

# The Australian Centre for Disease Control (ACDC)

Highway to health

Peter Breadon, Lachlan Fox, and Owain Emslie

February 2023



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## Grattan Institute Report No. 2023-03, February 2023

This report was written by Peter Breadon, Lachlan Fox, Owain Emslie, and Lauren Richardson.

We would like to thank numerous government and industry participants and officials for their input.

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This report may be cited as: Breadon, P., Fox, L., Emslie, O., and Richardson, L. (2023). *The Australian Centre for Disease Control (ACDC): Highway to health*. Grattan Institute.

ISBN: 978-0-6456349-5-2

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## Table of contents

Overview . . . . .	4
Recommendations . . . . .	5
1 There will be an Australian Centre for Disease Control . . . . .	6
2 The burden of chronic disease is big, and growing . . . . .	8
3 Prevention policy can work . . . . .	18
4 We aren't doing enough . . . . .	23
5 Focusing on the future is hard . . . . .	26
6 Vested interests block action . . . . .	28
7 Prevention needs cooperation . . . . .	31
8 The ACDC should be at the centre of prevention policy . . . . .	37
9 The ACDC should be set up for success . . . . .	42
10 Conclusion . . . . .	50

## Overview

Australian governments aren't doing enough to stop chronic disease before it starts. Instead, we're sleepwalking into a sicker future that will condemn millions of Australians to living with avoidable disease and disability.

Chronic conditions are the biggest killer in Australia, making up 85 per cent of the burden of disease, and contributing to 9 in 10 deaths. This burden is heaviest on the most disadvantaged Australians, who are twice as likely to have two or more chronic conditions. And the toll will keep growing, because many risk factors for chronic disease, such as obesity, are rising dramatically.

Rising chronic disease isn't inevitable, but changing course means shifting focus from sickness to health. More than 80 per cent of a person's health is caused by factors outside health care. Fortunately, those factors can be changed.

Many prevention initiatives have been shown to cost-effectively reduce rates of chronic disease, but Australia isn't adopting them. We have lost the leadership position we had in previous decades, with other countries now spending more, and doing more.

Australian governments have let a trifecta of practical and political challenges hold back chronic disease prevention: short-term thinking, vested interests, and lack of collaboration. They have resulted in piecemeal investment, stymied regulation efforts, and a leadership void.

There are proven ways to overcome these problems. Australia has systems to evaluate and fund other types of health investment. We have independent bodies that force a focus on the future, in areas from climate change to monetary policy. But prevention has been left behind.

The promised Australian Centre for Disease Control (ACDC) is an opportunity to get Australia back to the forefront. To do that, the ACDC

must have chronic disease as a top priority, not a distant second to preventing infectious disease. And it needs to be at the heart of a new national system for prevention.

The ACDC should be a strong, independent, expert voice. It should advise governments on overarching, five-year national prevention strategies. It should weigh the evidence, assessing what works and setting priorities for prevention research.

To have the biggest impact, the ACDC must be set up the right way, and have its advice built into government decision-making.

The ACDC must operate independently, to keep it insulated from vested interests. It must enable collaboration: between levels of government, across government portfolios, and with communities. It will also be vital for the ACDC to have the right capabilities, and enough funding to fulfil its functions.

Then, federal and state governments will need to do their part. They should commit to jointly funding effective prevention programs identified by the ACDC, and to considering regulatory changes that the ACDC recommends.

So that the public know about the benefits of prevention, and to counteract lobbying by vested interests, the ACDC's advice should be public.

The prize on offer is enormous: the potential gains to the health system and the wider economy run to tens of billions of dollars, and the quality of life of millions of Australians would be improved.

It's a long way back to the top for Australian prevention policy, but the ACDC could put us on the highway to health.

## Recommendations

The Australian Centre for Disease Control should provide expert, independent advice, and tackle chronic disease as a top priority.

To succeed, it will need the right role, structure, and resources.

### A clear role

The legislation for the ACDC should specify four key roles:

- Providing advice on the national prevention strategy.
- Maintaining a schedule of cost-effective prevention interventions that are supported by evidence.
- Identifying regulatory reforms with significant benefits.
- Advising national research funding bodies on preventive research priorities that support the goals of the national strategy.

The ACDC's advice on the national strategy, effective interventions, and regulatory reforms should all be tabled in Parliament.

### Set up for success

The ACDC must have the right structure, skills, and resources to do its work well, including:

- Independence enshrined in legislation.
- A structure that supports collaboration across portfolios and between Australia's governments.
- A strong focus on equity and engagement with diverse communities.
- A multidisciplinary board.
- Enough funding to hire a dedicated, specialist staff, with the right capabilities and the capacity to produce a large amount of high-quality analysis.

### Sustained priorities and predictable funding

For the ACDC's advice and analysis to have the maximum impact, governments must stick to a stable strategy, and commit to adequate and predictable funding for prevention:

- Updating the national prevention strategy every five years.
- Agreeing to a national funding deal to deliver initiatives on the ACDC's prevention schedule, with funding increasing over time.

## 1 There will be an Australian Centre for Disease Control

In 2020, then federal opposition leader Anthony Albanese pledged that, 'A Labor government will establish an Australian Centre for Disease Control'.<sup>1</sup>

The idea of an ACDC is not new, but 2022 marked the first time that an elected government has formally committed to establish one.<sup>2</sup>

The commitment, as part of Labor's election platform, proposed that an ACDC would work on pandemic preparedness, lead the federal response to infectious disease outbreaks, and seek to prevent both non-communicable and infectious diseases.<sup>3</sup>

### 1.1 Chronic disease prevention policy should be a top priority

A consultation paper on the ACDC proposed establishing it in two phases. The first phase would be operational from 2024 and involve three functions, all of which relate to infectious disease.<sup>4</sup>

In the ongoing COVID-19 pandemic, it is not surprising that policy makers are giving priority to infectious disease. But in the long run, the payoff from effective chronic disease prevention could be much larger. This report focuses on this part of the CDC's role.

We also focus on the ACDC's role in informing government policy: providing advice that forms the basis of government strategy, investment, and regulation.

Government's role here is crucial. Our risk of developing chronic disease isn't just about our genetics and our choices. It is strongly influenced by our environment.

Everything, from where we live, to where we shop, to how we travel, to the air we breathe, can have an impact on our health. The environment around us can make it much harder to be healthy, and it is shaped by many forces, such as government policies, and industries that actively promote unhealthy foods, drinks, and behaviours (Chapter 6).

As this report shows, risk factors for chronic disease are rising, making it harder to stay healthy. Most Australians face some of these risks, but they are greater for disadvantaged groups, who often lack the resources to change or avoid an unhealthy environment. For example, not everyone can get affordable, healthy food, move out of a polluted area, or air-condition their home in a heat wave (Section 2.1).

There is a role for government policy when things outside people's control harm their environment and their health. Governments can step in to make healthier choices easier, and the majority of Australians support this role.<sup>5</sup> There are already many ways that government policies do this, but this report shows that they can and should do more.<sup>6</sup>

- 
1. Albanese (2020).
  2. McCall et al (2013).
  3. Department of Health and Aged Care (2022a).
  4. Specifically, '...further developing the National Medical Stockpile; developing a national enhanced communicable disease surveillance and emergency management system; communicable disease surveillance, prevention, and response': see Department of Health and Aged Care (2022b).

- 
5. Almost two thirds of Australians agree that governments have a large, or very large, role to play in maintaining health: The Australia Prevention Partnership Centre (2021).
  6. Government policies range from occupational health and safety (OHS) laws, through to health standards for new buildings, and programs that promote healthy eating: see, respectively, Department of Employee and Workplace Relations (n.d.), Australian Building Codes Board (2019) and Health Star Rating (2020). Many health policies involve coordination between the federal and state governments.

In addition to informing government policy, the ACDC will have important operational roles, for example in public communications and education, managing data, and training public health professionals. But because government policy is so important, and falling so far short of where it should be, we have focused on prevention policy.

This report shows that:

- **Chronic disease is a huge problem** that will get worse if it's left unchecked (Chapter 2).
- **Prevention can reduce this burden**, but Australia is not doing enough, and is falling behind other countries (Chapter 3).
- **Three barriers block action**: short-termism (Chapter 5), vested interests (Chapter 6), and poor coordination (Chapter 7).
- **The ACDC can overcome these barriers** if it has the right role (Chapter 8) and if governments set it up for success (Chapter 9).

While the recommendations in this report are specific to the role an ACDC could play in chronic disease prevention, an ACDC will also tackle infectious diseases. The recommendations are all compatible with both roles.

## 2 The burden of chronic disease is big, and growing

Australians' life expectancy is one of the highest in the world, but so is the number of years we can expect to live with chronic disease. Chronic disease is by far the biggest part of Australia's disease burden, and its impact is growing. Already, half of Australians live with at least one chronic disease.

The direct cost of treating chronic disease is more than \$70 billion a year: more than is spent on all primary healthcare in Australia.<sup>7</sup> And the full cost of chronic disease is much bigger. Including human costs for those living with chronic disease, or caring for them, along with broader economic costs, the total annual cost of chronic disease is well over \$100 billion, and growing.<sup>8</sup>

What's worse, the burden of chronic disease falls disproportionately on the most disadvantaged.

The burden of chronic disease will get even heavier unless prevention is made a priority. Obesity has risen dramatically in recent decades. Dietary risk factors and rates of sedentary behaviour remain stubbornly high. Measures of mental health are getting worse, at a worrying rate.<sup>9</sup> In addition to these risk factors, which have been understood for a long time, there is new evidence about other threats to our health.

### 2.1 The chronic disease burden is big and growing

Chronic diseases – long-term diseases such as cancer, cardio-vascular diseases, diabetes, chronic obstructive pulmonary disease, and mental health conditions (Box 1) – are by far the biggest impost on the health

of Australians, causing much more illness, death, and disability than infectious diseases and injury.

#### Box 1: What is a chronic disease?

Chronic diseases are often called non-communicable diseases, or long-term conditions.

According to the Australian Institute of Health and Welfare:

*Chronic conditions are generally characterised by their long-lasting and persistent effects. Once present, they often persist throughout a person's life, so there is generally a need for long-term management by individuals and health professionals.<sup>a</sup>*

Common examples of chronic disease include cancer, cardio-vascular diseases, diabetes, chronic obstructive pulmonary disease, asthma, arthritis, osteoporosis, mental health conditions, and the consequences of injuries.

a. AIHW (2018).

Chronic conditions make up 85 per cent of the total burden of disease in Australia,<sup>10</sup> and contribute to nearly 9 in 10 deaths.<sup>11</sup>

Four chronic conditions – cancer, cardiovascular diseases, musculoskeletal conditions, and mental and substance-use disorders – cause more than half of the total burden of disease in Australia,<sup>12</sup> and

7. Grattan analysis of AIHW (2021a).

8. Grattan analysis of various sources. See Figure 2.5 on page 12.

9. R. Wilkins et al (2022, p. 122).

10. OWID (n.d.).

11. AIHW (2022a); and IHME (2022).

12. AIHW (2021b, p. iv).



almost half the years lived with disability.<sup>13</sup> This represents 16 times the number of years lived with disability caused by communicable diseases (Figure 2.1).

The burden of chronic disease in Australia has increased by 38 per cent over the past three decades.<sup>14</sup> And the prevalence of many chronic diseases is continuing to rise (Figure 2.2 on the next page). Today, almost half of us live with one chronic disease, and almost half of Australians aged over 65 have two or more.<sup>15</sup>

Unlike short-term health issues, such as many injuries and infections, chronic diseases rarely go away and often deteriorate over time. Without careful management, they often progress to cause serious ill-health and disability.

The impact of chronic diseases on Australians' quality of life is huge. People with multiple conditions are six times more likely to suffer some form of disability, restriction, or limitation. They are eight times more likely to report high levels of psychological distress. Almost 9 in 10 report recently suffering physical pain.<sup>16</sup>

Chronic conditions also exacerbate the impact of infectious diseases. The COVID-19 pandemic has made this clear – people with chronic conditions are more likely to have severe illness from COVID-19, have higher rates of complications, and a greater risk of death.<sup>17</sup>

13. IHME (2022).

14. OWID (n.d.).

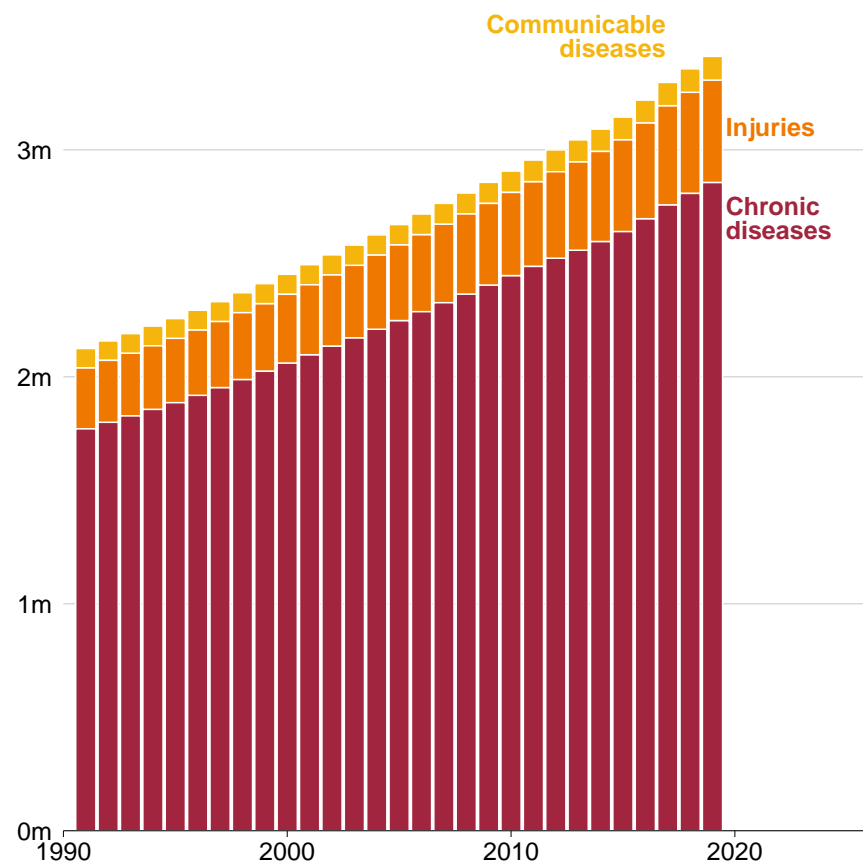
15. ABS (2022a).

16. AIHW (2022a).

17. For example, although about 50 per cent of Australians have one or more chronic conditions, pre-existing chronic conditions were recorded on the death certificates of 80 per cent of Australians who died from COVID-19 by November 2022: ABS (2022b).

**Figure 2.1: Chronic disease is by far the biggest component of Australia's disease burden**

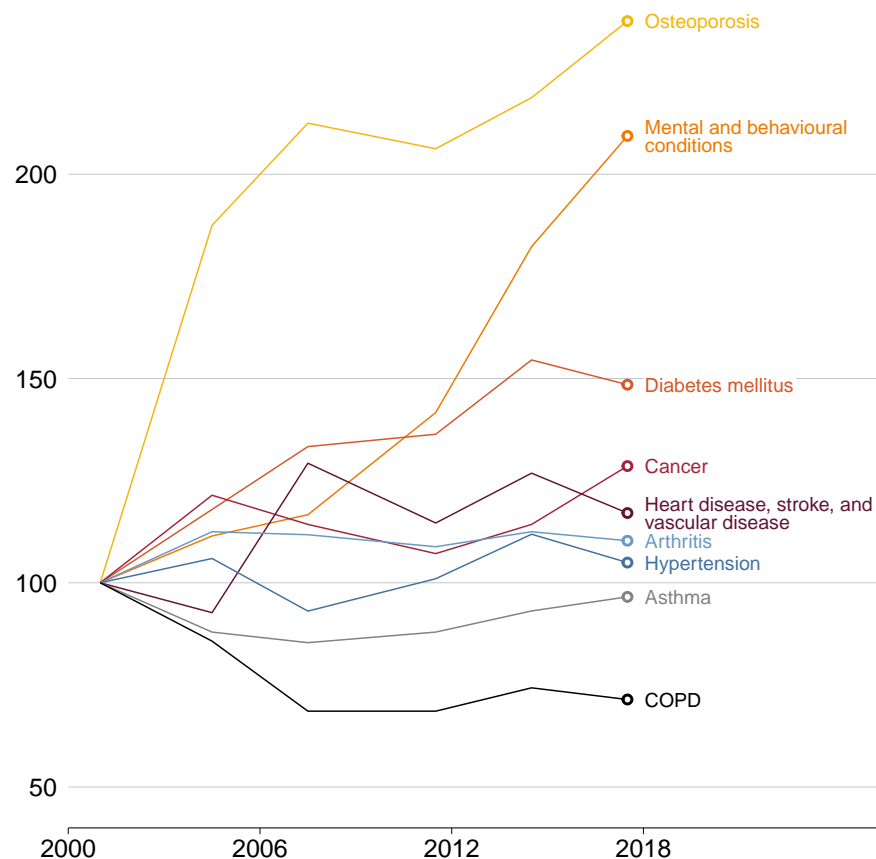
Total number of years lived with disability annually



Note: Communicable diseases include maternal, neonatal, and nutritional diseases.

