# NATIONAL STRATEGIC ACTION PLAN FOR HEART DISEASE AND STROKE

## September 2020

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**National Strategic Action Plan for Heart Disease and Stroke** July 2019 (Amendments September 2020)

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We acknowledge Traditional Owners of Country throughout Australia and recognise the continuing connection to lands, waters and communities. We pay our respect to Aboriginal and Torres Strait Islander cultures, and to Elders both past and present.

## Foreword

Today, more than four million Australians are living with cardiovascular disease (including heart disease and stroke), and each year nearly 44,000 Australians will die from cardiovascular disease. Apart from the great human cost, the impact on our health system is substantial. Cardiovascular disease has the highest level of healthcare expenditure of any disease group in Australia.

Yet cardiovascular disease is largely preventable. Interventions to treat and manage heart disease and stroke are proven to be effective. There is a solid foundation already in place for future breakthroughs in the prevention, treatment and management of these diseases. In recent decades, there have been significant advances in tackling preventable disease, improving access to best practice treatment and supporting Australians to live well. However, there is more to be done.

The National Strategic Action Plan for Heart Disease and Stroke provides a roadmap to achieving our goal of a healthier Australia. The Action Plan sets out strategic, evidence-based, cost-effective and patient- focused actions that will save lives.

Tackling two of this nation’s biggest killers – heart disease and stroke – is challenging, but it will reap enormous benefits.

Strategic interventions put in place now can reduce premature deaths and avoidable hospital admissions, alleviate suffering and cut the cost of heart disease and stroke to individuals, families, communities and the health system. In implementing the actions outlined in this Action Plan, we recognise the importance of tailoring approaches to meet the needs of priority populations in which the burden of disease is high. We can and must do more for those living in rural, regional and remote areas. Aboriginal and Torres Strait Islander peoples and other vulnerable communities require specific strategies to improve health outcomes.

The National Strategic Action Plan for Heart Disease and Stroke brings together the expertise of healthcare professionals, researchers and academics, government at all levels, non-government organisations, the private sector, and industry and community members, to deliver on our goal.

In developing this Action Plan, we have been excited by the vision of our researchers, encouraged by the commitment of our health professionals, and inspired by the innovative programs operating in many states and territories. Our consumers, carers and families have engaged with us at every step of the development process, focussing our thoughts and grounding our ideas.

Now it is time for action. Together we can reduce the burden of heart disease and stroke on our communities and our healthcare system, for the benefit of Australians today and into the future. This Action Plan will deliver a healthier Australia for generations to come.

On behalf of the National Heart Foundation of Australia and Stroke Foundation, we acknowledge and thank our Steering Committee, chaired by Professor Emily Banks, and all those who have participated in the development of this plan. We commend this Action Plan to the Australian Government and look forward to working with all of our stakeholders across cardiovascular health to implement the National Strategic Action Plan for Heart Disease and Stroke.

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| --- | --- |
| Chris Leptos Signature  Mr Chris Leptos AM President National Heart Foundation of Australia | James Angus signature  Professor James Angus AO President Stroke Foundation |

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## Acknowledgements

Thank you to the hundreds of people living with, or caring for someone living with, heart disease or stroke, as well as to the consumer groups, health professionals, research institutions, peak bodies, different levels of government and other relevant stakeholders and organisations who were part of the National Strategic Action Plan for Heart Disease and Stroke consultation. Thank you to the broader Australian community who strive to prevent heart disease and stroke and to support better lives for people with these conditions.

We would particularly like to thank the National Strategic Action Plan Steering Committee for their oversight of the development of the Action Plan. The Committee was an advisory body comprised of some of Australia’s leading thinkers. It was convened to support and guide the development of the Action Plan.

The National Strategic Action Plan for Heart Disease and Stroke will benefit all Australians, now and into the future, through creating a framework for ongoing progress in combatting two of the nation’s biggest killers, heart disease and stroke.

## Overview

### Goal

The goal of the National Strategic Action Plan for Heart Disease and Stroke is:

**“That all Australians live healthier lives through effective prevention, treatment and management of heart disease and stroke”.**

### Objectives

1. Focus on primary and secondary prevention and early detection of heart disease and stroke for a healthier Australia.

2. Provide efficient, effective, and appropriate access to diagnosis and treatment for heart disease and stroke for all Australians.

3. Provide access to support mechanisms for patients, carers and health professionals to provide and receive the best support and care for heart disease and stroke.

4. Ensure a well-funded, collaborative approach to heart (disease) and stroke research and its translation into practice.

### Accompanying documents

There are three accompanying documents (details of which are provided separately) that will be published alongside the National Strategic Action Plan for Heart Disease and Stroke. These include:

1. A consultation document outlining the various consultation processes that were undertaken in developing the Action Plan.

2. An evidence base document outlining the nature of the evidence that supports each action. Some examples include, but are not limited to: an international model of care; best practice as outlined in clinical guidelines; or anecdotally indicated reforms that could benefit from piloting to strengthen the evidence base.

3. A stocktake document outlining key programs, initiatives or activities that are already in place to address gaps in the approach to heart disease and stroke prevention, treatment and management, which may be easily scaled up or rolled out nationally.

### Priority Areas

The key actions needed to underpin a comprehensive and holistic approach to the prevention, treatment and management of heart disease and stroke in Australia fall into four priority areas. Each priority area is supported by actions focused on delivering the overall goal and objectives of the Action Plan. Each priority area is of equal importance and not ranked. The four priority areas are:

* Prevention and Early Detection
* Diagnosis and Treatment
* Support and Care
* Research

### Summary of Objectives and Actions

|  |  |  |
| --- | --- | --- |
| Priority | Objectives | Actions |
| Prevention and Early Detection | 1.1 Detect and better manage Australians at risk of heart disease and stroke | 1.1.1 Update the Absolute Cardiovascular Risk Assessment Guidelines  1.1.2 Develop a targeted approach to Absolute Cardiovascular Risk Assessment screening and Integrated Health Checks (IHC)  1.1.3 Improve identification and management of hypertension (high blood pressure)  1.1.4 Raise awareness of health checks (including Atrial fibrillation) at appropriate ages, among health professionals and the community  1.1.5 Provide health professionals with appropriate tools and resources to support health checks and care |
|  | 1.2 Address risk factors for heart disease and stroke to encourage all Australians to live healthier lives | 1.2.1 Build on and strengthen existing work to reduce tobacco use and exposure to tobacco smoke in the community  1.2.2 Ensure Australians are supported to be physically active  1.2.3 Promote healthy eating patterns to address heart disease and stroke risk factors  1.2.4 Collect population health data on heart disease and stroke |
|  | 1.3 Increase awareness and understanding of heart disease and stroke within the Australian community | 1.3.1 Implement nation-wide, education and awareness campaigns, including priority populations |
| Diagnosis and Treatment | 2.1 Provide efficient, effective and appropriate treatment for all Australians | 2.1.1 Improve management of people at high risk, or living with, heart disease and stroke through primary health care  2.1.2 Improve equity in cardiac treatment and care through national standards  2.1.3 Eliminate disparities in treatment of heart disease and stroke for Aboriginal and Torres Strait Islander peoples  2.1.4 Implement the Rheumatic Heart Disease (RHD) Roadmap  2.1.5 Continue to fund services for rural, regional and remote communities, including remote Aboriginal and Torres Strait Islander communities |
|  | 2.2 Ensure treatment and care is accessible when and where it is needed | 2.2.1 Improve the delivery of emergency stroke treatment to rural, regional, and remote Australians through telehealth  2.2.2 Establish standardised national, pre-hospital, time-critical responses to heart attack and stroke  2.2.3 Develop and implement a national endovascular thrombectomy and thrombolysis plan  2.2.4 Improve access to specialised stroke units  2.2.5 Improve access to Transient Ischaemic Attack (TIA) clinics |

