

The Hertfordshire Cohort Study



**Professor Elaine Dennison,
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Developmental origins of adult disease

The developmental origins of adult disease (DOHAD) hypothesis suggests that health in early life influences health in adulthood



David Barker 1936-2013



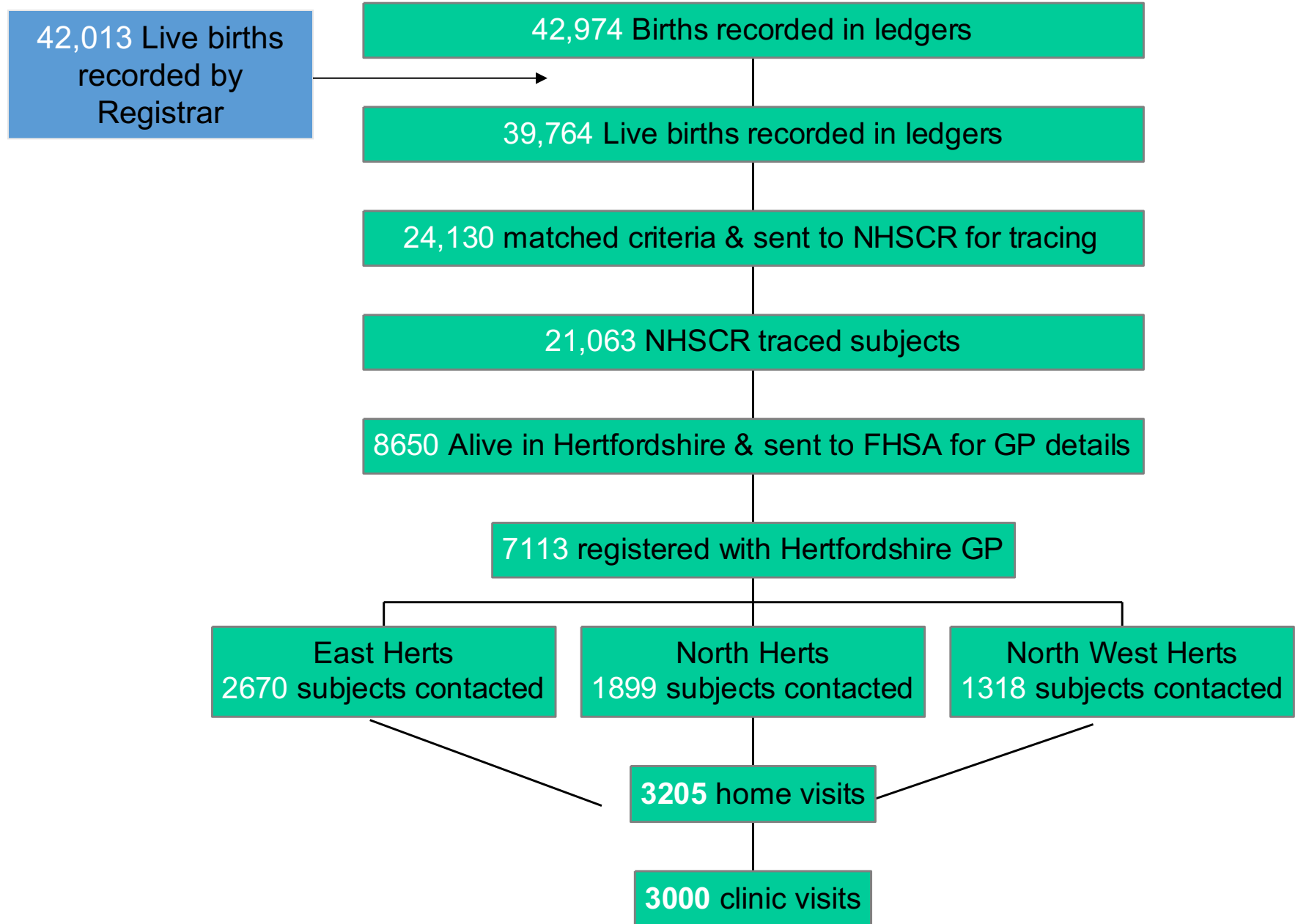
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Weight at Birth.	Weight 1st Year	Food.	No. of Visits.	Condition, and Remarks of Health Visitor.			
				W	R	D	T
8 1/4 lbs	24 1/2 lbs	B.	11	Y	-	-	4
Healthy & well developed.				Buckland School. Card to S.			
7 lbs	18 1/4 lbs	B	12	h.	Y.	Y.	8
moved to Bury Green St. Hadham.				Had measles, pneumonia & a			
8	20	Bot.	11	Y.	Y.	?	4
I.B. abscess in neck opened. Ant. fontanelle still open 23 yrs. Abdomen very large & prot.							
8 1/2	22	B.B.	9	Y	Y	Y	10
Healthy & normal.				Buckland School. Card.			



