

## Special Commission of Inquiry into Healthcare Funding

### Statement of Dr Jan Fizzell

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**Occupation:** Acting Chief Health Officer and Deputy Secretary, Population and Public Health, NSW Ministry of Health (**MOH**)

1. This statement made by me accurately sets out the evidence that I would be prepared, if necessary, to give the Special Commission of Inquiry into Healthcare Funding as a witness. This statement is true to the best of my knowledge and belief.

#### A. INTRODUCTION

2. My name is Dr Jan Fizzell. My substantive position is Clinical Lead in the Office of the Deputy Secretary, Population and Public Health and Chief Health Officer. I was appointed to this role on 19 August 2024. In this role I lead work in relation to improvement and protection of the health of the population, with particular focus on critical analysis, innovation, evidenced based practice and quality improvement.
3. From 6 December 2024 to 12 January 2025, I will be Acting Chief Health Officer and Deputy Secretary. Dr Kerry Chant holds this position substantially. This statement is written in my acting capacity as Acting Chief Health Officer and Deputy Secretary.
4. A copy of my curriculum vitae is **Exhibit 1** to this statement.

#### B. A SHARED UNDERSTANDING OF PREVENTION

5. Keeping people healthy is a major focus of international<sup>1</sup>, national<sup>2</sup> and NSW Health strategies<sup>3</sup> for the future. Broadly, preventive health (prevention) is any action taken to keep people well and prevent poor health and the risk of early death. Prevention aims to keep people healthy and well for as long as possible

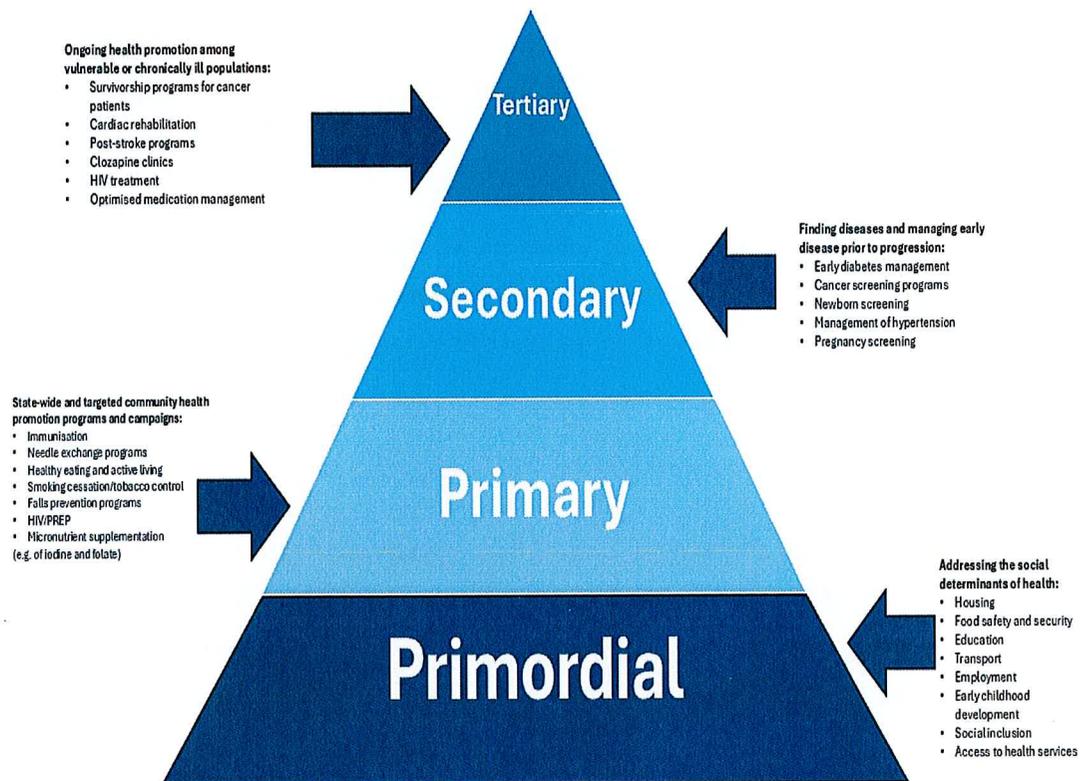
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<sup>1</sup> Goal 3 | Department of Economic and Social Affairs UN Sustainable Development Goals.

