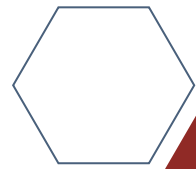




# Cardiovascular Health Mission



## Roadmap



Theme  
Research  
missions

The Cardiovascular Health Mission will provide \$220 million over 10 years under the Medical Research Future Fund to improve cardiovascular health and stroke for all Australians.

Cardiovascular disease is far from “solved” and continues to be Australia’s biggest killer. Together, heart disease and stroke are the leading causes of premature death, disability and avoidable hospital admissions, costing more than \$10.4 billion each year in direct health care costs (2015–16).<sup>1</sup>

Despite Australia’s significant gains over past decades, we still have extensive knowledge gaps in cardiovascular disease, from the biology of common diseases to systems for equitable delivery of world-best care to all Australians. Australian researchers are well positioned to discover transformative solutions with this substantial strategic investment, combined with leadership and collaboration.



### Scope

The Mission will improve health and save lives by mobilising research efforts, and developing collaborative and translational platforms. It will encompass broad innovations in cardiovascular health and stroke to benefit all Australians, with particular efforts to improve equity and outcomes for Aboriginal and Torres Strait Islander people.



### Our goal

To make transformative improvements in cardiovascular health and stroke for all Australians through:

- Reducing the number of Australians of all ages affected by heart disease and stroke
- Improving outcomes from acute cardiovascular and stroke events
- Improving long-term recovery and survivorship after a cardiovascular or stroke event

<sup>1</sup> Australian Institute of Health and Welfare (2019). Australian Burden of Disease Study: impact and causes of illness and death in Australia 2015, AIHW, Canberra.



## Our mission

To accelerate Australian-led research to advance cardiovascular health through the creation of a world-class sustainable eco-system underpinned by excellence, collaboration, innovation, consumer engagement and commercialisation, and embedded in the health care system

### Aims

The Cardiovascular Health Mission aims to:

- reduce mortality, morbidity and inequities associated with heart and vascular disease, and stroke
- reduce the personal, social and economic impacts of cardiovascular disease for all Australians
- improve the health experience for people living with, or at risk of, cardiovascular disease, within a value-based framework
- eliminate disparities in cardiovascular health care and outcomes between Aboriginal and Torres Strait Islander people and non-Indigenous Australians
- discover and apply new markers of subclinical disease to guide targeted prevention and treatment
- promote and leverage co-investment
- establish nationwide platforms for translation that are co-designed with end users, including consumers, health care providers, decision makers and industry
- foster a vibrant, sustainable, collaborative and multidisciplinary research workforce
- drive the development and delivery of new and innovative health solutions and services, including research into integrated models of care
- support the commercialisation of research discoveries, driving job creation and delivering solutions to patients
- support better integration of data between and within systems to enable seamless transition of care between sectors

### Underpinning considerations

- Research is essential across the discovery, translation and implementation spectrum
- Implementation should be supported by the routine collection, analysis and reporting of health data that are critical to devising solutions, identifying gaps, monitoring progress and assessing outcomes
- Australian researchers have made substantial contributions to global advances, but urgent investment is needed to address dwindling capacity, and attract and retain the necessary talent
- Consumer and caregiver input are key in priority setting, and co-designed and consumer-led research opportunities should be embedded in research practice
- Culturally appropriate approaches are needed for active partnership with Aboriginal and Torres Strait Islander people to set priorities, and in the co-design and implementation of investment initiatives
- All Australians, irrespective of background, sex, age, circumstance or geography, should have equitable access to evidence-based, best-practice, quality care
- Multidisciplinary approaches and collaboration are essential to discovering the missing biology in cardiovascular disease, and ensuring that Australian discovery and innovation translate to improved health and care



## Funding principles

Activities funded under this mission should:

- foster collaboration and harness resources across the system to deliver improved health outcomes for Australians, and to minimise duplication
- support excellence and novelty, including through competitive and transparent peer-review processes
- support people, programs, platforms and urgent capacity-building initiatives
- enhance collaboration and translation across the research system
- facilitate the best cross-disciplinary teams to tackle identified inequalities in health care access, provision and outcomes, with particular consideration of sex and ethnicity
- develop innovative and cost-effective approaches to primary and secondary prevention, early detection, treatment and long-term care, including reducing duplication and waste in research
- promote deep engagement with health services, government and nongovernment organisations, industry, patients and caregivers
- support leverage from other funding sources, including philanthropic, industry and international contributions
- support a vibrant and enduring research ecosystem

## Priority areas for investment

Funding for heart, vascular and stroke research will be invested across strategic interrelated and complementary flagships:

- **drug discovery** — targeted development of new therapies, incorporating emerging biology
- **bio-medical engineering** — development, implementation and translation of biomedical engineering approaches for cardiovascular health to improve diagnosis, precision treatment and outcomes, using devices and 3D tissue-engineered products, and using bioengineering models to maximise data use and prediction
- **precision medicine** — embedding multi-omic platforms and computational bioinformatics within well-characterised clinical cohorts to discover new markers for early disease detection and personalised risk prediction, and identify mechanisms to provide evidence-based targeted and tailored treatment
- **big data** — use and optimisation of large-scale data to support efficient, innovative research, improving the health system and health outcomes
- **clinical trials** — rigorous testing of innovative interventions in primary care, acute care, rehabilitation and community settings
- **implementation and policy** — research focused on implementing effective and efficient prevention and care, including supporting evidence-informed clinical and policy decision making