and 2 were mothers). Among all the OHPs identified by PIs (including those who were not screened or interviewed directly), 314 were fathers and 15 were mothers.

Full response rates are provided in Chapter 19.

Mode outcomes for Own Household Parents

Most OHP interviews were conducted face-to-face (38 of 60), with the remainder usually telephone (10) or web (11). In the table below we have presented numbers rather than percentages due to the small base sizes.

Table 15.4: Mode of interview for Own Household Parent interviews (includes all full and partially complete productive interviews)

	Total[31]
N	*60*
Face to face	38
Telephone	10
Teams	1
Web (includes one from online follow-up survey)	11

[31] Due to the disclosure risk arising from the low number of OHP interviews conducted, OHP figures are not reported at country level.

16 Online follow-up survey

Following the completion of the main fieldwork period, an online follow-up survey was conducted in each country to contact households that had not yet participated in the study. The aim of the online follow-up survey was to try to encourage more people to take part, especially those from demographic groups that had been less likely to take part in the main fieldwork. The online follow-up survey aimed to make participation easier by offering a shorter survey length, a higher incentive in some cases[32] and by offering the web survey to all participant types.

Fieldwork design

The fieldwork for the online follow-up survey started approximately one month after the closing of main fieldwork. As start and end dates of the fieldwork in each country had differed, the online follow-up survey also went into field at different times in each country.

Households where no-one had taken part in the survey so far were sent an invitation letter for the online follow-up survey, followed by one reminder letter approximately two weeks after the first letter landed.

Table 16.1: Online follow-up survey fieldwork dates

	England & Wales	Scotland	Northern Ireland
Main fieldwork end	4 February 2024	21 April 2024	14 July 2024
Invitation for online follow-up survey mailed	20 March 2024	21 May 2024	1 August 2024
Reminder for online follow-up survey mailed	5 April 2024	10 June 2024	19 August 2024
End of online follow-up survey fieldwork	22 April 2024	28 June 2024	6 September 2024

Sample design

The invitation letters for the online follow-up survey went out to households which had been fully unproductive (no interviews had been carried out at the household). Where we had two parents listed on the sample, the letter was addressed to both, but we asked only one parent to complete. We included unproductive OHP households whether or not the PI household had taken part. This means all respondents to the online follow-up survey were categorised as either PIs or OHPs.

Certain households were excluded from being sampled. This included households where people had complained about being contacted about the survey, where parents had proactively contacted the Ipsos helpline or interviewers to request no further contact was made, where the interviewer had specifically noted that it was a hard refusal, or where the interviewer became aware of any potentially sensitive situations. Only OHPs who had been on the sample from the beginning were included in the follow-up survey – OHPs identified during fieldwork were included in the separate 'new OHP fieldwork'.

[32] Ultimately, higher incentives were only offered in Scotland and Northern Ireland.

During the sampling for the online follow-up survey in England and Wales, some households that had already responded during the main fieldwork period were mistakenly included in the online follow-up sample. Households who responded to the online follow-up survey as well as the main survey were still provided the additional online follow-up survey incentive, and where the same person had answered both surveys, the previous, more in-depth interview was prioritised over the responses gathered via the online follow-up survey. However, where data linkage permissions differed between both sets of responses, the consent records were updated to reflect the more recent decision made by respondents as part of the online follow-up survey. Where new contact information was provided, this was also updated in the data. In some cases, a new respondent, i.e. the other parent, had responded to the online follow-up survey. In total, there were 25 duplicate respondents, and two new respondents (both AIs in the child's main household) from households that were mistakenly included in the online follow-up sample.

Questionnaire

The questionnaire was shortened to make it easier for participants to take part. During the main fieldwork, the interview was estimated to take one hour for Primary Informants (PIs) and 40 minutes for OHPs, whereas the online follow-up survey was shortened to about 60% of the content of the main survey, so that it took 30 minutes for PIs to complete online. The OHP online follow-up survey was the same version as the main survey, but as it was web-administered, it took about 20 minutes to complete.

The PI questionnaire script was shortened by cutting some questions asked about the other parent/partner, dropping some question sections that were less crucial to the functioning and harmonisation of the study to other cohorts (e.g. life events, child diet and sleep, pregnancy history), and by focusing on questions asking about present day and dropping any retrospective elements. The retained questions were chosen by the UCL study team based on priorities around the key scientific aims of the study as well as for harmonisation with the Children of the 2020s survey. The script was also changed to account for differences in fieldwork protocol compared with the main fieldwork, for example, PIs who were not living with the baby's other biological parent, and did not provide their contact details, were not asked to pass on information to their partner. Additionally, the online follow-up survey did not include a saliva element (the saliva element is not included in any of the timings noted above). The questionnaire used in Northern Ireland implemented all changes made to the main Northern Ireland script, on which further details can be found in chapter 6.

Incentives

The incentive amounts were different depending on the demographic group and the country. For England and Wales, the incentive amount remained the same at either £10 or £20.

An ethics amendment to increase incentives and to offer targeted incentives could not be approved in time for England and Wales; however, the incentive amount was increased by £10 for everyone invited to the online follow-up survey in Scotland and Northern Ireland, as the online follow-up survey fieldwork period occurred later in these countries. Additionally, those living in addresses in IMD groups 1-3 were offered an additional £10, as those from lower IMD groups had lower response rates in the main survey than other IMD groups. This meant that in Scotland and Northern Ireland participants could receive anything from £20 to £40 for their participation.

Incentives were sent out via email after the closing date for the online follow-up fieldwork in each country had passed.

Materials/letters for Online follow-up survey administration

Up to two letters were posted to each non-responding address: an online follow-up survey invitation letter, and a reminder letter. The letters included the link to the online survey, the passcode, as well as a QR code to simplify accessing the online survey. The reminder letter, sent two weeks after the first letter, also mentioned the survey closing date by which participants had to take part if they wanted to claim their voucher.

The letters were designed to include key messages intended to encourage participation in the survey, focusing on messages believed to particularly motivate 'harder to reach' groups. Therefore, the key messages that were emphasised were the incentive amount, the fact that it was now "quicker and easier to take part", and the fact that the online follow-up survey was the last opportunity to take part in Generation New Era.

There were three versions of each of the two mailings to account for different household types, depending on whether the household was a known (through the PI interview or through the screener) OHP household or a suspected OHP household (i.e. sampled address 2), a one-parent household (at address 1), or a two-parent household based on the initial sample information. Copies of all three invites and reminders are in the appendix.

Online follow-up survey outcomes

Table 16.2 below shows the outcomes for all those accessing the online follow-up survey. A total of 107 participants across the study completed the full online follow-up survey, and another 21 were classified as partial completes. Thirteen were screened out of the study because they refused to consent to taking part at the introduction. In total, 34 broke off while completing the survey (and did not progress far enough to be classified as partially completing). A higher proportion of those who accessed the survey went on to complete it in Scotland and Northern Ireland, than in England and Wales; this may be linked to the higher incentives on offer in Scotland and Northern Ireland for completion.

Table 16.2: Online follow-up survey outcomes by country

	Total N	England	Scotland	Wales	Northern Ireland
Screened out	13	8	0	5	0
Broke off	34	20	7	5	2
Partially complete	21	11	4	2	4
Fully complete	107	49	24	13[33]	21
All accessing online follow-up survey[34]	175	88	35	25	27

[33] Includes two cases completed as part of the replacement interview fieldwork – see Chapter 19 for details.

[34] Excluding those issued in error.

17 Interviewer training

A total of 146 interviewers worked on Generation New Era across 2023 and 2024. Of these, 21 were interviewing in Scotland, 15 in Wales and 15 in Northern Ireland.[35] These interviewers brought a lot of preexisting experience to the study. The majority of them (78%) had worked as interviewers for three years or more and 70% of had previous experience working on large cohort studies.
In-depth interviewer training was needed to introduce the study and its background, as well as any study specific protocols. The main purpose of the interviewer training was to ensure that all interviewers were informed about the details of the study and their role in administering its different elements, as well as ensuring that interviewers were aware of the messages and behaviours that would contribute to the success of the study.

Briefings

Twelve in-person interviewer briefings were conducted in various cities in England, Wales, Scotland and Northern Ireland. Of these, nine took place in England, one took place in Scotland, one in Wales, and one in Northern Ireland. The briefings in England and Wales took place between the 21st of August and the 20th of September 2023. The Scotland briefing took place on the 22nd of November 2023 and the Northern Ireland briefing on the 26th of March 2024. One shortened briefing took place on MS Teams to brief Scottish interviewers working remotely in Northern Ireland on the differences in fieldwork procedures.

All interviewers attended the sessions from 9.30am to 3.30pm. The last session, lasting from 3.30pm to 5pm, was only attended by interviewers who would be asked to visit households selected for the saliva collection.

Researchers from Ipsos ran the briefings with the support of Ipsos' field team and researchers from UCL. The Northern Ireland briefing was also attended by the Northern Ireland study lead from the University of Ulster and Business Services Organisation (BSO) representatives. The Scotland briefing was attended by the Scotland study lead from Edinburgh University. Additionally, the Fatherhood Institute was represented at one of the London briefings and ESRC staff attended the Cardiff briefing.

The briefings covered the following:

- Welcome and introduction
- Project background and objectives (done by CLS)
- Securing participation
- Contact made/no contact made with parents
- Using the ECS (Electronic Contact Sheet)
- Uncommon and sensitive scenarios
- Conducting the survey
- Collecting details for a second household
- Data linkage: linking administrative records
- Consent and Ethics

[35] Some interviewers were involved in the fieldwork in more than one country.

- Fieldwork Administration (done by field team)
- Collecting saliva samples (only those with saliva points stayed for this)

In addition to the PowerPoint slides, the briefings included various elements to aid understanding of the briefing contents. These included a demonstration of the setup of the ECS, as well as quizzes at the end of several sections. The briefings also included videos available to participants (on taking part, data linkage, saliva samples etc) and a video from the Fatherhood Institute. Lastly, interviewers were shown examples of saliva kits, so they could familiarise themselves with the content and use of the kits.

The Fatherhood Institute contributed valuable information to the content of the briefings regarding maximising contact and participation from fathers and OHPs.

The briefing content varied slightly in each country. Fieldwork periods in Scotland and Northern Ireland differed from those in England and Wales. In Northern Ireland the sample contained less information than in the other three countries because of a different data sharing agreement. The sample here only contained very basic information on the child and the mother of the child. This meant that the procedures regarding making contact with parents had to differ in Northern Ireland, especially for fathers who weren't included on the sample.

Prior to the briefing, interviewers were asked to familiarise themselves with the materials in their briefing packs and to watch a video prepared by the Fatherhood Institute. After the briefing, interviewers were asked to use the ECS practice document provided in the briefing packs to familiarise themselves with the ECS and with the survey.

Briefing packs

The briefing packs contained the following materials:

Table 17.1: Contents of interviewer briefing packs

Content	EWS reference	NI reference*
Showcards	C07	C07
Interviewer instructions	I01	I01N
Biosample FAQs	Q01	Q01
Data linkage FAQs	Q02	Q02
Notification 'Opt out' letter	L01G	L01NG
Invitation 'Advance' letter spare	L02G	L02NG
Invitation 'Advance' letter laminate	L02EG	L02NEG
Occupier letter	L07	L07N
Forwarding letter	L08	L08N
AI letter	L09	L09N
2nd HH/pass on letter	L10	L10N
Language card	C01	C01
Calling card	C02	C02
Appointment card	C03	C03
Change of address card	C05	C05
Interviewer contact card	C09	C09

Saliva card (NI only)	Not used	C10NI
Study guide – standard	B01S	B01NIS
Study guide - biosample	B01B	B01NIB
Adult saliva instructions	B02	B02
Baby saliva instructions	B03	B03
Biosample booklet	F02	F02
What happens next booklet	F04	F04NI
Health screener	HEALTH1	HEALTH1
Teams instruction card	MSTeams1	MSTeams1
Quiz handout	-	-
Briefing slides handout	-	-
Survey practice document	-	-

*Materials for Northern Ireland varied slightly from those in the other three countries.

Interviewer instructions

Interviewers were provided with a range of materials to help them when conducting fieldwork as part of their work pack. These included a set of project instructions which included the information covered in the briefings in more detail and a full list of outcome codes. These were intended as a manual as well as a reference document that interviewers could use if they needed reminding of any fieldwork procedures. Please see Chapter 11 for a list of the field materials.

Drop-in sessions

Drop-in sessions were scheduled once a week during fieldwork for interviewers to raise any questions. Additionally, a Q&A document was produced to address any frequently asked questions by the interviewers throughout the briefings and circulated to the interviewers.

During fieldwork an error in the administration of the saliva study was identified, whereby outcome codes were not always recorded for the saliva element of the study. The response to saliva was also lower than hoped, and so the study team wanted to encourage a higher rate of in-home collection. Therefore, an additional drop-in session was conducted to allow interviewers with high saliva response rates to share advice. The advice was summarised in a document and video which were shared with interviewers via email (see following section for more details).

Additionally, communication emails were sent out during fieldwork to circulate responses to common queries by interviewers. This included a communication about changes in fieldwork protocols for OHPs. These were changed to include more flexibility in the hopes of encouraging higher participation rates among OHPs. The field team also followed up the briefings in Scotland and Northern Ireland with a ‘top tips’ email to highlight key points from the briefing.

Monitoring saliva collection and changes made during fieldwork

During fieldwork the study team monitored the outcomes of the saliva study, to understand whether the saliva collection protocols and materials were working as intended. This monitoring helped to identify a few issues that were addressed during the fieldwork period to help to make the process smoother for interviewers, ensure outcomes were reported accurately, and increase the likelihood of participation:

Table 17.2: Issues identified during fieldwork and changes made in response

Issue	Changes made
Interviewers not consistently recording refusals or unproductive outcomes to the saliva module	Reminder note sent to interviewers to code outcome for saliva element of the study
Interviewers miscoding eligibility questions for the saliva module, resulting in some eligible parents being coded as ineligible for saliva	The questionnaire script was updated to clarify the term 'legal parental responsibility' (see Chapter 23).
Interviewers with differing response rates to the saliva completion, suggesting some interviewers were less successful in encouraging parents to participate	Interviewer Teams call focused on saliva organised for those working on the saliva study, to share 'top tips' on introducing this element of the study, and to help resolve any issues or queries with this element of the project. An email following the session reiterated the key points/tips discussed, and a video from a high-performing interviewer with tips on how to introduce the saliva element was shared across all interviewers. These tips were later used to develop a helpcard for NI interviewers (C10NI), and a video (VIDX) that were shared at the briefing sessions.
Return rates for samples left behind much lower than samples collected 'there and then' during household visit	Interview note, and interviewer Teams call, stressed the very low response rates if interviewers did not collect during their visits. The note and call emphasised the important role of interviewers in persuading and engaging participants in this element. Interviewers also shared tips on ways of increasing the chances parents would complete their samples after their visit, in cases where they were left behind.
Some saliva samples were returned that could not be matched to any CAPI data	It was unclear why some saliva samples were returned, when the barcodes for those samples had not been logged in the data. Interviewers were reminded to only administer the saliva study by going through the CAPI script (which would record the barcode). For later phases of Fieldwork (Scotland and Northern Ireland) the study team also logged which barcodes were sent to each interviewer, to help resolve any similar issues.
Bristol laboratory reports highlighted that some samples were poor quality, indicating participants	Interviewers were reminded about managing this within the household to ensure they collected saliva before parents ate/drank, and to use the flexibility built into the CAPI scripts to administer

had eaten/drunk within 30 minutes of giving their sample	the saliva module at any point in their visit that was convenient/ when respondents hadn't drunk or eaten recently.