<sup>2</sup> National Preventive Health Strategy 2021–2030 | Australian Government Department of Health and Aged Care.

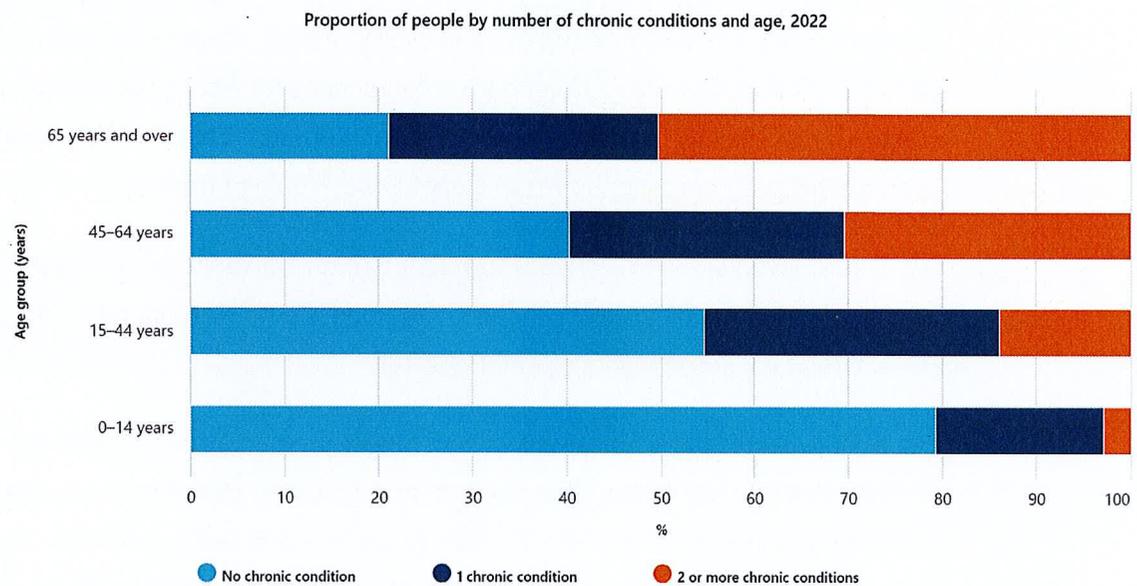
<sup>3</sup> NSW Health Future Health Strategy MOH.0001.0320.0001.

6. Prevention can be divided into primordial, primary, secondary and tertiary prevention, as shown in the diagram below.



7. Primordial prevention refers to population-level strategies, often implemented by governments or the community, that expose the whole population or subgroups to conditions that support health. Examples include water fluoridation, mandatory seatbelt use, monitoring of air quality and responses, and addressing socioeconomic factors such as food security, safe housing and education. More recently access to digital services has become an important determinant of health (eg the ability to book services and the ability to use videoconferencing for virtual care).
8. Primary preventive measures include health promotion programs that engage people through the lifespan to live healthier lives – these include healthy eating and active living programs, smoking cessation and tobacco control, prevention of infections through behaviour change and immunisation, reduction in harmful use of alcohol and other drugs, building social cohesion and minimising stigma, parenting support programs and maintaining physical activity and social connection through the lifespan.

9. Secondary prevention remains an important activity – by finding people with onset of disease or of conditions that lead to disease we can intervene prior to people having significantly poor health outcomes. This includes management of overweight and obesity, antenatal and newborn screening for disease, cancer screening programs, management of pre-diabetes and hypertension and early intervention programs for mental health. Accessibility of health services, to promote access to early diagnosis or recognition of risk factors, is critical. Given 45% of 15 - 44 year olds in the Australian population have at least one chronic health condition (as shown in the diagram below), it would not be uncommon that a person with one established chronic condition will need additional attention for other risk factors to avoid the development of more chronic conditions through the lifespan.



Source: Australian Bureau of Statistics, Health conditions prevalence 2022

10. Tertiary prevention involves disease management to prevent further progression and the development of complications. Accessibility of care, availability of recommended evidence-based treatment, acceptability of evidence-based treatments and improving quality of life are an important component of tertiary prevention. It is also noteworthy that, given the prevalence of one or more chronic conditions, attention to primary and secondary prevention in those with chronic conditions can help improve not just quantity of life, but quality of life as well. An example of this is the work being done with patients with significant mental health issues. By promoting screening for other diseases, timely immunisation against infectious diseases, and encouraging healthy lifestyle changes we can help prevent deaths from cardiac disease, influenza, and increased risk of cancer mortality in our mental health consumers.

