ASMS
ASSOCIATION OF SALARIED MEDICAL SPECIALISTS
TOI MATA HAUORA

20 August 2019

By email:

Dear [panel member]

Review of the New Zealand Health and Disability System: Collective Leadership: harnessing the knowledge and skills of clinicians to transform health care

As per my letter to you of 14 March 2019, please find enclosed a copy of a further *Research Brief* produced by ASMS which discusses the many benefits, both clinically and financially, of collective clinical leadership. This paper is the last of the series of publications we are submitting to the review panel. You will have already received the publications:

- *Path to Patient Centred Care*: Discussing the potential benefits of patient centred care and what needs to happen to truly achieve it.
- *Assessing the extent of the senior medical officer workforce shortages:* Considering the question of how many senior doctors are required to adequately meet New Zealand's current and future health needs and fulfil government health policies.
- *Forecasting New Zealand's future medical specialist workforce needs*: Investigating issues surrounding the future stability of the senior doctor workforce.
- *Does more access to primary care and a greater focus on preventing illness and promoting health reduce pressure on hospital services?* A case for a whole 'systems approach' to reducing pressure on hospitals.
- *The path to integrated care:* Lessons from the evidence on how to implement changes to achieve better community-hospital care integration.

Please consider these papers as ASMS's 'submissions' to the Review in lieu of a submission via your online process. I have also included below a brief outline of issues we have not had the time to cover in our earlier *Research Briefs* but which we believe are critical topics to consider in the Health and Disability System Review.

I appreciate the deadline for completing your 'interim report' to the Minister of Health is approaching and but I hope the information and comment provided here may be of use in finalising your report, as well as in the subsequent debate leading to your final report.

Yours sincerely

Ian Powell
Executive Director

cc Members of the Expert Review Panel
Members of the Māori Expert Advisory Group

ASMS
ASSOCIATION OF SALARIED MEDICAL SPECIALISTS
TOI MATA HAUORA

Determinants of ill health

The following focuses in three key determinants: obesity, alcohol abuse, and poverty.

Obesity

Recent research shows high population 'body mass index' (BMI) has now overtaken tobacco as the greatest contributor to health loss in New Zealand. An estimated two million New Zealanders will be considered clinically obese by 2038. [1]

The researchers say the increasing prevalence of obesity is largely due to greater availability and consumption of high-energy, low-nutrient foods and lower levels of physical activity. A comprehensive obesity reduction strategy might include, among other things, improving the relative affordability of healthy foods (eg, through taxation, subsidies), restrictions on marketing of unhealthy foods and promotion of active modes of travel such as walking and cycling.

The impact of obesity is not confined to increasing the risk of chronic disease with, for example, impacts on the costs of all hospitalisations, poorer outcomes post-elective surgery, and increased risk of pregnancy-related complications. It is also a concern that the obesity in one generation may impact on the next, with maternal obesity or excess weight gain associated with higher risk of obesity in offspring.[2]

A recent Australian study involving economic evaluations of 16 interventions for addressing obesity found increasing the price of alcohol through a uniform volumetric tax performed best in terms of cost-effectiveness and health benefits. Regulations to tax sugar-sweetened beverages and restrict television advertising of unhealthy foods ranked second and third on the cost-effectiveness scale, and have both been recommended by authoritative obesity prevention reports and health promotion bodies as key components of an obesity prevention strategy. Several other promising obesity prevention interventions include restrictions on price promotions of unhealthy foods; supermarket shelf-tags on healthier products; and workplace interventions to reduce sedentary behaviour.[3]

The study reinforces other studies on obesity in concluding that effective action to prevent obesity will not be possible without strong governmental leadership and commitment, recognising the strong evidence showing the most successful public health interventions have almost always involved measures beyond individual behaviour change.

A major five-year study evaluating the cost-effectiveness of 150 preventive health interventions in Australia found the largest impact on population health through prevention can be achieved by a limited number of interventions, including taxation on tobacco, alcohol and unhealthy foods, and a mandatory limit on salt in basic food items (bread, cereals and margarine). [4]

Challenges will arise from the following:

- Some interventions may lead to reduced company profits, resulting in industry resistance.
- Many health benefits and cost-savings may only materialise in the longer term (ie, beyond any single political cycle).
- Many effective interventions are cross-sectoral requiring a whole-of-government approach with inter-departmental cooperation and coordination.

We submit that the estimated cost of obesity to our health services of approximately $800 million (4.4% of health expenditure), plus the incalculable wider costs to society and the economy, are reasons alone for rising to those challenges.

