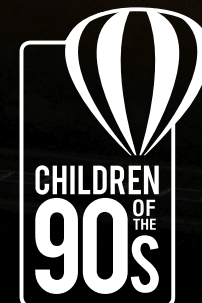
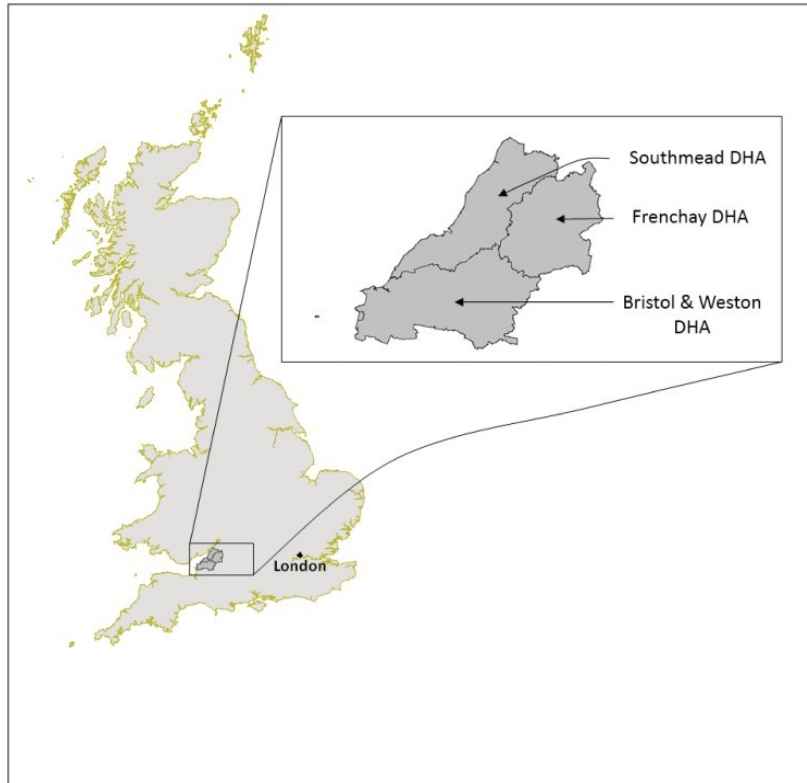


# The Avon Longitudinal Study of Parents and Children: The role of virtual visits in LPS data collection

**Melanie Lewcock**  
**Clinic Manager**



# ALSPAC (Children of the 90s)



## COHORT PROFILE

### Cohort Profile: The Avon Longitudinal Study of Parents and Children: ALSPAC mothers cohort

Abigail Fraser,<sup>1,2</sup> Corrie Macdonald-Wallis,<sup>1,2</sup> Kate Tilling,<sup>2</sup> Andy Boyd,<sup>2</sup> Jean Golding,<sup>2</sup> George Davey Smith,<sup>1,2</sup> John Henderson,<sup>2</sup> John Macleod,<sup>2</sup> Lynn Molloy,<sup>2</sup> Andy Ness,<sup>2</sup> Susan Ring,<sup>2</sup> Scott M Nelson<sup>4</sup> and Debbie A Lawlor<sup>1,2\*</sup>

