Agenda

- Background
- Longitudinal Weights
- Cross-Sectional Weights
  - Main Cross-Sectional Weights
  - Nurse Weights
  - Self-Completion Weights
- Clustering & Stratification Variables
- Q & A
Background
History of ELSA

Original sample
HSE 1998/1999/2001
Age 50+, 1 Mar 2002

Refreshment sample
HSE 2006
Age 50-74, 1 Mar 2008

Refreshment sample
HSE 2011/12
Age 50-51, 1 Mar 2014

Wave 1 2002/3
Wave 2 2004/5
Wave 3 2006/7
Wave 4 2008/9
Wave 5 2010/11
Wave 6 2012/13
Wave 7 2014/15
Wave 8 2016/17
Wave 9 2018/19

Refreshment sample
HSE 2001/02/03/04
Age 50-52, 1 Mar 2006

Refreshment sample
HSE 2009/10/11
Age 50-55, 1 Mar 2012

Refreshment sample
HSE 2013/14/15
Age 50-53, 1 Mar 2018
Longitudinal Weights
Key Points

- Aim to make the sample representative of those aged 50+ living in England at a single point in time
- Assigned to core members only
- Produced by assessing differences between respondents and non-respondents on a number of characteristics, e.g.:
  - Age (at wave 1) by sex;
  - Government Office Region;
  - Number in household;
  - Whether had a long-term limiting illness;
  - White/non-white ethnicity;
  - Self-reported general health.
Key Points

- Built upon longitudinal weights from each previous wave, as weights apply to those who have taken part in each wave
  - 1 weight is available in each Wave 3-8 using Wave 1 core members as a base
  - 1 additional weight is available at Wave 8 using Wave 4 core members as a base
- Applied when analysing individual change over time
## Longitudinal Weights by Wave

<table>
<thead>
<tr>
<th>Wave</th>
<th>Variable</th>
<th>Core Members</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>W3LWGT</td>
<td>7,168</td>
</tr>
<tr>
<td>4</td>
<td>W4LWGT</td>
<td>5,971</td>
</tr>
<tr>
<td>5</td>
<td>W5LWGT</td>
<td>5,262</td>
</tr>
<tr>
<td>6</td>
<td>W6LWGT</td>
<td>4,711</td>
</tr>
<tr>
<td>7</td>
<td>W7LWGT</td>
<td>4,062</td>
</tr>
<tr>
<td>8</td>
<td>W8W1LWGT</td>
<td>3,470</td>
</tr>
<tr>
<td>8</td>
<td>W8W4LWGT</td>
<td>5,623</td>
</tr>
</tbody>
</table>
Cross-Sectional Weights
Key Points

- Aim to make the sample representative of those aged 50+ living in England at the specific time of each wave
  - therefore do NOT include those who have moved out of England
- Assigned to core members only
- Produced by assessing differences between respondents and non-respondents on a number of characteristics
Wave 8 Example

- W8W1LWGT, n=3,470
- W8W4LWGT, n=5,623
- W8XWGT, n=7,133
# Main Cross-Sectional Weights by Wave

<table>
<thead>
<tr>
<th>Wave</th>
<th>Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>W1WGT</td>
</tr>
<tr>
<td>2</td>
<td>W2WGT</td>
</tr>
<tr>
<td>3</td>
<td>W3XWGT</td>
</tr>
<tr>
<td>4</td>
<td>W4XWGT</td>
</tr>
<tr>
<td>5</td>
<td>W5XWGT</td>
</tr>
<tr>
<td>6</td>
<td>W6XWGT</td>
</tr>
<tr>
<td>7</td>
<td>W7XWGT</td>
</tr>
<tr>
<td>8</td>
<td>W8XWGT</td>
</tr>
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</table>
## Nurse Weights by Wave

<table>
<thead>
<tr>
<th>Wave</th>
<th>Nurse Variable</th>
<th>Blood Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>W2NURWT</td>
<td>W2BLDWT</td>
</tr>
<tr>
<td>4</td>
<td>W4NURWT</td>
<td>W4BLDWT</td>
</tr>
<tr>
<td>6</td>
<td>W6NURWT</td>
<td>W6BLDWT</td>
</tr>
<tr>
<td>8</td>
<td>W8NURWT</td>
<td>W8BLDWT</td>
</tr>
</tbody>
</table>
## Self-Completion Weights by Wave

<table>
<thead>
<tr>
<th>Wave</th>
<th>Self-Completion Variable</th>
<th>Sexual Self-Completion Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>W4SCWT</td>
<td>N/A</td>
</tr>
<tr>
<td>5</td>
<td>W5SCWT</td>
<td>N/A</td>
</tr>
<tr>
<td>6</td>
<td>W6SCWT</td>
<td>W6SSCWT</td>
</tr>
<tr>
<td>7</td>
<td>W7SCWT</td>
<td>N/A</td>
</tr>
<tr>
<td>8</td>
<td>W8SCWT</td>
<td>W8SSCWT</td>
</tr>
</tbody>
</table>
Clustering & Stratification Variables
## Clustering & Stratification Variables

<table>
<thead>
<tr>
<th>Wave</th>
<th>Cluster Variable</th>
<th>Stratification Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>AHSECLS2</td>
<td>ASTRATIF</td>
</tr>
<tr>
<td>2</td>
<td>HSECLST</td>
<td>ASTRATIF</td>
</tr>
<tr>
<td>3+</td>
<td>IDAHHWN (household serial number: ‘IDAHHW’ plus Wave number e.g. for Wave 5, this is IDAHHW5)</td>
<td>GOR</td>
</tr>
</tbody>
</table>
Questions?
Useful Resources

ELSA Main Interview User Guide (Section 5):
http://doc.ukdataservice.ac.uk/doc/5050/mrdoc/pdf/5050_waves_1-8_interviewer_data_user_guide_v01.pdf

ELSA Nurse User Guide (Section 6):
http://doc.ukdataservice.ac.uk/doc/5050/mrdoc/pdf/5050_waves_2-4-6-8_nurse_data_user_guide_v01.pdf

Weighting in Stata:

Weighting in SPSS:
https://www.spss-tutorials.com/spss-weight-command/

Weighting in SAS:

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