The literature on taxing unhealthy foods tends to look mostly at combinations of taxes on sugar, salt and saturated fats rather than on a single target. The evidence for significant health benefits from these taxes is strong. The main argument against taxing unhealthy foods containing high amounts of sugar, salt or saturated fats is that they disproportionately impact on the poorest families. On the other hand, some argue that this is a major strength of the policy. Those on lower incomes spend a proportionately higher amount on unhealthy foods so the financial disincentive is most potent for poorer families. Because they are more sensitive to changes in price, they respond better and experience larger health gains than the more affluent. [5]

An OECD review of obesity prevention interventions concluded that taxes and other fiscal measures are the only interventions that consistently produce larger gains for the poor.[6]

Alcohol

> *There are violent assaults, motor vehicle accidents, some of the trauma that occurs – you see some pretty horrible stuff – and mental illness and overdoses. Some people do some pretty reckless things. They put themselves at risk of serious harm by drinking too much.*
>
> – John Bonning, Clinical Director of Waikato Hospital's Emergency Department.[7]

Dr Bonning's comments were reported after a survey by the Australasian College of Emergency Medicine revealed that one in four patients presented to emergency departments as a result of irresponsible alcohol use. Aside from the drinkers themselves, many others, including partners, families, friends, workmates and random strangers, are reported as being harmed by someone else's drinking.[8]

In hospitals, they also divert significant time and resources away from other patients.

The cost of alcohol abuse to society (estimated at around $5 billion in 2005/06) greatly outweigh the annual tax revenue generated from alcohol excise taxes ($985 million in 2016).[9]

The call by Alcohol Healthwatch for a substantial increase in the rate of excise tax on alcohol products is well justified; as is call for the affordability of alcohol to be addressed via further

increases above the rate of inflation in following years, as with tobacco excise increases. These regular increases are required to address any low-cost alcohol products developed by alcohol producers to mitigate the effects of price increases.

Poverty

Children and young people living in the most deprived areas are three times more likely to die in childhood or adolescence than those living in the least deprived areas, according to the Child and Youth Mortality Review Committee. The committee's report of April 2019 reviewing the deaths of children and young people for the period 2012 to 2016 shows poverty is a key driver of child deaths in this country. Its media release is on the Health Quality & Safety Commission's website at: https://www.hqsc.govt.nz/our-programmes/mrc/cymrc/news-and-events/media/3284/ and includes a link to the full report.

We asked two ASMS members for their view of the findings and their experience of the effects of poverty on child health. What they had to say can be read at: https://www.asms.org.nz/news/asms-news/2018/07/20/chilling-impact-of-poverty-on-child-health/

Poverty and its flow-on effects can have a significant influence on the likelihood of potentially preventable child hospitalisation, with New Zealand children aged 0-4 years in deciles 9 and 10 being nearly two-and-a-half times more likely to end up in hospital than those in deciles 1 and 2.[10]

Data supplied by the Ministry of Health shows that if all these potentially avoidable hospitalisations (including emergency department cases) were at the same rate as those in deciles 1 and 2, hospitalisations for young children would be more than halved overall. The greatest decrease would be for those children in deciles 9 and 10, with hospitalisations reduce by more than 70%.[11]

For these reasons and many more we support the Government's aim to reduce poverty. However, we note the latest statistics on childhood poverty suggest that on some key measures things are worse than previously estimated.[12] [13]

About one in six children (16% or 183,000) live below a before-housing-cost relative poverty measure, but that figure jumps to almost one in four (23% or 254,000) once housing costs are accounted for. And 13% (148,000) are living in households that experience material hardship – 6% in severe hardship.

The data show that the government will need to do much more to reach its targets for reducing childhood poverty.

The Work and Income 'Families Package', announced in 2017, will go some way to reduce childhood poverty, especially against the first before-housing-cost measure, which Treasury estimates will reduce the number of children below this measure by 64,000 by 2021.[14] The impact on the after-housing-cost measure is likely to be smaller because of rising rental costs. Likewise the reduction in the number of children living under material hardship is also likely to be less substantial.

Other measures such as increasing the statutory minimum wage and the extensions to free and low-cost doctors' visits for children and the broadening of access to the Community Services Card can be expected to help families experiencing material hardship, but these can only be expected to have marginal impacts.[15]

Substantial further initiatives will be needed to achieve significant and sustainable reductions in child poverty, such as reducing the inequality of pre-tax income and going further to remove the cost barriers to health care for poorer families. The government will also need to ensure its policies help the poorest of the poor, including increasing the level of assistance to families on benefits.

Frailty

Rising health care costs are commonly largely attributed to an ageing population but it is vital that we try to better understand what the challenges of an aging population really are in terms of demand on health services. It is well recognised that much of the health service cost for an individual is incurred in the months prior to death, rather than just from aging alone. In fact it has been argued that aside from 'end of life', the other major cause of increasing health care costs is the an increase in chronic illness.[16]

While the effects of population health measures and health service interventions have contributed to greater longevity in wealthy countries like New Zealand, the evidence that this is being accompanied by an extended period of good health is scarce.[17]

Indeed there is evidence to suggest that in New Zealand the prevalence of frailty (a concept of *unhealthy* ageing) is increasing towards the end of life of our older population.