### Summary of Objectives and Actions

|  |  |  |
| --- | --- | --- |
| Priority | Objectives | Actions |
| Support and Care | 3.1 Improve access to high quality rehabilitation services | 3.1.1 Improve access to best practice cardiac rehabilitation services  3.1.2 Improve access to best practice stroke rehabilitation services  3.1.3 Expand digital health approaches, including telehealth, to improve access to allied health services and rehabilitation |
|  | 3.2 Improve the patient and carer journey from hospital to community, through multidisciplinary, coordinated care | 3.1.1 Improve transition of care from hospital to the community  3.2.2 Improve post-discharge support services for people with heart disease and stroke, and their carers |
|  | 3.3 Support Australians with heart disease and stroke to make the best recovery possible, to be well, to actively engage with the community and to optimally return to education, work or retirement | 3.3.1 Ensure access to tailored health information for all Australians  3.3.2 Provide peer and emotional support mechanisms for people living with heart disease and stroke, and their carers |
| Research | 4.1 Ensure a well-funded, collaborative approach to cardiovascular research | 4.1.1 Progress the Medical Research Future Fund (MRFF) Mission for Cardiovascular Health to address the heart and stroke burden of disease  4.1.2 Allocate funding to tackle identified gaps in existing research |
|  | 4.2 Develop a platform to rapidly translate research evidence into clinical practice and policy | 4.2.1 Improve research translation and availability of evidence through ‘living’, continuously updated clinical guidelines  4.2.2 Develop a nationally consistent approach to support health professionals in the translation of clinical guidelines |
|  | 4.3 Continue to enhance data collection for, and management of, cardiovascular diseases | 4.3.1 Progress National Clinical Quality Registries for heart and stroke  4.3.2 Develop a National Cardiac Rehabilitation Dataset  4.3.3 Establish a National Cardiovascular Data Platform  4.3.4 Develop a national approach to collection, monitoring and linkage of ‘time to treatment’ data |

## About the Action Plan

In developing the Action Plan, the National Heart Foundation of Australia and Stroke Foundation consulted with community members affected by heart disease and stroke. This included people living with heart disease or stroke, family members and carers, and those working in the heart disease and stroke fields. The National Heart Foundation of Australia and Stroke Foundation also undertook an extensive analysis of national and international policy and literature.

All actions outlined in the plan are considered important in order to gain improvements in heart disease and stroke in Australia. For this reason, the actions outlined in the plan have purposely not been prioritised in any particular order, instead grouped according to the overarching priority areas of focus.

All actions are considered necessary and fundamental to achieving improvements in heart and stroke, whether they are immediately achievable actions for the short term, or actions that will require further consideration and input in order to realise longer term impacts.

Each state and territory has their own unique set of priorities for their specific population and many of the recommended actions may be in progress in various degrees or have been achieved in some jurisdictions.

Implementation of actions must occur according to the requirements and individual circumstances of each individual state and territory and tailored to the needs of each jurisdiction, thereby ensuring alignment with current work underway and flexibility to address local needs. Level of implementation of actions will vary across jurisdictions.

### Development of Actions

Actions were developed taking into account:

* Consumer and stakeholder roundtable consultations;
* An online public survey;
* An analysis of Australian Government policies and strategies, including:
* National Strategic Framework for Chronic Conditions; and
* National Aboriginal and Torres Strait Islander Health Plan 2013-2023;
* An analysis of gaps in current approaches to heart disease and stroke;
* An analysis of successful programs and initiatives addressing heart disease and stroke in the community with the potential to be scaled up or rolled-out nationally;
* Australian cardiovascular policies and strategies including:
* Hearts and Minds (2017);
* The Birch Review of Cardiovascular Disease Programs (2009);
* Time for Action (2008); and
* The National Service Improvement Framework for Heart, Stroke and Vascular Disease (2004);
* International cardiovascular and non- communicable disease policy approaches, including:
* World Health Organization Global Action Plan for the Prevention and Control of Noncommunicable Diseases 2013-2020; and
* World Health Organization Tackling NCDs: Best buys and other recommended interventions for the prevention and control of non- communicable diseases;
* Actions proposed by other organisations charged with developing national action plans for chronic conditions;
* Existing strategies such as the Australian National Diabetes Strategy 2016-2020; and
* The National Men’s Health Strategy 2020-2030, the National Women’s Health Strategy 2020-2030, and the proposed National Obesity Strategy.

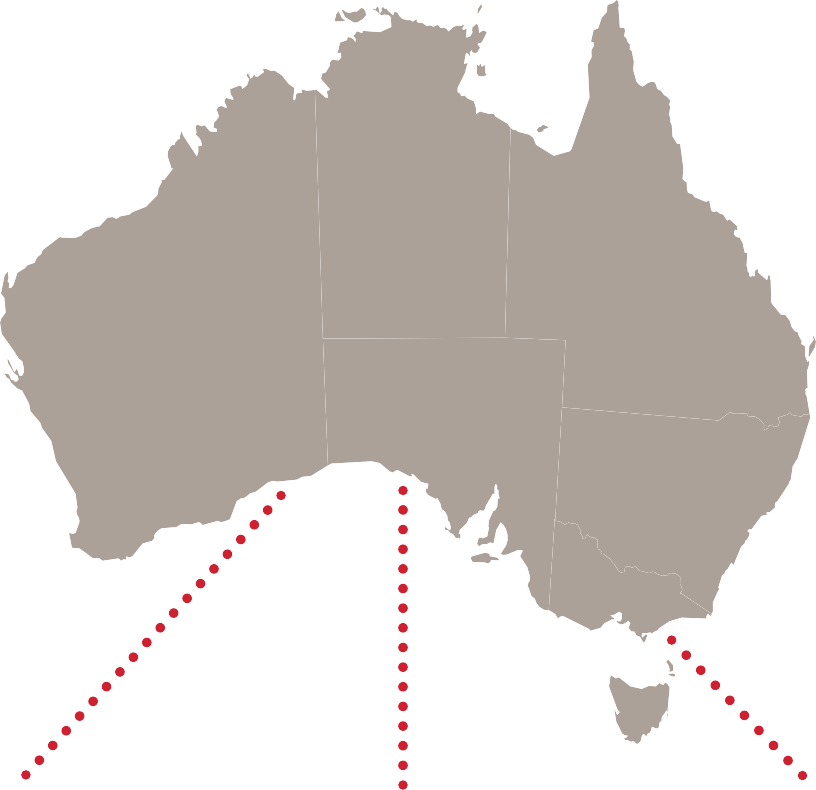
### Assessment Criteria

Inclusion of actions was considered based on the following criteria:

* The likelihood that this action will address an unmet need or gap in the current approach;
* The impact this action will have on avoidable hospital admissions or improvements in the effectiveness and efficiency of the health system;
* The likely significance and reach in the population of this action in addressing the burden of disease for heart and stroke;
* The strength of the evidence (nationally or internationally) for this action, and whether it has been shown to be cost-effective; and
* The likelihood that this action can be easily implemented or scaled up nationally.

## The facts about cardiovascular disease

Heart disease and stroke have a significant impact on Australians and healthcare costs.



**THE FACTS ABOUT**

**CARDIOVASCULAR DISEASE**

Mostly preventable
Cardiovascular disease causes almost 30% of all deaths
Affects 4 million Australians
A leading cause of burden of disease 12.3%
Aboriginal and Torres Strait Islander peoples have hospitalisation and death rate 2 times as high as for non-Indigenous Australians
44,000 deaths a year from CVD

## Foundation and Partnerships for Action

Tackling heart disease and stroke is challenging, but it will reap enormous benefits for the Australian population. Combatting these diseases requires consistency and support across several key areas.

* Governance and leadership – leaders across all sectors and levels of government must work with common aims. Partnership with communities, organisations and leaders is essential, particularly across priority populations, including Aboriginal and Torres Strait Islander peoples and culturally and linguistically diverse (CALD) populations. Addressing variations across jurisdictions and identifying who is responsible for implementing change is vital.
* Ongoing resourcing and sustainable funding – adequate allocation, distribution and efficient use of resources and funding is required to ensure appropriate implementation.

**Foundation for Action**

Foundation for action
Governance and leadership
Resourcing and sustainable funding
Data collection and management
Outcome measures
Health literacy and education
Workforce support

* Workforce support and recognition – with finite capacity and many competing demands on resources, it will be important to seek support and to prioritise efforts to ensure an appropriately skilled and educated workforce.
* A consistent approach to health literacy and education – this needs to be promoted by government, medical leaders and practitioners and developed and implemented in partnership with communities and appropriate industry bodies and services.
* A nationally consistent and consolidated data platform and approach to data collection and management – evidence is essential to decision- making, tracking progress and informing care.
* Nationally consistent outcome measures – this will ensure successful progress towards implementing actions.