11. Preventive health activities are broad and are provided to individuals and communities at local and state levels. Current preventive health activities include:
- a. For individuals: provision of advice to modify lifestyle risk factors or individual health coaching (eg the Get Healthy service, iCanQuit) or brief interventions to reduce alcohol consumption by clinicians or provision of accessible information (eg YourRoom, Ending HIV, Vaping, Healthy Ageing websites),
  - b. For families: family orientated health promotion programs (eg Go4Fun) or parenting programs (eg early childhood health services),
  - c. For communities: cultural groups, place based and settings based interventions (eg the Mental Health for Vietnamese People program and Pink Sari, an intervention to improve cancer screening in Indian and Sri Lankan communities), school based interventions (eg LiveLifeWell@School, Healthy School Canteens and Munch n Move in early childhood), interventions for Aboriginal people to come together for healthy eating and active living (eg the Knockout Challenge) and geographic programs (eg the North Coast Youth Vaping project),
  - d. At a local level: working with local government on walkable neighbourhoods and urban planning, cooling tower inspections, food safety or responding to specific local health concerns (eg local water quality),
  - e. At a state level: public messaging and health promotion campaigns (eg winter preparedness), regulation of medicines and poisons, state-wide surveillance of infectious diseases, state-wide toxicology service and early warnings regarding recreational drugs, cancer screening, healthy living behaviours (such as summer recipes, quit smoking and vaping) and our state-wide program of providing evidence and epidemiology to help guide state-level and local public health action,
  - f. Across government: MOH works in partnership with other agencies, including Communities and Justice, Transport, Education, and Planning and Environment, to address the social determinants of health and promote wellbeing in alignment with the commitments in *Future Health: guiding the next decade of health care in NSW 2022-2032*, the *First 2000 Days Framework* and the *2022-2024 NSW Closing the Gap Implementation Plan*,
  - g. Contributing to national and international prevention efforts to share expertise and advocate for alignment of health promoting and protecting policies to avoid

changes in policy which may cause unintended impacts on the population's health and to consider how best to work together to improve health.

12. Primary, secondary and tertiary prevention activities can be stand alone services, however embedding prevention in all levels of our services is important. Prevention activities take time and require development of skills. When scoping the implementation of new prevention initiatives we often hear from clinicians and health system managers that:
  - a. Services are stretched and individual clinicians do not have time or resources to deliver some prevention activities (eg access to Nicotine Replacement Therapy for people wishing to quit smoking as outpatients, time to deliver an immunisation in addition to recommending it),
  - b. Clinicians may experience a reluctance to discuss health risk areas where they are unsure of effective referral pathways (eg discussing overweight and obesity in children without knowledge of local programs that the child and family could be referred to),
  - c. Clinicians do not have the ability to manage the social determinants of health beyond a local sphere of influence (eg availability of affordable housing to support discharge of patients into safe and secure housing).
13. Even with advances in genomics and the impact of screening and potential therapies, the social determinants of health will remain. A key activity in the future will be helping people understand the potential benefits and risks of genetic testing, especially when it is unclear what the results of a test may mean. In some cases genomics has been lauded as the "future of prevention", however in order for a person to have the best outcomes we know that accessibility of services, transport, education and attention to other health risk factors will need to be optimised.
14. The growing interest in artificial intelligence to assist in preventive health is another area where will see change in practice. As well as reducing the costs and accessibility of some prevention activities (eg reading of digital images from CT or mammography in screening programs), it may help us link data in new ways helping us understand new risks for the development of disease or help us target certain preventive activities. Understanding consumer preferences through AI may assist us in targeting messages that they are more likely to respond to in improving their individual health – for example chatbots

providing health coaching in language that people prefer. We also need to assist in the development of AI services, advocating for the inclusion of data for machine learning from those who may be under-represented in research developing algorithms (eg Aboriginal people may not be well represented and clinical algorithms developed without their data may not be appropriate).

