Introduction

The New Zealand Society of Actuaries is the professional body for actuaries practising in New Zealand.

Actuaries are experts in assessing the financial impact of tomorrow's uncertain events. They enable financial decisions to be made with more confidence by:

- Analysing the past
- Modelling the future
- Assessing the risks involved
- Communicating what the results mean in financial terms.

Actuaries understand a wide range of technical disciplines and provide advice to many industries including healthcare, superannuation, insurance, banking and investments. Actuaries are becoming increasingly involved with non-financial sector organisations that aim to improve outcomes through data-driven insights.

Thank you for the opportunity to share our views on the New Zealand Health and Disability System Review. Actuaries have specialist skills in considering funding arrangements, the pooling of risk and the maintenance of equity. However, actuaries do not have special skills or experience in the delivery or structure of services to meet the needs of the community or certain groups within the community. As such we have chosen not to answer the questions posed in the public submission document.

We would like to take this opportunity to make some suggestions around funding and holistic system structure considerations to maximise the resources available to the system as a whole.

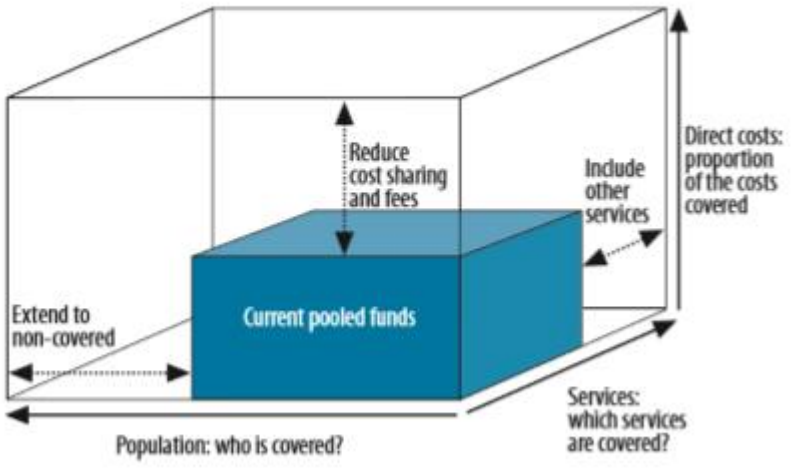
Universal health

The main aim for the NZ Health and Disability System should be to work to achieve equity in health and wellness for all New Zealanders. There should, therefore, be a focus on improving health for those people or groups of people in poorer health or at risk of poorer health.

The World Health Organization's (WHO) 2010 report "financing for universal coverage"[1] discusses the need for equality of access to health services. The chart below from their report shows the three dimensions where action needs to occur to reach universal health coverage:

(i) Extension of services to cover everyone
(ii) Extension of the range of services covered
(iii) Reduction in fees and cost to access.