Source: IHME (2022).

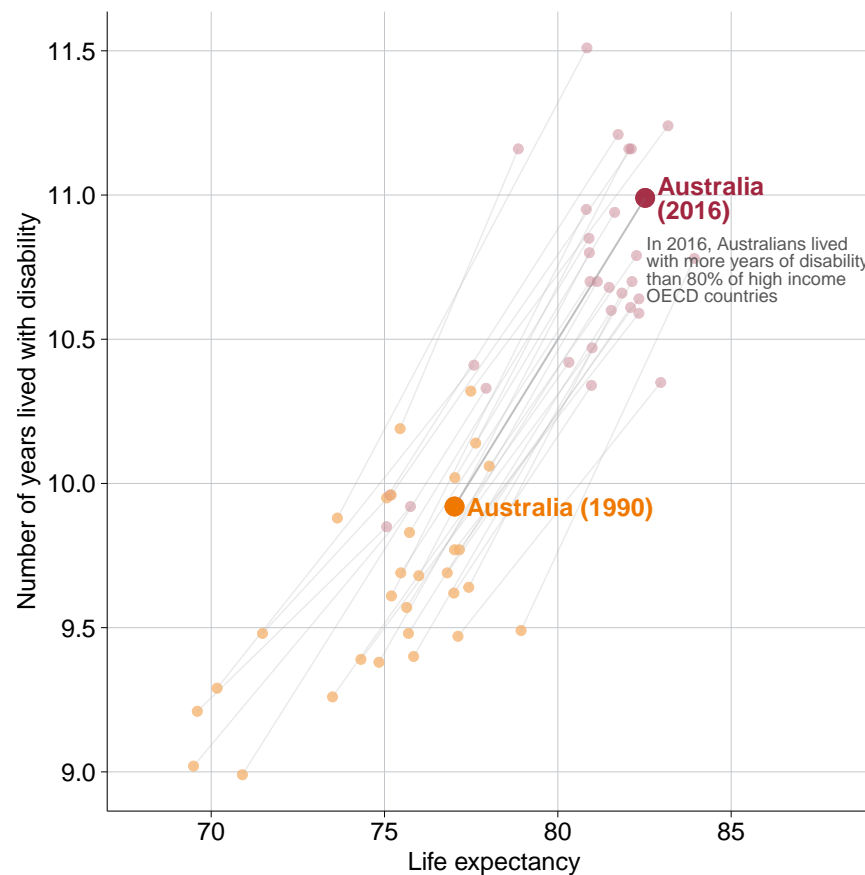
**Figure 2.2: Rates of many chronic diseases are rising in Australia**  
Indexed change in per capita incidence of chronic disease (2001 = 100)



Notes: COPD = Chronic obstructive pulmonary disease. Back problems, hayfever, and kidney disease are excluded. Because disease rates are self-reported, some change may be influenced by changing awareness of different conditions. There are many other rapidly growing causes of morbidity and mortality in Australia, such as dementia; however, this chart is limited to diseases included in the National Health Survey.

Source: ABS (2018a).

**Figure 2.3: Longer lives have come with more sickness**  
Expected years lived with disease or disability, by country, in 1990 and 2016



Note: Only high income OECD countries are included.

Source: OWID (2018).

Australians' life expectancy is one of the highest in the world. But of the five years we have gained since 1990, one will be lived with disease or disability (Figure 2.3 on the preceding page).<sup>18</sup> As our population grows bigger and older, the total number of years being lived in disability are rapidly climbing: from 500,000 in 2000 to 700,000 in 2019.<sup>19</sup> On average, Australians are now spending an eighth of their life in ill-health.

It is time to focus on living in better health, not just living longer.

## 2.2 There are large health system and economic costs

This growing burden of chronic disease creates huge costs for Australia's health system: more than \$70 billion annually.<sup>20</sup> This is more than the entire amount spent each year on primary healthcare in Australia from all sources.<sup>21</sup>

And if people are unable to work due to disability or chronic illness, this creates an economic cost. Compared to people with no long-term conditions, people with chronic conditions are 60 per cent less likely to participate in the labour force.<sup>22</sup> People with chronic diseases are likely to miss more days of work each year.<sup>23</sup> A lower employment rate, reduced productivity, absenteeism, and early retirement contribute to a labour market loss of about \$1,700 per person per year in Australia, 30 per cent more than the OECD average.<sup>24</sup> The OECD has estimated

that between 2020 and 2050, obesity and overweight will reduce Australia's GDP by more than 3 per cent.<sup>25</sup>

## 2.3 Modifiable risk factors are a big contributor to chronic disease

In many cases, chronic disease isn't inevitable. Instead, it is caused by long-term risks that can be changed. About 38 per cent of the burden of chronic diseases is caused by these modifiable risk factors, such as smoking, obesity and overweight, poor nutrition, or social isolation.<sup>26</sup>

For example, smoking increases the likelihood of lung cancer by 15-to-30 times,<sup>27</sup> and smokers are about four times more likely than non-smokers to die from heart disease.<sup>28</sup> Obesity increases the risk of type two diabetes onset by more than 10 times.<sup>29</sup> Alcohol consumption increases risks of six kinds of cancer by between 1.3 and 5 times.<sup>30</sup>

The direct cost to Australia of managing and treating chronic diseases caused by modifiable risk factors is estimated at well over \$20 billion per year (Figure 2.4 on the next page). The total preventable economic cost may be as high as \$160 billion per year (Figure 2.5 on the following page).

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18. On average. Life expectancy increased by 5.5 years from 1990 to 2016, while life expectancy with disease and disability increased by 1.1 years: OWID (2018).

19. Exact figures are 504,000 and 703,000: IHME (2022).

20. Grattan Institute analysis of AIHW (2021a).

21. AIHW (2021c).

22. AIHW (2009).

23. OECD (2019, pp. 25–26).

24. Figure has been inflated to 2021 dollars and converted from \$USD. National Food Strategy (2021, p. 91).

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25. OECD (2019, p. 27).

26. AIHW (2021d).

27. Centres for Disease Control and Prevention (2021).

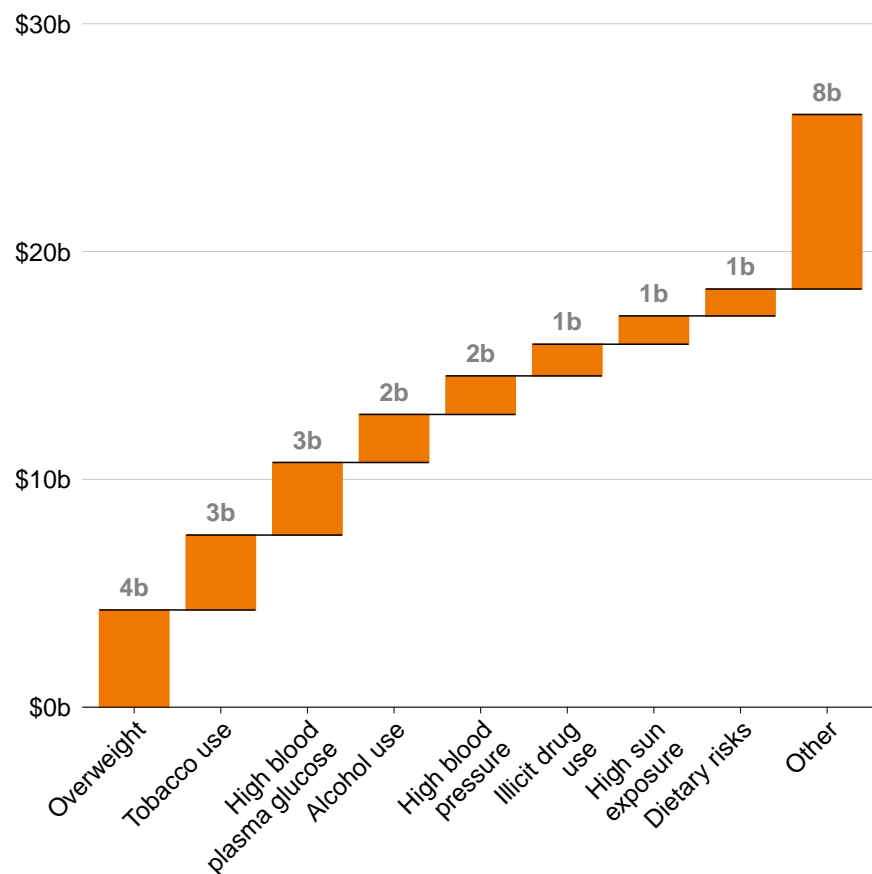
28. Heart Foundation (n.d.).

29. European Society of Cardiology (2020); and Barnes and Coulter (2011).

30. US CDC (2022a); and National Cancer Institute (2022).

**Figure 2.4: Chronic diseases caused by modifiable risk factors create significant costs to the health system**

Estimated annual cost to the Australian health system, by modifiable risk factor



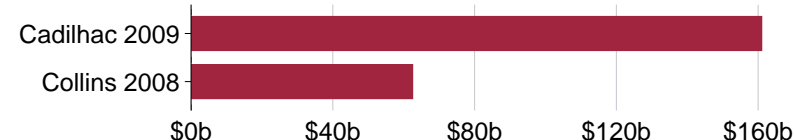
Notes: 'Overweight' includes cost attributable to overweight and obesity. The 'Other' category includes impaired kidney function, low bone mineral density, child abuse and neglect, physical inactivity, low birth weight and short gestation, occupational exposures and hazards, unsafe sex, intimate partner violence, high cholesterol, air pollution, iron deficiency, and bullying victimisation.

Source: AIHW (2022b).

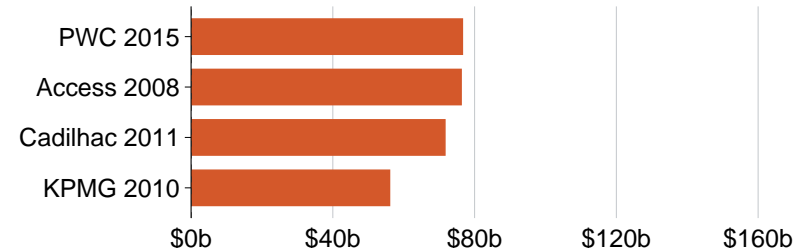
**Figure 2.5: The broader economic costs of chronic disease risk factors are huge**

Estimated total annual economic cost attributable to key modifiable risk factors, by study

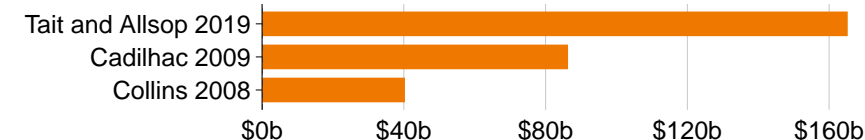
#### Multiple risk factors



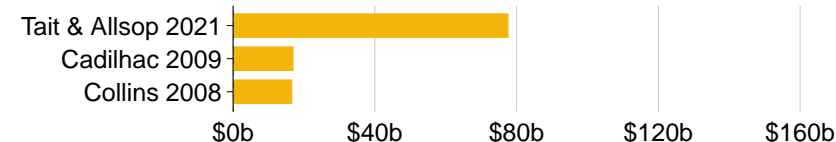
#### Overweight & obesity



#### Tobacco



#### Alcohol



Notes: All values are inflated to 2021 dollars. Where studies included economic cost estimates for the value of healthy life years lost, this figure was included in the estimates. Where studies did not include a cost estimate for the value of healthy life years lost, we estimated this cost using the statistical value of a life-year as recommended by ASCC (2008).

Sources: Crosland et al (2019), Tait and Allsop (2019) and Tait and Allsop (2021).



## 2.4 The burden is likely to grow

There is no time to waste. The burden of chronic disease is already growing, and will grow further. While some of this growth will be unavoidable due to an ageing population, much of it is preventable. The prevalence of some modifiable risk factors continues to rise, painting a bleak picture of the future of chronic disease in Australia.

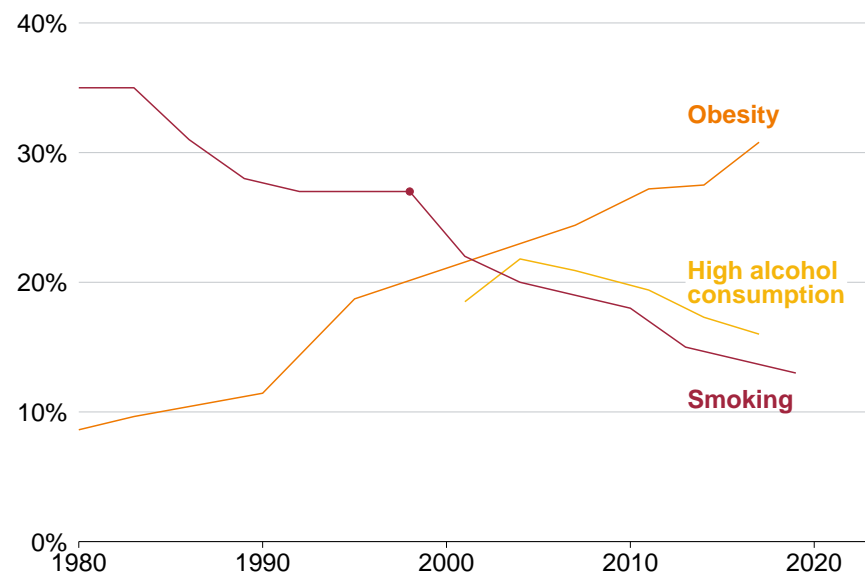
Australia has been successful in reducing some risks, such as smoking, and to a lesser degree high alcohol consumption. But other risk factors are either growing, or remain stubbornly high.

Rates of obesity have tripled, from less than 10 per cent of adults in 1980 to more than 30 per cent today (Figure 2.6). More than two thirds of Australians are overweight or obese, and this figure has risen consistently over the past decade.<sup>31</sup>

Dietary risk factors and rates of sedentary behaviour also remain stubbornly high. The most recent National Health Survey, released in 2018, found that more than 95 per cent of Australian adults did not eat the recommended amounts of fruit and vegetables. Only 15 per cent of Australians aged 18-64 did the recommended amount of physical activity.<sup>32</sup>

And there is growing concern about mental illness among Australians. Since 2001, self-reported mental health measures among Australians have rapidly deteriorated, particularly among younger age groups.<sup>33</sup>

**Figure 2.6: Some risk factors are being addressed, but others are rising**  
Proportion of adult Australians with relevant risk factor



Notes: The dot represents a series break. High alcohol consumption refers to consumption above the lifetime risk guidelines of no more than two standard drinks per day.

Sources: Greenhalgh et al (2022) and AIHW (2020).

31. AIHW (2022c).

32. ABS (2018b).

33. R. Wilkins et al (2022).

## 2.5 The burden is unfairly distributed

The burden of chronic disease falls most heavily on the most disadvantaged. The most disadvantaged fifth of Australians are twice as likely to have two or more chronic diseases compared to the least disadvantaged fifth of Australians (Figure 2.7).

