

# English Longitudinal Study of Ageing: Methods and Forward Look

7 July 2006  
British Academy, London

Carli Lessof  
National Centre for Social Research

# ELSA is...

- A study of people aged 50+ and their younger partners
- Multi-disciplinary - health, economic and social circumstances
- Longitudinal - change over time
- Comparative - United States (HRS) and Europe (SHARE)
- Policy relevant - applied research with long term aims

# ELSA is run by a consortium...

- International Centre for Health and Society, UCL
- Institute for Fiscal Studies and UCL Dept of Economics
- National Centre for Social Research
- Universities of Cambridge, East Anglia, Exeter, Imperial

# The research team

- Sheema Ahmed
- James Banks
- Richard Blundell
- Elizabeth Breeze
- Lisa Calderwood
- Hayley Cheshire
- Laura Conway
- Kate Cox
- María Casanova
- Panayotes Demakakos
- Bob Erens
- Edlira Gjonça
- Elizabeth Hacker
- Felicia Huppert
- Martin Hyde
- Mary Janevic
- Roger Jowell
- Saffron Karlsen
- Meena Kumari
- Iain Lang
- Michelle Lee
- Carli Lessof
- Peter Lynn
- Anne McMunn
- Brenda McWilliams
- Michael Marmot
- David Melzer
- James Nazroo
- Susan Nunn
- Dan Philo
- Mary Pierce
- Keeley Ribas
- Shaun Scholes
- Zoë Smith
- Nick Steel
- Gemma Tatlow
- Rebecca Taylor

# The research team

- Sheema Ahmed
- James Banks
- Richard Blundell
- Elizabeth Breeze
- Lisa Calderwood
- Hayley Cheshire
- Laura Conway
- Kate Cox
- María Casanova
- Panayotes Demakakos
- Bob Erens
- Edlira Gjonça
- Elizabeth Hacker
- Felicia Huppert
- Martin Hyde
- Mary Janevic
- Roger Jowell
- Saffron Karlsen
- Meena Kumari
- Iain Lang
- Michelle Lee
- Carli Lessof
- Peter Lynn
- Anne McMunn
- Brenda McWilliams
- Michael Marmot
- David Melzer
- James Nazroo
- Susan Nunn
- Dan Philo
- Mary Pierce
- Keeley Ribas
- Shaun Scholes
- Zoë Smith
- Nick Steel
- Gemma Tatlow
- Rebecca Taylor

# Management Group

- Michael Marmot (UCL)
- Elizabeth Breeze (UCL)
- Bob Erens (NatCen)
- James Banks (IFS)
- Richard Blundell (IFS)
- Carli Lessof (NatCen)
- James Nazroo (UCL)

# Advisory Group

- Baroness Sally Greengross
- Michael Bury
- Tom Kirkwood
- Tom Ross
- Jacqui Smith
- Anthea Tinker
- Christina Victor
- Alan Walker

# Consultants Group

- David Blane
- Mike Hurd
- Martin Hyde
- Jim Smith
- Beth Soldo
- Mike Wadsworth
- Bob Wallace
- Bob Willis



# Funders

- National Institute on Aging
- Department for Education and Skills
- Department for Environment, Food and Rural Affairs
- Department of Health
- Department of Trade and Industry
- Department for Work and Pensions
- HM Treasury
- HM Revenues and Customs
- Department for Communities and Local Government
- Office for National Statistics

# Study Design

**HSE + Nurse  
1998-1999-2001**

# Sample Design at Wave 1

- Sample is representative of population aged 50 and over, living in private households in England
- Drawn from Health Survey for England (HSE)
- Three years of HSE used - 1998, 1999 & 2001
- Annual cross-section of approximately 16,000 adults
- Core content, supplemented by varying modules
- Health measures provide 'pre-baseline' information
- Household response - HSE (74% to 76%)
- Individual adult response - HSE (67% to 70%)

# HSE Content for ELSA pre-baseline

- General health
- Use of health services
- MRC respiratory questionnaire, chest pain, CVD
- Physical activity
- Eating habits, smoking, drinking
- Height and weight (collected in interview)
- Waist and hip, demi-span (by nurse)
- Parental history
- GHQ12
- Blood pressure; blood sample
- Prescribed drugs; vitamins; nicotine replacements

