

**Cost-effective actions to tackle the
biggest killer of men and women**

HEART DISEASE

**Submission on the 2017-18 Federal Budget from the
National Heart Foundation of Australia**

The Challenge

This submission identifies cost-effective measures that will:

- help Australians lead longer, healthier, more productive lives;
- reduce avoidable hospital admissions; and
- ensure more efficient and effective health care expenditure for government.

The Savings

This submission will save lives and put money in government coffers. If implemented in full, the proposals will result in increased revenue of \$3.3bn a year, offset by an annual investment of \$402m.

The Facts

Cardiovascular disease (mostly heart disease and stroke):

- is the most costly disease group at \$7.7bn a year, or 10.4% of direct healthcare expenditure, including \$4.5bn in hospital admissions and \$1.65bn in pharmaceuticals;¹
- is highly prevalent, with 4.2m Australians living with cardiovascular disease;²
- is a major cause of avoidable hospital admissions;³
- causes almost 30% of all deaths;⁴
- is forecast to remain the most expensive disease group, projected to rise from \$12bn in 2012-13 to more than \$22bn in 2032-33;⁵
- is a leading cause of the fatal burden of disease at 23%;⁶
- is a leading cause of the total burden of disease at 15%;⁷ and
- is largely preventable.

Our Budget proposals align with Australian Government priorities.

Early detection of chronic, complex conditions



'The importance of health checks is high, especially when attempting to capture early stages of chronic disease, or the lifestyle risk factors that contribute to disease, so the robust access and control of these assessments is important to future management of chronic disease growth'.

House of Representatives Standing Committee on Health, May 2016

Prime Minister's commitment to physical activity



'Physical activity is absolutely critical to be healthy, happy, strong and successful'.

Prime Minister Malcolm Turnbull, June 2016

The need to address rising childhood obesity rates



'We need to do more to promote healthier lifestyles for our children, which can help tackle obesity rates in Australia'.

Coalition health policy, June 2016

Medical research



'Health and medical research is essential for the development of more effective medical treatments and key to delivering real health benefits to Australians every day'.

Health Minister Sussan Ley, March 2016

Closing the gap on Indigenous health



'While there have been improvements in circulatory and respiratory disease mortality rates for Indigenous Australians, there is still work to be done to improve the care of Indigenous Australians across all chronic disease'.

Health Minister Sussan Ley, March 2016

Cost-effective actions to tackle heart disease

1. Develop a heart and stroke strategy	
Address a glaring gap in the current approach to chronic disease by developing a cardiovascular disease strategy to sit under the National Strategic Framework for Chronic Conditions.	\$1m over 2 years
2. Address the CVD research crisis	
Ensure Medical Research Future Fund disbursements reflect the causes of Australia's disease burden and help address the capacity crisis in the cardiovascular disease research workforce by funding 50 cardiovascular fellowships.	\$24m over 3 years
3. Close the gap on rheumatic heart disease	
Renew and strengthen funding for the National Rheumatic Fever Strategy and RHD Australia at current or greater levels.	\$100m over 10 years
4. Detect and manage those at risk	
Prevent avoidable hospital admissions through early detection of those at risk of heart attack, stroke, diabetes, kidney disease and other vascular conditions by increasing uptake of the Integrated Health Check.	No cost for new quality incentive program
Develop a new MBS item for the Integrated Health Check and on-going management.	No cost calculated for new MBS item
5. Help all Australians <i>Move More, Sit Less!</i>	
Build on the Government's physical activity investment to date to develop a more comprehensive set of measures to achieve a national physical action plan.	\$50m a year
6. Develop an obesity prevention strategy	
Develop a national obesity prevention strategy, with a focus on childhood obesity prevention.	Cost-neutral when implemented in full with a health levy on sugary drinks
7. Save lives with a cardiac rehabilitation audit	
Improve chronically low levels of participation in life saving cardiac rehabilitation programs through a biennial national audit.	\$0.5m a year

8. Fund the development of clinical guidelines

Fund the development of clinical guidelines for heart failure, atrial fibrillation, high cholesterol and Guidelines for Management of Absolute Cardiovascular Disease Risk to improve and standardise professional practice and improve health outcomes.

\$2.7m

9. Revenue measures

Health levy on sugary drinks
Reform tax on alcohol

\$0.4bn a year
\$2.9bn a year

1. Develop a heart and stroke strategy

Recommended action: Develop a comprehensive national cardiovascular disease strategy as an integral part of the National Strategic Framework for Chronic Conditions.

Why is this important?

The development of the National Strategic Framework for Chronic Conditions provides an opportunity for the Australian Government to ensure it has a comprehensive and integrated approach to the major chronic disease groups, especially the large groups such as cardiovascular disease (CVD).

While the Australian Government has developed strategies and action plans to address a number of chronic diseases, such as diabetes, and key risk factors, such as tobacco control and alcohol, there remains no national action plan or strategy for cardiovascular disease – a disease group that causes almost 30% of all deaths and is responsible for 15% of the total disease burden.

This is a significant gap in Australia's approach to chronic disease prevention and control. However, much can be done – and done in a highly cost-effective way – to prevent premature death, improve quality of life, cut avoidable hospital admissions and reduce the immense economic burden cardiovascular disease imposes on the health system and the community.

A well-constructed national heart and stroke strategy can achieve these objectives while complementing existing disease-specific strategies, including the recently developed national diabetes strategy.