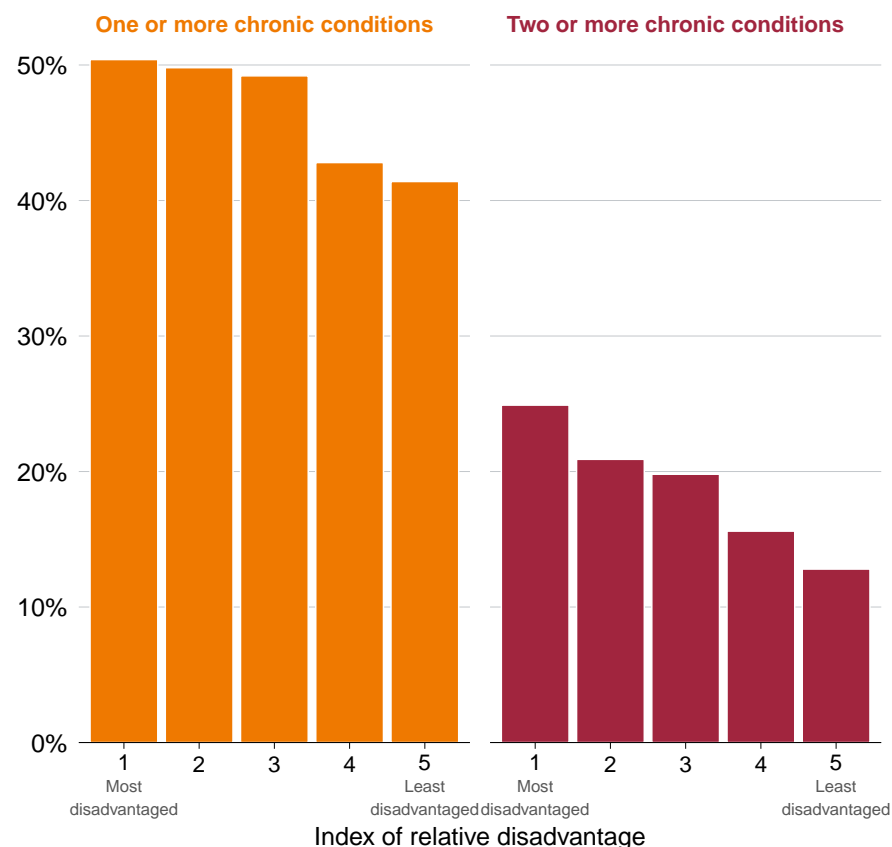
Indigenous Australians, poorer Australians, those with less education, and those living in the most rural parts of the country face the biggest barriers to health and are far more likely to be diagnosed with many common chronic diseases.<sup>34</sup> Chronic diseases account for about 80 per cent of the life expectancy gap between Indigenous and non-Indigenous Australians.<sup>35</sup>

The risk factors for chronic disease discussed above (Section 2.3) are almost all higher for disadvantaged groups (Figure 2.8 on the next page). Once these risks result in disease, it's already too late to achieve fair health outcomes. That means gaps in illness and life expectancy cannot be closed without better prevention.

While eating healthier foods or quitting smoking may seem like a personal choice, the settings we live in can make healthy choices much harder. Australia's obesity rate has tripled over the past 40 years, and that can't be explained by people caring less about their health, or losing their willpower. In the same period, we quit smoking at record rates and became much more sun-smart.<sup>36</sup>

**Figure 2.7: Disadvantaged Australians have higher rates of chronic disease**

Rates of chronic disease prevalence by index of socio-economic disadvantage



Source: ABS (2022a).

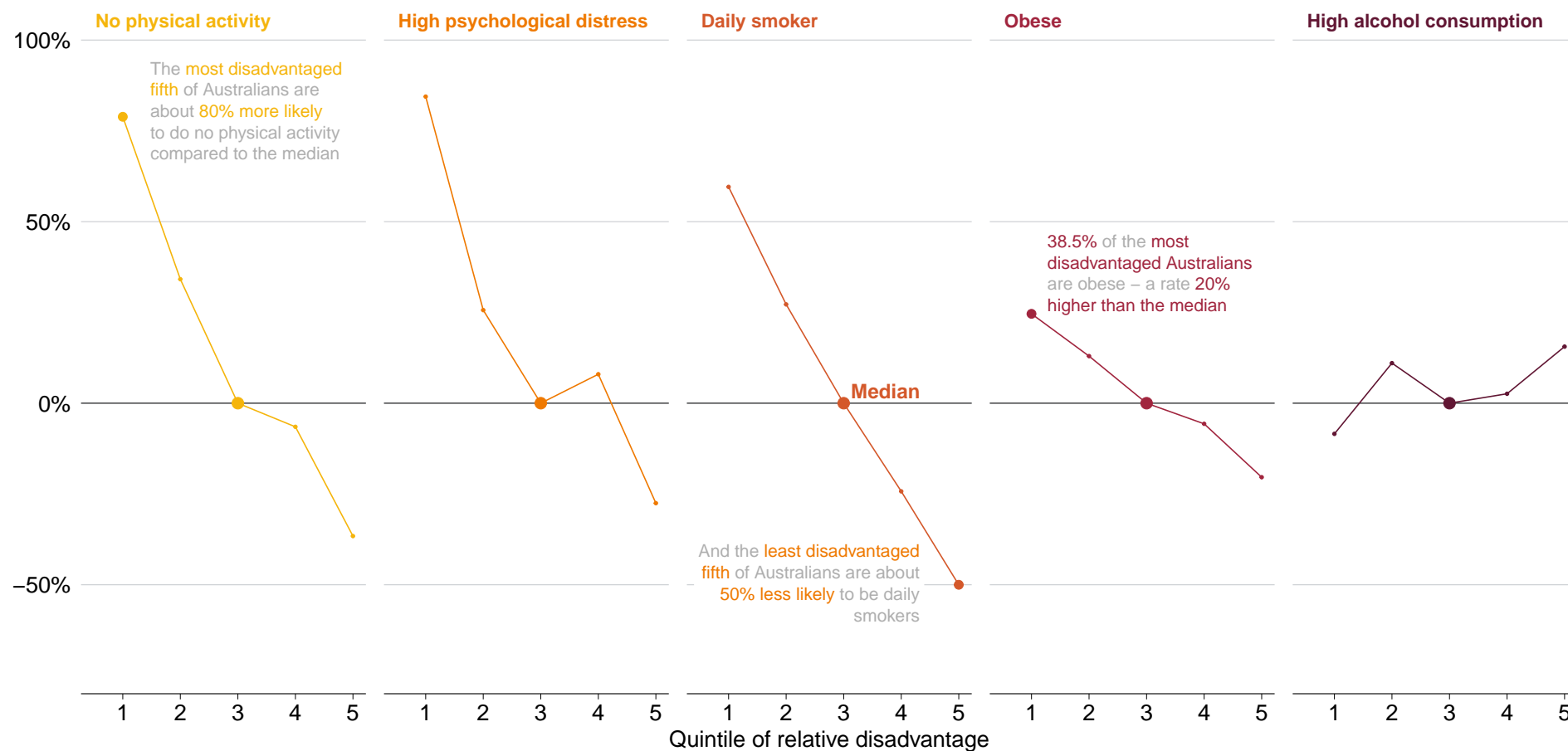
34. Grattan analysis of ABS (2018b) and AIHW (n.d.).

35. AIHW (2011).

36. Witten and Pearce (2016). For further details of smoking rates and skin cancer reductions, see Box 4 on page 20.

**Figure 2.8: Disadvantaged Australians are more likely to develop most risk factors for chronic disease**

Likelihood of developing a chronic disease risk factors compared to the median, by SES quintile



Note: High alcohol consumption refers to consumption above the lifetime risk guidelines of no more than two standard drinks per day.

Source: Grattan analysis of ABS (2018b) and PHIDU (2021).

Instead, more Australians have become obese because the settings we live in have changed. We have less time to prepare healthy food, are surrounded by ever-more advertising of unhealthy options, and are marketed more processed food than ever before, with bigger serving sizes.<sup>37</sup>

These changes have affected most Australians, but it is harder for many disadvantaged Australians to counteract them. For example, more disadvantaged Australians have fewer healthy options within reach or that they can afford, and can be surrounded by more advertising for less healthy options.<sup>38</sup>

## 2.6 New risks are emerging

This chapter has shown the huge impact of risks that have been well-known for decades, such as obesity, tobacco, and alcohol, with many lives and billions of dollars at stake. But this is only part of the picture. Evidence is rapidly building about other risk factors that are damaging our health, wealth, and wellbeing.

In coming years, Australia will need to closely monitor new evidence on harms such as air quality (Box 2),<sup>39</sup> social media use,<sup>40</sup> social isolation,<sup>41</sup> racism,<sup>42,43</sup> and ultra-processed foods.<sup>44</sup>

Already, we can be confident that these risks are harming Australians. For some of these risks, the impact is hard to reliably quantify, but this will change as the evidence develops, further strengthening the case for more action on prevention.

37. Baker (2014).

38. Sainsbury et al (2019); and CAFCA (2011).

39. Janjua et al (2021).

40. Rounsefell et al (2019).

41. Rohde et al (2015).

42. Victorian Department of Health (2022).

43. Lundback et al (2019).

44. Leffa et al (2020).

### Box 2: Other countries are leading on indoor air quality

Indoor air quality can be tainted by a range of pollutants, such as allergens, mould, particulates and other harmful gases.<sup>a</sup> The pandemic has also highlighted the importance of improving indoor air quality to reduce transmission of infectious diseases.<sup>b</sup>

The impact of poor indoor air quality is big. The US Environmental Protection Agency estimates poor indoor air quality contributes to as many as 50 per cent of all respiratory illness. There is evidence poor quality air can impair cognitive performance,<sup>c</sup> and increase risks of cancer, and lung and other respiratory illnesses.<sup>d</sup> In Australia, the costs of poor indoor air are estimated to be about \$12 billion per year.<sup>e</sup>

Australia has taken some important steps to regulate indoor ventilation in high-risk settings such as aged care facilities<sup>f</sup> and schools, to reduce viral transmission and provide a 'comfortable' environment.<sup>g</sup> But other countries are going further, embedding Indoor Air Quality Standards (IAQS) in legislation.<sup>h</sup> For example, France has mandated CO2 monitoring in indoor spaces, starting with school classrooms, daycare facilities, and restaurants,<sup>i</sup> And in Belgium, all publicly accessible areas will be required to have a clearly displayed CO2 sensor by 2024, with additional voluntary targets for indoor air quality proposed.<sup>j</sup>

a. DCCEEW (2021a).

b. Mousavi et al (2020) and Morawska et al (2021).

c. Wang et al (2021).

d. Tran et al (2020).

e. DCCEEW (2021a).

f. Aged Care Quality and Safety Commission (n.d.).

g. DCCEEW (2021b).

h. UN Environment Program (n.d.).

i. Nous Aérons (2023).

j. Belgian DHFCSE (n.d.).



### 2.6.1 It's not sustainable to continue down the same path

A recent Grattan Institute report showed how general practice can be supported to help people manage their chronic conditions better, which will help them live longer and healthier lives.<sup>45</sup>

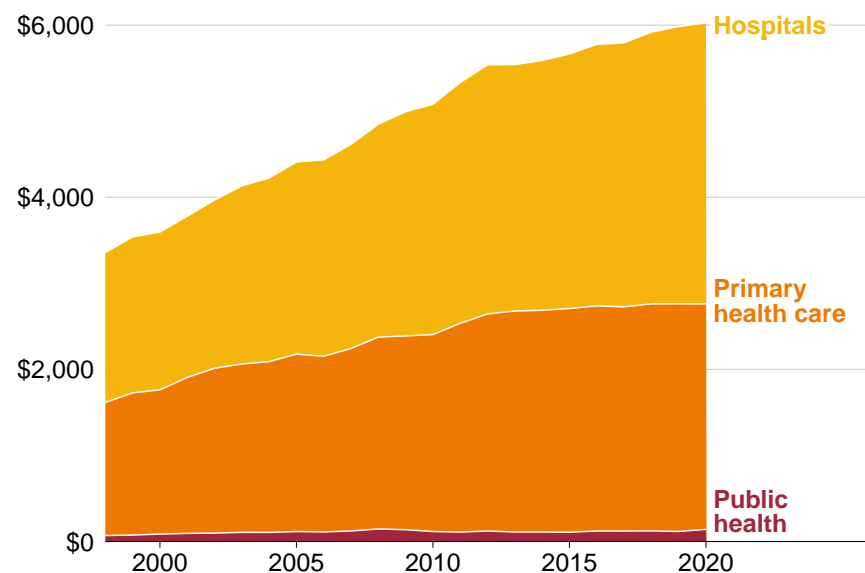
But just managing illness better won't be enough.

While hospital spending has skyrocketed, and primary care spending has grown, investment in public health and prevention has languished (Figure 2.9).

Continuing to focus almost all health spending on sickness instead of health can't go on forever. To reduce the cost of illness to individuals, their families, government budgets, and the economy, we have to get serious about prevention.

As the next chapter will show, prevention efforts haven't stalled because they don't work. In fact, there are many things governments can do that would keep people healthier for longer.

**Figure 2.9: It's not sustainable to only treat Australians once they're sick**  
Yearly per capita expenditure on hospitals, primary healthcare, and public health



Source: AIHW (2021c).

Notes: Primary healthcare spending excludes spending on public health. Includes government and non-government expenditure.

45. Breadon et al (2022).

### 3 Prevention policy can work

The good news is that, because so much of the burden of chronic disease is caused by modifiable risk factors, there are ways to stop people from developing chronic disease. This would have a huge payoff, by reducing health system and economic costs, and improving people's quality of life.

And there are lots of things Australian governments can do to make a difference. There are many ways to prevent chronic disease that are supported by evidence, and have a very high expected payoff. When they are selected and implemented well, these initiatives are often much more cost-effective than other health interventions that are routinely funded by government.

#### 3.1 Prevention can cost-effectively reduce chronic disease

Prevention can reduce the chronic disease burden. Even small changes to modifiable risk factors can achieve significant health and economic gains across a broad population – as is shown by Australia's past success in reducing rates of smoking and skin cancer (Box 4 on page 20).

Not only do they work, there is strong evidence that many different types of prevention are good value for money (see Box 3 for the different ways prevention can be achieved).

#### Box 3: What is disease prevention?

Disease prevention is often grouped into four categories: primordial, primary, secondary, and tertiary prevention.<sup>a</sup>

- **Primordial prevention** aims to prevent the development of risk factors, often by focusing on the wider determinants of health and promoting healthy environments.
- **Primary prevention** aims to reduce risk factors once they have developed, such as a poor diet or high blood pressure, before they lead to the development of illness.
- **Secondary prevention** focuses on the early detection and management of illness, for example through screening to detect signs of disease early.
- **Tertiary prevention** aims to manage diseases after they have been diagnosed, to prevent further complications.

This report focuses on primordial and primary prevention, which we refer to as 'prevention'. This is about stopping disease before it starts. But it can also slow the progression of disease.

For example, reducing salt intake across the population would result in fewer people getting high blood pressure. At the same time, it would stop many existing cases of high blood pressure from getting worse (secondary prevention).

a. Department of Health and Aged Care (2021a, p. 23), Kisling and J (2022). A fifth category, quaternary prevention, is also sometimes included.