An unpublished study at Hawke's Bay DHB shows in the 10 years from 2002 to 2012 hospital occupancy for those aged over 80 increased from 1.6 to 1.9 bed-days per person per year, while bed occupancy for all other ages fell over the same period. This 20% increase in demand among older people over such a short period requires an explanation. This increase of bed occupancy for older people - well above population growth rates - does not appear to be slowing.

These trends are consistent with studies showing increased frailty is associated with increased longevity, independent of morbidity (ie, there is a significant likelihood of developing frailty if you live long enough, even without overt disease).[18] [19]

The reasons for this are not well understood. While they may reflect the effects of 'delayed deaths' from successful population health measures and health service interventions, the corresponding increase in frailty towards the end of life raises questions reflecting the great heterogeneity in how people age, which requires a lot more research spanning multiple sectors. [20] [21]

In the meantime, if, as the evidence suggests, increasing numbers of people living over the age of 80 in New Zealand are leading to increasing prevalence of frailty towards the end of life, then much more preparation is needed for this than is currently evident.

As some overseas researchers have noted, our health care systems are designed primarily around disease management and are sorely unprepared to meet the needs that stem from disability.[22]

The extent of disability or dependency towards the end of life may be more valid as 'markers' of drivers of cost of health care rather than measurements of morbidity alone.

The importance of understanding this better and taking the necessary action is underscored by Treasury modelling indicating that by 2060 a 'no healthy ageing' scenario (increased longevity with an increase in the number of years lived in poor health) could cost up to 2.7% of GDP more than a 'healthy ageing' scenario (increased longevity with an increase in the number of years lived in good health).[23] We understand more recent unpublished Treasury analysis suggests 'unhealthy' ageing may require the equivalent of 1%-2% of GDP in additional funding – still a very substantial sum.

Funding

Our comments here are based on the premise that poor health and wellbeing is a substantial but unacknowledged 'debt', socially and economically and, conversely, the compelling evidence that greater investment in the health system, when used wisely, will lead to a healthier economy as well as a healthier population.

This perspective requires a shift from the common perception that containing cost equates to increasing efficiency. In many instances this is not the case. In practice, arbitrary budget cuts can contain costs 'successfully' without having any bearing on cost–effectiveness. The lost opportunity of failing to properly implement proven cost-effective policies such as distributed clinical leadership in DHBs, largely owing to cost constraints, is an example of this, as discussed in the ASMS *Research Brief* "Collective leadership: harnessing the knowledge and skills of clinicians to transform health care". This approach also requires a policy mind-shift from perceiving the health system as a drain on the economy to recognising it as part and parcel of improving health and achieving better economic growth. [24]

In short, a fiscal policy that enables greater investment in health care, provided through evidence-based polices, would make a positive contribution to GDP and help to reduce the country's social and economic debt that we leave to future generations.

The Government is aware that to address the years of underfunding of health services substantial incremental injections of funding are required in addition to funding to meet growing health needs. We are aware that other sectors are in a similar position to varying degrees. It is clear to us therefore that more tax revenue is needed.

We note that of the 10 (mostly northern European) countries rated most highly for converting economic growth into wellbeing, reported by the World Economic Forum, all bar one in 2016 had tax revenues above 36% of GDP, with six countries topping 40% of GDP (New Zealand's was 32%). There

is a similar gap between these countries' level of government expenditure and that of New Zealand's. [25] [26]

The Government's fiscal policy priority of capping government spending at 30% of GDP in order to reduce government debt appears to seriously undermine the potential for the Government's vision of wellbeing.

A study estimating the monetary worth of recent increases in life expectancy in selected western European countries showed that between 29% and 38% of notional GDP increases from 1970 to 2003 could be attributed to gains in life expectancy.[27]

> *Health expenditure through health systems and other sectors that impact on health can then be shown to achieve 'social productivity' many times greater than that associated with other forms of investment.*
>
> - Figueras et al, WHO Europe [28]

The economic costs of not investing in health, on the other hand, are considerable, as demonstrated in numerous cost-of-illness studies. One British study estimated the economic burden of coronary heart disease in Britain in 1999 was over seven billion pounds (almost 1% of Britain's GDP in that year). Only a quarter of that cost was for public health services, the rest – the less visible costs – were for informal care and lost productivity.[29]

> *Targeted health spending on highly cost-effective health interventions is a positive investment that promotes wellbeing and economic prosperity. The right health investments are not a drain on the economy; they have the opposite effect.*
>
> - Yamey et al, World Innovation Summit for Health[30]

References

[1] Wilson R, Abbott JH. Age, period and cohort effects on body mass index in New Zealand, 1997–2038, ***Australian and New Zealand Journal of Public Health, Vol 42 Issue 4, August 2018.***

[2] Ananthapavan J, Sacks G, Brown V, Moodie M, Nguyen P, Barendregt J, Veerman L, Mantilla Herrera A, Lal A, Peeters A, Carter R. Assessing Cost-Effectiveness of Obesity Prevention Policies in Australia 2018 (ACE-Obesity Policy). Melbourne: Deakin University, 2018.