Who will benefit?

The development of a heart and stroke strategy will guide resource allocation to interventions that will help save lives and improve the quality of life for those living with disease. It will also ease pressure on health systems by reducing avoidable hospital admissions.

While mortality rates have been in decline for several decades, cardiovascular disease still causes almost 30% of all deaths, is a leading cause of the total burden of disease in Australia (15% of the total burden) and imposes massive social and economic costs, comprising 10.4% of total direct healthcare expenditure.^{8 9}

Disturbingly, the number of people with cardiovascular disease is set to increase as the population grows, ages, becomes increasingly overweight and obese and some risk factors, such as poor nutrition, lack of physical activity, high blood cholesterol and high blood pressure, continue at alarmingly high rates.

Importantly, much of the cardiovascular disease burden is preventable – around 80% in the case of coronary heart disease. Many of the risk factors can also be prevented, including high blood pressure, high blood cholesterol, lack of physical activity, smoking,

overweight/obesity and poor nutrition.^{10 11} Addressing these key risk factors will also benefit many other chronic conditions.

The need to better tackle CVD was acknowledged when it was designated as a national health priority area in 1996. Subsequently, all health ministers agreed to a National Service Improvement Framework for Heart, Stroke and Vascular Disease in 2005. While the Framework sets out critical intervention points and priority areas, no implementation plan was developed and no funding provided to ensure the proposed outcomes could be achieved.

A decade has passed since the Framework was agreed, but there is still no funded national action plan to reduce risk, improve early intervention and drive improvements in outcomes for patients even though such a plan would help contain future costs for government.

“We have a once-in-a-generation opportunity to avoid millions of premature deaths and save lives by orchestrating a coordinated response to the heart disease and stroke pandemic across the globe. In order to achieve this we must work together to support implementation of the *WHO Global Action Plan 2013-2020* for NCD reduction, focussing specifically on heart disease and stroke”.

World Heart Federation’s *Mexico Declaration*. June 4, 2016

The concept of a national heart and stroke strategy already has strong support from stakeholders including state and territory governments. The *Review of Cardiovascular Disease Programs* (Birch Review) commissioned by the Federal Department of Health and Ageing and released in 2011, found: “*There is strong support across jurisdictional and non-government stakeholders for the formulation of a national action plan for CVD.*”

In June 2016, the world’s major vascular disease groups came together to call on all nations to develop dedicated heart and stroke plans, as set out in the Mexico Declaration.¹²

	Develop a national heart and stroke strategy.
	A heart and stroke strategy will guide resource allocation to effective interventions that will save lives, reduce avoidable hospital admissions and save money.
	\$1m over two years.

2. Address the CVD research crisis

Recommended action: Ensure Medical Research Future Fund disbursements reflect the causes of Australia's disease burden and help address the capacity crisis in the cardiovascular disease research workforce by funding 50 cardiovascular fellowships.

Why is this important?

There is a workforce crisis facing cardiovascular disease research. Static investment into the National Health and Medical Research Council (NHMRC) over the past five years has resulted in a decline in the NHMRC-funded workforce that endangers the capacity of Australia's health and medical research community to continue to produce exceptional health and economic returns.¹³

A recent survey found that almost one-in-four researchers were uncertain about being employed in the next twelve months. A lack of career opportunities and job security were a primary concern, with 80% of researchers surveyed saying they were considering leaving the profession.¹⁴

Heart disease is the largest killer of Australians¹⁵ and the most expensive disease in terms of direct health care costs. Cardiovascular disease is also responsible for the second highest burden of disease, accounting for 15% of the total burden in Australia.¹⁶

The *Medical Research Future Fund Act 2015* states that funding priorities must include the burden of disease on the Australian community. It is critical that MRFF disbursements be allocated to reflect Australia's disease burden if we are to address the CVD research crisis.

This will support research in areas of need that help address disparities in heart health and boost Australia's capacity to keep the best and brightest research minds within the cardiovascular research community.