15. Prevention strategies will need to evolve as society and the threats to population health also evolve. At any time new threats to the health of the population may occur (eg the rapid uptake of e-cigarettes and vaping, new synthetic opiates in the illicit drug market, new infectious diseases or changes to existing ones making them more virulent), or new tools to help in prevention may become available. This requires an agile and responsive workforce and infrastructure for prevention.
16. We also need to ensure that confidence in information provided to support prevention is trusted and to use behavioural insights to help us discover how best to credibly communicate how the population can prevent disease and promote health.
17. Investment in research and evaluation to ensure we can best meet the needs of the people of NSW is essential to ensure investment in prevention is evidence based, tailored to the NSW community and provides value for money.

### **C. RETURN OF INVESTMENT IN PREVENTIVE CARE**

18. The term prevention covers a wide range of activities across the spectrum of prevention activities, across the life course, and across populations and settings. It is therefore difficult to provide one overall assessment of the return on investment (**ROI**) from prevention. However, many studies have demonstrated that prevention activities can be highly cost-effective, and can deliver a positive ROI (ie be cost-saving).
19. A large international study published in March 2017, *Return on investment of public health interventions: a systematic review*, considered the ROI of the broad spectrum of prevention activities, including impacts of regulation and legislation to promote and protect health, activities to promote individual health (eg home blood pressure measurement, medically supervised injecting centres, medication management), public health campaigns, health promotion services, health protection initiatives and work to address the wider determinants of health. The authors estimated that for every dollar invested in prevention, \$14.30 is saved in health care and other costs. A copy of that study is **Exhibit 2** to this statement.

20. The Australian Prevention Partnership Centre published a 2021 brief entitled *The Value of Prevention*, considering the value of prevention, especially considering the four areas of overweight and obesity, tobacco use, physical inactivity and dietary risks. They found that a large proportion of Australia's disease burden is likely preventable through acting on these four risk factors. The attributable health burden in disability adjusted life years (**DALYs**) by risk factor includes tobacco use 9.3%; overweight & obesity 8.4%; dietary risks 7.3% and physical inactivity 2.5%. Approximately a third of all health burden can be attributed to all modifiable risk factors including environmental, behavioural and metabolic factors. Significantly modifying those factors could save millions of dollars of health care expenditure, as well as improving the quality of life for many people in NSW. A copy of that brief is **Exhibit 3** to this statement.
21. There have been estimates of costs of overweight and obesity to the Australian economy. One recent study shows that if we can reduce child and adolescent obesity by 5%, we could save as much as \$7.44 billion. A copy of that study is **Exhibit 4** to this statement.
22. Demand reduction for illicit drugs has been estimated by the Australian Institute of Criminology in its *Trends and Issues in Crime and Criminal Justice* no. 657 September 2022 report to have a ROI of \$5.40 for every dollar spent. A copy of that report is **Exhibit 5** to this statement.
23. In NSW, and as set out at [67]-[71] of the statement of my colleague, Professor Tracey O'Brien, independent evaluations have confirmed that campaigns delivered by the Cancer Institute have significant ROI. Campaigns to help prevent skin cancer, tobacco control and reducing vaping have had an estimated ROI of \$4.50 to \$33.20 per dollar invested.
24. It is important to note that not all prevention activities will result in cost-savings, or even align with current expectations around acceptable cost-utility for health interventions. This is why prevention activities need to be guided by excellent evidence, evaluation, and appropriately targeted investment. Whilst generating high quality evidence can be challenging given the long horizon for some effects (for example, an intervention in childhood to prevent morbidity in adults), responsible implementation of prevention activities need to be evidence based and for prevention activities to be considered carefully not just for benefits, but costs.