18 Fieldwork management

This chapter covers processes that were carried out during the study fieldwork periods and the management of them.

Fieldwork periods for each country

Due to differences in sampling timelines between countries (see chapter 5) and due to unanticipated delays, fieldwork dates also varied by country. Table 18.1 shows the main fieldwork dates[36] for each country.

Table 18.1: Fieldwork dates

Country	Main fieldwork		Online follow-up survey fieldwork	
	Fieldwork start date	Fieldwork end date	Fieldwork start date	Fieldwork end date
England	1 September 2023	3 March 2024	20 March 2024	22 April 2024
Wales	1 September 2023	3 March 2024	20 March 2024	22 April 2024
Scotland	24 November 2023	21 April 2024	21 May 2024	28 June 2024
Northern Ireland	2 April 2024	14 July 2024	1 August 2024	6 September 2024

Fieldwork monitoring

Fieldwork progress reports were sent to CLS weekly from September 2023 until July 2024. During main fieldwork, for each country, the reports provided updates on the following:

- The number of screener completes among issued households, broken down by region (for England & Wales), incentive condition, IMD decile, and child ethnicity;
- Of screener completes, interview status by respondent type and interview mode, broken down by region (for England & Wales), incentive condition, IMD decile, and child ethnicity;
- Interview length, including the maximum, minimum, mean and median values, by respondent type;

[36] New OHP fieldwork took place slightly outside of the Main fieldwork and Online follow-up survey fieldwork periods. from 18 April 2024 through 9 May 2024 in England, Wales, and Scotland, and from 17 July 2024 through 18 August 2024 in Northern Ireland.

- Data linkage consent rates by respondent type and data linkage group, broken down by incentive condition, IMD decile, and child ethnicity;
- Within the biosample group, saliva collection consent rates by respondent type and interview mode; outcomes among those consenting to saliva and the number of saliva samples received by respondent type; saliva interview lengths among those consenting during face-to-face interviews, and those consenting in other survey modes;
- Weekly interviews achieved against the weekly targets;
- And fieldwork response rates.

For the online follow-up survey, fieldwork progress reports included the following:

- Of those invited to the online follow-up survey, the interview status by respondent type, broken down by region (for England & Wales), incentive condition, and IMD decile;
- Online follow-up survey fieldwork response rates.

In-field mailings

Table 18.2 summarises the list of mailings that were sent out following the notification and invitation mailings during main fieldwork in each country, along with their frequency. The following sections give more information about the purpose of each mailing and details of the processing of sample for each. The online follow-up mailings are discussed separately in Chapter 16.

Table 18.2: List of in-field mailings

Mailing type	Mailing	Frequency
General (whole sample) mailings	Thank you letters	Every month on the second Thursday of the month, starting from the second month of each country's main fieldwork
	Conditional incentive mailing	Every Tuesday and Thursday during fieldwork
	Second-household forwarding email (where necessary)	Every week on Thursday
Saliva mailings	Saliva remote kit	Fortnightly on Thursday
	Saliva confirmation and vouchers	Email: every week on Thursday Letter: every month on the second Thursday of the month
	First saliva reminders (email/text)	Starting from week 3 of each country's main fieldwork, every week on Thursday

	Second saliva reminders (email/text)	Starting from week 4 of each country's main fieldwork, every week on Thursday

In-field mailings: general mailings to respondents

Thank you letters

Participants who fully completed the interview were sent a thank you letter, which included confirmation of what they had consented to in regard to data linkage. There were two versions of the letter, one for participants in the data linkage opt-in group and one for the data linkage opt-out group (both versions can be found in the appendix). Further information on the data linkage groups can be found in chapter 7. Both versions of the letter informed respondents what happened after the interview and what they could do to change their contact details. The opt-in version of the letter listed which types of administrative records participants had provided consent for, and Primary Informants were also shown the consents given for each type of their child's records. The opt-out version of the letter reminded participants that the study team would routinely link their records; in the small number of cases among this opt-out group where participants had spontaneously refused data linkage in the interview, their decision was acknowledged and confirmed on the letter. Both versions of the letter explained how to change data linkage permissions and provided a link to an online form as well as study contact details in order to do so.

The letters included signatures and logos from each country's study director.

This letter was mailed every month on the second Thursday of the month, starting from the second month of each country's main fieldwork.

Conditional incentive administration

A file listing all those who had completed an interview but had not yet received an incentive was created every Tuesday and Thursday. This file was passed to Ipsos' field team who administered incentives to respondents, usually on the same day.

Incentives were either emailed as 'e-vouchers' or the money was loaded onto gift cards that had been left behind by interviewers. In the case of gift cards, interviewers handed over cards at the end of the interview and inputted the unique serial of the gift card into their CAI so the card could be activated from the office. Interviewers advised respondents that the incentive money would be loaded onto the card within 5 working days.

Second-household forwarding email

In the interview, PIs/OHPs could indicate that their baby's other parent lived somewhere else. If this parent was not one of the named parents on the sample, and the PI/OHP refused or was unable to provide that parent's contact details, the PI/OHP interviewed was given an opportunity to either (1) have the interviewer leave an information pack (a 'pass-on' pack that includes a study guide and the Second household pass-on invitation letter L10) to pass onto the other parent, or (2) have the study team email them the information so the participating PI/OHP could forward the email to the other parent. The second household forwarding email was sent to the latter cases. In total, 15 parents agreed to pass on an information pack, and 17 parents were sent an email to forward to the other parent (one person agreed to both).

This email introduced the study and let the other parent know how to complete the survey online. The goal was to encourage parents living elsewhere that the study did not have contact details for to participate in the study. The list of PIs/OHPs requesting this email was identified and sent an email every week on Thursday.

In-field mailings: saliva mailings to respondents

Saliva remote kit

Where respondents completed the interview or survey remotely (i.e. Telephone, Teams or web) and had not provided saliva samples in-person during an interviewer visit (e.g., if an AI completed a web interview after an interviewer visit and consented to saliva collection within the questionnaire), they were sent a sample collection pack containing an invitation letter, a saliva kit, an instruction booklet on how to collect the sample, and prepaid packaging to return the sample. Each parent in the household received one pack. Where they had consented to collect a baby sample, Primary Informants also received one pack per baby. Participants who were eligible for this mailing were identified fortnightly on Thursday and posted the pack on the same day by a trusted supplier. The supplier also informed the study team which respondents were sent which saliva kit and barcodes. This helped the study team keep track of the saliva collection progress.

Saliva confirmation and vouchers

For each saliva sample received by the laboratory, the participant was sent a £5 voucher code in a letter or email that confirmed which saliva sample was received, how the participant could claim the voucher, how they could withdraw their consent, and the study contact details for any other questions. Participants providing an email address were sent a confirmation by email, whilst those who did not provide an email address were sent a confirmation via post. Primary Informants could be eligible for a voucher for both their sample and their baby's sample. In these cases, separate confirmations were sent for each sample received. Other parents were only eligible to provide their own samples, and therefore would only ever receive confirmation for their own samples. The list of cases eligible to receive confirmation via email was identified and emailed the confirmation weekly on Thursday. Cases that were eligible to receive a letter confirmation were identified and posted on the second Thursday of each month.

Saliva reminders

Reminders were sent to participants who had consented to the saliva study but whose samples or whose baby's saliva samples had not been received two weeks after their interview. This could occur when the kits had been left behind by interviewers for parents to complete themselves after the interview visit. This could also occur where participants did the interview/survey remotely and were posted the saliva kits.

There were two reminders. Participants were sent the first reminder two weeks after the interview if the laboratory had not yet confirmed receipt by that time. A second reminder was sent one week later if confirmation of receipt of the sample had still not yet been received. The list of eligible cases for the first reminder was identified on a weekly basis on Thursday, starting from week 3 of each country's main fieldwork period, after checking the sample receipt list sent by the laboratory on Tuesday. The list for the second reminder was also identified every Thursday, from week 4 of each country's main fieldwork period.

The reminders were sent via email and/or text. Respondents that provided only email addresses (and consented to the study team contacting them about the study) were sent both reminders via email. If they provided only mobile phone numbers, both reminders were sent via text. Where respondents

provided both email address and mobile phone number, and they agreed for the study team to contact them via email about the study, they were sent the first reminder via email and the second reminder via text. Where they only provided email addresses and did not consent for further contact from the study team about the study, no reminders were sent. Each parent received a reminder for themselves, and Primary Informants were sent reminders relating to both themselves and their baby.

Helpline and respondent communications

All sampled parents were able to contact the study team via post, email, telephone or via the study social media accounts. A dedicated helpline team within Ipsos monitored and managed email and telephone communication with respondents and were also notified of any other contact that came through UCL channels. The team was given a full briefing on the background to the study as well as standard responses to use for common queries, and were also in regular contact with members of the research team. If respondents got in touch with CLS instead, communication was also passed on to the Ipsos helpline team for their records. Information was cascaded from the helpline to relevant teams, including interviewers, research team staff and/or the UCL team.

All respondent communications received by the helpline team were logged on a dedicated spreadsheet, referred to internally as the 'respondent comms log'. Each row of the log corresponded to an interaction with a sample member. The table below shows the standard information that was recorded each time an interaction occurred:

Table 18.3: Summary of information in respondent comms log

Heading	Explanation
Interaction number	A sequential reference number that increased by 1 for each logged interaction.
Date	The date the interaction was logged.
Contact method	The way in which the respondent got in contact – e.g., phone, email.
Query via	The first recipient of the communication – either Ipsos or CLS.
Logged by	The person who logged the interaction.
Serial ID	The unique ID assigned to the respondent in the data.
Participant name	The name of the respondent.
Reason for contact	A code detailing the reason behind the communication.

Additional information	A spare text field for any extra notes the helpline team wished to make.
ECS Message	This was the same as the reason for contact, but the code in this field was fed through to interviewer tablets to keep them updated on their cases.
Admin (Field)	A checkbox to indicate if Ipsos needed to contact the Field team as a result of the interaction.

The table below summarises the types and frequencies of respondent communications received during fieldwork. Below, there is also a summary of the protocols that were followed during fieldwork for certain types of communications.

Table 18.4: Summary of respondent communications during fieldwork

Outcome Code	Frequency	Standard Protocol
215 – Baby has died	1	Helpline team sent serial number to Field team, who processed the opt-out as a high priority.
314 – Office refusal, from one parent only	75	Helpline team sent serial number to Field team, who processed the opt-out for that respondent. If the respondent gave a reason for refusing the survey, this was noted in the log.
315 – Office refusal, whole household	224	Helpline team sent serial number to Field team, who processed the opt-out for the whole household. If the respondent gave a reason for refusing the survey, this was noted in the log.
801 – Change of appointment	8	Helpline team notified the Field team of the new appointment time/date, who then passed this on to interviewers via the ECS.
802 – New address or contact details	22	Helpline team securely passed on new address details to the Field team to log via the ECS.
803 – New information about named parents / baby	6	Helpline team securely passed on new details about the parent or baby to the Field team, notifying Research team where applicable.
804 – Returned mail or gone-away from issued address	313	Helpline team notified the Field team that the mail had been returned to sender.

F003 – Survey query/issue	11	Helpline team raised the issue to the Research team, who then progressed the situation. Typically, these queries were related to technical issues and were resolved quickly.
F004 – Incentive query	36	Helpline team raised the issue to the Research team, who then progressed the situation. In most cases, Field re-sent the incentive to the email address that the respondent used to get in contact and respondents were then reminded to check their junk/spam folders. This usually resolved the issue.
F006 – Saliva mailing query	4	Helpline team raised the issue to the Research team, who then progressed the situation. In this case, a respondent who had already provided a saliva samples received a spare saliva kit, and this was sent back to head office.
F008 – Data deletion	6	See data deletion protocol below.
F010 – Complaint	8	See complaint protocol below.
F011 – Decided to take part (after opting out)	1	Helpline team notified the Research team, who then informed Field to let the interviewer know.
F012 – Administrative records consent change	10	Helpline team raised the issue to the Research team, who then liaised with the Data Manager for the project.
F013 – Other	27	Helpline team responded via email using the guidance provided and raising with the Field/Research teams where necessary.

Complaints protocol

For the duration of fieldwork, complaints were defined as any incidents raised that were regarded as serious, unsatisfactory or unacceptable to the individual who made the complaint. The appendix provides a full protocol for dealing with complaints that was used by Ipsos and CLS during the study.

When a complaint was received, this was treated as a new interaction in the respondent comms log. Additional columns were filled out in the event of a complaint, as shown in Table 18.5 below.

Table 18.5: Additional fields for complaints in respondent comms log.

Heading	Explanation
Complaint	A checkbox to indicate if an interaction was a complaint.
If complaint, response assigned to	The name of the person/people responsible for dealing with the complaint. • Ipsos were responsible for responding to complaints about interviewer conduct of the interviewers or the online survey. • Both Ipsos and CLS were responsible for dealing with complaints about the survey processes. • CLS were responsible for dealing with complaints about the study in general.
If complaint, response due by	The date that a response from the project team was due – typically, 14 days after the complaint was first received.
Action taken – update as progresses	This was a cumulative log where each action taken in dealing with the complaint was recorded, along with the date it was taken.
Complaint categorisation	This was a categorisation of the type of complaint.

In total, we received 8 complaints during fieldwork. When complaints were received, the log was filled out as quickly as possible and project team members were securely notified of the complaint. Complaints were acknowledged within one working day, usually via the same method through which the person made the complaint. During the ensuing two weeks, the complaint was investigated by the relevant teams, and a final response was prepared to send to the complainant. Final responses were sent out and complaints were closed within 14 days of initial receipt.

Any personally identifiable information relating to the complainant or the complaint was sent securely using the CLS Data Safe Haven or Ipsos' FileTransfer system. This information was only sent internally when absolutely necessary.