*International Journal of Epidemiology* 2013;**42**:97–110

doi:10.1093/ije/dys066

## COHORT PROFILE

### Cohort Profile: The 'Children of the 90s'—the index offspring of the Avon Longitudinal Study of Parents and Children

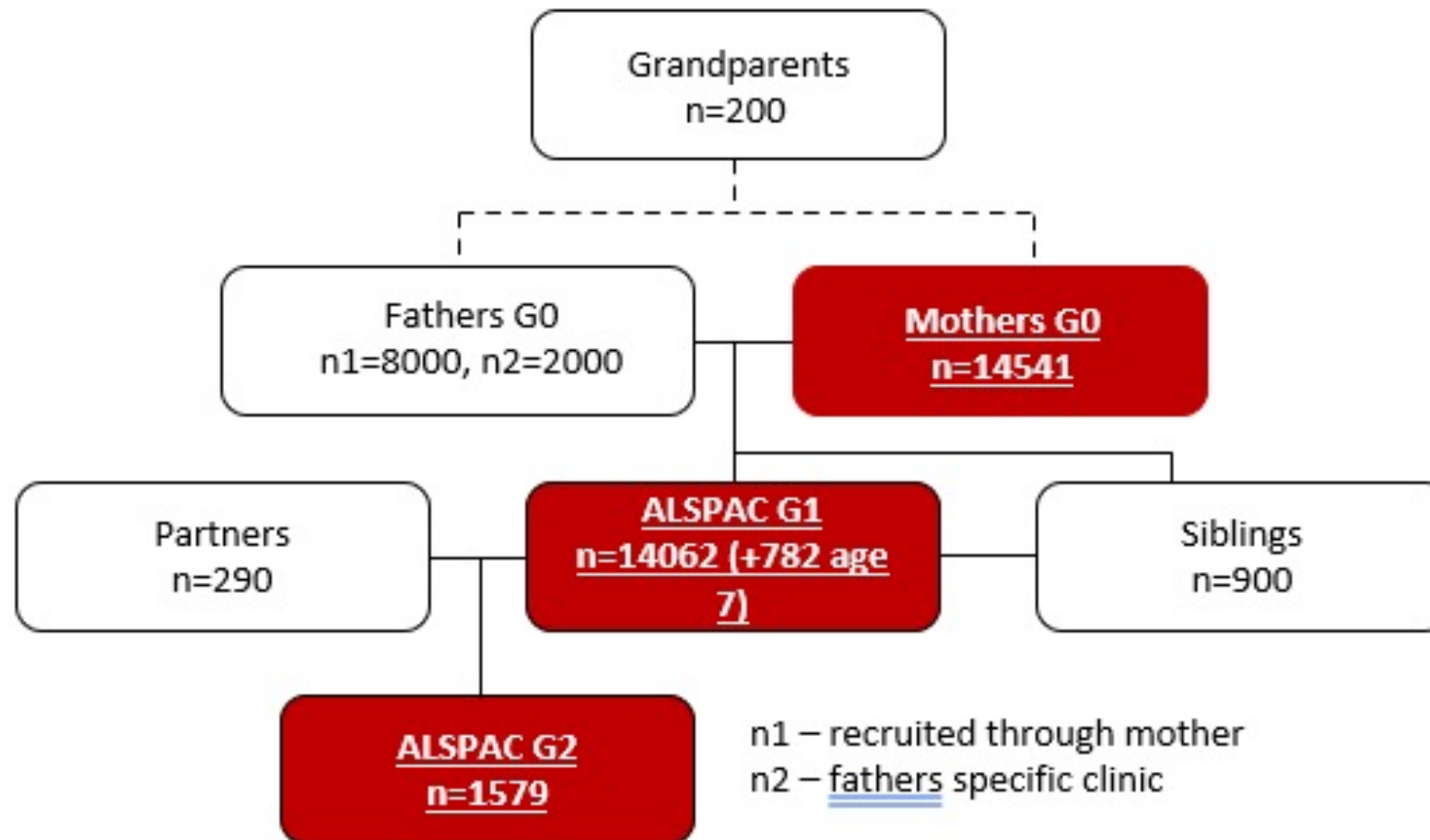
Andy Boyd,<sup>1\*</sup> Jean Golding,<sup>2</sup> John Macleod,<sup>1</sup> Debbie A Lawlor,<sup>2</sup> Abigail Fraser,<sup>2</sup> John Henderson,<sup>2</sup> Lynn Molloy,<sup>2</sup> Andy Ness,<sup>2</sup> Susan Ring<sup>2</sup> and George Davey Smith<sup>2</sup>