25. The ACE-Prevention study looked at the cost per DALY for a number of prevention activities in Australia in 2010. As well as identifying the most cost-effective interventions (which included items such as taxation on tobacco, provision of certain medications for people identified with high blood pressure and high cholesterol and intense sun safety campaigns) it also identified cost-ineffective interventions (either because they do not work well or are expensive for the outcomes) such as certain dietary interventions (such as providing fruit and vegetables in the workplace), or the provision of certain immunisations to age groups less likely to have a severe outcome (eg routine shingles immunisation at age 50). This type of prioritisation of prevention activities is important so that funding is directed to interventions that work and are a good investment (or at least are equivalent in cost-utility to other health interventions funded by government). A copy of a pamphlet regarding the study is **Exhibit 6** to this statement.
26. The UK Government has announced a shift from treatment to prevention as a focus of their model of health and care. The NHS Confederation, a membership organisation whose members cover the full range of organisations that plan, commission and provide NHS services in England, Wales and Northern Ireland, has recently released a report, *Paving a New Pathway to Prevention*, regarding the importance of prioritising prevention activities with an excellent evidence base and reprioritising prevention spending to where there is a greater ROI. The report drew on studies since 2013 and from England, USA, Canada, Australia, New Zealand and the Nordics.
27. By investing in areas with higher ROI, even within activities to prevent similar outcomes (eg programs and policies to support smoking cessation had a median ROI of GBP1.70 whereas the highest ROI for a policy or program was GBP23.7). That report also considers that whilst investment in children and young people provides a strong ROI, investing in prevention of poor health in working age adults and older people can also provide a good ROI.
28. The report provides a figure showing the impacts of different activities in the sphere of prevention. It gives a median return of investment for policies and programs, as well as a maximum ROI for the studied policies and programs. By considering this type of analysis we can consider where best to invest prevention expenditure. A copy of that report is **Exhibit 7** to this statement and the table below is extracted from that report.

Figure 7: Median five-year adjusted ROI by intervention category



## D. MEASURING HEALTH OUTCOMES

29. NSW Health monitors program and policy implementation, and measures health intervention processes, impacts and outcomes to consider whether prevention programs are being delivered as intended, and are working. The introduction of the Single Digital Patient Record (**SDPR**) will assist in identifying preventable risk factors in patients across the system, and how often prevention actions occur within our health services.
30. It is often difficult to link a specific health outcome to a particular prevention program or intervention. The time between an intervention and the outcome can be many months, decades or years. For example, reducing the number of young people smoking daily will one day reduce the occurrence of cardiovascular disease, however important changes to accessibility of smoking in adulthood, air quality, increasing physical activity, and management of personal risk factors (eg familial hypercholesterolaemia) will also contribute to that outcome. As such, attributing a particular outcome to one particular intervention can be challenging.
31. Measuring outcomes at the local level can be complex – the influence of national and state-wide programs may be more or less effective at a local level (eg uptake of bowel cancer screening may be influenced not just by acceptability of the program in collecting a stool sample, but also by the need to transport that sample over a greater distance to post it back for collection). Whilst there are international indicators (eg the Sustainable Development Goals or the World Health Organisation's indicators for non-communicable disease management) and national indicators (eg those associated with the National Preventive Health Strategy) these are not always appropriate to extrapolate to a local

level, nor is the data used in the calculation of those indicators always available at the state or LHD level.

32. It is also worthwhile noting that linked data – across agencies and across levels of government – is opening up new opportunities to focus prevention. For example, linking people with chronic heart failure (a NSW hospital data set) with the people who receive certain preventive medicines (an Australian government data set) gives an indication of how many people may be missing out on this care, where those people are and may give a first indication of where to focus activity. If we can see patients are being discharged on these medicines but do not continue them in the community, we need to talk to primary care providers to learn more. If we find they are not discharged with these medicines, we know we have to work within our own hospitals to achieve change. By understanding a patient journey it helps us target our inquiries and activities more effectively.

***Short term impacts***

33. We measure the short-term impacts of prevention activities by considering how often a service is offered or an intervention occurs. These are largely process measures and include (amongst many others):
- a. Immunisation uptake – monitored through data provided to the Australian Immunisation Registry and available for different vaccines with different levels of information,
  - b. Screening service participation rates (eg Breastscreen, newborn bloodspot screening) – these are available to LHD and primary health network levels, and also (with some delay) for culturally and linguistically diverse groups, as well as for Aboriginal people,
  - c. Immediate responses to public health messaging campaigns by the commissioning group (eg Cancer Institute, Health Protection NSW),
  - d. Time engaged with websites (eg by NSW Health communications groups),
  - e. Activity of phone based coaching services (by those commissioning the services eg Get Healthy or iCanQUit)
34. The SDPR will allow us to better understand how often additional prevention interventions are offered in our clinical services, for example:

- a. Alcohol and tobacco risk assessment and brief interventions,
  - b. Immunisations targeted towards vulnerable groups (eg renal dialysis or alcohol and other drug groups),
  - c. People being discharged with appropriate bundles of interventions for their health conditions (eg discharge with appropriate medicines and referral to cardiac rehabilitation after acute myocardial infarction).
35. Currently this information is spread through diverse systems and is difficult to extract electronically eg in maternity information systems, cancer information systems or community health information systems. We cannot always tell what intervention led to a prevention activity occurring (eg when a patient is immunised in a ward because it was recognised they were not up to date or whether the patient attended a drop in clinic on the way home – both are valid activities, however it makes it more difficult to gather data about whether ward-based immunisation or drop-in clinics might work best). It can also be difficult, for example, to look at discharge medications associated with health conditions across different record keeping systems to consider whether this type of tertiary prevention activity is occurring. The SDPR will allow us to better track these interventions, as well as evaluating their effectiveness. Some data is held by the Commonwealth (such as the Australian Immunisation Register) or by other NSW Government Departments (eg if looking at the number of children who received an intervention who had an improved educational outcome).

#### ***Medium term impacts***

36. We often measure medium term impacts to help us understand if our activities are modifying patients' risk factors and changing their trajectories. This may be in weeks to months, or possibly within five years (eg looking to see if an intervention in the postnatal period led to better outcomes at school entry). The medium term can be considered as that between an intervention occurring and an initial effect being seen, and can be different depending on the intervention. The tools we use to measure these impacts include self-reports through population health surveys, data linkage to see if people with risk diagnoses are receiving appropriate medications for secondary and tertiary prevention, and changes in prevalence of health conditions predicting long term chronic disease.

37. Positive impacts of prevention activities may include:
- a. Sustained change in behaviours after an intervention or exposure to public health messaging or a health coaching activity in individuals – this is often by self-report in population health surveys and may not be reliable,
  - b. Sustained use of preventive medicines recommended – this will currently often require data linkage to track whether medicines prescribed in hospital are continued for an appropriate length of time to reduce risk,
  - c. Population changes in the prevalence of health conditions or behaviours that lead to chronic disease (eg high blood pressure, overweight and obesity, risky alcohol consumption, rates of smoking and vaping) – in some cases we can see an early impact of an intervention (eg we would hope to see an early reduction in vaping after the regulatory and legislative changes in 2024).
38. Some of the health improvements may be being measured in primary care where NSW Health does not have access to the data. Again, this can make timely identification of trends (both positive and negative) challenging.

***Long term impacts***

39. Longer term trends help us understand whether the suite of activities being provided is assisting in improving the health of the population. It is important to note that in considering longer term trends or outcomes, we do not look at the individual patient level, but rather at the population health level. It is often difficult to distinguish whether a specific change in policy or programs contributed to these types of outcomes.
40. These outcomes can also be influenced by other factors within the health system, for example:
- a. Better diagnostic technology or introduction of screening for a condition (eg in 2025 when lung cancer screening is scheduled to be introduced, we may find an increase in the incidence and prevalence of lung cancer because more people are diagnosed earlier in their life journey),
  - b. People surviving childhood illnesses due to better management may have increased risk of chronic conditions in adulthood (eg survivors of childhood cancer often have chronic conditions related to their treatment),

- c. Decreased access to health care services may mean that people do not have conditions diagnosed or managed (eg we know that some people who die from suicide or heart disease have not received care in the last year of their life, people who have not seen a health professional for a regular check-up may not have had “silent” conditions such as early diabetes or hypertension diagnosed),

41. Long term indicators may include:

- a. Changes in DALYs due to different health conditions and overall burden of disease in a population. The Australian Institute of Health and Welfare is tracking this across Australia from a baseline in 2018 towards targets in 2030. The below table gives an estimate in progress to 2023.

Aim	Target	Sex	2018 (baseline)	2023 estimate	Comparison to 2018
All Australians have the best start in life	The proportion of the first 25 years lived in full health will increase by at least 2 percentage points by 2030	Persons	92.1% of first 25 years were lived in full health	91.6% of first 25 years were lived in full health	-0.5 <sup>(a)</sup>
All Australians have the best start in life	The proportion of the first 0-4 years of life lived in full health will increase by at least 3.5 percentage points by 2030	Persons	92.0% of first 5 years were lived in full health	91.4% of first 5 years were lived in full health	-0.6 <sup>(a)</sup>
All Australians live in good health and wellbeing for as long as possible	Australians have at least an additional 2 years of life lived in full health by 2030	Males	71.5 years lived in full health	71.6 years lived in full health	0.1 years
		Females	74.0 years lived in full health	73.6 years lived in full health	-0.4 years

(a) This is the difference in the proportion of the first 25 or 5 years lived in full health between 2023 and the baseline (2018).