**HSE + Nurse  
1998-1999-2001**

**ELSA Wave One 2002  
Main Interview (12,100)**

# Eligibility for the Study at Wave 1

- Core sample members born on or before 29th Feb 1952
- In household sector in England at baseline (ELSA W1)
- All age eligible individuals (unlike HRS which selects)
- Younger partners cohabiting with core sample at HSE
- New partners who joined household since HSE
- Some data about other household and family members
- No interviews in institutions or outside England at baseline

# Interview Content at Wave 1

- Household demographics
- Individual demographics
- Health
- Social participation
- Work and pensions
- Income and assets
- Housing
- Cognitive function
- Psychosocial health
- Expectations
- Final questions (including consents)
- Timed walk
- Self-completion



# Response at Wave 1

- Issued sample of 18,800 individuals (11,600 households)
- Main interviews with 12,100 individuals (7,900 households)
  - Of which 11,400 interviews with core sample members
  - Remainder partners: 640 younger and 70 new
- Response among core sample members
  - Household response 70%
  - 96% responding within households
  - Overall individual response rate of 67%
- Individual response rate for new partners 68%
- Individual response rate for younger partners 63%

# Achieved Sample Size - All Sample Types

Age	Numbers			%		
	Men	Women	Total	Men	Women	Total
Under 50	104	472	576	2	7	5
50-54	920	1156	2076	17	17	17
55-59	1030	1171	2201	19	17	18
60-64	813	883	1696	15	13	14
65-69	806	912	1718	15	13	14
70-74	680	797	1477	13	12	12
75-79	498	596	1094	9	9	9
80+	485	777	1262	9	11	10
Total	5336	6764	12100	100	100	100

**HSE + Nurse  
1998-1999-2001**

**ELSA Wave One 2002  
Main Interview (12,100)**

**Wave Two 2004  
Main (9,432)**

**Wave Two 2004  
Nurse (7,666)**

## Response at Wave 2

- Achieved main interviews with 9432 individuals
- Of which 8780 interviews with core sample members
- Remainder partners: 57 core, 501 younger and 94 new
- Of the 8780 interviews, 92 were by proxy informant
- Report based on 8688 core who responded in person

# Interview Content at Wave 2

- Household demographics
- Individual demographics
- Health and quality of care
- Social participation
- Work and pensions including job change and retirement
- Income and assets
- Housing including house moves and further consumption
- Cognitive function
- Psychosocial health
- Expectations and relative deprivation
- Effort and reward of caring and voluntary activities
- Final questions (including consents)
- Timed walk
- Self-completion including loneliness and life satisfaction

# Further changes at Wave 2

- As well as additions to the questionnaire
- Modifications to measure change
- Amendments to following rules
  - outside of England
  - moves into institutions
  - partners to be followed for one wave after split
- Exit interviews
- Nurse Visit with 7666 core members

# Nurse Visit - Core Sample Members Only

- Blood pressure
- Lung function
- Blood sample (fasting where possible, DNA)
- Standing and sitting height; weight, waist and hip measurement
- Physical performance: grip strength, balance, leg rise, chair raise
- Saliva sample to measure cortisol four times in one day
- Leave behind nurse self-completion (for one in ten households)

# Bloods Samples in Wave 2

- Fibrinogen
- Total cholesterol
- HDL cholesterol
- Triglycerides
- Ferritin
- C-reactive protein (CRP)
- Apolipoprotein E (ApoE)
- Fasting glucose
- Haemoglobin
- Glycated haemoglobin
- Genetics



# Response among core members at Wave 2

- Household contact rate 97%
- Individual co-operation rate 84%
- Individual field response rate 82%
- Three-quarters of non-response was refusal (1,530)
- High schedule and item response
- Self-completion 89.8%
- Nurse visit 88.2%

