
Households and later life transitions: trends and implications



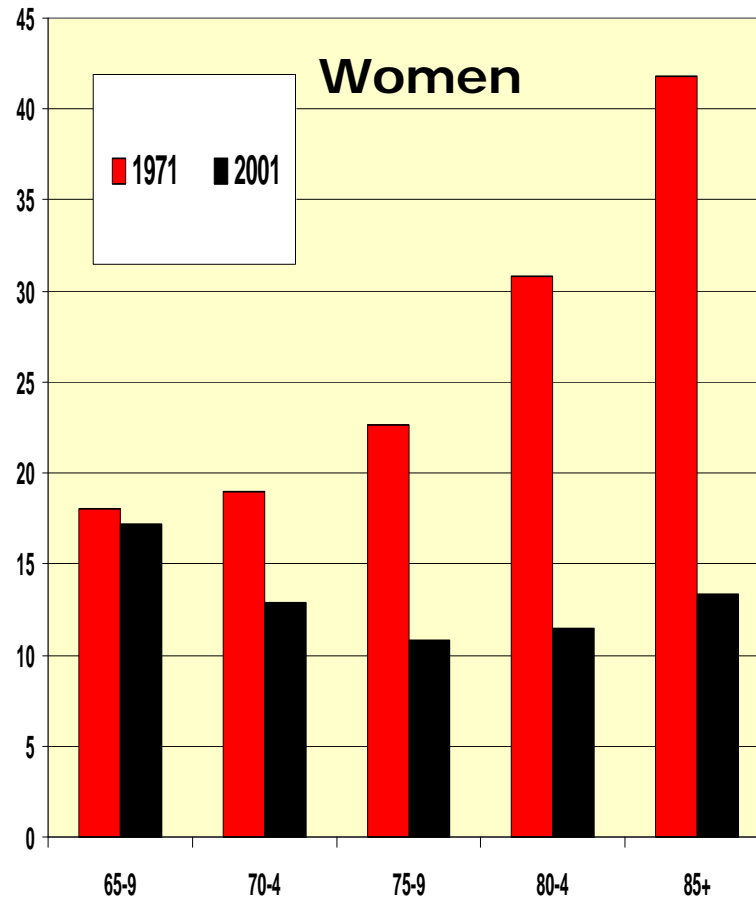
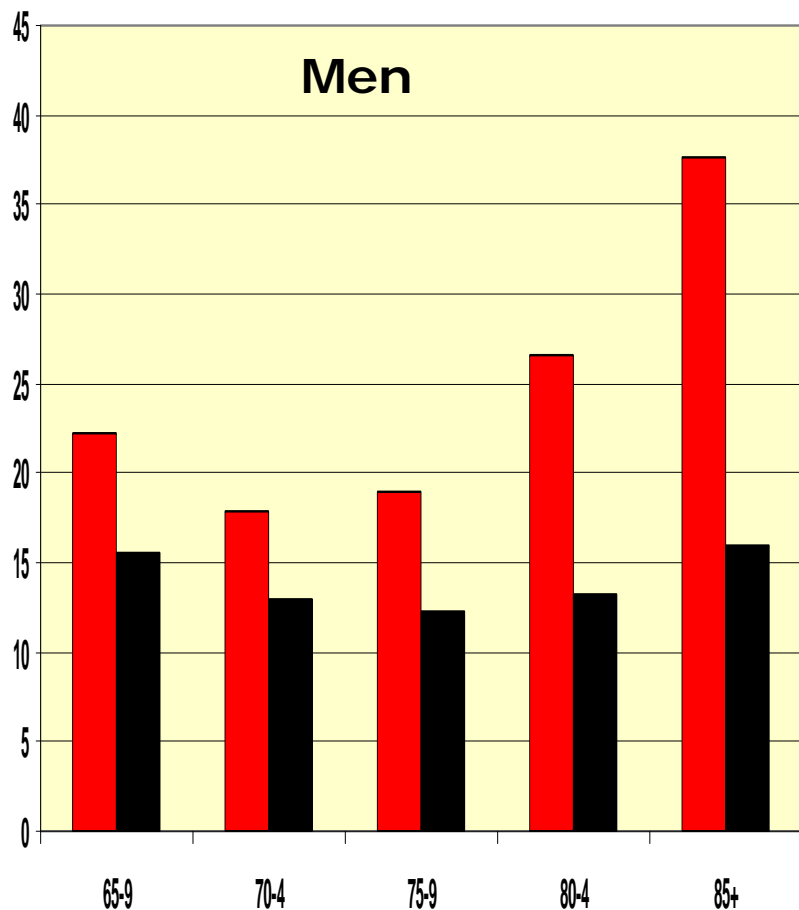
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Background

- Since 1970s large changes in the living arrangements of older people in England and Wales (and elsewhere) involving increases in extent of solitary living/living just with a spouse and decreases in living with relatives/in intergenerational households
 - Since 1970s also changes in policies and provision of institutional long-term care
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Proportion (%) of elderly men and women living in households with two or more generations, England and Wales, 1971 and 2001 (private household population).



Source: Analysis of ONS LS data.