Source: AIHW Australian Burden of Disease Database.

- b. Declines in diagnoses – as we have seen with the decline in deaths and hospitalisations from cardiovascular disease, such as those described by Ms Willcox, Dr Chant and Dr Lyons in their statement of 17 November 2023 at [108] – [112].

42. We know that we have an increase in the population of our oldest old (those aged 85 and over). Our prevention activities now should improve the health of the oldest old into the future, however we also need to consider how best to measure the health of the oldest old now. Consideration of expected years of life without disability becomes very important, as well as more age-specific health indicators (eg mortality rates due to falls,

suicide rates, uptake of age-specific immunisations (eg against shingles), uptake of medication reviews).

#### **E. FUNDING PREVENTIVE HEALTH ACTIVITIES**

43. It is important that alongside our growth in demand for acute care that activities that promote prevention are funded. These activities have a significant ROI and can help limit the escalation in demand for acute care services. Internationally, even when an intent is made for health systems to spend more on prevention, this is not easy to achieve at a time of escalating demand for immediate care for those with significant illnesses.
44. Quantifying the amounts spent on prevention can be challenging, given the broad spectrum of activities that can be considered preventive in nature. Treatment of early conditions (eg early mental health interventions) that help avert more serious conditions (eg serious mental illness, cardiovascular disease and substance use disorders) can be considered both as provision of a therapeutic service, as well as a preventive activity.
45. The NSW Health prevention approach is designed to integrate with and leverage the NSW Health structure (with the central role of Ministry and Pillars) and service delivery capacity. For example, for health protection activities around some communicable diseases, the Ministry works to promote policy, legislation and state-wide surveillance and works with other government agencies (eg Primary Industries), the Clinical Excellence Commission develops infection control advice, the Agency for Clinical Innovation helps disseminate messages to clinicians regarding the threat and LHDs tailor and disseminate messages, provide local public health action and provide care to people impacted. Currently NSW Health delivers a policy-led, community and equity focused preventive health portfolio, designed to work with other government and non-government agencies.
46. It is important that prevention functions are not separated from MOH governance arrangements, policy and programs, and funding and performance functions, as these prevention functions may become disconnected, lack health system integration and have limited opportunity to influence the delivery of preventive health care in practice.
47. Integration of preventive health within NSW Health allows for budget efficiencies, as workforces and governance structures are not duplicated across agencies.

48. If there were an appropriate system for provision of quarantined funding for prevention activities, this would ensure a continued and enhanced focus on the delivery of such activities. Optimally, this would include:
- a. An alignment on the vision for prevention, and our ambitions and priorities to achieve improved health of the population (such as through the *First 2000 days* framework),
  - b. Leveraging data and information to identify the needs of a particular population (and consider whether the needs of that population are best addressed through a state-wide, LHD-wide or specifically local activity),
  - c. Continuing to focus on equity in service delivery, noting the needs assessment ,
  - d. Appropriately defining activities that are considered largely preventive in nature, determining how these can be delivered and determine how outcomes (short, medium and long term) will be measured and reported.
  - e. Embedding activities within care pathways and ensuring systems are adequately resourced to continue those prevention activities, even under system stress, noting that whilst they may not improve short term performance they may prevent longer-term system issues
  - f. Ongoing conversations with the population to encourage co-design of solutions that meet the needs of the community
  - g. Ongoing evaluation and redirection of resources as required from programs that are not performing to those that will provide a greater ROI
  - h. The ability to work across levels of government, across agencies and across sectors (including NGOs and the private sector) to promote and improve health – including working with primary care to reduce duplication and enhance service and program delivery
  - i. Ensuring that there is an appropriate time course allowed to see improvements in health from long term investments,
  - j. The ability to scale successful programs,

- k. Funding to innovate to provide novel solutions to complex or emerging health challenges.

  
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Dr Jan Fizzell

  
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Witness: AMANDA LARKIN

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