An Australian study of 243 different interventions in healthcare found that the ones focused on prevention were mostly cost-effective. The median initiative cost about \$21,500 for each healthy year of life gained. This is well below typical cost-effectiveness thresholds for health interventions, which often range between \$50,000 and \$100,000, or even higher.<sup>46</sup>

The study found that, compared to prevention, early detection and treatment cost about 25 per cent more for each quality adjusted year of life gained. Managing diseases after they are well established cost nearly twice as much as prevention.<sup>47</sup> Similar findings have been made in other countries.<sup>48</sup>

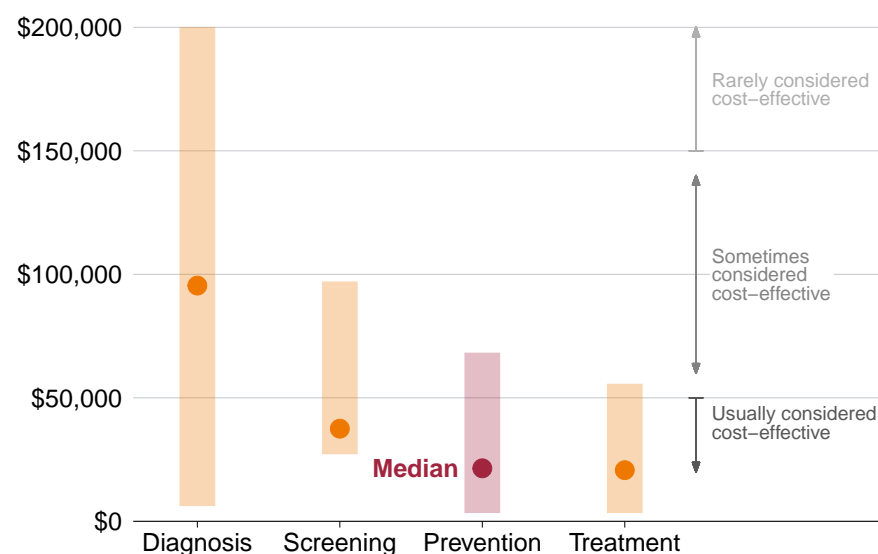
There is also good evidence that government-led programs, often targeted at broad population groups, are cost-effective and may do more to reduce health inequalities than initiatives in healthcare settings.<sup>49</sup>

For example, in 2010 a major Australian review assessed the cost-effectiveness of 150 prevention interventions and concluded that many were highly cost-effective.<sup>50</sup> In the UK, the National Institute for Healthcare and Excellence summarised cost-effectiveness estimates for preventive programs between 2006 and 2016, and similarly found

46. Although PBAC does not have a specific cost-effectiveness threshold, drugs with a cost-effectiveness of more than \$50,000/QALY are rarely funded: Taylor and Jan (2017b). In the UK, a cost-effectiveness threshold of \$93,000 is used: Paulden (2017). And using the WHO's method of 3x GDP per capita, Australia's cost-effectiveness threshold would be more than \$250,000.
47. Primary prevention cost \$18,900 per health adjusted life year gained, compared to \$23,100 and \$36,600 for secondary and tertiary prevention respectively. Values have been inflated to 2020 dollars.
48. Cohen et al (2008), Vliet et al (2020), Tengs et al (1995).
49. Masters et al (2017), Owen et al (2012), Bertram et al (2018), Owen et al (2018), Capewell and Graham (2010).
50. Vos et al (2010).

**Figure 3.1: Many prevention initiatives are cost-effective**

Intervention cost per disability adjusted life year avoided, by treatment type



Notes: Values have been inflated to 2021 dollars. Thresholds for cost effectiveness are approximate only, because estimates vary considerably: Iino et al (2022). For example, the Australian Pharmaceutical Advisory Group is more likely to approve drugs below a threshold of \$50,000, which is often used as a threshold of cost-effectiveness: Taylor and Jan (2017a). In the UK, the National Institute for Health Care and Excellence (NICE) considers a threshold of about \$95,000 per quality-adjusted life-year (QALY) to indicate cost-effectiveness: Paulden (2017). In the US, thresholds of \$150,000-\$225,000 have been used: Ubel et al (2003). The WHO recommends a threshold of about three times GDP per capita, equating to about \$250,000 per QALY, however this has typically been proposed as appropriate for low- and middle-income countries: M. Griffiths et al (2015).

Source: Dalziel et al (2008).

#### Box 4: Australia has succeeded in reducing rates of smoking and skin cancer

Many public health issues seem too big to tackle. But Australia's past successes show that, with the right approach and investment, we can make enormous gains, as the following examples show.

**Smoking rates** have consistently declined over the past 50 years in Australia. In the 1970s, more than 40 per cent of the adult population smoked. Today it is about 11 per cent.<sup>a</sup>

This reduction was not inevitable: across Europe, about 30 per cent of men and 22 per cent of women smoke.<sup>b</sup> In the highest-smoking countries, such as Greece, about 35 per cent of people smoke – about the same rate as Australia in the 1980s.

Smoking rates have declined in Australia largely due to concerted efforts by governments and NGOs. It has taken many decades, and many policies: gradual increases in taxation, advertising bans, plain-packaging regulation, the introduction of smoke-free environments, advertising campaigns, quit-smoking services, and others.<sup>c</sup>

Often these steps were taken in the face of significant opposition from vested interests.<sup>d</sup> Between 1998 and 2021, the two largest cigarette

manufacturers donated more than \$4.3 million to Australian political entities, and campaigned intensely against many regulations.<sup>e</sup>

There is much more that can, and should, be done to reduce smoking rates further.<sup>f</sup> But Australia is reaping the rewards of past actions: the first year of the national tobacco campaign alone was estimated to save 55,000 lives.<sup>g</sup> Thousands more are likely to have been saved by tobacco taxes, as well as plain packaging and other regulations.<sup>h</sup>

**Better sun protection** has also had immense public health benefits.<sup>i</sup> Australian governments have supported many educational campaigns over several decades to promote sun-smart behaviour,<sup>j</sup> including the Slip! Slop! Slap! campaigns, and the SunSmart Program in primary schools.<sup>k</sup>

These campaigns have changed behaviour over time, by influencing social norms and environmental factors, such as shade availability.<sup>l</sup> Today's risk of being diagnosed with melanoma by the age of 30 is about half what it was in the 1990s.<sup>m</sup> If diagnosis rates remained where they were in 1997, about 38,000 more Australians would have been diagnosed with melanoma in 2022.

a. Greenhalgh et al (2022).

b. Daily or occasional smokers: Eurostat 2021.

c. Department of Health and Aged Care (2021a); Hill and Carroll (2003); and Intergovernmental Committee on Drugs (2012).

d. Moodie et al (2016).

e. Donations by Phillip Morris and British American Tobacco; regulations resisted include plain packaging: Greenhalgh et al 2022.

f. Grogan and Banks (2020).

g. Hurley and Matthews (2008).

h. Wilkinson et al (2019).

i. SunSmart (n.d.) and Department of Health and Aged Care (2021a, p. 28).

j. Tabbakh et al (2019).

k. Department of Health and Aged Care (2021a, p. 28).

l. Dobbinson et al (2015).

m. AIHW (2022d).



that a significant majority were cost-effective.<sup>51</sup> Other systematic reviews have reached similar conclusions.<sup>52</sup>

Detailed OECD modelling of prevention initiatives provides concrete examples of the benefits that primary prevention could provide for Australians.

In 2019 and 2021 the OECD released reports on obesity and alcohol that estimated the economic and health benefits of various packages of prevention programs. They found that a communication-focused package<sup>53</sup> of interventions to prevent obesity in Australia would provide a return on investment of about \$4 for every dollar spent between 2020 and 2050.<sup>54</sup> A mixed package<sup>55</sup> of interventions designed to reduce alcohol consumption was even more cost-effective, with an expected return of about \$18 for each dollar spent between 2020 and 2050.

The health benefits would also be significant. Packages for obesity and alcohol were estimated to avoid the loss of almost 4,500<sup>56</sup> and 32,500 disability adjusted life years respectively.<sup>57</sup>

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51. Bertram et al (2018); and Owen et al (2018).

52. Masters et al (2017).

53. Including food labelling schemes, regulation of advertising of unhealthy food to children, and mass media campaigns.

54. Grattan analysis of OECD (2019). This figure is conservative, and the estimate does not include the economic benefit from avoided disability and death.

55. Including alcohol taxation, regulation of alcohol advertising, sobriety checkpoints and alcohol counselling in primary care: OECD (2021).

56. OECD (2019, p. 195).

57. OECD (2021, p. 288).

#### Box 5: What does prevention look like in practice?

Some prevention initiatives, such as stop-smoking advice and counselling, can be delivered at a personal level. Others, such as banning hazardous materials such as asbestos, are delivered population-wide. All aim to reduce the chance of injury, illness, or disease.

Prevention initiatives can also be described by how they are implemented:

- **Regulatory interventions**, such as plain-packaging regulations, food safety laws, or alcohol licensing, are typically laws or bylaws implemented by various levels of government to reduce unhealthy behaviours.
- **Pricing interventions**, such as cigarette or alcohol taxes, aim to discourage the purchase of unhealthy products, or encourage the purchase of healthy ones.
- **Communication and education programs**, such as sun-smart or road-safety campaigns, aim to encourage people to make healthier choices by persuading them of the benefits.
- **Programmatic interventions**, such as stop-smoking counselling, or healthy eating courses for school students, aim to counsel and educate specific population groups.

Most interventions are introduced by governments. Some, such as communication and education programs, are also often run by non-government organisations.

### 3.2 There are some common features of effective prevention interventions

Not every prevention initiative will be good value for money. Prevention interventions that are poorly targeted to a relevant population, or poorly designed and implemented, are unlikely to be worth their cost.<sup>58</sup>

Fortunately, there is no shortage of prevention initiatives which have been shown to be cost-effective, as this chapter has shown. Many share common features, which should guide prevention efforts. They tend to:<sup>59</sup>

1. Be based on the best available evidence
2. Be sustained over time
3. Include well-coordinated packages of interventions, delivered through partnerships
4. Be managed effectively, and evaluated in real time
5. Involve strong communication, to spur behaviour change and build awareness and support for public health interventions.

Many prevention interventions that follow these principles can make large health and economic gains. But as the following chapter shows, Australia is failing to take advantage of many opportunities to reduce chronic disease.

#### Box 6: Salt-reduction programs in the UK had significant health benefits

Between 2003 and 2010, the UK Food Standards Agency developed a voluntary plan with industry to reduce the salt content of many common foods through reformulation (changing the content of manufactured food).<sup>a</sup>

An independent body set salt targets for different food groups, a timeline for industry to reach each target, and developed a consumer awareness campaign. The UK also has a clear ‘traffic light’ system for labelling the salt content of foods.<sup>b</sup>

The program resulted in a significant decline in salt intake across the UK population, from 9.5g a day in 2000-2001 to 8.6g a day by 2008.<sup>c</sup> By 2050, it is estimated that this decline will have averted more than 193,000 cases of premature cardiovascular disease, and added more than 540,000 quality adjusted life years for the UK population.<sup>d</sup> The total healthcare cost savings will be worth more than \$2.8 billion, generating a financial return on investment.<sup>e</sup>

Modelling has estimated that a program achieving similar results would be highly cost-effective in Australia.<sup>f</sup>

a. He et al (2014); and Wyness et al (2012).

b. He et al (2014).

c. Wyness et al (2012).

d. Alonso et al (2021).

e. Value has been inflated to 2021 dollars and converted from pounds: Alonso et al (ibid)

f. Webb et al (2017).

58. Cohen et al (2008).

59. Summarised and adapted from: Frieden (2014) and Crane et al (2022).

## 4 We aren't doing enough

The previous chapter showed that there are good ways to reduce chronic disease. Many prevention initiatives are cost-effective, but Australia is not doing enough.

We spend less on prevention than many other countries. In the past, we led the world in tobacco control, but today we have fallen behind. And while we might be about to catch up on tackling tobacco, we will lag well behind leading countries when it comes to tackling other health threats.

### 4.1 Prevention is underfunded in Australia

In Australia, chronic disease prevention is chronically underfunded.<sup>60</sup> Australia spends less than 2 per cent of annual health expenditure on public health.<sup>61</sup>

This is about \$130 per person on public health each year: less than one-third of what Canada spends, and less than half of what the UK spends. It is also significantly below the OECD average of \$166 per person (Figure 4.1).

A recent study of four national chronic disease systems, including Australia's, concluded that insufficient funding was the the primary politically influenced barrier to better chronic disease prevention.<sup>62</sup>

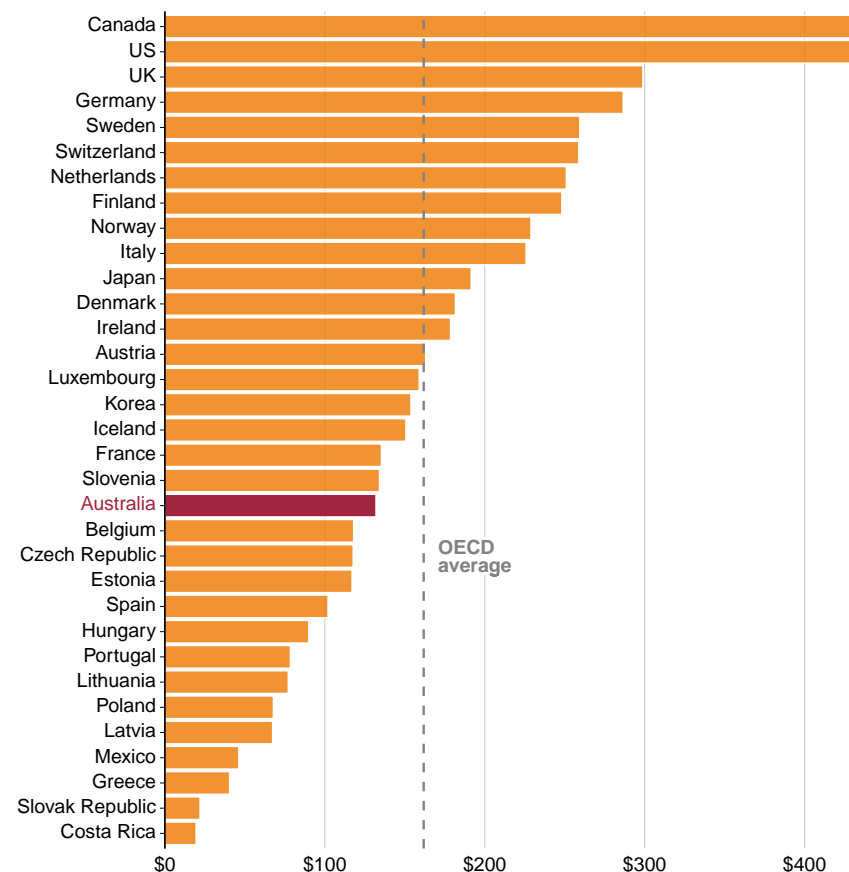
60. Shiell and Jackson (2018); and Sustainable Health Review (2019).

61. Public health expenditure is likely to be substantially greater than 2 per cent in 2020-21, due to the pandemic, but the figures presented refer to longer-term spending averages: see AIHW (2021e). 'Public health' is a broader term than 'preventive health', and includes infectious disease prevention and other public health activities alongside primary prevention. There is no data available on the share of funding allocated to primary prevention: AIHW (2021c).

62. Furtado et al (2018).

**Figure 4.1: Australia spends less than many other OECD countries on prevention**

Annual preventive health spending per capita (\$AUD, PPP adjusted), 2018



Note: PPP = purchasing power parity.

Source: OECD (2022).

Inadequate funding for prevention was highlighted as a key issue in both the 2021 'National Preventive Strategy' and Western Australia's 2019 'Sustainable Health Review'.<sup>63</sup> Both reports backed more than doubling funding to 5 per cent of the national health budget.

Determining the 'right' amount of funding for chronic disease prevention is difficult. But, as Chapter 3 showed, there are cost-effective prevention programs that are currently not funded in Australia.<sup>64</sup> Recent research has found that the public health budget would need be doubled to adequately fund interventions which have previously been found to be highly cost-effective.<sup>65</sup>

It is clear that a well-targeted increase in expenditure on preventive health would be worthwhile, and that current spending levels are insufficient.<sup>66</sup>

## 4.2 Australia has fallen behind

Australia used to be a world leader in some aspects of chronic disease prevention, such as tobacco controls.

A decade ago, Australia was the first country in the world to implement plain-packaging legislation for tobacco.<sup>67</sup> But today, other countries are

leading the way on tobacco controls. New Zealand recently passed a bill referred to as a 'tobacco endgame', legislating a maximum nicotine level for cigarettes, and a ban on sales to people born after 2009.<sup>68</sup> The US also has plans to establish a maximum nicotine level, to make cigarettes less addictive.<sup>69</sup>

Recent Australian announcements about potential new tobacco control reforms, such as updating graphic warnings and making individual cigarettes look unappealing, could help restore our leadership.<sup>70</sup> But tobacco is just one risk factor.

In other areas of disease prevention, such as food policies, Australia has never been a leader and currently trails many comparable countries. At least 85 countries have some form of taxation on sugar-sweetened beverages, but Australia has none.<sup>71</sup>

Forty-three other countries have mandatory, best practice policies to reduce trans-fatty acids in food, because they are a significant risk factor for cardiovascular disease.<sup>72</sup> Australia currently has no policies to reduce trans-fat consumption, and no mandatory labeling regulations to inform consumers about the trans-fat content of foods.<sup>73</sup>

And, although Australians consume on average almost double the amount of salt recommended by the WHO guidelines,<sup>74</sup> our efforts to reduce the amount of salt in our diets have also been weak. Australia does not have mandatory reformulation targets, mandatory front-of-pack labelling, a salt tax, or consumer education programs. A

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63. Department of Health and Aged Care (2021b); and Sustainable Health Review (2019).