Original Cohort construction



Hertfordshire Clinics



Royston



Welwyn Garden City



Southampton



Hertford



Radlett





1931-39

Births in Hertfordshire recorded in Health Visitors' ledgers
n=42,974

Liveborn singletons traced and living in Hertfordshire
n=8650

1998-2003

Baseline home interviews
n=3225

1998-2004

Baseline clinic visits
n=2997

2005

Musculoskeletal follow-up
(MSFU) n=642

2008

Clinical outcomes questionnaires
n=2299

Physical activity trial
(HPAT) n=96

2009

Wellbeing study
n=1417 & 30

Sarcopenia study
(HSS) n=105

2011

EPOSA study
n=443

2012

Bone study
n=250

2013

VIBE
n=279

Sarcopenia study
extension
(HSSe) n=168

2014

Diet & physical
activity focus groups
n=92

2017

Bone study
n=224

2018

----- H3G (intergenerational) study recruitment -----

Hospital Admissions n=8741

Deaths n=7398 to September 2016

Musculoskeletal measures in HCS



Physical Activity in Older Adults – the NAPA study



Home visit- control group will receive:

- Questionnaire
- Accelerometry
- Anthropometric measurements + SPPB
- Healthy living leaflet

Home visit- intervention group will receive:

- Questionnaire
- Accelerometry
- Anthropometric measurements + SPPB
- Approx 20 mins of healthy conversation using Healthy Conversation Skills with aim to increase physical activity and improve other lifestyle factors

