

Modelling the Impact of Population Ageing on Demand for Healthcare

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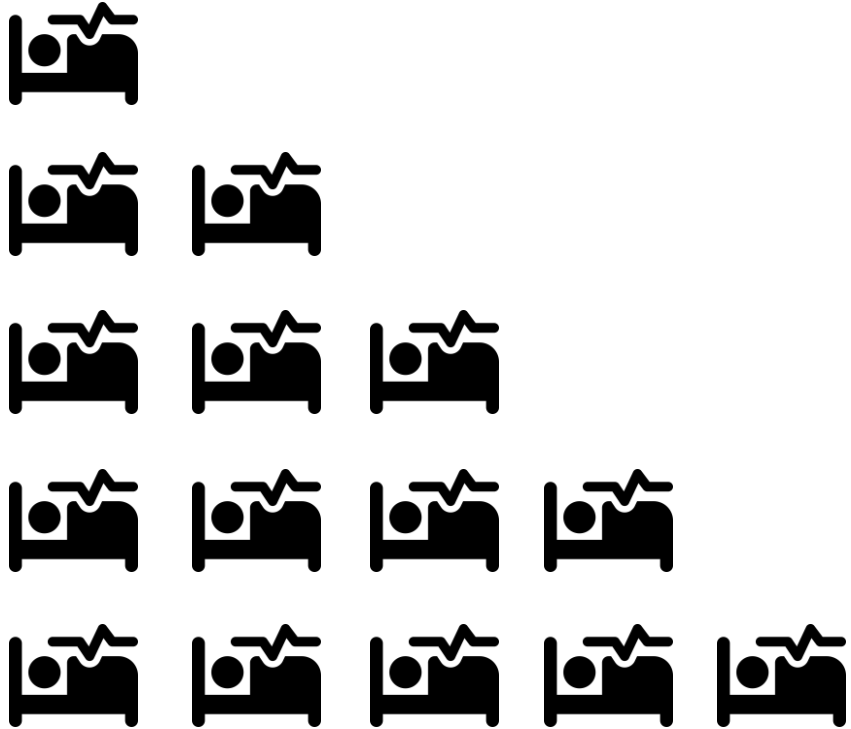


Midlands
Decision Support
Network



Midlands and Lancashire
Commissioning Support Unit

Thinking about how demographic change will affect demand is a fundamental early step in the process of scaling and designing health services



Population size

Population age structure



Fixed concepts

Good data

Established methods

More consensus

Population size

Population age structure

Fixed concepts

Good data

Established methods

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Health status



Abstract concept

Poor data

Novel methods

Less consensus

1. How will population health status evolve?
2. How to capture/reflect uncertainty?
3. How to incorporate health status in a model?

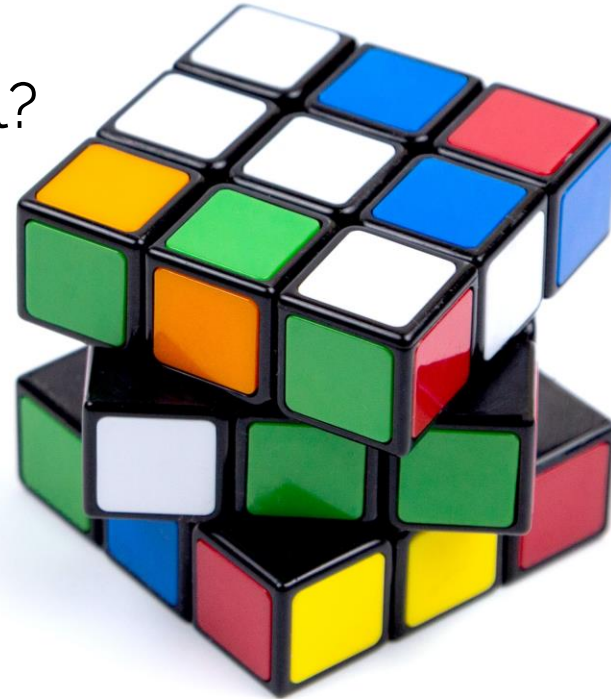


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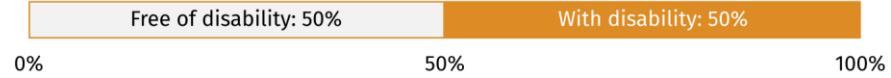
Today

The onset of morbidity separates an initial period of relative good health from a subsequent period of ever increasing morbidity