**Partnerships for Action**

Individuals living with heart disease and stroke 
Healthcare professionals
Private sector and industry
Communities, carers, families
Government (at all levels)
Researchers and academics
Non-government organisations 

## Priority Populations

Priority populations are those that are more likely to be affected by health conditions than the general population, resulting in a greater burden of disease and inequality in health outcomes. The social determinants of health are mostly responsible for health inequities – the unfair and avoidable differences in health status seen within and between populations1 (see page 41 for references). These determinants include an individual’s social and economic environment, the physical environment and the person’s individual characteristics and behaviours.

Some Australians face disadvantages that significantly increase their likelihood of being affected by heart disease and stroke. For example, Aboriginal and Torres Strait Islander peoples have cardiovascular disease (CVD) hospitalisation and death rates twice as high as those of non-Indigenous Australians.2 Both conditions are disproportionately experienced by specific populations, predominantly (but not limited to):

* Aboriginal and Torres Strait Islander peoples;
* People living in rural, regional and remote communities;
* Socioeconomically disadvantaged Australians;
* People living with mental illness; and
* CALD populations.

**Priority Populations**

**Priority Populations
Aboriginal and Torres Strait Islander peoples
Socio-economically disadvantaged Australians
People living in rural, regional and remote communities
People living with mental illness
Culturally and linguistically diverse populations**

In implementing actions outlined in this Action Plan, it is essential to recognise the importance of tailoring approaches to meet the needs of priority populations.

Considering and addressing the disadvantages experienced by these priority populations is critical in ensuring the intended outcomes are achievable. Examples of important considerations include:

* Promoting cultural safety and security in healthcare settings;
* Ownership and co-design of programs and initiatives;
* Ensuring access to a multidisciplinary workforce, geographically distributed with specific training and skills, well-supported and well-resourced including with technology and infrastructure;
* Embedding access to Aboriginal Health Workers in relevant models of care;
* Linkage with relevant, tailored services, for example Aboriginal Community Controlled Health Services (ACCHS);
* Ensuring access to interpreters;
* Enabling access to transport and culturally appropriate health services; and
* Supporting a healthy and safe environment, including education, employment, adequate housing and availability of, and access to, affordable, nutritious food.

## What are Heart Disease and Stroke?

The term heart disease encompasses heart conditions including, but not limited to:

* Ischaemic heart disease (IHD), which is the cause of most heart attacks, and angina. It is the result of atherosclerosis, a build-up of fatty plaques in the walls of the coronary arteries that, over time, cause blood vessels to become narrowed or blocked;
* Arrhythmias (irregular heart beat), such as atrial fibrillation (AF) and flutter, ventricular arrhythmias, and bradyarrhythmias;
* Heart failure; and
* Structural heart disease, encompassing rheumatic heart disease, valvular abnormalities, and congenital abnormalities.

Stroke results from the effects of interrupted circulation to the brain.

As stroke can happen in two main ways:

* Ischaemic stroke – a blood clot or cholesterol plaque blocks a blood vessel. Ischaemic stroke is generally a consequence of either atherosclerosis in the arteries that supply blood to the brain, or of clots emanating from the heart.
* Haemorrhagic stroke – A blood vessel leaks or breaks. Haemorrhagic stroke is most often caused by high blood pressure.

When a stroke occurs, the brain does not receive adequate blood supply, and damage to the brain can result. Stroke is a leading cause of disability

in Australia4 and increases the risk of developing dementia.5

Risk factors for heart disease and ischaemic stroke have significant overlap and include high blood pressure, high cholesterol, tobacco and e-cigarette use, diabetes, poor diet, and physical inactivity. AF is an important risk factor for stroke.

Cardiovascular disease (CVD) is a collective term for diseases that affect the heart and blood vessels. The term commonly includes heart disease, cerebrovascular disease (conditions that affect the blood vessels of the brain and the cerebral circulation, including stroke), and peripheral artery disease (PAD), in which atherosclerosis occurs in arteries elsewhere in the body, such as the legs, potentially causing gangrene. Atherosclerosis is one of the common causes of heart attack, stroke and PAD, and thus interventions and strategies targeted at preventing, detecting, or managing atherosclerosis often produce important outcomes across the spectrum of CVD.

Throughout the Action Plan, we refer specifically to heart disease and stroke. However, an effective approach considers these conditions within the context of CVD more broadly. There are many interconnecting factors contributing to these conditions, and synergies in tackling them. Hence, this Action Plan takes a systems approach. We consider the specific and general actions needed to prevent, or improve outcomes for, heart disease and stroke within the context of CVD prevention and management.

Actions and interventions highlighted in the Action Plan will help us to prevent and better manage not only heart disease and stroke but also broader cardiovascular conditions and their associated risk factors.

Heart disease and stroke share many risk factors, and benefit from shared approaches to management and treatment. But there are also some differences. In some cases, treatments, systems and models of care for each condition are at different stages of development, and a tailored approach is more likely to achieve the objectives laid out in the Action Plan.

While mortality rates have been in decline for several decades, IHD remains the leading cause of death for Australians, with cerebrovascular disease (primarily stroke) the third. As a whole, cardiovascular diseases are responsible for almost 30% of all deaths in Australia6 and are a leading contributor to the total burden of disease for the nation (12.3% of the total burden)7. Heart disease and stroke are major causes of avoidable hospital admissions, and impose massive social and economic costs on the nation.

The number of people living with heart disease and stroke is set to increase as the population grows and ages. The increasing numbers of Australians who are overweight and obese, have poor nutrition, do too little physical activity, and have high blood cholesterol and high blood pressure will only add to the burden of disease. Tobacco smoking causes heart disease and stroke, yet around 2.8 million (15.1%) Australian adults smoked in 2017-2018.8

## Priority Area 1 Prevention and Early Detection

Early detection and ongoing management of those at high risk of heart disease and stroke can save lives and reduce avoidable hospital admissions. There are two areas that will deliver significant gains in addressing the burden of heart disease and stroke in Australia:

* Primary prevention – using population health measures to promote good health and individualised management and treatment for those at high risk; and
* Secondary prevention – better management of people who have had a heart attack or stroke or are living with heart disease (who are at much higher risk of further events or hospitalisation).

Heart disease and stroke are largely preventable. As these conditions share many risk factors, preventive actions will reduce the impact of heart disease, stroke and broader chronic disease – including dementia, diabetes and chronic kidney disease – in the community and on the health system. Focusing on prevention, while continuing to ensure that chronic conditions such as heart disease and stroke, are well- managed, will provide better health and economic outcomes for Australians. On 12 June 2019, the Minister for Health, the Hon Greg Hunt MP announced the development of the Preventive Health Strategy (the Strategy). The Strategy will be a national long-term plan that addresses the prevention of disease for all Australians, across all stages of life. Research shows that for every dollar invested in prevention, there is a return of $14 to the wider economy.12

### Modifiable and non-modifiable risk factors

Modifiable risk factors are those that in general, individuals can change (including blood pressure, cholesterol, diet, physical activity, weight, smoking and alcohol intake).

Non-modifiable risk factors are generally beyond the control of an individual, and include family history, age, sex, ethnicity and socioeconomic status. Accurate measurement of risk factors, using best available methods, is important for achieving correct diagnosis and best practice care.

Maintaining a healthy weight, eating well, being physically active, not using tobacco products and limiting alcohol improves health and reduces the risk of heart disease and stroke as well as related chronic diseases. There is also growing evidence that people who use e-cigarettes may face an increased risk of cardiovascular disease including heart attacks and strokes.

For people at risk of heart disease and stroke, medical intervention alone is insufficient. Lifestyle and behavioural changes are essential for overall risk management and health improvement. It is acknowledged that adopting a healthier lifestyle can be difficult and is influenced by multiple factors, including social determinants of health. These include education, employment, housing, food security and access to culturally appropriate health services. All actions included in the Action Plan must be considered in the broader context of the social determinants of health, to maximise the potential for health improvements and address gaps in chronic disease management more broadly.

