



CeLSIUS

Households and later life transitions: trends and implications

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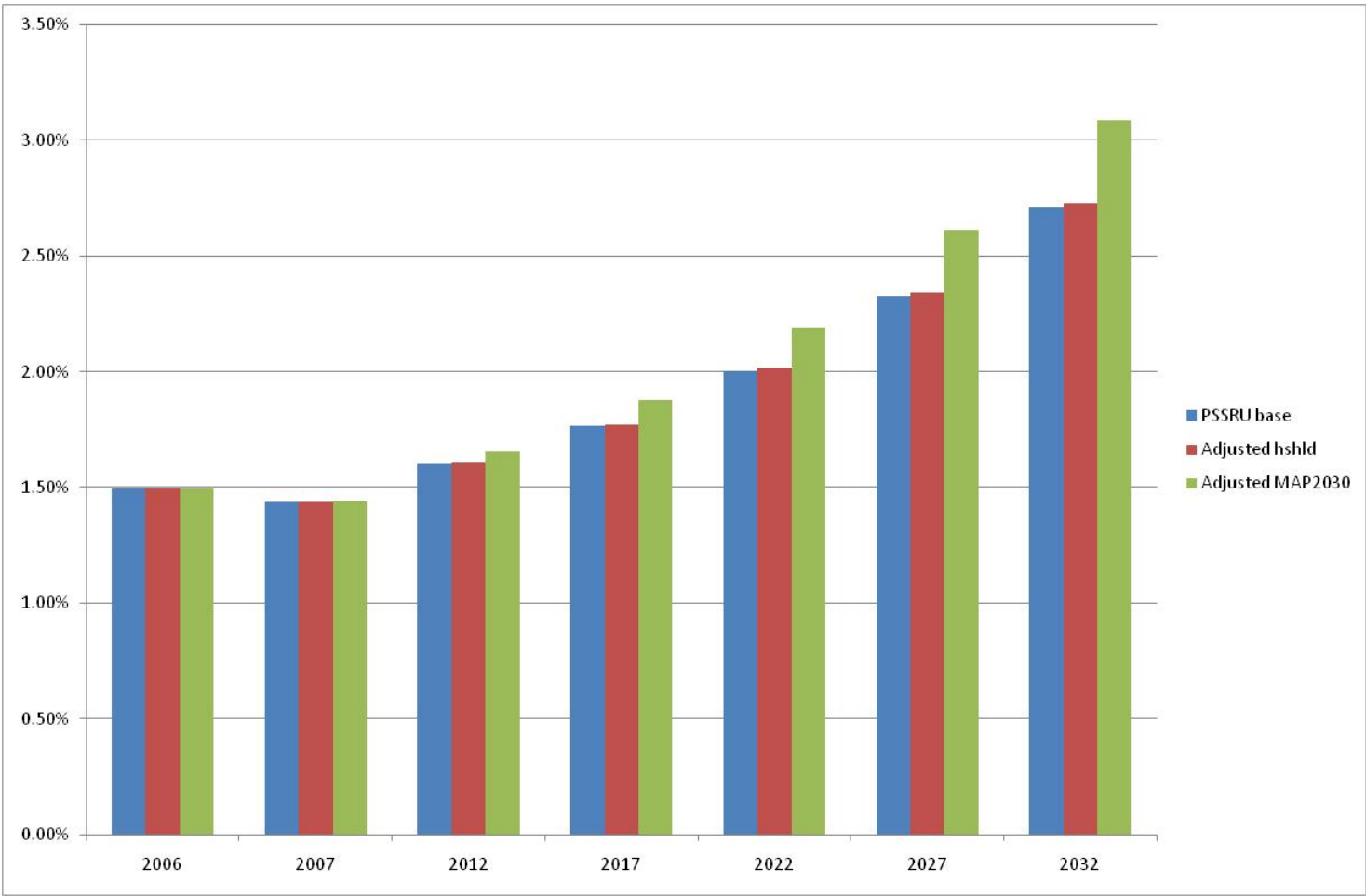
new dynamics of ageing
a cross-council research programme



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
 - Funding of long-term care a major policy and personal issue
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Projected expenditure (public and private) on long-term care as % of GDP; England 2006-2032



PSSRU base: gender, age structure & marital status; adjusted household: also takes account of changes in Living arrangements; MAP2030: additionally takes account of changes in disability (& housing tenure).