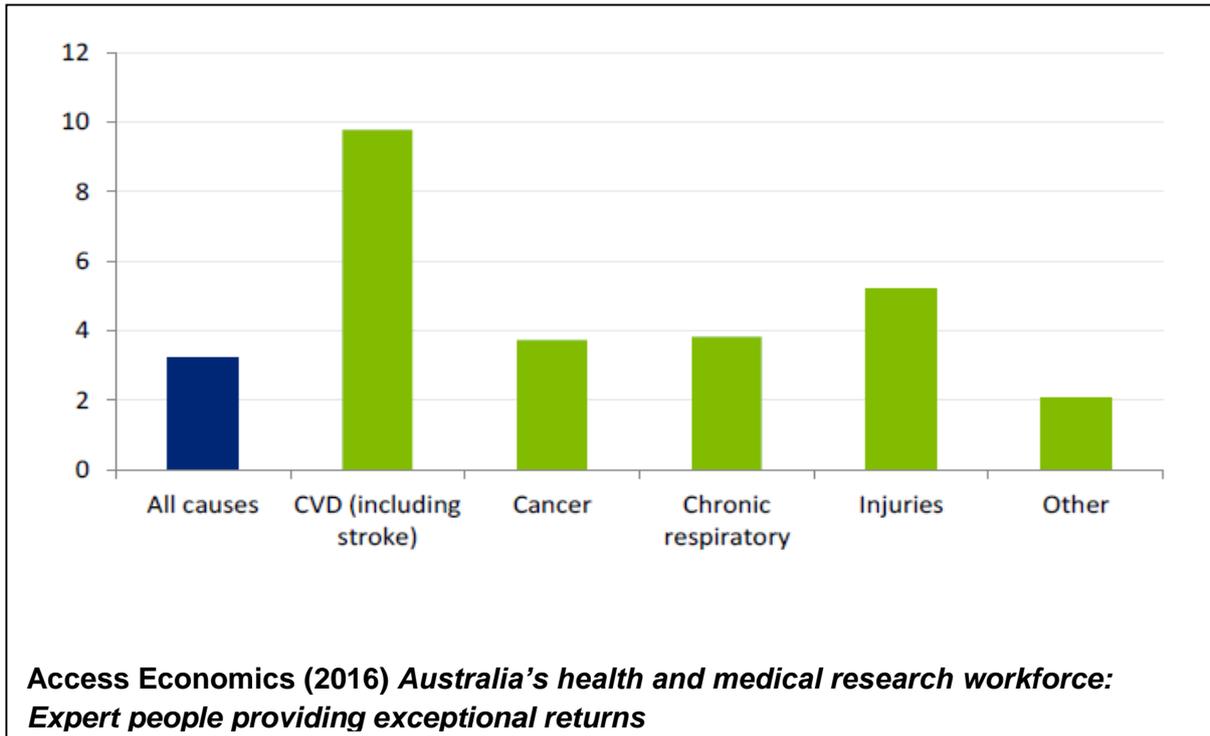
Cardiovascular disease research is an investment in the social and economic well-being of the nation that returns \$9.80 for every \$1 invested.¹⁷ It also offers the potential to address obesity-related illness through blue-sky innovation and improve linkages between knowledge generation and health outcomes.

The investment in 50 cardiovascular research fellowships would significantly boost the capacity of cardiovascular disease research in Australia and help arrest the current workforce crisis. The fellowships will help attract high-calibre candidates who will receive \$110,000 per annum in salary and an annual project support package of \$40,000.

Who will benefit?

Health and medical research is not an expense - it is an investment that reaps enormous social and economic benefits and drives improvement in healthcare quality and outcomes.

Between 2000-and-2015, the benefit-to-cost ratio of investment in cardiovascular disease research (including stroke) was 9.8¹⁸



The community benefits directly from the application of evidence-based research in CVD prevention, treatment, care, and rehabilitation because many advances in cardiovascular health have had their foundation in health and medical research discoveries.

Populations with special needs benefit from research that helps address disparities in heart health for all Australians. Like the government, the Heart Foundation is committed to health equity and research in areas of special need, such as cardiovascular disease in Aboriginal and Torres Strait Islander people and people from other vulnerable groups.

	<p>Ensure Medical Research Future Fund disbursements reflect the causes of Australia's disease burden and help address the capacity crisis in the cardiovascular disease research workforce by funding 50 cardiovascular fellowships.</p>
	<p>The Australian community benefits directly from the application of research in cardiovascular disease prevention, treatment and care.</p>
	<p>\$24m over three years.</p>

3. Close the gap on rheumatic heart disease

Recommended action: Renew and strengthen funding for the National Rheumatic Fever Strategy and RHD Australia at current or greater levels.

Why is this important?

Rheumatic heart disease (RHD) is primarily a disease of social disadvantage with the highest burden falling on Aboriginal and Torres Strait Islander communities.

Funding for the National Rheumatic Fever Strategy runs to June 2017 and needs to be renewed and strengthened to build on current success in addressing the alarmingly high rates of RHD among Indigenous Australians.

Data from the Northern Territory, Queensland and Western Australian rheumatic fever registers over 2010-2103 showed the incidence of acute rheumatic fever (ARF) - the precursor to RHD - among Indigenous people was 53 per 100,000, compared with less than 1 per 100,000 among other Australians.¹⁹

Indigenous Australians are eight times more likely than non-Indigenous Australians to be hospitalised for ARF/RHD and, in 2010, the prevalence rate of RHD was as much a 26 times higher.

The register-based control programs in South Australia, Northern Territory, Queensland and New South Wales have improved the detection of RHD, levels of treatment compliance, and awareness and knowledge among healthcare professionals.

Since their introduction, the NT and Western Australia control programs have doubled the number of patients receiving 80% or more of the required medication as part of secondary prophylaxis treatment.

Who will benefit?

Aboriginal and Torres Strait Islander people, especially those living in rural, remote and very remote regions.

The Australian Government will benefit from health savings associated with the transportation and hospitalisation of those with RHD - mostly Indigenous Australian - from regional and remote locations to receive specialist cardiac treatment in the major cities.

Rural and remote health services would be able to allocate scarce resources to other areas of priority because of the reduced costs treating and managing ARF/RHD.

The Heart Foundation was pleased to support the development and release of the Australian Medical Association's 'call to action' to prevent new cases of RHD in Indigenous Australia by 2031. The *2016 Report Card on Indigenous Health* made recommendations to achieve this aim through:

- All Australian governments committing to a target to prevent new cases of RHD reported among Indigenous people by 2031.
- Australian governments committing to a sub-target that no child in Australia dies of ARF and its complications by 2025.
- Australian governments working in partnership with Indigenous health bodies, experts, and key stakeholders to develop, fully fund, and implement a strategy to end RHD as a public health problem in Australia by 2031, comprising:
 - an interim strategy (operational from 2016-2017 until 2021); and
 - upon the 2020 receipt of the final report of the END RHD CRE, a comprehensive 10-year strategy (operational from 2021-2031).²⁰



	Renew and strengthen funding for the National Rheumatic Fever Strategy and RHD Australia at current or greater levels.
	Aboriginal and Torres Strait Islander people, especially those living in rural, remote and very remote regions will benefit.
	\$100m over ten years.

