

Summary of Scientific content

Introduction

The purpose of this document is to share proposed survey content for Generation New Era in Wave 1, in order to enable an open and transparent consultation and to take community evidence needs into account.

This document contains a section for each scientific theme of Generation New Era:

- A. children's physical health (including growth, nutrition and sleep)
- B. parents' mental and physical health
- C. children's cognitive, social and emotional development
- D. infant-parent relationships and early home environment
- E. social, environmental and neighbourhood influences on children's development and health
- F. inequality, disadvantage, diversity and context.

Under each scientific theme, we have included relevant topics from the [draft questionnaire](#) for Generation New Era wave 1 for consideration at the consultation. This draft questionnaire is a copy of that used for the predecessor of the study: the Early Life Cohort Feasibility Study (ELC-FS).

Each topic listed is accompanied by a line look-up for those interested to see the exact wording of questions. An estimate of the length of these topics in ELC-FS questionnaire is included next, followed by a summary of topics under that theme that were considered for ELC-FS questionnaire following consultation in 2021, but could not be included. A brief reason why they were not included is listed. This document includes an Annex describing the overall study design.

Summary of the questionnaire in GNE wave 1

Following on from the design of ELC-FS, GNE wave 1 will have up to a maximum of three parent-interviews for any one baby:

Informants	Length	Description
Primary Informant (PI)	60-min	Mainly in-person interview, ideally with the parent who spends the most time with the child in the child's primary/only residence
Own Household Parent (OHP)	40-min	Mainly online questionnaire with a birth/biological parent who does not reside full-time in the child's main household.
Additional Informant (AI)	30-min	In-person interview or online questionnaire with the co-residential parent/partner of the Primary Informant

The table below has a summary of the ELC-FS questionnaire in order, and which modules were completed by which informant. A shorter online-follow up (OFU) questionnaire was issued to non-responding families at the end of fieldwork to maximise overall response.

In this document, further below, we describe the questionnaire content organised by scientific theme, rather than survey module, however the overall content described is the same.

Table 2. ELC-FS questionnaire content (Online Follow-Up, OFU=40-minute online follow-up survey for non-responding households in main fieldwork)

Module	Topics covered	PI	OHP	AI	OFU
Introduction	Interview set up, assignment/checks	x	x	x	x
	Consent to take part	x	x	x	x
	Informant details	x	x	x	x
	Baby details and relationship	x	x	x	x
	Other parent details			x	
Household grid	Household grid	x	x		x
	Co-resident parent and/or partner details	x	x		x
	Details of any parents not in household list	x	x		x

Module	Topics covered	PI	OHP	AI	OFU
	Contact between child and own household parent	x	x		x
	Non-resident children	x	x		x
Housing	Housing	x	x		
	Languages spoken at home	x	x		
Background	Employment	x	x	x	x
	Parental leave	x	x	x	x
	Education	x	x	x	x
	Ethnicity (own, child)	x	x	x	x
	Religion	x	x	x	
About Partner	Employment	x	x		x
	Parental leave	x	x		
	Highest qualification	x	x		x
	Ethnicity	x	x		
	Health	x	x		
Family income	Benefits	x	x		x
	Family income	x	x		x
	Debt	x	x		x
Child's health	Fertility treatments	x			
	Birth & delivery	x			x
	Birth weight	x			x
	Health	x			x
	Diet	x			
	Sleep	x			
	Screen use and crying	x			x
	Development	x			
Child activities & temperament	Parenting engagement	x	x	x	x
	Temperament	x	x	x	
	Play activities	x	x	x	x
CASI	Pregnancy history (biological birth mother only)	(x)	(x)	(x)	
	Parent-infant bonding & parental stress	x	x	x	x
	Disadvantage indicators	X	x	x	x
	Parent health	X	x	x	x
	Life events during and after pregnancy	X	x	x	
	Social support, life satisfaction and loneliness	x	x	x	x
	Couple relationship	x	x	x	x
	Mental health	x	x	x	x
	Smoking, alcohol, vaping	x	x	x	x
	Info: sources of support	x	x	x	x
Childcare	Childcare providers	x			x
	Grandparent support	x			

