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Projecting utilisation of long term care in Ireland:

Demographics, Disability and Incentives

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Outline of Presentation

- Background
- Analytical challenge
- Modelling exercises
- Understanding demographic changes
- Sources of care
- Disability
- Projections
- Taking account of incentives
- Conclusions

Background

- Relatively young population that is ageing late

- Primary, community and social care outside hospitals is poorly developed

- Serious problems of delayed hospital discharge and rapid rise in long term residential care

- Objective to gain better understanding of the drivers of demands for long term care, and the problems in projecting or forecasting demand.

Analytical challenge 1

- Data inadequacy:

  - no comprehensive, consistent time series for recipients of residential care or formal community care;
  - inability to link datasets
  - no unique patient identifier

- Methodological limitations:

  - data inadequate to support analysis of predictors of utilisation;
  - modelling currently limited to projection of effect of continuation of current estimated utilisation patterns;

Analytical challenge 2

○ Changing economic, social, fiscal and policy backdrop:

- fiscal crisis causing cutbacks in publicly provided care;
- increased female labour force participation;
- new system of state support for residential care affecting utilisation

○ Ability to forecast will develop with developing data sources and understanding of drivers

- TILDA – The Irish Longitudinal Study on Ageing – first wave excluding those in residential care but follow up does not.

Modelling exercises

- Layte et al (2009):

  - need: forecast numbers of older people with severe disability;
  - projected residential LTC utilisation 2006-2021 assuming constant utilisation pattern

- Wren et al (2012, forthcoming):

  - forecast numbers of older people with severe disability & ADL difficulty;
  - projects utilisation of care in all settings 2006-2021 assuming constant utilisation patterns

- Future developments:

  - TILDA wave 2 offers potential for multivariate analysis of predictors of utilisation

Demographics

- Substantial rise in overall population in last decade

- Population share aged 65 and over forecast to increase from 11% in 2006 to over 15% in 2021

- Number 65+ up from 468,000 to 792,000 – nearly 70% increase

- Resumed outward migration removing some potential carers but not those who will need care in the next 20 years

- Divergent trends affecting informal care supply: rising female labour force participation but converging male & female life expectancies

- Ireland coming late to population ageing; formal caring infrastructure under-developed

Demographics – living alone

- Living alone predictor utilisation acute care and formal long-term care, studies in UK, Netherlands and Germany

- Care by spouse reduces LTC expenditure, cross-country study (Yoo et al, 2004:15 countries 1970-2000)

- **Significant interaction effect between population age and convergence of male and female life expectancies found in cross-country analyses of acute bed and formal LTC utilisation**,

  - Increased population age increases LTC utilisation
  - Convergence in life expectancies reduces LTC utilisation
  - These effects moderate one another

