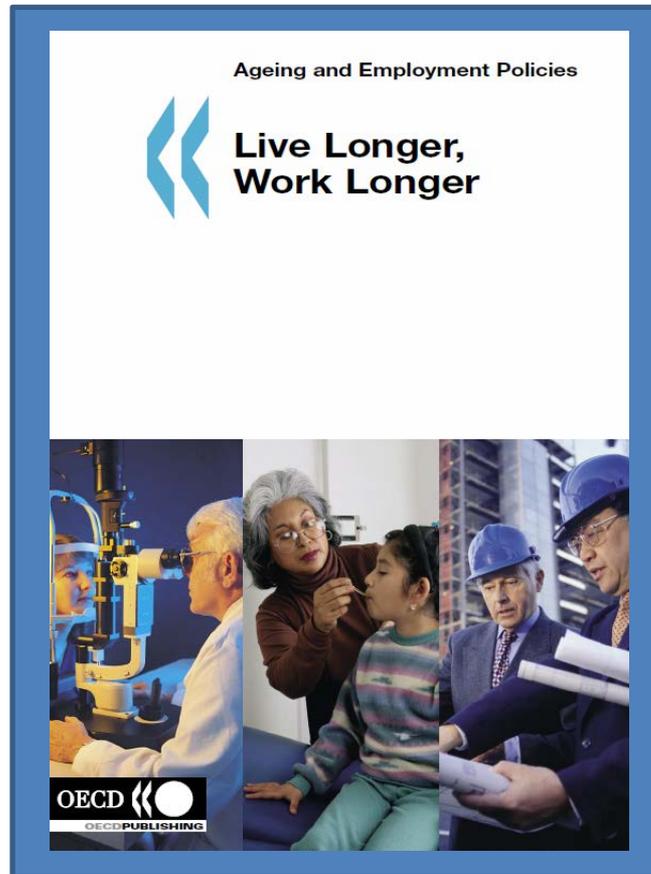


# Work, retirement, health and care: An introduction to the WHERL project

Karen Glaser, Laurie M. Corna, Loretta  
G. Platts, Diana Worts, Debora Price  
and Peggy McDonough

WHERL is an interdisciplinary consortium funded by the cross-research council Lifelong Health and Wellbeing (LLHW) programme under Extending Working Lives

# Introduction



- Context: Increases to average life expectancy; declining fertility; movement of baby-boomers into retirement
- 'Un-used labour capacity': Over one-quarter of adults between the ages of 50 and the current State Pension Age (SPA) in the UK are not in the labour market

# Introduction

- “catastrophic” consequences for individual living standards in retirement
- Health selection and causation
- Informal caring: In the UK, 12% of economically inactive adults ages 50-64 care for a sick, disabled or elderly person for 20+ hrs/week compared to only 3% of the economically active (Family Resources Survey 2010/11)

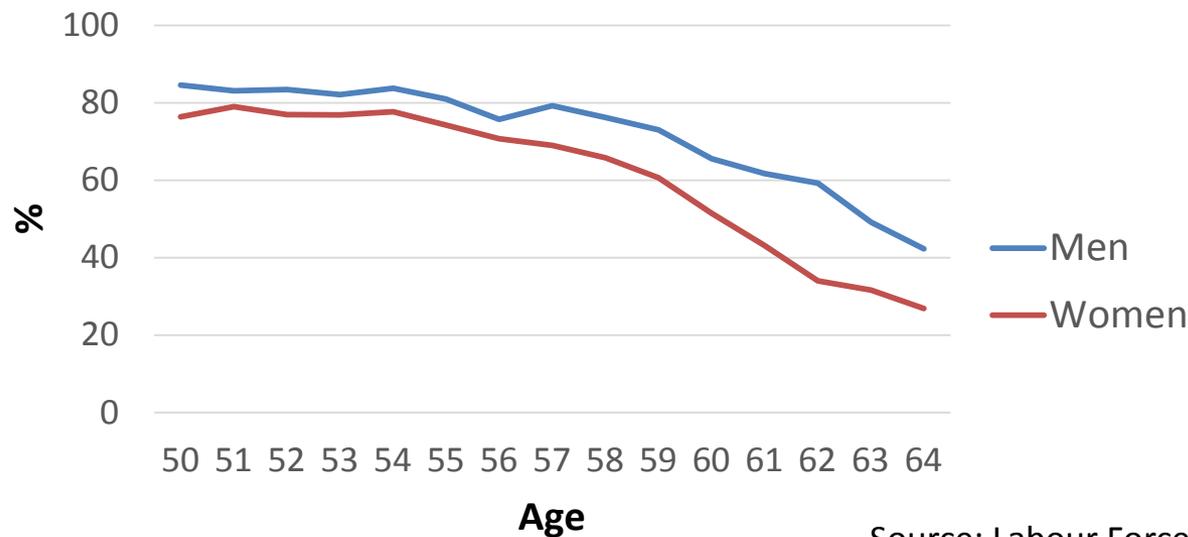


## Fuller Working Lives – A Framework for Action

June 2014

# A gendered life course perspective

**2013:** Percentage of men and women ages 50-64 in the labour market



Source: Labour Force Survey (2013)

- Trends in participation of adults 50+ vary by gender

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The WHERL consortium will examine a crucial question for ageing societies: How inequalities across the lifecourse relate to paid work in later life in the UK.

Our main aim is to investigate lifecourse influences on later life work trajectories and the implications for health and wellbeing of working up to and beyond the state pension age.

The project builds on an existing UK-Canadian collaboration examining lifecourse influences on later life work trajectories across several European countries and the US.

# Research themes

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- Using a wide variety of complex large scale datasets, our interdisciplinary team will be tackling projects that cover three major areas:
- i) a comprehensive assessment of lifecourse determinants and consequences for health and wellbeing of working up to and beyond the state pension age;
- ii) an evaluation of whether (and how) these relationships have changed for different cohorts and over time; and
- iii) modelling of the financial consequences of working up to and beyond the state pension age for those with different lifecourse trajectories.