**% of men and women aged 85 and over living in
multigenerational households or communal establishments
1971, 1981, 1991, 2001**

	Men			Women		
Year	Multigen.	Communal	Ratio	Multigen.	Communal	Ratio
1971	41	15	2.7	44	22	2.0
1981	30	11	2.7	34	19	1.8
1991	16	16	1.0	19	27	0.7
2001	14	13	1.1	15	23	0.7

Sources: Analysis of (cross sectional) data from ONS LS in Grundy 1999 & Grundy & Murphy 2006

Questions for research and policy makers:

- To what extent are period changes in the living arrangements of older people (especially balance between family and institutional care) due to changes in characteristics of the older population, changes in preferences, or changes in policy (particularly availability of institutional care)?
 - What are the prospects for the future?
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Long-term care policy and provision in E&W: Overview

- **1948** National Health and National Assistance Acts: NHS provided free long-term care in hospitals (mainly geriatric and psychiatric- many former poor law infirmaries). Local authorities (local government) required to provide means-tested residential care to older people in need of assistance- mostly in la homes but could also support people in private (for profit) and voluntary (independent not for profit) homes. Domiciliary services also provided (meals and home help). Small private nursing home/private residential hotel sector.
- **1970s**: LA residential care places failed to increase in line with growth of older old population; similar effective reduction in domiciliary services extending into 1980s. Contraction in NHS long-stay beds.
- **1980s**: Huge increase in 'board and lodging' payments to low income older people entering private and voluntary residential and nursing homes following administrative change in social security regulations with escalating costs- by 1985 1/3 of residents were funded this way (from Central Government); further contraction NHS long-stay beds.
- **1990s**: 1993 NHS and Community Care Act returned to local authorities responsibility for funding residential and nursing home care (means tested); requirement for a prior assessment. Increasingly this care contracted out to private and voluntary sector.
- Long-term care and its funding a major political issues (e.g. 1999 Royal Commission on Long-Term Care).

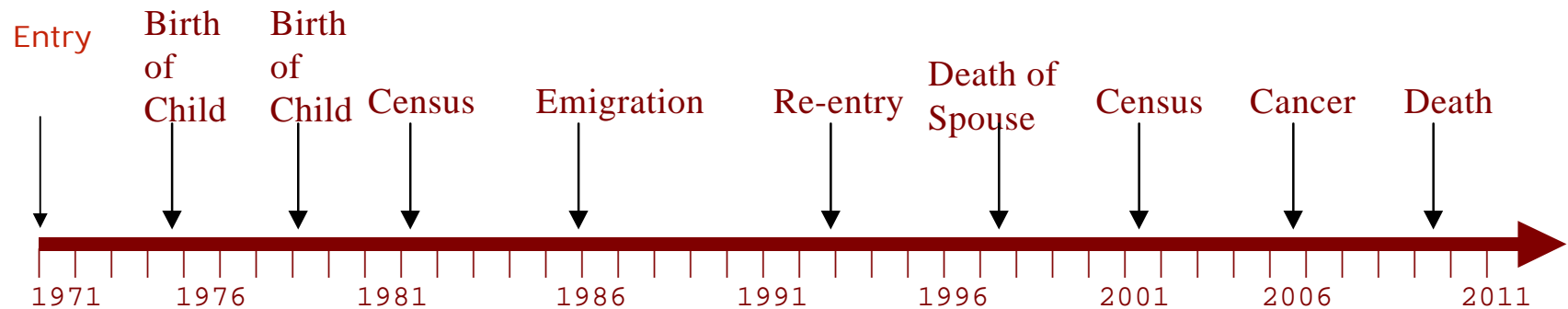
Aims of current study:

To use data from the ONS Longitudinal Study – a census based record linkage study including data 1971-2005- to investigate:

- 1) changes in the proportions of older people making a transition from a private to an institutional household
 - 2) changes in the balance between co-residence with family and residence in institutional settings
 - 3) Changes in living arrangements following widowhood
 - 4) changes in the relative mortality of older people living with family/living in institutions.
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The ONS Longitudinal Study of England & Wales