  (Wren and Normand, forthcoming: acute 17 OECD countries 1985-2006/ LTC 7 countries 1997-2006)
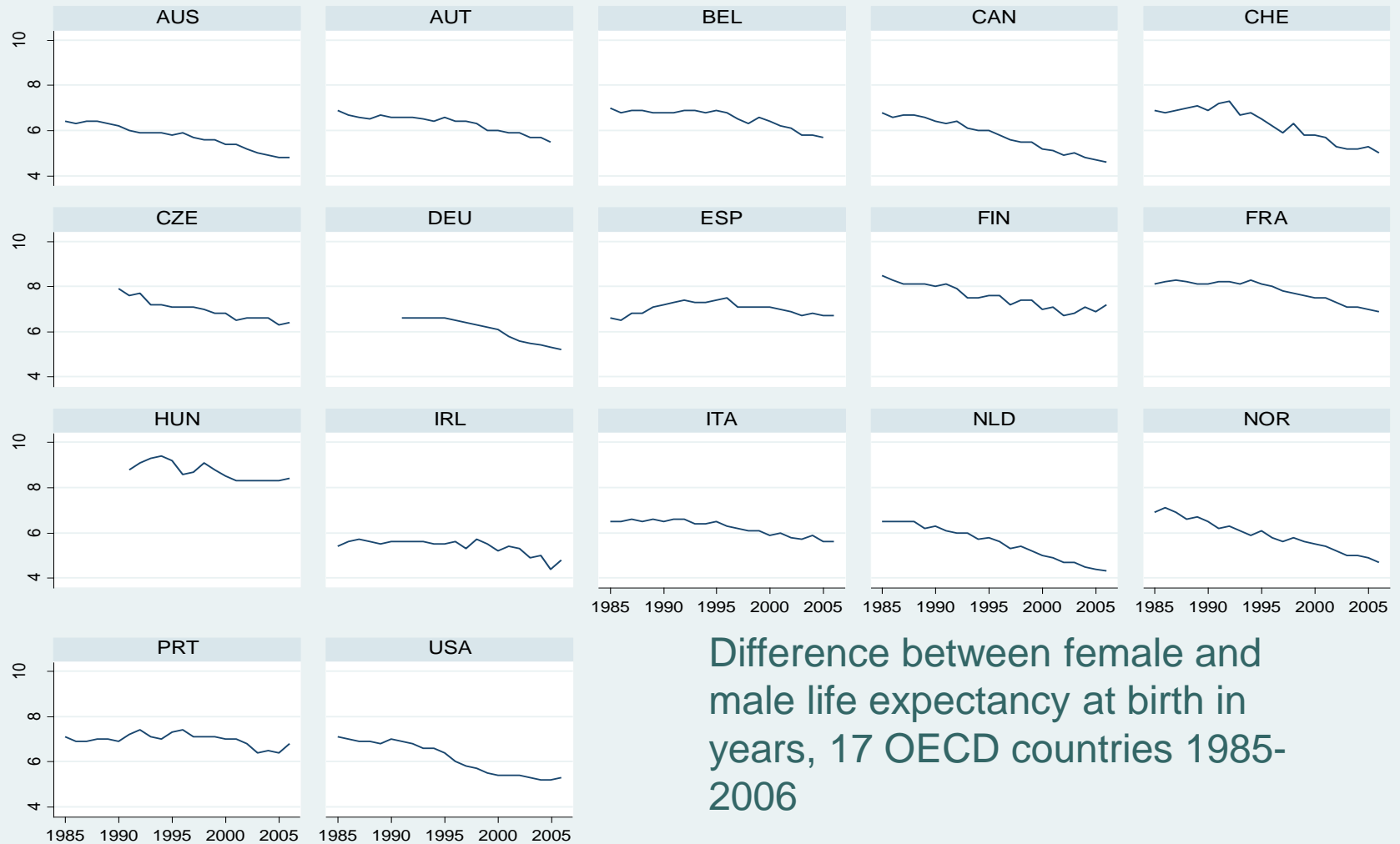
Increases in Life Expectancy at Birth EU 15