64. For examples, see Vos and Carter (2022)

65. Mihalopoulos et al (2021).

66. A similar conclusion was reached in a systematic review of UK public health interventions by NICE in 2012, despite the UK already funding prevention at a significantly higher level than Australia: Owen et al (2012). *'This analysis showed that the public health interventions considered by NICE are generally highly cost-effective... It seems likely that as a nation we are not investing sufficiently in public health interventions.'* A more recent update by NICE found a larger spread of cost-effectiveness of interventions and generally lower cost-effectiveness, but more than 60 per cent were still assessed as cost-effective: Owen et al (2018).

67. Cancer Council (n.d.).

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68. Blakely et al (2022); and Manning (2022).

69. US FDA (2022).

70. Butler (2022).

71. WHO (2022a).

72. Islam et al (2019); WHO (2022b); and Barrett (2023).

73. FSANZ (2017).

74. See: Land et al (2018). High dietary salt intake increasing risks of increasing the risk of hypertension, chronic kidney disease, heart attacks, and strokes, among other illnesses: Queensland Health (n.d.).



study of salt policy in 96 countries found 80 had at least one of these interventions. In many of these countries, salt intake has fallen by more than 10 per cent (Box 6 on page 22).<sup>75</sup>

An international comparison found that Australia went backwards between 2017 and 2022 compared to international best practice in creating healthy food environments and reducing obesity. In 2022, only 6 per cent of policy areas in Australia were assessed as meeting a 'high' level of implementation, compared with 16 per cent five years earlier.<sup>76</sup>

### 4.3 Three key barriers make prevention difficult

The problem is huge, the solutions work, and other countries have shown the way. So, why isn't Australia taking action?

A trifecta of policy challenges make chronic disease prevention a wicked problem:<sup>77</sup>

1. Short-termism makes it difficult to invest in long-term outcomes (Chapter 5).
2. Progress often faces opposition from vested interests (Chapter 6).
3. Coordinated action is challenging (Chapter 7).

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75. Santos et al (2021, Figure 2).

76. Sacks and Mann (2022).

77. The three barriers we present broadly encompass the seven areas highlighted by Littlejohns and Wilson (2019): collaborative capacity, leadership, health equity, implementation, information, resources, and complex systems paradigm (Littlejohns and Wilson (ibid)). Although Littlejohns et al do not include vested interests in their framework, this is well documented elsewhere: Lacy-Nichols et al (2022) and Watson and Martin (2019). The national preventive health strategy also identifies (a different) seven 'enablers': leadership, governance, and funding; prevention in the health system; partnerships and community engagement; information and health literacy; research and evaluation; monitoring and surveillance; and preparedness.

The next three chapters explain these challenges, and how they are currently affecting chronic disease prevention in Australia.

The ACDC is Australia's best opportunity to overcome these challenges, and help Australians lead longer lives, in better health. The final two chapters show how the ACDC can be designed to overcome all three of these long-standing barriers to prevention action.

## 5 Focusing on the future is hard

Prevention efforts are often very worthwhile, but the benefits take time and can be invisible. For governments, which may only remain in office for a short time, prevention often takes a back seat to more pressing issues. And unlike in other policy areas that take time to show gains, there are few guardrails to ensure there is enough action on prevention.

### 5.1 Prevention gains are often delayed and invisible

Investment in prevention allocates scarce resources in the present for benefits in decades to come.<sup>78</sup> For example, better labelling of food may change people's eating habits, and encourage manufacturers to put less salt and sugar in processed food. This would be expected to reduce rates of obesity and heart disease, but may take many years to do so. If smoking rates fall today, it may take decades before lung cancer rates fall.<sup>79</sup>

We tend to under-value these future gains. The term 'discount rate' is often used to describe how people weigh up decisions about the future. We 'discount' the value of things far off into the future as less valuable. For example, if people are offered the choice of being given \$5 today, or \$10 in a year's time, many will choose to take the money today, despite it being a lower amount.<sup>80</sup> The decisions we make about our health and the decisions politicians make about health spending are no different.<sup>81</sup>

Prevention faces another challenge: the gains aren't just delayed, they're invisible. For example, rates of heart disease might be

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78. Although some benefits from prevention can be achieved relatively quickly (such as injury prevention), most benefits are achieved further in the future: Jacques and Noël (2022).

79. Smith et al (2021).

80. Kahneman and Tversky (1979).

81. In fact, we may even discount health to a higher degree than money: Lawless et al (2013).

measurably lower, but there is no way of identifying people who were prevented from developing a disease.

This combination can make investing in prevention a thankless task for politicians.<sup>82</sup> It is no surprise that long-term prevention policy often slips off the national agenda, taking a back seat to issues that are more pressing, or can show results within electoral cycles.<sup>83</sup> Why should a government spend its time and budget on prevention initiatives when future governments will reap the benefits?

A recent multi-country study found that prevention is one of the first areas of spending to be reduced when government budgets are cut. This is largely because the lag between investment and payoff means prevention is not a salient issue either for the public or most interest groups.<sup>84</sup> With Australian governments under severe budget pressures, there is a risk that we will continue to under-invest in prevention (Chapter 4), or even go backwards.

### 5.2 For the best results, prevention needs to be sustained

Unlike injuries or infections, chronic diseases are often slow to develop. They typically stem from the cumulative impact of risk factors over a long period.

To reduce rates of chronic disease, prevention initiatives must often be sustained over a long period. It can take time for an intervention

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82. Leigh and Withers (2005, pp. 5–6).

83. Willmott et al (2015).

84. Jacques and Noël (2022).

to change entrenched patterns of behaviour.<sup>85</sup> If interventions are not adequately sustained over time, progress can easily stall.

### 5.3 A lack of guardrails has created instability

This tendency toward short-term decision-making at the expense of longer-term benefits is acknowledged in many policy areas. Often, when there is a risk that decision-making will suffer from short-termism, we have guardrails in place to help individuals and governments to make better decisions.

Australia's superannuation system compels us to save for retirement well in advance;<sup>86</sup> the Higher Education Loan Program allows students to focus on long-term educational outcomes, not immediate costs;<sup>87</sup> and a variety of sovereign wealth funds enable the government to consistently invest in projects which have long-term outcomes, such as health research.<sup>88</sup> Even in the politically charged area of infrastructure, governments have an independent watchdog, Infrastructure Australia, to assess the long-term merits of different projects.<sup>89</sup>

But there are few guardrails to guide chronic disease prevention. At a federal level, ministers are free to alter chronic disease prevention funding as they please, and agencies can be created, restructured, or abolished at whim.

An independent and capable Australian Centre for Disease Control could provide exactly the guardrails that Australia needs to keep prevention on the agenda. Chapters 8 and 9 explain how the ACDC should be established to make this happen.

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85. For example, smoking rates took years to steadily decline following the introduction of many anti-tobacco regulations and programs in Australia: Greenhalgh et al (2022).

86. ATO (2022).

87. Department of Education (2022).

88. For example the Medical Research Future Fund.

89. Infrastructure Australia (2022).

## 6 Vested interests block action

Preventing chronic diseases is clearly in the public interest. But the beneficiaries are diffuse and invisible. In contrast, private interests that stand to lose from prevention efforts are often concentrated, well organised, and well resourced. This can prove a killer combination for prevention reforms.

### 6.1 Vested interests try to influence policy

Private interests often stand to lose out from successful chronic disease prevention, for example when it results in fewer sales of unhealthy products, or requires investment to make those products healthier.

And unlike the diffuse, often invisible beneficiaries of better chronic disease prevention, private interests are typically well organised, vocal, and powerful. Together, the top five global food companies have an annual revenue close to the tax revenue of the federal government.<sup>90</sup> They have the time, resources, and networks to effectively lobby governments.<sup>91</sup>

For example, the food and beverages industry employs a range of lobbying strategies in Australia. It hires commercial lobbyists, donates to political parties, develops relationships with policy makers, and funds research to influence debate on public health policies.<sup>92</sup>

Many of the major players – such as Coca-Cola, Nestle, Mars, and Mondelez – have in-house and commercial lobbyists.<sup>93</sup> Research into the lobbying practices of food and beverage firms has found a range of sophisticated tactics to shift public debate and shape policy.

For example, Coca-Cola and McDonald's target constituency building and appearing to be 'part of the solution', while Nestle and the Australian Food and Grocery Council focus on framing the public debate, shaping the evidence base, and building relationships with policy makers.<sup>94</sup>

An analysis of NSW ministerial diaries between 2014 and 2020 found that ministers had more than 600 meetings with tobacco, alcohol, ultra-processed foods, and gambling industry representatives. Between 1998 and 2020, these industries made more than \$35 million of disclosed donations to political parties across the country.<sup>95</sup>

It is safe to assume that all this effort and spending is intended to influence governments.<sup>96</sup> But this influence is often at the expense of public health.<sup>97</sup>

### 6.2 The Australian system is not as robust against vested interests as it should be

In Australia, checks and balances on the policy influence of special interests are weak.<sup>98</sup> And chronic disease prevention is no exception.

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90. In 2019, the top five global food companies raised about \$420 billion of revenue: Food Engineering (2019). In 2019, the federal government tax intake was about \$450 billion: ABS (2022c).

91. Woods and K. Griffiths (2018, pp. 72–73); Mialon et al (2016); Coles and Krasna (2022); and Hunt (2020).

92. Mialon et al (2016).

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93. Attorney-General's Department (n.d.).

94. Mialon et al (2016).

95. Lacy-Nichols et al (2022).

96. Woods and K. Griffiths (2018).

97. Knai et al (2021).

98. Woods and K. Griffiths (2018).

Recent Australian governments have adopted a process of heavily involving commercial stakeholders in policy making. Many lobbyists from harmful industries have strong ties and access to government ministers, in part due to a 'revolving door' between the sectors.<sup>99</sup> There are many examples where commercial interests have appeared to unduly influence policy decisions, leading to outcomes that are not in the public interest.

The following sections detail two examples: Australia's health-star rating system, and the development of regulations for advertising unhealthy products to children.

### **6.2.1 The health-star rating system was shaped by industry preferences instead of evidence**

In 2011, the independent 'Review of Food Labelling Law and Policy' was released. It reviewed options for a front-of-pack food labelling scheme intended to provide consumers with clear food health information.<sup>100</sup>

Based on the evidence available, the report concluded that a 'traffic light system had the most evidence and consumer support' and that 'the government should introduce this as a voluntary scheme, moving to a regulated system if there was not widespread uptake'.<sup>101</sup>

But a traffic light system faced significant opposition from industry: 77 per cent of industry submissions to the review opposed it.<sup>102</sup> It has been reported that when similar food traffic light systems were proposed in

Europe, the food industry spent more than one billion euros lobbying to oppose its introduction.<sup>103</sup>

The industry position prevailed, and the traffic light system was eventually rejected in 2011.<sup>104</sup> As a compromise, a health-star system was adopted. That system was developed in partnership with the food industry, and has been criticised by some experts as having 'no evidence behind it'.<sup>105</sup>

More than a decade later, the scheme is still voluntary. In 2018, health-stars appeared on only 31 per cent of eligible products.<sup>106</sup>

### **6.2.2 Unhealthy food advertising to children is self-regulated by industry, despite a clear conflict of interest**

In 2009, the Australian National Preventive Health Agency called for advertising limits on the marketing of unhealthy foods before 9pm, to reduce exposure to children.<sup>107</sup>

Soon after, industry bodies released voluntary policies stating they would reduce marketing of unhealthy choices to children.<sup>108</sup> The

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99. Robertson et al (2019) found that more than a third of registered lobbyists had previously been a government representative; most of these had been chiefs of staff, senior advisors, or advisors.

100. Forum on Food Regulation (2011).

101. Swinburn and A. Wood (2013); and VicHealth (2010).

102. VicHealth (2010).

103. Corporate Europe Observatory (2010).

104. Chibber and Ankush (2011).

105. Swinburn and A. Wood (2013).

106. mpconsulting (2019). Further controversy also surrounded the lobbying of government to take down the website of the star rating when first published: Corderoy (2014).

107. Moodie (2008).

108. For example, the policy released by the Food and Grocery Council stated that advertising must 'represent healthier dietary choices, consistent with established scientific or Australian government standards', and applied to advertisements directly targeted at children (defined as people younger than 12), or where children were more than 35 per cent of the audience: Australian Food and Grocery Council (2018). Standards do not apply when advertisements are targeted at both adults and children. Compliance isn't actively enforced or recorded, and companies can opt not to sign up. For a review, see: Hickey et al (2018).

release of voluntary, self-regulatory policies in the face of potential binding regulation has long been used as a tactic by vested interests, such as cigarette manufacturers, to appear to address government concerns while preventing binding legislation.<sup>109</sup>

The federal government pledged to monitor the impact of the industry initiatives.<sup>110</sup> More than a decade later, advertising policy is still designed by industry, not government, despite criticism from experts that the industry-led policy is ineffective, difficult to understand or enforce, contains loopholes, and is a fundamental conflict of interest.<sup>111</sup>

A 2017 study found that during prime-time television, the average child would still see about three food or beverage advertisements per hour, 44 per cent of which were for unhealthy foods.<sup>112</sup>

Industries should be able to inform governments and the community about their views. But there is an asymmetry between their concentrated, organised interests, and those of the diffuse, delayed and invisible beneficiaries of prevention policy (Chapter 5). Chapter 8 and Chapter 9 show how the proposed ACDC can balance vested interest influence with independent technical advice to governments and the community.

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109. Australian Food and Grocery Council (2018) and Greenhalgh et al (2022, Chapter 10). World Health Organisation guidelines say that countries should 'Reject partnerships and non-binding or non-enforceable agreements with the tobacco industry' for this reason: Siggins Miller (2018, p. 12).

110. Watson and Martin (2019).

111. Lumley et al (2012).

112. Watson et al (2017).



## 7 Prevention needs cooperation

Responsibility for chronic disease prevention is diffuse. Many of the most effective strategies to reduce chronic diseases require the coordinated efforts of multiple actors. In Australia, this creates a huge challenge.

Firstly, those responsible for prevention need to develop a shared understanding of what works, and which interventions are good value for money.

Secondly, the most effective interventions require the participation of non-health ministers and departments.

Thirdly, different levels of government, and non-government actors, must coordinate their efforts. Federal, state, local, and non-government sectors all have different, and often shared, roles to play.

And finally, these efforts must be well aligned: to have the most effect, packages of complimentary interventions must be enacted together.

### 7.1 Australia lacks strong coordination between health and non-health portfolios

Chronic disease prevention requires coordination between different government departments and ministerial portfolios. More than 80 per cent of people's health status is determined by factors beyond clinical care: health-related behaviors, socioeconomic factors, and environmental factors.<sup>113</sup> The 1986 Ottawa Charter expressed this poetically:

Health is created and lived by people within the settings of their everyday life; where they learn, work, play, and love.<sup>114</sup>

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113. Magnan (2017) and Population Health Institute (n.d.).

114. WHO (n.d.).

Many of the most cost-effective interventions fall outside the remit of the Health Department (Figure 7.1 on the next page), and other departments that hold relevant policy levers may not see preventive health as a key priority.

Prevention relies on robust coordination between health and non-health portfolios at each level of government. Making this happen requires governance mechanisms or formal structures, as well as strong political will, resources, and a combination of complex skills.<sup>115</sup> But most Australian governments have few formal mechanisms to encourage portfolios beyond health to consider how their policies affect population health.<sup>116</sup>

The result is that while health departments may pursue policies within their remit, many things that have a strong influence on health – such as advertising, pricing, and planning – may remain a lower priority. In recent years, few regulatory or cross-portfolio initiatives have been implemented despite consistent evidence suggesting they are often the most cost-effective options.<sup>117</sup>

### 7.2 Australia lacks national leadership and coordination across different levels of government

Australia's federal system makes chronic disease prevention harder. Different aspects of prevention are the responsibility of different levels of government, meaning coordination of effort is required.

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115. Government of South Australia & Global Network for Health in All Policies (2019).

116. South Australia does have some formal mechanisms: SA Health (n.d.); Southgate Institute for Health, Society and Equity (2017).