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 (1)

- **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.
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Long-term care policy and provision in E&W: Overview (2)

- **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 (1999 Royal Commission on Long-Term Care; 2010 Commission on the Funding of Care and Support).**

Much residential and nursing home care is privately paid for and cost is regarded as a major barrier: annual nursing homes fees are approximately twice average annual income.



The Telegraph November 11 2010

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



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Year	Men			Women		
	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

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 the relative mortality of older people living with family/living in institutions
 - 4) Survival of older people in institutions in 2001 – relevant for policy and planning
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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 2001-05/9 by household type at start and end of relevant decade using Poisson regression.
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Design of analysis

1971

65+ (birth year LE 1906)

HOUSEHOLD TYPE



1981

75+ (birth year LE 1906)

HOUSEHOLD TYPE

1981-85

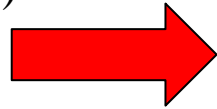
MORTALITY



1981

65+ (birth year LE 1916)

HOUSEHOLD TYPE



1991

75+ (birth year LE 1916)

HOUSEHOLD TYPE

1991-95

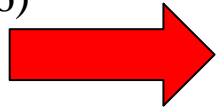
MORTALITY



1991

65+ (birth year LE 1926)

HOUSEHOLD TYPE



2001

75+ (birth year LE 1926)

HOUSEHOLD TYPE

2001-05

MORTALITY



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

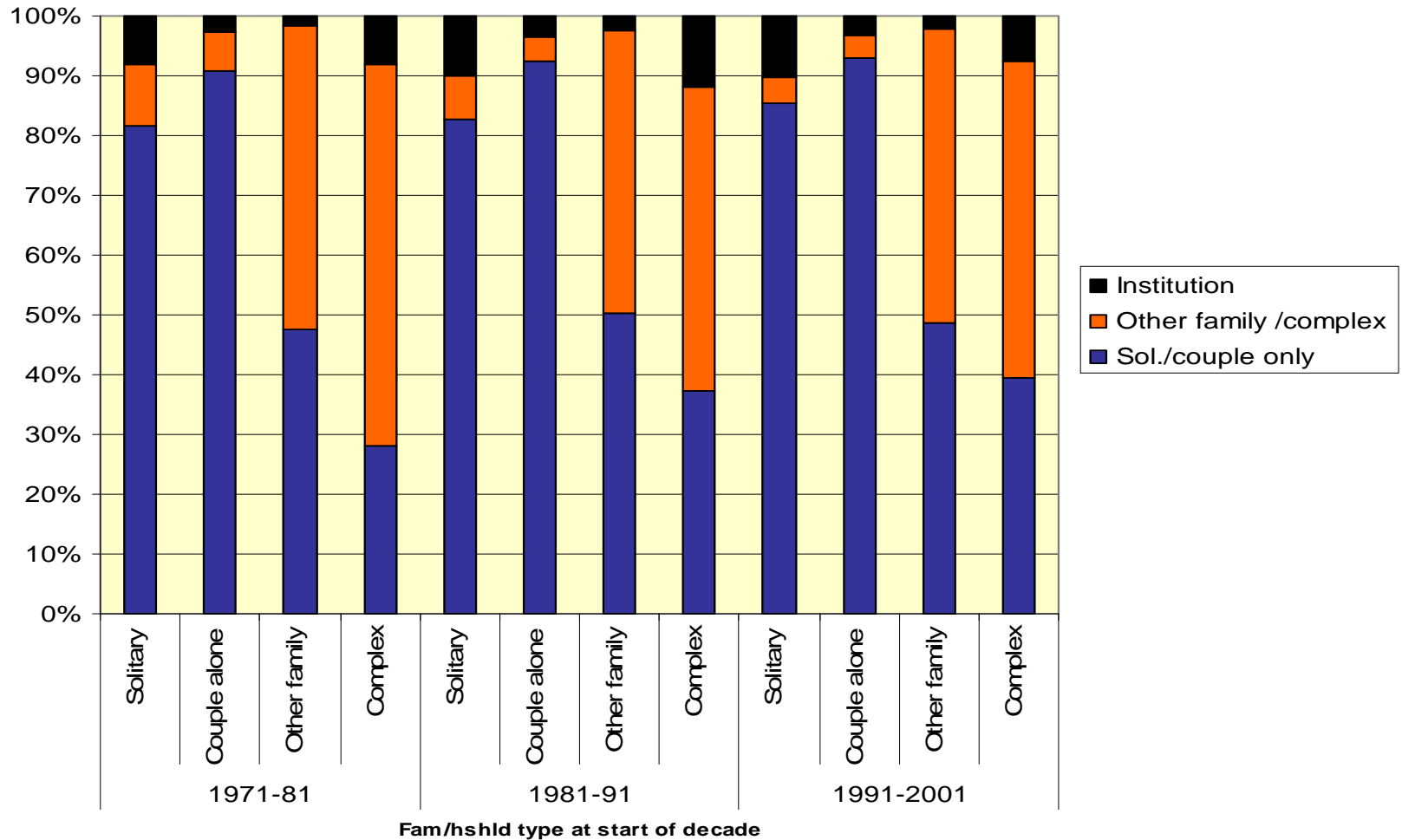
- Solitary/couple alone
- Other family/complex*
- Institution