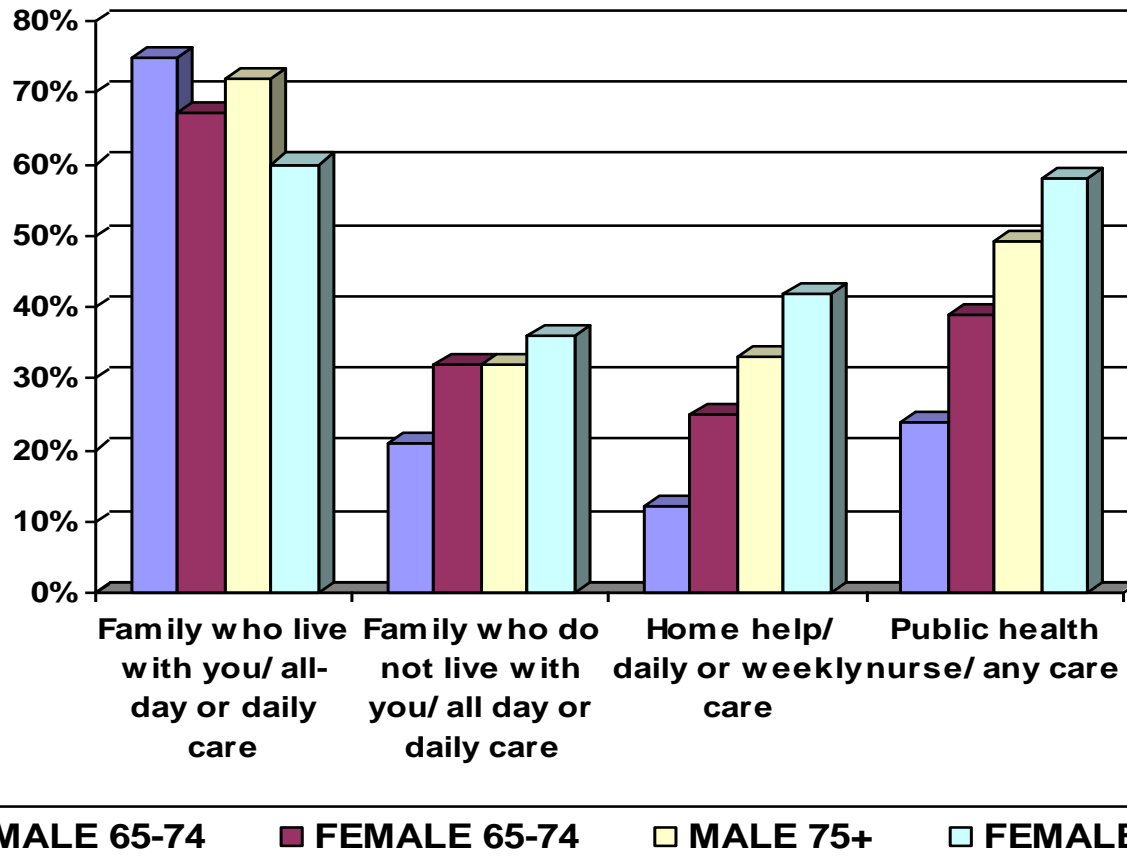|	1970-1980	1980-1990	1990-2000	2000-2009
Males	2.09	2.29	2.57	2.67*
Females	2.6	2.29	1.98	1.92*

* Adjusted for shorter interval

Converting life expectancies

Difference between female and male life expectancy at birth in years, 17 OECD countries 1985-2006