# Achieved Sample Size - Core Full Respondents

Age	Numbers			%		
	Men	Women	Total	Men	Women	Total
52-54	345	396	741	11	9	10
55-59	845	998	1843	23	20	22
60-64	663	805	1468	17	16	16
65-69	654	738	1392	16	14	15
70-74	559	640	1199	13	13	13
75-79	427	537	964	11	12	11
80+	413	668	1081	10	16	14
Total	3906	4782	8688	100	100	100

# Achieved Nurse Visits

Age	Numbers			%		
	Men	Women	Total	Men	Women	Total
52-54	310	354	664	9	8	9
55-59	752	906	1658	22	21	22
60-64	578	710	1288	17	17	17
65-69	596	677	1273	17	16	17
70-74	501	555	1056	15	13	14
75-79	362	452	814	10	11	11
80+	352	561	913	10	13	12
Total	3451	4215	7666	100	100	100

**HSE + Nurse  
1998-1999-2001**

**ELSA Wave One 2002  
Main Interview (12,100)**

**Wave Two 2004  
Main (9,432)**

**Wave Two 2004  
Nurse (7,666)**

**HSE + Nurse  
1998-1999-2001**

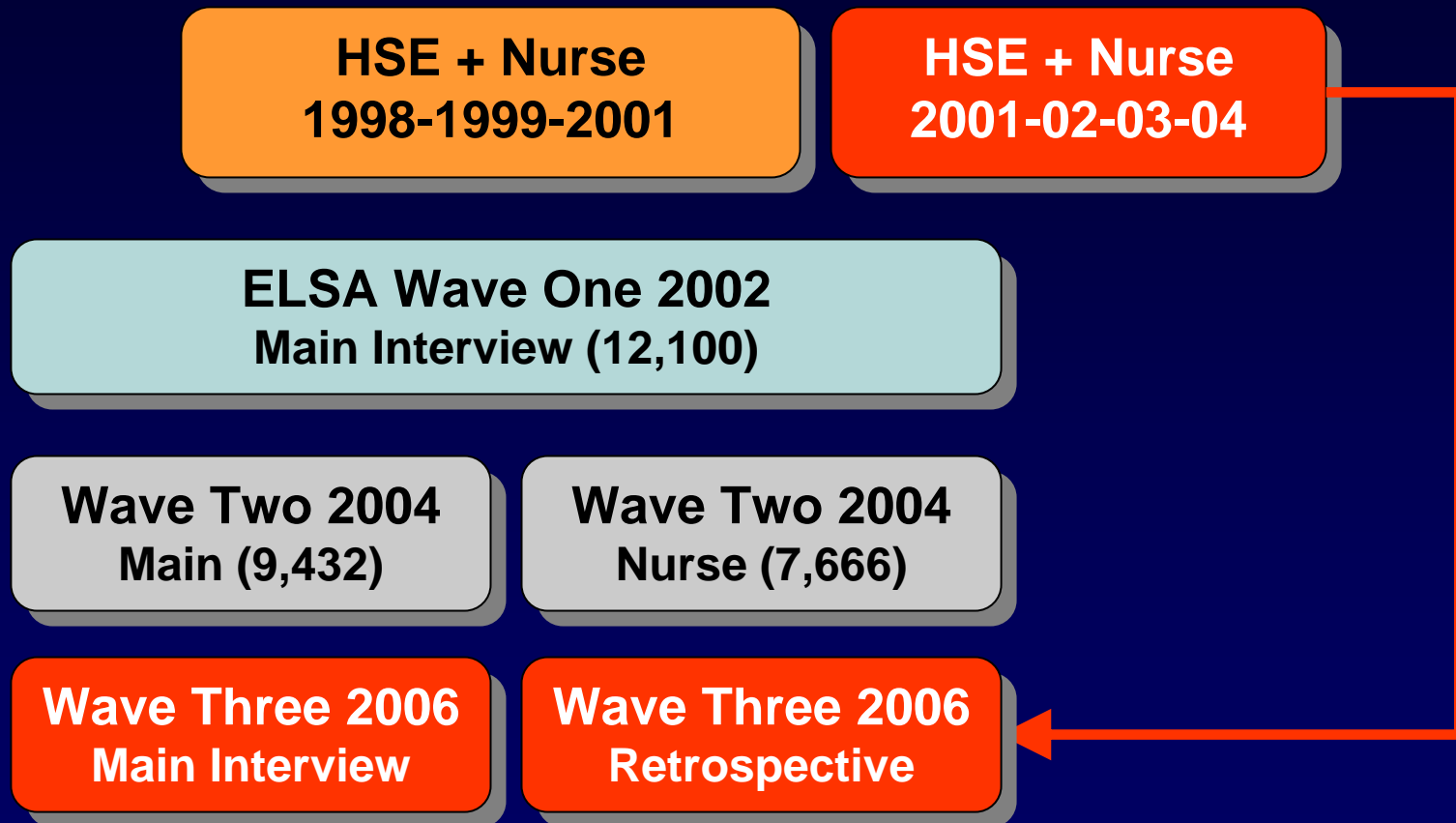
**ELSA Wave One 2002  
Main Interview (12,100)**

