



Health expenditure and the ageing population

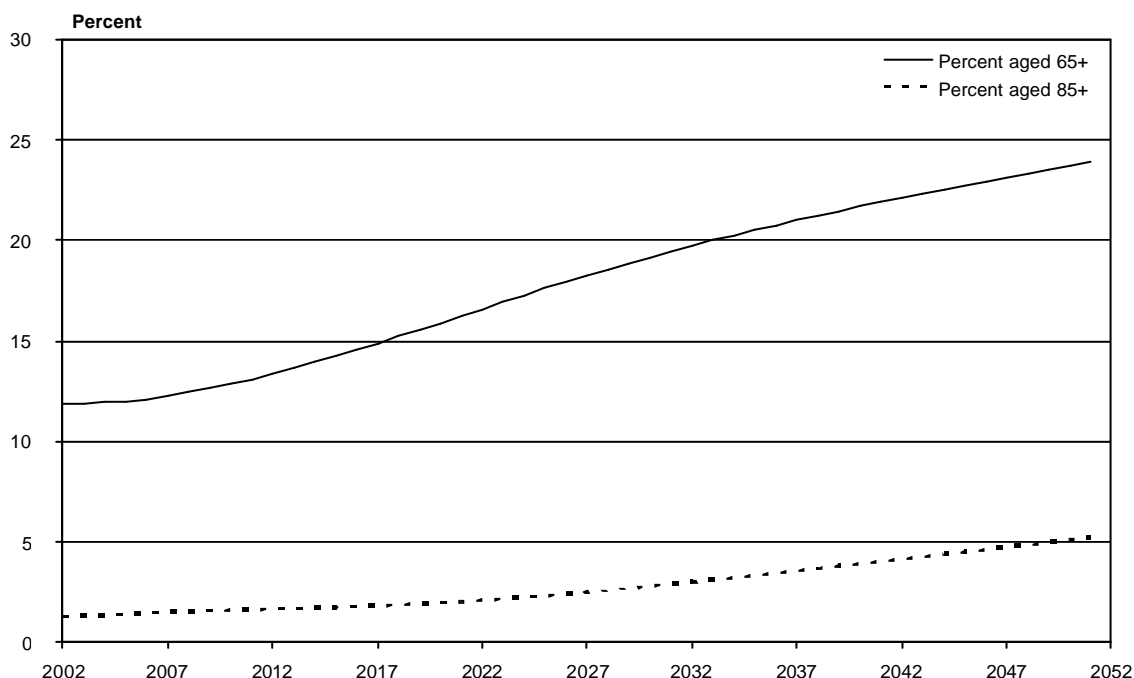
Frank Frizelle

A recent report issued by the New Zealand Ministry of Health raises important issues about the effect of the ageing population on the funding of future health services in New Zealand. The report entitled *Population Ageing and Health Expenditure: New Zealand 2002–2051*¹ was a joint project of the Ministry of Health and the New Zealand Treasury, and is available on the Ministry of Health website.¹

The report is based on the observation that the population of New Zealand will begin a period of rapid structural ageing as the large ‘baby boom’ cohorts of 1945–1975 reach retirement age. This will transform the age distribution of the population, so (by the late 2040s) the proportion of the population aged 65 years and over will double—from 12% at present to approximately 24%.

At the same time, the proportion of the population aged 85 years and over will increase more than fourfold, from approximately 1.3% to 5.5% (Figure 1). This demographic transformation will create some problems for the provision of health services.

Figure 1. Older people (aged 65+ and 85+ years) as a proportion of the total population in New Zealand, 2001–2051

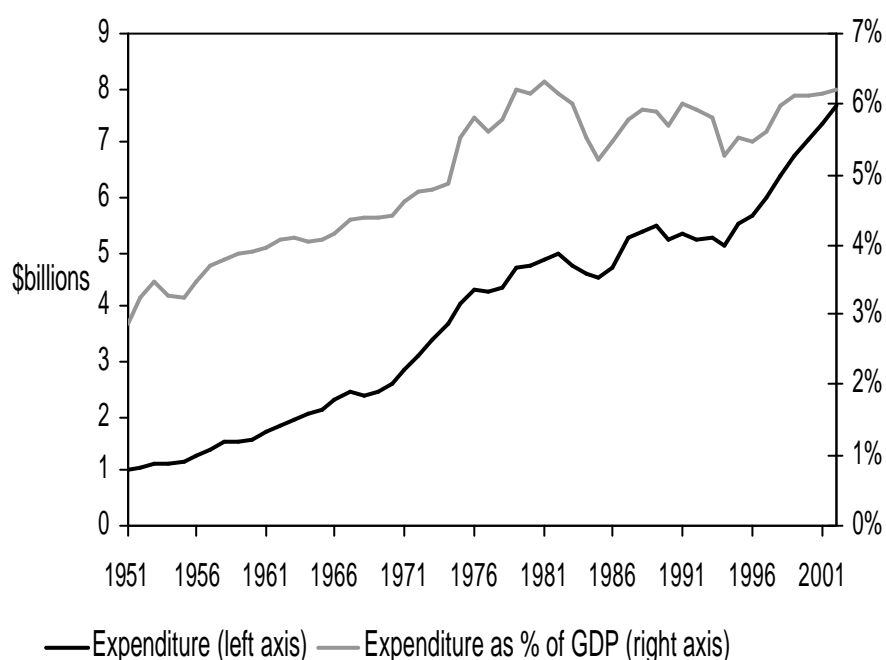


The report claims that per capita health expenditure in real terms is driven by the interaction of three factors—population ageing, health status, and coverage/prices. In reality, these factors are not independent of each other: mortality is both a dimension of health status and of population ageing, and investment in service coverage or health care technology impacts favourably on health status (both mortality and morbidity). It is the interaction of these variables that form the basis of the projected need.