Administrative records consent change protocol

Respondents were able to change their consent for any of the administrative records by getting in touch with the helpline team. The typical protocol was for the helpline team to send respondents a link to the data linkage consent change request form for respondents to fill out online. The data linkage form then automatically provided a 'receipt' of the change request. Respondents were able to change consent for

themselves or their child through the form. In total, 8 completed web forms were received, and 2 other change requests were requested directly via email/phone. For the 2 change requests requested directly via email/phone, CLS as data controller responded with confirmation of the change request.

Opt-out protocol

Respondents were able to opt-out of the study at any time by contacting the study team or Ipsos via any contact method. When an opt out was received by CLS, it was passed to the Ipsos helpline team who updated the respondent comms log with details of the new interaction. They then updated the ECS message (which was then fed through to interviewer tablets), and also informed the Field team each time a new opt-out was received, to help with ongoing management of the interviewers.

Opt-outs could either be given for the whole household, or for one parent only. When confirmation of the opt-out was sent, parents were reminded that the other invited parent would need to also contact Ipsos to opt-out if it wasn't clear the opt-out was for both parents. Where opt-outs were received from only one parent, the other parent in the household was still eligible for interviewers to contact. On these occasions, the ECS was updated so that interviewers knew one of the parents had opted out when contacting the other parent in the household.

There were a couple of instances where opt outs were also categorised as complaints, based on the nature of the respondent communication. In these cases, the helpline team marked the opt-out as high-priority/urgent when sending to Field, and the complaints protocol outlined above was followed.

Data deletion protocol

Respondents could request the deletion of their survey interview data or personal data by contacting the Ipsos Helpline team. Each parent was only allowed to request the deletion of their own data. If one parent requested the deletion of the other parent's data, the other parent was required to send a separate request before processing could occur.

In total, three[37] data deletion requests were received during fieldwork. Upon receiving a data deletion request, the Ipsos team internally validated it before notifying CLS. After validation, the Helpline team sent an acknowledgment to the respondent that CLS, as data controller, would confirm the request. CLS then sent confirmation to the respondent that the data would be deleted[38] at the end of Ipsos' contract and that no further contact would take place. During fieldwork, no actual data deletion took place; instead, these cases were flagged and excluded from in-field analyses. The data deletion process was carried out collectively at the end of all fieldwork phases.

[37] One further request was received by a parent on behalf of their spouse; the team responded asking that the individual contact the helpline themselves to request their data was deleted, as the team was unable to process requests on behalf of other participants. At the time of writing, no further notification or deletion request has been received so this case is not currently treated as a data deletion request.

[38] It was also explained that some data would be held in anonymised form for a period for the purpose of non-response analysis.

19 Response rates

Response rates by fieldwork stage

This chapter sets out the response rates for the study, including the overall family (or 'birth event')[39] level response rates, the impact of the online follow-up stage, and the fieldwork outcomes for the cases worked by the fraudulent interviewer (see also Chapter 5). It also describes the Primary Informants (PI), Additional Informants (AI) and Own Household Parents (OHP) interview response rates, outcomes for the saliva sample collection, and data linkage consent rates. It examines how response rates varied across key subgroups of interest.

Response rates throughout this chapter are unweighted for the sample design and do not include tests of statistical significance.

The numbers of interviews, families and babies reported here use Ipsos's fieldwork data prior to validation by CLS. This means the numbers here may differ from the data made available for research through the UKDS or other sharing platforms.

Overall family-level response rates

The overall family-level response rates show the proportion of eligible families (birth-events) which were classified as 'productive families'. This means that there was at least one full or partially productive interview (either the PI or AI) in the baby's main household. There may be up to two households associated with each birth event: the baby's main household is defined as the address at which the baby lives all or most of the time i.e. their main or only residence, and the non-main household is defined as the address where the baby does not reside or resides in part-time. A productive interview is any interview where at least the first two modules have been completed: where the interview is wholly completed this is a '*full*' interview, and where the interview is not wholly completed but at least two modules have been completed, this is a '*partial' interview.*

There were a small number of families (birth-events) in which there was a productive interview in the Own-Household Parent (OHP) household, and no productive interview in the baby's main household (n=15). These families are not classified as 'productive families' for the purposes of calculating an overall family level response rate to the study, and are discussed further in the OHP response section below.

Table 19.1 below shows the overall family-level response rates for the study including the main face-to-face fieldwork stage and online follow-up stage.

These response rate calculations exclude cases that were issued to a fraudulent interviewer who was discovered to have falsified interviews. These cases were reissued so that parents could be (re)interviewed. This re-issue is referred to as 'replacement fieldwork'. The response rates and number of productive interviews achieved during the replacement fieldwork are discussed separately below.

[39] Birth event indicates a birth that may be a singleton or multiple birth (e.g. twins); 'family' includes parents related to that event, whether or not they live with the child.

The **study response rate** (g) shows the proportion of eligible families (birth events) issued to the study opt-out stage which were productive i.e. where a Primary Informant or Additional Informant in the baby's main household completed an interview, either in the main or online follow-up fieldwork stage (f/a).

The **survey response rate** (h) shows the proportion of eligible families (birth events) issued to the face-to-face fieldwork stage which were productive i.e. where a Primary Informant or Additional Informant in the baby's main household completed an interview, either in the main or online follow-up fieldwork stage (f/b). Study opt-outs were not issued to the face-to-face fieldwork stage and therefore are excluded from this response rate.

The table also shows the *main survey response rates*, which only includes the response rates during the main fieldwork stage and does not include response during the online follow-up fieldwork stage:

The **main survey response rate** (i) shows the proportion of eligible families (birth events) issued to the face-to-face fieldwork stage which were productive i.e. where a Primary Informant or Additional Informant in the baby's main household completed an interview in the main fieldwork stage (e/b).

The **main survey refusal rate** (j) shows the proportion of eligible families (birth events) issued to the face-to-face fieldwork stage which were unproductive (i.e. no interviews were achieved in the baby's main household) due to refusal by at least one parent. This includes all refusals during the main fieldwork stage, including office refusals, and refusals to the interviewer before and after doorstep screening, but excluding refusal before the fieldwork stage (i.e. at the opt-out stage).

The **main survey untraced/not located rate (k)** and **non-contact rate (l)** are also shown, which are the proportion of eligible families (birth events) issued to the face-to-face fieldwork stage which were unproductive (i.e. no interviews achieved in the baby's main household) due to the interviewer not being able to locate the family and due to the interviewer not being able to make contact with anyone at the address. Non-location cases include cases where the address could not be located by the interviewer or where the family had moved from the address and a new address could not be located. These are the untraced/not located and non-contact rates during the main face-to-face fieldwork.

Some of these refusals and other unproductive cases subsequently took part in the online follow-up survey.

For unproductive cases where the screener was not completed and it was not possible to establish who was resident at the address, the mother's address from the sample file ('address 1') was treated as the baby's main household.

Table 19.1: Fieldwork outcomes and response rates outcomes for baby's main household

Main household defined as household where baby lives all/most of the time; where unknown, Address 1 (mother address from sample) used as baby's main household.

			Country Breakdown			
ref		**Total**	**England**	**Wales**	**Scotland**	**Northern Ireland**
a	Eligible families issued to opt-out stage (birth events)	3730	2083	456	552	639
a1	Number of opt-outs (birth event)	97	19	9	13	56
a2	Opt-out rate among eligible families issued to opt-out stage	3%	1%	2%	2%	9%
b	Eligible families issued to field (birth events)	3633	2064	447	539	583
b1	*Unable to find address*	52	42	3	3	4
b2	*Untraced movers*	254	187	26	26	15
c	Families with screener not completed	1414	796	171	193	254
c1	*Office refusals during fieldwork*	97	51	13	12	21
c2	*Other refusals*	874	466	120	129	159
c3	*No contact at household*	246	146	28	22	50
c4	*Other reason for no response*	197	133	10	30	24
d	Number of eligible families with a screener completed identifying a PI household	1913	1039	247	317	310
d1	*Screener complete, refusal*	148	109	10	*18*	11
d2	*Screener complete, other reason no interview*	48	30	6	*8*	4
e	Number of eligible families with at least one productive PI/AI achieved in main fieldwork[40]	1717	900	231	291	295
f	Total number of eligible families with at least one productive PI/AI achieved in main or online follow-up fieldwork[42]	1842	959[41]	244	319	320

[40] These figures do not include an additional 22 productive families (13 in England, 9 in Wales) achieved during the main fieldwork period, but on addresses that were in part covered by the fraudulent interviewer. To help in calculating household-level response rates, any households that the fraudulent interviewer worked on (either at first or reissue) have been excluded and are reported separately in later tables.

[41] Includes two responses in England submitted after the closing date for the online follow-up study.

g	**Study response rate** (at least one interview in the child's main household divided by eligible study families issued to opt-out stage) f/a	49%	46%	54%	58%	50%
h	**Survey response rate** (at least one interview in the child's main household during main fieldwork and online follow-up fieldwork divided by the number of families issued to field) f/b	**51%**	**46%**	**55%**	**59%**	**55%**
Main survey response rates						
i	Main survey response rate based on interviews during main fieldwork period among families issued to field (at least one interview in the child's main household) e/b	47%	44%	52%	54%	51%
j	Main survey refusal rate during main fieldwork (c1+c2+d1/b)	31%	30%	32%	29%	33%
k	Main survey untraced/not located rate (b1+b2)/b	8%	11%	6%	5%	3%
l	Main survey non-contact rate (c3+c4+d2)/b	14%	15%	10%	11%	13%

Impact of the online follow-up survey on the survey response rates

Table 19.2 below shows the number of households sent an invitation to the online follow-up survey. The figures exclude the cases issued to the online follow-up survey mistakenly, and therefore do not report an additional two 'new' parents who completed the online follow-up survey in households where another parent had done the main interview during the face-to-face fieldwork period. The table below includes two cases in Wales that were part of the replacement fieldwork period and which completed via the online follow-up survey. The response rate was almost 10 percentage points higher in Scotland and Northern Ireland than in England and Wales, which is likely linked to the higher incentives offered for the online follow-up completion.

Table 19.2: Online follow-up survey sample sizes and response rates by country

	Total	England	Wales	Scotland	Northern Ireland
Number of households allocated to online follow-up survey (excluding those incorrectly invited)	1,324	787	212	179	146
Total number of completes (full/partial)	128	60	15	28	25
Response rate to online follow-up survey	**10%**	**8%**	**7%**	**16%**	**17%**
Response by household type					
Number of assumed PI households allocated to online follow-up survey[42]	1,130	656	168	160	146
Number of households with PI completes (full/ partial)	127	59	15	28	25
PI response rate to online follow-up survey	11%	9%	9%	18%	17%
Number of assumed OHP households allocated to online follow-up survey	194	131	44	19	n/a
Number of households with OHP completes (full/partial)	1	1	0	0	0
OHP response rate to online follow-up survey	1%	1%	0%	0%	n/a

Fraudulent interviewer cases

During fieldwork, the team identified an interviewer working in England and Wales who had falsified parts of their interviews (see Chapter 5). In most cases, it appeared that the interviewer had approached the participants but had administered a far shorter interview and so had potentially falsified large parts of the interview. As a result, the interviews conducted by this interviewer were removed from the dataset. The response rate calculations above exclude any households that the fraudulent interviewer worked on, to give an accurate picture of the response rate among legitimate fieldwork efforts (since the response rate with those cases included is likely to over-state the true response rate, and the response rate including the reissued cases is likely to under-state the true response rate).

Where interviews had been conducted at an address allocated to the fraudulent interviewer, the addresses were reissued to other interviewers to try to reinterview participants with the full questionnaire in the 'replacement fieldwork' phase. The table below shows the interviews achieved among the cases reissued to other interviewers, including interviews with PIs/AIs at the main household (e) and interviews with OHPs (f). As expected, the replacement fieldwork response rate was lower than achieved during the main fieldwork period as some participants were unwilling or unable to complete the interview again. Note that figures in the table below are at the household level.

[42] Those who were 'Address 1' serials were assumed to be PI households for the purposes of this table, and those with Address 2 serials were assumed OHP households (note the father's address was allocated to the second serial where there were two addresses associated with a birth event). Ultimately, two responding parents were classified as PIs but were at Address 2 serials and these two cases are classified as 'assumed PI households' in this table.

The table also includes 22 households (13 in England and 9 in Wales) where a legitimate interview was achieved at a household worked by the fraudulent interviewer in the main fieldwork period (g), following investigation (in total, 29 interviews were done over these 22 households). These interviews are excluded from the previous table because the fraudulent interviewer had worked the address in some capacity. The two main reasons for noting legitimate interviews separately (g) here were:

1) One parent interview at the household had been conducted by a different interviewer even if the fraudulent interviewer had conducted the other parent interview (this could arise because of reissuing the address)
2) Web surveys were completed at the household allocated to the fraudulent interviewer, which would have been done by the respondent without interference from the interviewer.

Those legitimate interviews have been included in the table below (g).

Some households were not reissued to another interviewer to attempt a replacement interview (b-c); this was because some had been contacted by Ipsos following their interview to complete a short telephone interview about their experience of taking part in Generation New Era and we did not want to bombard those households with requests to take part in surveys. There were also four cases where parents had opted out or asked to be withdrawn from the study who were not approached again.

Table 19.3: Outcomes for households reissued due to fraudulent interviewer

			Country Breakdown	
ref		**Total**	**England**	**Wales**
a	Households issued to fraudulent interviewer (first or reissue cases)	287	116	171
b	Number of households with at least one interview 'achieved' by fraudulent interviewer (full/partial interview with any parent type)	182	80	102
c	Total households reissued to replacement interview phase	149	64	85
d	Among those in replacement fieldwork, total households screened	61	34	27
e	Number of main households with at least one interview achieved (full/partial PI or AI) in replacement fieldwork	52	31	21
f	Number of non-main households with at least one OHP or AIOHP interview achieved (full/partial) in replacement fieldwork	2	1	1
g	Number of main households with legitimate interview in main fieldwork (i.e. by another interviewer/web survey)	22	13	9
h	**Total household interviews achieved across households issued to fraudulent interviewer (e+f+g)**	**76**	**45**	**31**
i	Number of productive **birth events** across households issued to fraudulent interviewer (e+g)	74	44	30

Total number of interviews achieved in Wave 1

The table below sets out the total number of achieved interviews, and achieved families, in the first wave of the study across all the strands of fieldwork. This includes achieved cases noted in Table 19.3 that were affected by the fraudulent interviewer (a2); 'OHP-only' families where an interview was only achieved at the OHP household but not at the 'main' household (and therefore was not included in the earlier tables); and cases achieved during the online follow-up survey fieldwork.

At least one parent was interviewed across 1,918 main families (a, i.e. the household where the baby was living all or most of the time), and at least one parent was interviewed in 15 families in the OHP household (b), for a total of 1933 families.