Module	Topics covered	PI	OHP	AI	OFU
	Service use	x			x
Data linkage	Data Linkage	x	x	x	x
Contact details and end	Contact details	x	x	x	x
	Contact details for non-resident parent	x			x
	Stable Contact	x	x	x	x
	Details of new address if moving	x	x		x
	Incentive and Outro	x	x	x	x

In addition to the survey topics listed above, key components of the Generation New Era wave 1 survey will include:

- **Saliva collection** (for DNA extraction and analysis) at Wave 2, and possibly Wave 1.
- **Data linkage consent** collection for health, education and social care records for parents and baby, including Hospital Episode Statistics, Maternity Services Data Set, Community Services Data Set and National Pupil Database records. Linkages to geographical data will enrich survey information with insights about the local environment and service provision.
- **BabySteps app**: BabySteps is an innovative smartphone app designed to a) engage participants (parents can track their child’s milestones and get study updates and information) and b) collect information (via short questionnaires parents complete) on early development as they unfold between Generation New Era main data collections.

Only scientifically relevant topics are included in this summary document. The administrative and operational parts of the questionnaire have not been included under the scientific themes (e.g. screening eligibility to take part, instructions to interviewers, collecting names and contact details, collecting consents).

Based on ELC-FS, we estimate that in the longest parent interview where all questions are asked (primary informant, PI, interview), 16 minutes and 10 seconds are needed for the administrative/operational parts of the questionnaire. Including another 3 minutes of interviewer time to place the BabySteps App, **this leaves 41 minutes for scientific content in the PI interview at wave 1.**

A. Children's physical health

This section onwards provides a more granular overview of the [draft GNE questionnaire](#) content and a summary of the decisions the ELC-FS team took when deciding which topics that were flagged in the previous consultation could be included or were de-prioritised, and why. Numbers in square brackets refer to row numbers in the accompanying questionnaire document for this scientific theme (A).

Areas of ELC-FS questionnaire for review:

1. **Child's physical characteristics** – age at interview [A5-A6], sex [A7], ethnicity [A8]
2. Child's **birth and delivery** – fertility treatments [A10-A13], birth date [A1-A4] and due date [A14-A18], cared for in NICU [A19], when came home from hospital [A20-A21]
3. Child's **birthweight** [A22-A26]
4. Child's **general health** [A27], **accidents** [A28], **longstanding health conditions and hospitalisations** [A29-A30]
5. **Feeding** – breast milk [A31-A32] and solids [A33]
6. Child's **sleep** using combination of brief infant sleep questionnaire (BISQ, Sadeh et al. 2004) and sleep habits questionnaire (Seifer et al. 1996) – where [A34], how often wakes [A35], how long each night [A36], whether a problem for parents [A37]
7. Planned linkage of **child's health records** (not included in timing estimate).

Estimated average length of questions: 3 minutes 35 seconds.

Areas that were considered but not included in the ELC-FS questionnaire:

- **Child's exact delivery time:** deprioritised to make room for questions about fertility treatments.
- **Whether parents themselves were pre-term/low birthweight:** deprioritised as questions determining whether child born early/late already quite long.

- Whether **partner could accompany birth mother** due to COVID-19: no longer relevant for 2023-2024 fieldwork.
- **Type of delivery**: deprioritised for fertility treatment questions.
- Baby's birth **length and head circumference**, and current weight, length and head circumference following findings from Children of 2020s study that very high number of don't know responses.
- **Consumption of milk other than breastmilk**: deprioritised to focus solely on breastmilk and solids.
- **Reason why stopped breastfeeding**: deprioritised to include other questions on breastfeeding.
- **Child's vaccinations and parent's vaccine hesitancy**: deprioritised as vaccinations record can be incorporated through linkage.
- **Weekday and weekend sleep patterns**: deprioritised to fit in other general sleep questions.
- **Clarification of whether child born with the longstanding health condition**: deprioritised in favour of asking about exact type of longstanding health condition.

B. Parents' physical and mental health

Numbers in square brackets refer to row numbers in accompanying [questionnaire document](#) for this scientific theme (B).