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WHERL is led by the **Institute of Gerontology at King's College London** in partnership with:

- Institute of Psychiatry, Psychology & Neuroscience at King's College London
- Epidemiology & Public Health at University College London
- Dalla Lana School of Public Health at the University of Toronto
- Pensions Policy Institute (PPI)
- Age UK
- UK Department for Work and Pensions.

# Project structure

Employment status & mental health in later life at the *Institute of Psychiatry, Psychology & Neuroscience at King's College London*

Creation of marriage, fertility & labour market histories at *King's College London and the University of Toronto*



Health in retirement at *University College London and King's College London*

Financial wellbeing in retirement with the *Pensions Policy Institute*

Cohort changes in retirement timing at *King's College London*

*Partner project:* Labour market trajectories in later life (international comparison) with the *University of Toronto*

# Project structure

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# Health and wellbeing

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# Working beyond SPA and health and wellbeing

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- Aim is to investigate how paid work until or beyond SPA influences health and wellbeing and whether this relationship has changed across cohorts.
- Using data from the British Household Panel Survey, the British Retirement Survey and the English Longitudinal Study of Ageing.
- Self-report and biomarker data
  - General health, long-standing illness, ADLs/IADLs, chronic conditions (latent variable for somatic health: self-rated health, long-term illness, chronic lung disease, stroke, diabetes and cancer; ADLs and IADLs).
  - Biomarker data: height & weight, waist circumference, % body fat, respiratory function, Blood pressure, grip strength, chair lift , blood analytes (UKHLS, ELSA).
  - CES-D, GHQ12.

## *Research team:*

*King's College London:* Karen Glaser, Debora Price, Laurie Corna, Loretta Platts, Rachel Stuchbury, Lawrence Sacco, Giorgio di Gessa.

*UCL:* Amanda Sacker, Rebecca Benson.



# Psychological health

Employment status & mental health in later life at the *Institute of Psychiatry, Psychology & Neuroscience at King's College London*

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*Partner project:* Labour market trajectories in later life (international comparison) with the *University of Toronto*

# Working beyond SPA and psychological health

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- Aim is to address changes in relationship between employment status, adverse life events and psychological health.
- Using ONS Psychiatric Morbidity Surveys: 1993, 2000, 2007.
- Detailed psychological measures: Revised Clinical Interview Schedule (e.g. depression, anxiety, sleeplessness etc.), physical health, ADLs, cognitive function.
- Measure of stressful life events (e.g. serious illness, redundancy)
- 55–64 years using all three surveys and 55–69 years for more recent surveys.

## *Research team:*

*King's College London:* Karen Glaser, Debora Price, Laurie Corna, Loretta Platts, Rachel Stuchbury, Lawrence Sacco, Giorgio di Gessa.  
*IoPPN:* Rob Stewart, Gayan Perera.



# Financial wellbeing

Employment status & mental health in later life at the *Institute of Psychiatry, Psychology & Neuroscience at King's College London*

Creation of marriage, fertility & labour market histories at *King's College London and the University of Toronto*

Health in retirement at *University College London and King's College London*

Financial wellbeing in retirement with the *Pensions Policy Institute*

Cohort changes in retirement timing at *King's College London*

Partner project: Labour market trajectories in later life (international comparison) with the *University of Toronto*

# Modelling financial circumstances in retirement

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- A collaboration with PPI, an expert organisation undertaking rigorous research into retirement provision from an independent, long-term perspective.
- Feed into PPI's modelling of pension income which is based on hypothetical individuals.
  - Are such individuals representative of the population? (How long are typical career interruptions? What proportion of women return to work after having children?)
- WHERL will provide a set of individuals based on real data from nationally representative datasets. This will mean that a more realistic set of individuals can be used, improving the accuracy of this sort of individual model.

## *Research team:*

*King's College London:* Karen Glaser, Debora Price, Laurie Corna, Loretta Platts, Rachel Stuchbury, Lawrence Sacco, Giorgio di Gessa.

*Pensions Policy Institute:* Chris Curry, Mel Duffield, John Adams, Shamil Popat.



# Labour market trajectories in later life

Employment status & mental health in later life at the *Institute of Psychiatry, Psychology & Neuroscience at King's College London*

Creation of marriage, fertility & labour market histories at *King's College London and the University of Toronto*

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*Partner project:* Labour market trajectories in later life (international comparison) with the *University of Toronto*

# Labour market trajectories in later life

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- What are the health implications, for individuals, of extending working lives?
  - Is continuing to work at older ages realistic only for those in better health to begin with, or for those with certain privileges?
  - Will the better-off gain, in health terms, from extending working lives, while the less-well-off are harmed?
  - Or, is continuing to work likely to benefit all, and perhaps even reduce health inequalities among older adults?
- Examination of late career histories of people from Britain, Germany, Italy, Sweden and the USA from ages 50 to 70 years.
- Collaboration between King's College London (Laurie Corna), the University of Toronto (Diana Worts & Peggy McDonough) and University College London (Amanda Sacker & Anne McMunn).

“Work and Health in Later Life: Pathways and Social Patterning in Comparative Context” is funded by the Canadian Institutes of Health Research.



# LIFE COURSE HISTORIES

# Project structure

Employment status & mental health in later life at the *Institute of Psychiatry, Psychology & Neuroscience at King's College London*

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# Data & Key Variables

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- Data: British Household Panel Survey (18 waves + retrospective life histories collected in Waves 2, 11 & 12)
- Annual labour market activity over adult working life (16–55 years) for respondents born 1920-1945:
  - **Labour Market Involvement:** Full-time / Part-time / Not in paid work
    - Not in paid work: Unemployed / Retired / Incapacity / Education / Family care
- Subjective financial well-being (how well are you managing financially these days?)
- Self-rated health (Compared to people of your own age, would you say that your health has on the whole been...)