117. Vos and Carter (2022); Swinburn and A. Wood (2013); and E. Esdaile et al (2019).

For example, the federal government typically holds responsibility for many regulatory and pricing approaches – such as taxing cigarettes – while states tend to hold the levers for place-based regulations and more local intervention and education programs. Local governments have a role enforcing some regulations in their regions, and not-for-profits and industries often play a role in implementing government-sponsored programs.<sup>118</sup>

This is clear from the example of smoking, where the levers for prevention are spread over different governments (Table 7.1 on the following page). It is also reflected in funding for public health, which is split roughly equally between state and federal governments.<sup>119</sup>

This shared responsibility can make national coordination of prevention initiatives challenging, but it is important. A recent systematic review looked at what makes chronic disease prevention systems effective. National leadership was one of the most frequently identified factors.<sup>120</sup>

In the past five years, Australia has made progress in developing coordinated prevention strategies across different levels of government, including proposed targets and measurement of progress. For example, the national preventive health strategy and national obesity strategy both include agreed high-level directions to better prevent chronic diseases.<sup>121</sup>

This is a good start. But there remain big coordination challenges to turn these strategies into action – to prioritise, fund, implement, and sustain the directions they propose. To do this, we need agreement on what works, and how to fund and implement it.

118. Carrad et al (2022).

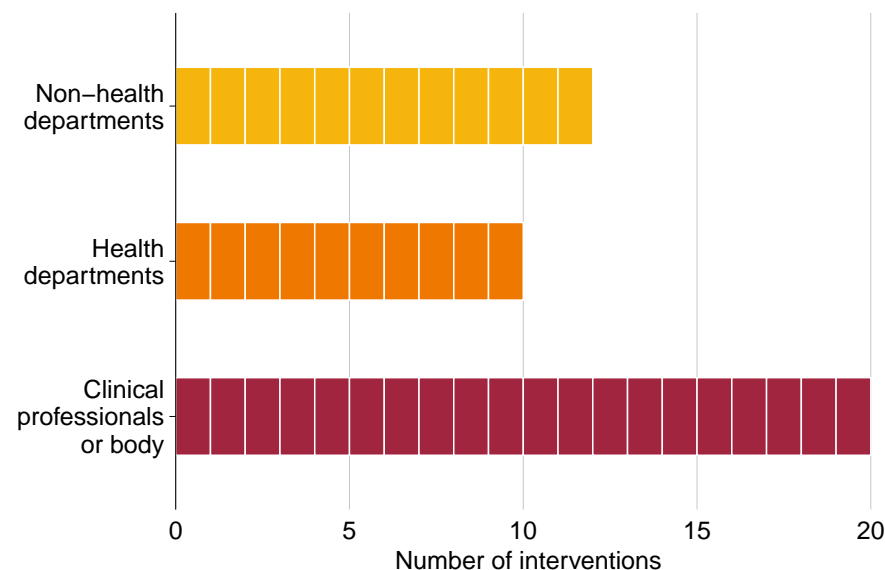
119. AIHW (2021c).

120. Littlejohns and Wilson (2019).

121. Department of Health and Aged Care (2021b); and Health Ministers' Meeting (2022).

**Figure 7.1: Non-health departments are responsible for many cost-effective preventive interventions**

Number of cost-effective interventions, by group responsible for implementation



*Notes: Includes dominant and very cost-effective interventions only. Very cost-effective interventions are classed as those with a cost of less than \$10,000 per quality adjusted life year gained. Some interventions are counted in multiple categories, because they could feasibly be implemented by either group.*

*Source: Grattan analysis of Vos and Carter (2022).*

Historically, this has rarely happened. Although there have been many strategies over the years, national coordination and leadership in chronic disease prevention has waxed and waned.<sup>122</sup> Governments have broken funding agreements, abolished agencies, abandoned initiatives, and created ongoing uncertainty about government commitment.

Over the past four decades, the longest-lasting overarching federal prevention body or agreement survived a mere nine years (Figure 7.2 on the next page). Although there have been many reports, national frameworks, and bodies, there has been wavering political commitment and ongoing uncertainty as to the federal government's role in chronic disease prevention.<sup>123</sup>

**Table 7.1: Anti-tobacco initiatives are a shared responsibility**

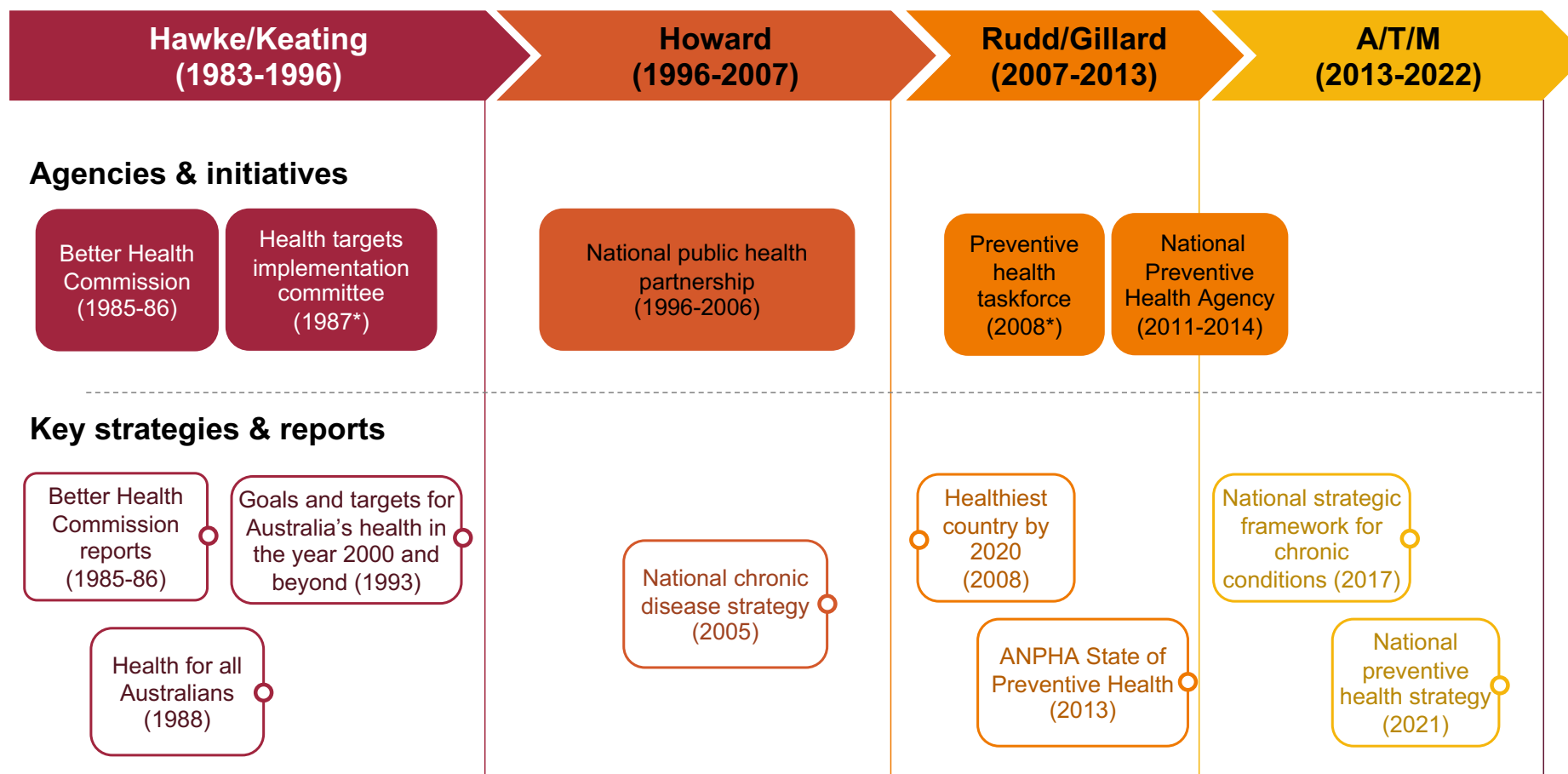
	Federal	State	Local	NGO
Pricing regulations (i.e. taxes)	X			
Product, advertising, retail, and import regulations	X	X		
Provision and funding of health interventions	X	X		X
Environmental and place-based regulations (including enforcement)	X	X	X	
Education campaigns and provision of health information	X	X	X	X

Sources: Greenhalgh et al (2022) and Treasury Laws Amendment (Illicit Tobacco Offences) Act 2018.

122. Duckett (2022).

123. Littlejohns and Wilson (2019); E. K. Esdaile et al (2022); and Morrice et al (2018).

Figure 7.2: Prevention efforts have been inconsistent at a national level



Notes: A/T/M = Abbott, Turnbull, Morrison. ANPHA = Australian National Preventive Health Agency. Dates with an asterisk (\*) indicate that no finish date could be found. This list is not exhaustive, and includes only major agencies, initiatives, and strategies. It does not include issue-specific taskforces or strategies, such as the national obesity or drug strategies, or state-level initiatives.

Sources: Wutzke et al (2017), Duckett (2022).

The most recent major attempt to fund and coordinate national chronic disease prevention at a federal level was in 2008, through the Australian National Preventive Health Agency and the National Partnership Agreement for Preventive Health.<sup>124</sup>

The Agreement aimed to improve healthy behaviours through social marketing, and provide enabling infrastructure and funding for evidence-based, coordinated prevention policies.<sup>125</sup> Five years after its launch, the Agreement was abruptly terminated, resulting in a return to a disjointed approach, with a lack of clarity about the roles of the different levels of government.<sup>126</sup>

National leadership and sustained commitment have been lacking in Australia's chronic disease prevention efforts, but they will be essential for success.

### 7.3 Prevention efforts must be well aligned

To make things even harder, effective chronic disease prevention often requires multiple complementary interventions at once.

Many chronic diseases and their risk factors have a wide variety of causes. For example, while the cause of weight gain – taking in more energy than we use over a long period – is relatively simple, the reasons for this are more complex. Many factors that increase the risk of obesity are outside an individual's control.

There is good evidence that inadequate exercise,<sup>127</sup> more sedentary lifestyles,<sup>128</sup> the proliferation of cheap and energy dense foods,<sup>129</sup> low income,<sup>130</sup> poor health literacy,<sup>131</sup> difficulty in obtaining fresh food,<sup>132</sup> and even genetic factors all increase the likelihood of an individual gaining weight.<sup>133</sup>

Because the causes are so varied, it often takes several different policies to make a significant dent to chronic disease risk factors.<sup>134</sup>

That's why evidence-based strategies to reduce rates of chronic disease are often proposed as 'packages' of changes, designed to address multiple risk factors at once.<sup>135</sup>

There is evidence to suggest that a package of coordinated interventions can have a larger effect than the sum of its components, because the policies reinforce one another to boost the overall impact.<sup>136</sup> For example, there is evidence that the combination of mass media campaigns and food labelling schemes may boost sales of healthy products by more than would be expected from each of the initiatives on their own.<sup>137</sup>

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124. Furtado et al (2018); and Crane et al (2022).

125. Morrice et al (2018).

126. Morrice et al (ibid): 'Cancellation of the NPAPH has resulted in a return to a situation where there is little coordination or clarity around the roles of the different levels of government with respect to chronic disease prevention.'

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127. Lee et al (2010).

128. WHO (2002).

129. Drewnowski and Specter (2004).

130. Loman et al (2013).

131. Michou et al (2018).

132. Pan et al (2012).

133. Note that this list is not exhaustive.

134. OECD (2019).

135. OECD (2019) and Frieden (2014). For example, a systematic review identified that multi-component salt interventions had a larger impact than single-component interventions: Hyseni et al (2017).

136. Royal Children's Hospital (n.d.), OECD (2019), Pacheco et al (2018) and Cobb et al (2015).

137. Surkan et al (2016).

This means different government actors must not only be at the table, their actions must be well coordinated to complement each other and multiply their impact.

#### 7.4 Australia lacks a shared understanding of what works

As if coordinating multiple government departments at multiple levels to act in synergy was not hard enough, Australia does not even have robust processes to agree about what works in prevention.

We have few mechanisms to develop a shared understanding of which initiatives are effective, or to decide how programs could be expanded over time.<sup>138</sup>

A recent review of government protocols indicated that governments are unlikely to have the tools to properly assess preventive health interventions, particularly when they span multiple portfolios. In NSW alone, nine different guidelines were found for assessing the cost-benefit of interventions, and many of the guidelines had significant differences in methodology.<sup>139</sup> This was partly attributed to the different methods used by different departments.

For most prevention programs to be funded and implemented, it is usually up to academia, the public service, advocacy groups, and non-government organisations to make a case to the responsible minister that the intervention is worth funding.<sup>140</sup> There is no guarantee that programs a minister chooses to implement will be evidence-based. And if initiatives are implemented at a state level, the cost-effectiveness assessments will probably be duplicated in each state.

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138. Ananthapavan et al (2021).

139. Ibid.

140. With the exception of prevention interventions funded under the MBS or PBS, such as smoking cessation interventions delivered in primary care settings: Department of Health and Aged Care (2021c).

This ad-hoc process is hardly conducive to developing a shared understanding of the evidence, or implementing a coordinated strategy to prevent chronic diseases.

The lack of a consistent, specified methodology for evaluating disease prevention initiatives is in stark contrast to the approach taken to evaluate treatments and medicines (Box 7 on page 39).<sup>141</sup>

The coordination challenges illustrated in this chapter have contributed to a disjointed approach to disease prevention that is rarely driven by evidence.<sup>142</sup>

As an independent national body, the proposed ACDC should be well positioned to communicate across government levels and portfolios. And it should be well positioned to fill the gap Australia has in understanding what works.

Chapters 8 and 9 show how the ACDC should help coordinate across government, and bring together the best available evidence to inform better decisions on prevention.

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141. Parliament of Australia (2016).

142. Department of Health and Aged Care (2021b, p. 35).



## 8 The ACDC should be at the centre of prevention policy

The previous chapters explained the key challenges facing chronic disease prevention policy in Australia. Short-term thinking, vested interests, and collaboration challenges have left a trail of piecemeal investment, stymied regulation efforts, and a leadership void.

These barriers are structural, so they can't be overcome by the good intentions of one government. Instead, institutional reform is needed, creating a new process for policy making. That has worked in many other policy areas that face similar challenges to chronic disease prevention.

The Australian Centre for Disease Control should be at the heart of a new prevention system. It should have a clear role informing policy: providing expert advice on where to focus and on what works. But to maximise its impact, the ACDC needs to directly inform government decisions, not just do analysis in isolation. Its advice must flow into government deliberations on prevention strategy, investment, and research. Governments need to set up this system by:

- Maintaining a national prevention strategy
- Considering public ACDC advice on that strategy
- Agreeing on a national funding deal for initiatives on an ACDC-approved prevention schedule
- Requiring research bodies to consider ACDC advice on prevention priorities
- Requiring parliamentary consideration of regulatory reforms recommended by the ACDC, and
- Legislating the ACDC's core functions.

### 8.1 The ACDC should advise on the national prevention strategy

The history of chronic disease prevention in Australia is a trail of prevention initiatives commenced then abandoned, leaving a legacy of ongoing uncertainty over government commitment to prevention (Section 7.2 on page 31).

To provide certainty, a national prevention strategy must be maintained by the federal government, after being agreed on and developed with all states and territories.

The 2021 National Preventive Health Strategy is a big step in the right direction.<sup>143</sup> The strategy was generally supported by experts in preventive health, though concerns were voiced about the will and ability of governments to implement policies to fulfil the strategy's promise.<sup>144</sup>

There is no need to reinvent the national strategy. Rather, the strategy should be used to drive the prevention agenda for the coming three-to-four years.

The strategy should then be updated every five years, to ensure its continued currency and relevance. The federal government should produce the strategy in partnership with the states. The strategy should include measurable targets for health outcomes, both at a national level and for specific disadvantaged communities such as Indigenous Australians. Many of the ultimate prevention goals will not be achievable within five years, so interim targets which link to long-term goals should be included.

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143. Ibid.

144. Doggett (2021), Stroke Foundation (2021), Public Health Association Australia (2021a), The Prevention Hub (n.d.), Australian Prevention Partnership Centre (2019) and Public Health Association Australia (2021b).

The ACDC should provide evidence, advice, and input to each update of the National Preventive Health Strategy. The ACDC should recommend focus areas and targets for the strategy, and report on progress against the targets.

The ACDC's input should be tabled in the federal, state, and territory parliaments. This process would oblige the relevant minister to formally respond to the advice.