*International Journal of Epidemiology* 2013;**42**:111–127

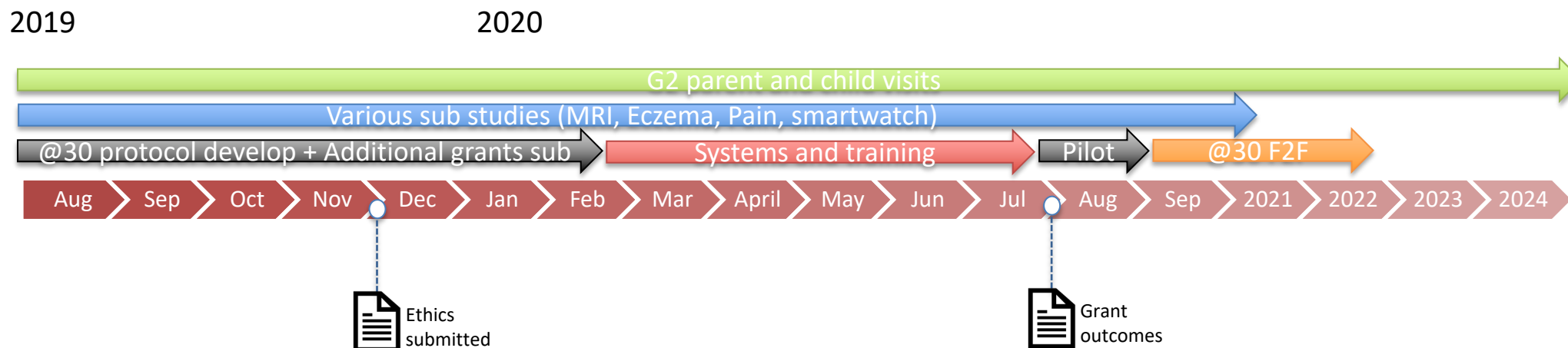
doi:10.1093/ije/dys064

- Avon Longitudinal Study of Parents and Children
- Birth cohort in Bristol, UK
- 14,500 pregnant women in 1991 – 1992
- Last 30 years original children, mothers and fathers
- Extended recruitment to children of children
- Biomedical study, face to face data and sample collection gold standard