# Classifying individual histories

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- We use **optimal matching analysis (OMA)** to summarise individual employment histories
- Involves classifying individual histories according to frequent and meaningful patterns with the help of “model” or “synthetic” sequences (Wiggins et al. 2007)
- Respondents are classified according to the “synthetic” history they match most closely
- The final result for one participant could be that their history is classified as: “full-time work throughout” or “family care to part-time work”
- OMA run separately for men and women

# The synthetic histories (ages 16-55)

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- Employment Histories (ages 16-55)
  1. Full-time throughout
  2. Non-employed throughout
  3. Full-time early exit
  4. Family carer to part-time
  5. Family carer to full-time
  6. Family carer throughout
  7. Full-time to part-time

# Matching individuals to their nearest synthetic history



Two example synthetic histories depicted here are **Full-time throughout (FTT)** and **Family care to part-time work (FT-NW-PT)**.

Synthetic histories	16	17	18	19	20	...	49	50	51	52	53	54	55
FTT	FT	FT	FT	FT	FT	...	FT						
FT-NW-PT	FT	FT	FT	FT	NW	...	PT						

Four observed individual histories:

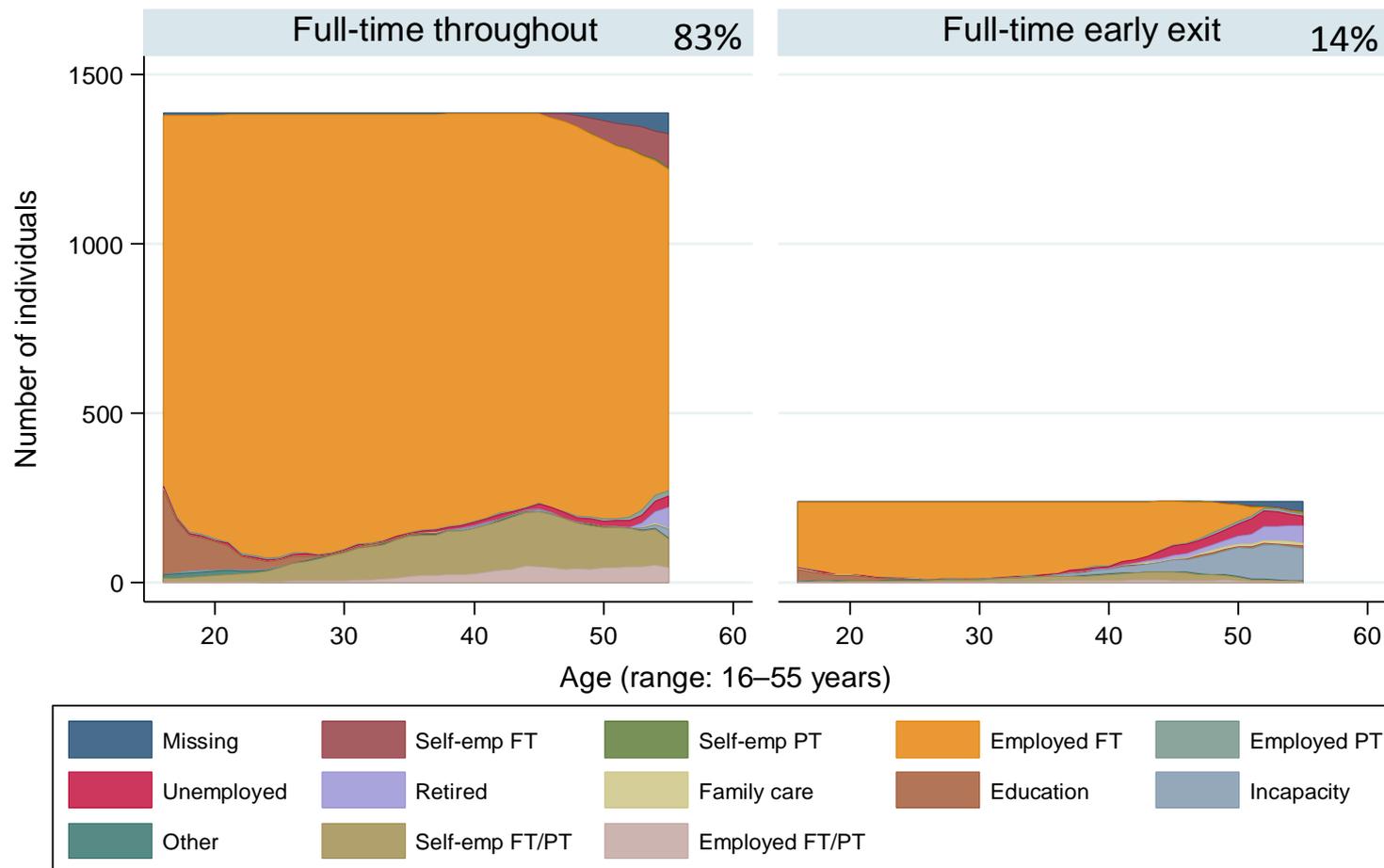
Observed individuals	16	17	18	19	20	...	49	50	51	52	53	54	55
1	FT	FT	FT	FT	FT	...	FT						
2	FT	FT	FT	FT	FT	...	FT	FT	FT	FT	FT	NW	NW
3	FT	FT	FT	NW	NW	...	PT						
4	FT	FT	FT	FT	NW	...	PT	PT	PT	NW	NW	NW	NW
...													