## Priority Area 1 Prevention and Early Detection

|  |  |
| --- | --- |
| OBJECTIVE 1.1 | Detect and better manage Australians at risk of heart disease and stroke |
| Actions | Implementation |
| 1.1.1Update the Absolute Cardiovascular Risk Assessment Guidelines | Being able to accurately identify Australians at risk of a primary heart or stroke event is essential to improve health outcomes, reduce expenditure, and optimize treatment for those at risk.  Current guidelines outlining how best to detect and manage CVD risk in primary care were developed by the National Vascular Disease Prevention Alliance (NVDPA) and endorsed by the National Health and Medical Research Council (NHMRC) in 2012.   * Update the Guidelines for the Management of Absolute Cardiovascular Disease Risk (2012), and the associated website risk calculator and risk-stratification algorithm, to ensure accurate identification and management of Australians at risk of a primary heart or stroke event. |
| 1.1.2Targeted approach to Absolute Cardiovascular Risk Assessment screening and Integrated Health Checks (IHC) | Scope options for expanding chronic disease checks in primary care, including combining Absolute Cardiovascular Risk Assessment for heart disease and stroke with a type 2 diabetes check and a kidney disease test for groups and individuals at high risk for heart disease, stroke and chronic disease.   * Compile current available evidence on the clinical and cost effectiveness of IHCs for at-risk populations, to support the extension of MBS funding. * Convene an expert advisory panel to make recommendations to the Australian Government on increasing and monitoring uptake of Absolute Cardiovascular Risk Assessments and IHC in primary care. * Include the IHC in the Quality Improvement Incentive (QII) program. |
| 1.1.3Improve identification and management of hypertension (high blood pressure) | Hypertension is a major risk factor for heart disease and stroke and is a significant determinant of an individual’s overall cardiovascular risk. Blood pressure assessment is a recommended component of CVD risk assessment. Hypertension is an under-recognised and under-treated and is the greatest contributor (32%) to the burden of cardiovascular disease in Australia.13 Specific actions to address the gaps in identification and management of hypertension are warranted in conjunction with an absolute risk approach.   * Improve health literacy and awareness of hypertension in Australia, including its risks and potential lack of observable symptoms, particularly among young Australians (see also Action 3.3.1). This should include improving adherence to medications. * Encourage and support clinicians to improve health literacy regarding adherence to medications, and to treat hypertension to guideline- recommended targets. * Develop and implement policy measures aimed at lowering salt intake in the Australian diet (see also Action 1.2.3). * Promote better quality blood pressure measurement using reliable devices that have been certified for accuracy. |

## Priority Area 1 Prevention and Early Detection

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| --- | --- |
| OBJECTIVE 1.1 | Detect and better manage Australians at risk of heart disease and stroke |
| Actions | Implementation |
| 1.1.4Raise awareness of health checks (including atrial fibrillation) at appropriate ages, among health professionals and the community | Australians need to know if they are at increased risk of heart disease and stroke, and what they can do to minimise that risk. This requires community education about necessary health checks, and support for primary health care professionals to conduct these checks.   * Improve awareness of required health checks for all Australians through a system of notification and recall. * Ensure programs are tailored for priority populations. * Fund a pilot or scoping study with the aim of setting up a system of notification and recall for every Australian adult, listing approved checks required at specified ages. * This would incorporate screening checks included in the IHC, AF and other chronic disease checks, similar to the cancer screening initiatives that are already in place.   AF is the most common heart arrhythmia, its incidence increasing with age, and is associated with significant morbidity and mortality. People with AF are up to five times more likely to experience a stroke.14 AF is often only diagnosed after a stroke has occurred.   * Implement education and awareness programs and training for primary care health professionals to promote opportunistic point-of-care AF checks in clinics or in the community. |

## Priority Area 1 Prevention and Early Detection

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| --- | --- |
| OBJECTIVE 1.1 | Detect and better manage Australians at risk of heart disease and stroke |
| Actions | Implementation |
| 1.1.5Provide health professionals with appropriate tools and resources to support health checks and care | Support primary care health professionals to deliver better evidence-based care through quality improvement programs.   * Promote and provide appropriate education and training, including software, to enable health professionals to use decision-support tools that are evidence- based and proven to be effective for use in primary healthcare. * Campaign in partnership with appropriate industry bodies and services to educate primary care health professionals about Absolute Cardiovascular Risk Assessment, building on work previously undertaken under the Primary Care Collaborative Program. * Incorporate messages about recording relevant patient measurements needed for risk calculations that can be readily undertaken using common general practitioner (GP) software. * Scope options to work towards automation in the identification and notification of risk via GP software. * Promote a ‘promotional and/or educational tool’ to educate primary care health professionals. * Embed educational materials or jointly branded resources in programs and systems. * Establish a targeted communication campaign. * Campaign in partnership with appropriate industry bodies and services to educate primary care health professionals about implementing best practice care based on clinical guidelines for conditions including hypertension, heart failure, atrial fibrillation, acute coronary syndrome (ACS) and stroke. * Promote ‘treatment to targets’ in accordance with clinical guidelines, to ensure that Australians are prescribed the appropriate type and level of therapy for their condition and/or associated risk. |

## Priority Area 1 Prevention and Early Detection

|  |  |
| --- | --- |
| OBJECTIVE 1.2 | Address risk factors for heart disease and stroke to encourage all Australians to live healthier lives |
| Actions | Implementation |
| 1.2.1Build on and strengthen existing work to reduce tobacco use and exposure to tobacco smoke in the community | Australia is a world leader in tobacco control. However, between 2014-15 and 2017-18, the daily smoking rate remained relatively similar. In 2017-18, 2.8 million (15.1%) Australian adults smoked (13.8% daily).15 In some priority populations, including socioeconomically disadvantaged Australians, those with mental illness and particularly Aboriginal and Torres Strait Islander peoples, smoking prevalence remains extremely high. In 2014-15 just under two in five (39%) Aboriginal and Torres Strait Islander peoples aged 15 years and over smoked daily.16 In 2017, tobacco use was responsible for the largest share of the burden of disease in Australia (9.7%).17 With targeted investment, Australia can accelerate efforts to reduce smoking prevalence and work towards a tobacco-free society.   * Strengthen Australia’s implementation of the WHO Framework Convention Tobacco Control (FCTC). The WHO FCTC aims to protect present and future generations from the devastating health, social, environmental and economic consequences of tobacco consumption and exposure to tobacco smoke. Under the FCTC, Australia must adopt and implement effective measures for preventing and reducing tobacco consumption, nicotine addiction and exposure to tobacco smoke. The FCTC also obliges Australia to take steps to protect the setting and implementation of its tobacco control from interference from the tobacco industry and its interests. * Implement a new National Tobacco Strategy to supersede the 2012-18 strategy. * Invest in new mass media education campaigns to further reduce tobacco smoking prevalence for the life of the next National Tobacco Strategy. * Employ population level approaches as well as complementary targeted approaches for priority populations with higher tobacco smoking rates than the general population. * Investment would complement existing funding provided for the Tackling Indigenous Smoking program. * Invest in and facilitate an evidence-based national approach to smoking cessation service provision. * Develop and disseminate national clinical guidelines and program support to embed the treatment of tobacco dependency in health services, primary care, community and social service organisations as part of routine care. This includes supporting Aboriginal Community Controlled Heath Organisations (ACCHOs) in taking a patient-centred approach. * Fund a national Quitline as a referral, training and behavioural support service provider. * Consider the need for further regulation of alternative nicotine delivery systems (such as e-cigarettes). * Continue to monitor evidence regarding the safety of e-cigarettes, their impact on smoking initiation and cessation, uptake among youth, and dual use with conventional tobacco products. |

## Priority Area 1 Prevention and Early Detection

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| OBJECTIVE 1.2 | Address risk factors for heart disease and stroke to encourage all Australians to live healthier lives |
| Actions | Implementation |
| 1.2.2Ensure Australians are supported to be physically active | Physical inactivity is a major health problem and a significant risk factor for heart disease and stroke. Eighty-five per cent of Australian adults do not meet national physical activity guidelines.19‡ Rates are higher among certain priority populations including those who are socioeconomically disadvantaged, Aboriginal and Torres Strait Islander peoples and older adults. Australians of all ages will benefit from being more physically active.   * Develop and fund a National Physical Activity Action Plan. This would include measures covering: * Healthy built environments; * Program supports; * Settings such as schools, workplaces and local communities; and * Public education, including raising awareness of the importance of physical activity.   Measures should be culturally adaptable to priority populations, including CALD populations and Aboriginal and Torres Strait Islander peoples, utilising local knowledge and community engagement. |
| 1.2.3Promote healthy eating patterns to address heart disease and stroke risk factors | A large proportion of the burden of disease in Australia is due to poor nutrition, related to the following factors: an excessive intake of discretionary foods that are high in kilojoules, saturated fat, added sugars and salt; and an inadequate intake of healthy foods, such as vegetables, fruit and whole grains, that are associated with a decreased risk of disease. Evidence-based strategies that will address this imbalance are required in order to minimise risk factors for heart disease and stroke, including high blood pressure, high cholesterol, obesity and diabetes. Strategies to improve healthy eating patterns should include a focus on priority populations, and particularly on access to affordable, nutritious food.  The National Nutrition Policy from 1992 urgently needs updating and expanding.   * Develop and fund a National Nutrition Strategy to improve eating patterns in Australia to reduce the burden of non-communicable diseases including heart disease and stroke. A National Nutrition Strategy should focus on: * A strong evidence base with regular reviews to the Australian Dietary Guidelines. |

‡ Includes walking for transport, walking for fitness, sport or recreation, moderate exercise and/or vigorous exercise undertaken in the last week. Excludes workplace activity.