[3] Ibid

[4] Vos T, Carter R, Barendregt J, et al. *Assessing Cost-Effectiveness in Prevention (ACE–Prevention): Final Report*. University of Queensland, Brisbane and Deakin University, Melbourne, 2010.

[5] L Allen. Rejection of sugar tax is based on faulty logic about the poor*, The Conversation*, 10 November 2015. Available: **https://theconversation.com/rejection-of-sugar-tax-is-based-on-faulty-logic-about-the-poor-50230**

[6] Sassi F. *Obesity and the Economics of Prevention: Fit Not Fat*, OECD, 2010.

[7] J Lines-Mackenzie. One on four hospital admissions related to alcohol, *Stuff,* 20 December 2016. Available: https://www.stuff.co.nz/national/health/87785603/one-in-four-hospital-ed-admissions-related-to-alcohol

[8] J Connor, S Casswell. Alcohol-related harm to others in New Zealand: evidence of the burden and gaps in knowledge. NZ Med. J. Aug 24 2012;125(1360):11-27.

[9] Alcohol Healthwatch. Submission to the Finance and Expenditure Select Committee *on the* Budget Policy Statement 2018, 18 January 2018.

[10] Simpson J, Duncanson M, Oben G, et al. *The Health Status of Children and Young People in New Zealand 2015*. Dunedin: New Zealand Child and Youth Epidemiology Service, University of Otago; 2016.

[11] J Simpson, M Duncanson, et al. The Health Status of Children and Young People in New Zealand 2015, New Zealand Child and Youth Epidemiology Service, Otago University, June 2016.

[12] Statistics NZ. Child poverty statistics released, media release, 2 April 2019.

[13] Fletcher M. New Zealand's dismal record on child poverty and the government's challenge to turn it around, Victoria University of Wellington, 26 April 2019.

[14] NZ Treasury. Treasury corrects coding error in child poverty projections, media release, 15 March 2018.

[15] Fletcher (2019)

[16] Koh L. Aging population not behind rising healthcare costs, *Stuff,* 3 September, 2015. **https://www.stuff.co.nz/business/71710588/**

[17] Beard J, Officer A, de Carvalho I, et al. The World report on ageing and health: a policy framework for healthy ageing, *Lancet*. 2016 May 21; 387(10033): 2145–2154.

[18] Smith A, Walter L, Miao Y, et al. Disability During the Last Two Years of Life, *JAMA Intern Med*. 2013;173(16):1506-1513. Published online July 8, 2013

[19] *Andrew Clegg, John Young, Steve Iliffe, et al.* Frailty in elderly people, *Lancet* 2013; 381: 752–62. Published Online**,** February 8, 2013.

[20] Lowsky D, Olshansky S, Bhattacharya J, et el. Heterogeneity in Healthy Aging***, J Gerontol A Biol Sci Med Sci***. 2014 Jun; 69(6): 640–649. Published online 2013 Nov 17.

[21] Maryam Karimi,1,2 Raphaële Castagné,3 Cyrille Delpierre, et al. Early-life inequalities and biological ageing: a multisystem Biological Health Score approach in Understanding Society, J Epidemiol Community Health 2019;73:693–702.

[22] Smith A, Walter L, Miao Y, et al. Disability During the Last Two Years of Life, *JAMA Intern Med*. 2013;173(16):1506-1513. Published online July 8, 2013

[23] NZ Treasury. *Health projections and policy options*. Background paper for the 2013 statement on the long-term fiscal position. July 2013

[24] J Figueras, M McKee, S Lessof, et al. *Health systems, health and wealth*: Assessing the case for investing in health systems, WHO Europe, 2008.

[25] Boston Consulting Group. Which countries are best at converting economic growth into wellbeing? World Economic Forum, July 2016. https://www.weforum.org/agenda/2016/07/which-countries-are-best-at-converting-economic-growth-into-well-being/

[26] OECD Government revenue and expenditure statistics, 2016.

[27] Figueras et al (2008)

[28] Ibid

[29] J Liu et al. (2002), "The economic burden of coronary heart disease in the UK", Heart, 88: 597–603

[30] Yamey G, Beyeler N, Wadge H, Jamison D. Investing in Health: The Economic Case. Doha, Qatar: World Innovation Summit for Health, 2016 Case. Doha, Qatar: World Innovation Summit for Health, 2016