

Mission for Cardiovascular Health – Roadmap

Scope

The Government established a \$220 million fund for a 10-year Mission for Cardiovascular Health that will support Australian researchers to make game-changing discoveries, develop a global biotech industry and enable the implementation of innovative changes in healthcare.

The Mission is about mobilising research efforts and developing platforms to improve the cardiovascular health of Australians. The Mission will target vascular health, heart health and stroke.

Vision

The health, economic and social burden of cardiovascular disease is immense. This strategic investment will significantly lead to an improved step-change associated with the individual and broader community impacts of heart disease, stroke and vascular diseases for all Australians.

Mission statement

The Mission will accelerate the impact of Australian cardiovascular research through the creation of a world class eco-system focused on break-through cardiovascular health research, underpinned by collaboration, innovation and commercialisation.

Rationale

Cardiovascular disease results in premature death and disability, costing the healthcare system \$8.8 billion in direct health costs. In Australia, one in three deaths are due to cardiovascular disease

Australia has made significant gains over past decades. However, heart disease continues to be Australia's biggest killer and together heart disease and stroke are the leading causes of premature death, disability and avoidable hospital admissions.

Goals

- To reduce cardiovascular mortality, morbidity and inequalities¹.
- To reduce the personal, social and economic impacts of cardiovascular disease.
- To improve the health experience for people living with or at risk of cardiovascular disease.
- To eliminate the disparity of cardiovascular health care and outcomes between Indigenous and non-Indigenous Australians.
- To discover and apply new markers of subclinical disease to guide targeted prevention and treatment
- To invest strategically in cardiovascular health research and promote leveraged co-investment.
- To establish a platform that is co-designed end-users (consumers, patients, health care providers, decision-makers, consumer advocates and industry) in strategy development to ensure nation-wide platforms for translation
- To foster a vibrant, sustainable, collaborative research and clinical ecosystem driving the development and delivery of novel and innovative health solutions.

Underpinning Principles

- Cardiovascular disease remains a massive health and economic burden and much remains “unsolved”
- Research is essential across the discovery, translational and implementation spectrum
- Australian CV researchers have made substantial contributions to global advances, but urgent investment to address capacity, and attract and retain talent is needed

¹ GBH- reduce premature CV death by 25% by 2030

- Consumers and carers are partners in priority setting and co-designed/consumer-led research opportunities should be encouraged.
- Culturally-sensitive approaches for active engagement and partnership with Aboriginal and Torres Strait Islander people in the co-design of priority setting and investment initiatives
- All Australians, irrespective of background, sex, circumstance or geography, should have access to evidence-based, best practice care.
- Multi-disciplinary approaches and collaboration are paramount to ensure Australian discovery and innovation crosses the valley of death. Intersectoral and interdisciplinary effort is needed to unravel missing biology for common risk factors and cardiovascular diseases.

Investment considerations:

- Support excellence via a competitive and transparent peer-reviewed process
- Support people, programs, platforms and urgent capacity building initiatives
- Enhance collaboration and translation across coordinated pipeline
- Strategically facilitate the best cross-disciplinary team to tackle identified inequalities in healthcare access, provision and outcomes with particular consideration of sex, and ethnicity
- Innovative approaches to secondary prevention
- Promote deep engagement with AHRTCs, industry, health care providers, patients and their caregivers
- Build capacity and consider the future sustainability of the CV research sector
- Be synergistic with other funding sources (not duplicating), and leverage philanthropic, industry and international contributions

Investment Flagships

Funding for vascular, myocardial and stroke research will be invested across strategic interrelated and complementary Flagships. That is, with linkages between flagship strategic areas and, where appropriate, between different disease areas encouraged:

Drug discovery

- Promoting targeted development of new therapies incorporating emerging biology.

Bioengineering

- Accelerating the development, implementation and/or translation of devices, tissue engineering, and advanced CV imaging including brain imaging, as well as telemedicine and technology to improve systems of care and equity of access to best practice care.

Precision medicine

- Embedding multi-omic platforms and computational bioinformatics with well-phenotyped clinical cohorts to discover new markers for early detection and mechanisms to provide evidence-based targeted and tailored treatment pathways.

Data

- Leveraging emerging opportunities in data science applied to national coordinated cohort studies, registries and electronic medical records to open new frontiers.

Clinical trials

- Including rigorous testing of Australian discoveries and devices, and drug repurposing, as well as innovations in delivery of care.

Implementation and policy

- Research focussed on improved and efficient approaches to prevention and primary care through to acute, rehabilitation and community-based care that supports evidence-informed policy decision making and ensure best CV care for all Australians.