Sources of care by age and gender

Source: 2006 National Disability Survey. Sources of home care as percentages of all people in private households in the age/gender cohort with ADL difficulty and receiving home care.
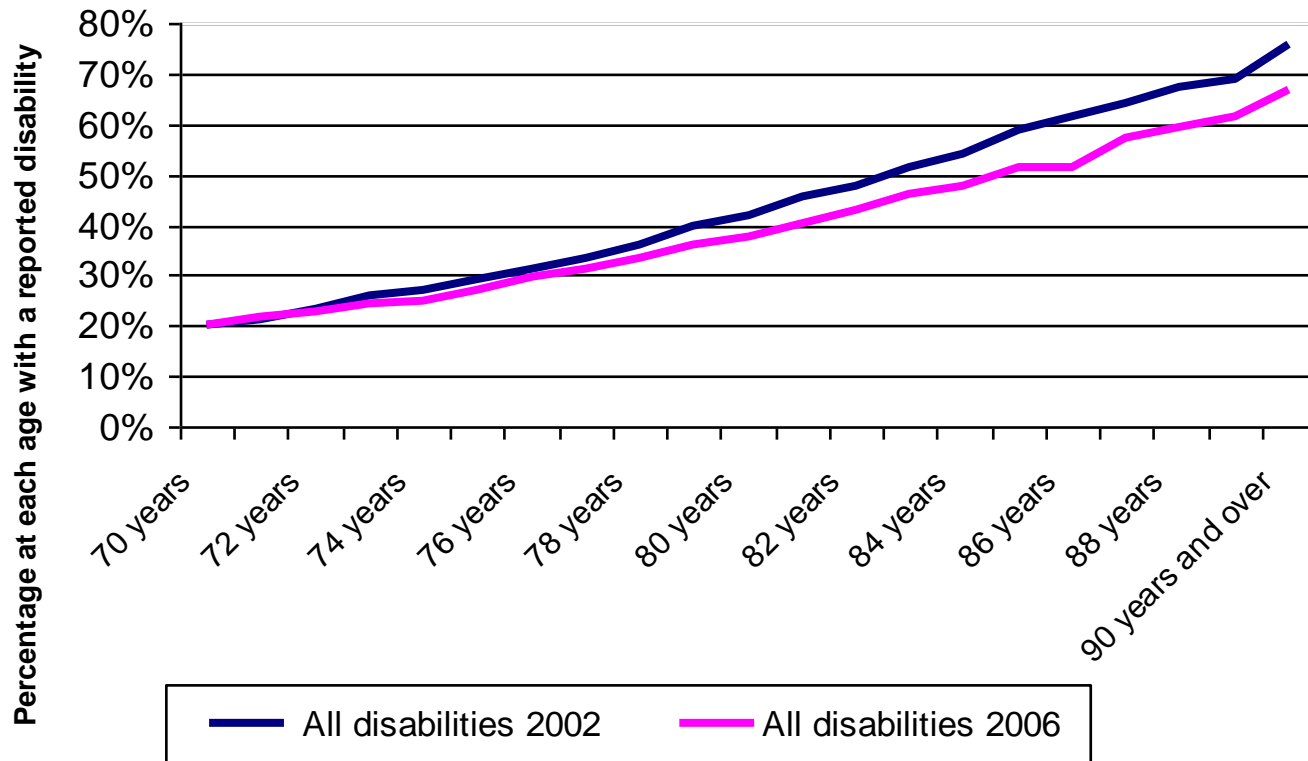
Disability

- Effect of age also moderated by trends in disability

- Over long time periods, clear evidence of deferred disability

- Over shorter periods, cross-country comparisons show divergent trends

- Majority of studies using measures of basic and/or instrumental activities of daily living show declining trend

- Irish Census evidence of declining disability prevalence for older people between 2002 and 2006