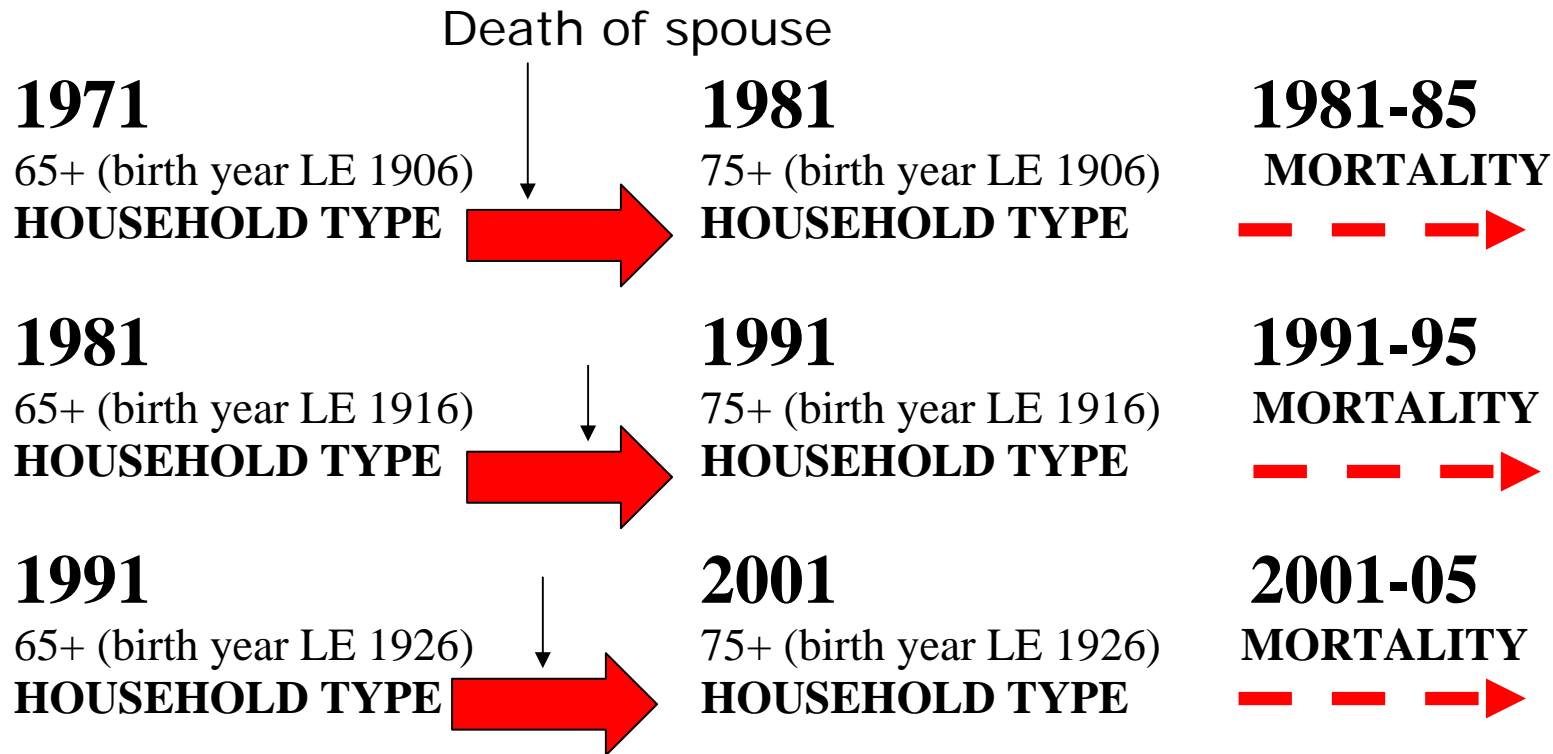
- Census data for a sample of individuals enumerated at the 1971 Census (c. 1% of population)
- Maintained through addition of 1% of immigrants and new births
- Information from later censuses (1981, 91 & 2001) added
- Linked event data including death of spouse and deaths of sample members.



Methods and design

- Cross sequential analyses of data from the ONS Longitudinal Study of England & Wales comparing 1971-81, 1981-91 and 1991-2001.
 - Analyses of changes in proportions moving from private to institutional household between beginning and end of each decade using logistic regression models.
 - Analyses of changes in household type between beginning and end of each decade using multinomial logistic regression models; further detailed analysis of changes post widowhood
 - Analysis of mortality 1981-5; 91-95; and 2001-05 by household type at start and end of relevant decade using Poisson regression.
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Design of analysis