# ALSPAC generations



# ALSPAC pre-COVID data collection plan

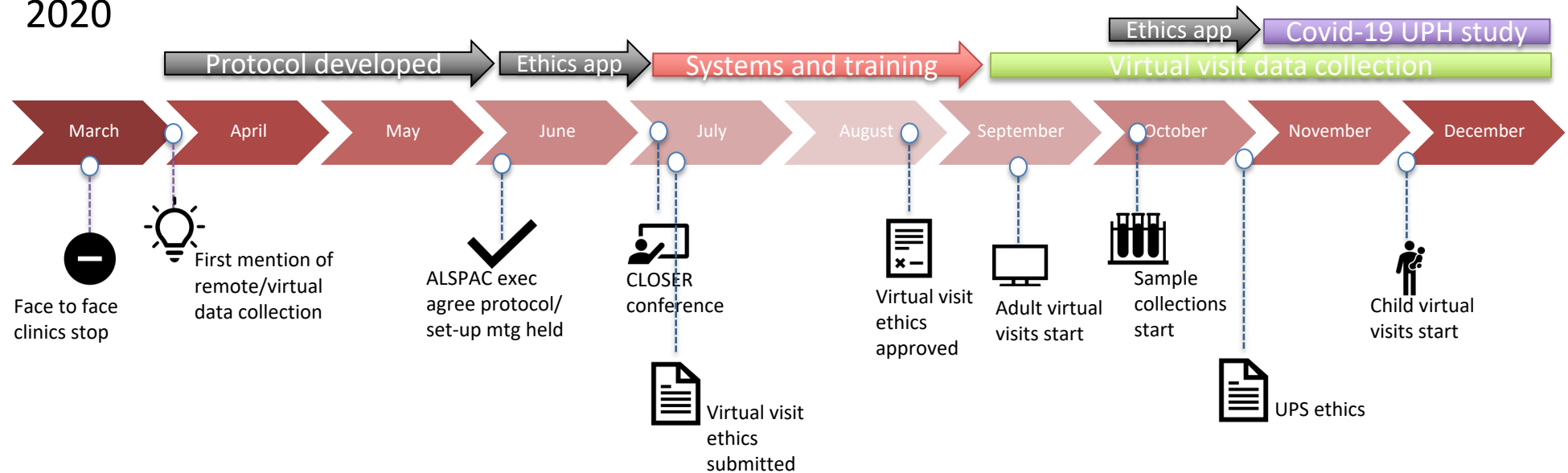




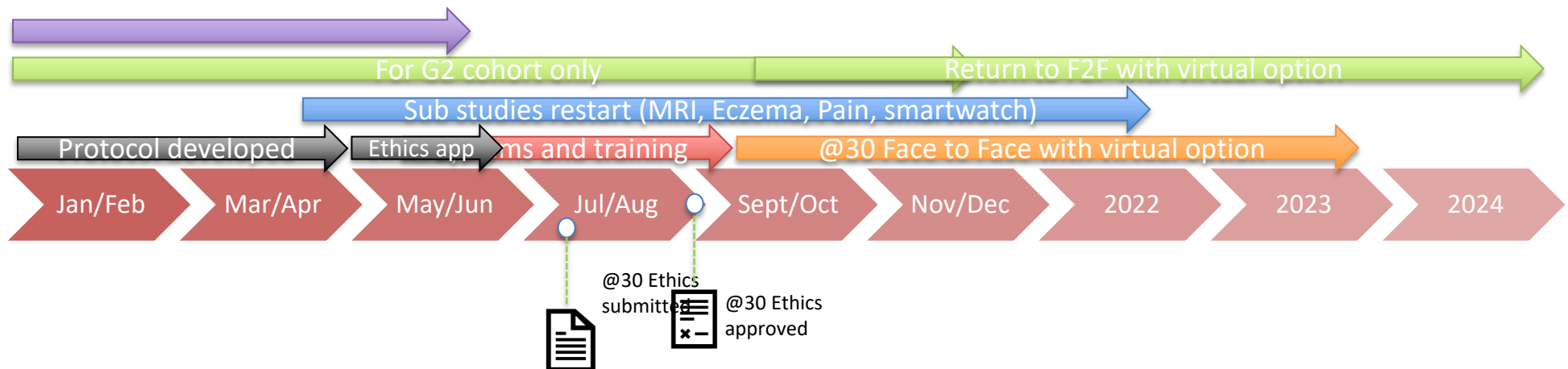
# ALSPAC post-COVID data collection plan



2020



2021



# G2 virtual visit measures

Measure	Completed virtually	Equipment required	Supplied by?
Anthropometry (Height, circumferences)	Yes	SECA tape measure	ALSPAC
Weight	Yes	Scales	Participant
BP	Yes (adults only)	BP monitor	ALSPAC
DXA	No		
Eczema assessment	Yes	None	N/A
Skinfolds	No		
DENVER assessment	Yes	Some toys	Participant
Head cameras	Yes	Head cam	ALSPAC
Intake 24 (Diet diary)	Yes	None	N/A
Axivity (activity monitor)	Yes	Axivity device	ALSPAC
Physical capability (timed walk, chair rise, grip, balance)	Partial (chair rise, balance only)	Chair	Participant
Cognitive and Baby bandit	Yes	Paperwork	ALSPAC
Voice recordings	Yes	None	
Blood sample	No		
Urine sample	No		
Oragene saliva samples	Yes	Collection kit	ALSPAC

# G2 virtual visit systems



Identification of appropriate video calling system



Delivery of equipment – Staff, courier, packaging, timing

Consent 10 - Version 5.4 (21 April 2021), IRAS No: 83462

We would like to ask you to undertake the following measurements/procedures. Please cross the "yes" box to indicate that you give consent or cross the "no" box if you do not consent. Please also cross to indicate whether you would like us to inform you of the result, and give you a letter to give to your GP, if the tests marked \* give cause for concern.