Fig. 1. **Three dimensions to consider when moving towards universal coverage**

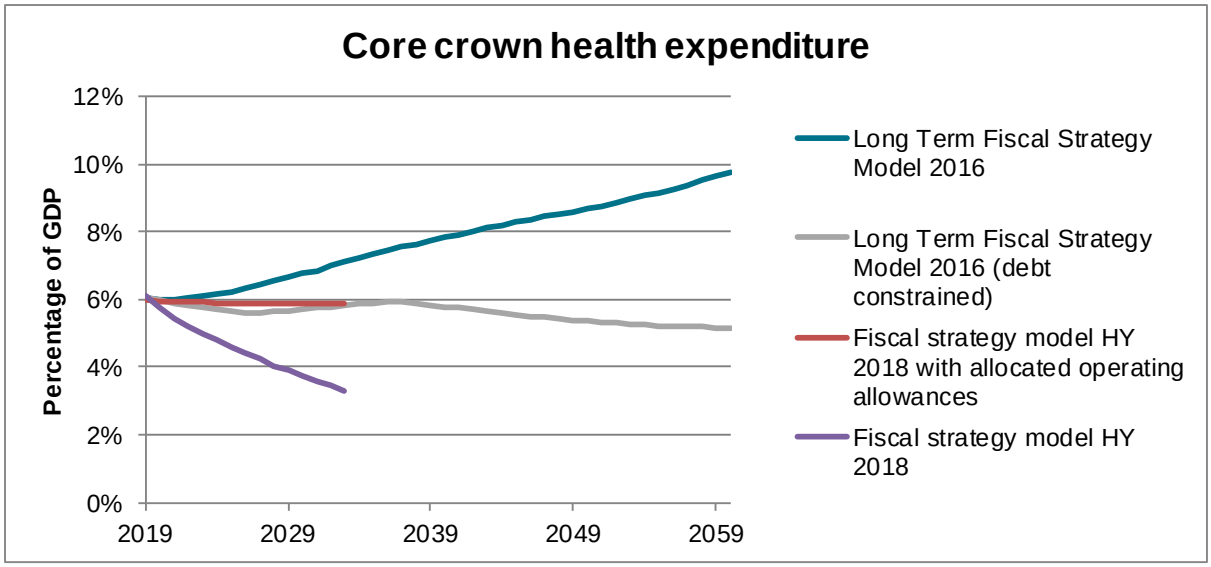


It could be argued the New Zealand system already does a good job of funding universal coverage but significant differences in health outcomes still exist. In order to achieve equitable and universal health outcomes, it is not just a situation of addressing the status quo. As described in the NZ Health Strategy (2016), there are several known or anticipated global challenges to the system that need to be addressed specifically, including:

- Health and social services must be provided to increasing numbers of older people who are living longer.
- The health burden of long-term conditions, such as heart disease, diabetes, obesity, depression, dementia and musculo-skeletal conditions, is growing.
- Benefits need to be assessed in light of affordability as new technologies and drugs emerge and expectations about health services rise.
- The global workforce is highly mobile.
- New infections and antibiotic resistance are emerging.
- Climate change has health and social consequences.

Each of these will put additional strain on what is a finite resource and needs to be included when considering the delivery of health and disability services.

More generally, healthcare expenditure is forecast to increase considerably over the coming years and decades, and changes to the amount and/or model for funding healthcare will need to adapt. The chart below shows a range of projections undertaken by The Treasury, based on figures from their 2018 fiscal strategy model[2] and 2016 long-term fiscal model[3].



The chart shows projected health spending as a percentage of GDP under four bases:

- The Fiscal Strategy Model – the first five years of this are the government budget and the remaining years are forecast by The Treasury based on the budget. This budget/forecast includes a growing proportion of spending which sits in an unallocated bucket (which will be allocated over time).
- The Fiscal Strategy Model including an allocation of operating expenses – this is the same as the Fiscal Strategy Model but assumes that unallocated bucket will be allocated in similar proportions to current spending.
- The Long-Term Fiscal Strategy Model – this is The Treasury's projections of health expenditure derived by projecting the cost drivers of healthcare into the long-term future. This allows for health-specific inflation and a number of other demographic changes.
- The Long-Term Fiscal Strategy Model with debt constrained – the is the same as the Long-Term Fiscal Strategy Model but assumes that spending is constrained in order to maintain the current debt to GDP ratio.

The overall picture that emerges from these projections is that healthcare costs are projected to increase significantly. To maintain costs at budgeted levels (and constrain debt levels) significant cuts will need to be made to the breadth of services currently provided. Alternatively, government spending on health will need to increase considerably, or the health funding model will need to be reviewed.

We recommend action in the following areas:

1. Equity

The Ministry of Health's definition of equity is:

In Aotearoa New Zealand, people have differences in health that are not only avoidable but unfair and unjust. Equity recognises different people with different levels of advantage require different approaches and resources to get equitable health outcomes.