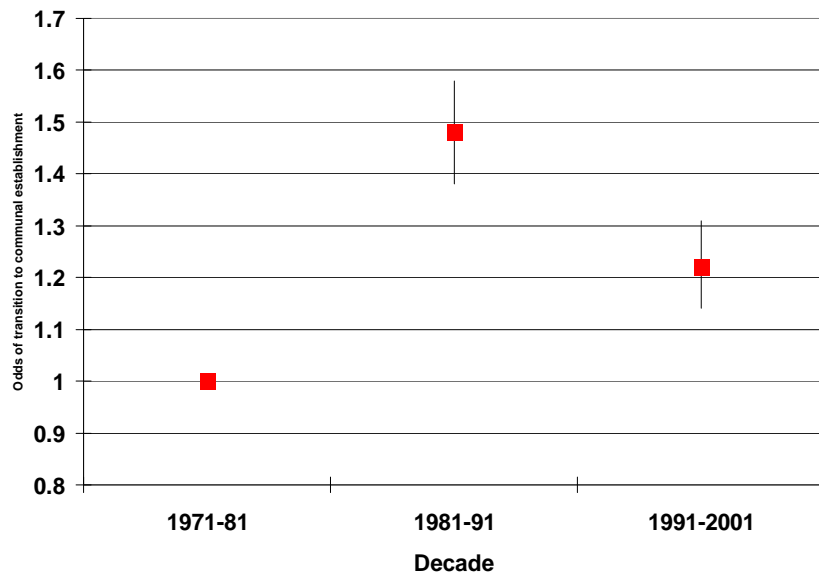


Previous related research using the ONS LS

- The analysis builds on previous work using the same data source including work which:
 - Showed that transitions from private (community) to non-private households between 1971 and 1981 were associated with age, gender, marital status, housing tenure and occupational social class and subsequent mortality differentials (Grundy 1992)
 - Showed that, after controlling for age, marital status and housing tenure, the risk of transition from a private household to an institution was some 33-52% higher in 1981-91 than in 1971-81 (Grundy 1992; 1993; Grundy & Glaser, 1997), a shift which was associated with reduced rates of transition to live with relatives (Glaser, Grundy and Lynch, 2003).
 - Showed that transitions from living in private households in 1991 to institutions in 2001 were, among women, strongly associated with parity, as well as with housing tenure and marital status (Grundy and Jitlal 2007).
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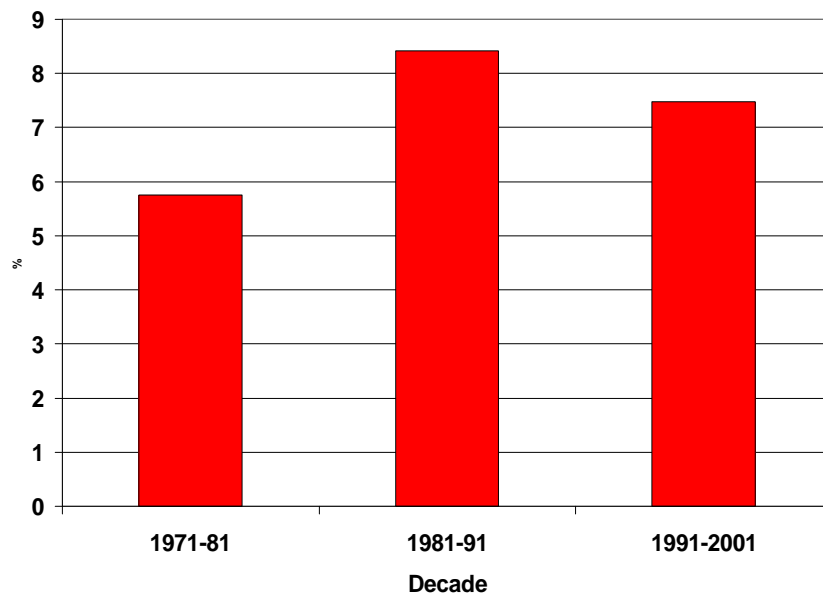
% aged 65+ who moved from private household to communal establishment between censuses, by decade.

Odds ratios



(Controlling for age, sex, marital status & housing tenure)

%



Definitions of family/household type

Household: coresident group with shared living space and/or shared housekeeping

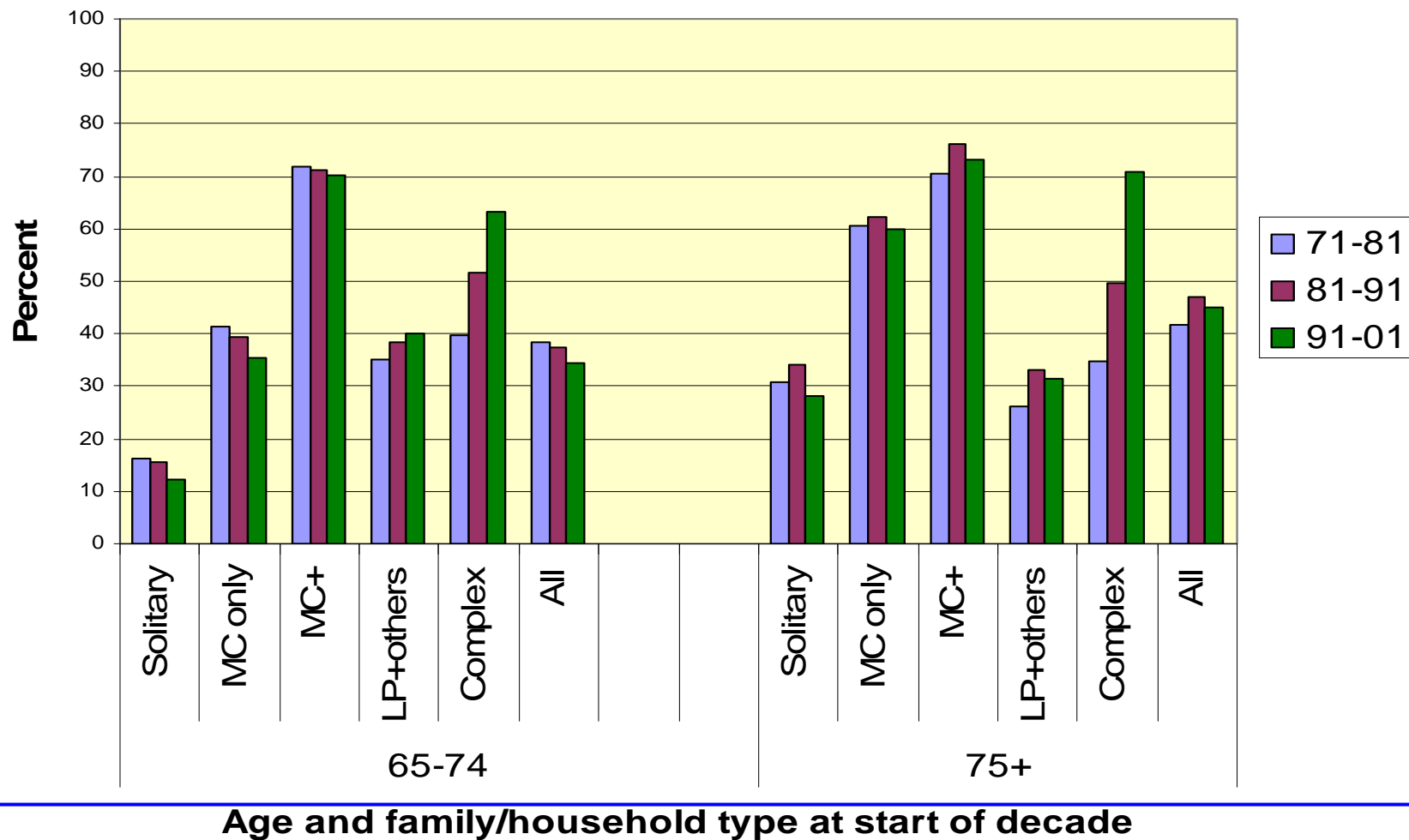
Family: co-resident couple +/- never-married child(ren); lone parent with never-married child(ren) or grandparent with never married grandchild if no intervening generation present in household*