## Priority Area 1 Prevention and Early Detection

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| OBJECTIVE 1.2 | Address risk factors for heart disease and stroke to encourage all Australians to live healthier lives |
| Actions | Implementation |
| 1.2.3 cont. | * Transparent labelling on processed food products, including mandatory labelling of kilojoules for foods purchased outside the home, and mandatory labelling of added sugars and fat profiles (including saturated, monounsaturated, polyunsaturated and trans-fat) on packaged food products; * Establishing food standards that place strong emphasis on healthy food and drink environments outside the home, with robust targets for salt reformulation and portion size and a recommended mix of healthy versus unhealthy foods; * Improving access to healthier food options, particularly for rural, regional and remote communities; and * Ensuring transparent governance, monitoring, reporting and surveillance including regular national nutrition surveys as part of the Australian Health Survey.   A National Nutrition Strategy would complement a National Obesity Strategy. Obesity is a leading modifiable risk factor for heart disease and stroke.  Develop and fund a National Obesity Strategy, based on the recommendations outlined in the report Tipping the Scales: Australian Obesity Prevention Consensus. 22 |
| 1.2.4Collect population health data on heart disease and stroke | The last Australian Health Biomedical Survey to collect data on risk factors including those relating to heart disease and stroke was conducted by the Australian Bureau of Statistics (ABS) in 2011-12.   * Establish ongoing funding to implement a six-year rolling Australian Health Survey that includes biomedical risk factors; and * Scope the inclusion of 24-hour urinary sodium excretion studies in the biomedical component of the Australian Health Survey. |

## Priority Area 1 Prevention and Early Detection

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| OBJECTIVE 1.3 | Increase awareness and understanding of heart disease and stroke within the Australian community |
| Actions | Implementation |
| 1.3.1Implement nation-wide, targeted education and awareness campaigns | When someone suffers a heart attack or stroke, every minute counts. Immediate access to treatment means a greater chance of survival, better outcomes and decreased costs to our health system. Too often, emergency treatment is delayed due to a lack of community awareness about the signs of heart attack or stroke, and the appropriate course of action. Fund separate national campaigns to:   * Raise awareness of heart attack and its warning signs and appropriate action; and * Raise awareness of stroke and the signs of stroke using the Face Arms Speech Time message (F.A.S.T). * Campaigns are scalable and should include: * Public awareness advertising (including television, radio, press and digital media); * Consumer resources; * Targeted public relations strategies to maximise free media opportunities; * Community and school outreach talks by trained volunteers; and * Community partnerships. * Implement tailored, targeted campaigns to raise awareness of the warning signs of heart attack and F.A.S.T signs of stroke within priority populations, particularly rural, regional and remote communities, Aboriginal and Torres Strait Islander peoples and people of CALD backgrounds; and * Increase understanding and awareness of the difference in symptoms for heart disease in men and women. * Support a ‘women and heart disease’ campaign, with a focus on driving knowledge to reduce risk, change behaviour and encourage prompt action. |

## Priority Area 2 Diagnosis and Treatment

All Australians need and deserve access to evidence- based care and treatment that is proven to save lives and improve outcomes. Addressing disparities in care among Australians is essential to improving outcomes and reducing inequalities. All Australians should have equal access to efficient, effective and appropriate treatment and care, when and where it is needed.

As Australia’s population ages, the number of people living with multiple chronic conditions (multimorbidity) including heart disease and stroke is expected to rise.

The complexity of treatment and the involvement of multiple health providers only adds to the challenges we must address. In order to improve service delivery and quality of care, we need to ensure comprehensive measurement and monitoring of data. Better measurement and collection of essential data pertaining to treatment, management and service delivery, can save lives and cut costs by informing health services about treatment and care of Australians living with heart disease and stroke, and enable ongoing advances in care delivery.

## Priority Area 2 Diagnosis and Treatment

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| **OBJECTIVE 2.1** | **Provide efficient, effective and appropriate treatment for all Australians** |
| **Actions** | **Implementation** |
| **2.1.1**  **Improve management of people at high risk, or living with, heart disease**  **and stroke through primary healthcare** | Provide better support for Australians to live healthier lives through primary care management.   * Introduce blended payments (such as practice incentive payments) to support better ongoing care of patients living with heart disease and stroke (including people at high risk of developing a chronic condition or having an acute episode, such as a heart attack or stroke). * Implement measures including specific payments for general practice and allied health services, encouraging better ongoing care of patients with, or at high risk of, heart disease or stroke and related conditions. * Ensure availability of, and access to, appropriate, evidence-based and culturally based lifestyle modification programs nationally for primary and secondary prevention. * Improve referral pathways to lifestyle modification programs with a dedicated portal that links healthcare settings and makes referral easy and simple for patients and practitioners. |
| **2.1.2**  **Improve equity in cardiac treatment and care through national standards** | Disparities exists in cardiac treatment and care depending on where a person lives and what services are available for treatment.   * Define equity standards for cardiac care, including in the areas of prevention, acute care and secondary care. * Quantify and monitor current variations across these dimensions at the national, jurisdictional and local level, including according to sex, rurality, Indigenous status, socioeconomic status and between CALD groups; and support services to respond to their data on equity, including by raising awareness and enhancing continuous quality improvement processes to achieve equity standards. |

## Priority Area 2 Diagnosis and Treatment

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| **OBJECTIVE 2.1** | **Provide efficient, effective and appropriate treatment for all Australians** |
| **Actions** | **Implementation** |
| **2.1.3**  **Eliminate disparities in treatment of heart disease and stroke for Aboriginal and Torres Strait Islander peoples** | A specific focus on Aboriginal and Torres Strait Islander peoples is required to eliminate disparities in diagnosis, treatment and care for heart disease and stroke. Aboriginal communities, community-controlled organisations and primary care service providers are working together to improve the long-term quality, efficiency and effectiveness of care for Aboriginal and Torres Strait Islander peoples. Ongoing effort is required.   * Continue to support Aboriginal and Torres Strait Islander health organisations and key partners in reducing disparities in hospital care to address the large gaps that exist between treatment and outcomes for Indigenous and non- Indigenous peoples. * Scope and expand projects and services, including employing and expanding existing employment of, Aboriginal and Torres Strait Islander peoples within identified projects and services. * Build on and expand existing projects that address barriers to accessing best- practice heart and stroke treatment and care for Aboriginal and Torres Strait Islander peoples, and support further implementation studies. Do this in a partnership between heart and stroke specialists and the ACCHO sector. |
| **2.1.4 Implement the Rheumatic Heart Disease (RHD) Roadmap** | RHD is a deadly condition mostly experienced in low-income countries but also persistent among Aboriginal and Torres Strait Islander peoples in Australia, who experience disease rates among the highest in the world.  The RHD Roadmap offers a more comprehensive approach to preventing new cases of RHD, as well as supporting people already living with the disease.   * Significant long-term investment is required to implement the RHD Roadmap and eliminate the disease by 2031. * Continue to follow up on recommendations in relation to the RHD Roadmap. |
| **2.1.5**  **Continue to fund services for rural, regional and remote communities, including remote Aboriginal and Torres Strait Islander communities** | People living in rural, regional and remote areas of Australia often do not receive the same level of treatment and care as those in metropolitan areas.   * Continue to fund specialist heart and stroke outreach services. * Continue to support and upskill outreach workers and specialists. * Ensure continuation of programs and services that are tailored to specific local needs, with additional support through telehealth services. * Where appropriate, include Aboriginal Health Workers and interpreter service support in outreach services. * Ensure programs and services are culturally appropriate and that the non- Indigenous workforce is trained in cultural security and cultural safety. |