In the *New Zealand Medical Journal*, we have previously considered whether enough is spent on healthcare in New Zealand.² While (in absolute terms) the amount of money spent on healthcare has increased steadily, the percentage of GDP has largely constant since 1976 (Figure 2). Over the next 50 years, the Treasury’s long term fiscal model projects an average annual growth rate in gross domestic product (GDP) of 1.5% per worker.³

If the same percentage of GDP is spent, healthcare expenditure will continue to increase steadily, however is it enough?

Figure 2. Total health expenditure (constant 2002 dollars) and expenditure as a percent of gross domestic product (GDP) in New Zealand



There are many possible scenarios depending on the interaction of the variables described above that determine the need. The report *Population Ageing and Health Expenditure: New Zealand 2002–2051* suggests the most likely scenario (i.e. the central scenario; characterised by a growth rate in coverage and prices of 1.5%, associated with a mortality reduction rate of 1.5% and a disability prevalence reduction rate of 0.5%) is where government health expenditure as a percentage of GDP increases over the projection period from 6.2% (in 2002) to 9.2% (in 2051), an increase of almost exactly 50%.

For the first decade (ie, until approximately 2012), there is no immediate change in the percentage of GDP spent on health. The rate of increase remains relatively slow until approximately 2026, after which it accelerates. Then under the most likely scenario (described above) there will be a one percentage point increase in the health share of GDP occurs from 2002 to 2026, compared to a two percentage point increase from 2026 to 2051.

The summary of key points and key messages from *Population Ageing and Health Expenditure: New Zealand 2002–2051* are listed below.

Summary of key findings over the period 2002–2051, under ‘central’ assumptions

- % GDP spent on health will increase from 6% to 9%.
- Older people’s share of health expenditure will increase from 40% to 63%, yet the ratio of spending on the average older versus younger person will decrease (by approximately 25%).
- Growth in coverage and prices, not population ageing, will continue to be the key driver of health expenditure.
- However, ageing will increase upward pressure on spending (especially from about 2026), so making it more difficult to constrain spending growth.
- Yet relative compression of morbidity (if it can be achieved) will reduce lifetime healthcare costs and so ease ageing pressure on health spending, constraining total health expenditure growth (by up to 30% of what it would otherwise have been).

Key messages

Policies aiming to maximise the *benefits to society of the ageing population* should focus on interventions to reduce disability rates over time. Reduction in the prevalence of disability (adjusted for severity) will flatten the age–cost curve and so improve intergenerational equity of health expenditure in relative terms. Such interventions are compatible with the Government’s policy of ‘Positive Ageing’.

Improvements in health status will have complex effects on the ageing pressure exerted on health spending, depending in particular on trends in health expectancy relative to life expectancy. Cost-effective interventions that *compress morbidity* relative to mortality have the potential to decrease life-time healthcare costs, and so ease ageing pressure on health expenditure. Investing in such interventions does not necessarily entail a trade-off against life extension—both disability reduction and life extension are desirable and can be achieved, yet it may prove possible to (cost-effectively) accelerate progress in the former relative to the latter.

Policies aiming to reduce the *cost of the public health system* should focus on managing the growth in scope, volume and cost of health and disability support services over time. Coverage and prices are by far the major drivers of health expenditure.

Key messages (continued)

Managing coverage and price growth in future will need to take account of many factors (some of which have been briefly mentioned in this report), and will be made more difficult by the simultaneous increase in ageing pressure. One major factor will be the increasing globalisation of the health workforce, which will put increasing upward pressure on wages and salaries. Greater vigilance will also be necessary in monitoring service coverage and the diffusion of new technologies.

While New Zealand has done well in comparison with other similar countries in controlling capital expenditure and (to a lesser extent) expenditure on pharmaceuticals, we have been less successful in assessing and managing the introduction of other technologies, such as diagnostic tests and surgical procedures. More effort in 'horizon scanning', technology trialling and promotion of evidence-based guidelines for clinical practice may be worthwhile.

Such efforts should aim, wherever possible, at redirecting investment toward cost-effective interventions that will reduce the incidence and improve the management of chronic, disabling diseases and conditions. While population ageing will inevitably make it more difficult to control health expenditure in the future than has been the case in the past; such investment has the potential to constrain spending growth while simultaneously achieving additional population health gains.

The complex political economy effects of population ageing are not examined in the report. However, a substantial increase in the proportion of health care resources consumed by the 65+ age group, relative to younger age groups, appears inevitable.

More generally, they conclude that population ageing—despite associated improvements in (non-fatal) health status—will make a substantial contribution to future health spending pressure. However, this source of spending pressure will be less than that arising from the anticipated growth in coverage and prices.

Apart from the report *Population Ageing and Health Expenditure: New Zealand 2002–2051*, the Ministry of Health have released two other related reports on the health of the ageing population. The first is a background paper that reviews international literature on the projected impact of population ageing on health and disability support services and undertakes some preliminary assessment of future demand in New Zealand:⁴ *Impact of population ageing in New Zealand on the demand for health and disability support services, and workforce implications*.

The second report, which has been prepared by the New Zealand Institute of Economic Research (NZIER) is a discussion document that analyses demand for health and disability support services; projects future demand to 2021 and identifies workforce implications:⁵ *Ageing New Zealand and Health and Disability Services 2001–2021*.

To summarise, the effect of the ageing population is an important issue and will have a major influence on health expenditure in New Zealand over the next 50 years. Those interested in this subject should read the documents references below.

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