4. Detect and manage those at risk

Recommended action: Include the Integrated Health Check and on-going management of patients at risk as part of the development of a new Quality Improvement Incentive payment. Provide an MBS item to support uptake of the Integrated Health Check.

Why is this important?

Around 100,000 Australians have a heart attack or stroke each year, taking an immense social and economic toll on the community and governments.

And yet, much of this toll and cost is avoidable if people at high risk are detected early enough and are then well-managed.

Disturbingly, some 1.4m Australians aged 45-74 have a high risk of a heart attack or stroke within the next five years. But almost one million of these are not receiving the recommended treatment.²¹

Tens of thousands of premature deaths could be averted if people aged 45 or older had a cardiovascular risk assessment and those at high risk were well managed according to existing guidelines.²²

Well-established, National Health and Medical Research Council (NHMRC) approved-guidelines call for general practitioners (GPs) to conduct assessments for eligible patients to detect those at risk of having a heart attack, stroke or developing type 2 diabetes or chronic kidney disease.

Because these diseases often co-exist and share many risk factors, it is recommended that these assessments be done concurrently as part of an 'Integrated Health Check' (IHC).

The check combines an absolute risk assessment for heart disease and stroke, a type 2 diabetes check and a kidney disease test. It is considered best practice as it consolidates the necessary checks a patient can request from their doctor.

However, relatively few GPs routinely conduct these checks for eligible patients, missing the opportunity to ensure people at high risk are managed to ensure they stay alive, stay well and stay out of hospital.

The Australian Government is developing a Quality Improvement Incentive payment by consolidating a number of existing Practice Incentive Payment schemes into a single program.

Undertaking Integrated Health Checks and ensuring on-going management of patients at risk should be incorporated into the proposed Quality Improvement Incentive payment. General practices would be required to:

- Check eligible patients for vascular and related conditions through the IHC;

- Manage the overall risk profile of patients, stratify risk and address their combined risk factors through advice about healthy eating, healthy physical activity and healthy weight, medical management and/or coordinating access to evidence-based prevention programs;
- Maintain a patient register, with recall and reminder systems for patients eligible for assessment and those who require management of risk; and
- Record and report the proportion of eligible patients who are checked, who have their risk managed according to the relevant practice guidelines, who have a GP management plan, and who access evidence-based prevention programs.

The Quality Improvement Incentive payment should be linked to Primary Health Networks, with the Networks charged with promoting uptake of the IHC, developing systems support, creating linkages with relevant prevention services and reporting via quality improvement audits.

In addition to inclusion in the proposed Quality Improvement Incentive payment, an MBS item should be established to support uptake and implementation of the IHC.

“A full cardiovascular risk assessment allows therapy to be targeted to those who would most benefit from it. Not only is this good clinical practice, it makes sound economic sense.”

Prof Emily Banks, National Centre for Epidemiology and Population Health, Australian National University, May, 2016

Who will benefit?

The community will benefit from fewer heart attacks, strokes and cases of type-2 diabetes, kidney disease and other vascular conditions.

The Australian Government will benefit from reduced health care costs achieved through a significant reduction in avoidable hospital admissions and more effective use of PBS medications.

	Include the Integrated Health Check in the new Quality Improvement Incentive payment.
	Detecting and managing those at high risk of having a heart attack, stroke or type-2 diabetes, kidney disease and other vascular conditions will reduce avoidable hospital admissions and cut health care costs.
	No additional cost for including IHC in the planned QII payment. New MBS item would require costing.

5. Help all Australians to *Move More, Sit Less!*

Recommended action: Build on the government's physical activity investment to date by developing a more comprehensive set of measures to achieve a national physical action plan.

Why is it important?

Physical inactivity is a major health problem in its own right. If physical activity were thought of as a medication with an adult dose of 30 to 60 minutes a day, there is scarcely anything that would provide comparable health benefits.

Disturbingly, since 2001, the number of Australian's doing very little or no exercise has continued to increase. Two in three (66.9%) Australians aged 15 and over are sedentary or have low levels of exercise, and eight-in-ten children do not meet physical activity guidelines of 60 minutes a day.^{23 24 25}

Physical inactivity is a major chronic disease risk factor that needs to be addressed. Physical inactivity costs the health budget an estimated \$1.5bn a year²⁶ and causes an estimated 14,000 deaths per annum.²⁷

Physical inactivity contributes to almost one-quarter of the cardiovascular burden of disease in Australia (24%).²⁸

Physical inactivity increases the risk of heart disease, stroke, diabetes, colon and breast cancer and is a critical factor in Australia's obesity epidemic.²⁹

Physical inactivity contributed to 5% of the overall burden of disease in Australia in 2011,³⁰ placing it among the top modifiable risk factors.

When considered by disease group, physical inactivity contributed 30% of the endocrine (diabetes), 21% of the cardiovascular and 6.4% of the cancer disease burden.³¹

Addressing the National Press Club in October 2015, the Health Minister said: "It is essential to the health of our nation that we are a physically active one. Too many Australians, young and old, are living sedentary lives and, frankly, it's killing us."