Areas of ELC-FS questionnaire for review:

1. **Psychological distress** (PHQ/GAD and Kessler-6) [B16-B26] and treatment [B27-B30]
2. **Loneliness** (ONS single question) [B15]
3. **Life satisfaction** [B14]
4. **General health** [B3] and **longstanding health conditions** (ONS question) of parents and their partners [B1-B2 and B4-B5]
5. **Alcohol, smoking and vaping** – currently, during pregnancy and in the home [B31-B57]
6. Birth mother's **pregnancy history** (to infer child's birth order and miscarriage history) [B6-B13]
7. Planned linkage of parents' **health records** (not included in timing estimate).

Estimated average length of questions: 6 minutes 20 seconds.

Areas that were considered but not included in the ELC-FS questionnaire:

- **Intentionality of pregnancy, time to conception, use of contraception:** deprioritised in order to include room for fertility treatment questions and other details around child's birth.
- **Obstetric complications:** deprioritised to make room for pregnancy history.
- **Parents' height and weight:** deprioritised as can be collected at later waves
- **COVID:** cut as fieldwork in 2023-2024.
- **Familial health:** deprioritised due to space constraints.
- **Partner's mental health:** deprioritised as will be asked in their own interview and sensitive.

- **Social isolation:** explored possibility of including question on frequency of contact with friends and family but cut due to space constraints and other questions included on social support and loneliness.
- **Self-harm:** Deprioritised for later waves as decided too sensitive for the first wave of a study.
- **Edinburgh post-natal depression score:** deprioritised as highly correlated to PHQ/GAD when baby 9 months old.
- **Parental coping:** parental stress index was added but coping component deprioritised due to high amount of overlap with the rest of the index, as well as social support questions and couple relationship questions included in the questionnaire.
- **Use of illicit drugs:** decided too sensitive to ask in the first wave of the study.
- **Alcohol use disorders identification test (AUDIT):** deprioritised in favour of more general questions about drinking patterns, including during pregnancy.
- **Use of smokeless tobacco/shisha:** deprioritised due to low population prevalence.
- **Alcohol, smoking and vaping pre-pregnancy:** deprioritised to focus only on during and post-pregnancy.

C. Children's cognitive, social and emotional development

Numbers in square brackets refer to row numbers in accompanying [questionnaire document](#) for this scientific theme (C).

Areas of ELC-FS questionnaire for review:

1. **Developmental milestones:** MCS wave 1 questions [C19-C27]
2. **Child Temperament:** Shortened Infant Behaviour Questionnaire [C3-C18]
3. **Crying** [C1-C2].

Estimated average length of questions: 5 minutes.

Areas that were considered but not included in the ELC-FS questionnaire:

- **Communication and language:** deprioritised as thought child would likely be too young when study was planned for 6 months.
- Child **attachment:** deprioritised as child too young at 9-months.
- Child's **social development:** deprioritised as child too young at 9-months to have social friends.
- **Colic** diagnosis and how easy child is to **console:** deprioritised as covered/implied through both crying and temperament questions.
- **Age each developmental milestone** achieved: deprioritised because of difficulties with retrospective reporting.
- Other developmental milestone scales e.g. **ASQ and CREDI:** MCS wave 1 items compared against these scales and chosen to allow cross-cohort comparisons and because only 9 items.
- **Parental understanding of child development** to aid policy: insufficient space to develop a question on this.
- **Parental concerns about development:** deprioritised in favour of objective measures.

D. Infant-parent relationships and early home environment

Numbers in square brackets refer to row numbers in accompanying [questionnaire document](#) for this scientific theme (D).

Areas of ELC-FS questionnaire for review:

1. **Family composition** - people in household [D7-D16], relationship of parents to child [D1-D5, D44-D46], relationship between parents/partners, parents'/partner's residency and contact with children [D17-D61], non-resident children [D62-D69].
2. **Relationship between parents/partners** – couple satisfaction index [D121-D125] and co-parenting disagreements [D126-D128]
3. **Languages** spoken at home [D70-D71]
4. **Religion** [D72]
5. **Parenting engagement** as measured in MCS wave 1 [D74-D82]
6. **Play** activities (adaptation of Ahmadzadeh et al. 2020) [D83-D107]
7. **Parent-infant bonding** as measured in MCS wave 1 [D108-D113] and parental **stress** (Parental Stress Scale) [D114-D120]
8. Child's **screen use** [D73]
9. Planned linkage of parents' and child's **social care records** (not included in timing estimate).