**Wave Two 2004  
Main (9,432)**

**Wave Two 2004  
Nurse (7,666)**

**Wave Three 2006  
Main Interview**

**Wave Three 2006  
Retrospective**



# Changes at Wave 3

- New sample of 50 to 53 year olds
- New or rotating questions
  - services and transport
  - dental health, fruit and vegetables
  - expectations for the future
- Anchoring vignettes in additional self-completion
- New consents for refreshment sample
- Retrospective interview

**HSE + Nurse  
1998-1999-2001**

**HSE + Nurse  
2001-02-03-04**

**ELSA Wave One 2002  
Main Interview (12,100)**

**Wave Two 2004  
Main (9,432)**

**Wave Two 2004  
Nurse (7,666)**

**Wave Three 2006  
Main Interview**

**Wave Three 2006  
Retrospective**

**Wave Four 2008  
Main Interview**

**Wave Four 2008  
Nurse Visit**





# Available Data

- [www.ifs.org.uk/elsa](http://www.ifs.org.uk/elsa)
- Economic and Social Data Service

# English Longitudinal Study of Ageing: Methods and Forward Look

7 July 2006  
British Academy, London

Carli Lessof  
National Centre for Social Research

# Weighting

- Imputation for missing values in economic variables
- At Wave 1
  - Weighting to take account of non-response
  - Post-stratified to the relevant population using Census 2001
  - Weights now available for self-completion (c.92%)
- At Wave 2
  - Weighting to take account of further non-response
  - Additional weights for nurse visit and bloods
  - Weights anticipated for self-completion (c.90%)

# Long-term Response

- ELSA Wave 1 is the baseline sample - exclude all those who are ineligible for follow-up - 82%
- Exclude households which did not include an age-eligible respondent who agreed to be re-contacted - 52%
- Exclude households for whom age data was never collected at Wave 0 - non-cooperating households at HSE - 47%
- Account for all losses, including those who were never interviewed (including for Wave 0) and never issued - 35%

Life History (for 90 year old female)

	0-9										10-19										20-29										30-39										40-49										
Where lived	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
Parents																																																			
Siblings																																																			
Partners																																																			
Children																																																			
Grand-children																																																			
Work																																																			
Other key events	'16	'17	'18	'19	'20	'21	'22	'23	'24	'25	'26	'27	'28	'29	'30	'31	'32	'33	'34	'35	'36	'37	'38	'39	'40	'41	'42	'43	'44	'45	'46	'47	'48	'49	'50	'51	'52	'53	'54	'55	'56	'57	'58	'59	'60	'61	'62	'63	'64	'65	'66

◀

▶

Important events around this year: \_\_\_\_\_

1914: Start WWI  
1918: End WWI

Personal events in this year: \_\_\_\_\_

▲

▼

not yet available:

# Linkages to administrative data

- NHS Central Register (HSE, W2 boost)
- New employers for private pension plans (W1-W3)
- Hospital Episodes (W1, W2 update, W3 refreshment)
- National Insurance Contributions (as above)
- Benfeits incl. state pensions and tax credits (as above)
- Tax records, savings, private pensions (W3 refreshment)