The table includes the total number of interviews broken down by interview type: PIs, AIs in the 'main' household, OHPs, and Additional Informants in OHP households (AIOHPs, row f). A total of 3,132 productive interviews across all interview types was achieved.

In total, 60 OHPs were interviewed. This includes 15 'OHP-only' families, where no interview was achieved in the main household, and 45 OHPs where an interview was achieved with either the PI and/or AI in the main household (in 44 of the 45 cases, a PI was interviewed; there was only one case where an OHP and AI were interviewed for the same birth event/family). Just four AIOHPs were surveyed; in all four cases the OHP was also interviewed. In three of these cases no interview was achieved in the main household, and in one case a PI was interviewed in the main household.

The online follow-up survey was intended for PIs or OHPs only. However, the survey was issued in error to a number of productive families in England and Wales, and some families that had already taken part in the main interview also completed an online follow-up survey. Two of these responses from productive families were completed by a parent that had not already participated in the study, and these two responses are classified as AIs (d4).

Table 19.4: All achieved families and interviews in Generation New Era Wave 1

		Total	England	Wales	Scotland	Northern Ireland
a	**Total number of productive families (PI and/or AI full or partial interview)**	1918	1003	276	319	320
a1	*Number of* **productive** *families from main fieldwork, including legitimate interviews on fraudulent interviewer addresses*	1739	913	240	291	295
a2	*Number of* **productive** *families from replacement fieldwork (fraudulent interviewer cases)*	52	31	21	0	0
a3	*Number of* **productive** *families from online follow-up fieldwork*	127	59	15	28	25
b	Total number of OHP-only families	15	13	2	0	0
c	**Total number of PI interviews**	**1908**	**994**	**276**	**319**	**319**
c1	*Main fieldwork*	1710	894	231	291	294
c2	*Achieved in replacement fieldwork (fraudulent interviewer)*	52	31	21	0	0
c3	*Legitimate interview on address worked by fraudulent interviewer*	19	10	9	0	0
c4	*Online follow-up fieldwork*	127	59	15[43]	28	25
d	**Number of AI (in main household) interviews**	**1160**	**585**	**181**	**198**	**196**
d1	*Main fieldwork*	1116	562	160	198	196
d2	*Achieved in replacement fieldwork (fraudulent interviewer)*	32	16	16	0	0
d3	*Legitimate interview on address worked by fraudulent interviewer*	10	6	4	0	0
d4	*Online follow-up fieldwork*	2	1	1	0	0
e	**Number of OHP interviews**	**60**	**42**	**8**	**7**	**3**
e1	*Main fieldwork*	57	40	7	7	3
e2	*Achieved in replacement fieldwork (fraudulent interviewer)*	2	1	1	0	0
e3	*Online follow-up fieldwork*	1	1	0	0	0
f	**Number of AIOHP interviews**	**4**	**4**	**0**	**0**	**0**

Response rates by informant type (PI/AI/OHP)

Participating informants among productive families

Table 19.5 details how many parent interviews were achieved among productive families (where at least one PI or AI interview was achieved). The table starts with reporting the number of productive main families either in the main or online follow-up fieldwork (a1), and in the main fieldwork only, excluding the online follow-up fieldwork (a2). In the great majority of productive main families (i.e. those where the baby was living), a productive interview was achieved with the PI (99%, rows b1-b3). On the converse of

[43] This figure includes two cases in Wales that were part of replacement fieldwork but ultimately completed the online follow-up version of the survey.

this, in 1% of productive families the only interview achieved in the child's main household was with the AI.

Rows c-h set out, for these achieved families, how often a second parent was identified – either at the same household (Additional Informant) or at a separate address (Own Household Parent). An Additional Informant was identified in 1,454 productive families, with 76% of these AIs completing an interview. An Own Household Parent was identified for 242 of the productive families, with 17% of these OHPs completing an interview.

Comparing AI and OHP response rates between the countries, the Additional Informant response rate appears to be lower in Northern Ireland than other countries by 3 to 7 percentage points. The slightly lower response rates may be attributable to only mothers being named on the sample in Northern Ireland, whereas in other countries both parents were named on the sample and were approached in their own right. The number of Own Household Parents identified and interviewed was substantially smaller in Northern Ireland than other countries (by 10 to 21 percentage points), likely reflecting that details for Own Household Parent addresses were not available on the sample for Northern Ireland.

Table 19.5: Informant response rates, among productive main families (excluding replacement interview cases)

			Country			
		Total	**England**	**Wales**	**Scotland**	**Northern Ireland**
a1	Total number of **productive families** - either *in main or online follow-up survey* fieldwork	1842	959	244	319	320
a2	Total number of **productive families** - achieved in the main fieldwork only - *excluding the online follow-up survey fieldwork*	1717	900	231	291	295
	Primary Informants					
b1	Total number of productive families with a **PI interview**, achieved during either *main or online follow-up survey* fieldwork	1831	949	244	319	319
b2	Total number of productive families with a **PI interview** in main fieldwork period only - *excluding the online follow-up survey fieldwork*	1706	890	231	291	294
b3	% main households with a PI interview (b1/a1)	99%	99%	100%	100%	100%
	Additional Informants					
c	Number of productive families where **AI identified** in household in main fieldwork	1454	724	202	261	267

d	Of these, number of full/partial **interviews with AIs**[44]	1112[45]	557	161	198	196
e	Additional Informant response rate, among main households with an AI identified during main fieldwork period (d/c)	76%	77%	80%	76%	73%
	Own Household Parents					
f	Number of productive families where **OHP identified** in main fieldwork period (OHP screened directly or identified by a PI during the PI interview)	242	145	30	25	42
g	Of these, number of full/partial **interviews with OHPs**	41[46]	26	5	7	3
h	Own Household Parent response rate, of main households with an OHP in the main fieldwork period (g/f)	17%	18%	17%	28%	7%

Among the 1,918 main families interviewed, an interview was achieved with one parent in that main household in 769 cases and with two parents in the main household in 1,144 cases. In another 5 cases parents at two separate addresses both reported themselves to be the PI, so there were two main households for the same family.

AI fieldwork response rate

Table 19.6 below shows more detail for the Additional Informant responses, including a summary of unproductive outcomes, during the main fieldwork period. This includes the number of refusals (9% of AIs identified in productive main households refused), non-contacts (4%) and those not responding for other reasons (12%). Other reasons for not responding included the parent being away during the entire fieldwork period, being unable to take part due to physical disabilities, or the web survey being placed by an interviewer but no further follow-up information.

[44] A small number of productive families were issued to the Online follow-up survey in England and Wales in error. As a result, some productive families completed the online follow-up survey, including two parents who had not previously completed an interview. These two parents (one in Wales, one in England) are classified as AIs.

[45] Another four AI interviews are not included in this total because they were conducted at addresses that were not classified as the 'main address' for the birth event (e.g. because parents at two separate addresses both claimed to be the PI, and only one was selected as the main address)

[46] A total of 45 OHPs were interviewed where a PI and/or AI was interviewed in the main household. Four cases are not reported in this table because either the main household or OHP interviews were done as part of the replacement fieldwork or online-follow up survey.

Table 19.6: Additional Informant outcomes and response rates during main fieldwork period – for productive main households

			Country			
Ref		**Total**	**England**	**Wales**	**Scotland**	**Northern Ireland**
a	Productive main households where an Additional Informant was identified during screening	1454	724	202	261	267
b	Among those households, refusals for AI element	130	55	12	29	34
c	No contact/ limited contact with AI at HH	51	25	6	2	18
d	Other reason for no response from AI	168	92	23	32	19
e	Total no. of productive households with AI completes (full/partial)	1112[47]	557	161	198	196
f	Additional Informant **response rate**, of those identified by screening among productive households (e/a)	76%	77%	80%	76%	73%
g	Additional informant **refusal rate**, of those identified by screening among productive households (b/a)	9%	8%	6%	11%	13%
h	Additional informant **non-contact** rate, of those identified by screening among productive households (c/a)	4%	3%	3%	1%	7%
i	Additional informant **other reasons for not interview** rate, of those identified by screening among productive households (d/a)	12%	13%	11%	12%	7%

[47] Another four AI interviews are not included in this total because they were conducted at addresses that were not classified as the 'main address' for the birth event (e.g. because parents at two separate addresses both claimed to be the PI, and only one was selected as the main address)

OHP fieldwork response rate

Table 19.7 below shows the OHP response rate was 17% among all productive main families during the main fieldwork period (row c - i.e. OHPs interviewed at a second address in families where a full/partial PI or AI interview was achieved on the first/main address). The base for this figure includes households where OHPs were screened directly, and cases where a PI interview confirmed an OHP existed at another address. This therefore covers both OHPs previously known from the sample frame and then confirmed by screener/PI (i.e. where we had two addresses on the sample frame) as well as 'new OHPs' discovered during fieldwork (e.g. in cases where parents are no longer living together or where the birth only had the mother on the birth registration).

A main household (PI or AI) interview was not achieved for fourteen OHPs interviewed during the main fieldwork period (another OHP-only survey was completed during the online follow-up stage – see below) - these 15 OHP interviews are not counted in Table 19.7 below. An OHP interview was achieved in 45 households where a main household interview was conducted (row d of Table 19.7): four of these OHP interviews are not reported in row b of Table 19.7, because the main or OHP interview was conducted as part of the online follow-up or the OHP was interviewed during the replacement interview period.

Our expectation was that OHP response rates would be higher among OHPs that were relatively engaged in their baby's lives. Among those OHPs who reported seeing their child at least 2 days per month, or where PIs reported that OHPs saw the baby at least twice per month, the response rate among for OHPs was 19% (based on OHPs where a full/partial interview was achieved at the main address). Of OHPs (either reported by the PI or directly by the OHP) who saw their child less than 2 days a month (67), seven were interviewed during the main fieldwork period, for a response rate of 10% (not reported in table 19.7).

The OHP response rates were low across all countries. They were particularly low in Northern Ireland where OHP details were not provided on the sample and where interviewers had limited success in tracing and contacting 'new' OHPs identified through PI interviews. Just 7% of identified OHPs were interviewed in Northern Ireland (compared with around 20% of OHPs identified/on the sample across England, Wales and Scotland in productive families).

Table 19.7: OHP main survey response rates, for productive families (main fieldwork period only; not including online follow-up survey outcomes or interviews)

			Country			
Ref		**Total**	**England**	**Wales**	**Scotland**	**Northern Ireland**
a	Total number of productive families where an OHP was identified in main fieldwork period (i.e. OHP screened directly or PI interview identified an OHP, among families where a PI or AI was interviewed at the main household)	242	145	30	25	42
b	Among them, total no. of households where there was OHP partial/full complete interview	41	26	5	7	3
c	OHP response rate, among productive main families (b/a)	17%	18%	17%	28%	7%
d	Total number of households where there was OHP partial/full complete interview, including replacement interviews and online follow-up cases	45	29	6	7	3
Response by contact with child						
e	Of OHPs interviewed, number where OHP reported seeing child at least 2 days per month	33	23	5	4	1
f	Number of households where no OHP interview achieved, but where the PI reports OHP sees child at least 2 days per month	143	83	19	12	29
g	Total no. of households where OHP sees child at least 2 days per month (either reported by PI where OHP not interviewed, or directly by OHP) (e+f)	176	106	24	16	30
h	OHP response rate, among productive main families where OHP sees child at least 2 days/ month (e/g)	19%	22%	21%	25%	3%

In addition to the above, across the 66 OHP households screened, 6 AIOHPs were identified, all of them in England. A total of 4 AIOHPs took part in an interview (see table 19.4, above).

Table 19.8 below shows the outcomes for both 'main households' (i.e. those known or suspected to be the household of the PI/baby) and 'non-main households' (the remaining addresses, known or suspected to be OHP addresses) during main fieldwork.

At least one interview was achieved at 47% of eligible 'main' households issued, compared with 13% of non-main households issued to field. Rates of refusals were similar in 'main' and 'non-main' households: 31% and 29%, respectively, but the rate at which parents could not be traced was notably higher for non-main addresses (19% compared with 8% of main households), as were 'other' reasons for not obtaining an interview (28% compared with 4%) – this largely includes cases with outcomes that only applied to non-main addresses such as households where limited address details were given by the PI which did not allow parents to be traced, and information packs being forwarded by PIs with no further contact made with the target OHP. The 'other' outcomes also include parents at the address being away/unavailable during the fieldwork period.

Table 19.8: Final household outcomes for eligible main and 'non-main' households (outcomes for 'non-main' households include cases that were productive and unproductive at the main household).

	a	b	c	d	e
	Productive	Refusal	No contact	Not traced	Other reason for no interview
Total % of main households	47%	31%	10%	8%	4%
Total % non-main households	13%	29%	12%	19%	28%

Response rates by sample characteristics

Main survey response rates by subgroup

Table 19.9 below shows the main survey family response and refusal rates for a number of subgroups. This analysis is based on main fieldwork (and excludes online follow-up respondents, replacement interview respondents and legitimate interviews achieved on the addresses issued to the fraudulent interviewer) to give a picture of performance in the field. Response rates were higher among some demographic groups, including those living in more affluent areas (IMD 7-10) and older mothers (aged 35+), and were lower among those living in London, the North East and the South East. Response rates were slightly higher among families not selected for the biosample study than those who were asked to provide a saliva sample (48% vs. 44%). N.b. differences are indicative and have not been tested for statistical significance.

Table 19.9: UK-level main survey response rates and refusal rates for key subgroups of interest

	Main survey response rate (during main fieldwork) (i in Table 19.1)	Main survey refusal rate (during main fieldwork) (j in Table 19.1)	Combined main survey untraced/not located and non-contact rate (k and l in Table 19.1)
Biosample group			
Biosample cases	44%	33%	23%
Non-biosample cases	48%	31%	21%
IMD			
IMD 1-3 (most deprived areas)	44%	31%	25%
IMD 4-6	45%	33%	22%
IMD 7-10 (least deprived areas)	57%	29%	14%
Region of England			
East Midlands	55%	28%	17%
East of England	54%	34%	12%
London	45%	26%	29%
North East	45%	34%	21%
North West	54%	25%	21%
South East	49%	36%	15%
South West	54%	33%	13%
West Midlands	53%	33%	14%
Yorkshire and the Humber	54%	33%	13%
Ethnicity[48]			
White British/ Irish/ Scottish/ Welsh	48%	33%	19%
Other White	43%	27%	30%
Mixed (any mixed ethnicities)	44%	27%	29%
Asian/Asian British - Indian	48%	30%	22%
Asian/Asian British - Pakistani	46%	32%	22%
Asian/Asian British - Bangladeshi	52%	22%	26%
Asian/Asian British - Any other Asian background	45%	24%	31%
Black/Black British – Caribbean	45%	28%	27%
Black/Black British – African	48%	22%	30%

[48] Based on England, Wales and Scotland (ethnicity not provided for Northern Ireland) – uses child ethnicity from the sample frame information

Black/Black British – other Black background	36%	18%	46%
Other ethnic groups, including Chinese	35%	31%	34%
Ethnicity not stated	48%	38%	15%
Mother age at delivery			
25 and younger	41%	30%	29%
26-34	47%	33%	20%
35+	55%	27%	18%

Age profile of babies

Generation New Era aimed to interview the majority of parents when their baby was 9-11 months old. Table 19.10 below details the distribution of baby's age at time of interview (unweighted, among productive families only) to evaluate how successful the fieldwork design was at capturing babies during the desired time period.