## Priority Area 2 Diagnosis and Treatment

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| **OBJECTIVE 2.2** | **Ensure treatment and care is accessible when and where it is needed** |
| **Actions** | **Implementation** |
| **2.2.1**  **Improve the delivery of emergency stroke treatment to rural, regional and remote Australians through telehealth** | Australians living in rural, regional and remote areas have limited access to time- critical stroke treatment, putting them at increased risk of death or significant disability following a stroke.   * Establish a National Telehealth Model to reduce geographical barriers and ensure that emergency stroke treatment is available to all Australians based on need not on where they live. * Expand and connect scalable, state-based stroke telehealth networks to deliver national coverage. * Establish infrastructure and specialist resources. * Provide implementation support including training. * Coordinate 24/7 access to neurologists and neuroradiologists for health professionals, boosting the capacity of emergency services in regional Australia. |
| **2.2.2**  **Establish standardised national, pre-hospital, time- critical responses for heart attack and stroke** | * Remove barriers and expedite access to time-critical treatments for heart attack and stroke. * Examine options to address perceived and real financial barriers to calling an ambulance for heart attack and stroke patients (in states where a cost is incurred). * Implement nationally consistent competency training for first responders and emergency department staff, including information on how to recognise heart attack and stroke in young people and stroke in children. * Utilise technology and systems. * Establish pre-hospital notification systems based on proven applications. * Investigate the expansion of ambulances equipped to treat stroke patients, and related innovations. * Implement national protocols to ensure ambulance services, including air retrieval services, deliver patients to centres that can provide appropriate cardiac and stroke care. |

## Priority Area 2 Diagnosis and Treatment

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| **OBJECTIVE 2.2** | **Ensure treatment and care is accessible when and where it is needed** |
| **Actions** | **Implementation** |
| **2.2.3**  **Develop and implement a national reperfusion plan for stroke (endovascular thrombectomy and thrombolysis)** | A well-organised, nationally coordinated and connected health system will ensure equitable access to vital life-saving treatments for stroke patients.   * Establish integrated reperfusion services (endovascular thrombectomy/clot retrieval and thrombolysis) in geographical areas of need, with appropriate workforce support. * Establish national coordination of reperfusion services to ensure jurisdictional boundaries do not limit access to these time-critical treatments. * Implement standardised emergency assessment protocols and support systems. |
| **2.2.4**  **Improve access to specialised stroke units** | Given the substantial evidence that organised inpatient stroke units benefit stroke patients, we need to ensure equitable access to consistent quality care  in these units, including for priority populations, with culturally appropriate access for Aboriginal and Torres Strait Islander peoples and CALD populations.   * Map existing stroke units to stroke incidence and population need and develop a plan to improve stroke unit access from 67% to 90%. * Develop a national accreditation framework based on national standards for stroke unit services. * Align accreditation of stroke units with financial incentives, and, where necessary, provide support for stroke units to improve their quality of care. * Ensure stroke units are adequately resourced with appropriate multidisciplinary care teams including stroke care coordinators and allied health staff. |
| **2.2.5**  **Improve access to Transient Ischaemic Attack (TIA) clinics** | A TIA happens when the blood supply to the brain is blocked temporarily. The signs are the same as for a stroke, but they disappear within a short time. Specialised clinics and services are critical in managing people who have experienced TIA. By providing rapid access to investigations and treatment, TIA clinics reduce the risk of stroke and avoidable hospital admissions.   * Ensure consistent availability of rapid access TIA clinics and services in geographical areas of need, along with well-established referral pathways. |

## Priority Area 3 Support and Care

Heart disease and stroke have major impacts on the lives of Australians. For many, these impacts limit their quality of life, and for some they last a lifetime. Many people live with changes that affect their physical, social and emotional wellbeing. Some of these impacts not only affect patients but also their families and carers.

People living with heart disease and stroke, and their loved ones, need ongoing support to live well. People living with heart disease and stroke should be at the core of rehabilitation and support programs, with initiatives tailored to their needs.

Programs must be effective, evidence-based and available when and however they are needed.All Australians must be empowered to navigate their own healthcare, to live with the best quality of life possible. This means we must also ensure support for those people living in communities that are disproportionately affected by heart disease and stroke. These include Aboriginal and Torres Strait Islander peoples; people living in rural, regional and remote areas; people who are socioeconomically disadvantaged; people living with mental illness; and CALD groups.

## Priority Area 3 Support and Care

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| **OBJECTIVE 3.1** | **Improve access to high-quality rehabilitation services** |
| **Actions** | **Implementation** |
| **3.1.1**  **Improve access to best practice cardiac rehabilitation services** | Access to, and completion of, cardiac rehabilitation services by heart attack survivors can dramatically reduce the chances of subsequent cardiac events. This saves and improves lives and reduces healthcare and health system costs. It is imperative to increase the proportion of eligible patients who participate in cardiac rehabilitation.   * Scope and fund programs to provide alternative models of care that are flexible and patient-centred, allowing patients and carers to access services in the way that best suits them. These may include: * Phone-based services and digital approaches including telehealth services; and * Tailored solutions to meet the needs of priority populations as well as young people and the working population. * Expand provision of culturally appropriate programs for Aboriginal and Torres Strait Islander peoples, to ensure services are accessible within: * Aboriginal and Torres Strait Islander communities; * Mainstream services with culturally appropriate care; and * Aboriginal-specific health services with options that include alternative models of care. |
| **3.1.2**  **Improve access to best practice stroke rehabilitation services** | Equitable access to rehabilitation services is crucial to ensure Australians live well after stroke, gain increasing independence and have their emotional and psychological needs met.   * Provide support and resources for health professionals to: * Improve uptake of consistent and standardised rehabilitation assessment processes, to ensure every person who has a stroke is assessed for their rehabilitation needs; and * Optimise the transition from acute care to inpatient rehabilitation services or community-based services to facilitate seamless, integrated care. * Ensure availability and funding for stroke inpatient and community-based rehabilitation services, including early rehabilitation, and alternative models of rehabilitation such as Early Supported Discharge programs. Services should address cognitive and mental health needs, be locally tailored, accessible and culturally appropriate. * Pilot and evaluate models that support consistent, periodic reviews for stroke survivors in the community. Reviews should be with health professionals and should cover physical, verbal, cognitive and emotional aspects of life after stroke, and ensure access to targeted rehabilitation when and where it is most needed. |

## Priority Area 3 Support and Care

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| **OBJECTIVE 3.1** | **Improve access to high-quality rehabilitation services** |
| **Actions** | **Implementation** |
| **3.1.3**  **Expand digital health approaches, including telehealth, to improve access to allied health services and rehabilitation** | Ensure all Australians have access to best practice cardiac and stroke rehabilitation care and allied health specialists close to home.   * Scope and expand digital health approaches (including telehealth, online and mobile mediums) to support accessible models of secondary care and rehabilitation. * Focus on development and co-design with priority populations such as rural, regional and remote communities, CALD and Aboriginal and Torres Strait Islander peoples. * Ensure access to services is facilitated through Aboriginal Health Workers and, where appropriate, with the aid of interpreter service support. * Establish a specialist telehealth rehabilitation network. * Investigate best practice uses for telehealth in rehabilitation. * Link telehealth to use of alternative models of care for provision of cardiac and stroke rehabilitation services. * Utilise telehealth services to support and boost the capacity of health professionals in rural, regional and remote areas through ongoing training, development and collaboration. |

## Priority Area 3 Support and Care

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| **OBJECTIVE 3.2** | **Improve the patient and carer journey from hospital to community, through multidisciplinary, coordinated care** |
| **Actions** | **Implementation** |
| **3.2.1**  **Improve transition of care from hospital to the community** | Ensure all Australians with heart disease and stroke have a well-coordinated and supported discharge from hospital, and a smooth transition back into the community.   * Support and equip hospital clinicians with the tools and resources they need to provide consistent, culturally appropriate, detailed care planning and management, including: * Lifestyle modification education and secondary prevention medication; * Routine referral to ongoing rehabilitation services, multidisciplinary chronic disease follow-up and specialist physician review, as required; * Routine discharge referral to primary care-based secondary prevention services; and * Information about supports and services available in the community, including culturally appropriate services, and how to refer to these services. * Scope options to expand nurse-led and multidisciplinary care programs to fill gaps in the transition of care and management for patients with heart disease (particularly heart failure) and stroke. * Improve access to multidisciplinary care programs for heart failure patients, including telemonitoring and telephone support programs. This is especially important where access to face-to-face, multidisciplinary heart failure disease-management programs after discharge are limited (such as in rural, regional and remote communities). * Improve access to, and expand provision of, nurse-led medication titration clinics for indicated heart failure patients. * Consider support and training mechanisms to upskill and expand scope of practice for nurse practitioners and other health professional to fulfill these roles. |
| **3.2.2**  **Improve post-discharge support services for people with heart disease and stroke, and their carers** | Support Australians with heart disease and stroke to make the best recovery possible, to be well and participate in the community.   * Support dedicated helplines − Heart Foundation Helpline and StrokeLine. * Scope and expand existing post-discharge support services nationally, connecting survivors and their families with the services and supports they need to live well. These include: * Connection with a GP and community pharmacists to ensure ongoing preventive medication and heart disease and stroke management, including lifestyle changes to prevent avoidable hospital admissions and recurrent heart or stroke events; * Connection with mental health services, peer support and specialist services as needed; and * Provision of vital education on how to reduce the risk of future heart attacks, strokes and heart disease. |