Typology used here (visitors/temporary residents excluded):

- **Solitary:** lives alone
 - **Couple only:** lives with spouse (incl. cohabitee) and no one else
 - **Couple + children/others:** lives with spouse and anyone else (usually adult child)
 - **Lone Parent +/- others:** no spouse, lives with never-married child of any age with or without others in household.
 - **Complex:**
 - Lives with others** (usually ever-married children) but not part of a family (i.e. no spouse or never-married child present)
- OR
- Lives in two family household** (e.g. with own spouse and married daughter and son-in-law)
 - **Communal establishment:** nursing or residential home or similar where meals are provided communally .

* (definition changed 2001 but here use 2001 data recoded in accordance with earlier definition).

Proportion (%) of people aged 65 and over who changed family/household type between censuses; 1971-81; 1981-91; 1991-2001 by age and family/household type at start of decade



Source: ONS LS data, author's analysis (earlier decades from Glaser & Grundy 1998)

Variables used in analysis:

Start of decade

Household/family type

- Solitary
- Couple alone
- Other family (couple + child/others;/lone parent)
- Complex.

Others

Age (single years); gender

- Housing tenure (owner v. non-owner)

End of decade:

Household/family type

- Solitary/couple alone
- Other family/complex*
- Institution

Others

- Marital status
- Limiting long-term illness (not 1981)

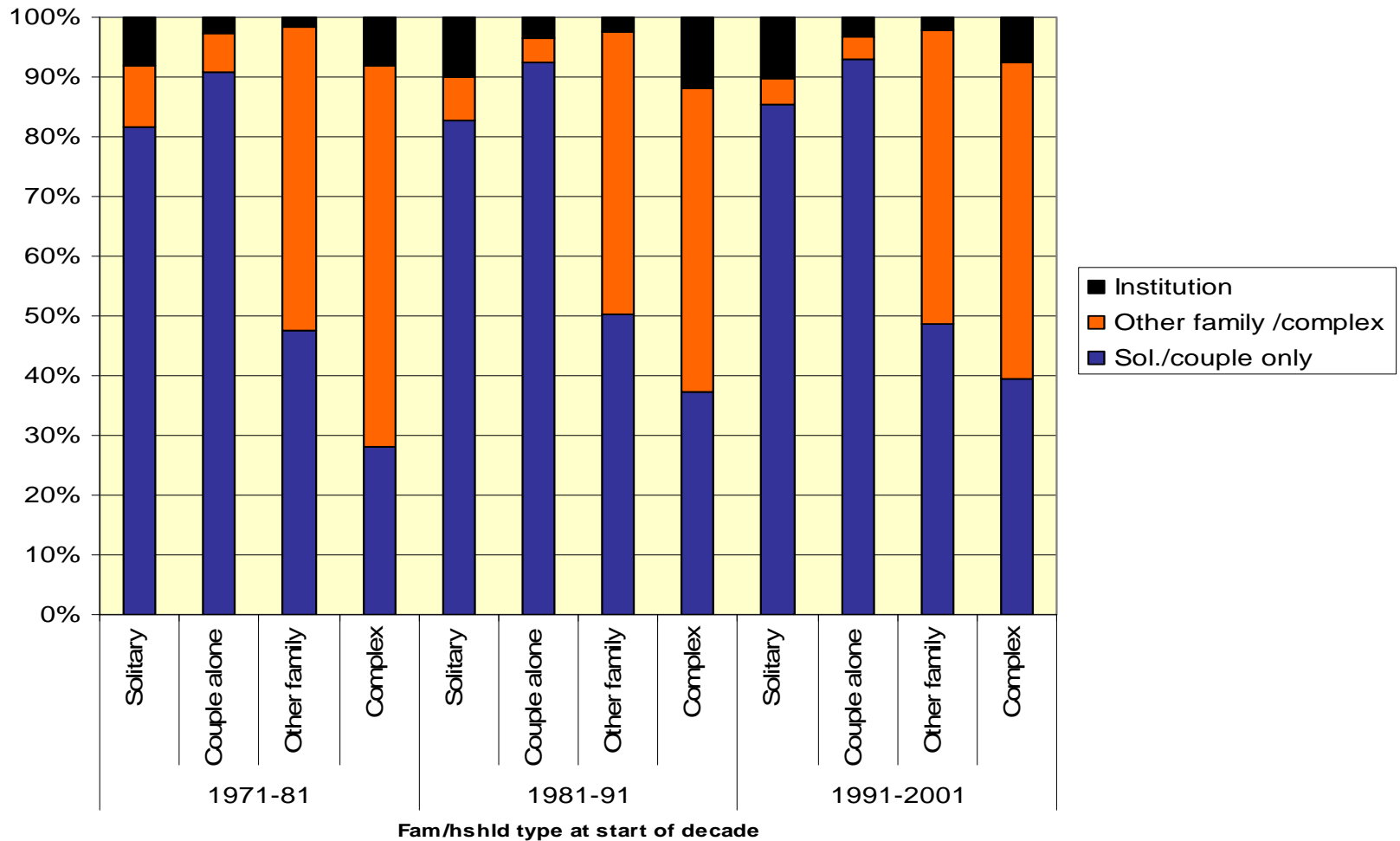
*distinguished in mortality analysis.