The table below shows that mean age varies by country due to differing fieldwork dates and birth months. In England, Wales and Scotland, babies were born in November and December 2022. In England and Wales, where fieldwork began when the oldest babies had just turned 10 months, babies were 8-19 months (mean age 11.6 months). In Scotland, fieldwork began when the oldest babies were 11 months, and babies were 11-20 months (mean age 13.9 months).

In Northern Ireland where babies were born in June and July 2023, and where fieldwork started when the oldest babies were 10.5 months, babies were 8-14 months (mean age 10.5 months).

Most of the achieved sample babies were aged between 9-13 months old (70.7%).

Table 19.10: Age of child/ren in productive main families (family-level data)

Child age	UK	England	Wales	Scotland	NI
8-9 months	3.9%	4.9%	1.1%	0.0%	6.9%
9-10 months	17.9%	19.4%	15.9%	0.0%	33.1%
10-11 months	23.0%	26.2%	24.9%	0.0%	34.4%
11-12 months	19.9%	22.2%	28.9%	10.0%	15.0%
12-13 months	9.9%	7.3%	7.9%	26.0%	3.8%
13-14 months	8.3%	5.1%	4.0%	26.0%	4.4%
14-15 months	5.9%	4.7%	3.6%	15.0%	2.5%
15-16 months	5.1%	5.2%	5.4%	9.4%	0.0%
16-17 months	3.5%	4.2%	5.8%	3.1%	0.0%
17-18 months	1.6%	0.8%	2.5%	4.7%	0.0%
18-19 months	0.6%	0.0%	0.0%	3.4%	0.0%
19-20 months	0.4%	0.1%	0.0%	2.2%	0.0%
Totals	1918	1002	277	319	320

There were 1,960 babies across the 1,918 productive main families in the UK (1,025 in England, 286 in Wales, 326 in Scotland and 323 in Northern Ireland). There were another 16 babies in non-main families (i.e. OHP-only households, where no PI or AI was interviewed).

Response rates by incentives group

Main survey response rates by different incentive groups

The unconditional £5 note and the bib had mixed impacts on fieldwork response rates. In all countries, except Northern Ireland, the £5 note was associated with higher response rates than the bib. The £5 note was also associated with higher response rates than the group which received no unconditional incentives. However, the impact of the bib compared to no unconditional incentive varied from country to country. The overall response rate for the group receiving no unconditional incentive was higher than that of the group receiving the bib. The response rates by unconditional incentive group can be found in Table 19.11.

Table 19.11: Main Survey Response rates by unconditional incentive group

	£5 note	Bib	No unconditional incentives
England (n = 2064)	47.5%	40.1%	43.1%
Wales (n = 447)	61.0%	50.3%	43.8%
Scotland (n = 539)	57.5%	50.6%	53.9%
Northern Ireland (n = 583)	48.2%	51.8%	51.8%
All countries (n = 3633)	50.8%	44.9%	46.2%

The response rates for the conditional incentives varied by country and incentive group. The response rates among those receiving the higher incentive of £20 was generally higher than those receiving £10. This was not true for Wales, where those in the £20 incentive group had a lower response rate than the £10 group. Differences should be interpreted with caution as the numbers in each incentive group for Wales, Scotland and Northern Ireland are fairly small. The response rates per country and incentive group can be found in table 19.12.

Table 19.12: Response rates by conditional incentive group

	£10 voucher	£20 voucher
England (n = 2064)	41.4%	45.8%
Wales (n = 447)	52.7%	50.7%
Scotland (n = 539)	53.2%	54.8%
Northern Ireland (n = 583)	48.6%	52.6%
All countries (n = 3633)	45.7%	48.8%

The combined impact of the conditional and unconditional incentive allocations is presented in table 19.13.

Table 19.13: Response rates by incentive group

Base includes the total number of eligible main households issued to fieldwork.

	No unconditional & £10 conditional	No unconditional & £20 conditional	£5 unconditional & £10 conditional	£5 unconditional & £20 conditional	Bib & £10 conditional	Bib & £20 conditional
England (n = 2064)	42.8%	43.4%	45.4%	49.7%	35.8%	44.4%
Wales (n = 447)	44.6%	42.9%	56.3%	65.3%	57.1%	43.8%
Scotland (n = 539)	56.8%	51.1%	58.9%	56.2%	43.8%	57.1%
Northern Ireland (n = 583)	53.5%	50.0%	45.5%	51.0%	46.8%	56.6%
All countries (n = 3633)	46.8%	45.5%	48.7%	52.8%	41.5%	48.2%

Online follow-up response rates by different incentive groups

As shown below, the online follow-up survey added 3-5 percentage points to the survey response rate. There was variation across the countries, with the online follow-up survey having a greater impact on response rates in Scotland and Northern Ireland – where higher incentives were offered for completing the online follow-up survey – than in England and Wales.

Table 19.14: Survey response rates[a] before and after online follow-up survey by country

	Main survey response rate before online follow-up survey	Survey response rate after online follow-up survey	Difference in response rates (= After - Before)
Total	47.2% (n=1717)	50.7% (n=1842)	3.4% (n=125[49])
England	43.6% (n=900)	46.4% (n=959)	2.9% (n=59[50])
Wales	51.7% (n=231)	54.6% (n=244)	2.9% (n=13[51])
Scotland	54.0% (n=291)	59.2% (n=319)	5.2% (n=28)
Northern Ireland	50.6% (n=295)	54.9% (n=320)	4.3% (n=25)

[49] Does not include 1 OHP case in England or 2 replacement cases in Wales reported in Table 19.18.

[50] One other complete in England was an OHP – not reported in this table.

[51] Another 2 cases in Wales completed the online follow-up survey as part of the replacement fieldwork period – not reported in this table.

[a] Survey response rates (productive main families of eligible birth events issued to fieldwork).

As additional incentives were offered to those in the lower IMD deciles (IMD 1-3) in Scotland and Northern Ireland, Table 19.15 shows the impact of the online follow-up survey on survey response rates by IMD group; for example, the online follow-up survey increased the overall survey response rate by 3 percentage points among households living in the lowest IMD deciles in England. The numbers invited to the online follow-up survey are low in each group, so these figures should be interpreted with caution. Nevertheless, the findings suggest that the online follow-up survey uptake is highest among those in the lowest and the highest IMD deciles, and slightly lower for the middling IMD groups, and this pattern is true both where larger incentives were offered for the online follow-up survey and those where the incentives were the same as the main survey. While the online follow-up survey impact is higher across the board in Scotland and Northern Ireland (where higher incentives were offered), the impact on response for households in IMD groups 1-3 is not markedly greater than for those in IMD groups 7-10, even though households in IMD groups 1-3 were targeted with even higher incentives.

Table 19.15: Difference in survey response rates after online follow-up survey by IMD group
(In Scotland and Northern Ireland, those in IMD groups 1-3 were offered an incentive £20 higher than the incentive offered to complete during the main fieldwork period; others were offered £10 more. In England and Wales, the incentive for completing the online follow-up survey was the same as the incentive offered during the main fieldwork period)

	IMD 1-3	IMD 4-6	IMD 7-10
England	3.0%	2.1%	3.0%
Wales	3.1%	3.1%	2.6%
Scotland	5.4%	4.4%	5.6%
Northern Ireland	4.7%	3.9%	4.3%
UK	3.5%	3.0%	3.8%

Survey completion by mode

Main survey completion

Parents had the choice of completing the main survey face-to-face, by telephone or Teams with an interviewer or, in some situations, completing a web survey (PIs were not offered this apart from in rare circumstances). Chapters 13-15 have more detailed information on the modes offered, and completion rates by mode for each type of parent interview and country. Table 19.16 below details completion for all responding parents by mode.

Table 19.16: Mode of main survey completion, by type of respondent

	CAPI	CATI	TEAMS	CAWI	Total
PI	92%	7%	1%	0.3%	1781
AI in the main/PI household	58%	8%	1%	34%	1,158
OHP	64%	17%	2%	17%	59
AI in OHP household	100%	No interview	No interview	No interview	4

The great majority of parents who started an interview or web survey went on to complete it, as shown below. The number of breakoffs during the introduction was relatively high for those completing by telephone (11.8% of all starting a telephone interview) or web (5.1% of those starting a web survey). There was no evidence to suggest that the longer introduction associated with the opt-out consent condition led to a higher rate of interviews being abandoned, although the numbers breaking off are very small across the board (of those abandoning an interview before completing the household grid, 45 were in the opt-in consent groups and 49 were in the opt-out consent group).

Table 19.17: Proportion of participants completing interview, or breaking off before complete, by mode (including main, reset and legitimate cases, but excluding non-response follow-up)

	Face-to-face	Telephone	Teams video-call	Web
Number starting interview/survey in each mode	*(2,393)*	*(246)*	*(29)*	*(433)*
Complete interview	97.9%	86.6%	96.6%	92.6%
Partial interview	0.4%	0.8%	3.4%	1.2%
Incomplete introduction (not counted as partial interview)	1.5%	11.8%	-	5.1%
Complete introduction but not household grid (not counted as partial interview)	0.3%	0.8%	-	1.2%

Online follow-up completion

Table 19.18 below shows the outcomes for all those accessing the online follow-up survey. A total of 107 participants across the study completed the full online follow-up survey, and another 21 were classified as partial completes. Thirteen were screened out of the study because they refused to consent to taking part at the introduction. In total, 34 broke off while completing the survey (and did not progress far enough to be classified as partially completing). A higher proportion of those who accessed the survey went on to complete it in Scotland and Northern Ireland, than in England and Wales; this may be linked to the higher incentives on offer in Scotland and Northern Ireland for completion.

Table 19.18: Online follow-up survey outcomes by country

	Total N	England	Scotland	Wales	Northern Ireland
Screened out	13	8	0	5	0
Broke off	34	20	7	5	2
Partially complete	21	11	4	2	4
Fully complete	107	49	24	13	21
All accessing online follow-up survey[52]	175	88	35	25	27

[52] Excluding those issued in error.

Table 19.19 below indicates how far those who broke off the online follow-up survey progressed through the script. The great majority abandoned the survey at the Introduction or Household grid modules at the start of the survey.

Table 19.19: Module in which breakoffs occurred (for all broken off or partially complete online follow-up surveys)

Module	Number of breakoffs
Intro	18
Household grid	15
Background	4
About partner	1
Income	3
Child health	1
Child activities	3
CASI	2
Childcare	2
Data linkage	2
Contact details	4
Total	55

Data linkage consent rates

The tables below show the consent rates by country, consent condition and record type within the interview, across all eligible interviews. Among all parent respondents, 1,584 were allocated to the Opt-in consent condition and 1,458 were allocated to the Opt-out consent condition. Of those parent respondents allocated to the Opt-in group, 16 were partial interviews where the opt-in module was not completed. Therefore, the base reported below for the Opt-in tables reflect the number of parent interviews where the opt-in module was completed.

Table 19.20: Number of parents allocated to opt-in and opt-out data linkage groups

	Opt-in-allocated interviews	Opt-out-allocated interviews
Total parent interviews	1584	1458
Partial interviews (Opt-in module not asked)	16	n/a
Base for data linkage consent tables	1568	1458

Tables 19.21 and 19.22 show the opt-in consent rates by country for parents and children respectively.

Table 19.21: Opt-in consent rates for parent data linkage by country, based on all parents (within opt-in group) completing full/partial interview (excluding partial interviews that did not answer data linkage module)

	Adult consents (all countries)	England	Wales	Scotland	Northern Ireland
Health Records	80%	75%	88%	85%	86%
Education Records	84%	76%	92%	89%	89%
Social Care Records	80%	73%	89%	88%	87%
Base	1568	816	245	252	255

Table 19.22: Opt-in consent rates for child data linkage by country, based on all PIs (within opt-in group) completing full/partial interview

	PI consents for baby linkage (all countries)	England	Wales	Scotland	Northern Ireland
Ineligible[53]	2%	3%	1%	0%	0%
Health Records	85%	81%	89%	88%	91%
Education Records	87%	81%	92%	94%	91%
Social Care Records	83%	77%	89%	91%	91%
Base (total PI partial / full complete interviews)	960	499	147	154	160

Sixteen parent interviews allocated to the opt-in group did not complete the opt-in consent module (all partial interviews) as noted in Table 19.20. Thirteen of these partially interviewed parents were PIs, meaning the child's consents were not collected either. A further 15 children's consents are excluded from these tables because the person completing the PI interview answered no/PNTS/DK to the question confirming whether they have legal parental responsibility, making them ineligible to give

[53] PI indicated in interview they did not have legal parental responsibility for the child, and therefore was ineligible to give consent. As described in Chapter 6 on the questionnaire, the questions in this module to confirm eligibility were adapted early in the fieldwork period as interviewers/participants appeared to be misunderstanding the question, which meant that an unrealistically high number of respondents were being classified as ineligible.

consent for the child. These figures include any consents from second interviews done with cases originally completed with the fraudulent interviewer (n=86).

All cases allocated to the Opt-out consent group completed this section as this question was placed within the first module (i.e. no partial interviews were missing consents as for the opt-in module). The consent rates for the Opt-out group are presented in table 19.23.

Table 19.23: Opt-out consent and refusal rates, based on all parents (within opt-out group) completing an interview (opt-out consent covers consents for both parent and child)

	Total (all countries)	England	Wales	Scotland	Northern Ireland
Consent N (no spontaneous refusal during interview)	1368	714	195	237	222
% Consent	94%	94%	95%	94%	92%
N Spontaneous refusal during interview	90	43	11	16	20
Base	1458	757	206	253	242

Consent changes

Following the interview, respondents were left with a 'What Happens Next?' booklet that included details of how to change the consents they had given in the interview to link their data to administrative records. The thank-you letter they received after their interview also reminded participants about how to update their details if they wished to do so.

In total, Ipsos recorded 10 changes of consent following interviews across nine households (table 19.24): In addition to these 10 consent change requests received through the online form or contacting the Ipsos Freephone team, there were four additional consent changes due to those respondents who were mistakenly administered online follow-up surveys after their main interview changing their consent choices in this second survey.