# EMPLOYMENT HISTORIES

# Male work histories

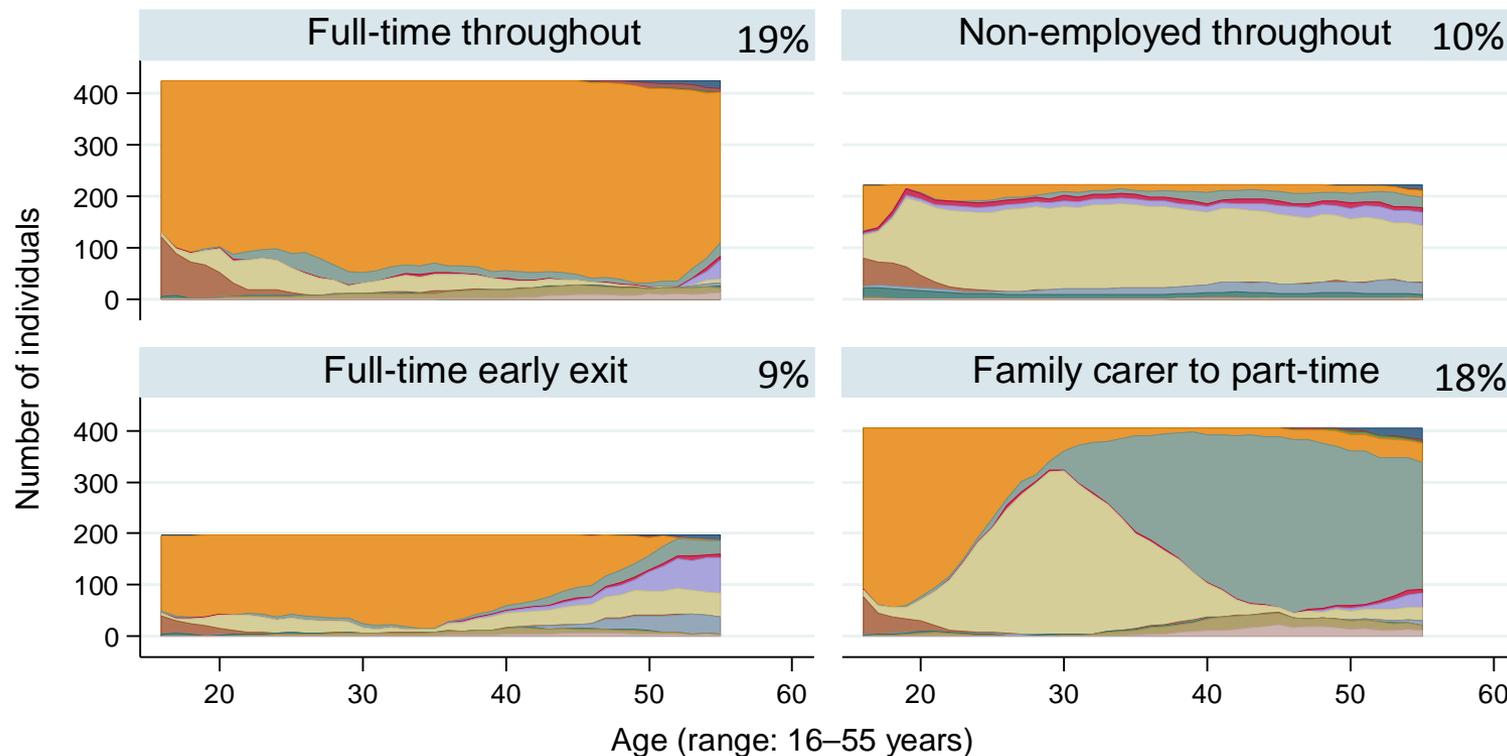
Chronograms of labour market status for 1625 men born 1920–1945 (BHPS)



Graphs of labour market histories organized by their nearest synthetic type.

# Female work histories

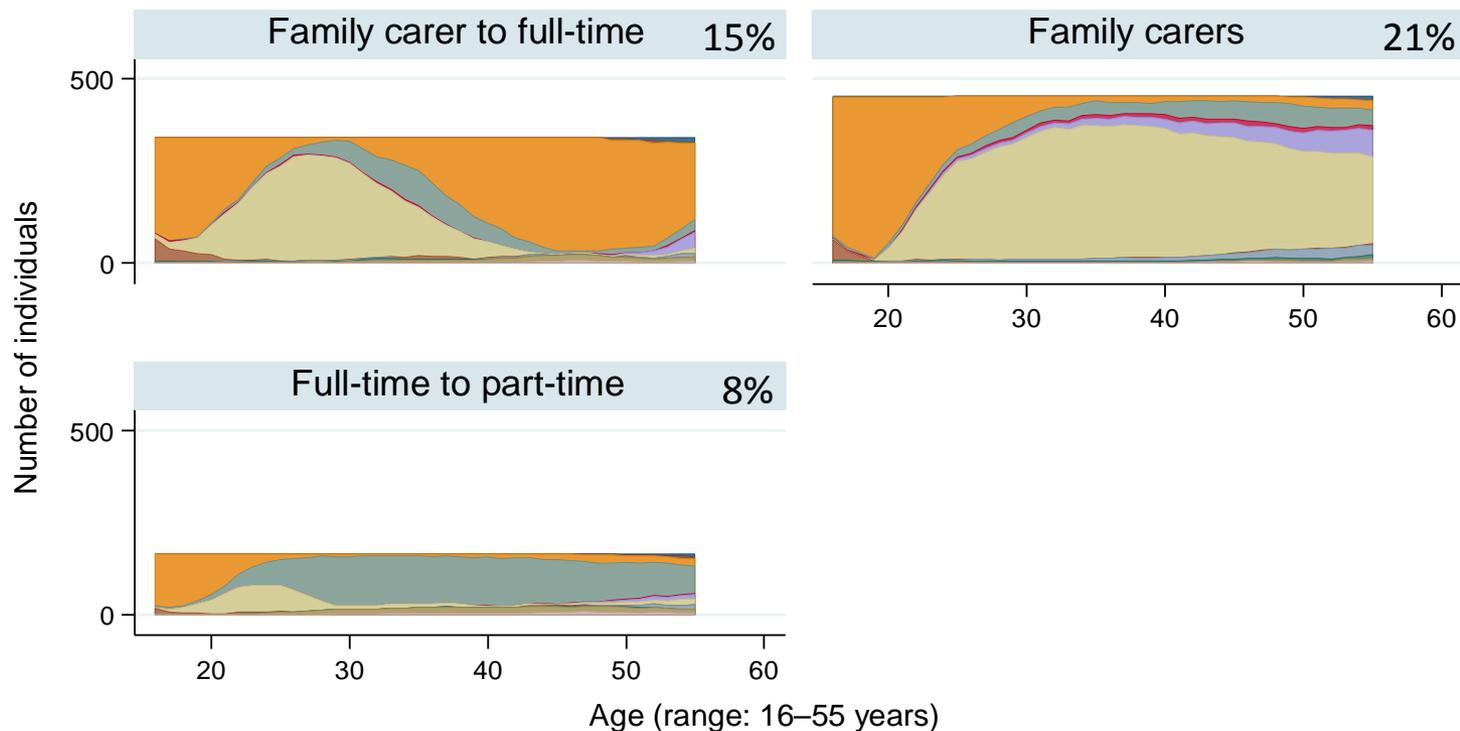
Chronograms of labour market status for 1250 women born 1920–1945 (BHPS)



Graphs of labour market histories organized by their nearest synthetic type.