Interim telephone calls at 1, 3, 6, 9 months for Healthy Conversation Skills

12 months follow up with repeat home visits

Recruit from East HCS approx. 230 participants
(men and women)
Age range: 79-88

Randomise into 2 groups

Effects of a global pandemic



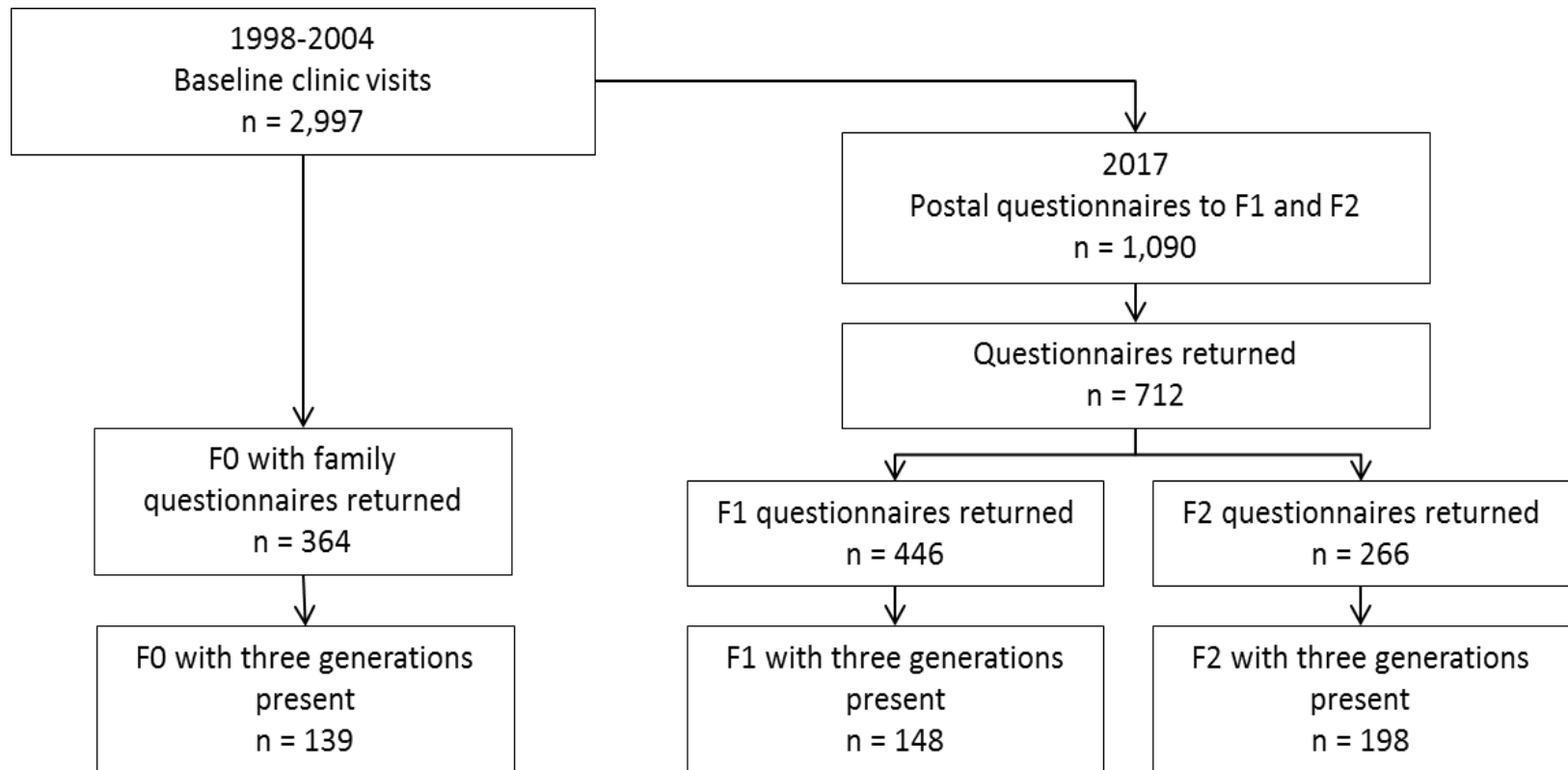
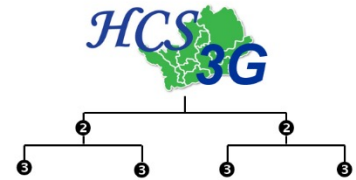
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Assessment of how older adults have been affected by COVID-19: A look at the Hertfordshire Cohort Study

16 DECEMBER 2020

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Intergenerational study



HCS website




<https://www.mrc.soton.ac.uk/herts/>

Key reading.....



REVIEW

The Hertfordshire Cohort Study: an overview [version 1; referees: 3 approved]

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Data access process

1. **Initial informal approach** – do we have what you need? emd@mrc.soton.ac.uk/cc@mrc.soton.ac.uk HCS website
2. **Main data use agreement** which needs to be completed by the leading collaborator for the project
3. **Separate custodian agreement** also needs to be completed by each individual who will be seeing the data
4. Paperwork reviewed at HCS steering group meetings, held every 2 months

Acknowledgements



NIHR | National Institute
for Health Research



VERSUS
ARTHRITIS

UNIVERSITY OF
Southampton