During the 2016 election campaign the Prime Minister said: "Physical activity is absolutely critical to be happy, healthy, strong and successful".

Who will benefit?

The opportunity exists to build on the Government's physical activity investment to date (*Sporting Schools, Girls Make Your Move*, community sport and recreation infrastructure funding) to develop a more comprehensive set of measures to achieve a national physical action plan. This could include:

School settings	Develop a targeted safe walking and cycling routes to school grants program.
Mass media	Extend <i>Girls Make Your Move</i> to other audiences, starting with older Australians (help them stay independent for longer, reduce risk of falls).
Walking	Support Heart Foundation Walking.
Healthy Urban Planning	Health considerations need to be at the heart of smart city planning because active cities are healthy, clean, connective, inclusive, prosperous and safe. ³²

All Australians, at any age, will benefit from being more physically active. Through leadership and making investments to support physical activity, the Australian Government will help ease the pressure on hospital admissions.

Australians with a chronic condition will benefit through better managing their condition, overall improvements in their quality of life.

Less than 20% of Australian children meet recommended activity levels

Australia was assigned a failing grade (D-) in the global physical activity report cards for children and young people, released in November 2016. Less than 20% of 5-17 year olds meet the recommended national physical activity guidelines of 60 minutes of moderate to vigorous physical activity every day. Organised sport and physical activity participation improved to a B (from a B- in 2014) while active transport declined to a C- (previously C). Australia continued to perform well in the settings and sources of influence (ranging from a C+ to an A-), however strategies and investments declined from a C+ in 2014 to a D in 2016. The traits associated with physical activity (physical fitness and movement skills) were also graded poorly.³³

	Build on the Government's physical activity investment to date to develop a comprehensive set of measures that achieves a national physical action plan.
	All Australians, at any age, will benefit from being more physically active, and the Government will make health savings in reduced hospital admissions and ongoing management of most chronic diseases.
	\$50m a year.

Heart Foundation Walking

The Heart Foundation Walking program has been promoting physical activity for more than 20 years. It is the largest network of free community based walking groups, with over 26,000 Australians enrolled.

Heart Foundation Walking participants are mostly women (78%), live alone (25%) and have a household income of less than \$40,000 (32%). Over half live in regional areas and one in nine have had a heart attack or stroke. Heart Foundation Walking groups are more likely to be located in more disadvantaged areas (59%) and have a sizable number of participants that speak a language other than English at home (14%).

Heart Foundation Walking is widely recognised as an example of best practice for improving health and wellbeing through physical activity. Despite its ongoing success, new models of engagement and program delivery are needed to bring its benefits to disadvantaged groups and communities with high levels of physical inactivity.

Heart Foundation Walking is ready to be scaled up to target disadvantaged groups in areas which have over 75% of the population insufficiently active, based on data from the Heart Foundation's *Heart Maps*. Shepparton and Ballarat in Victoria, the Riverina in NSW and Cairns in Queensland are among those communities that would benefit.

Walking is the most popular form of physical activity for Australian adults³⁴, and the Harvard Medical School says it is "the closest thing we have to a wonder drug³⁵ in terms of health benefits. Walking for just 21 minutes a day has been shown to reduce the risk of heart disease by 30%, and lower the risk of diabetes, cancer and hypertension and cholesterol levels.³⁶ It also improves cognitive function, elevates your mood and is a great way to build social connections.³⁷

	Expand the Heart Foundation Walking program to target disadvantaged groups in areas where over 75% of the population are insufficiently active.
	Australian communities in low socio-economic and often rural and remote areas will benefit directly from being able to access a free program to boost and support physical activity.
	\$10m a year over three years.

Community Infrastructure

The Heart Foundation supports the proposal of the Australian Local Government Association for the establishment of a regional and community infrastructure funding program that invests \$300m per annum over four years. This will enable local councils to plan and deliver adequate and appropriate community infrastructure.

The provision of additional funding that can be invested by local governments and communities to boost levels of physical activity through the development of local infrastructure is an important part of creating active communities and getting Australians to *Move More, Sit Less!*

Local government community infrastructure includes a significant portion of sporting and recreation facilities. Resources are needed to ensure sufficient and equitable access to community sport and recreation infrastructure if Australia is to tackle its chronic disease epidemic through increased physical activity. ³⁸

Accessible and high-quality facilities that engage and encourage community members to get up and get moving provide a counter-point to the obesogenic environment we live in. Appropriate sport and recreation infrastructure would help create active communities by making it easier to incorporate physical activity back into our daily lives, and facilitate greater social inclusion and overall wellbeing. ³⁹

	Establish a community infrastructure funding program.
	A community infrastructure fund will help build local sport and recreation facilities to support greater levels of physical activity that improve health and wellbeing.
	\$300m a year over four years.

6. Develop an obesity prevention strategy

Recommended action: Develop a national obesity prevention strategy, with a focus on childhood obesity prevention.

Why is this important?