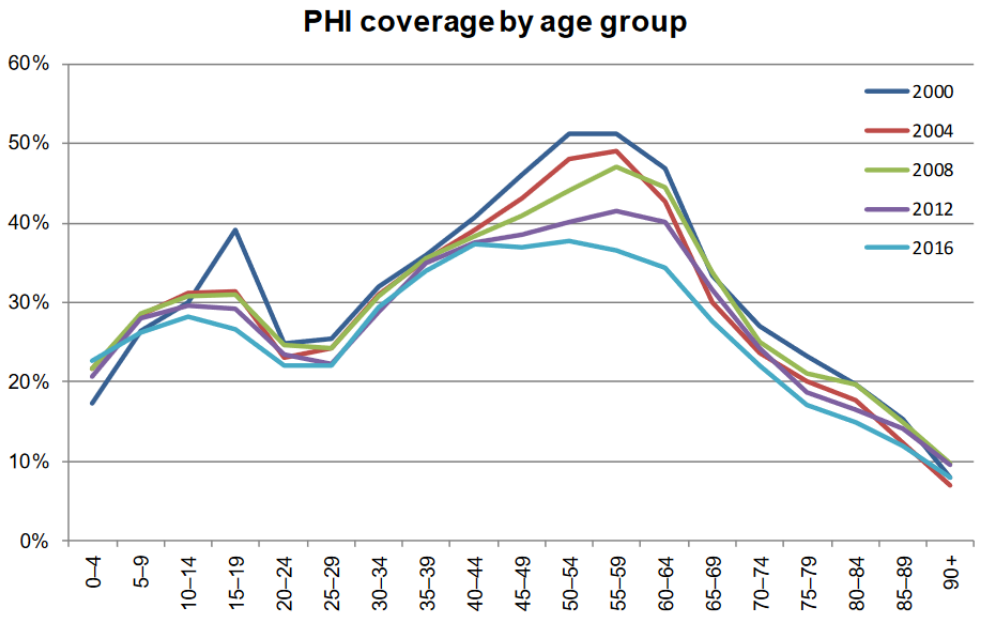
The outworking is that people or groups of people that are currently disadvantaged need additional investment to bring their health outcomes up to the level of those in comparative advantage. Māori and Pacific and those in low socioeconomic groups remain the most disadvantaged in New Zealand[4].

This implies an increased investment in health promotion and prevention services is required rather than simply increasing health treatment services. This should occur in conjunction with co-ordinated government policy for food, housing and education.

There are many instances in the current health and disability system where health outcomes are not equitable:

(i) There is currently some inequity in the interaction between ACC and the publicly funded system. If an individual has a health condition caused by accident or injury, then a range of drug and treatment, rehabilitation and compensation options funded by ACC is available. However, a second individual with a similar health condition caused by illness, not injury, may have an inferior range of treatment options and social support available. The difference in support provided is particularly noticeable for New Zealanders living with a disability caused by illness rather than injury. This does not seem fair. We think the review should consider how the system could be changed to reduce this source of inequity.

(ii) There is inequity in private health insurance coverage compared to need. One area where this is directly seen is in coverage at older ages as seen in the chart below[5].



As discussed in point 4 below, this is in direct contrast to healthcare needs.

(iii) Inequity in the service provision across DHB boundaries and between regions (see 2 below).

2. Efficiency

Resources available for delivery of health services will be maximised in an efficient system. There is the opportunity for wastage anywhere and efficiency should be sought at all points of the system.

However, we note the existing District Health Board structure with twenty DHBs, each centred around a major hospital, has been in place for over 18 years. It seems to us that the system contains an unnecessary amount of duplication of governance, funding allocation, reporting and management overhead in what is a relatively small country.

We also understand the existing DHB structure does not always encourage the utilisation of services across DHB boundaries and also are aware of inequity created by region within New Zealand when the funding position or resources available within one DHB is superior to that of a neighbouring DHB. This is most obviously manifest in differences in the ability to access elective services, seen in the Ministry of Health's national comparison of elective services patient flow indicators for DHBs[6].