## Priority Area 3 Support and Care

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| **OBJECTIVE 3.3** | **Support Australians with heart disease and stroke to make the best recovery possible, to be well, to actively engage with the community and to optimally return to education, work or retirement** |
| **Actions** | **Implementation** |
| **3.3.1**  **Ensure access to tailored health information for all Australians** | High-quality, relevant information is essential to ensure Australians are well informed on how to manage their conditions. Information should be patient-centred, and available when, where and how it best meets the needs of individuals and their families.   * Provide tailored resources to support people with heart disease and stroke, and their families, during the recovery and disease management process. Resources should be culturally appropriate, tailored to the appropriate level of health literacy and revised throughout the person’s life. * Provide targeted, accessible resources for priority populations including: * Aboriginal and Torres Strait Islander peoples; * CALD communities; * Childhood stroke survivors and their families; and * Stroke survivors affected by aphasia, and their families. * Proactively provide appropriate mental health information in conjunction with the dissemination of other resources throughout the recovery and disease management process. |
| **3.3.2**  **Provide peer and emotional support mechanisms for people living with heart disease and stroke, and their carers** | Recovery from, and ongoing management of, heart disease and stroke can be a long and challenging process. Australians should not have to navigate this process alone.   * Increase access to support and self-management mechanisms through a range of approaches including phone, face-to-face and digital mediums. * Expand availability of peer support for people living with heart disease or stroke and their families or carers, including face-to-face and digital mediums. * Offer tailored support for younger heart disease and stroke survivors, focused on empowering them to return to work and community activities, and facilitate access to the National Disability Insurance Scheme (NDIS) where appropriate. |

## Priority Area 4 Research

Australia is recognised internationally for excellence in heart disease and stroke research, and clinical care.

There is an opportunity to capitalise on this expertise and deliver the next break-through in prevention and/or treatment of heart disease and stroke. This might mean identifying new early markers of disease and/or opportunities for innovative preventive and therapeutic strategies.

We are well placed to use homegrown innovation to deliver world-leading heart disease and stroke care for all Australians, from prevention and primary care through to acute and secondary care, rehabilitation and beyond.Heart disease and stroke research is an investment in the social and economic wellbeing of the nation.

Many advances in the prevention and treatment of heart disease and stroke derive from health and medical research discoveries.

The community benefits directly from the application of evidence-based research in the prevention of these conditions, and in the treatment, care, and management of patients.

Research takes time and a great deal of money, but when the break-throughs come, they benefit generations.

## Priority Area 4 Research

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| **OBJECTIVE 4.1** | **Ensure a well-funded, collaborative approach to cardiovascular research** |
| **Actions** | **Implementation** |
| **4.1.1**  **Progress the Medical Research Future Fund (MRFF) Mission for Cardiovascular Health to address the**  **heart and stroke burden of disease** | Translating health evidence into action is vital to strengthen health systems and improve outcomes for Australians with heart disease and stroke.   * Implement and progress the $220 million MRFF Mission for Cardiovascular Health, which will focus on the most common causes of premature death from heart disease and stroke. The areas in critical need of focus include: * Atherosclerosis; * Heart failure; * Cardiac arrhythmias/sudden cardiac death; and * Stroke. * Establish six flagships that will facilitate strategic, nation-wide collaboration in the following areas: * Implementation and Policy; * Clinical Trials; * Smart Data; * Bioengineering; * Precision Medicine; and * Drug Discovery. * This work would also be supported by capacity-building initiatives, including a national bioinformatics program, and initiatives to support and encourage commercialisation of discoveries, thus embedding research in our health system and helping us to target unmet needs. |
| **4.1.2**  **Allocate funding to tackle identified gaps in existing research** | Significant gaps exist in heart disease and stroke research. Funding that supports research could, for example, help to:   * Continue to identify public health interventions that promote behavioural change. * Continue to identify public health interventions that promote healthy lifestyle measures and risk-reduction interventions. * Address specific priorities for heart disease and stroke in Aboriginal and Torres Strait Islander peoples, as well as culturally appropriate treatment, care and support. * Ensure co-design with Aboriginal and Torres Strait Islander peoples and researchers. * Address the sex and gender-specific focus on research and data analysis, including the need to recruit appropriate numbers of female participants to improve representation in clinical trials. * Improve our understanding of the natural history of stroke recovery, of effective rehabilitation interventions, and of stroke in young people and children. |

## Priority Area 4 Research

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| **OBJECTIVE 4.2** | **Develop a platform to rapidly translate research evidence into clinical practice and policy** |
| **Actions** | **Implementation** |
| **4.2.1**  **Improve research translation and availability of evidence through ‘living’, continuously updated, clinical guidelines** | Evidence-based clinical practice guidelines are key to establishing effective, high-quality, consistent and safe healthcare practices and policies. Living clinical guidelines mark a new era in the ability to support health services and improve outcomes. Currently, clinical guidelines for the prevention, screening, diagnosis, and management of CVD exist in a static format. They are updated periodically, and the process can take several years. This means that some aspects of the guidelines are likely to be out of date by the time they are published. A living guideline is defined as a prospective approach and involves active processes that use continuous surveillance and a rapid response to incorporate relevant new evidence into a clinical guideline.25   * Support the Australian Living Evidence Consortium to build and evaluate a world-first, online, dynamically updating summary of evidence to guide clinical practice and policy development. * Provide resources to transform existing heart disease guidelines into living guidelines. * Consider expansion of the current living guidelines pilot for stroke to include childhood stroke. |
| **4.2.2**  **Develop a nationally consistent approach to support health professionals in the translation of clinical guidelines** | Embed guidelines into clinical practice to ensure care is based on the best available evidence, and evaluate their use in practice.   * Promote accessible guidelines (online) reflective of the latest evidence, supported by educational tools and avenues for collaboration. * Provide ongoing, data-driven quality improvement programs within hospitals, reflective of best practice guidelines. * Set and monitor practice standards that are consistent with evidence-based guidelines, including availability, accessibility and delivery of evidence-based care across the continuum. |

## Priority Area 4 Research

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| **OBJECTIVE 4.3** | **Continue to enhance data for, collection and management of, cardiovascular diseases** |
| **Actions** | **Implementation** |
| **4.3.1**  **Establish National Clinical Quality Registries for heart disease and stroke** | National Clinical Quality Registries for heart disease and stroke are vital to monitor the quality of heart and stroke care, drive improvements in clinical practice and ultimately improve patient outcomes. The current approach is ad-hoc and inconsistent.   * Strengthen coordination and integration of cardiac registries to provide a comprehensive, high-quality, patient-based profile of cardiac care across the nation and across patient experiences. * Expand the Australian Stroke Clinical Registry (AuSCR) to be a national clinical quality registry for stroke. * Optimise the use of data linkage projects and use of existing data, to monitor health outcomes including Patient Reported Outcome Measures (PROMs) and benchmark service outcomes across Australia. |
| **4.3.2**  **Develop a National Cardiac Rehabilitation Dataset** | Cardiac rehabilitation, along with appropriate secondary prevention measures, is vital to reducing the likelihood of someone having another heart attack or heart event. International literature has found people are 4%-30% less likely to be readmitted to hospital and 14%-36% less likely to die from CVD if they have  participated in a cardiac rehabilitation service.23 In order to improve quality of care and service delivery, we need to monitor and record cardiac rehabilitation data.  Develop a national agreed set of minimum data to enable cardiac rehabilitation services to collect and measure referral, participation, completion and readmission rates. This will enable us to:   * Identify opportunities to improve services and monitor progress over time; and * Inform development of best practice and alternative models of service provision. |