The rapid rise in the number of Australians who are overweight or obese presents a major threat to the health of two thirds of the community. Most Australians (63%) are overweight, with 28% obese. Disturbingly, more than a quarter of Australian children are overweight or obese.⁴⁰

High body mass now contributes 5.5% of the total burden of disease in Australia while dietary risk factors account for 7.2%, the third and second major contributors after tobacco use (9%). The impact on cardiovascular disease is even more stark, with dietary risk factors contributing 35% of the disease burden and high body mass 21%.⁴¹

Work commissioned by the Heart Foundation reveals that the number of obese adults in Australia is expected to nearly double by 2032. The total extra expenditure for cardiovascular disease and type-2 diabetes from attributable to excess weight between now and 2032 is estimated to be \$187bn.⁴²

Who will benefit?

If current trends continue, it has been estimated that there will be 1.75m deaths at ages 20 years and over caused by overweight and obesity in the years 2011-2050, with an average loss of 12 years of life for each Australian who dies before the age of 75 years.⁴³ If obesity rates could be arrested during this time, half a million lives could be saved.⁴⁴

Overweight/obesity is a major modifiable risk factor for a broad range of diseases, including heart disease and stroke, type-2 diabetes, chronic kidney disease, some cancers and osteoarthritis.

As the World Health Organisation states: “Obesity is one of today’s most blatantly visible – yet most neglected – public health problems.”

Solutions, however, are at hand, with significant consensus across public health groups on cost-effective interventions.

The Australian Government could develop a comprehensive national obesity prevention strategy with measures such as:

- Curb marketing of unhealthy food and beverages to children;
- Introduce a health levy on sugary drinks with funds raised to be invested in preventive health measures;
- Strengthen national food reformulation and portion control measures;
- Invest in effective education campaigns, such as *LiveLighter*;

- Enhance education for the national Health Star Rating front-of-pack labelling system; and
- Develop and fund a national physical activity action plan to get all Australians to *Move More, Sit Less!*

Health levy on sugary drinks

WHO has recommended that governments place a levy on sugary drinks as part of a comprehensive approach to reducing sugary drink consumption. This approach was a recommendation of the WHO Commission on Ending Childhood Obesity and has been embraced by a number of countries including Mexico, some parts of the United States and the UK. A recent Australian study estimated that increasing the price of sugary drinks by 20% could reduce consumption by 12.6%.⁴⁵

This reduction in consumption has the potential to generate a decline in the prevalence of obesity by 2.7% among men, and 1.2% among women, and could reduce the number of cases of type 2 diabetes by 800 a year.

The study estimated that the levy could raise revenue in excess of \$400m a year, even after accounting for reduced consumption.⁴⁶ The funds raised should be invested in public health programs, including a national obesity prevention strategy.

	<p>Develop a national obesity prevention strategy, with a focus on childhood obesity prevention.</p>
	<p>High body mass and dietary risk factors present a major threat to public health. A well-funded national obesity prevention strategy is needed to tackle this crisis.</p>
	<p>Cost-neutral when implemented in full with a health levy on sugary drinks.</p>

National tobacco education campaign

Australia has been a global leader in tobacco control for the past three decades. Important measures have included the introduction of plain packaging of tobacco products, increases in tobacco taxes, the Tackling Indigenous Smoking initiative and the decision by the Future Fund and a number of superannuation funds to end their investment in tobacco companies.

Smoking remains a leading cause of death and disability in Australia, claiming 15,000 lives each year ⁴⁷ and is estimated to account for 12% of the total burden of cardiovascular disease.⁴⁸

If Australia is to reach its target of 10% of the population as daily smokers by 2018, more needs to be done.⁴⁹ A scaled-up National Tobacco Campaign is needed to help achieve this target.

The evaluation of Australia's National Tobacco Campaign ⁵⁰ (1997) showed that, over a sustained six-month period:

- It delivered \$740.6m in healthcare savings;
- Prevented 55,000 deaths and gained 323,000 life-years; and
- The \$9m invested in 1997 (returning \$740.6m) translated to \$20m in 2017 – with well over \$740m in expected returns, given the inflated healthcare costs over two decades.

The Australian Government should increase funding for tobacco control education campaigns and ensure this funding is ring-fenced for this purpose.

	Enhance the National Tobacco Campaign in 2017-18.
	Australians who quit smoking as a result of an enhanced public education campaign will benefit from better health and reduced disease risk. The government will also make health savings due to fewer deaths and less disease burden associated with tobacco use.
	\$20m a year.

7. National cardiac rehabilitation audit

Recommended action: Fund a biennial national audit of cardiac rehabilitation services.

Why this is important?

Cardiac rehabilitation programs are an important step in the journey of care, guiding and supporting patients to recover following a cardiac event. Despite this, it is estimated that attendance rates for cardiac rehabilitation are as low as 11–31%.⁵¹

More than one-third of hospital admissions for heart attack are repeat events.⁵² Moreover, the number of hospital separations due to heart attacks has increased, rising by 15% between 2003-04 and 2013-14.⁵³

A Victorian study reported a 25% increase in five-year survival rates among patients who attended cardiac rehabilitation,⁵⁴ and recent research indicated that \$227m worth of economic and social benefits could be made from increased cardiac rehabilitation participation over a ten-year period in Victoria.⁵⁵

In the UK, an annual audit of cardiac rehabilitation has helped better understand referral and completion rates, and driven improvements across the system.