General Consents		
	Yes	No
A1 I confirm I have read and understood the "Further information about your focus visit" booklet V3.2 (02/07/2020).	<input type="radio"/>	<input type="radio"/>
A2 I confirm that I have had the	<input type="radio"/>	<input type="radio"/>
A3		

Electronic consent system

exception

bring existing Clinic visit ID 387123901A

is visit ID 387123901A

Fieldworker: CCGO Child MEDCap

**MOTHERS' CLINIC**

Inpatient Consent Code:

Source: DeEmpolyment

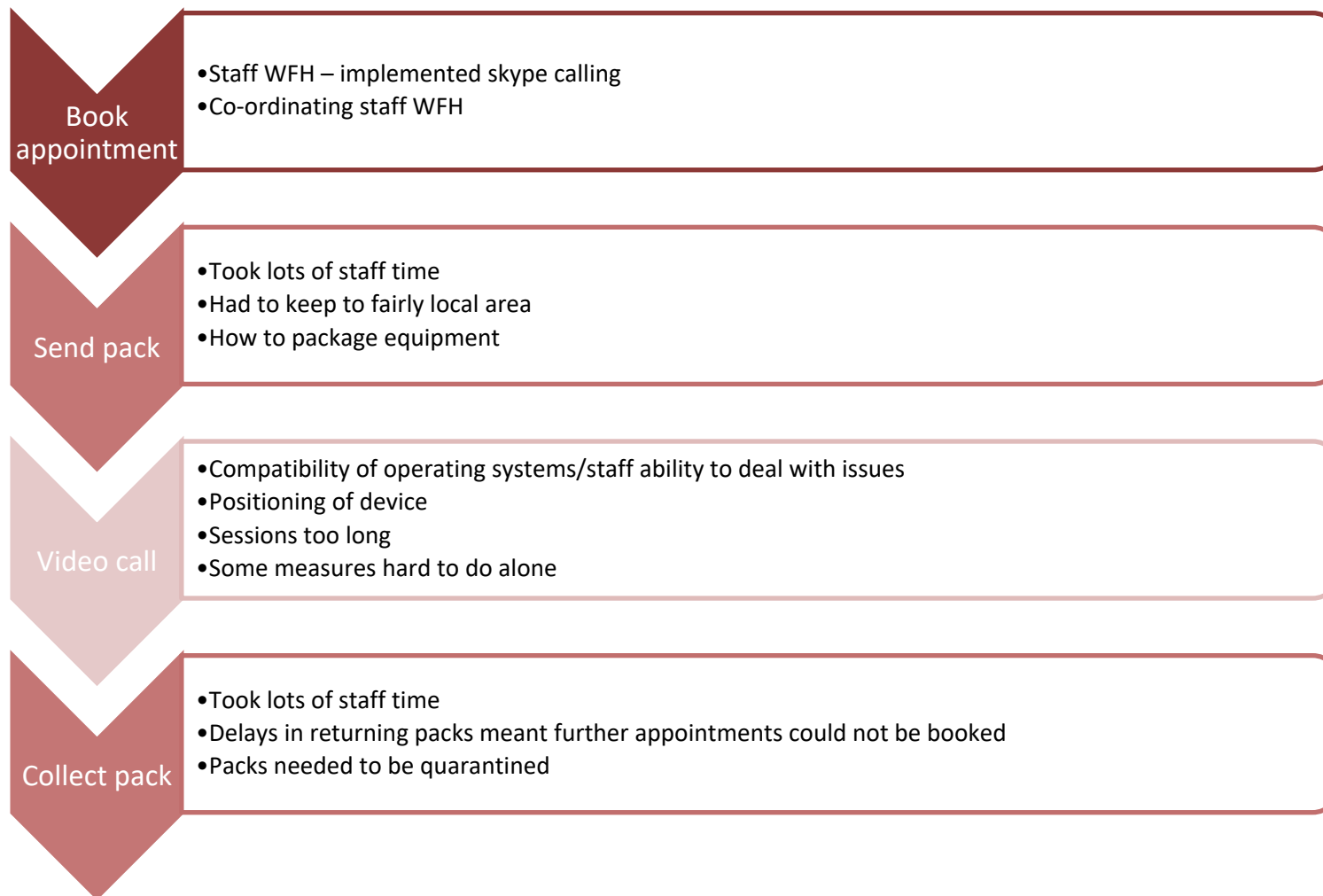
Participant Consent Unique Link for Visit:

https://childrenofthe90s.ac.uk/consent/consent/387123901A/Source: DeEmpolyment

virtual ID	123901	Imported from admin system
Source of Birth	BT 67-1992	Imported from admin system
Wt	90	Imported from admin system
Age	12	Imported from admin system
Gender	Male	Imported from admin system
Created at	2021-07-01 10:00:00	Imported from admin system

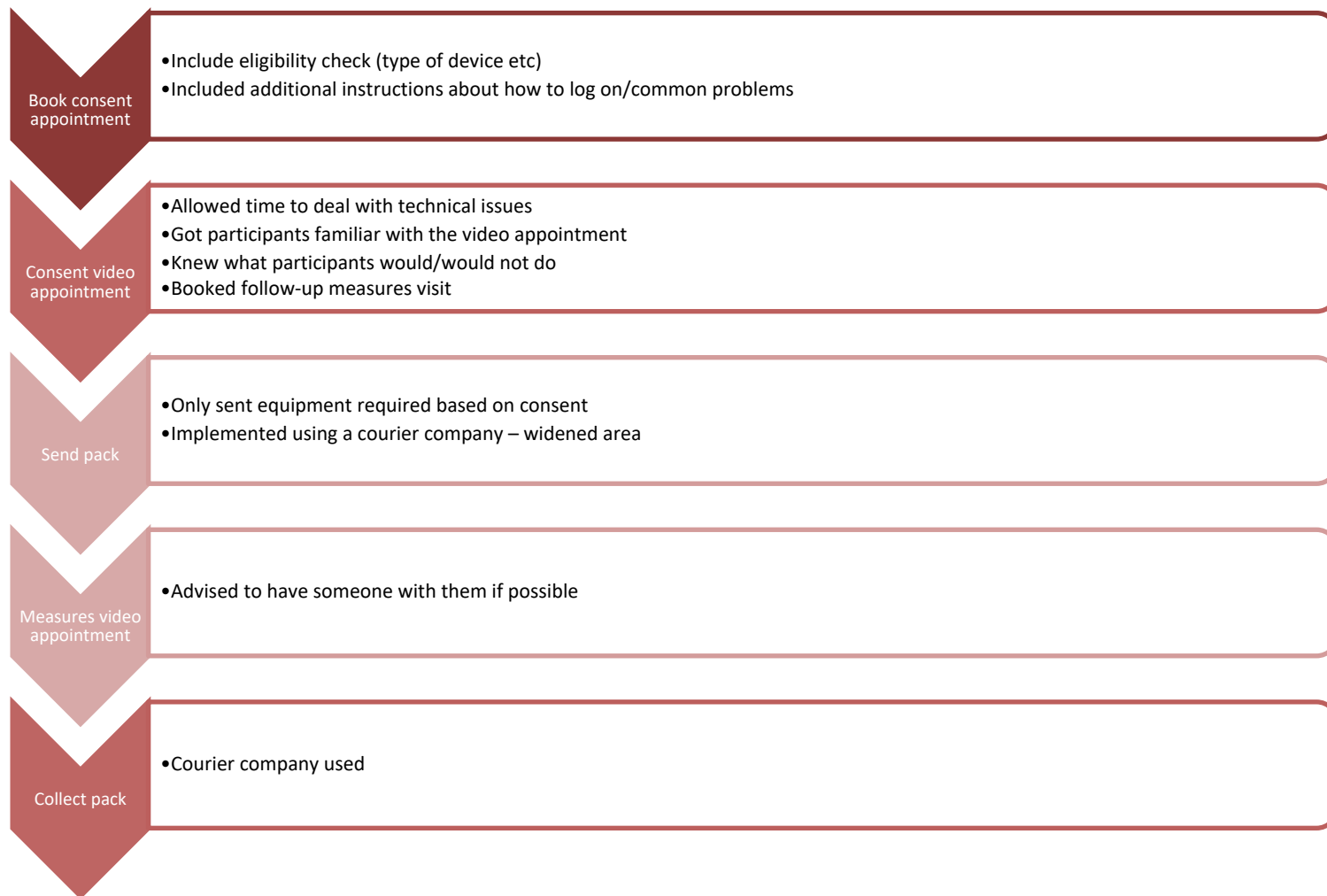
Data collection system

# Virtual visit pilot

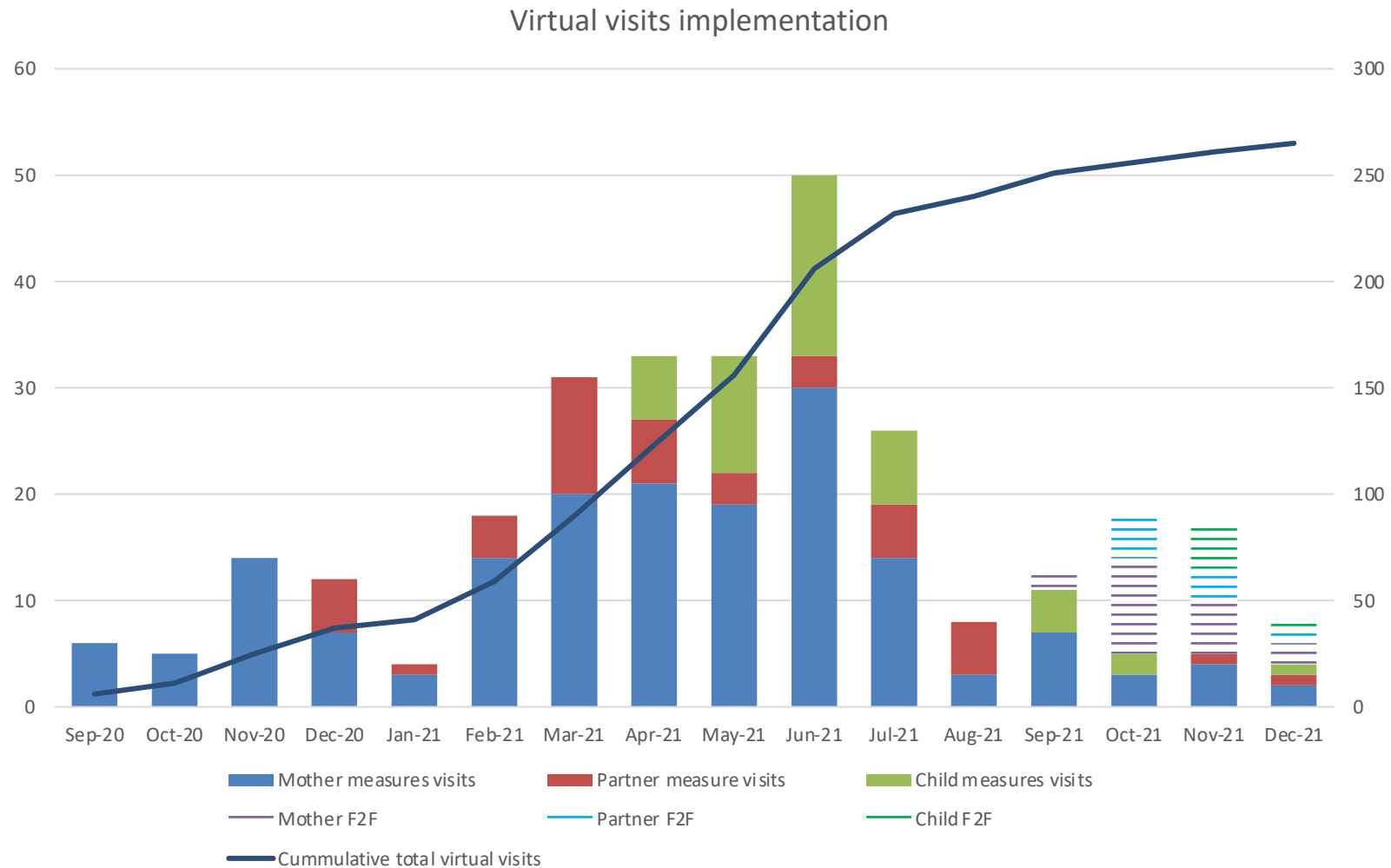




# Virtual visit – final process



# Virtual visits completed

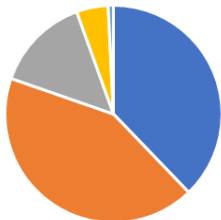


- Implementation of virtual visits allowed us to obtain some data on about 20% of participants
- Obtained consent for linkage to obstetric records and for birth samples
- Maintained engagement

# Participant feedback

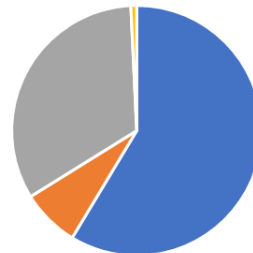
- 133 of 217 adult participants completed a satisfaction survey
- No concerns over confidentiality
- All found it easy to arrange and most found it convenient and no better or worse than a face-to-face visit
- Everyone was satisfied with their visit
- A small number had difficulty connecting or with call quality
- A small number had difficulty arranging deliver/collection of the pack

How easy did you find it completing the measurements yourself? If you had difficulty, please add comments



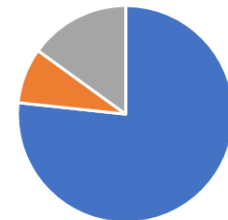