## Priority Area 4 Research

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| **OBJECTIVE 4.3** | **Continue to enhance data for, collection and management of, cardiovascular diseases** |
| **Actions** | **Implementation** |
| **4.3.3**  **Establish a National Cardiovascular Data Platform** | Consistent, high-quality, relevant data and data sharing are necessary to drive improvements in health outcomes, as well as to underpin accountability.   * Incorporate data on heart disease, stroke, peripheral vascular disease (PVD), AF, heart failure and related conditions, including elements relevant to detection, prevention, diagnosis and treatment. * Scope existing and emerging data sources relevant to CVD with a view to continuously updating and improving of data facilities for CVD. * Define measures to be monitored across the risk, incidence, prevention, care and outcome spectrum, including the data-specific actions defined in this plan. This should include variation in these measures, according to the agreed equity measures in action 2.1.2. * Link and analyse data from appropriate sources to inform targeted actions and quality improvement to address CVD, and evaluation of outcomes. There should also be measures of inequality between population groups, including according to sex, between Aboriginal and Torres Strait Islander and non-Indigenous Australians, according to socioeconomic status, and according to CALD status. * Communicate evidence effectively to heart disease and stroke stakeholders. |
| **4.3.4**  **Develop a national approach to collection, monitoring and linkage of 'time to treatment' data** | Treatment times are critical in improving outcomes for those who experience heart attack and/or stroke. The sooner a person receives treatment, the better the outcome. Better measurement will drive improvements in treatment times.   * Develop and implement a framework to collect, monitor and record critical ‘time to treatment’ data for emergency heart and stroke care in Australia. * Ensure ambulance, emergency and hospital services have the capability and capacity to record and capture this data to enable reporting against these measures. * Align data collection with the Acute Coronary Syndromes Clinical Care Standard Indicators and the Acute Stroke Clinical Care Standard Indicators. |

## Achieving progress

Work is underway to progress action in addressing heart disease and stroke at a national level and across the states and territories. Further work to progress the Action Plan will require consideration as to what level of progress is relevant and achievable in each jurisdiction. The Action Plan requires a coordinated and strategic national response, with engagement and partnership from all sectors. Implementation partners will vary according to the action to be addressed, however stakeholders should include all levels of government, non- government organisations, primary, secondary and tertiary healthcare providers, general practice, allied health and specialist colleges and representative bodies, the private sector, industry, peak bodies, researchers and academics, healthcare professionals, policymakers, communities and individuals.

### Implementation

Implementation of actions in the Action Plan will be at the discretion of jurisdictions. Implementation of the Action Plan will take into account individual state and territory government and partner organisation circumstances. Implementation will allow flexibility to identify priority activities and determine the scope and timing of activities that best suit local needs, readiness and funder and provider capacity and capability.

To achieve progress, it is essential that the Action Plan is funded and that jurisdictions are supported to implement and promote the actions within the Plan.

To ensure the effectiveness of the Action Plan in fulfilling its goal and objectives, the following is proposed:

1. Establish an Implementation Advisory Group to provide expert advice on facilitation and drivers for the implementation of the Action Plan. The design, development and implementation of a comprehensive monitoring and evaluation plan will be an integral aspect of this governance role.
2. Conduct a five-year review, with twelve-month and three-year development checks, to assess progress on each of the priorities in alignment with requirements for reporting consistent with the National Strategic Framework for Chronic Conditions.

### Monitoring and Reporting

The evaluation and monitoring plan should be linked to the overarching goal and report on progress towards outcomes of the objectives of the four priority areas. In line with the National Strategic Framework for Chronic Conditions, recognition of the core role that the Australian and state and territory governments have across the health system, formalised reporting on progress towards the objectives across the priority areas is recommended at the national and state level.

### Expectations for the future

In five years, we would expect to see marked improvements against the objectives of the Action Plan, with indication of progress against the overarching goal.

### Next steps

Further work is required to operationalise each of the priorities in the Action Plan. It is proposed an Implementation Advisory Group, comprising leaders in the heart and stroke field, work to coordinate efforts and drive the delivery of the Action Plan. The Advisory Group should be established with experts in the heart and stroke field, including the National Heart Foundation of Australia, Stroke Foundation, state and federal governments and key primary health care and other relevant stakeholders as mentioned above. Implementation may include developing an interventional timeline to prioritise actions and identifying the sector area responsible for leading the implementation of each action. Key implementation partners would be determined, along with an implementation plan outlining how to achieve the overall objectives.

## Appendix 1

## Abbreviations

ABS Australian Bureau of Statistics

ACCHO Aboriginal Community Controlled Health Organisation

AF Atrial Fibrillation

AIHW Australian Institute of Health and Welfare

CHD Coronary Heart Disease

CSANZ Cardiac Society of Australia and New Zealand

CVD Cardiovascular Disease

GP General Practitioner

IHC Integrated Health Check

IHD Ischaemic Heart Disease

MBS Medicare Benefits Schedule

MRFF Medical Research Future Fund

NDIS National Disability Insurance Scheme

NHMRC National Health and Medical Research Council

NVDPA National Vascular Disease Prevention Alliance

QII Quality Improvement Incentive

PAD Peripheral Artery Disease

PVD Peripheral Vascular Disease

RHD Rheumatic Heart Disease

SAHMRI South Australian Health and Medical Research Institute

TIA Transient Ischaemic Attack

WHO World Health Organization

## Appendix 2

## Highlight on Joining up Data

### National Cardiovascular Disease Data Platform

Information and evidence are required for Australia to continue to make significant progress in heart disease and stroke prevention, diagnosis, treatment and management. Consistent, high-quality, relevant data and data-sharing are necessary to ensure that the actions in this plan, and their implementation, are effective in driving improvements in health outcomes, as well as underpinning accountability.

The Australian health system already collects a range of data on heart and stroke health that is designed to be used for different purposes including population monitoring of CVD by the Australian Institute of Health and Welfare (AIHW). However, it is necessary to acknowledge the complexity of the data environment and its limitations.

Work is required to build a comprehensive National Cardiovascular Disease Data Platform, including data on heart disease and stroke, to provide coverage of appropriate outcomes, and the necessary level of detail to maximise the utility of information. The types of data needed range from population health monitoring to detailed information on quality of acute care, and include data on: the incidence of heart disease and stroke; the use of recommended medications for primary and secondary prevention; quality of care; and the structure and comprehensive reporting of relevant risk factors.

Much of this data can be derived from existing, readily accessible sources and will require linkage and appropriate analysis. There are already some promising advances allowing us to better utilise siloed data sources and infrastructure by linking a number of major data sets together. There is now an opportunity to build on the current momentum, ensure consistency at a national level, assess gaps in the system, scope emerging data opportunities and better integrate the existing data. This work would benefit from strong partnerships between state and territory jurisdictions, AIHW and other relevant national agencies, clinical experts, researchers and consumers.

A targeted range of data-related actions and interventions has been identified and prioritised through the consultation processes for the Action Plan, and includes the need for monitoring, evaluation and accountability to be built into all actions. The continued improvement and development of an overarching, coherent data system is essential to ongoing improvements in the prevention and management of heart disease and stroke.

## Steering Committee members

We would particularly like to thank the Action Plan Steering Committee for their oversight of the development of the Action Plan. The Committee was an advisory body comprised of some of Australia’s leading thinkers. It was convened to support and guide the development of the Action Plan. Members included:

**Professor Emily Banks (Chair)**

– Australian National University

**Adjunct Professor John G Kelly AM**

– Group CEO National Heart Foundation of Australia

**Ms Sharon McGowan**

– Chief Executive Officer Stroke Foundation

**Professor Garry Jennings**

– Chief Medical Advisor National Heart Foundation of Australia

**Adjunct Associate Professor Jennifer Muller**

– Stroke Foundation Consumer Representative

**Ms Lyndal Ritchie**

– National Heart Foundation of Australia Consumer Representative

**Professor Leonard Kritharides**

– President Cardiac Society of Australia and New Zealand

**Associate Professor Andrew Wong**

– Stroke Society Australasia

**Professor Alex Brown**

– South Australian Health and Medical Research Institute

**Dr Lynelle Moon**

– Australian Institute Health and Welfare

**Professor Bruce Campbell**

– Stroke Foundation Clinical Council Chair

**Ms Jacinta McDonald**

– Australian Government Department of Health

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