Others

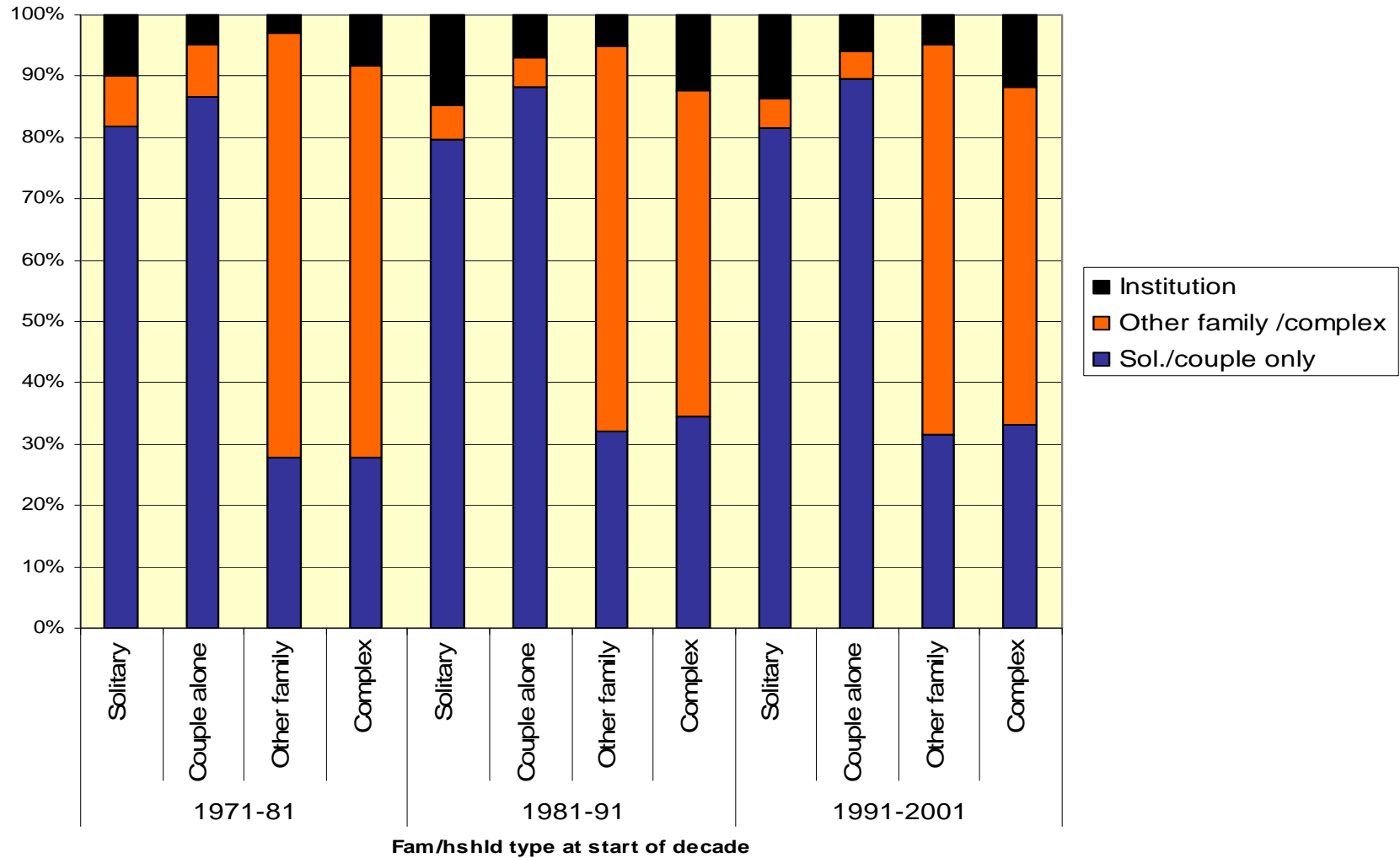
- Marital status
- Limiting long-term illness (not 1981)

*distinguished in mortality analysis.