Distribution of 1971-81, 1981-91 and 1991-2001 samples by socio-demographic characteristics.

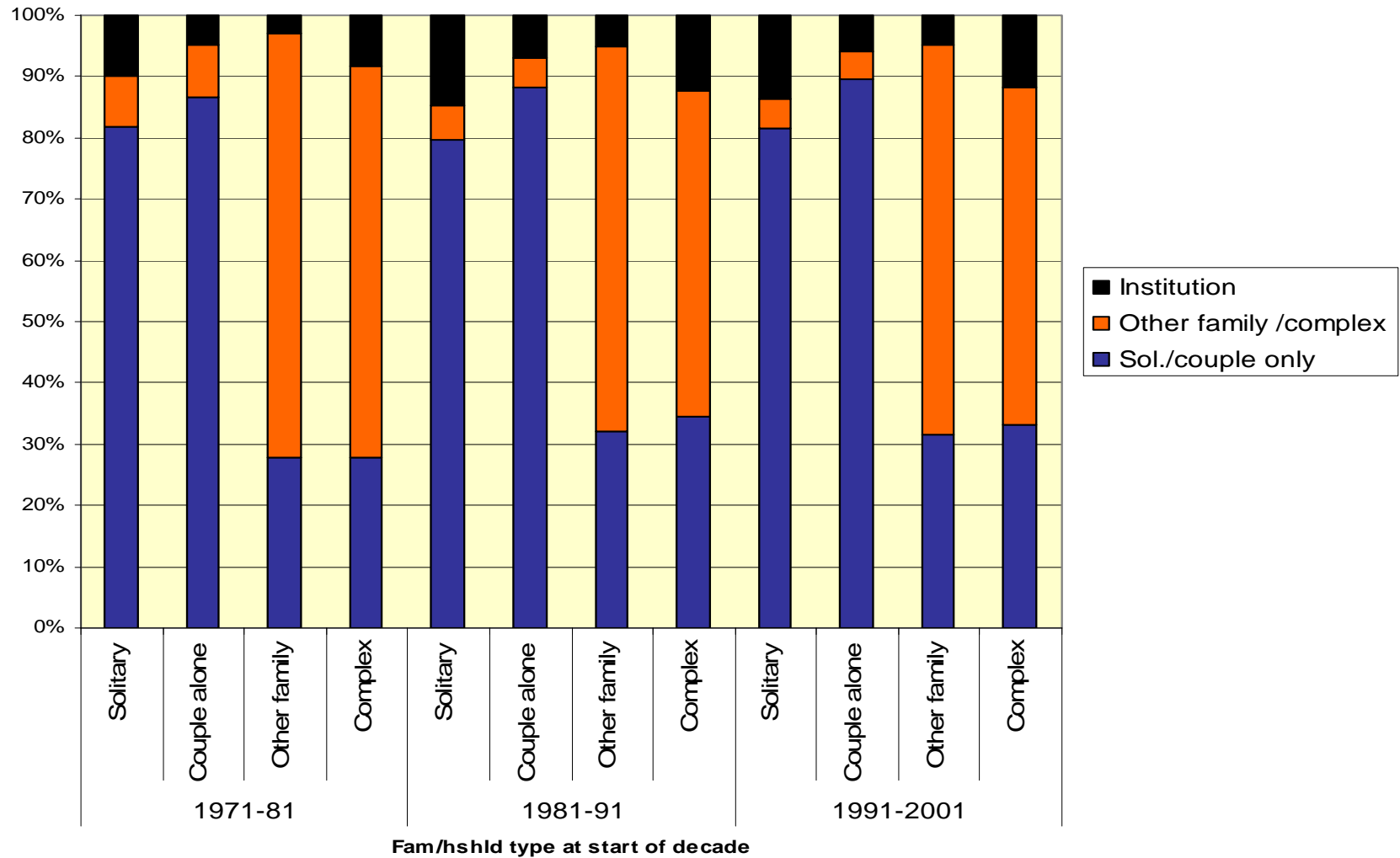
	1971-81		1981-91		1991-2001	
	M	F	M	F	M	F
Mean age ¹ (SD)	69.54 (4.14)	70.56 (4.72)	69.98 (4.30)	71.16 (4.95)	70.00 (4.38)	71.17 (5.04)
Home owner ¹ (%)	58.36	52.73	61.31	56.04	72.61	65.81
Tenant ¹ (%)	41.64	47.27	38.69	43.96	27.39	34.19
Married ²	61.21	20.22	63.84	23.79	63.62	25.90
Never-married ²	6.12	13.01	5.37	10.05	5.49	6.98
Wid./div/ ²	32.67	66.77	30.79	66.16	30.88	67.12
N	8,482	17,259	10,971	20,978	13,587	23,107

¹ Start of decade; ² end of decade.

Distribution of male samples by family/household type at start of end of decade, 1971-81, 1981-91, 1991-2001.



Distribution of female samples by family/household type at start of end of decade, 1971-81, 1981-91, 1991-2001.