## **8.2 The ACDC should consistently evaluate prevention initiatives**

While there is strong evidence for the benefits of many chronic disease prevention interventions, the evidence is not always consistently presented, evaluated, and visible (Section 7.4 on page 36). Where evidence has been comprehensively evaluated, it has rarely been linked to government decision-making, or given a role in policy development.<sup>145</sup>

One of the best ways to promote the most efficient interventions, and to counter the influence of vested interests in public debate, is providing a clear, consistent evidence base for reforms.<sup>146</sup>

Disputes over the evidence base give vested interests fertile ground to push their case, and politicians an excuse for backing down.<sup>147</sup>

This is particularly the case with respect to chronic disease prevention, where many studies are funded by vested interests, muddying the waters.<sup>148</sup>

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145. For example, many recommendation from the Australian cost-effectiveness of prevention study were not implemented, despite being found to be cost-effective: Vos and Carter (2022).

146. Daley (2021).

147. Ibid.

148. Fabbri et al (2018).

The ACDC can play an important role as the consistent evaluator of the evidence base for prevention, both broad strategies and specific initiatives. The ACDC should develop a consistent, rigorous basis for evaluating initiatives, determining the estimated benefit/cost ratio. The ACDC's methodology should be specified and published.

To make the best decisions, governments need to understand the full impact of potential investments. In addition to health outcomes, ACDC evaluations should estimate economic, social, and environmental benefits from improved health outcomes.<sup>149</sup>

Evaluation should also include the effect on the equity of health outcomes. Initiatives which disproportionately benefit disadvantaged groups, for example people in rural areas, would be valued more highly than those that disproportionately benefit advantaged groups.

For each potential initiative, the ACDC should also calculate the expected contribution towards meeting the measurable targets in the National Preventive Health Strategy. This will enable policy makers to determine a set of policies that can be expected to achieve the national strategy's goals.

### **8.2.1 The ACDC should produce a continuously-updated schedule**

Evaluating potential prevention initiatives would enable the ACDC to develop a schedule of initiatives that are supported by enough evidence to justify investment.

This schedule should be continually updated, and maintained on a public website.<sup>150</sup>

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149. Ananthapavan et al (2021).

150. Similar to the Infrastructure Priority List maintained by Infrastructure Australia, see: Infrastructure Australia (2023a).

This level of rigour in developing a schedule is not unusual: it is similar to the approach taken to evaluate pharmaceutical treatments for inclusion in the Pharmaceutical Benefits Scheme. Box 7 shows this and other examples of organisations providing evidence evaluation to inform public spending decisions.

A rigorous approach to gathering and evaluating evidence will give governments the confidence to make long-term commitments to invest significant funds in prevention, overcoming some of the difficulties arising from the long lag between investment and return (Chapter 4).

Initiatives could be categorised into:

- those for which large-scale implementation is sufficiently supported by evidence
- those that justify further studies
- those unsupported by evidence.

The categorisation would have parallels with the Infrastructure Priority List produced by Infrastructure Australia. Infrastructure Australia categorises potential infrastructure investments as ‘Investment-ready proposals’, ‘Potential investment options’, and ‘Early-stage proposals’, based on a publicly available assessment framework.<sup>151</sup>

### 8.2.2 The ACDC’s schedule should inform investment

Ready-to-proceed initiatives should be guaranteed federal funding if states contribute

The ACDC’s schedule would include all initiatives assessed as ready for full-scale implementation. State governments could choose initiatives from the schedule to invest in. An intergovernmental

#### Box 7: Examples of evidence evaluation functions

The What Works Clearinghouse (WWC) is an investment of the Institute of Education Sciences within the US Department of Education. The WWC’s function is to ‘review the research, determine which studies meet rigorous standards, and summarise the findings’, and to focus on high-quality research to answer the question ‘What works in education?’<sup>a</sup> The WWC’s Intervention Reports are a regularly-cited resource for governments as well as individual schools.

The UK’s National Institute for Health and Care Excellence (NICE) is an executive non-departmental public body, sponsored by the Department of Health and Social Care.<sup>b</sup> NICE produces evidence-based guidance, quality standards, and other information to inform National Health Service planning and decision-making. NICE considers the scientific value of evidence, and follows a set of principles for making social value judgments.<sup>c</sup>

In Australia, the Pharmaceutical Benefits Advisory Committee and Medical Services Advisory Committee use a standard Health Technology Assessment methodology to evaluate medication for listing on the Pharmaceutical Benefits Scheme, and for public funding of new medical services.<sup>d</sup> The expected health improvement and cost of new medicines and services are measured, and compared against existing treatments to establish whether the medication’s net benefits exceed a threshold.<sup>e</sup>

- a. National Centre for Education Evaluation and Regional Assistance (n.d.).
- b. Gov.UK (n.d.).
- c. National Institute for Health and Care Excellence (n.d.).
- d. Medical Services Advisory Committee (2016).
- e. Parliament of Australia (2016).

151. Infrastructure Australia (2023b).

agreement should commit the federal government to fund a proportion of the cost, up to a cap. The cap should increase each year up to a long-term target.

The funding amount for this long-term target would be negotiated between the states and the federal government. The previous National Partnership Agreement on Preventive Health provides a guide.<sup>152</sup> Under this agreement, up to \$260 million was to be made available to the states in 2014-15, to help improve healthy behaviours.<sup>153</sup>

However, the scope of this agreement was limited to a few specific areas of prevention, and risk factors in some of these areas – such as unhealthy eating, and overweight and obesity – have only got worse since then.<sup>154</sup> It's therefore likely that significantly more funding would be required today.

This arrangement would motivate states to support the ACDC's work, because it would allow them to access federal funding for a growing list of prevention initiatives.

### Initiatives unsupported by evidence should be defunded

The ACDC's analysis would also identify initiatives that fail an economic evaluation.

These initiatives should be identified on the ACDC's prevention schedule. This will place pressure on governments to avoid funding

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152. Council of Australian Governments (2009).

153. Inflated to 2020-21 dollars.

154. For example, the NPAPH set some specific targets for improvement, including: to increase the proportion of Australians with a healthy body weight by 3 per cent in 10 years (by 2018); to increase the proportion of Australians meeting national healthy eating and physical activity guidelines by 15 per cent in 6 years (by 2014); to reduce the proportion of Australians who smoke to 10 per cent within 10 years (by 2018); and to reduce the harmful consumption of alcohol. Of these targets, only the target for alcohol consumption has been met: see ABS (2018b).

new initiatives that are poor value for money, and to cease investment in any that they are currently funding.

### Advice on regulatory interventions should be tabled

Regulatory interventions aimed at chronic disease prevention have been few and far between in Australia over the past decade, sometimes stymied by the influence of vested interests (see Chapter 6).

As well as funded initiatives that are good investments, the ACDC should evaluate potential regulatory interventions and identify those with significant benefits.

The ACDC should advise relevant federal and state ministers about regulatory reforms in their portfolios, and table recommended regulatory reforms in Federal Parliament annually, with quantification of the expected benefits.<sup>155</sup> The ACDC should be fully empowered to set their own agenda and evaluate regulatory interventions in line with the priorities of the national prevention strategy. Governments should also be able to refer regulatory interventions to the ACDC, which they may also choose to assess.

The process could be similar to that of the Climate Change Authority, which is required to give public advice on future emissions-reduction targets, obliging the minister to formally respond to the advice.<sup>156</sup>

Tabling advice in parliament would leave ministers fully able to refuse the advice, but would publicise the fact that they had done so. In most cases, this would force the ministers to publicly justify their reasons for ignoring the ACDC's advice.

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155. Reports should be tabled in state parliaments when they are relevant to state powers.

156. Parliament of Australia (2022, p. 88); and Morton (2022).

### 8.3 The evidence base should be developed for unproven initiatives

The ACDC's evaluation of the existing evidence base would also identify initiatives with potential, but where the current evidence base is too thin, or of insufficient quality, to justify immediately running the initiative at full scale.

In some cases, the initiative might require clear results from randomised trials to justify further investment. Or perhaps the initiative has been shown to work at a very small scale, but a regional trial would provide evidence that the initiative can work at full scale.

The federal government should commit to continuing to use both the Medical Research Future Fund (MRFF) and National Health and Medical Research Council (NHMRC) as vehicles to direct research to preventive health initiatives.<sup>157</sup>

The ACDC should be empowered to advise both the NHMRC and MRFF on which initiatives justify further research, where better evidence would help achieve the national prevention strategy's goals. Investment in ACDC-directed research topics would be consistent with the existing scope and priorities of both the MRFF and NHMRC.<sup>158</sup>

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157. Over the coming decade, \$600 million of the MRFF's \$6.3 billion planned investment is allocated to 'Preventive and Public Health Research': Department of Health and Aged Care (2022c, p. 3). Of the research money awarded under this initiative to date, about half has been for primary prevention research: Grattan analysis of Department of Health and Aged Care (2022d). The NHMRC includes about \$20 million annually for primary prevention: Grattan analysis of NHMRC (2022).

158. The MRFF strategy includes achieving 'equitable health outcomes through research-informed preventive health and health care': see Department of Health and Aged Care (2023). The NHMRC's scope includes research to 'inquire into matters related to prevention, diagnosis, and treatment of disease': NHMRC (2021, p. 2).

### 8.4 The ACDC should not directly fund prevention initiatives

With the ACDC established as an authority on the value of chronic disease prevention initiatives, there may be some appeal in extending its powers to directly funding initiatives, circumventing governments entirely. However, this would be an overreach. The ACDC's role should be limited to advising governments. Governments should remain the ultimate decision-makers, for three reasons.

Firstly, extending the ACDC's powers would risk a loss of role clarity, and risk diverting its focus from the core role of providing advice supported by rigorously evaluated evidence.

Bodies with granting authority generally don't also have an advisory role. For example, an agency such as the Australian Renewable Energy Agency has a very narrow investment remit, which can be altered by the federal government. The National Housing Finance and Investment Corporation conducts research as well as administering a grants program, but has no formal role in advising government.<sup>159</sup>

Secondly, it is inappropriate for an unelected body to have authority to spend significant amounts of public money, unless tightly-defined criteria limit how the money can be spent.

The ability to grant money to an unbounded set of chronic prevention initiatives would be overreach for an unelected body, and risk politicising the body. Ultimate responsibility for spending public money should rest with ministers where practical.

Thirdly, granting spending authority may narrow the ACDC's focus to initiatives requiring investment. This would risk inhibiting the ACDC's ability to advise governments on a full range of interventions, including regulatory and pricing reforms.

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159. NHFIC (2022) and *National Housing Finance and Investment Corporation Act 2018*.

## 9 The ACDC should be set up for success

The ACDC's role will be a challenging one. It will have to push hard for change, without being unrealistic. It will need to perform complex analysis and communicate clearly to a range of audiences.

Starting with the right structure, orientation, skills, and funding will be essential. The ACDC's success could be undermined if it is seen as out of touch with non-health portfolios, disconnected from state governments, ignored, irrelevant, or captured by vested interests.

As with any organisation, a large part of the ACDC's success will rely on the quality of its leadership and culture,<sup>160</sup> but it also needs the right design and resources to be set up for success.

The ACDC must operate independently, with independence enshrined in legislation, to minimise opportunities for political interference. It must be set up to best enable collaboration: between levels of government, across government portfolios, and with communities. It will also be vital for the ACDC to have the right capabilities to fulfil its functions.

### 9.1 International CDCs take various approaches

Internationally, comparable bodies to the promised ACDC take various approaches (Figure 9.1 on the following page). Most have a stated aim of chronic disease reduction, but different roles to achieve it. Some fund initiatives directly, while others have an advisory role. Overall budgets vary from \$3 per capita (the equivalent of \$70 million for Australia) to \$117 per capita (the equivalent of \$3 billion for Australia). The level of focus on public communication also varies.

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160. Kaul (2018).

### 9.2 The ACDC should have its independence enshrined

The ACDC should be set up as an independent statutory body. That way it will draw its authority from the legislation that creates it, rather than from the federal health minister or the Health Department.

ACDC board appointments could be agreed by the Health Ministers' Meeting (HMM), which includes health ministers from all states and territories, as well as the federal health minister. A merit-based process should be followed for board appointments, with an independent panel selecting a shortlist, from which the HMM would make final selections.<sup>161</sup>

Many other countries' CDCs lack functional independence from the government of the day (Figure 9.1 on the next page). An Australian CDC should aim higher, because a CDC that's seen as independent of political interference is more likely to gain public trust.

For example, political interference has been blamed for a drop in trust in the US CDC.<sup>162</sup> While the US CDC is operationally independent, the director is a direct presidential appointment, with no requirement for Senate approval.<sup>163</sup> During the COVID-19 pandemic, the US CDC was criticised for allowing interference from the White House in its communications.<sup>164</sup>

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161. D. Wood et al (2022).

162. McNiff (2022).

163. Klobucista (2022).

164. See: McNiff (2022) and Hamblin (2022).



Figure 9.1: International CDCs take various approaches

	Budget (per capita)	Chronic disease focus	Public facing	Funding authority	Independence
<b>New Zealand</b> - Public Health Agency (commenced July 2022)	\$3	Pathways in Strategy include Population health & equity, Determinants of health, and Environmental health	Main role is to provide ministers with independent advice	Main role is to provide ministers with independent advice	Within the Ministry of Health
<b>France</b> – Sante Publique	\$4	Prevention and health education one of six focus areas	Health promotion and health risk reduction; the development of prevention and health education	A reference centre in public health, an agency of scientific expertise	Public administrative establishment under the supervision of the Ministry of Health
<b>Canada</b> – Public Health Agency of Canada	\$19	Health promotion & chronic disease prevention one of three program areas	Conducting public engagement activities such as consultations, public opinion research	About a third of funding is directed to grants and contributions	Part of the federal health portfolio
<b>Norway</b> – Norwegian Institute of Public Health	\$23	Mental & Physical Health one of five divisions. Partial focus on chronic disease.	Main role is knowledge provider to the health system	Main role is knowledge provider to the health system	Reports directly to the Norwegian Ministry of Health, does not have its own board
<b>Finland</b> – Finnish Institute for Health and Welfare	\$24	Public health and welfare is one of five departments, mainly focused on chronic disease	Main role is providing knowledge and expertise for decision-makers and professionals	Main role is providing knowledge and expertise for decision-makers and professionals	Independent, state-owned. Operates administratively under the Ministry of Social Affairs and Health
<b>USA</b> - CDC	\$56	8%-10% total budget	Promoting healthy and safe behaviours, communities, and environment	Funds and guides states, territories, cities, and tribes to use interventions that work	Operation is independent, but Director is presidential appointment. Past three presidents have appointed new directors on their inauguration.
<b>Singapore</b> – Health Promotion Board	\$63	Mostly chronic disease prevention	Seeks to empower the Singapore public with knowledge and skills to take ownership of their health and live a healthy lifestyle	Administer some grant programs, for individual Health Ambassadors and Healthier Dining partners.	Statutory board under the Ministry of Health
<b>UK</b> – Public Health England (abolished 2020)	\$103	Lesser focus than infectious diseases and hazards	Supporting individuals to change their behaviour including through social marketing campaigns promoting healthy lifestyles	About ¼ of expenditure was grants to local authorities.	Executive Agency of the Department of Health

Sources: Grattan analysis of US CDC (2019), US CDC (2022b), US CDC (2022c), US CDC (2022d), US CDC (2022e), Council on Foreign Relations (2022), US CDC (2022f), Public Health Agency of Canada (2020a), Public Health Agency of Canada (2022a), Public Health Agency of Canada (2022b), Public Health Agency of Canada (2020b), Marchildon (2008), Public Health England (2017), Public Health England (2020), Sante Publique France (2019), Sante Publique France (2022a), Sante Publique France (2022b), NIPH (2022a), NIPH (2022b), THL (2022a), THL (2022b), THL (2022c), Singapore Health Promotion Board (2020), Singapore Health Promotion Board (2022), New Zealand Ministry of Health (2022a), New Zealand Ministry of Health (2022b) and Daalder (2021).

Public Health England also provides a cautionary tale. It lacked independence and was summarily abolished during the pandemic (see Box 8).

The problems that bedevil chronic disease prevention (short-termism, vested interests, cooperation challenges) can be best addressed by limiting the capacity for short-term political considerations to interfere with the ACDC's operations. In Australia, there are several examples of independent agencies set up to tackle similar problems (see Box 9 on the following page).

Independence from direct ministerial influence will help in three ways.

Firstly, independence will greatly increase the value of the ACDC's advice to governments, parliaments, and the community. This structure will allow the ACDC's advice to be in the public interest, unencumbered by politicians' agendas or the influence of vested interests. For example, an independent ACDC would be free to publish advice on regulatory interventions that are inconsistent with government policy.