Distribution of 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		

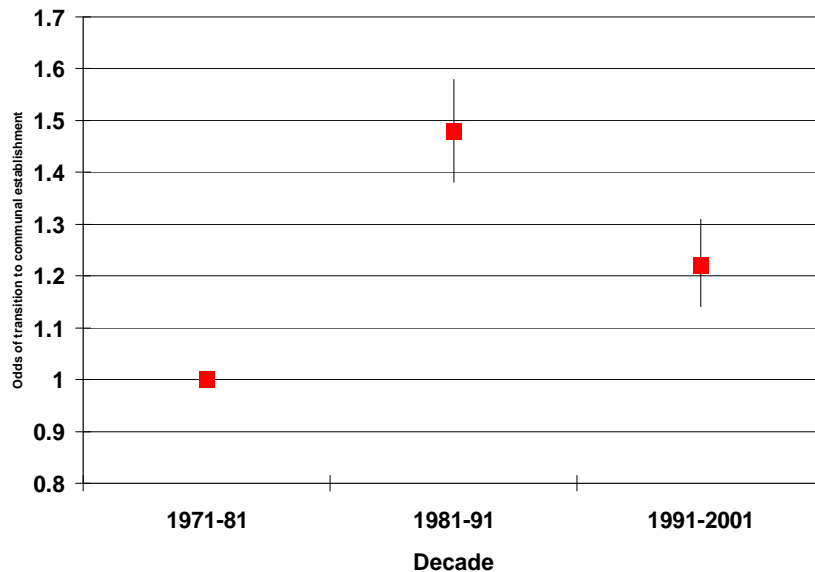
Source: Analysis of ONS LS

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

Women	Institution vs. solitary/couple only	Institution vs. family/complex	Family/complex vs. solitary/couple only
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		

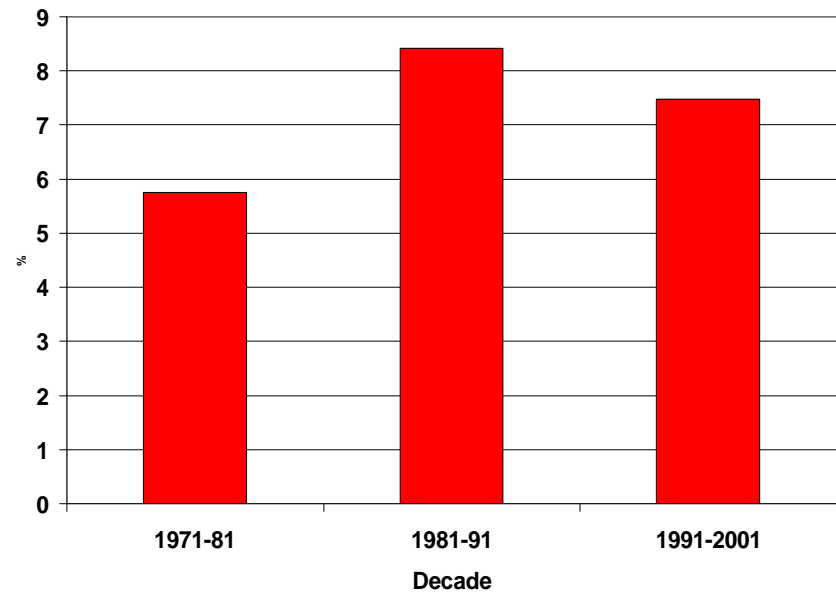
% aged 65+ who moved from private household to communal establishment between censuses, by decade.