Despite the benefits of attending a cardiac rehabilitation program, variation in care from program to program is cause for concern. The core components that constitute an effective cardiac rehabilitation approach are well defined as:

- Referral and access to services;
- Assessment and short-term monitoring;
- Recovery and longer term maintenance;
- Lifestyle/behavioural modification and medication adherence; and
- Evaluation and quality improvement.⁵⁶

How well we are delivering these components of care to people after a cardiac event is not known and there is no consistent data collection and monitoring of these programs. This raises serious concerns as to the quality of care that is provided to patients and equity of access to good care that will save lives and reduce avoidable admissions and healthcare costs.

Currently, there is no mechanism to determine how many patients are referred to, or complete, cardiac rehabilitation. These areas also lack consistent definitions and measures making it currently impossible to monitor and evaluate services.

Funding a biennial national audit of cardiac rehabilitation services in Australia will assist in identifying opportunities for driving service improvement, monitoring progress over time, and sharing good-practice.

Who will benefit?

Improving cardiac rehabilitation in Australia can improve the quality of life for patients, reduce avoidable hospital admissions and reduce financial pressure on our health systems.

People living in regional, rural and remote communities will also benefit through reduced inequity as a result of improved access regardless of where a patient lives.

Aboriginal and Torres Strait Islander people could particularly benefit because, at present, their participation in cardiac rehabilitation programs is less than 5% and significantly lower than the general population.⁵⁷

Heart disease remains the single biggest killer of Aboriginal and Torres Strait Islander people, who are more than twice as likely to die from heart disease (and at younger ages) than non-Indigenous Australians.⁵⁸ Cardiovascular diseases is responsible for almost one-quarter of the mortality gap between Indigenous and non-Indigenous people.⁵⁹ The Australians Government's *National Aboriginal and Torres Strait Islander Health Plan 2013-2023* recognises cardiac rehabilitation as a key health priority.⁶⁰

The Government could boost cardiac participation by Aboriginal and Torres Strait Islander people through entering into a National Partnership Funding Agreement with state and territory governments that improves the patient journey and linkages between hospitals and local Aboriginal Community Controlled Health Services

	Fund a biennial national audit of cardiac rehabilitation services.
	People who have had a coronary event, especially those living in regional, rural and remote communities who have poor access to services. In particular, Aboriginal and Torres Strait Islander people whose participation in cardiac rehabilitation programs is less than 5%.
	\$0.5m a year.

8. Fund the development of clinical guidelines

Recommended action: Fund the development of clinical guidelines for heart failure, atrial fibrillation, high cholesterol and absolute cardiovascular disease risk to improve and standardise professional practice and improve health outcomes.

Why is this important?

There is strong evidence that using guideline recommendations in practice leads to improved health outcomes for patients.^{61 62} Research shows that guidelines are effective in changing clinical practice, improving quality of care and achieving better health outcomes that help optimise value for money.^{63 64}

Clinical guidelines for heart failure, atrial fibrillation, elevated cholesterol and absolute cardiovascular disease risk need updating.

Heart failure

Heart failure affects around 300,000 Australians and kills close to 2,900 each year as a primary cause and 20,000 deaths where heart failure is an associated factor.^{65 66} The cost of chronic heart failure in Australia has been estimated at over \$1bn per year.⁶⁷

The current heart failure guidelines were released in 2011. Since that time there have been considerable changes in its treatment and management. The management of chronic heart failure is now a pressing issue with many instances of poor case detection, discordant management, recurrent hospital admission and disconnected care.⁶⁸

Atrial fibrillation

Atrial fibrillation (AF) is a type of abnormal heart rhythm (arrhythmia) linked to increased risk of developing heart failure and stroke. It is estimated that over half a million Australians aged 50 years and older are living with AF.

There is strong evidence that AF increases the risk for heart failure, and it is estimated that AF increases the risk of heart failure approximately three fold.⁶⁹ The annual costs to the Australian economy in 2008-09 from AF are at least \$1.25bn per annum through medical costs, the costs of long term care for those with a disability, and lost productive output.⁷⁰

Australia currently has no guidelines for the clinical management of AF.

Elevated cholesterol

Treatment of elevated cholesterol includes the use of statin medication, with statins being the most widely prescribed medication in Australia. Some 40% of Australians over 65 years of age take statin therapy.⁷¹ High cholesterol is a significant risk factor for coronary heart disease and despite its treatment being the most prescribed medication, there are no uniform lipid clinical guidelines in use in Australia.

Guidelines for the Management of Absolute Cardiovascular Disease Risk

In 2009, the National Vascular Disease Prevention Alliance (NVDPA) developed *Guidelines for the Management of Absolute Cardiovascular Disease Risk*. These were approved by the NHMRC in 2012, and support the best practice approaches in primary care and focus expensive treatments in the right areas.

Since then, new evidence has emerged that has led to confusion among health professionals and the preparation of alternate guidelines. The need now exists to update the NVDPA guidelines in the immediate future at an estimated cost of \$1.2m.

The Heart Foundation has a long history of developing robust, clinical appropriate and well respected clinical guidelines that our *Health Professional Survey* shows are used by 4 in 5 GPs.

All guidelines are developed by leading Australian medical specialists including cardiologists, physicians and general practitioners, and are endorsed by applicable medical colleges including the Cardiac Society of Australia and New Zealand and the Royal College of General Practitioners.

Who will benefit?

Australians with, or at high risk of, heart disease will benefit from reduced variation in clinical practice and improved uptake of best-practice amongst health professionals.

They will also benefit from improved health outcomes that are the result of practices that follow guideline recommendations.