■ Very easy ■ Easy ■ Neither easy or difficult ■ Difficult ■ Very difficult

If you could choose the format of your next COCO90s visit, what would it be?



■ Face to face ■ Home visit ■ Online ■ Blank

What device type did you use for your virtual visit? Please add comments on any difficulties you had



■ Laptop/desktop PC ■ Tablet ■ Smartphone

# Qualitative study

**Qualitative review of Children of the 90s recruitment and virtual visits by QuinteT (Qualitative Research Integrated within Trials) – Marcus Jepson**

- Audio recorded both consent (10) and measurement sessions (5)
- Analysed using Conversation Analysis (applied method for the study of naturally occurring talk)

Outcomes:

- Fieldworker approach led to an overall positive mood even though visits could be long
- The technical aspects of online form filling were negotiated most successfully when fieldworkers and participants were able to share a screen
- Fieldworkers demonstrated a high level of knowledge about the equipment provided to participants and were able to orientate participants to the correct measurement tools
- The value of the fieldworker being able to see the participant as they undertook measurements should not be underestimated.

This was a relatively small-scale study, with calls being made by an experienced team of fieldworkers. The participants in the study were active members of the ALSPAC G2 cohort and were willing to take part in the measures visits.

# Lessons learned and issues

- Some measures more appropriate than others. For physical measures that can be completed remotely a video session is likely to be better than telephone call or self administered.
- Validation of measurement data has been difficult, the ideal being repeating the measures face to face
- With our current data collection sweep we now have the opportunity to repeat some measures both virtually and face to face
- The cost for setting up virtual visits was mainly in staff time to develop protocols and systems and complete training – now these are established it would be more cost effective to implement in future
- Sending/receiving equipment was by far the biggest challenge
- Training staff remotely was difficult and they were also only just becoming familiar with video calling and were having to use new systems

# Future plans

- Virtual visits can provide an alternative to face-to-face visits
- ALSPAC plan to continue to use virtual visits as an engagement tool – to reach those who may not traditionally attend face-to-face or cannot attend (overseas, personal circumstances)
- ALSPAC will consider the use of virtual visits in the set-up of future clinics. It may be favourable and cheaper, in some circumstances, than face to face