Table 19.24: Number of changes to consent permissions received after interview in England, Wales and Scotland[1]

	Opt In		Opt Out			TOTAL
	England	Wales	England	Wales	Scotland	
Give permission for all records: Parent and child	1					1
Withdraw permission for all: Parent and child	2		1	2	1	6
Withdraw permission for all: Parent only			1		2	3
Withdrew consent for child social care, and all parent	1					1
Withdrew consent for parent and child health	1	1				2
Selected permission: Parent and child (yes to education records only)			1			1
Totals	5	1	3	2	3	14

[1]No consent changes were received from participants in NI.

Eight consent changes were received from participants in England, 5 from the opt-in condition and 3 from the opt-out condition; 3 consent changes were received from participants in Wales, and 3 were received from participants in Scotland (all opt-out group). Factoring in those 6 opt-out respondents who declined consent for all linkages after the interview, the opt-out consent rate is **93.5%** for parents across all countries.

Saliva Response rates

Impact of the saliva request on overall study response rate

One of the questions the feasibility study sought to answer was whether the request for saliva samples would depress recruitment rates into the study. Qualitative interviews with parents conducted as part of the development work for the feasibility study highlighted that parents were less comfortable about the saliva request than other components of the study. Collecting saliva samples on the first wave of a cohort study – rather than later waves when the cohort was more established – was an untested approach.

The overall face-to-face survey response rate was 44% for families in the saliva study compared with 48% for other families.

Saliva completion rates

Table 19.25 below sets out the consent and return rates for the saliva module. Not all biosample-allocated parents who completed an interview went through the saliva interview module (row B). This

appeared to be because interviewers did not administer the module when parents had refused to take part in the saliva upfront – during fieldwork, further guidance was given to interviewers to make sure a refusal was logged either in the interview or ECS.

Among those eligible to provide a saliva sample, 62% PIs (129/208) consented to provide a sample, and a similar proportion (63%) consented to give a sample for their baby (131/208). Consent rates for Additional Informants in the main household were similar at 61%.

As expected, the return rate of interviewer-administered kits was much higher (F) than the return rate of kits sent by post to those completing via remote interviewing modes (G).

Table 19.25: Saliva consent and return rates

	PI	BABY	AIMAIN	OHP
A) Number completing interview	247		172	4
B) Number completing saliva module	213		164	4
C) Number completing saliva module and eligible[a]	208	208	162	4
D) Consent given, of those complete and eligible	129	131	99	2
E) Consent rate (d/c)	62.0%	63.0%	61.1%	50%
F) Return rate of interviewer-administered kits (all collected by interviewer in home, or left behind by interviewer to be posted by participants)	76.0%	72.6%	75.5%	100%
G) Return rate of kits sent by post to those completing interviews via web/Telephone/Teams	32.2%	32.2%	40.0%	N/A
H) Total number of saliva samples returned to lab	95	93	73	2
I) Completion rate (H/C)	46%	45%	45%	50%

[a]Biological parents were eligible to provide a saliva sample.

Reasons for refusing to give saliva samples

If consent was refused, the CAPI script asked for reasons for refusal. Most respondents did not give a reason for refusing to give a saliva sample (reasons for refusal were only collected if interviewers went into the saliva CAPI script; in some instances, interviewers did not open the script and coded a refusal directly into their Electronic Contact Sheet instead). Where reasons where given, the most frequently mentioned were: 'I don't want to/ I would be uncomfortable (71 respondents), 'it is too invasive/intrusive' (10 respondents) and 'I don't trust what will be done with it / lack of confidentiality' (7 respondents).

20 Interviewer feedback

As Generation New Era is a feasibility study, it was important to collect interviewer feedback to feed into both the evaluation of the study and the design of a possible larger study conducted in the future. Feedback was collected through interviewer feedback forms and debrief sessions.

Towards the end of the fieldwork period, interviewers who had finished their sampling points were sent an interviewer feedback form to complete. Additionally, two debrief sessions were held to collect more in-depth feedback from a subset of interviewers. The first session was held on the 14th May 2024 and included interviewers from England, Scotland and Wales. The second session took place on the 15th July and included interviewers involved in the fieldwork in Northern Ireland. Each debrief session was held on MS Teams and lasted for two hours. The sessions were led by Ipsos' field and research teams. They were attended by a range of interviewers as well as by the Centre of Longitudinal Studies (CLS).

Feedback form

The feedback form covered the following aspects of the survey:

- Making contact with respondents,
- Satisfaction with the setup of the screener,
- Experiences with interviewing different types of respondents (PIs, AIs, OHPs),
- Experiences contacting and achieving interviews with OHPs,
- Feedback on the different interview modes (in person, online, telephone, MS Teams),
- Satisfaction with the setup of the Electronic Contact Sheet (ECS),
- Questionnaire content: general coverage and reactions to the self-completion module,
- Reactions to and understanding of the different data linkage consent models,
- Experiences delivering the saliva element,
- Reactions to and suitability of the survey materials,
- Satisfaction with the interviewer training provided, and
- General feedback: What worked well and or not well.

The full feedback form can be found in the appendix.

Debrief sessions

Interviewers were selected to cover a range of regions, and to include some interviewers who had worked on sampling points that included saliva cases. The first debrief session involved nine interviewers, of which three were from Scotland and one from Wales. The second session involved ten interviewers from Northern Ireland, two of whom had also been involved in the fieldwork in Scotland.

Each session started with short introductions. The feedback form was used to provide a structure, with interviewers being asked to expand on the findings from the feedback form. Interviewers were asked to report on what went well or not, as well as voicing any recommendations for possible improvements they may have. The full debrief topic guide can be found in the appendix.

Feedback and recommendations

Interviewers overall enjoyed working on the survey and gave positive feedback. They noted various issues and points of confusion they encountered and provided suggestions for improvement. These suggestions are as follows:

- **Electronic Contact Sheet (ECS):** Interviewers reported some confusion around the layout of the ECS, especially the outcome codes. They found it time-consuming to distinguish between person-level and household-level outcomes.

- The **notification (opt-out) letter** was frequently not remembered by respondents, as the time between receiving the letter and the beginning of fieldwork was too great. This was mainly an issue for Scotland, where a pause in the study after the notification mailing meant there was a significant gap before fieldwork started (see Issued sample, in Chapter 5, for more).

- Interviewers mentioned that the **materials and engagement strategies** might be more beneficial if they put greater emphasis on positive impacts achieved by previous cohort studies. Interviewers suggested creating an 'impact card' for them to give or show respondents. They also suggested wider publicity in the national press around the launch of the study would help allay fears of 'scams' and establish the credibility of the study.

- Additionally, they found that respondents had often not read the materials or only read them superficially due to the large volume of materials provided. Interviewers also struggled with the volume of materials, many of which they found easy to mix up.

- Interviewers reported encountering **language barriers**, which made making contact and doing the interview more difficult. As the main survey script was only available in English, the translated materials (such as the showcards) were of limited use to them.

- Interviewers noticed **local differences** in people's interest to take part, which seemed to be heavily impacted by income, education and ethnicity/language barriers. In low-income areas interviewers reported encountering significantly more distrust, and suspicions that their baby's development is being monitored.

- Interviewers reported greater difficulties in contacting **younger parents** where living circumstances were often more complicated: for example, interviewers reported parents living with the baby's grandparents and grandparents acting as gatekeepers, as well as high rates of mobility and untraced movers with this group.

- The availability of **different modes** was useful in reducing refusals according to interviewers. They felt that this flexibility was very beneficial and would have appreciated more flexibility regarding the modes available to PIs, as they encountered cases where offering the web survey to a PI may have made a difference.

- The **survey length** caused some logistical issues regarding the scheduling of interviews, as it was difficult to schedule a PI and AI interview within one visit. To achieve a higher response, however, conducting both interviews within the same visit would have been preferable.

- **Own Household Parents** (OHPs) were frequently difficult to reach. Interviewers reported having problems getting contact details as PIs were reluctant to provide this information. Additionally, OHPs were less likely to be interested in taking part and interviewers encountered more difficulties making contact with them. Nevertheless, interviewers believed that where it was possible to convince OHPs to take part, their experiences would add important insights to the survey.

- Interviewers sometimes encountered situations where the father was **living with the mother but was registered at a different address** for benefits purposes. In these situations, it was usually difficult to convince the father to take part. Additionally, interviewers struggled with deciding whether to conduct the AI or OHP interview with the father. These situations were usually marked by high levels of distrust from the respondents as they were worried about being 'found out' or having to lie throughout the interview. Interviewers wondered whether there were ways to set up the ECS to avoid putting respondents into uncomfortable situations about their living arrangements.

- During the debrief session interviewers discussed their experiences with the **screener**. Although this generally worked as intended, some interviewers talked about how the screener can be limiting to their introductions and their engagement strategies. Some interviewers even reported that they do not take their CAPI device with them when making initial contact and filled out the screener later based on the information they gathered. It was mentioned that the CAPI device can have an off-putting effect on respondents at first contact.

- The **questionnaire** was generally well-received. The CASI module was not perceived as too sensitive by most respondents. Interviewers mentioned that at times the questionnaire could be laid out differently and repetition could be reduced. Interviewers recommended for example that some questions in the child activities module could be presented as a table instead of asking each question on a separate screen.

- **Data linkage**: All interviewers had a mix of the participants allocated to the 'opt-in' (agreement to each linkage covered in the interview) and 'opt out' (participants informed by interviewer that study wanted to link records and how to opt out if they did not want this to happen) data linkage consent groups. Overall, both consent models were well-received by respondents. Interviewers felt that regardless of consent model, the end of the interview is better suited to discussing data linkage with respondents. They encountered little resistance to the idea of data linkage from respondents, regardless of the consent model. However, one downside to the opt-in model was the length, which interviewers felt could have been reduced.

- The request for a **saliva sample** was received with mixed reactions by respondents. However, interviewers did not think that the addition of the saliva element would have any significant off-putting effect on those who did not feel comfortable providing a sample. According to interviewers, the voluntary nature of this element of the study was sufficiently highlighted. They therefore did not foresee any issues with including the saliva element in the main survey.

- Parents and interviewers preferred the swab to **collect biosamples** rather than giving a saliva sample by spitting into a tube, which could be awkward during a household visit, and suggested it would be helpful to provide a swab for parents as well as babies.

- Interviewers had mixed views on the value of the incentive included in the invitation mailing (either £5 or the baby's bib): some felt that it helped to instil trust, whereas other interviewers reported that parents were suspicious and considered it a 'bribe'; some reported parents trying to return the incentive. The latter was especially the case for the £5 cash incentive. Interviewers felt the conditional incentive was sufficient, as in their experience there are limits to the effect an incentive can provide. Where people have concerns about taking part, these are usually not overruled by higher incentives in their experience. Interviewers reported that they often started out focusing on other engagement messages when making contact and only stressed the incentive when they felt that an additional motivator was needed.

- The **interviewer training** was deemed important to conduct face to face. Interviewers thought that they would have benefitted from having an opportunity to conduct practice interviews and get more familiar with the questionnaire content, and hear more about the rationale for the interview content (for example, why questions are repeated of both parents; more able to reassure parents that giving socially undesirable responses in the CASI section will not have implications).

While the points above applied to all four countries, a few points were raised that were specific to the different fieldwork procedures in Northern Ireland:

- As only mothers were listed on the sample in Northern Ireland, **making contact with fathers** was entirely reliant on the mother's cooperation. Interviewers reported having to spend a lot more time and effort on trying to get in touch with fathers and achieving an interview with them. This was mentioned regarding both AIs and OHPs.

- Interviewers felt that their chance of **achieving an AI interview** was higher when conducting a face-to-face interview as placing the web survey was usually a last attempt and required a lot of follow-up contact to remind AIs to take part.

- **Contacting OHPs** was especially difficult in Northern Ireland. Interviewers had mixed opinions on whether it would be worth including OHPs in a potential future study. They agreed that the fieldwork protocols and strategies would need to be reviewed and improved if OHPs were to be included in a future study.

21 Telephone feedback survey with participants

Aims of the survey

The telephone feedback survey aimed to collect feedback from parents about their experience of taking part in the main fieldwork, including how parents found the novel aspects of the study (e.g. the saliva sample procedures). As this was a feasibility study, collecting feedback from parents was particularly important to inform the development of future waves of the survey.

Sample design and quotas set

The sample was made up of a selection of respondents who completed an interview during main fieldwork[54]. The selection included all types of respondents (i.e. PI, AI, OHP, AIOHP), and it was possible for both parents in a household to be contacted.

Target quotas were set for certain groups of respondents to ensure that we had a diverse set of feedback. These were defined as the minimum number of responses to achieve for a particular group of respondents. Target quotas were set on:

- the type of parent interview;
- the mode of interview;
- whether respondents were in the biosample study (and if so, whether they agreed to provide a sample)
- characteristics of the respondent (e.g., age, ethnicity, region and IMD decile).

Some of these quotas were particularly prioritised during fieldwork because the numbers of parents interviewed in these groups were relatively small, but the feedback from these groups was of especial interest in shaping the design of any future cohort. These were:

- OHPs
- In the biosample study and consented to give own sample
- Young parents, i.e. 16-25 years old

Fieldwork design and protocols

There were two waves of fieldwork for the telephone feedback survey. The first wave involved respondents from England, Scotland and Wales, and the second wave involved respondents from Northern Ireland. This fieldwork design meant that respondents could be contacted promptly after they had completed the main interview. The survey was administered a few months after main fieldwork had begun.

[54] When respondents consented to completing the main survey, this also included a consent to follow up.

The table below shows the fieldwork timings for the telephone feedback survey

Table 21.1: Telephone feedback survey fieldwork dates

Fieldwork wave	Fieldwork start date	Fieldwork end date
Wave 1 (England, Wales, and Scotland)	30 January 2024	17 May 2024
Wave 2 (Northern Ireland)	24 June 2024	22 July 2024

Before starting fieldwork, the telephone interviewers attended a virtual briefing and were given a set of interviewer instructions for running the survey, which can be found in the appendix. Respondents were not given an incentive for taking part in the telephone feedback survey.

Questionnaire design and final questions

The questionnaire was designed to take around 5 to 10 minutes to complete. Timings data shows the median completion time was 7 minutes, and the mean was 8 minutes. The table below shows the topics covered in the final version of the questionnaire:

- Parents' motivation(s) for taking part
- Parents' likelihood of taking part again
- Whether parents would prefer the next wave to be conducted face-to-face or online
- Parents' experiences of the interview
- Parents' feelings about how they were contacted about the study/the opt-out approach
- Whether parents felt it was clear that the study was voluntary
- Parents' feelings towards interview length
- Parents' experiences of the saliva module
- Parents' experiences of their assigned data linkage approach
- Any other feedback

Most of the questions in the telephone feedback survey were asked to all parents. The main exception was the questions on the saliva element, which were only asked to parents originally assigned to the biosample group in the sample. However, all parents in the biosample group were asked about the request for saliva samples, regardless of whether they fully completed the module or consented to provide saliva samples during main fieldwork or not. Different versions of the question on data linkage approach were given depending on which consent approach -opt-out or opt-in- they were allocated to.