Multinomial regression modelling

- Contrasts odds of one outcome versus another (e.g. living in an institution versus living with relatives) in cases where more than 2 outcomes are possible (in this case 3: solitary couple; family; institution)
- Models include control for age; marital status; and housing tenure – results shown are from fully adjusted models
- Results shown as Odds Ratios (more than 1=higher chance)
- Asterisks indicate level of statistical significance:
* $P < 0.05$; ** $P < 0.01$; *** $P < 0.001$

Results from multinomial regression models of transitions between household/family types 1971-81; 1981-91 and 1991-2001, men.

Men	End of decade living arrangement		
	Institution vs. solitary/couple	Institution vs. Family/complex	Family/complex vs. solitary/couple
Age	1.16***	1.10***	1.05***
Solitary (ref.)	1.00	1.00	1.00
Couple alone	0.94	0.80*	1.18*
Other family	1.47***	0.05***	27.02***
Complex	3.72***	0.14***	26.24***
Tenant (ref. owner)	1.44***	1.63***	0.88**
Married (ref.)	1.00	1.00	1.00
Never-married	5.86***	2.53***	2.32***
Wid./divorced	4.75***	1.73***	2.74***
1971-81	0.79**	0.57***	1.38***
1981-91 (Ref.)	1.00	1.00	1.00
1991-2001	0.84**	0.90	0.94
N	32,915		

Source: Analysis of ONS LS

Results from multinomial regression models of transitions between household/family types 1971-81; 1981-91 and 1991-2001, women.

Women	End of decade living arrangement		
	Institution vs. solitary/couple	Institution vs. family/complex	Family/complex vs. solitary/couple
Age	1.18***	1.12***	1.06***
Solitary (ref.)	1.00	1.00	1.00
Couple alone	1.07	0.79***	1.34***
Other family	1.96***	0.05***	42.30***
Complex	2.49***	0.10***	25.88***
Tenant (ref. owner)	1.20***	1.41***	0.85***
Married (ref.)	1.00	1.00	1.00
Never-married	4.58***	2.03***	2.28***
Wid./divorced	3.29***	1.27***	2.59***
1971-81	0.75***	0.51***	1.48***
1981-91 (Ref.)	1.00	1.00	1.00
1991-2001	0.78***	0.87**	0.90**
N	61,237		

Results from Poisson regression analysis of mortality post decade end

	1981-85		1991-91		2001-05	
	M	F	M	F	M	F
Age	1.04***	1.04***	1.03***	1.04***	1.08***	1.09***
Tenant (Ref. = owner)	1.04	1.04	1.08**	1.04	1.25***	1.20***
<i>Household type at start of decade</i>						
Couple alone	1.04	0.99	1.02	0.97	0.98	1.03
Other family	1.04	0.93	0.97	0.96	1.00	0.99
Complex	1.02	0.98	0.98	1.01	0.94	1.03
<i>Household type at end of decade</i>						
Family/complex	1.08	1.15***	1.07	1.10**	1.10	1.25***
Institution	1.91***	1.85***	2.19***	1.97***	2.80***	2.85***
<i>Marital status (end of decade) (Ref.=married)</i>						
Never-married	1.04	0.98	1.00		1.00	1.04
Widowed/divorced	1.10**	0.99	1.02		1.34**	1.08*
Number of deaths	1162	1596	1230	1705	1204	1641

Have there been changes in responses to widowhood?

Extension of analysis including information on date of widowhood and examining end of decade (post widowhood) living arrangements in relation to

- years since widowhood;
 - time period;
 - gender and age;
 - housing tenure and household access to car (prior to widowhood)
 - region of residence.
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Socio-demographic characteristics of men and women 60+ who were widowed in 1971-81, 1981-91, and 1991-2001.

	1971-1981		1981-1991		1991-2001	
	M	F	M	F	M	F
Died before the end of decade, n	1333	1382	1436	1425	1569	1926
Survived to the end of decade, n	2028	4252	2263	5113	2625	6249
Age at widowhood	72.8 (5.9)	71.5 (5.5)	73.9 (6.3)	72.8 (5.8)	75.1 (6.6)	73.8 (6.2)
Household has car¹	44.9	39.5	60.2	52.3	70.9	64.4
Home owner¹	56.8	54.6	58.8	57.2	70.2	70.7
Region¹						
North	30.4	29.6	31.1	30.5	30.0	28.2
Mid	22.2	21.0	21.1	22.2	21.8	23.1
Southwest	8.7	10.0	10.2	9.8	11.3	11.8
Wales	4.9	4.6	5.4	5.1	5.6	5.8
Southeast	33.7	34.8	32.2	32.3	31.3	31.3

