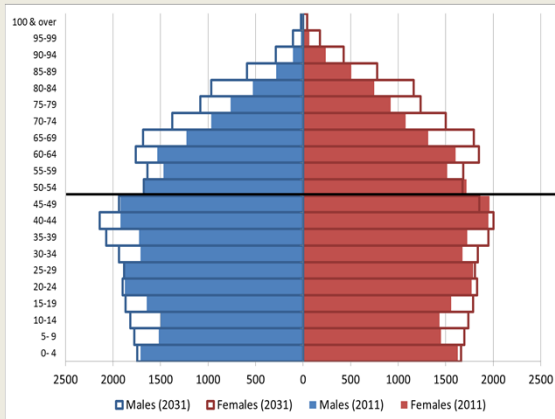


Demand for Future Elderly Health Care

Stephen Clark (gysc@leeds.ac.uk)
University of Leeds, School of Geography

Change in population structure 2011 to 2031

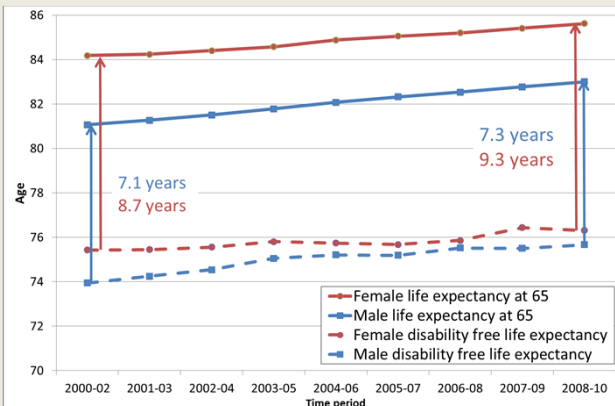


England : 2011 aged 50 or older : 18,309,000
2031 aged 50 or older : 23,526,000 (+28%)

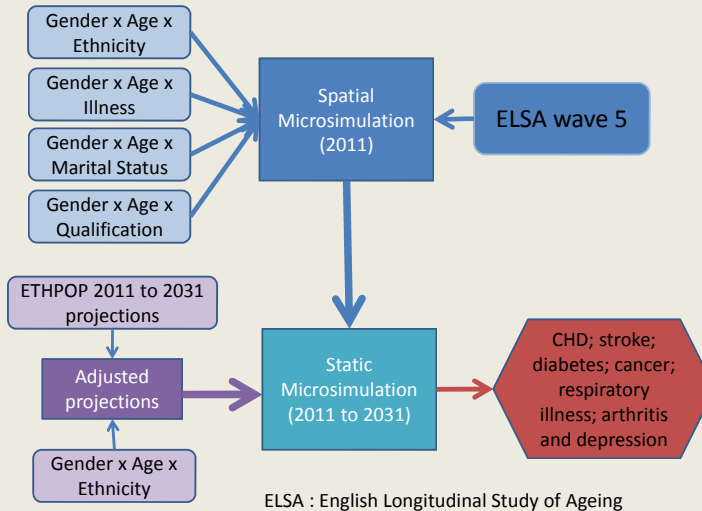
- Ability of working age population to support the young and elderly populations
- Increased financial, care and support pressures on general population.

Life expectancies

How long to live and how healthy?



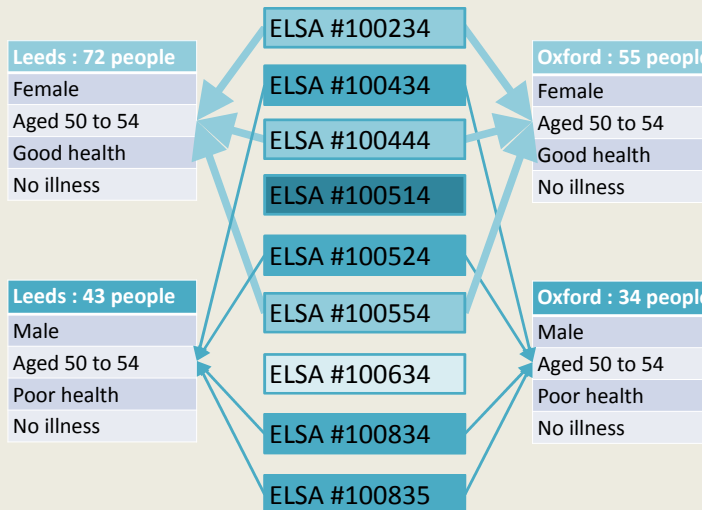
Simulation Structure



ELSA : English Longitudinal Study of Ageing

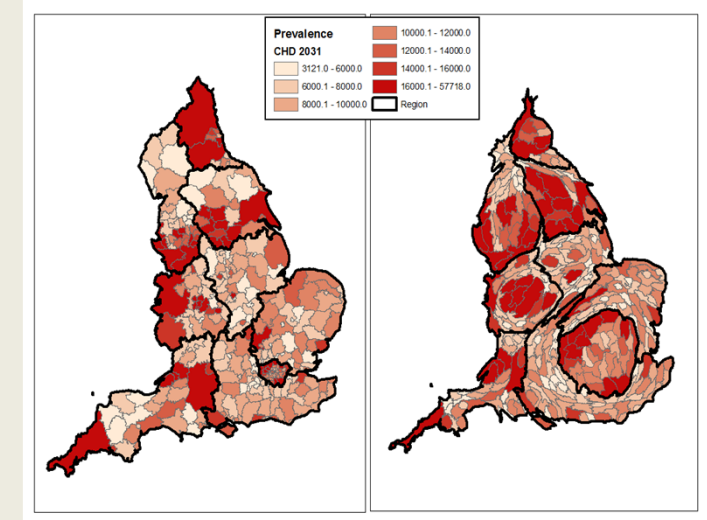
Spatial microsimulation

Need for both rich data (ELSA) and rich geography (CENSUS)
Match individuals to areas based on common characteristics



Static Microsimulation

- Individuals “age in place”
- Re-shape population to projections by random selection
- Tally morbidity outcomes at each time step
- Map prevalences as counts or rates



Dynamic Microsimulation

- Age the spatial population through time
- “Recruit” those aged 50 to 51 from HSfE
- Change morbidity status using hazard models
 - Wave; Age; Gender; Ethnicity; Smoking; Area Type
- Compare with Static outcomes

Supervisors : Prof Mark Birkin and Dr Alison Heppenstall

Population and life expectancy data from the Office for National Statistics

Funding :