Disability

**Changes in disability rates, Ireland 2002-2006
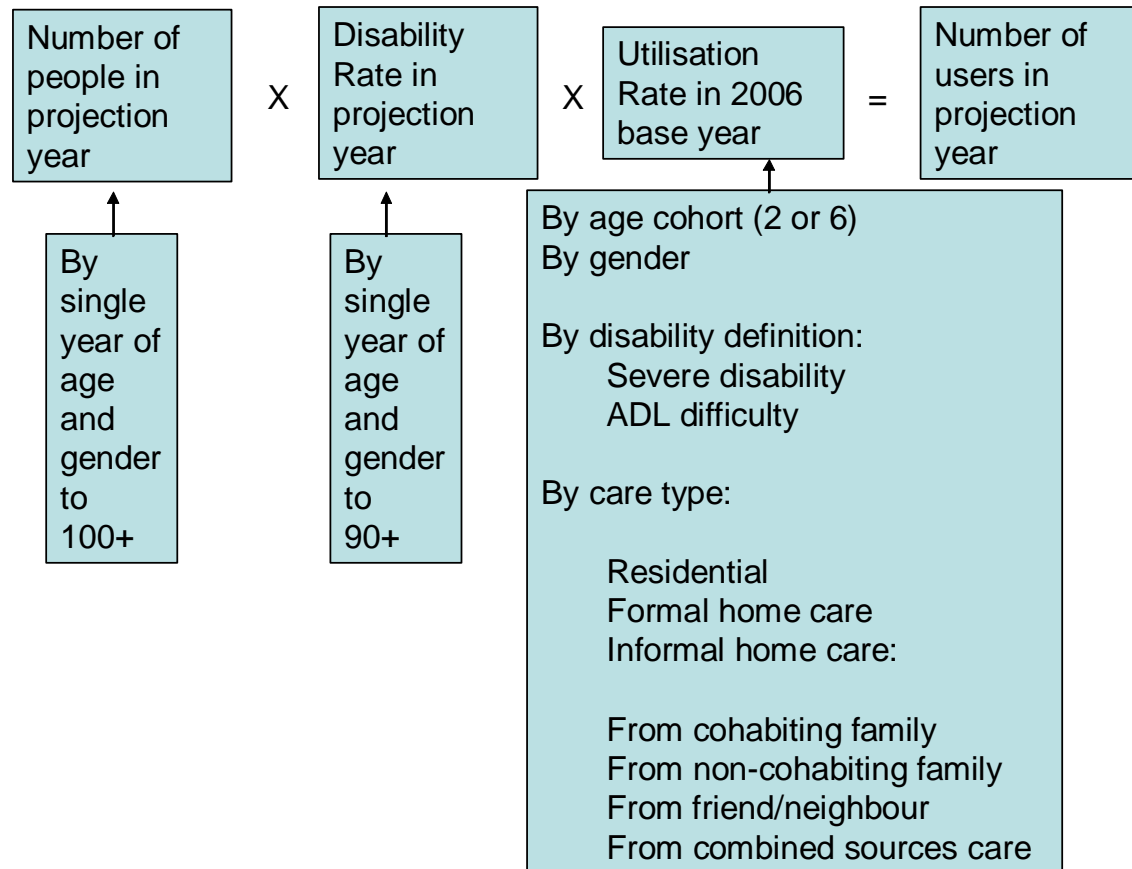Among people aged 70 and over**

Disability forecasting

- Alternative scenarios

- Preferred scenario assumes cohort effect of pronounced disability rate improvement will moderate

- Convergence to long-run trend of declining disability, mirroring assumptions in improving life expectancy

- Prevalence ADL difficulty in people aged 65 & over reduces from 15.9% in 2006 to 14.8% in 2021

- While *rate* reduces, *numbers* with ADL difficulty up from 74,000 to 117,000 – over 50% increase

Projection methodology

Number of people in projection year **X** Disability Rate in projection year **X** Utilisation Rate in 2006 base year **=** Number of users in projection year

By single year of age and gender to 100+

By single year of age and gender to 90+

By age cohort (2 or 6)
By gender

By disability definition:
    Severe disability
    ADL difficulty

By care type:

    Residential
    Formal home care
    Informal home care:

    From cohabiting family
    From non-cohabiting family
    From friend/neighbour
    From combined sources care

Utilisation patterns

- Alternative estimates from multiple sources

- Of people aged 65+ in 2006 base year:

  - 4.4% to 4.8% in residential LTC
  - 8.9% to 10.5% receive formal home help
  - 8.8% have ADL difficulty and receive intense all-day or daily informal care;
  - 28% receive some informal care

- Notable gender differences and evidence of unmet need

Utilisation projections

- Of people aged 65+ in 2021:

  - 4.2% to 4.7% in residential LTC
  - 8.2% to 9.7% receive formal home help
  - 8.1% have ADL difficulty and receive intense all-day or daily informal care;

- If utilisation patterns remain constant, implies in each year from 2006-2021:

  - 820-970 additional people in residential LTC
  - 1,600-1,870 additional people receiving formal home help
  - 1,570 additional people receiving intense all-day or daily informal care

Incentives and trends

- Supply of informal carers, household composition, relative pricing and incentives will affect future utilisation patterns;

- Nursing Home Support Scheme - the "Fair Deal" - introduced in 2009 to make state support equitable across all settings now under pressure and under review

- Co-payment based on income and assets can include deferred contribution of up to 15% of value of family home.

- Recognised need for a unified care needs assessment favouring community over residential care

- Substantial problem of delayed discharge from acute hospitals exacerbated by cutbacks in public nursing home places and home help provision

Summary

- *Ceteris paribus* the changing demography will require significant increases in provision of long term care in Ireland, mainly domiciliary

- The effects of changing male life expectancy will significantly reduce the growth in demand for formal care

- Increasing emigration and increased FLFP will reduce supply of informal carers

- Clear evidence of response to availability of services and financial incentives

Thank you for your attention