Odds ratios



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

%



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

Results summary

- 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 older age; being unmarried (especially never-married); not owning a home; being female (Results from fully adjusted model).
 - Mortality of those moving to institutions and those moving to live with relatives both raised – but higher in institution group and excess largest in most recent period; suggests policy change led to admission of more disabled group
 - Among women, those who had never had children had the highest risk, and those who had had two children the lowest, of transition to an institution (taking account of marital status and other relevant co-variates).
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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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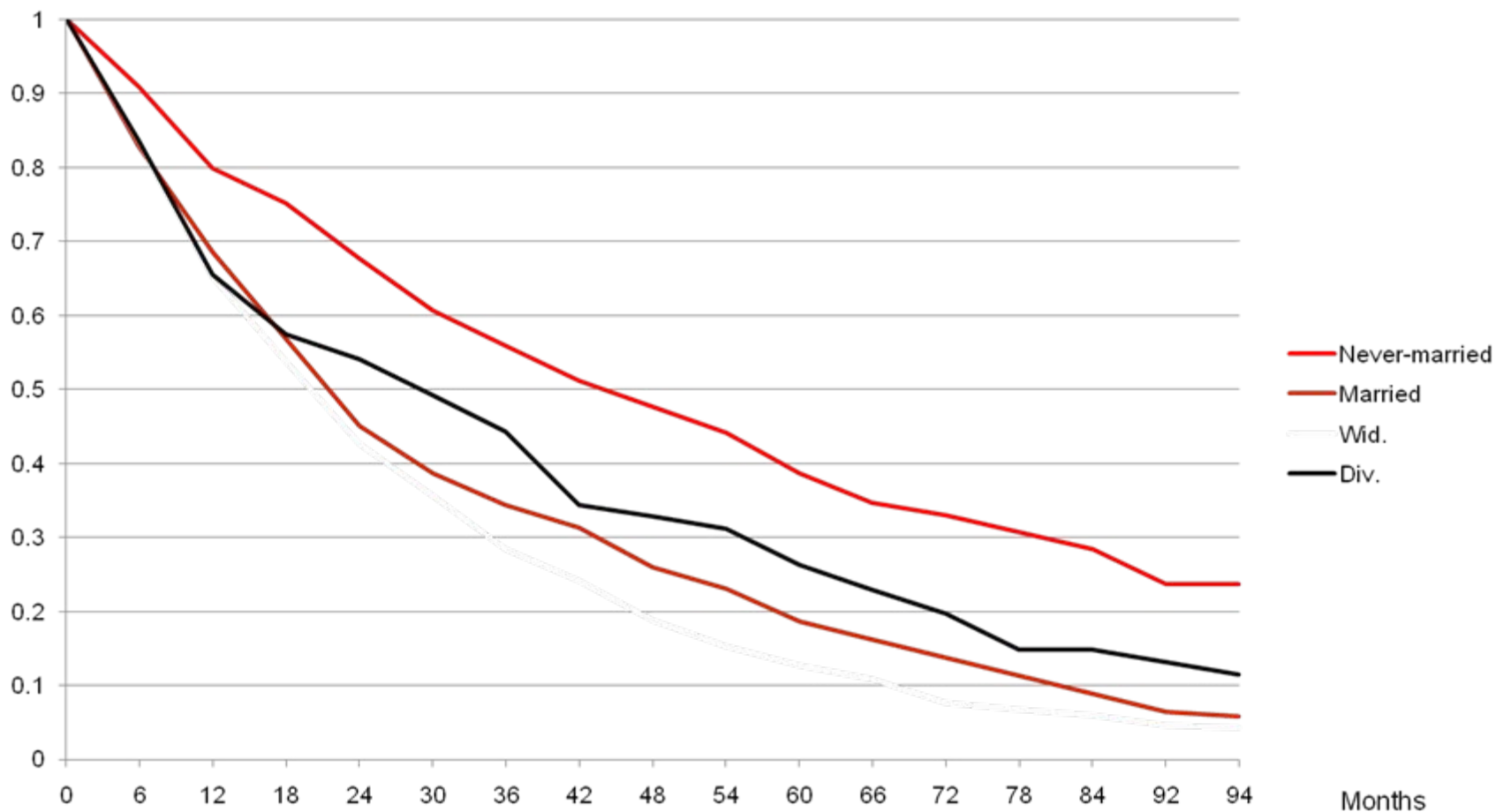
Conclusions (2)

- 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.
 - 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 further 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
 - Information on survival in institutional care relevant for both policy makers and individuals and their families in further work this has been examined for most recent period.
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Survivorship (proportion) 2001-2008 among men in communal establishments by marital status in 2001 and months survived



Survivorship (proportion) 2001-2008 among women in communal establishments by marital status in 2001 and months survived