# Female work histories

Chronograms of labour market status for 958 women born 1920–1945 (BHPS)

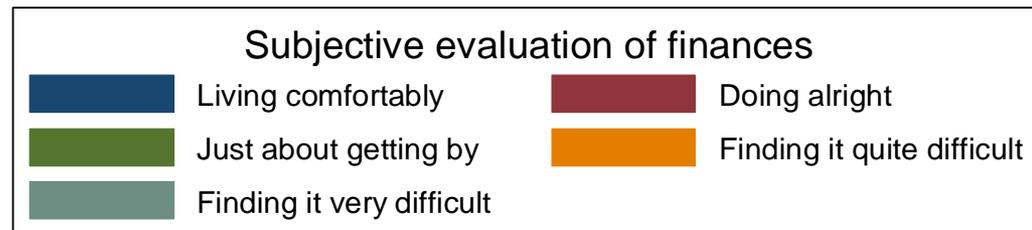
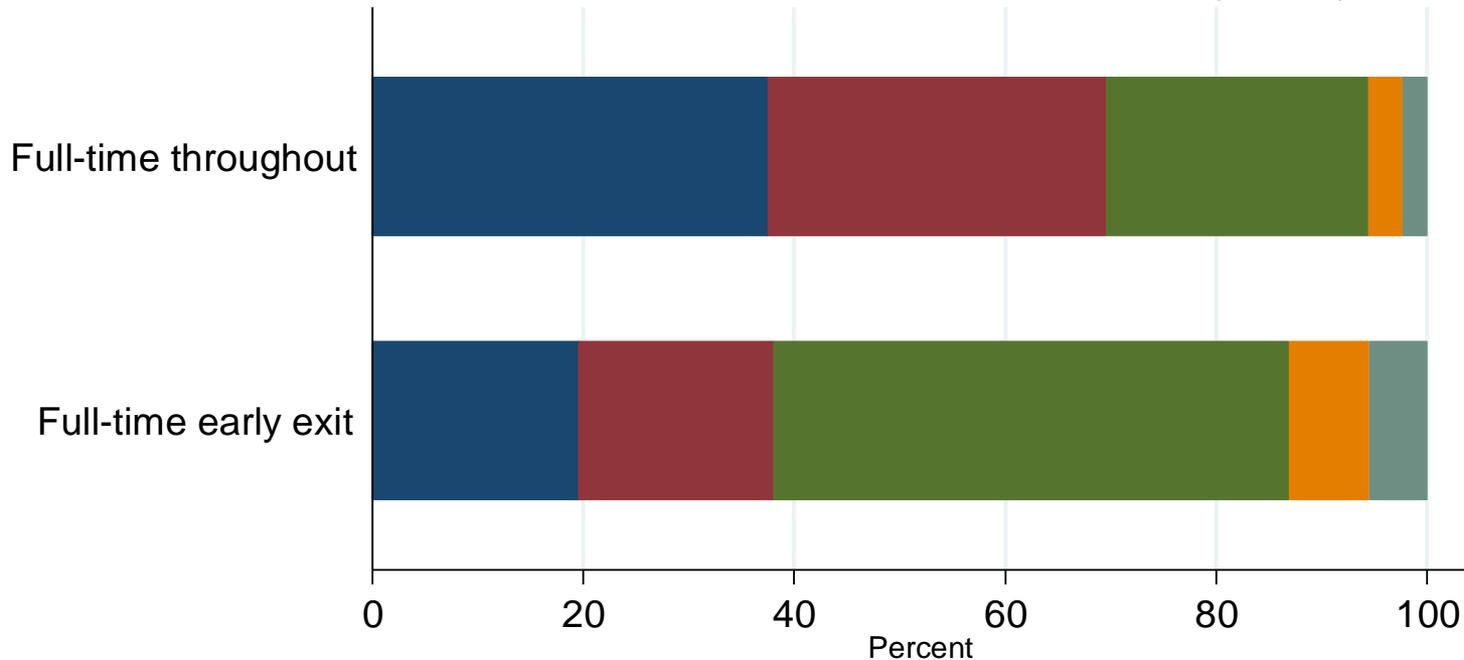


Graphs of labour market histories organized by their nearest synthetic type.

