

Modelling Needs and Resources of Older People to 2030

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Introduction

Systems for providing financial and other resources for later life are being reviewed and reformed worldwide in response to population ageing. In both long-term care and pension provision debate has centred around three key issues: how far people should fund their own care or pensions and how far they should be publicly funded; the role of means-testing in determining entitlement to state-funded care or pensions; and the future affordability of the systems. Despite these similarities there has been little attempt to connect the long-term care and pensions debates. Yet there are obvious trade-offs and interactions between the two systems and both are affected by changes in mortality, disability, family structures and private provision for old age.

Understanding the links between the key determinants of individual and aggregate need for care and financial resources in later life, such as mortality, disease and disability; household/family formation and kinship; family support and the supply and demand or informal care; the accumulation and distribution of income and assets in later life is crucial for informed policy making. But these linkages are under-researched and there is considerable uncertainty about how trends in key drivers such as mortality and morbidity will evolve. Between the 2002-based and previous (2000-based) British official population projections, the expected increase in the number of people aged 75 & over in 2031 rose from 57% to 73%. There is little clear evidence on whether or not increases in longevity will be accompanied by a compression of morbidity. Since much of the political controversy centres on the distributional incidence of the costs of

alternative policies these models need to disaggregate their results by characteristics such as income or other indicators of socio-economic status, gender, age, and generation.

Future cohorts of elderly people will face very different life course experiences than today's elderly people. But projections of the changing family unit and kinship status of elderly populations (apart from marital status) are not produced in Britain and projections of availability of informal carers are non-official and unsystematic.

The future costs of means-tested pensioner benefits depend crucially on levels of private saving for retirement. Hence we need models which can incorporate the key assumptions and test the sensitivity of their projections to these assumptions.

Even where consensus can be reached on future policy, continued refinement and application of these models is needed to ensure that policy can respond to changing demographic and economic circumstances.



We discuss a framework for analysing such changes based up 5 interlinked work packages.

1. Mortality trends and their implications

The future number of older people will be determined by future levels of mortality. These numbers directly determine resources required in some areas such as pensions, and have a major influence on areas such as the need for informal care. Overall mortality change will inevitably affect population characteristics in ways relevant to this proposal: for example, decreasing levels of mortality will lead to more older people being married and hence affect the volume and types of care in years to come.

Differential mortality change will also affect the overall population structure in all areas of the project. Examples include changing sex differentials in mortality and between social groups: at

present, men in Social Class I can expect to live over 8 years longer than those in Social Class V, which had major implications for equity in use of services and availability of resources. There are substantial differentials in mortality by the key factors addressed in this project, living arrangements, income levels, and health status, although the extent of these among older people is not well-established or recognised in some cases, in part due to lack of data sets of appropriate size and/or quality.

2. Future disease patterns and their implications for disability in later life

Conceptual models of the disablement process place active pathology or disease at the beginning of the process and the major causes of disability in later life are known to be diseases and conditions such as cardiovascular and cerebrovascular disease, sensory problems (vision and hearing), arthritis, incontinence, dementia and depression. Despite this, projections of the number of older people with disability have not generally taken into account changing disease patterns. Projections of the numbers of older people in the future with disability and care needs do not provide insight into the relationship between overall length of life and the time spent with disability, thereby addressing the important questions of whether there will be a compression or expansion of disability in the future. We discuss how a simulation model is under development in the University of Leicester to explore how changing patterns of multiple diseases will impact on the future burden of disability using the Medical Research Council Cognitive Function and Ageing Study (MRC CFAS)

3. Projections of the Changing Family Unit and Kinship Structure

Kinship ties become more important with age, as kin form a major resource in times of need, but there is concern that ties are weakening, and the numbers and types of kin may vary substantially from the relatively benign current position. Having kin is a precondition for kin interaction and support, and cumulative lifetime experiences such as total number of partnerships substantially affect interactions with other kin. We describe how kinship micro simulation models are used.

4. Household and family resources

Changes in family related behaviour, economic activity of women and living arrangements have raised concerns that the availability of family support for older people may diminish while the numbers needing such assistance increases. Marked declines in intergenerational co-residence have been interpreted by some as an indicator of such a trend. However the future evolution of family support in the face of changing demographic and socio-economic parameters is uncertain and changes in household patterns are themselves important. Forecasting of long-term care needs is affected by trends and differentials in household type, and transitions between households of different types, in the older population.

5. Projections of pensions, incomes, savings, informal care and use of long-term care by future cohorts of older people and of expenditure on pensions and long-term care

This work package will produce unified projections of public and private expenditure on pensions and long-term care, and of the distributional implications of policy changes in these areas, which at present are produced separately. Since the economic impact of an ageing population will be on both, it is important that they are considered together. By drawing on insights from earlier work packages, cross fertilisation between models will lead to improvements in each individual model, increasing the quality and flexibility of modelling in the area of pensions, informal care and long-term care. This will enable projections to be produced on a wider range of scenarios on trends in external drivers of demand for long-term care and in the availability of resources and on a wider range of policy options on long-term care and pensions.