An Overview of ELSA

ELSA User Day, 10 May 2023

Dr Brian Beach
UCL Research Department of Epidemiology & Public Health
What is ELSA?

ELSA is a multidisciplinary cohort study of a representative sample of people aged 50+ living in private households in England.

The survey began collecting data in 2002 (following a pilot study in 2001), with follow-up interviews every two years.

The sample has been refreshed periodically to maintain representativeness of the population aged 50+.
What ELSA does

ELSA provides a rich and unique resource of information related to ageing.

The main objective of ELSA is to understand the *complex dynamics of the ageing process*, which relates to economic circumstances, family and social connections, biological factors, work, lifestyle practices, and multiple aspects of health and wellbeing.

A key aim of ELSA is to advance research and inform policy to improve the lives of older adults and all who reach later life.
Components of ELSA

ELSA includes various modules and components that contribute to its richness. Each wave of data collection involves a computer-assisted personal interview (CAPI) as well as a self-completion questionnaire.

This SCQ provides respondents with an added layer of privacy as well as extra time, collecting information related to e.g. social connections, loneliness, consumption practices, and life satisfaction. SCQs in Waves 6 & 8 also collected information on sexual activity.

In certain years, a Nurse Visit is conducted to take various measurements related to health and physical function, including taking blood samples.
## Waves and Data Collection

<table>
<thead>
<tr>
<th>Year</th>
<th>Modality</th>
<th>Sample</th>
<th>Refreshment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wave 1 (2002/3)</td>
<td>CAPI</td>
<td>12,099</td>
<td></td>
</tr>
<tr>
<td>Wave 2 (2004/5)</td>
<td>CAPI + Nurse visit</td>
<td>9,432 (7,666)</td>
<td></td>
</tr>
<tr>
<td>Wave 3 (2006/7)</td>
<td>CAPI + Life History</td>
<td>9,771 (7,855)</td>
<td>HSE 2001/02/03/04</td>
</tr>
<tr>
<td>Wave 4 (2008/9)</td>
<td>CAPI + Nurse visit</td>
<td>11,050 (8,643)</td>
<td>HSE 2006</td>
</tr>
<tr>
<td>Wave 5 (2010/11)</td>
<td>CAPI</td>
<td>10,274</td>
<td></td>
</tr>
<tr>
<td>Wave 6 (2012/13)</td>
<td>CAPI + Nurse visit</td>
<td>10,601 (8,054)</td>
<td>HSE 2009/10/11</td>
</tr>
<tr>
<td>Wave 7 (2014/15)</td>
<td>CAPI</td>
<td>9,666</td>
<td>HSE 2011/12</td>
</tr>
<tr>
<td>Wave 8 (2016/17)</td>
<td>CAPI + Nurse visit (50%)</td>
<td>8,445 (3,525)</td>
<td></td>
</tr>
<tr>
<td>Wave 9 (2018/19)</td>
<td>CAPI + Nurse visit (50%)</td>
<td>8,736 (3,069)</td>
<td>HSE 2013/14/15</td>
</tr>
<tr>
<td>Covid-19 (2020)*2</td>
<td>Online + CATI</td>
<td>~7000</td>
<td></td>
</tr>
<tr>
<td>Wave 10 (2022/23)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Sample sizes are all completed interviews; CAPI = computer assisted personal interview; CATI = computer assisted telephone interview; HSE = Health Survey for England; Wave 1 = Original sample interviewed in HSE 1998/1999/2001, age 50+ on 1 Mar 2002.*
The Main ELSA Modules

Demographic data
e.g. ethnicity, martial status, education

Physical health
e.g. mobility, disability, chronic conditions

Lifestyle practices
e.g. smoking, physical activity, sleep

Mental health & psychosocial wellbeing
e.g. depression, loneliness (SCQ), quality of life (SCQ)

Social care
e.g. limitations in I/ADLs, formal care receipt

Social participation
e.g. transport, activities out of the home (SCQ)

Work & pensions
e.g. employment status, pension arrangements

Income & assets
e.g. sources of income, wealth

Housing & consumption
e.g. housing tenure, energy use, goods owned

Cognitive function
e.g. memory, word recall, literacy

Volunteering & caregiving
e.g. recipient of help, sense of reward

Expectations
e.g. of mortality, retirement timing, future finances
Special Sub-studies of ELSA

Life History Interview: Conducted as part of Wave 3 (2006/07)
• Collected retrospective data on key events across respondents’ entire life course

• Used to investigate dementia risk using a series of various cognitive tests and batteries among a subsample (~1,300) of ELSA participants aged 65+
• Informed a predictive algorithm to classify ELSA respondents
• Designed to produce comparable data among the HRS/Gateway network of studies

COVID-19 sub-study: June/July & Nov/Dec 2020
• Collected key ELSA measures along with items specific to the pandemic
Special Features and Connections

In addition to the wide range of information collected in ELSA, there are additional resources for various types of specialist research:

- Hospital Episode Statistics – linkage to data from health services
- Environmental data linkage, e.g. area-based air pollution
- Genetic data – genotyped data, polygenic scores
- Biomarkers – connecting the biology to other outcomes
- Proteomics – assays of proteomes to allow analysis of protein biomarkers
Thank you!

www.elsa-project.ac.uk

b.beach@ucl.ac.uk