# EARLY DESCRIPTIVE FINDINGS

# Men's subjective financial well-being at 55 by employment history

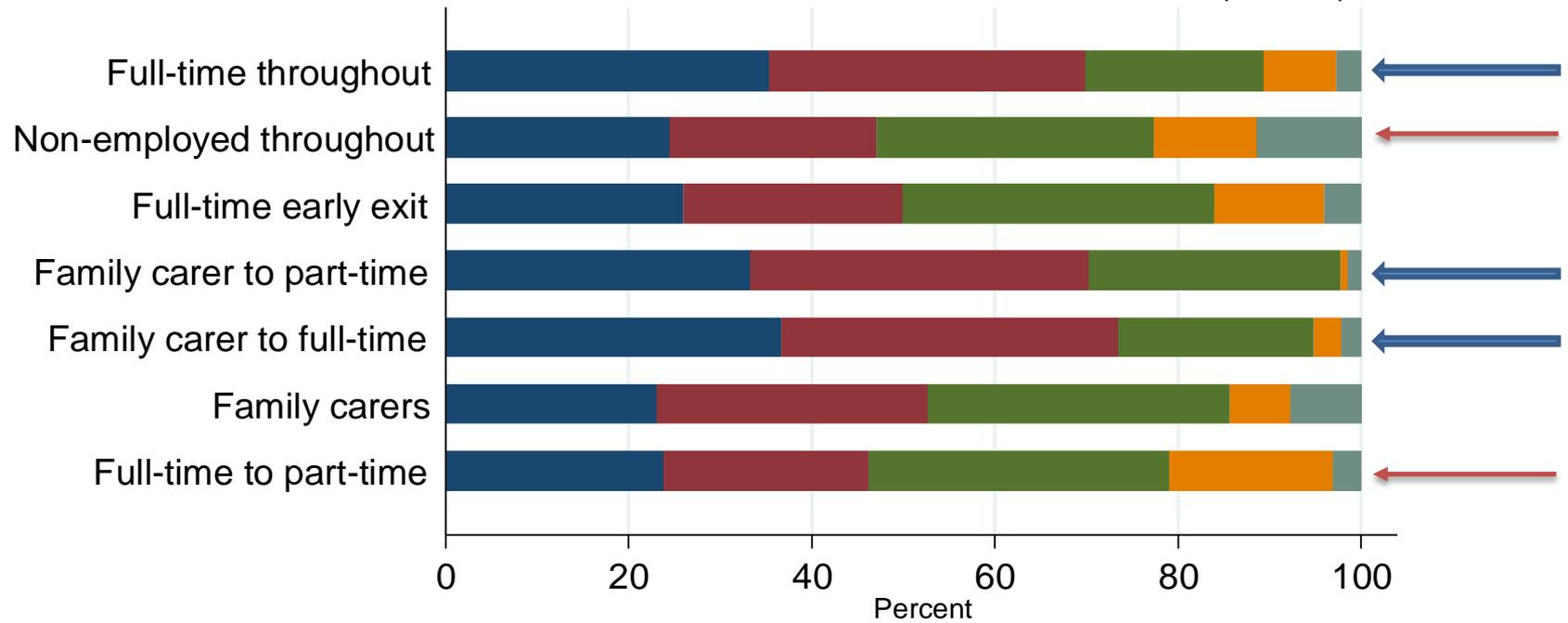
Chronograms of labour market status and financial situation for 529 men born 1920–1945 (BHPS)



# Women's subjective financial well-being at 55 by employment history



Chronograms of labour market status and financial situation for 610 women born 1920–1945 (BHPS)



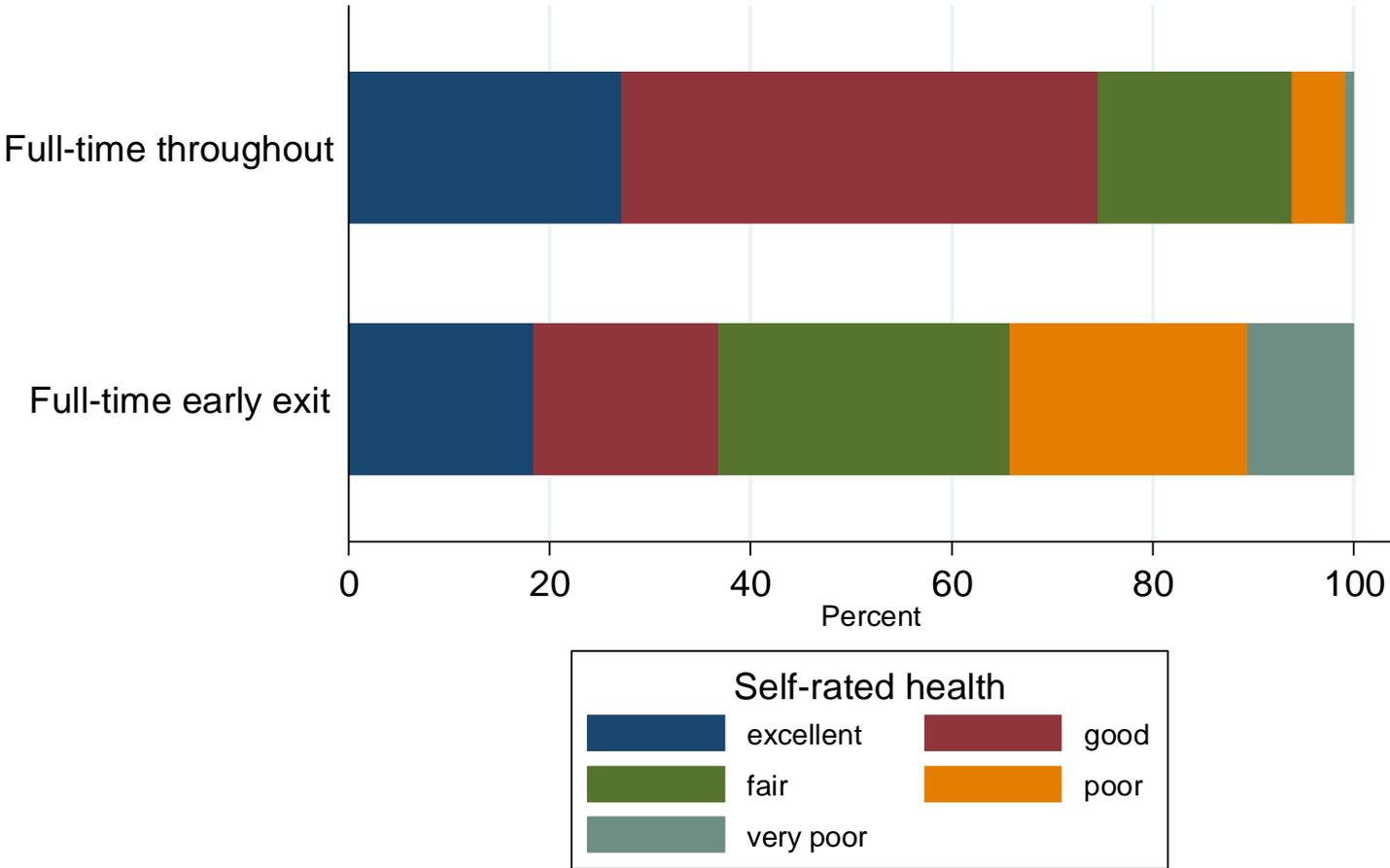
**Subjective evaluation of finances**

- Living comfortably
- Doing alright
- Just about getting by
- Finding it quite difficult
- Finding it very difficult