morbidity

Age 65

Age at death



2035

expansion of morbidity

Average health status for someone of the same age today has worsened

Age 65

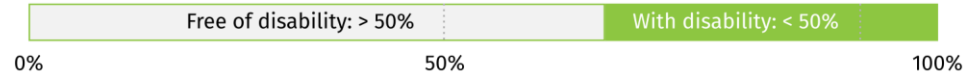


2035

compression of morbidity

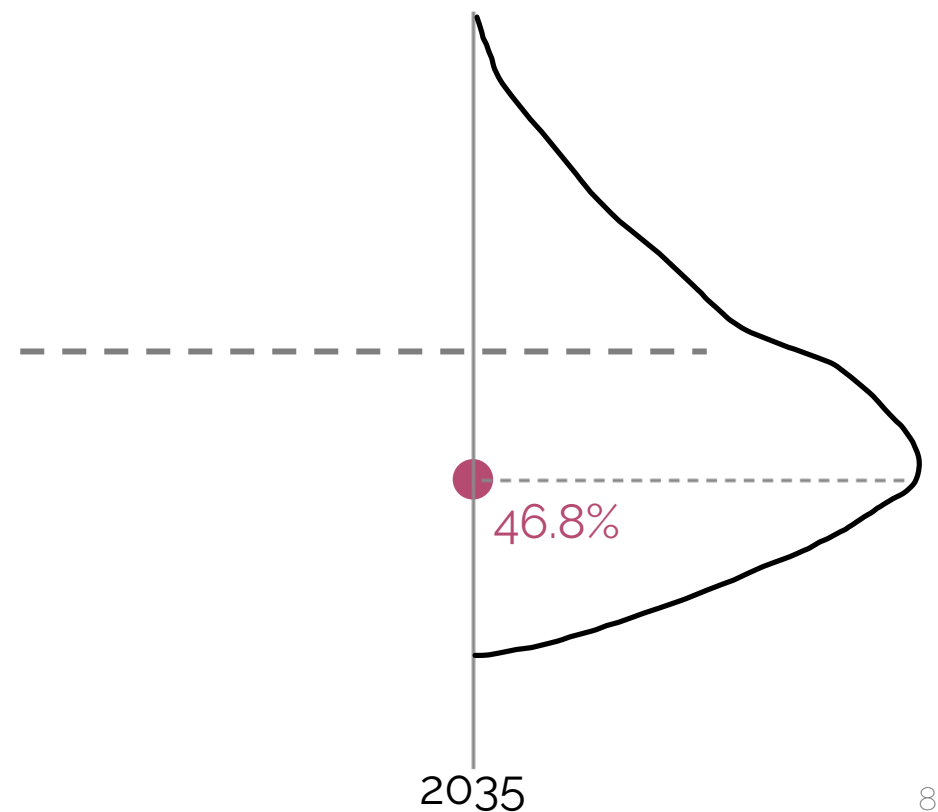
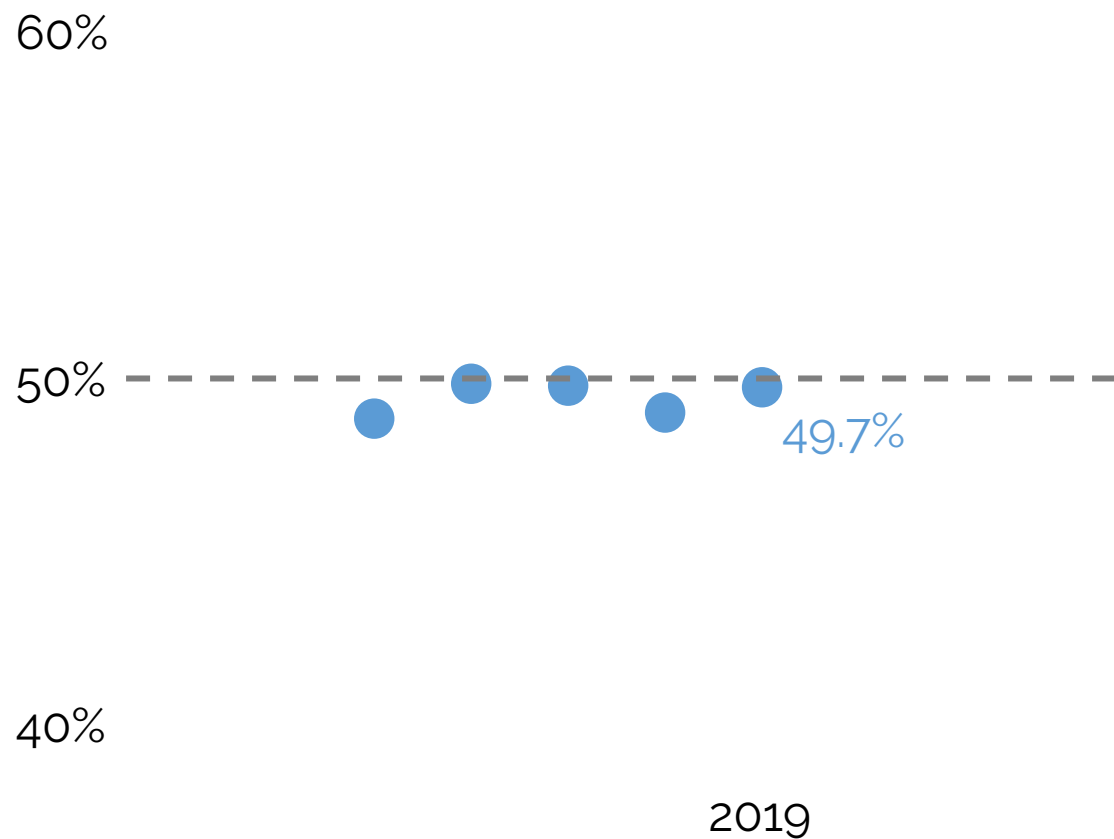
Average health status for someone of the same age in 2018 has improved

Age 65



Expert Panel

For a typical female/male of age 65 years in 2035, what proportion of their remaining life expectancy will be spent free of disability (i.e., without a limiting long-standing illness)?



Objectives

Engage a wide audience

Raise awareness of an often-overlooked issue—population health status

Democratize an approach to modelling the impact of population aging

Communicate uncertainty