Estimated average length of questions: 11 minutes 10 seconds.

Areas that were considered but not included in the ELC-FS questionnaire:

- **Child custody arrangements:** deprioritised due to space constraints and significant questionnaire time already on household composition and nature of relationship between parents.

- **Details on non-resident partners:** information on co-resident parent partners prioritised under space constraints as most likely to have direct influence on child.
- **Questions about child's other residences:** deprioritised as unlikely to spend considerable amounts of time not living with at least one parent at 9-months.
- **Division of household tasks between parents:** Deprioritised as engagement with parenting/child activities appeared to have greater interest when looking at publications from MCS wave 1.
- **Parenting beliefs and aspirations:** deprioritised as possible to ask this at a later stage.
- **Disciplining children:** deprioritised as 9 months is young for intentional misbehaving, and somewhat captured in parenting stress index.
- **Technoference:** explored some questions in 2022 but were not satisfied with validity.
- **Parental over-reactivity to parenting stress:** deprioritised as somewhat captured in parental stress index.
- **Other couple relationship scales** e.g. GRIMS and Quality of Marriage Index: deprioritised in favour of CSI, as former highly correlated to CSI items, and latter did not relate well to parents who live separately but are in a relationship.
- **Parental conflict** e.g. Conflict Tactics Scale: deprioritised for co-parenting disagreement questions.
- **Reason for relationship breakdown with child's other parent:** cut due to time constraints.

E. Social, environmental and neighbourhood influences on children's development and health

Numbers in square brackets refer to row numbers in accompanying [questionnaire document](#) for this scientific theme (E).

Areas of ELC-FS questionnaire for review:

1. **Social support** – perceived social support questionnaire [E30-E35]
2. **Housing type** – tenure [E6], number of rooms [E7], car [E8], outdoor space [E9]
3. **Family service use [E20-E27] and problems accessing healthcare services [E28-E29]**
4. **Childcare [E11-E16]**
5. **Types of support from grandparents [E17-E19]**
6. Planned linkage of parents' and child's **social care records** (not included in timing estimate)
7. Address of household for **geographic linkages [E1-5]**.

Estimated average length of questions: 7 minutes 25 seconds.

Areas that were considered but not included in the ELC-FS questionnaire:

- **Address history** of parents for historic geographic linkages: history modules are long (scripted to take 1 minute and 50 seconds) so these questions were deprioritised in favour of keeping pregnancy history module.
- **Interviewer observations** of the home and neighbourhood: dropped due to ethical concerns about the collection of this information.
- **Chaos of household:** items from a chaos/interference scale (DISCORD) were added but had to be cut under space constraints.

- **Questions about the neighbourhood:** deprioritised as can be added through geolinkage.
- **Whether received baby box/bundle schemes in Wales/Scotland.**
- **Which grandparents providing which care:** decided to leave this open to accommodate different familial circumstances but probed whether respondent's own parents or other grandparents.
- **Expanding types support from grandparents to all relatives:** deprioritised as most likely relative to provide care to child is grandparents.
- **Whether childcare providers wear masks:** deprioritised for 2023-2024 fieldwork.
- **Social support during pandemic:** deprioritised as fieldwork 2023-2024.
- **Social provisions scale:** dropped in favour of perceived social support questionnaire.
- **Trust in others:** deprioritised in favour of keeping other questions about life satisfaction, loneliness and social support.

F. Inequality, disadvantage, diversity and context

Numbers in square brackets refer to row numbers in accompanying [questionnaire document](#) for this scientific theme (F).