# Men's self-rated health at 55 by employment history



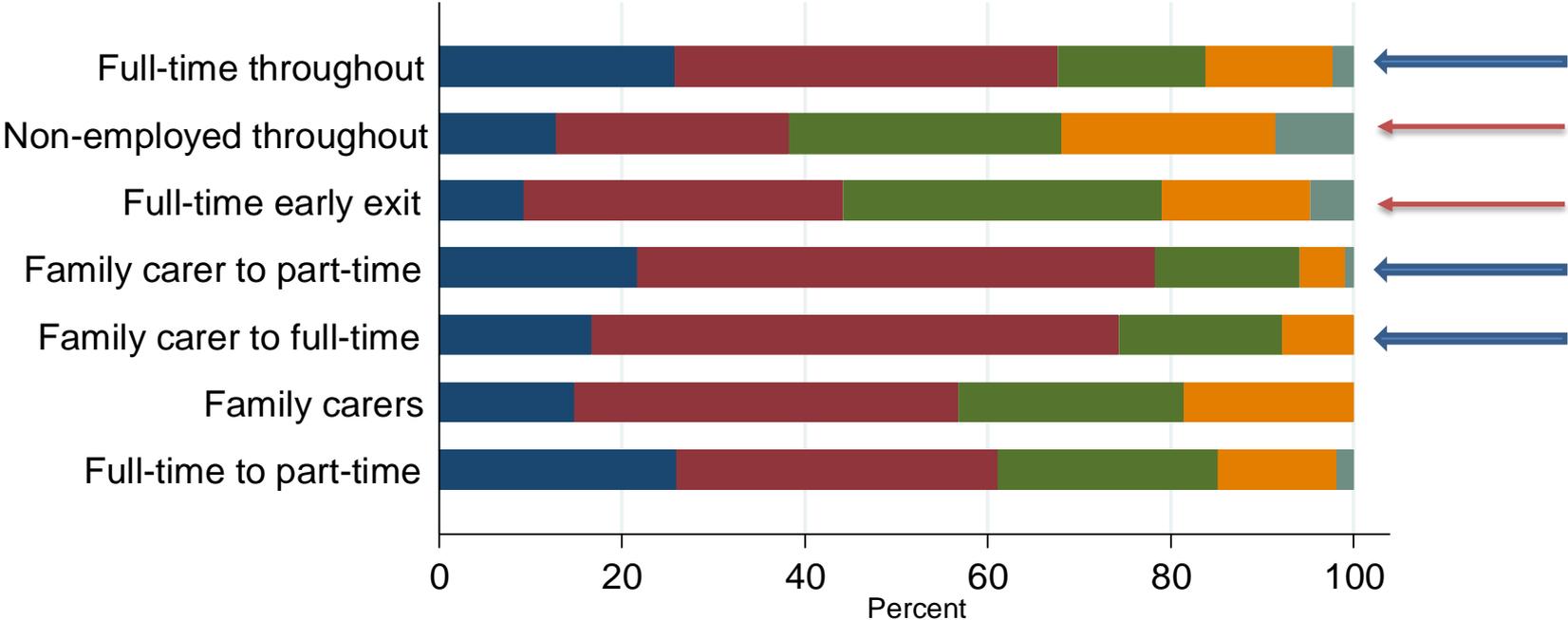
Chronograms of labour market status and self-rated health for 466 men born 1920–1945 (BHPS)



# Women's self-rated health at 55 by employment history



Chronograms of labour market status and self-rated health for 528 women born 1920–1945 (BHPS)