The introduction included textfills that were tailored to the parents' sample/interview data. For example, parents were reminded of the mode through which they completed the main interview, the incentive they received, and the date of completion. These textfills were also included in some other questions. This was done to tailor the wording of the questionnaire so that it was as relevant as possible to the main interview that the parents had completed.

One change was made to the questionnaire before Wave 2 of the telephone feedback survey in Northern Ireland. The question wording at OPTOUTMAT, which asked about the opt-out approach, was changed to reflect the different fieldwork protocol in Northern Ireland: specifically, the fact that local Health Trusts were responsible for sending out the notification letters about the survey. The rest of the survey was unchanged.

The final questionnaire specification for the telephone feedback survey can be found in the appendix.

Achieved sample vs. target quotas

The issued sample consisted of 2,026 respondents: 1,692 in Wave 1 (England, Wales and Scotland), and 334 in Wave 2 (Northern Ireland).

In total, 464 respondents completed the telephone feedback survey. However, 17 of the responses achieved in Wave 1 were removed, because they were given by parents who were originally interviewed by an interviewer found to have falsified some interviews. Therefore, the final achieved sample was 447 responses: 333 in Wave 1 (227 in England, 55 in Wales, and 51 in Scotland), and 114 in Northern Ireland in Wave 2.

The table below shows how the profile of the achieved sample compared against the target quotas set for Wave 1 (England, Wales and Scotland):

Table 21.2: Wave 1 - Achieved sample vs. target quotas

Quota Name	Target Quota (minimum quotas)	Achieved Sample
Total interviews	300	333
Type of parent	180 – PIs 25 – OHPs 95 – AIs or AIOHPs	202 – PIs 12 – OHPs 119 – AIs or AIOHPs (1 AIOHP)
Mode of interview	235 – CAPI 25 – CATI or Teams 40 – CAWI	286 – CAPI 23 – CATI or Teams 24 - CAWI
Biosample	50 – In Biosample study	65 – In Biosample study

	35 – In Biosample study and consented to give own sample	41 – In Biosample study and consented to give own sample
IMD Decile[55]	170 – Between 0 and 3 80 – Between 4 and 7 50 – Between 8 and 10	157 – Between 0 and 3 100 – Between 4 and 7 72 – Between 8 and 10
Age[55]	60 – 16-25 years old 130 – 26-35 years old 110 – 36+ years old	42 – 16-25 years old 174 – 26-35 years old 116 – 36+ years old
Ethnicity	150 – White British 30 – White (Other) 30 – Black African/Caribbean 50 – Bangladeshi/Pakistani 20 – Other Asian (Indian/Chinese/other) 20 – Mixed or other ethnic groups	181 – White British 23 – White (Other) 57 – Black African/Caribbean 38 – Bangladeshi/Pakistani 19 – Other Asian (Indian/Chinese/other) 15 – Mixed or other ethnic groups
Region	70 – North of England 30 – Midlands 80 – South of England (inc. London) 60 – Wales 60 – Scotland	64 – North of England 43 – Midlands 120 – South of England (inc. London) 55 – Wales 51 – Scotland

The table below shows how the profile of the achieved sample compared against the target quotas set for Wave 2 (Northern Ireland). Unfortunately, no OHP or AIOHP interviews were achieved in Northern Ireland during main fieldwork before the sample for the telephone feedback survey was drawn, so these quotas could not be met in this study.

[55] Four cases were missing IMD decile data and one case was missing age data, so the achieved sample breakdowns for these variables do not sum to the total number of interviews achieved.

Table 21.3: Wave 2 - Achieved sample vs. target quotas

Name of Quota	Target Quota (minimum quotas)	Achieved Sample
Total interviews	60	114
Type of parent	36 – PIs 5 – OHPs 19 – AIs or AIOHPs	67 – PIs 0 – OHPs 47 – AIs (0 AIOHPs)
Mode of interview	50 – CAPI 5 – CATI or Teams 5 – CAWI	85 – CAPI 3 – CATI or Teams 26 – CAWI
Biosample	10 – In Biosample study 7 – In Biosample study and consented to give own sample	6 – In Biosample study 6 – In Biosample study and consented to give own sample
IMD Decile	20 – Between 0 and 3 20 – Between 4 and 7 20 – Between 8 and 10	25 – Between 0 and 3 42 – Between 4 and 7 47 – Between 8 and 10
Age	8 – 16-25 years old 25 – 26-35 years old 20 – 36+ years old	6 – 16-25 years old 64 – 26-35 years old 44 – 36+ years old
Ethnicity	No target quota set	N/A.
Region	No target quota set	N/A.

Data processing and coding of telephone findings

Data processing for the telephone feedback survey consisted of the following stages:

- Data checking during fieldwork
- Data cleaning
- Data checking and editing post fieldwork

- Coding verbatim responses

During fieldwork, general data checks were conducted to make sure that the routing was working as expected and that all questions were being asked. These checks flagged one issue: one of the parents was not identified as a particular type of parent (i.e. PI, AI, OHP and AIOHP). The respondent was identified as an AIOHP from the raw data in main fieldwork but this had not pulled through when creating the sample for the telephone satisfaction survey.

After fieldwork, the researchers cleaned the data in several stages. This involved:

- Removing 15 responses from parents who had completed their main interview with the fraudulent interviewer who had falsified some sections of his interviewers.
- Recoding variables where appropriate so that responses were numeric with value labels, rather than text strings (e.g., instead of 'Yes' or 'No', recoding to '1' (Yes) or '2' (No).
- Assigning variable labels to all questionnaire variables as per the questionnaire specification.
- Assigning variable labels to the sample data variables.

The cleaned data was then checked again, and any final edits were made to the data. This involved:

- Editing the respondent who did not have a parent type so that they were identified as an AIOHP.
- Removing personally identifiable information from four verbatim responses.

The last stage was adding the coded data. A specialist coding team within Ipsos was responsible for coding verbatim responses within the telephone satisfaction survey, using the Ascribe coding system to do so. Coding was applied to the following questions:

- WHYPART (Why chose to take part in the study);
- OPTOUTMATO (If concerns about the opt-out approach for the study, what were they);
- FCON (What concerns, if any, about answering any of the questions);
- OPINBIO1 (How felt about being invited to give saliva sample for DNA extraction);
- OPINDLO (If concerns about data linkage approach, what were they);
- FBFinal (any other feedback about the survey).

Some of the questions above had a preexisting list of answer codes, as well as an open-text other (specify). For these questions, if the verbatim response matched one of the preexisting answer codes, these were "back coded" to the pre-existing code that was shown to respondents. If the verbatim response did not match any of the pre-existing codes, or if there were no pre-existing answer codes, a codeframe was created and the verbatims were assigned under codes that represented common themes within respondents' answers. Responses at all questions could be assigned up to three codes.

The Ipsos research team was responsible for reviewing the coded data and merging it with the main data for the telephone satisfaction survey. New binary variables were created for each code to allow analysis

of the most popular codes among respondents. Variable labels were assigned to all of the new variables to correspond with the codeframes. After the coded data had been merged with the main data, a final spot-check was performed against the raw file from the coding team to ensure that the codes had been imported and merged successfully.

The Ipsos research team was responsible for reviewing the coded data and merging it with the other data from the telephone feedback survey. New binary variables were created for each code to allow analysis of the most popular codes among respondents. Variable labels were assigned to all of the new variables to correspond with the codeframes. After the coded data had been merged with the other data from the feedback survey, a final spot-check was performed against the raw file from the coding team to ensure that the codes had been imported and merged successfully.

Participant feedback from telephone survey: key findings

Overall, 87% of respondents said that they would either definitely or probably take part again. The great majority (95%) felt the questions were relevant and/or interesting, and 83% had no concerns about answering the questions. Among those who did have concerns, the most common issue cited was the personal nature of the questions, which was mentioned by 28 respondents.

In England, Wales, and Scotland, 87% of respondents were happy with the opt-out recruitment approach used by the study, which rose to 95% in Northern Ireland. Some 61% of respondents felt the interview was about right in length – however, almost a third (31%) felt that it was a bit too long.

When asked about their preference for future interviews, 19% of respondents said they would prefer a face-to-face interview, 39% said they would prefer an online questionnaire, and 40% were happy with either approach. Over 90% of respondents either strongly or somewhat agreed that they enjoyed talking about parenting, that their interviewer was professional, and that they could take part in a way that suited them.

Most of the respondents who were in the biosample study felt comfortable providing a saliva sample, and did not experience any difficulties in collecting or returning it. Across the full sample, 89% of respondents were happy with their data linkage approach.

22 Cohort Maintenance

Stable Contacts

All participating parents were asked to provide details for a stable contact, which is an individual known to the respondent who could be contacted to help trace the respondent if they had changed address or became unreachable. The respondents were asked to choose someone who: (i) does not live with them, and (ii) is neither their child's other parent nor their partner. Examples of suitable stable contacts included non-resident parents, friends, or family members.

The following details were collected about stable contacts (if possible):

- Name
- Relationship to the respondent
- Mobile telephone number
- Landline telephone number
- Email address

Respondents were asked to let stable contacts know that they had been nominated as a stable contact and their details had been passed on. Respondents were also asked to tell stable contacts that their details would be kept securely and would only be used to get in touch about the study if the respondent themselves could not be reached.

Respondents who didn't provide stable contacts were asked if they would be happy to provide these details after discussing this with suitable individuals. They were signposted to the study team's contact details page and the study website.

The table below shows the stable contact consent rates for each country in main fieldwork interviews.

Table 22.1: Stable contact consent rates in main fieldwork.

Country	**Yes**	**No**	**Don't know/Prefer not to say**	**Total**	**Percentage saying 'Yes' to the question** 'Is there someone you would be happy for us to contact if we cannot get in touch with you in any other way?'
England	564	951	39	1554	36.3%
Wales	255	169	23	447	57.0%
Scotland	265	216	13	494	53.6%
Northern Ireland	277	203	12	492	56.3%
Total	**1361**	**1539**	**87**	**2987**	**46.9%**

The following table shows how frequently respondents provided each type of contact detail about the stable contact, broken down by country.

Table 22.2: Details of stable contacts collected in main fieldwork.

Country	Name	Relationship	Mobile Number	Landline Number	Email
England	563 (99.8%)	562 (99.6%)	533 (94.5%)	116 (20.6%)	227 (40.2%)
Wales	259 (100%)	259 (100%)	237 (92.9%)	87 (34.1%)	81 (31.8%)
Scotland	266 (100%)	266 (100%)	247 (93.2%)	77 (29.1%)	110 (41.5%)
Northern Ireland	284 (100%)	283 (100%)	266 (96.0%)	83 (30.0%)	116 (41.9%)
Total	**1372**	**1370**	**1283**	**363**	**534**

In the online follow-up survey, 15 parents out of 113 who completed the survey and answered these questions (13.3%) said they were willing to provide stable contact information (not shown in table above). The numbers responding to the online follow-up survey were small, so these percentages should be treated with caution. Nevertheless, it is notable that a much smaller proportion of participants provided stable contact details in the online follow-up survey than in the main stage of fieldwork.

Change of address

During the interview, parents were also asked if they were looking to move from their current address in the next 12 months. If they said yes, the researchers asked parents to provide the following details about their new address:

- Address line 1
- Address line 2
- Town
- County
- Country
- Postcode
- New home phone number (if applicable)
- Expected date of move

The table below shows the overall number of parents who said they were looking to move in main fieldwork interviews, broken down by country.

Table 22.3: Number of parents in main fieldwork looking to move address in the next 12 months.

Country	Yes	No	Total	Percentage saying 'Yes' (of those providing a substantive response)
England	140	796	936	15.0%
Wales	20	246	266	7.5%
Scotland	31	258	289	10.7%
Northern Ireland	36	253	289	12.5%
Total	**227**	**1553**	**1892**	**12.0%**

Of the 227 parents in main fieldwork who said they were looking to move, 37 parents (16.3%) knew their new address and were willing to provide it. The following table shows how frequently respondents provided each detail about the new address.

Table 22.4: Details of new addresses from parents in main fieldwork.

Details of New Address	Details Received	Percentage
Address Line 1	38	90.5%
Address Line 2	26	61.9%
Town	37	88.1%
County	32	76.2%
Country	40	95.2%
Postcode	36	85.7%
New home phone number	0	0.0%
Expected month of move	31	73.8%
Expected year of move	32	76.2%

In the online follow-up survey, 10 parents (8.9%) said they were looking to move address in the next 12 months. Of these, 3 knew their new address and were willing to provide it.

All parents who were interviewed face-to-face were also given a change of details card at the end of the interview. Parents were asked to return the card to the research team with updated address details in the event that they decide to move in the future.

23 Data processing

Data checks during fieldwork

The Ipsos and UCL teams reviewed detailed fieldwork data each week. This included reviewing the progress of achieved interview numbers and response rates but also covered:

- Interview lengths: ongoing monitoring confirmed that the average timings for each type of interview (PI, AI, OHP) were in line with our expectations and that no changes to the scripts were needed.
- Participants providing consent for data linkage: early monitoring indicated a higher proportion of parents than expected saying they did not have legal parental responsibility for their child (and therefore being ineligible to give consent for data linkage or saliva). As a result, changes were made to the CAI script to clarify this term (see Appendix for more details of script changes during fieldwork).
- Participants providing consent for saliva samples: early monitoring showed that interviewers were not consistently recording unproductive outcomes for the saliva element, and that saliva kits were being left behind in homes for parents to complete on their own after the interview at a much greater rate than we had hoped for. Follow-up training session and materials were provided to interviewers to rectify these issues (see chapter 8 for more information).
- Participants' eligibility to provide saliva samples: early monitoring indicated a proportion of parents providing conflicting information on whether they were biological parents of the children. This affected the number of eligible parents for saliva study; thus the CAI script was revised to provide further clarification (see appendix).
- Participants returning saliva samples: the team matched the barcodes of the saliva samples received by the lab against the recorded barcodes of the kits left/collected by interviewers and highlighted any discrepancies. The Ipsos team investigated a number of mismatched or missing samples and resolved a number of queries (e.g. where barcodes had been inputted incorrectly, where barcodes could not be matched to a respondent, or where barcodes of AIs that provided saliva samples without completing an interview were not matched correctly to their data).
- The rate of identifying OHPs, collecting relevant contact information, and achieving follow-up interviews with OHPs: The response rates among OHPs on the sample, and among 'new' OHPs identified via PIs, was lower than hoped for. See chapter 15 for more information on the changes made to try to boost OHP response during fieldwork.
- During the online follow-up survey fieldwork, the team checked that all questions were being answered as expected in the script: This highlighted that a question on the online follow-up script had inadvertently been missed (RELSAT1) for the England and Wales fieldwork; this was corrected on the scripts for Scotland and Northern Ireland.
- Checks during the online follow-up fieldwork also highlighted that an error had been made in England and Wales, which meant that some households that had productive interviews in the main fieldwork period (and should have been ineligible for the online follow-up survey) had been invited to take part. The team checked whether any of the responses were from 'new' parents that had not already taken part (which was the case for two productive interviews among these cases issued incorrectly) and whether those who had completed the survey twice had given the same consents in their interviews. See Chapter 16 Online follow-up survey.