Simply merging existing DHBs into a number of larger regional groups may not automatically generate efficiency gains. We recommend a review of the high-level structure is carried out with the aim of;

(i) Maximising overall efficiency
(ii) Further encouraging regional and national centres of excellence for the benefit of all New Zealanders
(iii) Minimising regional inequality in the availability of health services.

3. Ageing

The issues of providing and funding health services for the changing demographics of an ageing population are well-documented and we endorse the Ministry of Health's strategy for maintaining the health and wellbeing of older New Zealanders.

To achieve its vision where

older people live well, age well, and have a respectful end of life in age-friendly communities

the Healthy Ageing Strategy 2016[7] sets a framework whereby policies, funding, planning and service delivery:

- prioritise healthy ageing and resilience into and throughout people's older years
- enable high quality acute and restorative care, for effective rehabilitation, recovery and restoration after acute events
- ensure people can live well with long-term conditions
- better support people with high and complex needs
- provide respectful end-of-life care that caters to physical, cultural and spiritual needs.

We support the full implementation of the Healthy Ageing Strategy as an important part of achieving equitable health outcomes.

4. Interaction of the public health sector with private health insurance

The terms of reference for the Review note that private health insurance (PHI) is outside of the scope of the Review, although the interaction of PHI with demographic drivers of healthcare need is within scope. PHI does not operate in isolation of the public system, so it is good that the terms of reference include consideration of interactions between the two.

The Health Funds Association reports that, as at March 2019, around 1.4 million NZ lives are covered by some form of PHI. This represents around 28% of the population, although that figure varies significantly by age. By and large, PHI coverage increases towards the later years of a person's working life and decreases markedly after this. As a person ages their healthcare needs increase and PHI premiums respond accordingly.

We believe that the Review should consider how the existence of PHI, and the change in coverage as people age, affects the public system. This might include questions such as:

- What is the long-term impact on the health of New Zealanders (and strain on the public system) of undertaking procedures funded by PHI earlier than would be the case under the public system?
- What impact does PHI have on the demand for health services? Many health providers operate in both the public and private sectors, so it is possible that the private industry competes against the public system to some extent.
- To what extent does PHI alleviate costs for the public system? What is the benefit of procedures being covered by PHI which would otherwise be paid for by the public system?

- What are the overall net benefits or costs to New Zealand of the PHI industry and how does this vary demographically?
- Given an understanding of the net cost/benefit of PHI, how should the public sector respond in terms of encouraging or discouraging the take-up of PHI?

5. Rationing

As discussed in the WHO 2010 report8[1111], health system design is ultimately a decision about rationing. Trade-offs must be made between the proportions of the population to be covered, the range of services to be made available and the proportion of the total costs to be met. In deciding these trade-offs, the effect on health outcome equity is an important consideration.

Ultimately the system will have finite resources so it is necessary to restrict or deny access to some services. We expect the availability of alternative (expensive) treatment options to become an even greater issue over time due to technology developments overseas.

Rationing is often most visible and emotive in instances where someone from a relatively advantaged situation suffers from a health condition that would benefit from a treatment option that is not available in the public health system. These patients have already accessed the full resources available to them in New Zealand and they have the education and resources to be aware of what is available in other countries. The issue is that cost is often prohibitive and out of the reach of all but a small minority of the wealthiest New Zealanders.

Significant rationing also occurs in elective surgery where resources are limited and services are provided via a waiting list. The criteria for the waiting list is set based on resources available, meaning patients who don't get on the waiting list may still benefit from the surgery. We note that elective surgery provided through ACC or private health insurance uses the same resources as the public health system. The criteria for eligibility across the three areas is not consistent and this is another source of inequity in healthcare provision and health outcomes. For example, in their 2016 Annual Review[9], the Health Funds Association reports that the average time to surgery from first GP visit in the public system is 177 days compared to 76 days when provided through private health insurance.