Secondly, being formally independent of the federal department of health would better enable the ACDC to consider cross-portfolio initiatives (see Chapter 7).

Thirdly, being structurally separate from the department of health and minister would probably make the agency harder for a future minister to shut down. The Australian National Preventive Health Agency (ANPHA) was set up to report to the federal health minister, which made it easier for a new government to pull its activities back into the Health Department.<sup>165</sup> Public Health England's position as an Executive Agency of the Department of Health also made it easier for the health minister to abolish it (see Box 8.).

#### Box 8: Public Health England was abolished

Public Health England (PHE) was an Executive Agency of the Department of Health, with a role to 'promote the health and well-being of the nation', and 'reduce health inequalities'.<sup>a</sup> PHE's remit included infectious diseases, hazards, health equality, and population health.<sup>b</sup>

As an Executive Agency, PHE was not created under legislation.<sup>c</sup> There were longstanding concerns about PHE's lack of independence and inability to challenge the government.<sup>d</sup>

In August 2020, the UK Government announced PHE would be disbanded. A new agency, the National Institute for Health Protection, would focus exclusively on external threats: biological weapons, pandemics, and infectious diseases.<sup>e</sup> PHE's chronic disease functions were transferred to the UK Health Security Agency and the Office for Health Improvement and Disparities.<sup>f</sup>

PHE's lack of structural independence made its abolition administratively straightforward.

The governments was accused of abolishing PHE in a bid to 'shift blame' for poor COVID outcomes from the government to PHE.<sup>g</sup>

a. Public Health England (2017, p. 11); and The Lancet HIV (2020).

b. Public Health England (2017, Table 2).

c. Ibid (p. 13).

d. Toff (2021).

e. Hancock (2020) and British Medical Journal (2020).

f. Brodie and Marron (2021).

g. The Lancet HIV (2020) and Campbell (2020).

165. Sweet (2018).

But there are risks to independence which should be managed. Being independent could lead to the ACDC being ignored by the government if its advice drifts too far from what governments are willing to consider. Unless the ACDC's functions and advice are practical, there is a risk the ACDC could gradually slide into irrelevance.

New Zealand's Public Health Commission was abolished in 1995, only two years after it was founded. Part of the reason for its abolition was that its operation was too far removed from the health minister, and its advice was not considered useful, because it clashed too much with government policy.<sup>166</sup>

The requirement for ACDC advice to be tabled in parliament would go some way to mitigating the risk of being ignored. In addition, a savvy multi-disciplinary board would be appropriately focused on maintaining relevance (Section 9.4 on page 48).

To further ensure the ACDC remains relevant, it should be subject to an independent review every five years, with terms of reference related to its legislated functions. The recent example of the Reserve Bank of Australia illustrates the value of an external review in ensuring an independent body can maintain the support of governments and other stakeholders, without compromising its independence.

### 9.3 The ACDC should enable collaboration at all levels

Responsibility for prevention is shared between all levels of government, and between different government portfolios. As such, collaboration between different levels of government, different parts of government, and communities is vital.

Some governance arrangements will support collaboration better than others. In addition to optimal governance, a key aspect will be the

#### Box 9: Independent agencies can tackle problems of a similar nature to chronic disease

There are examples of federal government agencies which have a primary purpose of overcoming short-termism, vested interests, and coordination problems, as the ACDC will need to do with respect to chronic disease prevention. These agencies are generally established with a degree of independence from federal ministerial control.

The **Climate Change Authority** is an independent statutory authority, which conducts and commissions independent research and analysis, and conducts periodic statutory reviews of climate policies.<sup>a</sup> The Climate Change Authority's independence is vital to avoid giving too much weight to short-term concerns, particularly those pushed by vested interests.

As an independent central bank, the **Reserve Bank of Australia** (RBA) is accountable to the parliament rather than the government.<sup>b</sup> This independence is necessary so that the RBA can properly consider long-term impacts of monetary settings, rather than the short-term electoral interests of the government.<sup>c</sup>

The **National Heavy Vehicle Regulator** exists primarily to overcome coordination problems between state governments, reducing inconsistencies in heavy vehicle regulation.<sup>d</sup> The Board comprises five members appointed on the unanimous recommendation of state and territory ministers.<sup>e</sup>

a. Climate Change Authority (n.d.).

b. RBA (n.d.).

c. Fraser (1994).

d. NHVR (2022a).

e. NHVR (2022b).

166. Gauld (2001, pp. 123–125).

inclusion of collaboration as a stated goal of the CDC. Regular internal and external reviews can assess whether collaboration targets are being met. The ACDC's approach could then be adjusted accordingly.

### 9.3.1 The ACDC structure should encourage state involvement as well as federal

While the ACDC is a federal government commitment, it is vital that the state governments are involved and committed to supporting the work of the ACDC (Section 7.2 on page 31).

There is a risk that a purely federal body will, in practice, be unable to achieve recognition from the states as a central expert and advisor.<sup>167</sup>

One option is to set up the ACDC as a body fully co-owned by all states and the federal government, via a cooperative applied law scheme (Figure 9.2).<sup>168</sup> A structure such as this is arguably the best way to ensure state and territory involvement, and also make the ACDC secure from abolition or defunding.<sup>169</sup>

However, a fully national body is likely to be difficult to set up and operate, requiring unanimous agreement at every stage. This constitution would also be quite unorthodox. Fully national bodies with co-ownership by states are typically formed to enable nationally-consistent state-based regulations, for example, licensing,

167. P. Wilkins et al (2016) identifies the importance of formal links to ensure collaboration.

168. The Australian Health Professional Registration Authority and the National Heavy Vehicle Regulator were both set up under cooperative applied law schemes. Each scheme involves the text of standard provisions promulgated in Queensland being applied or adopted in each participating jurisdiction as if it were a law made in that jurisdiction: AHPRA (2022) and NHVR (2022b).

169. The ANPHA was able to be defunded by the Abbott Government in 2014 because it was established under federal legislation (see Chapter 7).

Figure 9.2: The ACDC should be a federal body with links to the states

	Collaboration between Commonwealth & states	Secure against abolition/defunding	Ease to set up & operate
<b>Fully national body</b> <i>e.g. National Heavy Vehicle Regulator, Australian Health Practitioner Regulation Agency</i>	<ul style="list-style-type: none"> <li>Co-owned by states and Commonwealth</li> <li>Most likely to ensure state involvement</li> </ul>	Requires state approval to disband	Veto power could be a blocker  Unusual structure for an advisory body - typically regulatory bodies
<b>Commonwealth body, with legislated state involvement</b> <i>e.g. National Transport Commission, Independent Hospital Pricing Authority, Safe Work Australia, NDIA</i>	<ul style="list-style-type: none"> <li>Requirement to consult with states, take some direction from Health Ministers Meeting</li> <li>Reasonably likely to achieve state engagement</li> </ul>	Legislation provides some barrier to abolition	May be some small difficulty obtaining agreement for board appointments
<b>Purely Commonwealth body</b> <i>e.g. CSIRO, Therapeutic Goods Administration</i>	<ul style="list-style-type: none"> <li>No formal connection to states</li> <li>Biggest risk of state disengagement</li> <li>Less ability to make recommendations to states</li> </ul>	Easy for the CW government to abolish or defund	Easiest to set up and operate

Source: Grattan analysis.

regulation, or compliance.<sup>170</sup> There are no notable examples of a fully co-owned national body with a broad remit to advise, and to set its own agenda.

If establishing a fully national body is too big a barrier to the establishment or operation of the ACDC, a more workable option may be for the ACDC to be set up under federal legislation, with board appointments agreed to by the states and territories through the Health Ministers' Meeting (HMM).<sup>171</sup> The legislation should specify the core functions of the ACDC, and that the legislated reports of the ACDC are delivered to the HMM, health departments, and parliaments.<sup>172</sup> Legislated functions would provide security against abolition.<sup>173</sup>

The risk of state disengagement would be reduced by the intergovernmental agreement linking federal funding to the ACDC schedule (see Section 8.2.2 on page 39).<sup>174</sup> The states would be motivated to support the ACDC's comprehensive schedule, because this would give them access to federal co-investment.

The federal government should also consider other options to further cement state involvement.

For example, the ACDC could be jointly funded by the states and the federal government. This could increase state involvement, while

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170. Examples include the Australian Health Practitioner Regulation Authority and the National Heavy Vehicle Regulator.

171. Examples of similar arrangements include the Independent Hospital Pricing Authority, Safe Work Australia, and the National Disability Insurance Agency.

172. Modelled on the National Transport Commission: See *National Transport Commission Act 2003* and NTC (2003).

173. The ANPHA had legislated functions, but these were mostly areas of responsibility rather than specific outputs, with the exception of a bi-annual report on the state of prevention in Australia: *Australian National Preventive Health Agency Act 2010*. The Abbott Government was able to defund the agency and transfer essential functions to the Department of Health.

174. The intergovernmental agreement could also specify aspects of federal-state cooperation, for example states agreeing to supply data to the ACDC.

also reducing the risk of funding cuts, because they would require national agreement. This could be a similar arrangement to the National Transport Commission (NTC). Half of the NTC's funding comes from the federal government, with the other half from the states, in proportion to population. An intergovernmental agreement specifies that, each year, the NTC's proposed budget and work plan will be approved if a majority of the federal, state, and territory transport ministers agree.<sup>175</sup>

The ACDC could also be formally required to regularly seek the advice of the national committee of state and territory chief health officers.<sup>176</sup>

Overseas CDCs do not generally have formal links to sub-national governments. The Public Health Agency of Canada has no formal links to the provinces, but is a part of the federal Health Department. The US CDC is similarly a federal agency. An Australian CDC should not follow this lead, however. A lack of collaboration between federal and state governments is a key barrier to chronic disease prevention in Australia (Section 7.2 on page 31). A structure that gives the states some formal links to the ACDC would give the new agency the best chance of success.

### 9.3.2 The ACDC should encourage collaboration across portfolios

Just as responsibility for prevention is shared in Australia between different levels of government, it is also shared between different parts of governments. Many of the potential gains from prevention come from interventions that are not the sole responsibility of health ministers (Section 7.1 on page 31).

The ACDC should have a stated intent to understand and engage with other portfolios. ACDC leadership should embed a culture of

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175. *National Transport Commission Act 2003* and NTC (2003).

176. The Australian Health Protection Principal Committee.

understanding different portfolio objectives, and framing advice in a way that considers economic, social, and environmental outcomes, as well as health outcomes.<sup>177</sup>

This broad approach is comparable to the Climate Change Authority, which is required to take account of the impact on households, business, workers, and communities, be consistent with Australia's foreign policy and trade objectives, and boost economic, employment, and social benefits, including for rural and regional Australia.<sup>178</sup>

The ACDC should also regularly brief non-health ministers on recommended interventions in their portfolios. These interventions could include, for example, interventions related to urban planning or transport.

Regular internal reviews of the ACDC should assess whether the goal of cross-portfolio collaboration is being achieved. If it is not, the ACDC could trial methods for improving collaboration. They might include more regular interactions with relevant departments, secondments of staff between the ACDC and governments, or new approaches to consultation and communication.

### 9.3.3 The ACDC should engage communities

Working in partnership with Australia's diverse communities will be essential for the ACDC to carry out the functions identified in this report.

There are stark disparities in preventable illness between different groups in the Australian community.<sup>179</sup> To provide the best advice on prevention goals, solutions, and impacts, the ACDC should have a deep understanding of these disparities and the perspectives of people

who experience them. By including equity targets in its evaluations, the ACDC can also drive a focus on chronic disease outcomes for disadvantaged groups.

To gain this insight, the staff, leadership, and culture of the ACDC should be diverse and inclusive, representing the broader community. The ACDC should also use a range of consultation and engagement methods to work with demographic groups that face the biggest barriers to health, including regular consultation and co-design.<sup>180</sup>

### 9.4 The ACDC should employ people with a range of capabilities

To ensure the ACDC is capable of driving collaboration, it should have a multi-disciplinary board. This will increase the likelihood that the ACDC's advice will take into account a broad range of relevant considerations. This will also reduce the risk of failing to influence key stakeholders.

The board and other staff should have a range of skills, including modelling (specifically of impacts of health effects, as well as more general modelling capability), economics, and communications, as well as public health expertise. The Health Promotion Board in Singapore has board members with experience in banking, consulting, sport promotion, and entrepreneurship, as well as in other government departments, such as Education, and Culture, Community, and Youth.<sup>181</sup>

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177. Greer et al (2022).

178. Climate Change Authority (2022).

179. ABS (2018b).

180. For example, the ACDC could enable and lead programs of outreach to vulnerable communities: see, for example Michener and Ford (2022). The ACDC could also engage with communities through other deliberative democracy mechanisms such as 'town hall' meetings: Adams (2004); focus groups: Stromberg (2019); and citizens' juries: Bozentko et al (2021).

181. Singapore Health Promotion Board (2020, pp. 4–13).



Cross-government experience will also be very relevant to the ACDC, to best enable collaboration with all relevant parts of government, rather than just the health portfolio.

To avoid the risk of vested interests influencing the ACDC, potential board members should be disqualified from the process if they have worked in tobacco, food and beverage, or gambling industries within the past five years.

### 9.5 The ACDC should be adequately funded

The ACDC's role in preventing chronic disease will be important, and challenging. The government will need to resist the temptation to run the ACDC on the cheap. Cutting corners with funding would set up the institution to fail, and seriously inhibit Australia's ability to reduce chronic disease.

As discussed in previous sections, the ACDC will need to hire a dedicated, specialist staff, with capabilities in several key areas. The ACDC will need the capacity to establish rigorous methodologies for evaluating interventions, and call on the expertise of experienced modellers, economists, scientists, and public health experts.

For the ACDC's schedule to be of use to governments, and trusted by the public, it will need to have broad reach, and set new standards of rigour in its evaluation of evidence. The capacity of the ACDC to produce a large amount of high-quality analysis will be paramount.

To the achieve these goals, the ACDC should be adequately funded in five yearly cycles to help the agency plan its work. It is difficult to determine the right budget. Although overseas CDCs can be used as a guide, they have different functions and serve different sized populations.<sup>182</sup>

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182. Scaling costs for different populations may also be misleading, as there are both fixed and variable costs.

International bodies most similar to what we propose, with mainly advisory instead of grant funding roles, have different levels of funding. At the lower end, New Zealand's Public Health Agency is funded at a per-capita level that would be the equivalent of about \$80 million annually for Australia. But other similar bodies, such as those in Norway and Finland, would cost about \$600 million annually (Figure 9.1 on page 43).

## 10 Conclusion

The ACDC could trigger a step-change in Australian prevention policy, finally getting us to pay enough attention to stopping chronic disease before it starts.

While the Federal Government has been clear that this will be part of the ACDC's role, the consultation paper on the new body suggests it won't be an early priority.<sup>183</sup> The paper says that, starting in 2024:

The initial focus will be on further building up the National Medical Stockpile; undertaking communicable disease surveillance, prevention, and response; and arranging greater data sharing and data linkage, both nationally and between jurisdictions.

These are essential steps to fix shortcomings in the COVID-19 response.<sup>184</sup> But the number of missed opportunities in chronic disease prevention highlighted in this report, and their huge impact on Australians' health, show that chronic disease prevention must be a top priority too. We recommend that chronic disease prevention be a core function from day one. Otherwise it is likely to be sidelined once again.

If the Federal Government instead chooses to build up ACDC functions over time, and defer chronic disease prevention, it can still reduce this risk.

First, the Government should ensure that any permanent or interim executive team, board, or advisory group include expertise in chronic disease prevention, not just infectious disease prevention.

Second, before phase one begins in 2024, future functions in chronic disease prevention proposed in this report should be agreed.<sup>185</sup> These functions should be included in the legislation enabling the ACDC, which will help ensure they are central to its mission and sustained over time.

The ACDC is a once-in-a-generation opportunity. It will be a wasted opportunity if chronic disease prevention is not built into its DNA, and if a plan for its full role is deferred for more than a year. Because every year that we wait locks in more disease, disability, and death in decades to come.

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183. Department of Health and Aged Care (2022b).

184. Australian National Audit Office (2020) and Shergold et al (2022).

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185. Future functions should include advising on what works through a Prevention Schedule, tabling regulatory reform options in Parliament, and advising research funding bodies on prevention research priorities.

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