In addition, several checks were run during fieldwork at an interviewer level, to assess whether interviewers appeared to be following the guidance given on administering the interviews, and to quality assure the study data. Any queries were discussed with the field and fieldwork validation teams. These checks included:

- The number and proportion of participants refusing to complete the CASI (self-completion) section
- The number and proportion of eligible participants refusing to give consent for saliva collection
- The number and proportion of participants refusing to give information about stable contacts
- The proportion of participants agreeing for their data to be linked to health, education and social care records
- Timings data at an individual level, for overall interviews and for individual modules in the script
- The proportion of interviews done by telephone or Teams rather than face-to-face.

General data quality checks were carried out to identify any problems either in the script or in how questions were being interpreted. This led to detecting some errors in the script (e.g. at WHYT, issues with AIs completing the saliva module, missing data at the SALWHO-SALOUT routing in the saliva module – see Questionnaire chapter for more details).

Data issues identified during fieldwork

A number of queries came to the research team from interviewers, particularly during the early stages of the fieldwork. Other issues were identified by the Ipsos team as they processed the data for the fieldwork reports, or for other mailings (such as reminders to collect saliva samples). These queries and any actions taken to resolve them were collated in a 'Field log', so that the Ipsos and UCL teams could clearly identify the types of issues encountered with the script and protocols for the feasibility study. The Ipsos research and field teams met weekly during fieldwork to discuss and resolve these queries. Issues included:

- In February 2024, it came to light that one interviewer who had worked on sample points in England and Wales had falsified some sections of his interviews. They were allocated 287 addresses, including 172 cases in Wales and 115 in England. Of these 287 cases, 149 interviews were reported as complete.[56] Validation suggested that some form of interview had probably taken place at these addresses, but some sections of the interviews were implausibly short and therefore the data may not be reliable. To ensure the quality of the data, these 149 interview records were removed. Those cases where an interview had been recorded were invited to complete the interview again in a reissue fieldwork phase ('replacement fieldwork'). They were sent a letter explaining the reason[57] for redoing the interview and were given the opportunity to do the interview with an interviewer or via web survey link and offered additional incentives to do so. The 'replacement' fieldwork phase response rates are reported in chapter 19.

[56] This interviewer was an experienced and trusted member of the Ipsos panel, and worked on 'distance points' – i.e. as well as working his local area also worked in other locations. As a result, they had been allocated a much higher number of points than is typical, and much higher than any other interviewer on the study.

[57] Respondents were told that they had not been asked some questions during the interview due to an error.

- Interviewers confusing the Additional Informant and Second Household letters: these letters each included a link to a different version of the web survey, one intended for AIs and one for completion by OHP/PI. As the letters appeared very similar, interviewers mistakenly gave 40 AIs in the main households the OHP letter by mistake which meant 40 AIs completed the longer version of the interview. In addition, one OHP was given the AI letter by mistake. This resulted in participants' data being incorrectly marked as the wrong respondent type; this was later rectified in the data. In response to these issues, the team provided guidance to interviewers to clarify the protocols, and added clearer labelling to the AI and OHP letters for the Scotland and Northern Ireland fieldwork to avoid confusion, as well as using different colours on the letters.

- Problems with administering the screener: Interviewers encountered two main issues whilst administering screeners during fieldwork. In 10 cases, interviewers made errors in the screener process, leading to a failure to identify all eligible parents in the household which meant that interviewers were unable to interview all parents who were present in the household. The field team was asked to manually edit the screener records to resolve these errors. In other instances, interviewers unnecessarily conducted extra screeners on blank second addresses, even when both parents resided together. In some cases, this was due to participants' living arrangements, where it was not always easy to establish whether partners lived in the household permanently or mainly lived elsewhere (see Chapter 20, Interviewer feedback).

- Problems with confirming legal parental responsibility and biological parents during the saliva study: The questions regarding legal parental responsibility and biological parents contained wording that was not well understood by some respondents, causing several respondents to provide incorrect responses during the saliva study. These issues were addressed and resolved at the beginning of fieldwork to prevent further occurrences. There is more information in the Appendix (see 'Script changes during fieldwork) about this.

- Potential duplicate interviews: In some instances, this appeared to be because the interviewer started an AI interview face-to-face before the parent decided to complete online. In other instances, it appeared that there were two PI interviews (face-to-face and web) completed by the same person, as details matched. Where multiple AIs or PI interviews were completed by different people, the data was retained. Interviews that appeared to be completed by the same person were removed.

- Parents giving conflicting information about where they live (e.g. one parent claiming parents have moved in together, another parent claiming they live separately): A similar issue was parents indicating during the screener that they lived alone, but where their interview responses showed there is another parent living in the household. In these instances, the team had to ask interviewers to redo the screener so that the AI interview would appear for these households.

- Parents listed as living separately on the sample who appeared to have moved into the same household at screening/interview stage: although it was expected that this would happen, these cases were reviewed and confirmed manually.

- Problems with the barcodes inputted/scanned for the saliva element, such as duplicate barcodes or interviewers scanning the baby barcode for the parent and vice versa.

- Inconsistent or illogical outcome codes based on the progress updates. In these instances, queries were sent to interviewers to clarify what progress/outcomes were made at each address.

Data editing

In general, data was not edited or cleaned by Ipsos. This ensured that the UCL team could see the data in its raw form, including any errors or logical inconsistencies in the data – in many cases, the errors made suggest that different approaches are needed for any future data collection, so that fieldwork processes run more smoothly and with less manual intervention.

One exception to this principle was the allocation of respondent ID numbers. Each respondent was assigned a unique seven-digit ID number, which comprised their address serial number (a six-digit number) with a final digit appended to indicate the type of respondent interview they completed ('1' for PIs; '2' for AIs; '3' for OHPs; '4' for AIOHPs). These IDs were originally assigned based on the screener data. In some instances, respondents went on to complete a different type of interview than they had been assigned in the screener. To avoid duplicate IDs, and to ensure respondent IDs were consistently applied, these IDs were corrected where errors were found (i.e. AI doing the interview using OHP web survey link), so that the respondent ID matched the type of participant they were and/or the household where they lived.

Coding

Many questions in the script had "other (specify)" answer codes, where respondents could provide answers that did not appear on precoded lists. These text answers were coded by Ipsos's coding team. Where the answer given reflected a pre-existing answer code, these were "back coded" to the pre-existing code; where it did not, new answer codes were suggested.

The Ipsos coding team used the Ascribe coding system to code all free-text responses. As standard, 5% of coded responses were validated by the Team Manager/Team Leader to ensure coding quality.

In the published dataset, original answer codes (including simply a numeric value for all those selecting "other (specify)" are included, alongside separate variables for coded data and a combined variable containing data from both the original variable and the coded variable.

SOC Coding

The Standard Occupation Coding (SOC) and Standard Industry Classification (SIC) is a classification system designed by the Office for National Statistics (ONS) that assigns a unique code to each occupation based on its tasks, skills and knowledge required. The coding system is designed to provide a standardised and consistent method of classifying occupations, allowing for easier comparison and analysis of employment data across different industries and sectors. Each occupation is assigned a four-digit code, with the first two digits representing the major group or category of the occupation, and the last two digits providing more specific details about the occupation.

Information about occupations is typically collected by asking participants to provide their job title and open-text descriptions of their job and the industry in which they work. This information is then coded to the SOC classification manually by office coders, using the Cascot programme. A total of 5% of the coding is checked and verified by another coder in the team.

SIC Coding

The Standard Industrial Classification (SIC) is a classification of business establishments and other statistical units by the type of economic activity in which they are engaged. This classification is designed by the ONS and provides a standardised way of classifying industries.

Information needed to classify SIC involves asking participants what the job or firm they work for mainly makes or does. The open-text answers are then coded manually by office coders to the SIC classification using the Ascribe programme.

NS-SEC

The National Statistics Socio-Economic Classification (NS-SEC) is a system used to classify individuals based on their occupation and employment status, providing an indication of their socio-economic position. It was developed by the Office for National Statistics (ONS) to replace earlier classifications like Social Class based on Occupation and Socio-Economic Groups. NS-SEC is used to analyse various social and economic trends and is based on factors like employment relations, conditions of occupations, and whether someone is employed or self-employed, and their supervisory role.

Participants answer a series of six questions which ask about their supervisory and managerial duties in their current (or most recent) job role, their employment status, and their organisation size.

Selection weights

Selection weights were calculated by Kevin Pickering, Head of Statistics at Ipsos.

The sample design for England included large boosts of ethnic minority groups, and low-income areas (see Sampling chapter for details). In England, selection weights were calculated as the inverse of the probability of selection for births within group * sampling strata as outlined in the table below.

Table 23.1: Selection weights for England

		Group			
		Black	Asian	Other deprived	Other not deprived
Stratum	1. 7+ Black African (BA) and Black Caribbean (BC) births	5.2	7.1	13.8	29.0
	2. 7+ Bangladeshi (BAN) and Pakistani (PAK) births	10.4	12.5	22.3	24.1
	3. 3+ BA, BC, BAN, PAK births	32.7	28.8	45.5	57.3
	4. Deprived areas	6.8	5.1	9.0	11.9
	5. All other PSUs	51.0	143.7	225.9	115.3

As there were no sample boosts in other nations, the selection weights were calculated as population size divided by the number selected for each nation.

	Population / sample	Weight
Wales	4589 / 630	7.28
Scotland	7517 / 665	11.29
Northern Ireland	3240 / 665	4.87

Data outputs

Ipsos provided raw (unvalidated) data files to the UCL team throughout fieldwork on a monthly basis, to allow the UCL team to run initial checks on the data and to develop a specification for the final outputs. These data were also used to run analyses for deliverables to the ESRC.

The final data outputs comprise:

- Main survey data files:
  - Address-level screener file, where screeners have been completed;
  - Respondent-level data file, for all partial and fully completed interviews (including PI, AI, OHP and OHPAI);
  - Person-level household grid data file, for all members of the households of parents completing the household grid as part of a full/partial interview
- Online follow-up survey data files:
  - Respondent-level data file, for all partial and fully completed online follow-up surveys
  - Person-level household grid data file, for all members of the households of parents completing the household grid as part of a full/partial interview
- Telephone feedback survey data file:
  - Respondent-level data file for all those participating in the telephone satisfaction survey
- De-identified sample frame files
  - For England, Wales and Scotland only, the original sample frame data (with any identifying information removed), with flags to indicate those who were sampled for the opt-out stage, and those issued to fieldwork. For NI, the sample data received by Ipsos (i.e. those who did not opt out of the study).
- Fieldwork issues log
  - As described earlier in this chapter, a log of all data issued identified during fieldwork (through research team checks, through interviewer queries, or failing validation checks built into the scripts). Also includes details of any actions taken to resolve queries.
- Respondent contact log
  - A log of all queries and contacts made by participants with the Ipsos helpline during the study, including contact details of participants, a description and classification of the query, and notes on how the team responded.
- Consents data
  - A record of data linkage and biosample consents provided in the interview, and any changes to consents post-interview, for productive cases.
- Contact information
  - Full contact information from sample and interview for productive cases.
- Paradata
  - Main survey: Call history, in-field mailings (e.g. reminders, mailings sent)

    - Online follow-up survey: e.g. device type used to access, device set-up information, dates incentive vouchers sent
- Script updates log
    - Outline of scripting changes made during fieldwork
- Fieldwork issues log
    - Outline of issues identified in the data during fieldwork
- Field outcomes file
    - Outcomes of all issued cases

APPENDIX A Comparisons of samples delivered against estimated population profiles for each country

England Regions	sample (n)	sample (%)	popn (n)	popn (%)
East of England	10,524	11.1%	11,176	11.1%
East Midlands	7,587	8.0%	7,977	8.0%
London	17,798	18.7%	18,494	18.7%
North East	4,149	4.4%	4,192	4.4%
North West	12,551	13.2%	13,021	13.2%
South East	14,815	15.6%	15,715	15.6%
South West	8,017	8.4%	8,713	8.4%
West Midlands	10,565	11.1%	10,641	11.1%
Yorkshire and The Humber	9,151	9.6%	9,396	9.6%
TOTAL	95,157	100.0%	99,325	100.0%

Wales Regions	sample (n)	sample (%)	popn (n)	popn (%)
Mid Wales	224	4.9%	265	4.9%
North Wales	992	21.6%	1,035	21.6%
South East Wales	2,388	52.0%	2,520	52.0%
South West Wales	985	21.5%	978	21.5%
TOTAL	4,589	100.0%	4,797	100.0%

Scotland Health Boards	sample (n)	sample (%)	popn (n)	popn (%)
Ayrshire and Arran	450	6.0%	488	6.2%
Borders	143	1.9%	137	1.7%
Dumfries and Galloway	174	2.3%	165	2.1%
Fife	488	6.5%	511	6.5%
Forth Valley	417	5.5%	418	5.3%
Grampian	745	9.9%	759	9.6%
Greater Glasgow and Clyde	1,780	23.7%	1,921	24.3%
Highland	395	5.3%	377	4.8%
Lanarkshire	1,004	13.4%	1,152	14.6%
Lothian	1,333	17.7%	1,298	16.5%
Orkney	27	0.4%	31	0.4%
Shetland	27	0.4%	30	0.4%
Tayside	510	6.8%	583	7.4%
Western Isles	24	0.3%	20	0.3%
TOTAL	7,517	100.0%	7,890	100.0%

Northern Ireland HSCTs	sample (n)	sample (%)	popn (n)	popn (%)
Belfast HSCT	621	19.3%	675	20.0%
Northern HSCT	812	25.2%	778	23.1%
South Eastern HSCT	569	17.6%	594	17.6%
Southern HSCT	718	22.3%	754	22.4%
Western HSCT	522	16.2%	568	16.8%
TOTAL	3,242	100.0%	3,369	100.0%

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