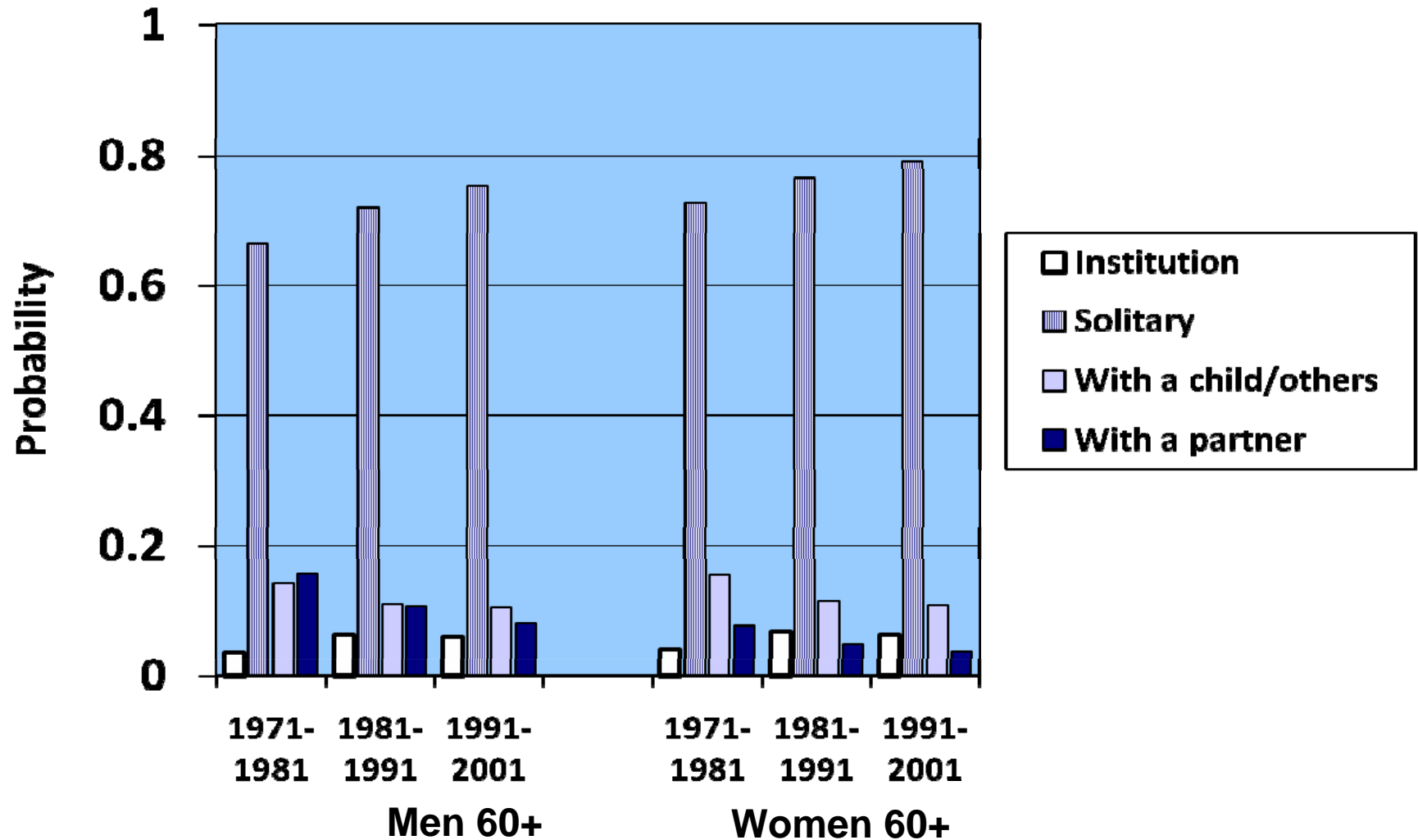
¹At the start of the decade (prior to widowhood). Age at widowhood, car, home ownership and region calculated for widowed men and women who survived to the end of the decade.

Living arrangements of men and women 60+ who were widowed in 1971-81, 1981-91, or 1991-2001.

	1971-1981		1981-1991		1991-2001	
	M	F	M	F	M	F
N	2028	4252	2263	5113	2625	6249
Living arrangements at end of decade (after widowhood)¹						
Solitary	69.8	72.8	71.2	77.0	76.2	78.6
With a child/other relative	14.5	15.5	11.2	11.5	10.0	11.1
With a partner	15.7	7.6	10.9	4.8	7.7	3.8
Institution	3.3	4.2	6.7	6.7	6.0	6.5

¹At the end of decade for widowed men and women who survived to the end of the decade.

Probabilities of being in various living arrangements after widowhood in 1971-81, 1981-91, or 1991-2001.



Controlled for age at and time since widowhood, availability of car, tenure status and region.

Conclusions (1)

- The risk of making a transition from a private to a non-private household was much higher in the 1981-91 decade than in 1971-81; in 1991-2001 it fell but was still higher than in the first decade – reflection in part of policy changes.
 - Higher risks of transitions to institutions were associated with being female; older age; being unmarried (especially never-married); not owning a home; (other work also showed associations with living in North of England and with having no children).
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Conclusions (2)

- For both men and women prior family type was strongly associated with outcome household type with those initially living in a family or with other relatives being most likely to be in one of these types of household ten years later
 - Chances of living with relatives rather than alone or with a spouse were lower in 1991-2001 than 1971-81 or, for women, in 1981-91.
 - Living arrangements following widowhood showed a trend away from remarriage or living with relatives towards living alone
 - Excess mortality of the institutional population was greatest in 2001-05. Among women, those living with relatives also had raised mortality risks, but these were considerably less than the risks for those in institutions suggesting that these populations are not equivalent in terms of health status.
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Implications and future work

- Continuing trend towards more 'independent' living arrangements may have implications for care needs as a strong association between living arrangements over time (i.e. people living with relatives at one point most likely to be also in this situation at a later point) and between living arrangements and use of formal services.
 - Trend away from remarriage/moving in with relatives following widowhood may also have financial implications
 - Use of institutional care influenced by supply side factors
 - Overall both positive and negative implications
 - Feed results on preference/policy change influence on household type into marital status based household projections
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Usual source of help for people aged 65 and over unable to do various tasks unaided, Britain 2001