The issue also appears currently in the context of funding for drugs and, although out of scope of the review, we commend the system for the excellent work PHARMAC continues to do in this regard.

However, the need for rationing can capture public interest and detract from confidence in the health system. Therefore, we would recommend the review ensures

(i) The need for rationing is de-politicised as far as possible to allow investment in a system that retains affordability and is able to invest in initiatives that maximise health outcomes for given investment.

(ii) People have an affordable option to purchase services that are not covered by the public system yet have reasonable utility and may be available in other first world countries. This may, for example, involve some support of private pooling options like private health insurance.

6. Social wellbeing investment approach to funding of health initiatives

The New Zealand Health Strategy (2016) specifies a social wellbeing investment approach to providing health services:

It is essential that we find new and sustainable ways to deliver services, investing resources in a way that will provide the best outcomes possible for people's health and wider wellbeing.

The Treasury's Budget Policy Statement 2019[10] describes a wellbeing approach as:

"enabling people to have the capabilities they need to live lives of purpose, balance, and meaning for them. It is an intergenerational approach that seeks to maintain and improve New Zealanders' living standards over the long term."

We support the use of a social wellbeing investment approach as an appropriate mechanism for considering long-term funding of healthcare initiatives to support maintaining and improving the wellbeing of New Zealanders. Actuaries have been closely involved in the development of investment in social wellbeing approaches used within ACC, the Ministry of Social Development (MSD) and Oranga Tamariki – Ministry for Children (OT), and are similarly well placed to assist with the development of a social wellbeing investment approach for health.

There are however important differences to consider when looking at the use of an investment in social wellbeing approach for health relative to social welfare and ACC. For both the MSD and ACC the social wellbeing investment approach initially focused on a valuation of the future liability; that is, the expected value of a "customer's" entitlement to benefits provided by MSD, OT and ACC. Given the nature of these agencies, there is a close alignment between a better wellbeing outcome for the customer (however that might be defined) and a reduction in the future benefits and services needed. Analysis of the drivers of change in the future benefits and services needed has allowed officials to develop insights into the key factors leading to improved customer wellbeing.

For health, similar linkages between improved customer wellbeing outcomes and a reduced liability may apply when considering preventative care. However, in other circumstances it will be necessary to consider the associated "asset" created by expenditure. The "asset" being the benefits of improved quality of life, and/or increased longevity of life. This will require an adaption of the approaches used within MSD, OT and ACC.

In our view the greater long-term value derived from a social wellbeing investment approach is gained from understanding the drivers of change in the result rather than the quantum of the result itself. Such an approach can provide the means to assess how investment in a specific initiative can improve health and wellbeing outcomes and increase health equity for under-served groups.

We note also that there are strong linkages between health and other social wellbeing outcomes, such as the ability to participate in the workforce. Likewise, health outcomes can be strongly influenced by investment in other public services such as housing and education. It is important to understand the overall impact in peoples' wellbeing across the social sector. As such, any proposals for changes to the public health and disability system should not be viewed in isolation. They must consider the interactions with wider public and private services to enable an investment approach in making evidence-based decisions on where to invest for the improved wellbeing of all New Zealanders. The evolution of the investment approach to a more holistic wellbeing approach is reflected in the work being undertaken by actuaries in ACC, MSD and OT.

The potential scope to which an investment in social wellbeing approach in health could be applied is very broad. There may be value in initially testing this approach with a restricted scope, such as mental health, before generalising the approach to wider health issues.

Conclusion

We are available to participate more actively in the review if there is the opportunity to do so. We would be delighted to expand further on our thoughts with the reviewers if this would be useful.

We also look forward to reviewing the draft report when it becomes available.

Contact details:

New Zealand Society of Actuaries Incorporated
Phone: 04 815 8179
Email: society@actuaries.org.nz
PO Box 10087, Wellington 6143

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