	Fund the development of clinical guidelines for heart failure, atrial fibrillation, high cholesterol and Guidelines for the Management of Absolute Cardiovascular Disease Risk to improve and standardise professional practice and improve health outcomes.
	Australians with, or at high risk of, heart disease will benefit from the greater uptake of best-practice amongst health professionals and improved health outcomes.
	\$2.7m

9. Revenue measures

Recommended action: Consider a health levy on sugary drinks, with funds to be allocated to preventive health, and reform alcohol tax in line with recommendations from the Foundation for Alcohol Research and Education.

Why is this important?

The Australian Government could raise \$3.3bn a year with two popular, evidence-based revenue measures: alcohol tax reform and a health levy on sugary drinks. These measures could not only raise much needed funds to off-set new public health interventions, but would also achieve important population health benefits in their own right.

It's important to note that Australia lags well behind other OECD nations when it comes to investment in public health, with government funding amounting to just 1.4% of total healthcare expenditure. New Zealand leads the OECD at 7% with Canada on 5.9%.

Alcohol tax reform

With new tobacco tax measures in place, the Government should act on alcohol tax reform. The Foundation for Alcohol Research and Education (FARE) calls for reform to:

- bring wine and cider to be brought into line with other alcohol products, and
- apply a 10% increase to all alcohol excise.

This would raise \$2.9bn annually to achieve a 9.4% reduction in alcohol consumption.⁷² FARE further calls for indexation of alcohol excise rates to average weekly ordinary time earnings, rather than the CPI, to ensure that the cost of alcohol does not reduce relative to personal income.

As FARE states, among alcohol harm prevention policies, alcohol taxation is the most effective as it not only reduces consumption and related harms, but also provides revenue to contribute to services addressing alcohol-related harms. Surveys indicate that 71% of Australians believe that the alcohol industry should pay for reducing alcohol harms and 51% support an increase to the tax on alcohol.

As the American Heart Association states, drinking too much alcohol can:

- lead to high blood pressure, heart failure and an increased energy intake; and
- raise the levels of some fats in the blood (triglycerides)

In addition, excessive drinking and binge drinking can lead to stroke. Other serious problems include foetal alcohol syndrome, cardiomyopathy, cardiac arrhythmia and sudden cardiac death.⁷³

Health levy on sugary drinks

As noted above, WHO has recommended that governments place a levy on sugary drinks as part of a comprehensive approach to reducing sugary drink consumption.

This approach was a recommendation of the WHO Commission on Ending Childhood Obesity as has been embraced by a number of countries including Mexico, some parts of the United States and the UK.

A recent Australian study estimated that increasing the price of sugary drinks by 20% could reduce consumption by 12.6%.⁷⁴

This reduction in consumption has the potential to generate a decline in the prevalence of obesity of 2.7% among men, and 1.2% among women, and could reduce the number of cases of type 2 diabetes by 800 a year. The study estimated that the levy could raise more than \$400m a year, even after accounting for reduced consumption as a result of the levy. The funds raised should be invested in public health programs, including a national obesity prevention strategy.

Overweight and obesity is a serious health challenge. In 2014-15, 63.4% of Australian adults were overweight or obese (11.2m people) up from 56.3% in 1995. Around one in four (27.4%) children aged 5-17 years were overweight or obese, similar to 2011-12 (25.7%).⁷⁵

Australian Bureau of Statistics data, released in 2016, reveals that while the median amount of sweetened beverages consumed on the day prior to interview was around the size of a typical can (375ml), the top ten per cent highest consumers of sweetened beverages consumed more than one litre on the day, peaking at 1.5 litres for males aged 19-30 years. The average intake for males aged 14-18 years who consumed sugar-sweetened beverages was 16 teaspoons, or 68 grams.⁷⁶

	<p>The Australian Government should consider corrective tax reform options including:</p> <ul style="list-style-type: none"> • a health levy on sugary drinks, with funds to be allocated to preventive health. • alcohol tax reform in line with recommendations from the Foundation for Alcohol Research and Education.
	<p>Corrective tax reform measures and a health levy on sugary drinks could reduce excessive consumption while providing a source of revenue for additional health measures.</p>
	<p>The health levy will raise \$400m a year. Reform of alcohol taxation will raise \$2.9bn a year.</p>

A comprehensive approach to cardiovascular disease

Priority actions to tackle cardiovascular disease	
Develop a heart and stroke strategy	\$1m over 2 years
Address the CVD research crisis	\$24m over 3 years
Close the gap on rheumatic heart disease	\$100m over 10 years
Detect and manage those at risk	No cost, MBS item
Help all Australians <i>Move More, Sit Less!</i>	\$50m a year
Develop a national obesity prevention strategy	Cost neutral
Biennial national cardiac rehabilitation audit	\$0.5m a year
Develop clinical guidelines	\$2.7m
Revenue measures	\$3.3bn a year
Additional measures	
Increase public health investment	Lift investment to 5% of total health expenditure over time
Strengthen national food reformulation program, the Healthy Food Partnership	\$5m a year
Invest in tobacco control, especially education campaigns	\$20m a year
Review cardiovascular disease risk guidelines	\$1.2m
Fund the review of vital heart failure guidelines	\$2.8m
Fund national heart failure study	\$5m
National defibrillator program for sport venue and clubs	\$6.5m a year
Reporting treatment times for heart attack and stroke	\$4m over 4 years
Biomedical component of the National Health Survey	\$12m every 6 years

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