

# Multiple chronic conditions: an emerging healthcare challenge

Over the next 20 years the number of people with two or more chronic conditions will almost double to nearly 10 million, increasing the demands on health and social care services. Multiple illnesses need to be given higher priority in healthcare planning and funding.

## About the research

The delivery and planning of healthcare is generally focused on the treatment of single diseases – but this approach does not adequately address the needs of older people. Over the last decade alone more than 50% of people aged 65 years and over have had at least two chronic conditions ('multi-morbidity'), and little is known on how risk factors of younger age groups will play out in future multi-morbidity.

This presents a major challenge to the provision and funding of health and social care services. For example, following single-disease guidelines from the National Institute for Health and Care Excellence for an older person with five conditions (Type 2 diabetes, previous myocardial infarction, osteoarthritis, Chronic Obstructive Pulmonary Disease and depression) can result in a minimum of 11 medications, 8–10 routine primary care appointments and 4–6 GP appointments.

Developed within the broader MODEM project (Modelling outcome and costs impacts of interventions for dementia), the Population Ageing Care Simulation (PACSim) model used datasets from three longitudinal studies, including the ESRC-funded Understanding Society, to provide estimates of multi-morbidity in the older population in England from 2015 to 2035. The results suggest a significant increase in multi-morbidity over the next two decades.

## Key findings

- Between 2015 and 2035, the number of older people with more than two illnesses ('multi-morbidity') will almost double, from 5.2 million in 2015 to 9.8 million in 2035.
- Increases of more than 50% are projected in the number of older people affected by most individual diseases and impairments – the largest increases being for numbers having cancer (179.4%, or 2.2 million) and diabetes (118.1%, or 1.7 million).
- The number of older people in the population with more than four diseases ('complex multi-morbidity') will increase from 9.8% (952,400) in 2015 to 17.0% (2,453,200) in 2035.
- Two-thirds of those with more than four diseases will have mental ill-health (dementia, other cognitive impairment, depression) by 2035 – a total of 1.75 million people, an increase of 600,000 from 2015.
- The gain in life expectancy at age 65 between 2015 and 2035 (men: 3.6 years, women: 2.9 years) is not sufficient to compensate for increased illness – it comprises a reduction in years spent with no or one disease, an increase in years spent with two or more diseases (men: 5.5 years, women: 5.0 years), and an increase in years with four or more diseases (men: 2.4 years; women: 2.5 years). This suggests an expansion of morbidity.

## Policy implications

- The findings suggest the need for a strategic focus on complex multi-morbidity from NHS administration, Clinical Commissioning Groups and the Department of Health and Social Care, to avoid a marked increase in demand for health services.
- The focus should be on how to prevent complex multi-morbidity at younger ages, and how to provide appropriate and efficient service provision for older people who suffer from it.
- With the strong association between multi-morbidity and reduced functional capacity, there is also a pressing need to consider the implications for social care, both from formal care services and from unpaid family and other carers.
- Renewed efforts are needed on three fronts:
  - ◇ Primary prevention, by addressing mid- and later-life risk factors
  - ◇ Prevention of complex multi-morbidity, by targeting older people who have just acquired their second chronic condition
  - ◇ More efficient future health and social service provision appropriate for people with four or more long-term conditions.

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## FURTHER INFORMATION

The report *Projections of multi-morbidity in the older population in England to 2035* used the Population Ageing and Care Simulation (PACSim) model to simulate the characteristics of individuals over the period 2014–2040 (including (sociodemographic factors, health behaviours, chronic diseases and geriatric conditions).

**Web:** <https://academic.oup.com/ageing/article/47/3/374/4815738>

This work forms part of the MODEM project (Modelling outcome and costs impacts of interventions for dementia), funded by the ESRC and the National Institute for Health Research.

**Web:** [www.modem-dementia.org.uk](http://www.modem-dementia.org.uk)

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The views expressed in this evidence briefing are those of the authors and not necessarily those of the ESRC, NHS, the NIHR or the Department of Health and Social Care.

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