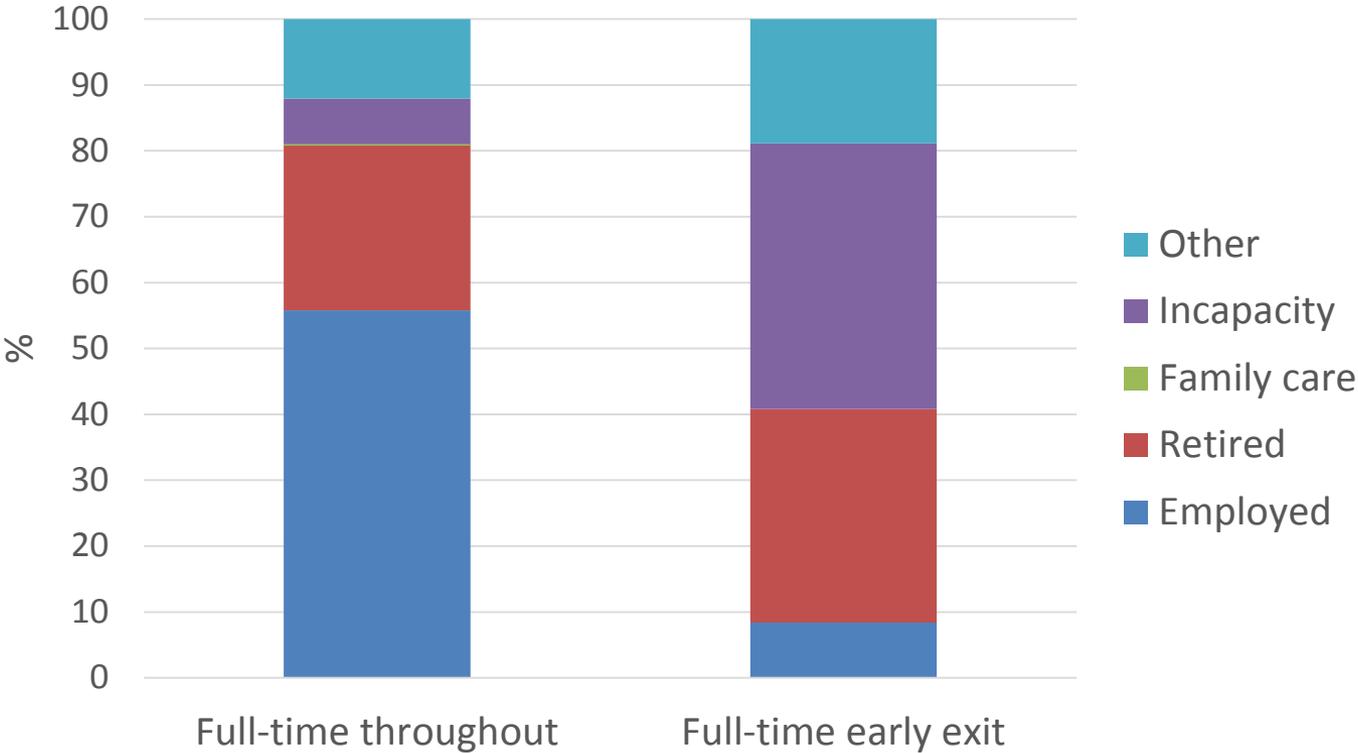
**Self-rated health**

<span style="display:inline-block; width:15px; height:15px; background-color:darkblue; border:1px solid black;"></span> excellent	<span style="display:inline-block; width:15px; height:15px; background-color:darkred; border:1px solid black;"></span> good
<span style="display:inline-block; width:15px; height:15px; background-color:olive; border:1px solid black;"></span> fair	<span style="display:inline-block; width:15px; height:15px; background-color:orange; border:1px solid black;"></span> poor
<span style="display:inline-block; width:15px; height:15px; background-color:teal; border:1px solid black;"></span> very poor	

# Men's labour market activity at age 60 by employment histories

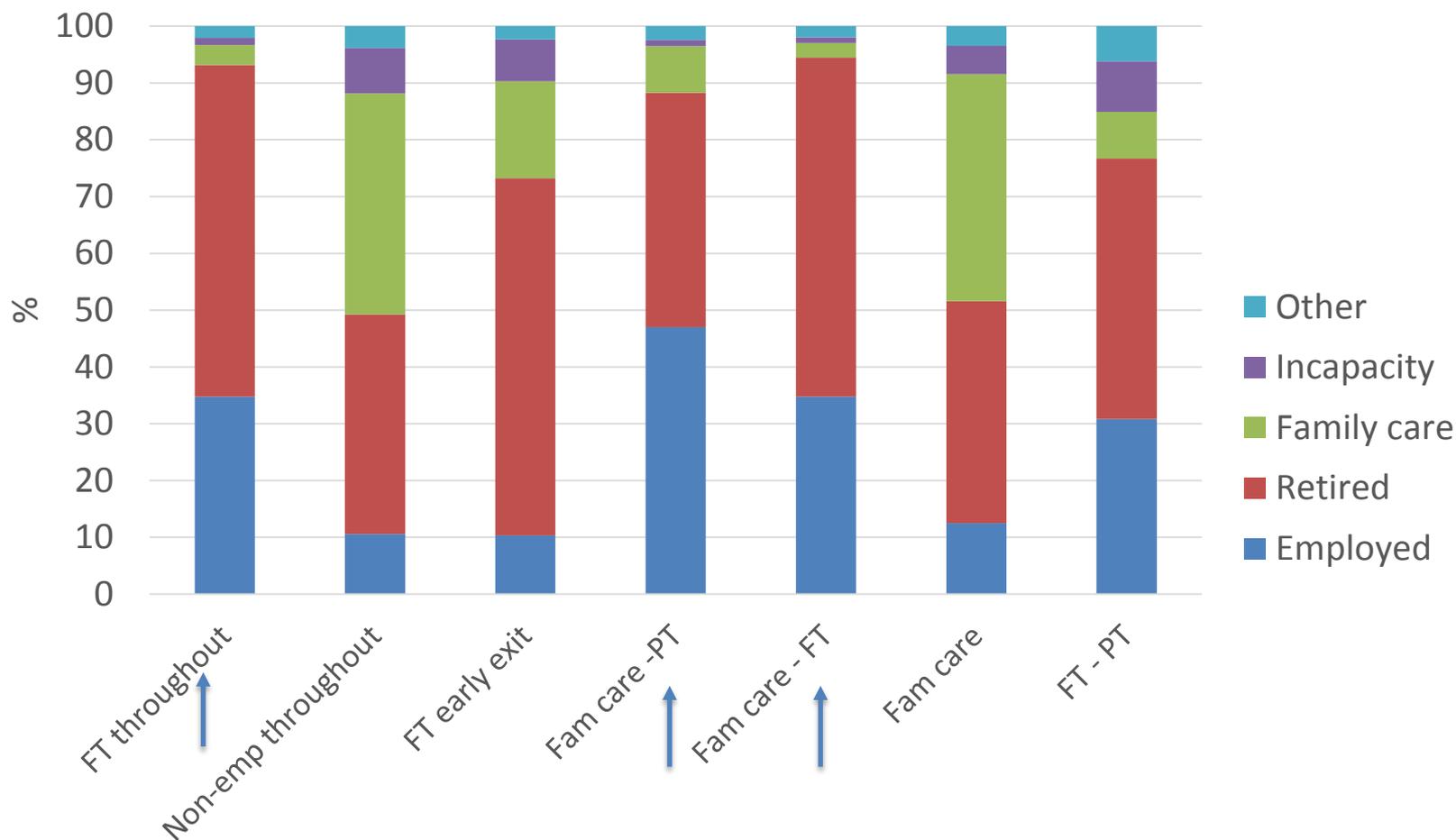


Men's labour market activity at age 60 by employment history (N=1573)



# Women's labour market activity at age 60 by employment histories

Women's labour market activity at age 60 by employment history  
(N=2058)



# Discussion: early findings

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- Considerable heterogeneity in the employment histories of women; two groups suffice for men
  - Men who exit the labour market before 55 may be particularly disadvantaged
  - Women who transitioned to full or part-time work following family care, and those who worked throughout report fewer financial concerns and better self-rated health at 55; those who transitioned are more likely to be working at 60
- Early findings; much work left to do
  - Work until and beyond SPA, role of occupational class, importance of family histories, etc.

# Questions

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[www.wherl.ac.uk](http://www.wherl.ac.uk)