Areas of ELC-FS questionnaire for review:

1. **Family income** with unfolding brackets [F75-F80]
2. Parents' (and their partner's) **employment** (or last job if currently unemployed) for SOC2020 and NSSEC coding [F19-F41, F60-F63], stopping work [F42-F45], **parental leave** [F46-F49, F64-F68], intentions to return to work and how job differs [F50-F51, F69]
3. Parents' (and their partner's) **education** [F52-F54, F70]
4. Parents' (and their partner's) **demographics** – age [F1-F2, F17-F18] sex and gender [F3-F16], ethnicity [F59, F71], country of birth [F55-F58]
5. Measures of **disadvantage** [F82-F85]
6. Receipt of **benefits** [F72-F74]
7. Keeping up with **bills** [F81]
8. **Adverse life events** during pregnancy and post-birth [F86-F109]
9. Planned linkage of parents' and child's **education and social care records** (not included in timing estimate).

Estimated average length of questions: 14 minutes and 15 seconds.

Areas that were considered but not included in the ELC-FS questionnaire:

- **Work flexibility**, shift work and agency work: questions were added from LFS but could not be retained under time constraints.
- **Employment history** of parents: deprioritised in favour of keeping pregnancy history module.
- **Pandemic-related impact on work and finances**: deprioritised given fieldwork in 2023-2024.

- **Paid and unpaid overtime:** deprioritised in favour of keeping questions about hours usually worked.
- **Paid and unpaid parental leave:** deprioritised within the parental leave question block to make sure variety of leave types captured, including stopping work.
- **Parental pay:** scripted to take 1 minute and 50 seconds to ask about pay, and 55 seconds to ask about partner's pay. Deprioritised in favour of keeping a single family income question.
- **Parental income sources**, including receipt of financial support from ex-partners and other family members: grandparents contributions to child captured elsewhere.
- **Debts** include mortgages: scripted to take 1 minute and 15 seconds. Deprioritised in favour of keeping other disadvantage measures.
- **Assets and wealth:** scripted to take 45 seconds. Deprioritised in order to keep questions on disadvantage.
- **Socio-economic status at 14** (main earner's employment at 14): deprioritised as can be reliably asked in other waves.
- **Impact of National Insurance increase on finances:** decision this would need to be modelled rather than asked directly.
- **Rent amount:** deprioritised as would also need information on housing costs which there was not space for.
- **Intimate partner violence:** questions were developed but ultimately cut as very sensitive for a first wave questionnaire where trying to build rapport. Questions retained about adverse life events (which covers general abuse) and couple relationship.
- **Whether respondent perpetrator of a crime:** felt too sensitive for a first wave of a study.
- **Linkage of HMRC and MOJ administrative records:** in testing work with the public these records considered more sensitive than health, education and social care. Possible to ask these at later waves.

Annex: Wave 1 Study overview

Wave 1 sample

- Target sample of 30,000 families, sampled via birth registration and health records from January-December 2026 births. This comprises 16,300 families in England, 4,500 families in Wales, 5,000 families in Scotland, and 4,200 families in Northern Ireland.
- Ethnic minority boosts in England and Scotland, and sample boosts of families in deprived areas in all nations.
- Boosts in Scotland, Wales and Northern Ireland: In Scotland, we will be inviting around 11,500 families or about 25% of all births; In Wales, we will be inviting over 9,700 families, over 1/3 of all births, and in Northern Ireland, we will be inviting nearly 10,000 families, nearly half of all births.

Wave 1 target age of interview

- Wave 1: 9-10 months. This target age was decided following evidence from the Feasibility Study around the earliest age of interview accounting for the duration of the sample data provisioning process.
- Wave 1 Main fieldwork period: November 2026 through January 2028, with each birth month issued separately.
- An online follow-up survey will be issued to non-responding families after the main fieldwork period for each month of births.
- A short pilot will precede main fieldwork data collection.

Recruitment approach

1. An **opt-out notification letter** will be addressed to each parent in the 'main household' allowing sampled individuals an opportunity to opt-out of being approached for interview.

2. An **'invitation pack'** (invitation letter and Study Guide leaflet) providing further information about the study will be posted to families who have not opted out inviting them to participate.
3. This is then followed by an **interviewer visit** to their home address to answer any questions, secure their participation and arrange appropriate interviews.

We also plan to provide targeted unconditional (given ahead of completion) incentives, as well as conditional (given on completion of the survey) incentives to all participants.